

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION
RAIPUR**



Chhattisgarh State Power Generation Co. Ltd.		P. No. 01/2022 (T)
Chhattisgarh State Power Transmission Co. Ltd		P. No. 02/2022 (T)
Chhattisgarh State Load Despatch Centre		P. No. 03/2022 (T)
Chhattisgarh State Power Distribution Co. Ltd.		P. No. 75/2021 (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 2020-21 and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25;
2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) Petition for final true-up for FY 2020-21 and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25;
3. Chhattisgarh State Load Despatch Centre (CSLDC) Petition for final true-up for FY 2020-21 and determination of ARR and Charges for the Control Period from FY 2022-23 to FY 2024-25;
4. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) Petition for final true-up for FY 2020-21, and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25.

ORDER

(Passed on 13/04/2022)

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, 2021 (hereinafter referred as 'CSERC MYT Regulations, 2021') for determination of tariff for the Generating Company, Licensees, and CSLDC.

2. The Commission had notified the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2015 (hereinafter referred as 'CSERC MYT Regulations, 2015') for determination of tariff for the Generating Company, Licensees, and CSLDC, which is applicable for truing up for FY 2020-21 for the Generating Company, Licensees, and CSLDC.
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 2020-21 and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25, (ii) Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for approval of final true-up for FY 2020-21 and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25, (iii) Chhattisgarh State Load Despatch Centre (CSLDC) for approval of final true-up for FY 2020-21 and determination of ARR and Charges for the Control Period from FY 2022-23 to FY 2024-25, (iv) Chhattisgarh State Power Distribution Company Limited (CSPDCL) for final true-up for FY 2020-21, and determination of ARR for the Control Period from FY 2022-23 to FY 2024-25 and Tariff for FY 2022-23.
4. This Order is passed under the provisions of Section 32(3) 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 23, 2022 for seeking their valuable suggestions and comments. Further, the Commission conducted Public Hearings in physical as well as video conferencing mode on the Petitions in its office at Raipur on 24th and 25th February 2022.

6. The Commission has undertaken final true-up for FY 2020-21 for CSPTCL, CSLDC, CSPGCL and 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 2020-21 on May 30, 2020 and for FY 2021-22 on August 02, 2021.
8. The Revenue Gap/(Surplus) of CSPGCL, CSPTCL and CSLDC arising out of final true-up for FY 2020-21, along with corresponding carrying/holding cost, have been considered, along with the impact of the Review filed by CSPDCL on the Tariff Order for FY 2021-22, while computing the cumulative Revenue Gap/(Surplus) to be allowed for CSPDCL for FY 2022-23.
9. After applying the carrying cost on Revenue Gap of CSPGCL for FY 2020-21, the total Revenue Gap up to FY 2022-23 has been approved as Rs. 246.21 Crore, as claimed by CSPGCL.
10. After applying the holding cost on the Revenue Surplus of CSPTCL for FY 2020-21, the total Revenue Surplus up to FY 2022-23 has been approved as Rs. 95.52 Crore, as against the claim of CSPTCL for Revenue Gap of Rs. 35.71 Crore. Similarly, after applying the holding cost on the Revenue Surplus of CSLDC for FY 2020-21, the total Revenue Surplus up to FY 2022-23 has been approved as Rs. 3.46 Crore, as against the claim of CSLDC for Revenue Surplus of Rs. 3.34 Crore.
11. The cumulative Revenue Gap of CSPDCL after applying the carrying cost for FY 2020-21 up to FY 2022-23 is approved as Rs. 1,688.05 Crore, as against Rs. 4367.73 Crore sought by CSPDCL. The cumulative Revenue Gap/(Surplus) of CSPGCL, CSPTCL, and CSLDC for FY 2020-21 along with carrying/holding cost amounting to

Rs. 147.23 Crore, as against the claim of Rs. 278.58 Crore by the Companies, has been considered in the ARR of CSPDCL for FY 2022-23.

12. The Commission has approved the capitalisation for the MYT Control Period based on the Capital Investment Plan (CIP) considered for the MYT Control Period.

CSPGCL: Tariff for FY 2022-23

13. The Commission has approved cumulative Revenue Gap of Rs. 246.21 Crore up to FY 2022-23 for CSPGCL, which shall be separately billed by CSPGCL on a monthly basis, at the rate of Rs. 20.52 Crore per month.
14. The Annual Fixed Cost (AFC) and Energy Charge Rate for CSPGCL stations, approved by the Commission for the Control Period, are as under:

Thermal Power Stations

Table: Approved Annual Fixed Cost (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	663.30	672.77	694.59
2	DSPM	425.83	434.35	443.60
3	KWTPP	596.69	580.90	563.23
4	ABVTPP	1435.34	1394.41	1353.36

Table: Approved Contribution to Pension and Gratuity (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	137.75	150.74	162.10
2	DSPM	51.11	55.93	60.14
3	KWTPP	30.59	33.48	36.00
4	ABVTPP	83.66	91.55	98.45

Table : Approved Energy Charge Rate (Rs./kWh)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	1.574	1.574	1.574
2	DSPM	1.688	1.688	1.688
3	KWTPP	1.339	1.339	1.339
4	ABVTPP	1.838	1.838	1.823

Hydro Power Station (Hasdeo Bango)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Approved AFC (Rs. Crore)	22.87	24.68	26.77
2	Approved Net Generation (MU)	270.71	270.71	270.71
3	Approved Tariff for Hasdeo Bango	0.845	0.912	0.989
4	Contribution to P&G	4.36	4.77	5.13

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

15. In this Order, the Commission has determined the Input Price of coal from Gare Palma -III mines for ABVTTP for the first time, for the Control Period from FY 2022-23 to FY 2024-25, as given in the following Table:

Approved Input Price of Coal from GP-II mines for the Control Period (Rs. Crore)

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
Total Price/MT	Rs./MT	1510.90	1511.05	1488.99

CSPTCL: Tariff for FY 2022-23

16. For CSPTCL, the Transmission Charge for FY 2022-23 shall be as under:

Sl.	Particulars	Units	FY 2022-23
A	ARR for CSPTCL (including contribution to pension and gratuity)	Rs. Crore	1102.55
B	<i>Less:</i> past year cumulative Revenue Surplus	Rs. Crore	95.52
C	Net Approved ARR (A-B)	Rs. Crore	1007.03
D	Monthly Transmission Charges for Medium-term and Long-term Open Access Consumers (C/12)	Rs. Crore/ month	83.92
5	Short-term Open Access Charges	Rs./kWh	0.3367

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: Charges for FY 2022-23

17. For CSLDC, the Charges for FY 2022-23 shall be as under:

Sr. No.	Particulars	Petition	Approved
1	ARR for FY 2022-23	18.93	18.09
2	Adjustment of Surplus of FY 2020-21 with carrying cost up to FY 2022-23	3.34	3.46
3	Adjusted ARR for FY 2022-23	15.58	14.63
4	System Operation Charges	12.47	11.71
5	Intra-State Market Operation Charges	3.12	2.93
6	Total SLDC Charges	15.58	14.63

CSPDCL: Tariff for FY 2022-23

18. For FY 2022-23, CSPDCL has sought approval for ARR of Rs. 14,969.03 Crore. As against this, the Commission, after prudence check and due scrutiny, has approved the ARR at Rs. 15,280.57 Crore. The State Government subsidy has not been taken into account while approving the ARR of CSPDCL for FY 2022-23. After considering the ARR and revenue from sale of electricity for FY 2022-23, the stand-alone Revenue Surplus for FY 2022-23 has been estimated as Rs. 1,448.95 Crore, as against the stand-alone Revenue Surplus of Rs. 3,642.72 Crore projected by CSPDCL for FY 2022-23.
19. CSPDCL, in its Petition for FY 2022-23, has sought approval for cumulative Revenue Gap of Rs. 4,367.73 Crore pertaining to previous years, along with the carrying cost. As against this, the Commission, after prudence check and due scrutiny, has arrived at a cumulative Revenue Gap of Rs. 1,688.05 Crore for FY 2022-23, for CSPDCL.
20. Accordingly, the net ARR for recovery through tariff for FY 2022-23 has been approved as Rs. 17,115.85 Crore for CSPDCL, as against the net ARR of Rs. 19,336.76 Crore sought by CSPDCL. The net ARR effectively claimed by CSPDCL for FY 2022-23 amounted to Rs. 19,615.34 Crore, after adding the Revenue Gap/(Surplus) as claimed by CSPGCL, CSPTCL, and CSLDC in their respective Petitions. The adjusted Average Cost of Supply (ACoS) approved for FY 2021-22

was Rs. 6.41/kWh. The ACoS has been approved as Rs. 6.22/kWh for FY 2022-23, compared to the effective ACoS of Rs. 6.85/kWh claimed by CSPDCL in its Petition for FY 2022-23.

21. The effective Revenue Gap sought by CSPDCL, after considering the Revenue Gap/(Surplus) as claimed by CSPGCL, CSPTCL, and CSLDC in their respective Petitions, amounted to Rs. 1003.59 Crore. Against this, the Commission has arrived at cumulative Revenue Gap of Rs. 386.33 Crore for CSPDCL for FY 2022-23, after adjusting the Revenue Gap/(Surplus) after true-up of CSPDCL, CSPGCL, CSPTCL and CSLDC for FY 2020-21.
22. 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 Orders as well as this Order has taken various steps to protect public interest and provided relief to the consumers and Utilities in the State of Chhattisgarh.
23. In order to recover the cumulative Revenue Gap of Rs. 386.33 Crore, the Commission has approved increase in the category-wise Tariff for FY 2022-23.
24. In its Petition, CSPDCL had requested for uniform tariff hike in energy charges across all consumer categories to meet the approved Revenue Gap. The average tariff increase effectively claimed by CSPDCL was 5.39% to meet the Revenue Gap claimed by the Companies, which translates to 35 paise/kWh. The Average Billing Rate (ABR) estimated by the Commission at the existing tariff for FY 2022-23 is Rs. 6.08/kWh. Hence, the Commission has approved average tariff increase across all consumer categories of 2.31%, which translates to 14 paise/kWh, with the adjusted ACoS of Rs. 6.22/kWh.
25. The Commission has increased the Energy Charges across different categories/slabs from 5 paise/kWh to 15 paise/kWh, with no change being made in the Fixed/Demand Charges. The Commission has revised the category-wise tariffs in such a manner that the cross-subsidies are reduced and are brought within $\pm 20\%$ of ACoS as stipulated in the Tariff Policy, 2016, to the extent possible.
26. The tariff increase approved for different categories is quite nominal and far lesser than the prevalent inflation indices. The Commission has also given certain directions

to CSPDCL for improving its operational efficiency including its metering, billing and collection efficiency.

27. 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) The term “Connected Load” has been replaced with the more appropriate term “Sanctioned Load” in the Tariff Schedule.
- b) It has been clarified that Dharamshalas and working women’s hostels run by Charitable Trust, as well as Government student hostels, are included in LV-1 Domestic Category.
- c) It has been clarified that only gymnasium and clubhouses within the housing society as well as farm houses for own use are included in LV-1 Domestic Category.
- d) In the LV-3 Agriculture category, the Commission has accepted CSPDCL’s request and incorporated the clause that consumers opting for flat rate billing under KJJY scheme shall pay Rs. 100/HP/month as flat rate charges, in addition to fixed charges on billing demand plus energy charges on consumption payable by State Government under KJJY scheme up to the applicable ceiling limit of 6000/7500 units annual consumption.
- e) The State Government, under the 'Bespoke Policy' aims to promote Textile, Jute, and ethanol industries. In light of this, and with the view to rationalise the tariff for these industries, a discount of 25% on Energy Charges has been provided for Textile industries including handlooms and powerlooms, Jute industries, and ethanol industries categories under HV-3 category.
- f) A discount of 5% on Energy Charges shall be applicable for Poha and Murmura mills under LV-5 category.
- g) The minimum Billing Demand for the relevant LV categories and all HV categories has been increased from 75% to 80%, for facilitating effective load management.
- h) The Load Factor rebate on Energy Charges for Indian Railways has been reduced from 30% to 20%.

- i) The Load Factor rebate for HV-4 Steel category has also been made applicable to consumers having captive generating facility with installed capacity above 1 MW.
28. The approved Tariff Schedule applicable is appended herewith as **Schedule**.
29. The Order will be applicable from 1st April, 2022 and will remain in force till March 31, 2023 or till the issue of the next Tariff Order, whichever is later.
30. The Commission directs the Companies to take appropriate steps to implement the Tariff Order.

Sd/-
(PRAMOD KUMAR GUPTA)
MEMBER

Sd/-
(VINOD DESHMUKH)
MEMBER (JUDICIAL)

Sd/-
(HEMANT VERMA)
CHAIRMAN

CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION

RAIPUR



Chhattisgarh State Power Generation Co. Ltd.		P. No. 01/2022 (T)
Chhattisgarh State Power Transmission Co. Ltd		P. No. 02/2022 (T)
Chhattisgarh State Load Despatch Centre		P. No. 03/2022 (T)
Chhattisgarh State Power Distribution Co. Ltd.		P. No. 75/2021 (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 2020-21 and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25;
2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) Petition for final true-up for FY 2020-21 and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25;
3. Chhattisgarh State Load Despatch Centre (CSLDC) Petition for final true-up for FY 2020-21 and determination of ARR and Charges for the Control Period from FY 2022-23 to FY 2024-25;
4. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) Petition for final true-up for FY 2020-21, and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25

CORRIGENDUM ORDER

(Passed on 28/04/2022)

In the Order dated April 13, 2022, certain inadvertent typographical errors have been noticed. Accordingly, the following changes have been made in the Order.

2. In para 10 of the Order, 'Rs. 95.52 Crore' shall be read as 'Rs. 90.32 Crore', and 'Rs. 3.34 Crore' shall be read as Rs. 3.32 Crore.
3. In para 11 and para 19 of the Order, 'Rs. 1688.05 Crore' shall be read as 'Rs. 1,679.82 Crore' and 'Rs. 147.23 Crore' shall be read as Rs. 152.57 Crore.
4. In para 16 of the Order, the table shall be read as under:

Sl.	Particulars	Units	FY 2022-23
A	ARR for CSPTCL (including contribution to pension and gratuity)	Rs. Crore	1102.55
B	<i>Less: past year cumulative Revenue Surplus</i>	Rs. Crore	(90.32)
C	Net Approved ARR (A-B)	Rs. Crore	1012.23
D	Monthly Transmission Charges for Medium-term and Long-term Open Access Consumers (C/12)	Rs. Crore/ month	84.35
E	Short-term Open Access Charges	Paise/kWh	33.84

5. In para 17 of the Order, the table shall be read as under::

Sr. No.	Particulars	Petition	Approved
1	ARR for FY 2022-23	18.93	18.10
2	Adjustment of Surplus of FY 2020-21 with carrying cost up to FY 2022-23	(3.34)	(3.32)
3	Adjusted ARR for FY 2022-23	15.58	14.78
4	System Operation Charges	12.47	11.82
5	Intra-State Market Operation Charges	3.12	2.96
6	Total SLDC Charges	15.58	14.78

6. In para 18 of the Order, 'Rs. 1,448.95 Crore' shall be read as Rs. 1,446.06 Crore.
7. In para 20 of the Order, 'Rs. 17,115.85 Crore' shall be read as Rs. 17,112.94 Crore.
8. Sub-sub para (iii) and (iv) of sub para (1) of para 1.1 .11 of the Tariff Schedule for FY 2022-23 shall be deleted;

9. Sub-sub para (iii) of sub para (2) of para 1.1 .11 of the Tariff Schedule for FY 2022-23 shall be deleted;
10. The Commission directs the Companies to take appropriate steps to implement the Tariff Order.

Sd/-
(PRAMOD KUMAR GUPTA)
MEMBER

Sd/-
(VINOD DESHMUKH)
MEMBER (JUDICIAL)

Sd/-
(HEMANT VERMA)
CHAIRMAN

LIST OF ABBREVIATIONS

Abbreviation	Description
A&G	Administrative and General
ABR	Average Billing Rate
ADMS	Automatic Demand Management System
AFC	Annual Fixed Charges
AMC	Annual Maintenance Contract
APTEL	Hon'ble Appellate Tribunal of Electricity
ARR	Annual Revenue Requirement
AT&C	Aggregate Technical and Commercial
BESS	Battery Energy Storage System
BSP	Bhilai Steel Plant
CAGR	Compounded Annual Growth Rates
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CIP	Capital Investment Plan
COD	Date of Commercial Operation
CPI	Consumer Price Index
CSD	Consumer Security Deposit
CSEB	Chhattisgarh State Electricity Board
CSERC	Chhattisgarh State Electricity Regulatory Commission
CSLDC	Chhattisgarh State Load Despatch Centre
CSPDCL	Chhattisgarh State Power Distribution Company Limited
CSPDCL	Chhattisgarh State Power Distribution Company Ltd
CSPGCL	Chhattisgarh State Power Generation Company Limited
CSPGCL	Chhattisgarh State Power Generation Company Ltd.
CSPHCL	Chhattisgarh State Power Holding Company Limited
CSPTCL	Chhattisgarh State Power Transmission Company Limited
CSPTCL	Chhattisgarh State Power Transmission Company Ltd.
CSPTCL	Chhattisgarh State Power Trading Company Limited
CTU	Central Transmission Utility
CWIP	Capital Work in Progress
DA	Dearness Allowances
DISCOM	Distribution Company
DPC	Delayed Payment Charges
DPS	Delayed Payment Surcharge
DS	Domestic Service
DSM	Deviation settlement mechanism
DT	Distribution Transformer
EHV	Extra High Voltage
FCA	Fuel Cost Adjustment
FY	Financial Year

Abbreviation	Description
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoCG	Government of Chhattisgarh
GoI	Government of India
HP	Horse Power
HPO	Hydro Purchase Obligation
HR	Human Resource
HT	High Tension
HV	High Voltage
IDC	Interest During Construction
IoWC	Interest on Working Capital
IPDS	Integrated Power Development Scheme
IPP	Independent Power Producer
kcal	kilocalorie
kg	kilogram
km	Kilometer
kV	kilo Volt
kVA	kilo Volt-Ampere
kW	Kilo Watt
kWh	kilo Watt-hour
LV	Low Voltage
M&G	Maintenance and General
MAT	Minimum Alternative Tax
MAT	Minimum Alternate Tax
MCLR	Marginal Cost of Fund based Lending Rate
MGR	Merry-Go-Round
ml	Millilitre
MMC	Monthly Minimum Charges
MT	Metric Tonnes
MU	Million Units
MYT	Multi Year Tariff
NTI	Non-Tariff Income
NTPC	National Thermal Power Corporation Ltd.
O&M	Operation and Maintenance
P&G	Pension & Gratuity
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
PTC	Power Trading Corporation of India Limited
R&M	Repair and Maintenance
RBI	Reserve Bank of India

Abbreviation	Description
RDSS	Revamped Distribution Sector Scheme
RE	Renewable Energy
RoE	Return on Equity
RPO	Renewable Purchase Obligation
Rs.	Rupees
RSA	Revenue Sharing Agreement
SAIL	Steel Authority of India Ltd.
SAMAST	Scheduling, Accounting, Metering and Settlement of Transaction
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
STPS	Super Thermal Power Station
STU	State Transmission Utility
T&D Loss	Transmission and Distribution Loss
ToD	Time of Day
TSAF	Transmission System Availability Factor
TSAF	Transmission Service Agreement
TVS	Technical Validation Session
UDAY	Ujjwal DISCOM Assurance Yojana
UI	Unscheduled Interchange
UI	Unscheduled Interchange
VCA	Variable Cost Adjustment
WLDC	Western Regional Load Despatch Center
WPI	Wholesale Price Index
YoY	Year-on-Year
STPS	Super Thermal Power Station
STU	State Transmission Utility
T&D Loss	Transmission and Distribution Loss
ToD	Time of Day
TSAF	Transmission System Availability Factor
TSAF	Transmission Service Agreement
TVS	Technical Validation Session
UDAY	Ujjwal DISCOM Assurance Yojana
UI	Unscheduled Interchange
VCA	Variable Cost Adjustment
WLDC	Western Regional Load Despatch Centre
WPI	Wholesale Price Index
YoY	Year-on-Year

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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 (CSPTCL), and Chhattisgarh State Power Holding Company Limited (CSPHCL). The assets and liabilities of the erstwhile CSEB have been allocated to the successor Companies w.e.f. January 1, 2009 according to the provisions of the CSEB Transfer Scheme Rules, 2010.

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 December 31, 2020 by adopting principles of CSERC MYT Regulations, 2015.

Accordingly, CSPGCL, CPSTCL and CSLDC had filed Petitions for final true-up for FY 2019-20 and ARR for FY 2021-22 while CSPDCL filed Petitions for final true-up for FY 2018-19 and FY 2019-20 and ARR & Retail Supply Tariff for FY 2021-22, for which the Commission issued order on August 02, 2021.

Further, 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, 2021 (hereinafter referred as 'CSERC MYT Regulations, 2021') for determination of tariff for the Generating Company, Licensees, and CSLDC.

CSPGCL filed the Petition for approval of final true-up for FY 2020-21 and determination of ARR and tariff for the Control Period from FY 2022-23 to FY 2024-25 for thermal generating stations and hydro electric plants on December 28, 2021, which was registered as Petition No. 01 of 2022 (T). CSPTCL filed the Petition for approval of final true-up for FY 2020-21 and determination of ARR and transmission tariff for the Control Period from FY 2022-23 to FY 2024-25 on December 31, 2021, which was registered as Petition No. 02 of 2022 (T). Also, CSLDC filed the Petition for approval of final true-up for FY 2020-21 and determination of ARR & SLDC charges for the Control Period from FY 2022-23 to FY 2023-24 on December 31, 2021, which was registered as Petition No. 03 of 2022 (T). CSPDCL filed the Petition for approval of final true-up for FY 2020-21, and determination of ARR and Retail Supply Tariff for the Control Period from FY 2022-23 to FY 2024-25 on December 21, 2021, which was registered as Petition No. 75 of 2021 (T).

In this instant order, the Commission has undertaken the final true-up for FY 2020-21 and determination of ARR and Tariff for the Control Period from FY 2022-23 to FY 2024-25 for CSPGCL, CSPTCL, CSLDC and CSPDCL in accordance with the provisions of the MYT Regulations, 2021. 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 Petition filed by CSPDCL was registered on December 24, 2021, while the Petitions filed by CSPTCL, CSLDC, and CSPGCL were registered on January 1, 2022.

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 the Petitioners 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 February 17, 2022, February 18, 2021, and March 7, 2022 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 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 24 and 25, 2022 in physical as well as through video conferencing. 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 23 February, 2022 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 is annexed as **Annexure III**.

The following suggestions and objections were submitted:

- a) Member from Urla Industrial Association has requested not to increase the industrial tariff. Also requested to reduce demand charge of small LT industry including to reduce specified normal value of power factor from 0.90 to 0.85.
- 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 Contribution to Pension and Gratuity Fund

The Objector submitted that the State Power Utilities, in their Tariff Petitions, have claimed total contribution to Pension and Gratuity (P&G) Fund of Rs. 1124.49 Crore for FY 2022-23.

The Power Companies had created P&G Fund for the payment of pension and gratuity to their employees in the year 2002 and Chhattisgarh is the first State to create such Fund and it is there in only one or two more States. The objective was to save the then Income Tax Liability on CSEB by making contribution to such Fund, such contribution being tax-free. Although Power Companies have not provided the details about existing Fund volume, income, etc. of P&G Fund, however, its volume is estimated to be about Rs.4,700 Crore (Opening balance on FY 2020-21) and it is fetching about 6-7% Annual Return on Investment, i.e., about Rs. 300-310 Crore annually. The present size of the Fund is capable of paying liability of pension and gratuity till at least FY 2026-27.

Considering the impact of COVID-19 pandemic over the economy of the State, the State Government has decided to cut increments, incentives, allowances, etc., payable to the Government Employees during post-COVID period. The Objector submitted that in post-COVID period, HT Industries, especially Steel Industries, are facing very difficult time and they are seeking incentives and other support from the State Government. However, at the same time, the State Government is facing huge revenue shortfall due to slow-down.

Considering the impact of COVID pandemic on revenue of CSPDCL during FY 2020-21 and FY 2021-22 and lower HT consumption, it is inevitable that CSPDCL will suffer huge losses during FY 2021-22, which may be trued-up next year. This will make the retail Tariff quite unstable.

The Objector submitted that the above said proposed contribution of Rs. 825 Crore (after netting of interest income, i.e., Rs. 1,125 Crore – Rs. 300 Crore = Rs. 825 Crore) towards P&G Fund during FY 2022-23 should be used to stabilize the Retail Tariff by making a Tariff Stabilization Fund considering the impact of Corona pandemic. It will not make any impact on payment of Pension & Gratuity during FY 2022-23, since P&G Fund has sufficient Funds already available for the next 4-5 years or more.

Another Objector submitted that during True up of ARR for previous years of all the Companies, the expenses towards payment of pension and gratuity should be considered on the basis of actual outflow from CSEB P&G Fund for payment of pension and gratuity for employees of State Power Companies with carrying cost rather than on the basis of contribution to the Fund by Companies. Accordingly, for FY 2020-21, Rs. 929 Crore should be allowed for CSPGCL, CSPTCL and CSPDCL instead of Rs. 679 Crore actually contributed.

The Objector added that the ARR for future years should be approved by considering estimation of expenses with due diligence so that actual yearly expenses towards payment of retirement benefits for P&G for all retirees/pensioners of State Power Companies can be met from the respective year's ARR. Some additional allocation of Fund should also be made in the ARR to reasonably fill the gap/deficit of the CSEB P&G Fund between actual available Funds and requirement of Fund as per actuarial/valuation so that deficit of previous years can be filled up.

The Objector requested to approve an additional amount of Rs. 83.45 Crore with carrying cost in the ARR of the Petitioners.

Petitioner's Reply

CSPGCL submitted that in light of the various judicial dictums, CSPGCL is unable to fathom the legal and moral sanctity of the suggestion regarding creation of a Tariff Stabilization Fund. Not only is the suggestion devoid of any legal sanctity, but it is against the facts.

CSPGCL submitted that in *Deoki Nandan Prasad v. State of Bihar & Ors*, the Hon'ble Supreme Court in the Judgment dated May 4, 1971 (1971 AIR 1409, 1971 SCR 634), held that Pension is a right; not a bounty or gratuitous payment. Further, in the landmark Judgment in *D.S. Nakara & Others vs Union of India* dated December 17, 1982 (1983 AIR 130, 1983 SCR (2) 165), the Hon'ble Supreme Court again affirmed the ratio decidendi. It held as under:

“From the discussion three things emerge : (i) that pension is neither a bounty nor a matter of grace depending upon the sweet will of the employer and that it creates a vested right subject to 1972 rules which are statutory in character because they are enacted in exercise of powers conferred by the proviso to Art. 309 and clause (5) of Art. 148 of the Constitution ; (ii) that the pension is not an ex-gratia payment but it is a payment for the past service rendered ; and (iii) it is a social welfare measure rendering socio-economic justice to those who in the hey-day of their life ceaselessly toiled for the employer on an assurance that in their old age they would not be left in lurch.”

The Objector, in the garb of suggestion, has distorted the facts. The narrated objective is presumed notion, which does not find any place whatsoever in the Gazette Notification dated June 18, 2001 or the Regulations notified by the Commission. Prima facie, it appears a wilful misrepresentation.

From the CSERC MYT Regulations, 2021, it is clear that:

1. The Trust has been constituted and is under an obligation to meet the past unfunded liabilities towards Pension and Gratuity.
2. Pension is not to be paid through O&M expenses.
3. Trust shall receive contribution in accordance with the Regulations.

These liabilities were incurred over the period when the sector was governed by the SEB, which being creature of statute, was considered immortal. However, with the Change in law, the SEB has paved way for Companies, and hence, the past unfunded liabilities are now akin to the Regulatory Assets created due to change in law. In this context, reference to the Hon'ble APTEL decision in OP 01 of 2011, is relevant.

CSPGCL submitted that once it is decided that Pension is not to be paid directly by the Companies and it would be through the Trust, which in turn would get contribution from the Companies, denial of contribution would tantamount to denial of the right, which has been treated invariably by the courts akin to the right to property. The objector's suggestion of creation of Tariff Stabilization fund from the Pension Fund contribution is contemptuous to logical and judicious thinking and is unheard of in the whole judicial parlance. It needs not only outright rejection but may be deplored too.

CSPGCL prayed for allowing the Contribution to Trust as per the Petition as the same is not only in accordance with the Regulations but has been prayed exactly in accordance with the demand raised by the Trust from CSPGCL, without any addition made by the Petitioner at its own end.

CSPTCL submitted that it is contributing to P&G Trust Fund in the manner decided by the Commission in its Tariff Order from time to time and the same has been approved by the Commission at the time of true-up of ARR of respective years. The expenditure towards contribution to P&G Trust in respect of CSPTCL for FY 2022-23, FY 2023-24, and FY 2024-25 has been formulated on the basis of projected demand raised by the CSEB P&G Fund Trust.

CSPDCL submitted that the contribution to P&G Fund Trust is flowing from Regulation 34 of the CSERC MYT Regulations, 2021. It is to meet past unfunded liabilities of employees appointed before 01.01.2004. The contribution to this Fund is a constituent of the ARR of the Power Companies. The interest earned by the corpus of P&G Trust Fund already stabilizes the tariff shock to the consumers and thus, the entire corpus stands as Tariff Stabilization Fund. Hence, there is no need to consider the objector's present request.

Further, the creation of Tariff stabilization fund is considered only at the time when utility has Revenue Surplus. The Commission has also utilized surplus as Tariff Stabilization Fund in the past. Therefore, contentions of the Objector may be dismissed.

CSPDCL submitted that the contentions under this para as far as they are not connected to CSPDCL's Tariff Petition, are denied. CSPDCL is contributing to the P&G Trust Fund in the manner decided by the Commission in its Tariff Order from time to time. The under-statement of contribution set by the Commission in respect of CSPDCL for FY 2021-22 by Rs. 83.51 Crore is included in its Petition under Chapter 5 on Review of Order dated August 2, 2021.

Further, expenditure towards contribution to P&G Trust in respect of CSPDCL for FY 2022-23, FY 2023-24 and FY 2024-25 has been formulated on the basis of projected demand raised by the CSEB P&G Trust Fund.

Commission's View

The Commission does not find any merit in the suggestion for diversion of the Contribution to P&G Trust for creation of a Tariff Stabilization Fund.

Regulation 34 of the CSERC MYT Regulations, 2021 specifies the principles for contribution to P&G Fund for each year of the MYT Control Period. The Commission has allowed the Contribution to P&G Fund for the Control Period based on the letters received from the Chhattisgarh Gratuity and Pension Trust. The amount of

contribution requested by the respective Power Companies and the Commission's rationale for allowing the amounts are elaborated in the respective Chapters of this Order.

2.1.2 Group Cashless Health Insurance Facility/ Medical Facility for Pensioners

The Objectors (retired persons of the State Power Companies) submitted that being senior citizens, medical insurance facility is essential for them. Therefore, the Objectors requested the Commission to make special suitable provision in HR expenses towards 'Group Cashless Health Insurance Facility/ Medical Facility for Pensioners'. The Objectors further submitted that they are ready to share the amount of premium of group term health insurance plan on 50:50 basis with the State Power Companies.

Petitioner's Reply

CSPGCL submitted that though the issue may primarily appear unrelated to the instant Petition, however, in the interest of fairness and transparency, it is admitted that at present, the medical facility is neither available for the existing employees nor the pensioners. However, there is demand from various quarters and the matter is under consideration. As per Regulations, expenses on existing employees are to be covered under the HR expenses and the expenses on pensioners are met by the P&G Trust. As both the expenses are projected on the basis of the past trend/ projected liabilities, in the MYT Petition, there was no opportunity for the State Power Companies to include such expenses in the projections for the HR expenses and/ or the P&G Trust contributions.

In view of the above, CSPGCL prayed that if the suggestion is considered, the Commission may kindly accord 'in-principle' approval for pass through of such expenses in the head 'HR expenses' or 'P&G Trust contribution'. Such 'in-principle' approval would be helpful at the time of True up, as and when the State Power Companies implement such a scheme.

CSPTCL submitted that the issue of 'Group Cashless Health Insurance Facility/ Medical Facility for Pensioners' is not related with CSPTCL's present Tariff Petition; hence, no comments are offered in the matter.

CSPDCL submitted that the aforesaid point is not connected to CSPDCL's present Tariff Petition; hence, no comments are offered.

Commission's View

The Commission finds merit in the submission of the Objectors. The Commission has considered the matter on humanitarian grounds and is of the opinion that Group medical insurance for employees and pensioners is a genuine requirement. Further, the impact of such Group medical insurance is not expected to be very significant but can go a long way to improve the morale of the employees. The Companies may consider all implications on merit. The Commission grants in-principle approval for pass through of such expenses in the head "HR expenses" as and when they are actually incurred. The Commission has made the suitable provision in HR expenses towards 'Group medical insurance facility for employees and Pensioners' as discussed in the relevant section of this Order.

2.1.3 Merger of Power Companies

The Objector submitted that CSPGCL has paid huge amount of Income Tax of Rs. 76.92 Crore, Rs. 70.68 Crore and Rs. 8.90 Crore for FY 2018-19, FY 2019-20 and FY 2020-21, respectively. On one hand, CSPGCL is earning profits and paying Income Tax and on the other hand, CSPDCL is projecting huge losses.

Since, burden of both is borne by the consumers of the State, hence, it is earnestly required that all Power Companies except CSPTCL be merged immediately so that huge expenses (about Rs.100 Crore to Rs. 150 Crore every year) on account of taxes, administrative expenses and cost of additional working capital is saved.

Hence, the Commission is requested to issue advisory to the State Government for the merger of all such Power Companies in the common interest of the State under Section 86(2)(iii) of Electricity Act, 2003.

Petitioner's Reply

CSPGCL submitted that the issue raised by the Objector is unrelated to the instant Petition. Income Tax has been paid in accordance with the prevailing Income Tax Rules. Moreover, merger of Companies is a far bigger policy matter and has multi-faceted dimensions, which is beyond the scope and extent of the instant exercise.

CSPDCL submitted that it would not like to comment on the contentions of Objector on this issue as they are extraneous to the subject matter of present Tariff Petition.

Commission's View

Income Tax paid by CSPGCL for FY 2018-19, FY 2019-20 and FY 2020-21 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 beyond the scope of the present exercise for determination of the ARR and Tariff of the Power Companies for the next MYT Control Period.

2.2 Objections for CSPGCL

2.2.1 Capacity Charges for Marwa TPP/ ABVTPP

The Objector submitted that during FY 2020-21, Plant Availability Factor (PAF) of Marwa TPP/ABVTPP was only 55.06% against approved PAF of 76.50%. However, CSPGCL has claimed Rs.1,471.14 Crore as Capacity Charges against approval of Rs.1,508.31 Crore. Thus, CSPGCL has submitted excess claim of Rs. 385.55 Crore in Capacity charges for FY 2020-21. This means that without running the plant to normative capacity, CSPGCL is recovering its fixed cost from the consumers of the State, even when such plant is meant to supply electricity to Telangana on back-to-back basis.

Therefore, the Objector requested the Commission to consider ARR of Marwa TPP on reduced PAF and disallow excess claim of Capacity Charges of Rs.385.55 Crore for FY 2020-21.

Petitioner's Reply

CSPGCL has not submitted any reply.

Commission's View

In accordance with the CSERC MYT Regulations, 2015, in its Petition, CSPGCL 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 2020-21, the details of which are provided in subsequent Chapter of this Order.

2.2.2 Cost of Coal

The Objector submitted that CSPGCL has not provided consolidated quantum and cost of coal consumed, in its True-up Petition for FY 2020-21. Also, claim against cost of coal and net generation in the True-up Petition are not matching with the figures as per Audited Balance Sheet of FY 2020-21. The Objector requested the Commission to direct CSPGCL to submit reconciled data in the True-up Petition for FY 2020-21 to carry out proper True-up exercise.

Petitioner's Reply

CSPGCL submitted that there is no infirmity in claiming coal cost and/or net generation. Coal cost has been computed as per settled methodology approved by the Commission in all previous Orders. Right from the first true up of CSPGCL, it is settled that while the accounting cost is determined in accordance with moving average price of coal, for regulatory purposes, the rate is determined on the basis of replacement price (determined on the basis of landed rate of the coal during the year). Further, as per the specific provision in the Regulations and widely accepted regulatory practice since so many years, in the regulatory computation, the landed cost of coal includes all the costs incurred in transportation. In the financial accounts, the cost incurred on employees, A&G and R&M of external Coal Handling Plant (CHP) is part of O&M cost and not the fuel cost. It is for this reason that for each plant, the O&M cost incurred on coal transportation added in the landed cost computation is exactly the same, which is deducted from the plant O&M cost computation.

Therefore, conceptually too, while the quantity of coal consumed matches with the values appearing in the accounts, there will be some difference in the financial accounts and the regulatory accounts. It is further submitted that for determination of landed cost, all relevant data have already been submitted along with the bi-monthly FCA calculations.

As regards the issue of deviation in the net energy, CSPGCL submitted that there is no infirmity / inconsistency in the data and alleged deviation is just a mix up of scheduled energy and net injection. When accounts refer to the sold energy, it implies billed energy, i.e., the scheduled energy. However, actual technical parameters such as AEC / SHR, etc. are computed in reference to actual net generation.

Commission's View

The Commission agrees with the clarifications submitted by CSPGCL on the issues raised by the Objector. 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.

2.2.3 Plant Availability Factor (PAF) for HTPS

The Objector submitted that the Commission had allowed lower PAF of 76.5% for 4x210 MW HTPS from FY 2017-18 to FY 2020-21 against Normative PAF of 83% considering shutdowns due to installation of Electrostatic Precipitator (ESP) in its two Units. In the Tariff Petition for FY 2021-22, CSPGCL had informed that the said work was still not completed and hence, requested for continuity of lower PAF of 76.5% for FY 2021-22. CSPGCL had not submitted any progress report, investment made, legitimate reasons for delay and expected completion time against the said work. Therefore, the Commission was requested not to accept such lower PAF for HTPS; but again, lower PAF was allowed at 78.69% in the Tariff Order for FY 2021-22.

CSPGCL has again projected quite lower PAF for HTPS, i.e., 79%, 78% and 76.5% during MYT Period from FY 2022-23 to FY 2024-25. Therefore, the Objector requested the Commission to decide PAF of 83% for HTPS during the Control Period.

Petitioner's Reply

CSPGCL submitted that it has considered normative PAF for HTPS for the next Control Period exactly as specified in the CSERC MYT Regulations, 2021, and there is no infirmity in the same.

The pleadings of the Objector are contrary to the established principles of law. The appropriateness of the Regulations cannot be challenged in the garb of objection to the Petition filed in accordance with the Regulations. Such pleadings do not sustain even in the form of an Appeal before the Hon'ble APTEL. The Hon'ble APTEL in the Appeal No. 5 of 2013 read with the decision of Constitution Bench of Hon'ble Supreme court of India in PTC India Ltd. vs CERC reported at 2010 (4) SCC page 603, has held that validity of the Regulations framed under the Act can be challenged only by seeking judicial review under Article 226 of the Constitution of India and not otherwise.

In view of the above, the Commission is prayed to reject the objection ab initio and allow PAF as prayed in the Petition.

Commission's View

The norms for operation of the conventional generation plants of CSPGCL have been specified in the CSERC MYT Regulations, 2021 notified for the MYT Control Period. Accordingly, the Commission has approved the normative PAF of 79%, 78% and 76.50% for FY 2022-23 to FY 2024-25, as discussed in subsequent Chapter of this Order.

2.2.4 Non-Tariff Income of CSPGCL

The Objector submitted that CSPGCL has claimed the Non-Tariff Income of Rs. 24.99 Crore for FY 2020-21, whereas as per the Audited Balance Sheet for FY 2020-21, the Non-Tariff Income is Rs. 33.74 Crore. Therefore, the Commission should

consider the Non-Tariff Income of CSPGCL for FY 2020-21 as Rs.33.74 Crore and prudently check revenue suppression of Rs.8.75 Crore.

Petitioner's Reply

CSPGCL submitted that the objection is denied. CSPGCL in the Petition has explained the principles followed and specific exclusions made in Non-Tariff Income. Specific reference has been made to Regulation 38.6 of CSERC MYT Regulations, 2015. The approach and methodology adopted by CSPGCL is in line with the settled principles and practice adopted. It is submitted that the objector has probably lost sight of the fact that in all the previous Orders, it has been well settled that while the interest on FDRs pertaining to the Gidhuri Pathuria coal blocks is at present non-incident to the business of CSPGCL, the interest received on FDRs pertaining to Gare Palma III has to be accounted against the Capital Cost of the project and cannot be considered as revenue income.

In view of the above, CSPGCL submitted that there is no infirmity in the Petition and the Commission is prayed to allow Non-tariff Income as prayed in the Petition.

Commission's View

The Commission has approved Non-Tariff Income for FY 2020-21 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.

2.3 Objections for CSPTCL

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

The Objector submitted that CSPTCL has projected the Transmission Loss trajectory at 3.08% for the Control Period from FY 2022-23 to FY 2024-25. The proposed Transmission Loss of 3.08% is higher as compared to the Transmission Loss in other States. The Objector cited the example of Himachal Pradesh, Uttarakhand, Jharkhand, and Madhya Pradesh wherein Transmission Losses are much lower as compared to Chhattisgarh. Therefore, the Objector requested the Commission to rationalise the Transmission Losses of CSPTCL for the Control Period at least at par with Transmission Losses of Madhya Pradesh, which is 2.59% (highest among these States).

The Objector also submitted that STOA charges proposed by CSPTCL are 36.47 paise per unit for FY 2022-23. These charges proposed by CSPTCL are on the higher side as compared to other States. The Objector cited the example of Himachal Pradesh, Uttarakhand, Jharkhand, Uttar Pradesh, Odisha and Telangana wherein Transmission Charges are much lower as compared to Chhattisgarh. Therefore, the Objector requested the Commission to rationalise the Transmission Charges of CSPTCL at least at par with Transmission Charges of Odisha, which are 24.21 paise per unit (highest among these States).

Petitioner's Reply

CSPTCL submitted that based on transmission loss achieved for FY 2014-15 (3.22 %), the Commission has set target as 3.22% for every year of the Control Period from FY 2016-17 to FY 2020-21. At present in the final true up of ARR, CSPTCL has

achieved transmission loss to the tune of 3.09%. Hence, CSPTCL has proposed transmission loss to the tune of 3.08 % for each year of upcoming Control Period, which is reasonable.

CSPTCL submitted that STOA charges proposed for FY 2022-23 in the Petition are based on the methodology adopted for determination of STOA charges in the previous Tariff Orders.

Commission's View

The Commission has approved the intra-State Transmission Loss for the Control Period from FY 2022-23 to FY 2024-25 as 3%. The actual Transmission Losses shall be considered at the time of truing up for FY 2022-23, 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.

2.4 Objections for CSLDC

2.4.1 SLDC Operating Charges

The Objector submitted that CSLDC is currently charging Operating Charges at Rs. 2000 per day per transaction for all inter-State as well as intra-State Open Access consumers, which is 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 in the Western Region, SLDC Operating Charges in Maharashtra and Madhya Pradesh are Rs. 2,250 per day and Rs. 3,000 per day, respectively. Thus, SLDC Operating Charges of Rs. 2000 per day levied by CSLDC is justifiable in comparison of SLDC operating charges levied in Maharashtra and Madhya Pradesh.

Commission's View

SLDC Operating Charges for STOA consumers are reasonable and have been retained at existing levels.

2.5 Objections for CSPDCL

2.5.1 Non-Reconciliation of data

The Objector submitted that CSPDCL has submitted Tariff Petition in December 2021 and it has revised lot of data vide additional submission in February 2022. The additional submission is meant to supplement data gap, which was submitted originally. In fact, CSPDCL has amended the Tariff Petition without filing amended Petition and requisite affidavit, which is not permissible under the Law.

CSPDCL has submitted Audited Balance Sheet for FY 2020-21; however, no reconciliation has been provided in support of submission made under additional submission and there remain several ambiguities and discrepancies of data.

The Objector submitted that due to such different sets of data for FY 2020-21, it is impossible for stakeholders to make any legitimate objection on present Tariff Petition filed by CSPDCL. Therefore, the Commission should direct CSPDCL to amend the Tariff Petition and to submit reconciled data in order to enable stakeholders/consumers to make legitimate suggestions/ objections.

Petitioner's Reply

As regards objection on difference between the Tariff Petition and Additional Submission, CSPDCL submitted that at the time of filing of Petition, the Accounts available were provisional and the audit was in process. By the time of TVS, the Accounts were finalized, and hence, revised submission was made on the basis of audited accounts. CSPDCL submitted that in the original Petition, it has specifically mentioned the aforesaid aspect at para 4.3 of the Chapter 4 – Methodology of the Petition. Hence, the contention of the Objector that the data is non-reconciled is wrong. The same prayer has been reiterated under various heads of ARR in the original Petition.

Pursuant to the directions of the Commission, the Petitioner has submitted consolidated revised Petition of true-up part for FY 2020-21 vide Letter No. 2769 dated February 22, 2022.

As regards the objection on difference between Additional Submission and Audited Accounts, CSPDCL submitted the detailed reasoning of the deviations from the audited accounts for each head separately as under:

i. Contribution to Pension and Gratuity:

CSPDCL submitted that the expenses towards Pension and Gratuity in the audited accounts contain the actual outgo of Pension and Gratuity as well as the actuarial gain and loss, which is notional in nature and has not been incurred in actual. Hence, as per the settled methodology, CSPDCL has claimed the actual outgo on account of Pension and Gratuity in the Tariff Petition. This is in line with the provisions of Regulations. Hence, there is no discrepancy in this data.

ii. Non-Tariff Income:

CSPDCL submitted that the Non-Tariff Income as per audited accounts includes interest on loan of Rs. 9.25 Crore and amortization of grant of Rs. 212.43 Crore. These two items have hence, not been considered in the Non-Tariff Income in the Petition and the detailed reason for the same has been provided in the Petition. In light of the above, the contention of the objector is wrong.

iii. R&M Expenses and A&G Expenses:

In line with the above submission, CSPDCL submitted that the R&M expenses and A&G expenses claimed in the original Petition were based on the provisional accounts and CSPDCL has revised its claims in the additional submissions based on

the final audited accounts. As per Note 26 of the Accounts, the total other expenses including capitalization is Rs. 513.65 Crore.

R&M expenses as per the Accounts are Rs. 364.57 Crore, which has been claimed as R&M expenses in the revised petition. Further, the expenses of Rs. 49.68 Crore towards manpower expenses at 33/11 kV substations has been deducted while claiming the sharing of gain and losses on account of O&M expenses. The R&M expenses have been claimed strictly as per the audited accounts and there is no multiplicity of the data as contended by the Objector.

Similarly, Rs.149.08 Crore has been claimed under the head A&G expenses after adjustment of the capitalization of expenses, strictly as per the audited accounts and there is no deviation.

The Objector has wrongly adjusted the capitalization from R&M expenses, which is resulting in confusion. The Commission is requested to consider the submission of the Petitioner, which are as per the audited accounts.

iv. Consumer Security Deposit:

CSPDCL submitted that the Objector has erred in the objection. The Petitioner has claimed the security deposit at Table 23 of the revised True Up Part of the Petition as Rs. 2374.04 Crore, which is as per the audited accounts. The Objector is comparing the opening balance of the consumer security deposit with the closing balance of consumer security deposit.

v. Employee Expenses

CSPDCL submitted that there is no deviation between the Petitioner's claim and audited accounts as regards the employee expenses. The Objectors claim of adding the outsourced manpower expenses in the employee expenses is contrary to the Regulations. Hence, the objection is baseless and has been made contrary to the Regulations.

vi. Sale of Energy (MU)

CSPDCL submitted that the sale of electrical energy is not a subject matter of audited accounts, hence, as per the settled methodology, the Petitioner has relied on the actual sales data in MU as per R-15. This methodology has been followed by the Commission in all the previous true up Orders.

vii. Sale of Energy (Rs. Crore)

CSPDCL submitted that the revenue from sale of energy has been considered as per the audited accounts as per the settled methodology and hence, there is no deviation on account of this head.

viii. Purchase of Energy (MU)

CSPDCL submitted that as stated above, the purchase of power in MU terms is not a subject matter of the audited accounts and hence, CSPDCL has been relying on the R-4 submitted to the Commission and hence, the objector's objection is not relevant.

ix. Purchase of Energy (Rs. Crore)

CSPDCL submitted that the power purchase expenses have been claimed as per the audited accounts. The figures of power purchase expenses in the audited accounts are inclusive of Rs. 571 Crore of DPC, which has not been considered by the Petitioner as per the settled methodology and hence, the contention of the Objector is wrong. Further, regarding the REC cost of Rs 187.03 Crore, the Petitioner has submitted a detailed justification for the provisions in its reply to the second set of data gaps sought by the Commission.

x. Purchase of Renewable Power (MU)

The Petitioner submitted that the quantum of power purchase from any source is not a subject matter of audited accounts and hence, the contention of the Objector is baseless.

In view of the above, request of Objector seeking directions for submission of amendment Petition is baseless. The Commission may like to consider the contents of reply dated February 9, 2022 and February 22, 2022, which is submitted subsequent to filing of Tariff Petition in reply to the Commission's queries.

Commission's View

The Commission is of the view that the reply submitted by the Petitioner is in order.

2.5.2 Issues related to Agriculture Consumption

The Objector submitted that based on analysis of actual sales to Agriculture consumers from FY 2016-17, the sales forecast for Agriculture consumers during FY 2022-23 as submitted by CSPDCL appears to be on lower side (232 units/HP/month) against that claimed by CSPDCL in True-up for FY 2020-21 (259 units/HP/month).

CSPDCL has shown Agriculture consumption during FY 2022-23 lower than FY 2020-21 and FY 2021-22 even when number of such consumers is projected to increase considerably, which shows absence of realistic and reliable data and estimation.

Existing Energy Charges for Agriculture category is Rs.4.40 per unit whereas CSPDCL has proposed lower consumption of Agriculture Pumps during FY 2022-23 and also proposed to dispose surplus power at a lower rate of Rs.3.11, creating an artificial loss.

From the above, it is quite clear that CSPDCL has projected lower consumption of Agriculture Pumps during FY 2022-23 in order to show lower revenue artificially. Energy Meters of Agriculture Pumps are not read regularly and lakhs of such connections are served without any meter in violation of Electricity Act, 2003, hence it has become quite difficult to determine their actual consumption.

The Objector submitted that the report of the study on Agricultural consumption as directed under Tariff Order for FY 2017-18, FY 2018-19 and FY 2019-20 should be made available along with Tariff Order for FY 2022-23. Action taken report to curb the large number of defective energy meters and present status of such meters as observed under Tariff Order for FY 2018-19 and FY 2019-20 should also be made available along with Tariff Order for FY 2022-23.

The Objector submitted that a Suo-Motu Petition should be filed 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 approve actual sales during FY 2020-21 and sales forecast for FY 2022-23 to FY 2024-25 on the basis of realistic data.

Petitioner's Reply

CSPDCL submitted that it has submitted the justification for consumption of LV-3 category in revenue statement for FY 2020-21, in reply to data gaps dated February 9, 2022. Further, basis of projections of consumption for each year of the Control Period, i.e., FY 2022-23 to FY 2024-25 is detailed at Para 8.5 to 8.8 of the Tariff Petition.

The prayer of considering additional revenue from sale of power to LV-3 category during FY 2020-21 would be against accounting principles. Petitioner submitted that CSPDCL is billing flat rate to agriculture category of consumers in accordance with State Government directions issued under Notification No. 2131/F-21/08/2009/13/2/UE/KJJY dated September 19, 2013. Under clause No. 110(A) of Article of Association of CSPDCL, the directions of Government are imperative nature and have overriding effect on functions of the Company. In light of the above, CSPDCL requested to consider the revenue demonstrated in R-15 as the revenue from LV-3 agriculture category and the same may be considered to arrive at net standalone Revenue Gap for FY 2020-21.

All other issues such as Suo-motu Petition in the matters of agriculture category, etc., with regard to LV-3 category are not connected to CSPDCL's Tariff Petition, hence, no comments are offered.

Commission's View

The Commission has verified the sales to the agricultural category for FY 2020-21, based on the R-15 submitted by CSPDCL, and the same has been considered in the true-up for FY 2020-21. The Commission has already issued directions to CSPDCL for improvement of 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 2020-21, 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 2022-23 to FY 2024-25 has been elaborated in the subsequent Chapter of this Order.

2.5.3 UDAY Scheme and Distribution Losses

The Objector submitted that CSPDCL has committed to specific loss levels under UDAY Scheme vide MoU executed on January 25, 2016.

Previously, CSPDCL had claimed share of gains on reduction of Distribution Losses during FY 2016-17 in Provisional True-up Petition; however, the same was rejected by the Commission in the Tariff Order for FY 2018-19.

From the 1st Amendment in CSERC MYT Regulations, 2015 effective from April 1, 2016, it is amply clear that the energy loss trajectory agreed and committed in writing by CSPDCL shall prevail over provisions made in principal Regulations. Further,

CSERC MYT Regulations, 2015 specifies Transmission & Distribution Loss as Controllable factor under Regulation 11.2 and provides mechanism for sharing of under-achievement of stipulated targets.

CSPDCL has reported Distribution Loss of 18.50% below 33 kV and 16.84% including EHV sales during FY 2020-21. Surprisingly, without attaining prescribed target of 15% for FY 2018-19, CSPDCL has considered targeted loss of 16% during FY 2020-21 while computing the share of loss to be borne by it. Further, the share of loss of Rs. 106.11 Crore computed by CSPDCL is not accounted in ARR for FY 2020-21, which is unacceptable.

CSPDCL has provided for Rs. 198.97 Crore as State Subsidy during FY 2020-21 against support funding/ reimbursement of losses during FY 2019-20. The Auditors' Report provides that in terms of MOU signed by the GoI, Government of Chhattisgarh and CSPDCL, such amount should be Rs.486.32 Crore, a huge receivable of Rs.287.35 Crore. Hence, such amount of State Subsidy should be considered as Rs.486.32 Crore instead of Rs.198.97 Crore as claimed by CSPDCL during FY 2020-21. It is further interesting to note that the additional amount (Rs.253.39 Crore) against such State Subsidy is accounted in Balance Sheet of CSPDCL under Exceptional Items (Note 27); however, the same has not been provided in the present True-up Petition for FY 2020-21. This amounts to concealment of facts.

Considering all above reasons and provisions of CSERC MYT Regulations, 2015 and UDAY Scheme, the Objector requested the Commission:

- a. to stipulate the AT&C Loss agreed by CSPDCL under UDAY Scheme while allowing distribution losses at 33 kV and below for FY 2020-21.
- b. to order for share of loss against non-achievement of Distribution/AT&C Losses in accordance with CSERC MYT Regulations, 2015.
- c. to consider amount of State Subsidy as Rs.486.32 Crore instead of Rs.198.97 Crore during FY 2020-21 against UDAY Scheme.

The Objector submitted that in the True-up Petition for FY 2020-21, CSPDCL has claimed Distribution Loss below 33 kV as 18.50% whereas in Tariff Petition for FY 2021-22, CSPDCL had projected a Distribution Loss below 33 kV as 16.00%.

Energy balance produced by CSPDCL in True-up Petition for FY 2020-21 and MYT Petition for the Control Period are erroneous since quantum of Net Power Purchase is not matched in such Energy Balance.

Even if the claim of CSPDCL with respect to energy losses is considered primarily, it can be tabulated as under to roughly estimate the revenue impact as Rs. 236 Crore.

The Objector submitted that the Commission has allowed higher Distribution Loss of 16% during FY 2021-22 going against the agreed terms under UDAY Scheme, CSERC MYT Regulations, 2015 and previous Tariff Orders, without assigning any reason. The Ministry of Power (MoP), GOI has directed for reduction of AT&C losses to the level of 12% to 15% by FY 2024-25 under Revamped Distribution Sector Scheme (RDSS).

In view of the above, the Objector prayed the Commission:

- a. to allow AT&C Loss of 15% for FY 2020-21 and even lower for the Control Period from FY 2022-23 to FY 2024-25 as provided in CSERC MYT Regulations, 2015, MoU under UDAY Scheme and directives of MoP, GoI.
- b. to treat judiciously any revenue losses due to under-achievement vis-à-vis agreed target under the provisions of CSERC MYT Regulations, 2015 without putting additional burden on consumers.

The other Objector submitted that based on the energy balance for FY 2022-23 and FY 2023-24, it is observed that sales projection for all categories are increasing at 10% every year; however, the energy losses for below 33 kV is projected same, i.e., 16% for every year without any change. The Commission, in the Tariff Order for FY 2021-22, has directed CSPDCL to strive to achieve the target in subsequent years so as to achieve the desired targets as per the MoU signed under UDAY. Therefore, directions may be given to CSPDCL to reduce the losses below 16% as it impact the tariff specially for EHV consumers.

Petitioner's Reply

CSPDCL submitted that it has submitted details about State Government subsidy in the Petition. Further, CSPDCL has also provided break-up of aforesaid revenue in additional information submitted through Letter No. 2650 dated February 9, 2022. The above submissions reveals that Petitioner has received Rs. 198.97 Crore as revenue from subsidy towards UDAY scheme during FY 2020-21. Further, receivable of Rs. 287.35 Crore is not considered as revenue in light of the fact that grant of UDAY is not under regular nature of subsidy. It is further to submit that the same shall be included as revenue in future years when actual subsidy from the Government is received.

Petitioner submitted that it has clarified the reasons for not considering deductions due to under achievement of line loss targets at 33 kV level at Para 6.13 of the Tariff Petition. Further, CSPDCL has submitted consolidated revised Petition in respect of final true up of FY 2020-21 incorporating the changes due to audited accounts containing various tables stated at Reply to query No. 4 of Letter No. 2650 dated February 9, 2022. This includes the modified table on sharing of efficiency losses.

The request of Objector to substitute 33 kV distribution loss with AT&C losses is strongly objected as it considers collection efficiency too. As the collection efficiency is not included as a performance parameter for distribution licensee, consideration of AT&C losses at 33 kV level would be against the Regulations.

CSPDCL submitted that the contentions about mismatch of figures in energy balance, power purchase cost and its commercial conversions in terms of revenue are baseless. The true up data in respect of energy sales/power purchase is based on actual meter readings at distribution periphery. The Objector has not considered the differential timings involved in billing cycles of power purchase and consumers. CSPDCL bills more than 59 lakh consumers in LT spread across the State and it is difficult to issue simultaneous bills to all consumers at one time due to constraints in meter reading, while the power purchase bills observe definite monthly cycle.

That Objector's request for consideration of AT&C losses of 15% for true up years as well as projections for each year of the Control Period is also baseless. The reasoning for consideration of 16% for projections of energy balance for each year of the

Control Period is detailed at Para 8.40 and 8.42 of the Tariff Petition. Further, the Commission in the Tariff Order dated May 30, 2020 has approved target distribution loss (below 33 kV system) as 16% for FY 2020-21 and further, upheld the same target for FY 2021-22. As no target is specified for FY 2022-23 in Regulation 98.3 of CSERC MYT Regulations, 2021, and the energy loss trajectory has to be stipulated by the Commission in the Tariff Order itself, the Petitioner has reasonably projected the energy sales and energy audit on the basis of uniform 16% Distribution Loss for each year of the Control Period from FY 2022-23 to FY 2024-25.

CSPDCL also submitted that in pursuance to Regulation 5.7(b)(ii)(3), a distribution licensee is required to project energy sales for projection of revenue for ensuing year. Accordingly, there would be opportunity to revise the projections based on the energy loss trajectory specified by the Commission in the present MYT Order.

In view of the above, CSPDCL requested to dismiss the prayers made by the Objector.

Commission's View

For true-up for FY 2020-21, the Commission has considered the Distribution Losses based on actual energy sales and purchase with respect to the Distribution Losses approved in the Tariff Order for FY 2020-21. Further, the efficiency losses on account of non-achievement of the distribution loss trajectory approved in the Tariff Order, despite inclusion of assessed sales, has been computed and shared between CSPDCL and the consumers, in accordance with the CSERC MYT Regulations, 2015. For the Control Period, the Commission has approved the trajectory for reduction of Distribution Losses as detailed in subsequent Chapter of this Order. 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 subsequent Chapter of this Order.

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

The Objector submitted that CSPDCL has purchased Renewable Power at quite higher cost and much lower quantum of concessional power than approved, which indicates effort to inflate over-all power purchase cost. CSPDCL has not explained the reasons for such variations, which are causing additional burden to the consumers of approx. Rs. 80 Crore for FY 2020-21 and Rs. 338.96 Crore for FY 2022-23.

The Objector also submitted that the information provided in the present Petition and additional information do not match with the Audited Accounts for FY 2020-21. CSPDCL has entered into an Agreement with SECI for purchase of Solar power of 500 MW at very low rate of Rs. 2.57 per unit and supply of such power was expected to commence in March 2021. Hence, such high purchase cost of Solar power during FY 2022-23 is not understandable and it needs prudent examination.

Further, CSPDCL has claimed Rs. 187.09 Crore under Power Purchase Expenses during FY 2020-21 for the purchase of Renewable Energy Certificate (REC) but the Auditors' Report for FY2020-21 states that:

“(viii)Renewable Energy Certificate (REC)

Due to non-compliance of RPO (Renewable Power Obligations) target, the company is obliged to purchase REC Certificate. However the company has not purchased the REC Certificate which has resulted in creation of a provision amounting to Rs.187.09 Crores....”

A true-up exercise is based on actual expenditure and income and it does not allow provisions of expenses to be made beyond the financial year. Hence, such provisional expenditure should not be allowed in True-up of FY 2020-21.

Petitioner’s Reply

CSPDCL submitted that the procurement of renewable energy power is to meet the RPO target. Further, the power purchase is made in accordance with the long-term Power Purchase Agreement (PPA) at tariff determined/approved by the Commission. Hence, the objection that RE purchase has been done at higher cost is denied. The Objector has not taken into consideration the additional billing of DSM and statutory taxes and duties applicable to biomass sources. Further, the reduced rates in respect of solar purchase is due to availability of cheaper power during FY 2020-21, thereby, reducing the effective average weighted rate. The procurement of hydel/other RE contains sources with less than installed capacity 25 MW. The per unit rates approved for small hydel plants varies between Rs. 6.15 to Rs. 7.74 per unit (Levelised tariff) plus taxes, duties and water charges for FY 2020-21. CSPDCL has submitted source-wise power procurement details in MS Excel format along with the Petition as well as in reply to additional points under prudence check.

CSPDCL has submitted the clarification on power purchase expenses regarding ‘Other charges-RE’ at point no. 13 of reply No. 2769 dated February 22, 2022 under prudence check.

In view of the above, CSPDCL requested to dismiss the prayers made by the Objector.

Commission’s View

The Commission has considered the quantum and rate of purchase from RE sources and Concessional Power sources for FY 2020-21, as elaborated in a subsequent Chapter of this Order. The Commission has considered the quantum and rate of purchase from RE sources and Concessional Power sources for the Control Period, as elaborated in the relevant Chapter of this Order.

2.5.5 Banking of Power

The Objector submitted that the ‘Banking of Power’ is a recent development in the field of Distribution Business. Banking of energy does not involve any purchase of electricity. It is a cashless transaction and is a facility available to Distribution Licensee like storing energy with other Discoms for subsequent own consumption. The Banking is done between two Discoms on mutually agreed terms and conditions. This methodology is mutually beneficial as one Discom can bank its costly surplus power with other Discom, without surrendering at quite low UI Rates in the Grid, and can avail back such power in the hours of shortages, avoiding emergency purchase of costly power. This methodology facilitates discipline in operation of the Grid, Distribution network and Power Purchase Cost.

In the present True-up Petition for FY20-21, CSPDCL has neither shown any reason for not returning 1,061.15 MU of power banked with it in totality although it had surplus availability of power nor has it submitted the “Power Banking Pass Book. It is clear that the quantum of such Banked Power is quite high and is purchased in one year and used/sold in later years or vice-versa. Amount of such power may be as high as Rs.500 Crore to Rs.1,000 Crore evaluated at Average Power Purchase Cost.

The Objector submitted that the Judgment of Hon’ble APTEL dated July 1, 2014 in Appeal No. 220 of 2013 (Himalaya Power Producers Association Vs. HPERC, etc.) is related to the determination of Average Pooled Power Purchase Cost (APPC) under REC mechanism, hence, the directives of Hon’ble APTEL should not be taken in other context.

If the quantum and cost of such Banked Power is not accounted in the same Financial Year, it may create several problems relating to accounting and statutory lapses, viz:

- a. Banked Power is Stock in Hand (positive or negative, as the case may be) and it should be accounted in the Balance Sheet and Profit/Loss Account of CSPDCL.
- b. By not accounting the quantum and cost of such Banked Power in the same financial year, Revenue Surplus or Deficit may be siphoned to the coming years, which will create artificial stand-alone Profit/Loss for that particular Financial Year.
- c. It is against the basic principles of accounting and Accounting Standards being followed.
- d. It is against the statutory provisions of Income Tax.

CSPDCL has failed to comply with the above directives of the Commission while filing True-up Petition for FY 2020-21. In view of the above, the Objector submitted following:

- a. Such quantum of Banked Power should be treated as Stock in Hand (positive or negative, as the case may be) and Cost of such Banked Power should be accounted in the same Financial Year. Further, CSPDCL should be directed to comply with the directive already issued to maintain a ‘Power Banking Passbook’ having details like Banking Partner/s, Banked Quantum, Date & Time of such Banked Quantity, effective UI Rates on such time, Agreed Date and Time for Reverse Banking, etc.
- b. Necessary Regulations be made at the earliest with respect to Banking of Power as announced in Tariff Order for FY 2019-20.

Petitioner’s Reply

CSPDCL submitted that it is complying with the directions issued by the Commission at Para 10.2(vi) ‘New directives to CSPDCL’ regarding banking transactions. Further, CSPDCL has also submitted the details showing reconciliation of banking transactions during FY 2020-21 with respect to corresponding banking agreements showing energy units received and unit returned in reply to Query No. 37 and 38 of Letter No. 2650 dated February 9, 2022. The aforesaid replies were also placed in public domain.

The contentions of banking about previous many years is not a subject matter of present Petition when the Commission has already settled the transactions in terms of

true-up Orders for each of the previous year. The Commission has approved final true up to FY 2019-20.

In view of the above, the Objector's prayer is ineffective; hence, may be dismissed.

Commission's View

While undertaking the final true-up for FY 2020-21, 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 the relevant Chapter of this Order. The Commission has also given certain specific directives in this regard, in this Order.

2.5.6 Review of Final True-up of FY 2018-19 and FY 2019-20

The Objector submitted that in the present Tariff Petition, CSPDCL has sought review of Tariff Order for FY 2021-22 pertaining to true-up of FY 2018-19 and FY 2019-20. This Review Petition was filed for an additional claim of Rs. 1088.56 Crore against approved true-up for FY 2018-19 and FY 2019-20 under Tariff Order for FY 2021-22. However, the claim is revised by CSPDCL to Rs. 1,033.62 Crore, which shows that the issues and claim produced vide Petition No.54/2021 have been revised after the expiry of limitation period of 60 days from the date of impugned Tariff Order. This is not permissible under the Law. Public Notice issued by the Commission and CSPDCL in the newspaper/s inviting comments, suggestions and objections from the public do not mention about the Review of Tariff Order for FY 2021-22 within the scope of present Petition. Since comments/objections are not called on review of Tariff Order for FY 2021-22 pertaining to True-up for FY 2018-19 and FY 2019-20, it would neither be legitimate for the public/stakeholders to raise any objection/s on the merits of such a huge demand of Rs.1,228.47 Crore (including carrying cost) nor for the Commission to address this issue without having followed proper procedure.

Therefore, the Objector requested the Commission not to allow CSPDCL to include any new issue other than Petition No.54/2021 for the review and to issue Public Notice for the review of Tariff Order for FY 2021-22 inviting suggestions/ objections from the public/ stakeholders and calling for a Public Hearing on the matter.

Petitioner's Reply

CSPDCL submitted that the prayer made by the Objector does not hold good in light of the directions of the Commission to include the points of review of Tariff Order dated August 2, 2021 in ensuing Tariff Petition for FY 2022-23. Accordingly, inclusion of Chapter 5 under present Petition is in pursuance to the Order dated October 30, 2021 in Review Petition No. 54 of 2021 read with provisions of Order 47 Rule 1 of Civil Procedure Code.

Commission's View

The reply of the Petitioner is self-explanatory.

2.5.7 Difference in Energy Sold and Actual Revenue Receipts from Retail Sale

The Objector submitted that revenue receipts claimed in the True-up Petition for FY 2020-21 is less than Revenue reported in R-15 format by CSPDCL, amounting to Rs. 95.39 Crore.

Similarly, CSPDCL has shown lower revenue from retail sale to LV3-Agriculture category, amounting to Rs. 428.59 Crore.

The Objector submitted that in accordance with Section 45 of the Act, CSPDCL is bound to recover energy charge as prescribed by the Commission under prevailing Tariff Order and it cannot show any undue preference to a consumer or class of consumers.

While true-up of earlier years, the Commission has considered 'additional revenue for Agriculture metered category'. During FY 2017-18, such additional revenue was Rs. 351.24 Crore whereas during FY 2018-19, it is considered as Rs. 382.85 Crore under true-up.

Therefore, the Objector requested the Commission to:

- a. prudently check shortage of revenue of Rs.95.39 Crore received from retail sale of power to HT Consumers during FY 2020-21 in light of R-15 data provided by CSPDCL
- b. consider additional revenue of Rs.428.59 Crore from sale of power to LV-3 Agriculture category during FY 2020-21 in accordance with prescribed Energy Charges under prevailing Tariff Order and the approach followed by the Commission in previous Tariff Order/s.

Petitioner's Reply

CSPDCL submitted that the contentions about difference of Rs. 95.39 Crore are baseless. CSPDCL has considered revenue reported in the audited accounts, under 'Revenue from sale of power' and 'Non-Tariff Income' in Tariff Petition as per the practice adopted by the Commission. Billing of Parallel Operation Charges, meter rent, cross subsidy surcharge, etc., forms miscellaneous part of revenue and is included under Non-Tariff Income. Therefore, comparing R-15 with figures of audited balance sheet is superfluous.

The other contention is also incorrect as Objector has not taken into consideration the billing of VCA to this category of consumers. Petitioner has given details of billing to LV-3 category consumers (inclusive of temporary connections) at reply to Query No. 8 of Letter No. 2769 dated February 22, 2022. Therefore, the Commission is requested to dismiss the Objector's prayer.

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 the relevant Chapter of this Order.

2.5.8 Power Purchase from CSPGCL

The Objector submitted that the net generation by CSPGCL for FY 2020-21 differs from quantum of power purchased by CSPDCL although entire power is purchased by CSPDCL. Also, there is difference in the cost of power purchased from CSPGCL during FY 2020-21.

Therefore, the Objector requested the Commission to:

- a. Prudently examine lower quantum of power purchase from CSPGCL by 128.93 MU against such power claimed by CSPDCL during FY 2020-21.
- b. Prudently examine the cost of power purchase from CSPGCL claimed by CSPDCL and excess provision of Rs.33.21 Crore in FY 2020-21.

Petitioner's Reply

CSPDCL submitted that the difference of net power generation by CSPGCL and power purchased by CSPDCL is accounted as DSM and the same has been taken into consideration in relevant Table 10 of the Petition.

Hence, there no significant difference in revenue of CSPGCL and power purchase expenditure of CSPDCL. Accordingly, it is requested to dismiss the prayer made by the Objector.

Though the objection is related to CSPDCL power purchase, in the interest of clarity, CSPGCL submitted that the quantum of power purchase is viewed from two different perspectives, depending upon the context and reference. One is the scheduled energy on which monthly energy charges are billed and the other is net injection, which is used for energy balance. The difference of the two is dealt by way of DSM. The objector's reference to CSPGCL data pertains to net injection of energy, which was about 17401 MU from the plants under True up. The scheduled energy from these plants was lower at about 17272 MU. In support of both the data, CSPGCL has already submitted the DSM statement certified by CSLDC. Further, it is important to note that as the CSPGCL True up Petition is for conventional plants only, the above data does not include the energy from the plants based on Renewable Energy sources. From the billing sheet already submitted, it may be seen that the total energy billed was about 17,272 MU.

In light of the facts submitted above, there is no infirmity and the alleged deviation is only a result of confusion between the scheduled energy and net injection. The Commission is prayed to accept the data as submitted in the Petition.

Commission's View

The Commission has verified the reconciliation given by CSPDCL and CSPGCL and has accordingly approved the quantum and cost of power purchased from CSPGCL in the final true-up for FY 2020-21.

2.5.9 Power Purchase from Central Generating Stations (CGS)

The Objector submitted that the quantum and cost of power purchased from CGS (NTPC and NSPCL) differs in various submissions made by CSPDCL.

Further, rebate of 2.5% is provided for timely payment against power purchase from Central Sector; however, CSPDCL is not availing this benefit although sufficient provision for working capital requirement is provided in the ARR. Thus, consumers of the State are deprived from huge benefit of Rs. 219.38 Crore in the form of rebate from CGS.

Therefore, the Objector requested the Commission to:

- a. Prudently examine cost of power purchase from Central Sector as claimed by CSPDCL during FY 2020-21.
- b. Prudently examine quantum of power purchase from Central Sector as claimed by CSPDCL during FY 2020-21 and excess purchase of 768.45 MU.
- c. Institute mechanism for the verification of calculations of VCA Charges recoverable from consumers.
- d. Ensure separate accounting of VCA Charges as directed under Tariff Order for FY 2020-21.
- e. Set VCA Charges to zero at the start of MYT Control Period from FY 2022-23.
- f. Allow rebate of Rs. 95.71 Crore for FY 2020-21 and Rs.123.67 Crore for FY 2022-23 for purchase from CGS and not to allow any Delayed Payment Surcharge (DPS) under ARR.

Petitioner's Reply

CSPDCL submitted that the contentions and prayers made by the Objector are absurd. It is because the Objector has compared unlike with likes. The expenditure taken as difference of power purchase cost (CHPP) on bi-monthly basis under the FCA and VCA mechanism observes separate annual cycle specified at Regulation 67.8 of CSERC MYT Regulations, 2015. Further, the expenditure taken as cost of power purchase observes annual cycle of financial year. This different billing cycles give rise to aforesaid difference. Hence, the contention of excess recovery through VCA is incorrect.

The contentions on rebate from CGS are hypothetical in nature. The benefit of early payment is consequential of discharging payment liability within the prescribed timelines. This is in turn connected to the financial position of the Petitioner. As there is no actual benefit received by the Petitioner towards early payment, the request of Objector to consider rebate is ridiculous.

In view of the above, the Objector's request may be dismissed.

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 2020-21.

The Commission does not find any merit in the suggestion for considering notional rebate on power purchase, which has not been received by the Petitioner, in the true-up for FY 2020-21.

The approach adopted by the Commission for projecting quantum and cost of power purchase from CGS stations for the Control Period is detailed in the relevant Chapter of this Order. The Commission has also made certain modifications in the FCA and VCA mechanism for the next Control Period, as elaborated in the relevant Chapter of this Order and in the Tariff Schedule.

2.5.10 Power Purchase from Marwa TPP

The Objector submitted that CSPDCL has an agreement with Telangana for back-to-back supply of power generated by Marwa TPP after adding trading margin of 7 paise per unit. The details of generation and supply to Telangana for FY 2020-21 shown an under-recovery of Rs. 248.93 Crore.

The burden of such under-recovery during FY 2020-21 is proposed to be passed on to the retail consumers. Also, the average cost of generation claimed by CSPGCL during FY 2020-21 is substantially high, even higher than cost of short-term power purchased by CSPDCL (Rs.4.12 per unit) and purchase of power from Marwa TPP for retail sale is inflating retail Tariff.

Therefore, the Objector submitted that any under-recovery from sale of power to Telangana below cost of generation should not be loaded on retail consumers.

Petitioner's Reply

CSPDCL submitted that it is supplying power purchase from ABVTTP (Marwa) to Telangana DISCOMs under back-to-back arrangement. It has been reiterated that based on demand supply gap of the State, a portion of availability from Marwa is utilised for supply to consumers of the State. In response to Query No. 32, CSPDCL has provided break-up of quantum and rate of purchase from Marwa out of consolidated CSPGCL Thermal at Table no. 10 of the Petition through Letter No. 2650 dated February 9, 2022. From the reply, it can be seen that out of total availability of 4377.99 MU, the sale to Telangana is 3275.37 MU. Resultantly, the short-dispatch to Telangana is utilised for supply to consumers of the State. Therefore, the prayer submitted by the Objector is irrelevant and liable to be dismissed.

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 ABVTTP, in the final true-up for FY 2020-21. Further, the recovery of Fixed Charges by ABVTTP has been allowed in accordance with the CSERC MYT Regulations, 2015, as elaborated in the relevant Chapter of this Order. For true-up, the Commission has approved sale of surplus power to Telangana after due prudence check, as detailed in the relevant Chapter of this Order.

2.5.11 Preparation of R-15 and Status of Defective Meters and Assessed Billing

The data submitted in LT R-15 report for FY 2018-19, FY 2019-20, FY 2020-21 and FY 2021-22 (8 months) along with Tariff Petition for FY 2021-22 shows that the number of defective meters and assessed billing cases are extremely high.

Thus, it is quite evident that CSPDCL is not sure about actual energy consumption and in large number of cases, billing is done on assessment basis. Hence, it is also obvious that meter reading is not done on regular basis. Number of defective meters are increasing in spite of several directives and Orders from the Commission.

CSPDCL has spent a hefty sum of Rs. 89.39 Crore (Balance Sheet, Note No.26) for meter reading and other merchandizing services during FY 2020-21, in spite of which meter readings are not done on regular basis. The Commission should disallow such

huge expenditure on out-sourcing of meter reading when 20-30% of meters are not being read.

The Commission had directed CSPDCL to prepare an action plan and take corrective measures to bring down percentage of defective meters and assessment-based billing within prescribed ceiling under Tariff Order FY 2019-20. However, unfortunately nothing has been done, hence, disallowance should be treated as punishment for non-compliance of directives.

The Objector submitted that the Action Taken Report to curb the large number of defective energy meters and present status of such meters as observed under Tariff Order for FY 2018-19 and FY 2019-20 should be made available along with Tariff Order for FY 2022-23.

The Objector submitted that the Commission in several Tariff Orders, has laid emphasis on correct and timely preparation of R-15 report. However, there is no uniformity in the submission of CSPDCL with respect to R-15 report, and it is very difficult to have a 'Bird's Eye-view' to have an overall picture of distribution system. There are also several data-based and calculation errors due to which very purpose of preparing R-15 report has been lost.

It is observed that R-15 format is being prepared by CSPDCL using SAP software and the Commission is now authorized to look directly into the data fed into SAP system. Therefore, it is desired that the Commission should inspect SAP data directly and regularly for better feedback and control.

In absence of authenticated, reliable and reconciled data and information like R-15 format, True-up Petition, Additional Submission and Audited Balance Sheet and Auditors' Report for FY 2020-21, the True-up exercise for FY 2020-21 should be carried only after submission of uniform data and information by CSPDCL.

Petitioner's Reply

CSPDCL submitted that the Commission has disposed Petition No. 53 of 2020 through its Order dated December 9, 2021 which was connected to compliance of directives by CSPDCL in respect of Tariff Order for FY 2019-20. The Commission after perusing the details of submissions made by respondent on each of the tariff directive contained in the Tariff Order dated February 28, 2019, appreciated the efforts taken by CSPDCL with specific observation to accelerate the efforts. The directives include preparation of action plan and corrective measures to bring down percentage of stop defective meter and assessment based billings.

Further, the status of stopped and defective meters and cases of assessed billing are demonstrated in revenue statement and the same are in pursuance to provisions of the Supply Code. The difficulties in replacement of stopped and defective meters such as diversity in locations of agriculture and BPL pumps, prolonged locked premises and resistance of consumers towards meter replacement are prominent reasons for existing status.

As regards to preparation of R-15, the contentions of Objector may be dismissed as the Petitioner is following the directions of the Commission from time to time.

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 has hence, given further directions to CSPDCL to submit a time bound action plan to phase out defective meters and assessment billing, along with the next MYT/Tariff Petition.

2.5.12 Retail Tariff of Mini Steel Plants (HV4-Steel Industries)

Effect of Lock-down and COVID-19 Pandemic on Steel Industries:

The Objector submitted that due to first wave of COVID-19 Pandemic, the Central and State Governments imposed Lock-down since March 23, 2020. Industries were allowed to work in limited manner since 1st week of May 2020, by strictly observing certain terms and conditions prescribed by the Government. The said Lock-down had been effectively imposed till May 31, 2020 by issuing strict guidelines and notifications. In second and third wave of Corona Pandemic, although the lock-down was not strictly imposed, the procurement-production-marketing-monetary cycle of Steel Industries of the State was very badly affected.

Under said circumstances, Steel Industries have been hit hard and are almost unable to run normal production activities due to following reasons:

- a. Complete Lock-down till 03.5.2020 and partially till 31.5.2020;
- b. Labourers and Staff are not attending production activity due to threat to their lives, migratory labourers have gone back to their respective States;
- c. Raw-material is not available in required quantity;
- d. Market and demand of goods has substantially diminished;
- e. Financial cycle has been badly affected;
- f. Huge liability of Minimum Electricity Bill during the period of closure.

The impact of above negative forces has resulted in actual sales to HV-4 category being much lower than approved in FY 2020-21 and FY 2021-22.

Hence, it is clear that Steel Industries, especially Mini Steel Plants, have suffered very badly due to Corona Pandemic and have not recovered even to the level 2 years before. This is a matter of great concern not only for industries but also for CSPDCL. Looking at the seriousness of the situation, the State Government had announced Tariff Subsidy up to Rs.1.22 per unit for Steel Industries having load of 2,500 kVA or above till July 2021 and later Retail Tariff was also reduced by the Commission, which is a highly welcome initiative taken by the Commission.

Lower Tariff in Neighbouring States:

The Objector submitted that some of the neighbouring States have announced electricity tariff for Steel Industries quite lower/competitive to the existing tariff in Chhattisgarh.

It is feared that trade and manufacturing activity may shift from the State to other States, which may prove to be nightmare for the development of our State. Hence,

Retail Tariff of Steel Industries should be designed in such a manner that such existing industries not only survive stiff competition from other States but are also able to fetch fresh investment.

Post-COVID afresh Investment in the State:

The Objector submitted that in the post-Corona period, the State Government is trying hard to attract fresh investment in the State by providing booster under State Industrial Policy 2019-24. Hence, to achieve above objective, the growth of existing industries is essentially required to be secured who are finding it difficult to survive in the present scenario.

CSPDCL has reported a surplus of electricity by about 7% (excluding Marwa TPP, generation of which is sold to Telangana and also not considering lower drawal against Central Allocation) during FY 2020-21. It shall further increase due to availability of Solar and RE Power of 2,373 MW during FY 2022-23 and such surplus power is proposed to be sold to other States at a price lower than purchase price. In this manner, we are subsidizing other States, which is certainly not our objective.

Therefore, the Objector prayed that the Retail Tariff and Incentives should be designed in such a manner that they not only help in survival but also encourage the consumption of electricity. To achieve above objective, following measures are suggested:

- a. A separate Tariff Sub-Category under HV4-Steel Industries should be formed for Bulk Consumers having load of 2,500 kVA or above and also having annual load factor of 50% and above;
- b. Average Billing Realization from Bulk Consumers to CSPDCL should be near to Voltage-wise Cost of Supply (FY 2021-22 - Rs.4.80 per unit for 33 kV supply determined by the Commission excluding past revenue gap);
- c. Suitable Bulk Consumption Incentive should be given over and above Load Factor Incentive (Orissa Pattern);
- d. Power-off hours should be increased to average 60 hours per month, considering shutdowns and weekly-off days;
- e. Only Night Tariff (optional) should be introduced to encourage consumption during surplus period with allowing 12 hours working;
- f. TOD Tariff Hours should be reset by reducing the peak period from 5 hours to 4 hours, reducing the normal period from 13 hours to 12 hours, and increasing the off-peak hours from 6 hours to 8 hours.
- g. Advance Payment Rebate equivalent to DPS (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.

The Objector made detailed submissions regarding the formulation of Only Night Tariff, which provides an ABR of about Rs.5.00 per unit considering 60% load factor (12 hrs) and 10% additional working during the period other than Normal (12 hrs) for other essential operational activities like loading, unloading, cooling, production cycle completion, office, etc.

Following issues are required to be fixed in consultation with CSPDCL:

- a. Allowable Normal Working Hours for Only Night Tariff, which should be 12 hrs minimum;

- b. Metering and Billing issues;
- c. Availability of Load in respective feeders during said period of 12 hrs, which can be permitted on 'first come- first get' basis, etc.

The Objector submitted that the Retail Tariff for Mini Steel Plants during FY 2022-23 should be designed considering Corona after-effects, package/ relief from the Central Government, lower tariff in neighbouring States, sincere efforts of the State Government to attract afresh investment and revenue contribution by Mini Steel Plants over the years, etc.

Petitioner's Reply

CSPDCL submitted point-wise reply to the measures suggested by the Objector as under:

- a. As regards separate Tariff Sub-Category under HV4-Steel Industries, CSPDCL submitted that creation of new tariff category would cause multiple tariff categories, which would be against the decision of the Commission taken in FY 2005-06 wherein prevailing tariff structure prior to regulatory regime was reduced by merger of several HT categories on the basis of purpose and usage of electricity.
- b. As regards Average Billing Realization from Bulk Consumers being near to Voltage-wise Cost of Supply, it would be against the Tariff Policy Clause 8.3(2) wherein consumer retail tariff is required to be determined within the limits of $\pm 20\%$ of Average Cost of Supply.
- c. Load factor incentive is a prerogative of the Commission under Section 62(3) of Electricity Act, 2003. CSPDCL in the capacity of Distribution Licensee requests to consider the aforesaid suggestion subject to protection of its approved ARR for FY 2022-23.
- d. The intention of power off hours is to compensate power intensive industries from interruptions. The Commission has already revised duration of 30 hours to 36 hours recently in the Tariff Order dated August 2, 2021. The aforesaid revision is based on average interruptions caused to industrial feeders across the area of supply in the State. Applicant has not submitted any justifications for revision. Therefore, aforesaid prayer is liable to be dismissed.
- e. The request for only night tariff for existing consumers would simply lead to shifting of load cycles. Any surplus consumption over and above existing would be achieved only by way of adding non-consumers of CSPDCL.
- f. The changes in TOD structure involve metering issues, and hence, may have constraints in implementation.
- g. The advance payment rebate already exists in the Tariff Design.

Commission's View

The Commission has addressed the issue of Load Factor Rebate for HV4-Steel Industries Category along with the tariff philosophy and other terms and conditions of tariff in the relevant Chapter of this Order. The category-wise tariffs have been determined in such a manner that the cross-subsidy between categories is reduced vis-

à-vis the Average Cost of Supply, while at the same time, the approved revenue requirement of CSPDCL is also met through application of the revised tariffs.

2.5.13 Sale/Consumption of Surplus Power within State

The Objector submitted that the Commission in Tariff Order for FY 2019-20, has directed CSPDCL to examine the possibility of optimum utilisation of surplus power within the State through appropriate incentive mechanism and to come up with a proposal for same by November 30, 2019. However, CSPDCL has not submitted any such proposal.

In the True-up Petition for FY 2020-21, CSPDCL has reported surplus availability of power of 1643.18 MU (excluding sale to Telangana in spite of much lower drawal against Central Allocation of power from Central Generating Stations), which is sold at Rs. 2.54/kWh as against average power purchase cost of Rs. 3.93/kWh.

The above quantum of surplus power amounts to more than 7% of retail sale of power of 23,361 MU during FY 2020-21. It is observed that CSPDCL is paying capacity charges to about 4 to 5 CGS stations (NTPC) without drawing any power from them due to surplus availability. Also, about 7% of the total net power procurement is disposed-off 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. Hence, if such power can be utilised within the State at relatively higher realization, it shall prove to be beneficial to CSPDCL and consumers as well.

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 the Order dated December 10, 2020, the Commission had directed industries to take up the matter during discharge of Tariff Petition for FY 2021-22 and also directed CSPDCL to submit detailed data and proposal to achieve above objective.

Due to favourable policies, market conditions and State Subsidy, Steel Industries have grown beyond estimations during FY 2018-19 and FY 2019-20 and have delivered major revenue to CSPDCL. However, due to the impact of Corona Pandemic since March 2020, Steel Industries of the State have suffered very badly and consumption is expected to remain 25% below the estimation.

Hence, estimation of consumption of Steel Industries at 8,443 MU during FY 2022-23 (55% higher than FY 2020-21) would be sustainable only when the tariff of Steel Industries is considerably reduced and anomalies are removed, considering negative impact of economic slowdown and effect of Covid-19. Hence, CSPDCL should be directed to make efforts to sell this surplus quantum of power to the consumers of the State as directed by the Commission. Therefore, a mechanism has to be devised so 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 compared to Rs.3.62 (gross average power purchase cost estimated for FY 2022-23 by CSPDCL), revenue of CSPDCL will be improved;

- 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.

The Objector submitted that the above measures may 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-effect of Corona Pandemic. Any operational constraints may be resolved under consultation with CSPDCL and consumers.

Petitioner's Reply

CSPDCL submitted that it anticipates a TOD surplus ranging between 100 MW to 1500 MW in the system during off-peak hours of winter and day time subject to commissioning of solar plants during the next Control Period. As consumer sale requires RTC surplus; hence, the present suggestion is senseless.

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 the Control Period, and has considered some short-term purchase from Power Exchanges to meet the energy requirement. However, during the Control Period, there are bound to be mismatches between demand and supply, and CSPDCL should strive to maximise the revenue from such sale of surplus power.

2.5.14 Change of Tariff Category

The Objector requested the Commission for consideration of electricity connection for 'Bharatnet Pariyojna Cabin' at 5987 nos. of Panchayat Buildings under LV-1 Domestic category instead of present LV-2 Non-domestic category.

The Objector submitted that at present, the tariff of LT Non Domestic is being charged for Printing Industries. However, Printing Industries have been considered under manufacturing industry; therefore, Industrial tariff should be applicable for Printing Industries.

The Objector submitted that he is involved in business of processing green vegetables and Food Processing Units are considered under HV-3 category (Industrial and General Purpose). In other States like Maharashtra, Uttarakhand and Uttar Pradesh, Food Processing Units are covered under agriculture allied category. Therefore, applicable tariff category for Food Processing Units should be HV-5 Irrigation and Agriculture Allied Activities, Public Water Works.

The Objector submitted that different tariffs are charged presently for various Wire Industries who have Induction Furnace, TMT Mill and manufacturers of MS Wire. Tariff for these Wire Industries should be same.

Petitioner's Reply

CSPDCL submitted that designing and re-structuring of retail supply tariff is statutory function of the Commission under the Act. Hence, the Objector's request may be considered subject to protection of CSPDCL's approved ARR for FY 2022-23.

Commission's View

The detailed rationale and philosophy adopted by the Commission is given in Chapter 13 of this Order.

As regards the suggestion regarding categorisation of Printing Industries, the Commission is of the view that Printing Industries, though an industry, cannot be categorised under industrial tariff category, hence, no change has been made based on this suggestion.

As regards the suggestion regarding categorisation of Food Processing Units under HV-5 Agriculture allied category, the Commission has decided not to modify the categorisation at present.

As regards the tariff for Wire industries, it is clarified that all Wire industries are categorised under HV-4 Steel category. The tariff differential is only because of the voltage-wise difference in tariff, wherein consumers connected at higher voltage are levied lower tariff as compared to consumers connected at lower voltages, to reflect the voltage-wise differential in cost of supply.

2.5.15 Promotional Electricity Tariff for 'Export Oriented Units'

The Objector requested the Commission to extend the scope of promotional electricity Tariff granted to export oriented Textile industries to other Textile industries also.

Furthermore, the State Govt has also suggested to rationalize the Tariff of Textile Industries, Jute Industries and Ethanol industries.

Petitioner's Reply

CSPDCL submitted that determination of retail supply tariff and differentiating among consumers while tariff determination, is a prerogative of the Commission under Section 62(3) of the Act. In the capacity of Distribution Licensee, CSPDCL submitted that the aforesaid request of the Objector may be considered subject to protection of Petitioner's approved ARR for FY 2022-23.

Commission's View

Looking to the specific purpose of supply of power to such Industries a special rebate of 25% for Textile, Jute, Ethanol industries categorised under HV-3 category has been introduced in this Order.

2.5.16 Voltage-wise Cost of Supply

The Objector submitted that Hon'ble APTEL in its Judgment in Appeal No. 102 of 2010 dated May 20, 2011, provided the guidelines for calculation of 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 who are having connectivity at 220 kV voltage are compelled to bear both the transmission losses as well as distribution loss.

Petitioner's Reply

CSPDCL submitted that the applicant's request to consider Voltage-wise Cost of Supply in tariff determination is misplaced in light of the fact that the Commission has already differentiated the energy charges for HV-4 tariff category on the basis of voltage of supply. It is pertinent that energy charges for 220 kV and 132 kV are substantially less than energy charges for 33 kV and 11 kV voltage.

The Hon'ble Supreme Court in the matter of Punjab State Power Corporation Limited V/s Punjab State Electricity Regulatory Commission & Ors. in Civil Appeal No. 4510 of 2006 decided on 10.02.2015 [(2015) 7 Supreme Court cases 387] has already upheld principles of cost of supply and cross subsidy. Accordingly, the present tariff structure in respect of HV-4 tariff category wherein different energy charges are determined for different supply voltages, is consistent with the aforesaid legal principle settled by the Hon'ble Supreme Court.

Further, retail supply tariff is statutory function of the Commission and while discharging this function it is guided by the Tariff Policy. According to Clause 8.3(2) under 'tariff design' of Tariff Policy notified on 28.01.2016, the retail supply tariff of a consumer category has to be within the limits of + 20% of Average Cost of Supply.

In view of the above, the request of the applicant to consider Voltage-wise Cost of Supply for retail tariff determination is baseless and need not be taken into consideration.

Commission's View

The approach of the Commission regarding determination of Voltage-wise Cost of Supply is given in the relevant Chapter 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.

2.5.17 Revenue from Existing Tariff

The Objector submitted that there is lack of transparency in estimating revenue from the existing tariff particularly from Railway and Steel Industry. ABR of Railway and Steel Industry comes out to be Rs. 6.21 per unit and Rs. 7.25 per unit. Such huge ABR indicates that the Petitioner has deliberately not considered huge load factor rebate allowed to both categories.

Petitioner's Reply

CSPDCL submitted that in response to specific query of the Commission, CSPDCL has submitted detailed reply showing revenue from sale of power at existing tariff for FY 2022-23 incorporating the implications of load factor rebate allowed by the Commission in the Tariff Order for FY 2021-22, impact of TOD tariff with details of TOD time slot, and computation of fixed charges in respect of LV-1 domestic category in line with modified telescopic fixed charges, vide submission through Letter No. 2769 dated February 22, 2022.

Commission's View

The Commission's analysis on the revenue from existing tariff has been detailed in a subsequent Chapter of this Order. The Commission has considered the impact of load factor rebate for HV-1 and HV-4 category, while computing the revenue from existing tariff for FY 2022-23.

2.5.18 Revenue Gap/Surplus for FY 2020-21

The Objector submitted that CSPDCL has not revealed under-recovery/over-recovery of revenue from consumers with reference to the estimation/approval in the Tariff Order. The Objector objected to the ARR submitted by CSPDCL and sought relief on following:

- a. Under-recovery (i.e., difference between actual ABR and ABR approved in Tariff Order multiplied by units sold to such category of consumers) and Railway (HV-1) should be worked out for FY 2019-20 and previous years and financial impact should be loaded to the same category of consumers.
- b. To maintain transparency, CSPDCL should be instructed to share the details of above calculations considering load factor rebate and share with public.
- c. To keep steel industry as subsidizing category, the load factor rebate needs to be withdrawn/ abolished.

The other Objector submitted that the closing deficit for FY 2020-21 is Rs. 4388.23 Crore, which contains the revenue gap of FY 2018-19, FY 2019-20 and FY 2020-21. The Petitioner wants to recover the entire gap through proposed tariff hike, which will cause a tariff shock in the pandemic period.

Petitioner's Reply

CSPDCL submitted that the contentions raised by the Objector regarding retail tariff determination are connected to previous Tariff Orders and proposal for ensuing year. With regard to contentions on retail tariff determination for the previous years, CSPDCL submitted that the Tariff Orders of all previous except FY 2021-22 (Tariff Order dated August 2, 2021) have attained finality as each of these have completed the term after issuance of subsequent Tariff Orders. Under the adopted practice, every change in existing tariff design is supported by justification and reasons in respective Tariff Order by the Commission. Facts demonstrate that the Objector have not exercised remedies available under the Act, in terms of examining the legality, propriety and correctness of these Orders. Further, review filed by Objector against Tariff Order for FY 2021-22 have also been dismissed by the Commission through Order dated December 22, 2021 in Petition No. 61 of 2021.

Under such circumstances, raising issues with regard to previous Tariff Orders before the Commission again would be inappropriate and abuse of regulatory process.

In light of the above, the Petitioner submitted that it would not like to comment on contentions raised by the Objector on tariff determination of previous Tariff Orders.

CSPDCL submitted that the Revenue Gap at Table No. 29 is computed according to the regulatory practice adopted by the Commission. Pursuant to such practice, the estimation of expenses and revenue is compared with actual expenses and revenue in terms of audited accounts at the time of truing up to get stand-alone gap position of

CSPDCL for FY 2020-21. The Table also includes additional gap arising out of Review Petition included at Chapter 5 of present Tariff Petition.

Further, the projections of revenue for ensuing year, i.e., FY 2022-23 are also done by applying existing tariff on estimated sales discovered on the basis of scientific methodology described at Para 8.6 to 8.8 of the Tariff Petition. Additionally, CSPDCL has also provided the revenue implications arising out of implementation of load factor rebate and TOD in response to data gaps raised by the Commission pursuant to prudence check.

CSPDCL submitted that the Objector's contention on closing deficit for FY 2020-21 do not require any comments as the same have been dealt in the Tariff Petition in detail. Further, CSPDCL has also submitted reply to data gaps/additional points on Tariff Petition to the Commission under prudence check.

Commission's View

The Commission has adjusted the Revenue Gap/(Surplus) arrived at based on final true-up of FY 2020-21, with the stand-alone Revenue Gap/(Surplus) of FY 2022-23, and the revised tariffs have been designed based on the cumulative Revenue Gap/(Surplus) as per the methodology adopted in previous Tariff Orders.

2.5.19 Tariff for Steel Rolling Mill and Mini Steel Plants

The Objector stated that Steel Rolling Mills are paying high tariff of Rs. 8 to 9 per unit. Steel Rolling Mills are known as low load factor industries. Earlier, Steel Rolling Mills were classified as Low Load Factor Industries category but later on, such category is merged with HV4 Steel Industries. Further, mini steel plants have a load factor of 70-75% whereas steel rolling mills have load factor of only 15-20%. The ABR for Stand-alone Steel Rolling Mills for FY 2021-22 is Rs. 8.19 per unit compared to ABR of Rs. 5.37 per unit for mini steel plants (having combined Steel Rolling Mills). On the contrary, the ABR of HV4 Steel Industries is Rs. 6.51 per unit, which does not provide true picture of tariff of Stand-alone Steel Rolling Mills. Stand-alone Steel Rolling Mills are finding it very hard to survive. Therefore, the Objector has requested for a separate category in the Tariff for low load factor industries for load factor up to 35% so that their ABR can be monitored, and tariff may be decided efficiently. The ABR for Stand-alone Steel Rolling Mills should be near Rs. 7 per unit.

The Objector submitted that demand charges for Stand-alone Steel Rolling Mills having load factor up to 35% should be brought to Rs. 100/kVA/month. Also, energy charges should be reduced to Rs.6/- per unit from the present level of 6.45 per unit.

Further, the Objector proposed for a special night tariff for Rs. 5 per unit for 12 hours considering availability of surplus power within the State. As an alternative, industrial consumers may be allowed to consume more power compared to the previous year's average consumption at Rs.4 per unit.

Petitioner's Reply

CSPDCL submitted that the creation of separate category for low load factor industries would be against earlier decision of the Commission in FY 2005-06 wherein merger of several HT categories was made with intention to reduce the

excessive consumer categories prevailing in the structure prior to regulatory regime and subsequently in FY 2017-18 wherein load factor of the consumer has been considered as a basis to differentiate among the energy charges for supply of electricity at different voltages. It is pertinent that separate low load factor tariff existed in the tariff design prior to FY 2017-18.

CSPDCL submitted that the Objector's request for reduction in demand charges and energy charges is the prerogative of the Commission under Section 62(3) of the Act. Hence, in the capacity of Distribution Licensee, the Petitioner requested the Commission to consider the aforesaid request subject to protection of approved ARR of CSPDCL for FY 2022-23.

CSPDCL submitted that the Objector's request for introduction of optional Night tariff at reduced charges taking into consideration surplus power available with CSPDCL requires no consideration in light of the fact that CSPDCL has surplus power only on TOD basis and that too during few months of second half of financial year. As consumer supply would require surplus RTC power, hence, present request for introduction of optional night tariff would be against the present conditions of demand supply position.

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 from the Tariff Order for FY 2019-20.

2.5.20 Load Factor Incentive for CPPs

The Objector submitted that the load factor incentive was taken away from the CPPs with capacity of 1 MW and above. Steel manufacturing is a power intensive process and taking away the load factor incentive will result in financial ruin. Therefore, to support the steel manufacturers, load factor incentive should be allowed for CPPs of 1 MW and above connected with CSPDCL grid as per the benefits given to the Mini Steel Plants. Also, there should be no increase in the tariff of this category in upcoming Tariff Order.

Petitioner's Reply

CSPDCL submitted that under Section 62(3) of the Act, the Commission has powers to determine retail tariff of different consumer categories and differentiate among the consumers on grounds of consumer 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. CSPDCL has not proposed any change in tariff design in respect of steel industries and requested the Commission to kindly continue the existing tariff design with uniform increase in energy charges across all tariff categories to meet the approved gap.

CSPDCL requested the Commission to consider the Objector's prayer subject to protection of approved ARR of CSPDCL for FY 2022-23

Commission's View

The Commission has addressed the issue of Load Factor Rebate for HV-4 Steel Industries Category and extension of the same to CPPs with capacity of 1 MW and above, along with other terms and conditions of tariff in the relevant Chapter of this Order.

2.5.21 Railway Tariff

The Objector submitted the Railways is a public utility and a bulk customer. Therefore, Railways should be provided with favourable tariff formulation of so that CSPDCL and Railways can serve the Nation as well as the State together. The reasons provided by the Objector are as follows:

- a. It is a base load consumer with average load factor of 30 to 40%;
- b. It is a Deemed Licensee, so, it can always avail electricity through Open Access;
- c. Surplus Power is available with CSPDCL. Railways being a Deemed Licensee, should be treated at par with CSPDCL and the power sold to Railways should be at Average Power Purchase Cost;
- d. Important role played by Railways in development of the State;
- e. 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;
- f. 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 for HV-1 (Railway Traction) considering the adversely affected train operations (Passenger services) during the current financial year due to COVID-19 pandemic situation. Further, the tariff for non-traction load of Railways in HV-3 category should be reduced. All non-traction load should be considered under LV-6 (Public utilities) tariff category.

Petitioner's Reply

CSPDCL submitted that the Objector has not made any comments on the Tariff Petition. The contention that the Objector may be treated as deemed licensee, does not require any consideration in light of the fact that such issue is not connected to the subject matter of present Tariff Petition. Further, the benefit of load factor rebate is already extended to Railway traction tariff under HV-1 category where traction sub-stations attaining load factor above 20% are availing rebate of 30% in billing of energy charges, under existing tariff design.

The request for treatment of non-traction load under LV-6 tariff category is an issue related to tariff design, which falls under the realm of the Commission. Under a conscious decision, bulk supply at one point to establishments applicable to consumer like Railway is categorised as HV-3 (other industrial and general purpose non-industrial), which is to meet commercial implications of mixed load in same premises availing non-traction connection. Further, request to include non-traction load under LV-6 tariff category may also observe the limitations of electrical safety involved in

issuing electricity connections simultaneously of HV/LV in same premises and more so, this issue is controlled by the Supply Code and not by Tariff Order.

Further, the request of the Objector to reduce tariff of HV-1 and HV-3 tariff categories requires examination of Tariff Policy Clause 8.3(3) wherein it is stipulated that consumer tariff has to remain within the limits of $\pm 20\%$ of average cost of supply. Pursuant to load factor rebate in HV-1 tariff category, applicant is already availing the benefit of subsidized tariff category. Hence, request for further tariff reduction would be unfair.

Commission's View

The detailed rationale and tariff philosophy adopted by the Commission, while determining the category-wise tariff for FY 2022-23, is given in the relevant Chapter of this Order. The detailed Tariff Schedule applicable for FY 2022-23 is given in the relevant Chapter of this Order.

2.5.22 Statutory Charges

The Objector submitted that in the Petition, it is not clearly indicated whether the water charges and SLDC charges are included in the ARR of CSPGCL and CSPTCL. These expenses are also not estimated for the Control Period. Therefore, ARR of all Petitioners should include estimate of all expenses including water charges, SLDC charges, statutory taxes, duties and cess payable on the basis of previous year's data and include the same in its ARR.

Petitioner's Reply

CSPDCL submitted that the contentions to project actual expenses in terms of statutory charges is erroneous in backdrop of the CSERC MYT Regulations, 2021. Pursuant to aforesaid Tariff Regulations, it has made the projections of power purchase expenses for FY 2022-23 to FY 2024-25 in accordance with the principles of CSERC MYT Regulations, 2021. Actual expenditure towards water charges, statutory taxes, duties and cess, etc., on 'actually paid' basis are allowed as power purchase expenses at the time of true up in pursuance to Regulation 92.4.3 of CSERC MYT Regulations, 2021.

Commission's View

The Commission has considered all the Statutory Charges as per the CSERC MYT Regulations in the ARR of CSPDCL as detailed in the subsequent chapter of this Order.

2.5.23 Special Rebate for Small Industries

The small industries (MSME, specially Micro and Small) do not have enough capital and space to install HT substation, which is presently required above 150 HP. The MSME sector coming either under LT or HT should also be given a special rebate in tariff.

The Objector submitted that at present, the power requirement in small industries having LT connection is increasing due to new machineries and technology. The small industries having LT connections are always in shortage of funds and space.

Therefore, the LT connection limit should be increased from the current 150 HP (112 kW) to 250 HP (187 kW).

Further, it is observed that at the time of load enhancement/reduction, documents required in application are not well informed, which takes huge time for the connection to be installed or the load to be reduced, which is a huge monetary loss for the consumers.

Petitioner's Reply

CSPDCL submitted that apart from the Objector's requests for special tariff for small industries under MSME sector, all other submissions are governed through Supply Code. The requests related to Supply Code does not form part of present Tariff Petition; hence, no comments are offered to all such points. Further, the request of applicant for special tariff falls under the realm of the Commission. Hence, the same may be considered subject to protection of Petitioner's approved ARR for FY 2022-23.

Commission's View

The Commission's philosophy on the tariff for small industries is detailed in the Chapter 13 of this Order. The other issues raised by the Objector are not relevant for the present Tariff proceeding.

2.5.24 Private Hospitals, Clinics and Diagnostic Centres

The Objector requested that private hospitals, clinics, and diagnostic centres should be categorised under LV-1 or 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.

Petitioner's Reply

CSPDCL submitted that the Objector has requested to consider re-categorization of the tariff applicable to private hospitals from existing LV-2/HV-3 category to LV-1/LV-5 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 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 2022-23.

Commission's View

The Commission after considering the views and suggestions of all objectors has approved the revised Tariff for FY 2022-23. The philosophy and rationale adopted by the Commission is detailed in the relevant Chapter of this Order.

2.5.25 Consumer with Captive Power Plant

The Objector submitted that for consumers having a Captive Power Plant, additional Demand Charges at the rate Rs. 20/kVA/month should be payable only on the extent of quantum of power availed over and above its contracted demand and energy consumed corresponding to excess supply should be billed at normal tariff. The Objector further submitted that same should be incorporated for Tariff for FY 2022-23 also.

Petitioner's Reply

CSPDCL submitted that the issue is specifically connected to tariff determination. Hence, this being the prerogative of the Commission under Section 62(3) of the Act, CSPDCL requests to consider the aforesaid submissions subject to protection of its approved ARR for FY 2022-23.

Commission's View

The Commission vide tariff order dated May 30, 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.

2.5.26 Rebate for supply at High Voltage

The Objector submitted that rebate should be given to consumers availing 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.

2.5.27 Tariff for LT Industries

The Objector submitted that the rural incentive of 5% on Energy Charges should be continued. Existing Adivasi Area Incentive for Bastar and Saguja should be continued. Also, 10% rebate on Energy Charges to Women Self-help Groups should be continued. Food Processing Units should be given 5% rebate on Energy Charges in line with 5% rebate to HT Rice Mills.

Only Night Tariff may be introduced to encourage consumption during the night hours. Load factor incentive may be introduced in similar way as given to HT industries. Further, power factor penalty below 0.90 made applicable since 01.08.2021, should be rolled back to earlier level of 0.85. Power factor incentive may be given step-wise on each point improvement above 0.85.

The Objector submitted that the tariff for LT Industries should be reduced.

Petitioner's Reply

CSPDCL has not submitted any reply.

Commission's View

The Commission after considering the views and suggestions of all objectors has approved the revised Tariff for FY 2022-23. The existing rebates have been retained, while some new rebates have been approved. The philosophy and rationale adopted by the Commission is detailed in the relevant Chapter of this Order.

2.5.28 Tariff for Agriculture Consumers

The Objector submitted that the existing tariff for Agriculture Consumers is quite high and near to the level of agriculturally rich States. Farmers of Chhattisgarh are poor and any tariff increase from the existing level shall prove to be detrimental to the farmers. Therefore, there should be no increase in tariff for Agriculture Consumers.

The Objector submitted that CSPDCL has continued to issue bills on flat rate as per the directions of the State Government for such agriculture consumers who have opted for flat rate billing system. The differential amount from the prescribed tariff of the Commission shall be compensated by the State Government. However, after failure to get compensation from the State Government, CSPDCL has proposed formation of optional tariff schedule based on flat rate. Therefore, the Commission is prayed not to form optional tariff schedule based on flat rate as proposed by CSPDCL and to direct the State Government to release the compensation to CSPDCL.

The Objector submitted that in year 2002, the tariff for Agriculture Consumers was Rs. 1 per unit, which has increased to Rs. 5.50 per unit at present. The tariff for Steel Industries was Rs. 2.80 per unit in year 2002, which is now Rs. 5.00 per unit after considering the load factor rebate. The Industrial tariff has reduced in the past years whereas tariff for Agriculture has increased. Therefore, the tariff for Agriculture should be reduced.

Petitioner's Reply

CSPDCL has not submitted any reply.

Commission's View

The Commission after considering the views and suggestions of all objectors has approved the revised Tariff for FY 2022-23. The Commission has accepted CSPDCL's proposal in this regard. The Commission has revised the tariffs in order to recover the approved Revenue Gap and has reduced the cross-subsidies to the extent possible. The philosophy and rationale adopted by the Commission is detailed in the relevant Chapter of this Order.

2.5.29 Tariff for Oxygen Plant

The Objector submitted that in the previous Tariff Orders, oxygen plant got concession of 10% on energy charge but at the same time demand charge was increased. Therefore, Oxygen plant could not avail the benefits of concession. The Objector requested the Commission to give concession to oxygen plants.

Electricity is one of the major expenses of oxygen plant and due to high electricity tariff, small oxygen plants are not able to compete with the big players. The Objector requested the Commission to make sub-categories for oxygen plants based on size like steel industry, i.e., small, mini and large plant.

Petitioner's Reply

CSPDCL has not submitted any reply.

Commission's View

The Commission after considering the views and suggestions of all objectors has approved the revised Tariff for FY 2022-23. The philosophy and rationale adopted by the Commission is detailed in Chapter 12 of this Order.

2.5.30 Parallel Operation Charges

The Objector submitted that in the previous Tariff Orders, Parallel Operation Charges (POC) were increased up to 300% only on the request of CSPDCL to fulfil the revenue gap without considering any exercise before hike. Now CSPDCL got revenue surplus in previous tariff periods, hence, a part of this surplus may be used to reduce the existing POC up to 50% from the existing tariff.

Some Objectors submitted a request for revision in Parallel Operation Charges (POC) by rolling back of POC charges from 13 paise/kWh to 4 paise/kWh.

Petitioner's Reply

CSPDCL submitted that the revenue earned through Parallel Operation Charges is among the constituents of Non-Tariff Income. Any rationalization among such constituents would have a bearing on tariff of normal electricity consumers. As CSPDCL has requested to continue the existing tariff design in present tariff proposal, hence, any consideration to objector's present request may cause additional burden on other consumers.

CSPDCL submitted that the revision in POC has been made by the Commission in Tariff Order dated August 2, 2021 with views elaborated at Para 11.8 of the Order. The aforesaid revised charges are implemented by the Petitioner with no difficulties. Hence, the contentions raised by the Objector about simplification and easy implementation of the existing methodology is baseless. Further, the revision of POC may adversely affect the Non-Tariff Income, which may require to load normal electricity consumers additionally through tariff.

Commission's View

The Commission has revised POC vide Tariff Order dated August 2, 2021. The Commission has not revised the POC for FY 2022-23.

2.5.31 Unscheduled Power

The Objector submitted that the Commission has fixed the maximum cap rate of Rs 1.50/-per unit for unscheduled power injection by Captive Power Plants, which has not changed till date. It is submitted that the rate has not been changed from last 5 years and during the intervening period, the cost of power generation has increased considerably and the industry has also suffered setback due to COVID - 19 Pandemic. Also, the retail per unit price of Power, at times goes up to Rs. 20.00/-. For instance, on 23-02-2022, the retail per unit price of Power was Rs. 17.00/-. This difference of input against output is causing financial ruin to the member Companies. Further, the overall injection of power into the grid by Captive Power Plants in fact supports the system and helps CSPDCL to supply energy to the consumers of the same sub-station without any transmission loss. Therefore, the Commission is requested to revise the above-mentioned maximum cap rate to Rs. 3.00/- per unit.

Petitioner's Reply

CSPDCL submitted that the request for revision in purchase rate of unscheduled power is not a subject matter of present Tariff Petition and it would require amendment in CSERC (Availability based Tariff and DSM) Regulations, 2016.

Commission's View

The Commission notes that the objection raised is not relevant for the present tariff proceeding.

2.5.32 Cross Subsidy

The Objector requested the Commission to reduce the cross-subsidy, as the Act states that cross-subsidies should be progressively reduced in the manner as may be specified by the Commission.

Petitioner's Reply

CSPDCL submitted that the issue is related to tariff determination. Hence, this being the prerogative of the Commission under Section 62(3) of the Act, CSPDCL requested to consider the aforesaid submissions subject to protection of its approved ARR for FY 2022-23.

Commission's View

The Commission has rationalised the cross subsidy between tariff categories to the extent possible, while deciding the category-wise Tariff for FY 2022-23, as elaborated in the Tariff Philosophy Chapter in this Order.

2.5.33 Delayed Replacement of Burnt/Damaged Transformers

The Objector submitted that if distribution transformer gets damaged, consumers are pressurised to clear dues as a precondition of replacement of such transformer. Therefore, CSPDCL should be directed for replacement of all burnt/ damaged transformers to supply power to Agriculture consumers.

Petitioner's Reply

CSPDCL has not submitted any reply.

Commission's View

The Commission has noted the objection on delayed replacement of burnt/ damaged transformers by CSPDCL. CSPDCL is directed to replace such transformers as per the timelines specified in the Standard of Performance Regulations. However, the consumers also have the obligation to clear their dues as per the bills raised by CSPDCL.

2.5.34 Temporary Connections to Agriculture Consumers

The Objector submitted that large number of consumers are waiting since long to get the permanent connection from CSPDCL and have no choice other than to avail Temporary Supply. The State Government has decided to release minimum 35,000 new connections during FY 2021-22; however, CSPDCL seems to be far away from such target. Hence, CSPDCL should be directed to prepare time-bound plan for release of pending Agriculture connections to farmers.

Petitioner's Reply

CSPDCL has not submitted any reply.

Commission's View

The Commission has noted the objection on delay in releasing new connections to Agriculture consumers by CSPDCL. CSPDCL is directed to release the new connections as per the timelines specified in the Standard of Performance Regulations.

2.5.35 Shifting of Headquarters of Power Companies

The Objector submitted a request to intervene in the matter of shifting of headquarters of Power Companies to Naya Raipur.

Petitioner's Reply

CSPDCL submitted that aforesaid request of the objector has no connection with the contents of present Tariff Petition, hence, no comments are offered.

Commission's View

The objection raised by the Objector is not relevant for the present tariff proceeding.

2.5.36 Waiver of Connection Charges and Security Deposit

The Objector submitted that Bharatnet Pariyojana Phase II is being implemented to improve the telecommunication network in the rural areas of the State. Therefore, the waiver should be given in new connection charges and security deposit.

Petitioner's Reply

CSPDCL has not submitted any reply.

Commission's View

The objection raised by the Objector is not relevant for the present tariff proceeding.

3 TRUE-UP FOR FY 2020-21 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, 2015 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 were 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. Further, the Commission, vide Tariff Order dated August 02, 2021, undertook the final true-up for FY 2019-20 for CSPGCL.

CSPGCL has now filed this Petition for true-up of FY 2020-21 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 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:

- (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, has undertaken true-up of ARR for FY 2020-21 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 2020-21 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 MW=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 2020-21 is shown in the Table below:

Table 3-2: Actual PAF for FY 2020-21 as submitted by CSPGCL

Station	FY 2020-21
KTPS	62.03%
HTPS	71.72%
DSPM	82.57%
KWTPP	92.64%
ABVTPP	55.06%

As regards DSPM, CSPGCL submitted that there is slight deviation in actual PAF from target PAF specified by the Commission. As regards KWTPP, CSPGCL submitted that it has met the availability criteria as per the targets specified by the Commission. CSPGCL has considered the normative values for ABVTPS as approved by the Commission vide Order dated July 7, 2018.

CSPGCL submitted that the gains / loss from performance are proposed to be shared as per the Regulations.

Commission's View

The Commission asked CSPGCL to provide reasons for reduced availability as compared to the normative parameters of KTPS, DSPM, HTPS and ABVTPS for FY 2020-21.

As regards KTPS, CSPGCL submitted that the lower performance of KTPS in terms of reduced availability and increase in auxiliary consumption was mainly on account following:

- **Effect of Aging:** Plant has completed about 40 years of life and these two Units were the last Units to survive so long. These two Units (120 MW each) of KTPS have been retired on December 31, 2020 after serving for more than 40 years.
- **No Capital Investments on Plant and Machinery:** The performance is also a function of the investment. With the imminent closure as per directions of the Commission, there has been almost no capital investment in Plant and Machinery in the last 5 years. Considering these factors, the performance has been better than the expectations and the net effective tariff is lower than that approved in the Order.

As regards DSPM, CSPGCL submitted that during the year, the capital overhaul (COH) was undertaken for Unit-2 of the plant. During inspection of Stator, core pressing ring and locking keys were found dislodged, ventilating duct spacer were missing, and core packets were found having higher leakage current. Also, leakage was observed in Generator Rotor CC bolt and marking on shaft. Repair work of the same was undertaken by the OEM M/s BHEL resulting in extended period of overhauling (71 days) and hence, resulted in reducing the availability of the Plant.

As regards the reduced availability of HTPS as compared to the normative parameters, CSPGCL submitted that during the year, Unit No. 1 was under COH. Major works carried out were COH of Turbine, replacement of Generator Stator, and installation of DDCMIS. Unit was under shut down for 87 days. This is the first Unit for which DDCMIS implementation work has been undertaken by M/s BHEL, which is the OEM. However, as the old system is replaced completely with the new control system, commissioning of various control loops took considerable time. Also, as directed by the Commission, Residual Life Assessment (RLA) of HTPS Unit No. 2 was also undertaken and the Unit was shut down for 8 days. This has resulted in reduction in availability of the plant as well as increase in the Auxiliary Energy Consumption. Further, during the year, ageing effect caused frequent outages of HPH-6.

As regards all actual parameters (except Transit Loss) of ABVTPS being significantly poorer than the normative parameters for FY 2020-21, CSPGCL submitted that the lower performance was mainly on account of following:

- **Lower Coal receipt from South Eastern Coalfield Limited (SECL):** Plant is covered under the Bridge Linkage Policy of the Government of India (GoI), wherein Coal India Limited (CIL) does not sign any Fuel Supply Agreement (FSA), rather it signs only Memorandum of Understanding (MOU) on best effort basis. The cap limit of the same as per the Policy (GOI, the Ministry of Coal, OM No. 23021/3/2015-CPD dated February 8, 2016) is as under:

“(vii) As there are constraints in availability of coal and in view of negative coal balance, CIL/SCCL shall endeavour to supply 75% of 'Agreed Requirement' of coal where 'Agreed Requirement' is calculated at 90% of normative requirement of the plant at 85% PLF. There shall be no minimum assured quantity. Coal will be supplied on "best effort basis" after meeting existing contractual obligations of coal companies.”

Thus, the Bridge Linkage Policy itself stipulates maximum coal supply sufficient only for about 57.375% PLF. During the year, around 2.06 Million Tonnes of coal was supplied by SECL. Coal was also supplied from the integrated coal mine and while mining operation all over the world suffered due to COVID-19, CSPGCL exceeded the target set in the Mining Plan. Against a target excavation of 1.5 Million Tonnes, the actual achievement was 1.66 Million Tonnes of coal. Despite this, coal supply was short of the requirement, which was uncontrollable for CSPGCL.

- **Ash Evacuation problem:** During the year, Units also faced problems on account of ash evacuation. The lower quality of coal particularly from Korri Chhapar mines of SECL also aggravated the problem. Units had to be operated at partial loads and sometimes had to be stopped also.
- **Clinker Formation:** Due to clinker formation in the boiler, Units were under shut down for more than 1000 hours and contributed to lower availability.
- **Damage of Generator Rotor Compressor blades of Unit 2:** On January 9, 2020, Unit 2 had to be stopped due to abnormality in hot and cold gas temperature. After checking generator rotor, hydrogen compressor blades were found damaged. As compressor blades are encased and neither require any separate operational procedure nor any routine / capital maintenance is required, as such the failure was uncontrollable for CSPGCL. M/s BHEL, which is OEM, was contacted for replacement, however, as it is not an off-the-shelf item, by the time man and material could be mobilised the pandemic set in. Due to lock down, the work got hampered and finally the machine could be brought back on bar in the month of July 2020.
- **Backing Down:** Even at part loads, sometimes the Unit had to face backing down as per SLDC instructions (mostly due to lower demand in system). This also led to further deterioration of parameters.

CSPGCL also submitted that though these factors for DSPM, HTPS and ABVTPS may be contended as uncontrollable, however, considering the view taken by the Commission in previous Orders, no exception is pleaded, and the impact of lower availability has been treated in line with methodology prescribed in the Regulations.

The Commission has examined the actual PAF of the generating stations for FY 2020-21 submitted by CSPGCL and supported by CSLDC's certificate. The Commission has considered the actual PAF as per CSLDC's certificate for FY 2020-21 for determining sharing of gains and losses.

As regards KTPS, the Commission has considered Normative Annual Plant Availability Factor (NAPAF) for FY 2020-21 as 70.00%, as approved in the MYT Order dated April 30, 2016.

As regards HTPS, the Commission in the final true up of FY 2017-18 and FY 2018-19, approved NAPAF at 78.69%. The Commission has considered same NAPAF for FY 2020-21 also. 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 2020-21.

As regards DSPM and KWTPP, the Commission has considered the NAPAF of 85% as per the MYT Order, for the purpose of true-up for FY 2020-21.

As regards 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 2020-21.

The station-wise NAPAF and actual PAF approved by the Commission in the true-up of FY 2020-21 is shown in the Table below:

Table 3-3: Approved Plant Availability Factor for FY 2020-21

Station	NAPAF	Actual PAF approved by Commission
KTPS	70.00%	62.03%
HTPS	78.69%	71.72%
DSPM	85.00%	82.57%
KWTPP	85.00%	92.64%
ABVTPP	76.50%	55.06%

3.4 Auxiliary Energy Consumption

CSPGCL's Submission

CSPGCL has submitted the actual Auxiliary Energy Consumption (AEC) for its stations for FY 2020-21, as shown in the Table below:

Table 3-4: Auxiliary Energy Consumption for FY 2020-21 as submitted by CSPGCL

Station	MYT Order	CSPGCL's Submission
KTPS	11.25%	11.84%
HTPS	9.70%	9.83%
DSPM	9.00%	8.41%

Station	MYT Order	CSPGCL's Submission
HBPS	1.00%	0.21%
KWTPP	5.25%	5.14%
ABVTPP	5.25%	5.97%

CSPGCL submitted that during FY 2020-21, all other generating stations except KTPS, HTPS and ABVTPP have achieved AEC better than the specified norms.

Commission's View

In this Order, normative AEC has been considered for truing up 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 2020-21 has been considered. Further, the normative AEC for FY 2020-21, as shown in the Table below, has been considered for computation of normative net generation:

Table 3-5: Approved Auxiliary Energy Consumption for FY 2020-21

Station	MYT Order	Actual	Normative approved
KTPS	11.25%	11.84%	11.25%
HTPS	9.70%	9.83%	9.70%
DSPM	9.00%	8.41%	9.00%
HBPS	1.00%	0.21%	1.00%
KWTPP	5.25%	5.14%	5.25%
ABVTPP	5.25%	5.97%	5.25%

3.5 Gross Generation and Net Generation

CSPGCL's Submission

CSPGCL submitted that the actual gross generation and net generation for FY 2020-21 for its generating stations, as shown in the Table below:

Table 3-6: Actual Gross Generation and Net Generation for FY 2020-21 as submitted by CSPGCL (MU)

Station	Gross Generation	Net Generation
KTPS	975.71	860.16
HTPS	5,302.03	4,781.01
DSPM	3,336.86	3,056.38
HBPS	419.18	418.29
KWTPP	4,065.53	3,856.71
ABVTPP	4,709.22	4,428.06
Total	18,808.53	17,400.61

As regards HBPS, CSPGCL submitted that generating station not only contributes green power but is the cheapest source of power in the State. The generating station has achieved its operational parameters for FY 2020-21. During the year, the plant injected much higher energy than what was envisaged. However, as in the previous Orders, the Commission has adopted the approach that generation from the plant is dependent on water discharge from the plant, which in turn is uncontrollable for CSPGCL, hence, in compliance with the regulatory philosophy, no gain on account of excess generation is being claimed.

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 are based on actual metered data and the normative gross generation and net generation have 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 2020-21 (MU)

Station	Normative		Actual	
	Gross Generation	Net Generation	Gross Generation	Net Generation
KTPS	1,108.80	984.06	975.71	860.16
HTPS	5,790.32	5,228.66	5,302.03	4,781.01
DSPM	3,723.00	3,387.93	3,336.86	3,056.38
HBPS	274.00	271.26	419.18	418.29
KWTPP	3,723.00	3,527.54	4,065.53	3,856.71
ABVTPP	6,701.40	6,349.58	4,709.22	4,428.06
Total	21,320.52	19,749.03	18,808.53	17,400.61

3.6 Gross Station Heat Rate

CSPGCL's Submission

CSPGCL submitted the actual Gross Station Heat Rate (GSHR) for FY 2020-21 for existing generating stations, as shown in the following Table:

Table 3-8: GSHR for FY 2020-21 (kcal/kWh)

Station	FY 2020-21
KTPS	2,967.91
HTPS	2,718.26
DSPM	2,407.35
KWTPP	2,467.47
ABVTPP	2,570.94

Commission's View

The Commission asked CSPGCL to provide reasons for increase in GSHR as compared to the normative parameters of 500 MW KWTPP for FY 2020-21. CSPGCL submitted that during the year, plant faced problem of low vacuum due to scaling and sludge deposition in Condenser Tube resulting in higher GSHR. However, no exception is pleaded and the impact of lower availability has been treated in line with methodology prescribed in the Regulations.

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 2020-21.

After due verification, the actual GSHR as submitted by CSPGCL for FY 2020-21 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 2020-21 are shown in the Table below:

Table 3-9: Approved GSHR for FY 2020-21 (kcal/kWh)

Station	Normative	Actual
KTPS	3,110.00	2,967.91
HTPS	2,650.00	2,718.26
DSPM	2,500.00	2,407.35
KWTPP	2,375.00	2,467.47
ABVTPP	2,378.42	2,570.94

3.7 Secondary Fuel Oil Consumption

CSPGCL's Submission

CSPGCL has submitted the actual Secondary Fuel Oil Consumption (SFOC) for FY 2020-21 as shown in the Table below:

Table 3-10: SFOC submitted by CSPGCL FY 2020-21 (ml/kWh)

Station	MYT Order	Actual
KTPS	2.00	1.08
HTPS*	0.90	0.83
DSPM	0.50	0.33
KWTPP	0.50	0.34
ABVTPP	0.50	0.60

* 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 2020-21. 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 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 2020-21 (ml/kWh)

Station	Normative	Actual
KTPS	2.00	1.08
HTPS	0.90	0.83
DSPM	0.50	0.33
KWTPP	0.50	0.34
ABVTPP	0.50	0.60

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 2020-21

Station	FY 2020-21
KTPS	0.76%
HTPS	0.19%
DSPM	0.20%
KWTPP	0.19%
ABVTPP	0.56%

Commission's View

The actual transit loss for FY 2020-21 has been considered as submitted by CSPGCL for the purpose of sharing of efficiency gains and losses, while the normative transit loss for FY 2020-21 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 2020-21

Station	Normative	Actual
KTPS	1.15%	0.76%
HTPS	0.20%	0.19%
DSPM	0.20%	0.20%
KWTPP	0.20%	0.19%
ABVTPP	0.80%	0.56%

3.9 Calorific Value and Price of Fuel

CSPGCL's Submission

CSPGCL submitted that Regulation 41.6 of the CSERC MYT Regulations, 2015 specifies that the energy charge shall cover the fuel cost (primary fuel as well as secondary fuel). Fuel cost has been considered as per settled methodology adopted in all previous Orders. CSPGCL has submitted the plant-wise landed rate of coal and oil for thermal power plants and coal cost, oil cost and energy charge rate computation.

CSPGCL also submitted that the coal supply by SECL for the 1x500 MW KWTPP was from the same source and same mode, which is available for HTPS old plant (4 x 210 MW). As per well settled methodology, with common coal stock, the base data of coal receipt has been taken same as considered for HTPS old plant. The consumption has been booked as per actual.

Similarly, the landed price of the Fuel oil has been computed considering common procurement for HTPS and KWTPP. However, fuel consumption as per actual has been considered separately for these plants.

CSPGCL submitted the actual Calorific Value (CV) and price of fuels for FY 2020-21, as shown in the following Table:

Table 3-14: Actual Calorific Value and Price of fuels for FY 2020-21

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	3150.23	1787.67	10000	48208.05
HTPS	3583.82	1813.39	10000	53656.92
DSPM	3478.87	2141.37	10000	56902.51
KWTPP	3598.33	1813.39	10000	53656.92
ABVTPP	3438.86	2219.61	10000	73404.00

Commission's View

As per information available, common facility is used for transportation of coal for HTPS and KWTPP. In the present Tariff Petitions, CSPGCL has submitted that coal is supplied by SECL to HTPS and KWTPP from the same source and hence, 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 2020-21 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 the Guideline No. 23011/48/2013-CPD dated November 26, 2015 issued by the Ministry of Coal, Government of India. 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.

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 2020-21. The calorific value of fuel and price of fuel considered by the Commission for computation of actual and normative fuel cost for FY 2020-21 is shown in the Table below:

Table 3-15: Approved Calorific Value and Price of fuels for FY 2020-21

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	3150.23	1794.70	1787.67	10000	48208.05
HTPS	3583.82	1813.50	1813.39	10000	53656.92
DSPM	3478.87	2141.47	2141.37	10000	56902.51
KWTPP	3598.33	1813.50	1813.39	10000	53656.92
ABVTPP	3438.86	2224.96	2219.61	10000	73404.00

3.10 Fuel Cost

CSPGCL's Submission

The Table below shows the fuel cost claimed by CSPGCL in the True-up of FY 2020-21:

Table 3-16: Actual Fuel Cost for FY 2020-21 (Rs. Crore)

Station	Normative	Actual
KTPS	205.88	168.80
HTPS	801.79	750.71
DSPM	582.38	500.08
KWTPP	454.68	512.36
ABVTPP	1,053.67	800.41
TOTAL	3,098.40	2,732.36

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 2020-21 as shown in the Table below:

Table 3-17: Approved Fuel Cost for FY 2020-21 (Rs. Crore)

Station	Normative	Actual
KTPS	205.88	168.80
HTPS	801.79	750.71
DSPM	582.38	500.08
KWTPP	454.68	512.36
ABVTPP	1,053.67	800.41
TOTAL	3,098.40	2,732.36

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 submitted that the opening GFA and capital structure (Debt / Equity) for FY 2020-21, have been taken as per the closing values approved by the Commission in the final True-up of FY 2019-20. Additions have been considered as per accounts / Fixed Asset Register (FAR) after mapping with approved Capital Investment Plans (CIPs). In the mapping with CIP, only exception is the capitalisation of Oil Coolers at HEP Bango, which have been replaced during the Capital Overhaul (COH) to mitigate the generation loss. In the accounts, the said replacement has appeared as capital, hence, in compliance of transparency and equity, in the instant True-up also, the same has been considered as capital only.

Further, in compliance with the directive of the Commission and in line with consideration adopted by the Commission in the previous True-up Orders, the

Petitioner has attempted to segregate the capital expenses considered in the books of accounts on best effort basis.

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, Hasdeo Bango, KWTPP and ABVTPP.

The Commission accordingly approves the additional capitalisation claimed in True-up of FY 2020-21 for all the power stations as shown in the Table below:

Table 3-18: Approved Additional Capitalisation in true up for FY 2020-21 (Rs. Crore)

Station	MYT Order	Petition	Approved
KTPS	0.00	1.29	1.29
HTPS	51.34	73.84	73.84
DSPM	2.60	3.49	3.49
HBPS	1.80	1.31	1.31
KWTPP	0.00	10.91	10.91
ABVTPP	-	111.01	111.01
Total	55.74	201.85	201.85

3.13 Means of Finance for Additional Capitalisation

CSPGCL's submission

CSPGCL has considered the capital structure in line with the provisions of Regulations 17.1 and 17.3 of the CSERC MYT Regulations, 2015 and the settled methodology in the previous Orders. In cases of higher than normative equity, the normative debt:equity (D:E) ratio has been considered. However, for additional capitalisation of the project cost at KWTPP and ABVTPS, the opening D:E ratio has been considered at 82.86:17.14 for KWTPP and at 87.56:12.44 for ABVTPP. For new schemes normative capital structure has been considered.

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 stations except for ABVTPP and KWTPP. The excess equity in capitalisation has been considered as normative loan. As regards additional capitalisation for 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 of 87.56:12.44 as approved in Order dated July 07, 2018. The approved means of finance for additional capitalisation for FY 2020-21 is shown in the Table below:

Table 3-19: Approved Means of Finance for existing stations for FY 2020-21 (Rs. Cr.)

Station	CSPGCL Petition			Approved		
	Equity	Debt	Total	Equity	Debt	Total
KTPS	0.39	0.90	1.29	0.39	0.90	1.29
HTPS	22.15	51.69	73.84	22.15	51.69	73.84
DSPM	1.05	2.44	3.49	1.05	2.44	3.49
HBPS	0.39	0.92	1.31	0.39	0.92	1.31
KWTPP	2.07	8.84	10.91	2.07	8.84	10.91
ABVTTP	14.55	96.46	111.01	14.55	96.46	111.01
Total	40.60	161.25	201.85	40.60	161.25	201.85

3.14 Depreciation**CSPGCL's submission**

CSPGCL submitted that Depreciation for DSPM, KWTPP and ABVTSPS have been computed by applying weighted average depreciation rate on the average regulatory GFA. The weighted average depreciation rate 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 2020-21 as submitted by CSPGCL (Rs. Cr.)

Particulars	DSPM	
	Tariff Order	CSPGCL's Petition
Opening GFA		2,370.61
Additional Capitalization		3.49
Closing GFA		2,374.10
Average GFA		2,372.35
Weighted Average Rate of Depreciation		5.47%
Depreciation	130.28	129.84

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

Table 3-21: Depreciation for KWTPP for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Particulars	KWTPP	
	Tariff Order	CSPGCL's Petition
Opening GFA		3600.89
Additional Capitalization		10.91
Closing GFA		3611.80
Average GFA		3606.34
Weighted Average Rate of Depreciation		5.16%
Depreciation	190.71	185.94

CSPGCL submitted the depreciation for ABVTPP for FY 2020-21 as shown in the Table below:

Table 3-22: Depreciation for ABVTPP as submitted by CSPGCL for FY 2020-21

Particulars	Tariff Order	CSPGCL's Petition
Opening GFA		8660.84
Additional Capitalization		111.01
Closing GFA		8771.85
Average GFA		8716.34
Weighted Average Rate of Depreciation		5.35%
Depreciation	468.54	466.47

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 depreciation submitted by CSPGCL for HTPS is shown in the Table below:

Table 3-23: Depreciation for HTPS for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Particulars	Tariff Order	CSPGCL's Petition
Opening GFA on additional capitalization from FY 2010-11 onwards		546.34
Additional Capitalization during the year		73.84
Closing GFA		620.18
Average GFA		583.26
Depreciation rate (%)		5.31%
Depreciation for the year	33.54	30.99

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 depreciation submitted by CSPGCL for KTPS is shown in the Table below:

Table 3-24: Depreciation for KTPS for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Particulars	Tariff Order	CSPGCL's Petition
Opening GFA as per Order		698.80
Additional Capitalisation		1.29
Closing GFA		700.09
Cost of Land		1.95*
Effective Closing GFA excluding Land		698.15

Particulars	Tariff Order	CSPGCL's Petition
90% of GFA		628.33
Accumulated Depreciation up to last year		578.37
Balanced Depreciable value		49.96
Balance useful life		0.75
Depreciation for the year	60.53	49.96*

Note: * CSPGCL in data gaps reply has revised the cost of land from Rs. 1.95 Crore to Rs. 1.97 Crore; Depreciation is also revised from Rs. 49.96 Crore to Rs. 49.94 Crore

The depreciation for Hasdeo Bango Hydel plant has been computed in accordance with the first proviso of 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 depreciation submitted by CSPGCL for HBPS is shown in the Table below:

Table 3-25: Depreciation for HBPS for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Particulars	Tariff Order	CSPGCL's Petition
Opening GFA		109.90
Additional Capitalisation		1.31
Closing GFA		111.22
Accumulated Depreciation up to last year		72.38
90% of GFA excluding land		100.09
Balance amount to be depreciated		27.71
Remaining Useful Life		10.00
Depreciation for the year	2.65	2.77

Commission's View

The Commission observed that in calculation of Depreciation for KTPS, CSPGCL has considered cost of land as Rs. 1.95 Crore based on figures of Trial Balance. However, CSPGCL in its model for True up of FY 2019-20 had considered cost of land as Rs. 1.97 Crore for KTPS, which was also approved by the Commission. In reply to query in this regard, CSPGCL submitted that it has inadvertently considered the cost of land as Rs. 1.95 Crore instead of Rs. 1.97 Crore. CSPGCL submitted the revised calculations for depreciation of Rs. 49.94 Crore for KTPS.

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. In view of the above, the Commission continues with the methodology of depreciation as approved in MYT

Order and approves the depreciation over the balance useful life of the plant as submitted by CSPGCL for FY 2020-21. 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 5.31% for FY 2020-21 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 2020-21, which has been applied on the 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 opening GFA and asset addition during the year approved in this Order.

In view of the above, the Commission approves the Depreciation for FY 2020-21 after final true-up, as shown in the Table below:

Table 3-26: Depreciation approved for CSPGCL for FY 2020-21 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM TPS	Hasdeo Bango	KWTPP	ABVTPP
Opening GFA	698.80	546.34	2,370.61	109.90	3600.89	8660.84
Additional Capitalization	1.29	73.84	3.49	1.31	10.91	111.01
Closing GFA	700.09	620.18	2,374.10	111.22	3611.80	8771.85
Cost of Land	1.97	-	-	-	-	-
Effective Closing GFA excluding Land	698.12	-	-	-	-	-
Average GFA	-	583.26	2,372.35	110.56	3606.34	8716.34
Average Rate of Depreciation	-	5.31%	5.47%	-	5.16%	5.35%
Balance Depreciation to be recovered	49.94	-	-	27.70	-	-
Balance Useful Life	0.75	-	-	10.00	-	-
Depreciation	49.94	30.99	129.84	2.77	185.94	466.47
Accumulated Depreciation till 31.03.2021	628.31	198.08	1529.25	75.16	1362.89	2175.55

3.15 Return on Equity

CSPGCL's submission

CSPGCL has computed RoE as per Regulation 22 of the CSERC MYT Regulations, 2015 for FY 2020-21. CSPGCL submitted that regarding the Income tax, CSPGCL has religiously followed the principle adopted by the Commission in the previous Orders and accordingly claim is limited to actual Income Tax. Further, CSPGCL craved leave for submission of income tax liability, if any, which may arise after scrutiny by the Income Tax Department in future. CSPGCL prayed to approve the same in line with the prior Orders.

CSPGCL submitted that during the year, the last two units of KTPS plant got retired on December 31, 2020 after providing 40 years of service to the State and in accordance to the statutory requirement. Accordingly, ROE has been computed on pro-rata basis only for KTPS.

CSPGCL submitted the station-wise RoE for FY 2020-21 as shown in the Table below:

Table 3-27: Return on Equity for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP	ABVTPP
Permissible Equity in Opening GFA	216.23	420.19	705.96	37.72	617.26	1077.17
Equity addition during the year	0.39	22.15	1.05	0.39	2.07	14.55
Permissible Equity in Closing GFA	216.62	442.34	707.01	38.11	619.33	1091.72
Rate of return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	13.79	66.85	109.51	5.88	95.84	168.09

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 2020-21 has been approved in the MYT Order dated April 30, 2016.

For existing stations, the closing equity approved in true-up for FY 2019-20 has been considered as the opening equity for FY 2020-21. The addition of equity has been considered 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 2020-21 is shown in the table below:

Table 3-28: Approved Return on Equity for FY 2020-21 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP	ABVTPP
Opening Equity	216.23	420.19	705.96	37.72	617.26	1077.17
Equity addition during the year	0.39	22.15	1.05	0.39	2.07	14.55
Closing Equity	216.62	442.34	707.01	38.11	619.33	1091.72
Rate of return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	13.79	66.85	109.51	5.88	95.84	168.09

Further, CSPGCL has claimed Income Tax of Rs. 8.90 Crore for FY 2020-21. Since the Commission has not considered pre-tax RoE rate for computation of RoE for FY 2020-21, the Commission has allowed the actual Income Tax paid during FY 2020-21, as reflecting in the Audited Accounts of FY 2020-21, in line with the approach adopted in previous Orders. The Commission accordingly approves the Income Tax of Rs. 8.90 Crore for FY 2020-21 for CSPGCL. The Commission has considered the amount of Income Tax approved for FY 2020-21 in the Table for computation of final Revenue Gap for FY 2020-21.

3.16 Interest and Finance Charges

CSPGCL's submission

CSPGCL submitted that Interest and Finance charges have been computed for FY 2020-21 as per Regulation 23 of the CSERC MYT Regulations, 2015. There is no change in the principle or methodology from previous Orders. As per the procedure adopted by the Commission in the previous Orders, the repayment of regulatory loan during the year is deemed to be equal to the depreciation allowed for the year.

The interest rate prevailing on 1st April of the year has been taken from quarterly statements issued by PFC. Further, timely payment rebate, which does not appear in the quarterly statement issued by PFC, but is allowed separately, has also been passed.

Finance charges have been considered as per actuals. Savings from refinancing have been computed as per the settled methodology.

The Interest and Finance charges submitted by CSPGCL for FY 2020-21 are shown in the Table below:

Table 3-29: Interest & Finance Charges as submitted by CGPGCL for FY 2020-21 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP	ABVTPP
Opening Normative loan	0.00	151.19	265.24	0.00	1806.69	5874.61
Repayment during the period	0.90	30.99	129.84	0.92	185.94	466.47
Debt Addition during the year	0.90	51.69	2.44	0.92	8.84	96.46
Closing Net Normative Loan	0.00	171.89	137.84	0.00	1629.59	5504.60
Weighted Average Interest Rate (%)	11.39%	11.41%	10.25%	10.16%	10.15%	10.15%
Interest Expense for the Period	0.00	18.43	20.66	0.00	174.39	577.53
Sharing of net savings for re-financing	-	-	1.11	-	10.02	33.18
Financing and Other Charges	0.00	0.02	0.01	0.00	0.01	0.08
Total Interest Expenses	0.00	18.45	21.78	0.00	184.43	610.79

Commission's View

The Commission has computed Interest and Finance charges for FY 2020-21 as per Regulation 23 of CSERC MYT Regulations, 2015.

For existing stations, the closing net normative loan balance approved after True-up for FY 2019-20 has been considered as opening net normative loan balance for FY 2020-21. The debt addition has been considered as equal to debt amount approved in this Order towards additional capitalisation for FY 2020-21. The depreciation has been considered as repayment during the year.

The actual weighted average interest rate as on April 1, 2020 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 2020-21.

The Commission asked CSPGCL to submit the calculation of savings made through re-financing of loans for each station. CSPGCL submitted that in earlier Order, the Commission placed reliance on the PFC's offer letter no. 042690 and 042689 dated October 14, 2016 for KWTPP and ABVTPS, respectively, and REC letter no. 331 dated January 05, 2016 for DSPM. Previously, the Commission accepted the revision of rate of interest on loan from 12.42% to 10.25% for DSPM, from 12.99% to 10.37% for KWTPP and from 12.66% to 9.90% for ABVTPP. The Commission allowed sharing the savings of re-financing as per Regulations. Similar methodology has been adopted this year also. However, it has been observed that the lender's notified rate for State sector category 'A+' companies (conventional generation projects) has got revised and the same was 11.90% at the beginning of the year. In the true spirit of the letter, as even without refinancing, reduction in notified rate would have taken place; hence, no gain is being claimed on reduction of coupon rate to the notified rate. Benefit of refinancing has been calculated considering only the difference of the reduced notified rate of 11.90% (and not the original higher coupon rate) and actual applicable weighted average rate at the beginning of the year. Accordingly, savings

due to refinancing has been computed as 1.65% for DSPM, 1.75% for KWTPP and 1.75% for ABVTPS.

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 the 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 has not claimed any additional cost 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 2020-21 are shown in the Tables below:

Table 3-30: Interest & Finance Charges approved for FY 2020-21 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP	ABVTPP
Opening Net Normative Loan	0.00	151.19	265.24	0.00	1806.69	5874.61
Repayment during the period	0.90	30.99	129.84	0.92	185.94	466.47
Debt Addition during the year	0.90	51.69	2.44	0.92	8.84	96.46
Closing Net Normative Loan	0.00	171.89	137.84	0.00	1629.59	5504.60
Weighted Average Interest Rate (%)	11.39%	11.41%	10.25%	10.16%	10.15%	10.15%
Interest Expense for the Period	0.00	18.43	20.66	0.00	174.39	577.53
Add: Sharing of net savings for re-financing	-	-	1.11	-	10.02	33.18
Add: Financing and Other Charges	0.00	0.02	0.01	0.00	0.01	0.08
Total Interest Expenses	0.00	18.45	21.78	0.00	184.43	610.79

3.17 Normative Operation and Maintenance (O&M) expenses

CSPGCL's Submission

CSPGCL submitted the O&M Expenses (excluding water charges and SLDC 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 previous Orders. With the retirement of plant, the normative A&G and R&M expenses for KTPS generating station have been considered on pro-rata basis, i.e., only up to December 31, 2020. However, as the switchyard and hydrogen plant remained in service, the normative O&M for these two for the balance 3 months have been computed separately.

For the purpose of normalization of O&M expenses for FY 2020-21, CSPGCL has considered weighted average WPI-CPI inflation as shown in the following Table:

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

Particulars	FY 2020-21
WPI Variation	1.29%
CPI variation	5.02%
Average (60:40)	3.53%

CSPGCL further submitted that the normative O&M Expenses for KWTPP and ABVTPS, whose COD was later than April 1, 2010, have been computed as per 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 incentive, donations and CSR expenses as part of employee expenses for regulatory purposes, as per the methodology settled in the previous Orders. Further, in light of the first amendment to the Regulations and as per the methodology adopted in previous true ups, separate computation of impact of wage revision has not been considered.

In the Accounts, the 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.

CSPGCL further submitted that as per Regulations, the MYT Order has not considered the contribution to the pension trust as part of O&M expenses. For the purpose of this petition, CSPGCL has also followed the same.

Further, as per the methodology adopted in earlier Orders, the cost incurred on coal transport has been reduced from the O&M Expenses and added to the fuel cost.

The O&M Expenses submitted by CSPGCL for FY 2020-21 is shown in the Table below:

Table 3-32: O&M Expenses for FY 2020-21 submitted by CSPGCL (Rs. Cr.)

Station	Petition
KTPS	105.54
HTPS	291.05
DSPM	169.24
HBPS	8.22
KWTPP	84.66
ABVTPP	183.66
Total	842.36

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 2020-21 by applying the actual inflation on base O&M expenses for FY 2019-20 as approved in previous True-up Order, by considering the actual CPI and WPI for FY 2020-21 over CPI and WPI of FY 2019-20. For FY 2020-21, the Commission has considered escalation factor of 5.02% for employee expenses and 1.29% for R&M expenses and A&G Expenses. Further, as regards KWTPP and ABVTPP, the normative O&M expenses have been determined in accordance with the norms specified in the CSERC MYT Regulations, 2015, with escalation factor considered as 3.53% for FY 2020-21.

In the context of retirement of last 2 Units of KTPS, the Commission asked CSPGCL to clarify whether all components of ARR of KTPS have been considered pro-rata till December 31, 2020. In reply, CSPGCL submitted that RoE has been calculated on pro-rata basis. Further, CSPGCL has not claimed any interest on loan as the actual as well as normative loan for the project has been closed. Entire depreciation for the balance period has been claimed by the Petitioner in accordance with the principle of the balance depreciable value divided by the balance useful life. The methodology is in accordance with the Regulations and has been relied by the Commission in the previous Orders. The IoWC has also been considered on pro-rata basis. For O&M expenses, the Petitioner has considered R&M expenses and A&G expenses on pro-rata basis. Employee Expenses have been considered for the year on actual basis as the Employee expenses are passed through at actuals. CSPGCL submitted that the Commission vide Order dated August 10, 2021 adjusted the Pension and Gratuity contribution of KTPS generating station for FY 2021-22 on other plants assuming the applicability of Pension and Gratuity to all the employees of KTPS. Accordingly, the employee cost of the KTPS remains pass through at actuals considering employee expenses of KTPS as a whole for the Company. The Petitioner has initiated the process of transferring all the serviceable employees of KTPS generating stations to other generating stations as well as head office. CSPGCL requested the Commission to consider the employee expense of KTPS generating station on actual basis.

The Commission also asked CSPGCL to clarify the reasons for which the switchyard and hydrogen plant of KTPS remained in service beyond December 31, 2020, and which Station they were serving. CSPGCL submitted that the switchyard of KTPS plant is still charged and power is getting routed through this switchyard to the State grid. The process for transfer of substation to STU is in progress. However, during the year, the substation was maintained by CSPGCL and the cost is claimed accordingly,

and the same is not included in CSPTCL ARR. There are total 11 no. of bays in 220 kV switchyard and 5 nos. Transformers are still operational. The Transformers in service are two nos. of 20 MVA each, one no. of 25 MVA, one Autotransformer of 160 MVA and one transformer of 12.5 MVA.

Regarding Hydrogen plant, CSPGCL submitted that this hydrogen plant supplies the Hydrogen to all the thermal plants of CSPGCL. The Hydrogen plant would remain in service even after the decommissioning of KTPS. Further, though the O&M charges corresponding to PGTI and water supply system of DSPM were met through O&M of KTPS plant only, yet CSPGCL has not claimed any separate claims for PGTI and water supply system of DSPM.

CSPGCL submitted that as the normative and actual R&M expenses and A&G expenses have been claimed up to retirement of KTPS plant only, normative R&M expenses for aforesaid bays, transformers and Hydrogen plant have been considered additionally for last quarter of the financial year.

As regards 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 2020-21 are as shown in the Table below:

Table 3-33: Approved Normative O&M Expenses for FY 2020-21 (Rs. Cr.)

Particulars	MYT Order*	Revised Normative Expenses
KTPS	212.75	135.88
HTPS	450.61	370.86
DSPM	216.16	177.11
Hasdeo Bango	19.27	15.88
KWTTP	136.45	106.38
ABVTTP	209.80	212.76

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

As regards 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 and 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 2020-21, 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 2020-21. 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 2020-21 (Rs. Cr.)

Particulars	Actual	Normative
KTPS	105.54	135.88
HTPS	291.05	370.86
DSPM	169.24	177.11
Hasdeo Bango	8.22	15.88
KWTPP	84.66	106.38
ABVTPP	183.66	212.76

3.18 Pension and Gratuity Contribution

CSPGCL's Submission

CSPGCL submitted that the Commission in the MYT Order approved Pension and Gratuity (P&G) Fund Trust Contribution by CSPGCL as Rs. 185.01 Crore. Plant-wise allocation considered in the Order has been maintained. CSPGCL submitted that actual contribution to the Trust has been in conformity to the Order. It is clarified that Regulatory and Accounting provisions are different. The provisions in books of accounts are governed by applicable accounting standards, whereas tariff / true up are governed by Regulations / Orders of the Commission.

CSPGCL further submitted the plant-wise allocation considered as shown in the Table below:

Table 3-35: Pension and Gratuity Contribution for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Station	MYT Order	CSPGCL's Petition
KTPS	65.60	65.60
HTPS	67.92	67.92
DSPM	11.16	11.16
HBPS	4.53	4.53
KWTPP	10.99	10.99
ABVTPP	24.81	24.81
Total	185.01	185.01

Commission's View

The P&G contribution of Rs. 185.01 Crore, including contribution for ABVTPP, has been approved for CSPGCL for FY 2020-21 in the MYT Order dated April 30, 2016. The Commission has considered the same in the Truing-up for FY 2020-21.

3.19 Interest on Working Capital

CSPGCL's Submission

CSPGCL submitted that it has calculated the normative Interest on Working Capital (IoWC) as per Regulation 25 of CSERC MYT Regulation, 2015. Normative cost of coal/oil has been taken as per Regulation 25.1(a) (i)/(ii), O&M cost as per sub-clause (iii), and cost of maintenance spares has been taken as per sub-clause (iv). The Receivables have been computed as per Regulation 25.2 equivalent to one (1) month of actual revenue billed.

As per Regulation 25.4, IoWC has been calculated at the rate equal to the applicable Base Rate of State Bank of India as on 1st April plus 350 basis points for the year, i.e., 11.65%.

CSPGCL submitted the interest on working capital as shown in the Table below:

Table 3-36: IoWC for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Particulars	MYT Order	CSPGCL's Petition
KTPS	13.60	8.66
HTPS	33.12	28.99
DSPM	24.92	20.86
HBPS	0.70	1.11
KWTPP	17.68	18.61
ABVTPP	46.69	39.45
Total	136.71	117.68

Commission's View

The Commission has computed the IoWC for FY 2020-21 as per Regulation 25 of the MYT Regulations, 2015. The rate of interest has been considered as 11.65% for FY 2020-21 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 2020-21 is shown in the Table below:

Table 3-37: Approved IoWC for CSPGCL for FY 2020-21 (Rs. Cr.)

Particulars	MYT Order	Approved
KTPS	13.60	8.66
HTPS	33.12	28.99
DSPM	24.92	20.86
HB	0.70	1.11
KWTTP	17.68	18.61
ABVTTP	46.69	39.45
Total	136.71	117.68

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 2020-21 for its existing Stations. For computation purpose, plant-specific income has been booked to respective plants and income appearing against HO and CAU has been allocated to thermal plants on the basis of installed/ effective capacity. Delayed Payment Surcharge has not been taken into account while determining the Non-Tariff Income for FY 2020-21 as per well-settled principle in previous Orders.

As per settled methodology, provisions for income as well as expenses are not considered for the purpose of true-up. However, there are specific exclusions from Non-Tariff Income, which are detailed below.

Regarding Coal Blocks, CSPGCL submitted that there are two coal blocks allocated to CSPGCL, namely Gidhmuri Pathuria and Gare Palma (GP)-III. As per settled principle, the interest on Fixed Deposit Receipt (FDR) would qualify for setoff from the capital cost of the coal mine, as applicable. Accordingly, the view taken by the Commission in the previous Orders is being maintained in the instant Petition also and the interest income is not considered as NTI. Regarding Gidhmuri Paturia coal block there is no change in the factual matrix and Interest on the FDR's pertaining to the coal mines remain non-incidental to the business of CSPGCL. However, interest income pertaining to GP-III coal mine is considered in the computation for determination of input price of coal from that mine.

CSPGCL submitted that the cost of decommissioning includes R&M and A&G cost after the retirement of the plant. It is pertinent to mention here that as per the regulatory principle, 10% of GFA is recovered through the salvage value. Further, the balance value of stores and inventories has also to be charged to the cost of scrap. Thus, the total scrap value amounts to Rs. 117.27 Crore (Rs. 69.81 Crore of salvage value + Rs. 47.46 Crore of Inventories), which is yet to be received. During the year, CSPGCL received Rs. 36.37 Crore (Rs. 17.25 Crore + Rs. 19.12 Crore) from sale of scrap of KTPS. However, this includes GST and interest on delayed payment. The net receipt during the year against sale is Rs. 30 Crore only. Against the same, the cost of de-commissioning actually incurred for the purpose of sale of scrap is Rs. 9.18 Crore. Thus, on net basis, as on 31st March, 2021, Rs. 96.45 Crore remained to be recovered from sale of scrap. However, as further receipts are expected in the coming years from

balance sale of scrap, no claim is made on account of such residual recovery. CSPGCL has craved leave for submission of any residual expense/ income after completion of sale of all the retired assets.

The Non-Tariff Income submitted by CSPGCL for FY 2020-21 is shown in the Table below:

Table 3-38: Non-Tariff Income for FY 2020-21 as submitted by CSPGCL (Rs. Cr.)

Station	MYT Order	CSPGCL's Petition
KTPS	9.89	1.60
HTPS	19.36	7.63
DSPM	11.21	4.11
HBPS	0.00	0.02
KWTTP	5.26	3.69
ABVTPP	0.00	7.64
Total	45.72	24.69

Commission's View

The Commission approves the station-wise Non-Tariff Income based on actuals as per the Audited Accounts and considering CSPGCL's submissions, for the purpose of truing up for FY 2020-21, as shown in the Table below:

Table 3-39: Approved Non-Tariff Income in True-up for FY 2020-21 (Rs. Cr.)

Particulars	MYT Order	Approved
KTPS	9.89	1.60
HTPS	19.36	7.63
DSPM	11.21	4.11
KWTTP	0.00	0.02
HB	5.26	3.69
ABVTPP	0.00	7.64
Total	45.72	24.69

3.21 Additional R&M Expenses

CSPGCL's Submission

As regards additional R&M expenses, CSPGCL submitted that the Commission vide MYT Order dated April 30, 2016 in Petition No. 3 of 2016 has approved the total additional R&M for certain schemes for the Control Period as Rs. 54.83 Crore. Further, in the Order dated May 02, 2020 in Petition No. 77 of 2018, the Commission converted some of the earlier approved schemes from Capital account to R&M account with the leave that in case the earlier approved normative O&M falls short then expense on such scheme shall also be considered as additional R&M. During the year under consideration, the actual additional R&M claimed by CSPGCL is Rs. 2.92

Crore for reheater coil replacement and Rs. 3.91 Crore towards condenser tube replacement, Rs. 2.87 Crore on account of LTSH Coil and Rs 0.61 Crore for modified coal compartment assembly. The reheater coil was part of works approved in additional R&M in the original order and the last two items are covered in the Order dated May 2, 2020. Condenser tube amounting Rs. 6.30 Crore was approved in CIP Order. However, additional requirement was met through the additional R&M. Regarding such works, the Commission in the CIP Order dated May 2, 2020 decided that if need arises, the Utility is at liberty to take up such works under regular O&M head and the Commission would take appropriate view regarding consideration of additional R&M expenses on account of such expenses, at the time of true up.

Accordingly, the Petitioner has considered these schemes on account of additional R&M expense. CSPGCL requested the Commission to consider the additional R&M of Rs. 10.31 Crore for HTPS for FY 2020-21.

Commission's View

Based on the submission of CSPGCL, the Commission has approved additional R&M expenses of Rs. 10.31 Crore for HTPS for FY 2020-21 as shown below:

Table 3-40: Approved Additional R&M Expenses (Rs. Cr.)

Year	ABVTPS	DSPM	KTPS	HTPS	KWTPP
Additional R&M Expenses	-	-	-	10.31	-

3.22 Ash Utilization Expense

CSPGCL's Submission

CSPGCL submitted that the Ministry of Environment and Forests (MoEF) amended the Environment (Protection) Act, 1986 vide notification dated January 25, 2016. Since the notification was issued after the notification of CSERC MYT Regulations, 2015, CSPGCL did not get an opportunity to consider the implications of the said amendment and the O&M expenses were computed as per CSERC MYT Regulations, 2015 and the actual cost implication kept on piling up.

Regulation 11.1 lists the uncontrollable factors and the entry at 11.1 (b) is "Change in law". Further, Regulation 12 provides that any gain/loss on account of uncontrollable item shall be pass through in ARR. During the previous year, CSPGCL submitted the difficulty due to diversion of O&M funds for Ash Utilization and prayed for allowing detailed submission in the matter.

The Commission vide its Order dated August 10, 2021 in Petition No. 09 of 2021 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. The Commission had directed the Petitioner to submit the required details and justification in this regard, along with the next Tariff Petition. Accordingly, in the instant Petition, CSPGCL has made detailed submission for allowing the expenses on Ash Utilization during the Control Period up to FY 2020-21.

The expenses for the period up to FY 2019-20 are submitted under the head “Prior Period Expenses” and in line with the Commission’s previous Orders, the claim is limited to only 50% of the actual expenses.

For FY 2020-21, the Ash Utilization expenses have been reduced from the O&M expenses and equal amount has been claimed under the separate head. Thus, the total expenses remain same.

Commission’s View

The Commission vide its Order dated August 10, 2021 in Petition No. 09 of 2021 had 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. The Commission had directed CSPGCL to submit the required details and justification in this regard, along with the next Tariff Petition.

CSPGCL has submitted the expenses on Ash Utilization during the Control Period up to FY 2020-21 as shown below:

Table 3-41: Ash Utilization Expenses as submitted by CSPGCL (Rs. Cr.)

Year	ABVTPS	DSPM	KTPS	HTPS	KWTPP	Total
FY 2016-17	0.00	0.00	0.00	0.00	0.00	0.00
FY 2017-18	0.00	0.85	0.00	0.01	0.01	0.87
FY 2018-19	4.28	0.63	0.03	0.33	0.23	5.49
FY 2019-20	9.42	3.04	1.25	5.41	3.76	22.88
Total up to FY 2019-20	13.70	4.52	1.28	5.75	3.99	29.25
FY 2020-21	10.33	3.08	1.89	6.37	4.43	26.10

The Commission, in line with the previous Orders, has approved only 50% of the actual expenses for Ash Utilization for the period up to FY 2019-20 under the head “Prior Period Expenses”. For FY 2020-21, the Ash Utilization expenses has been approved under the separate head in ARR.

Ash Utilization Expense approved by the Commission are shown as below:

Table 3-42: Ash Utilization Expenses as approved (Rs. Cr.)

Year	ABVTPS	DSPM	KTPS	HTPS	KWTPP
Prior Period Expenses- Ash Utilization Expense for the period up to FY 2019-20	6.85	2.26	0.64	2.88	2.00
Ash Utilization Expense for FY 2020- 21	10.33	3.08	1.89	6.37	4.43

3.23 Statutory Charges

CSPGCL's Submission

CSPGCL submitted that as per the CSERC MYT Regulations, 2015, it has claimed the statutory and other charges such as water charges, SLDC charges, Start-up power charges, etc., on reimbursement basis. CSPGCL has recovered the same accordingly. In view of the above, on these counts, no deficit/surplus is claimed in true up.

CSPGCL submitted that Rs. 135.59 Crore as Water Charges, Rs. 6.75 Crore as SLDC Charges and Rs. 5.07 Crore as Start-up power charges have been claimed for FY 2020-21, totalling to Rs. 147.41 Crore for FY 2020-21.

Further, CSPGCL submitted that as per Regulation 82 of CSERC MYT Regulations, 2015, the petition filing fee and publication expenses are directly chargeable and hence, the expenses incurred towards petition filing fee and publication expenses have been reduced from O&M expenses and are claimed separately.

Commission's View

For the purpose of the truing up for FY 2020-21, the Commission has considered Statutory Charges based on audited accounts for FY 2020-21.

3.24 Aggregate Revenue Requirement for CSPGCL for FY 2020-21

The Summary of ARR for KTPS, HTPS, DSPM, HBPS, ABVTPP, and KWTPP for FY 2020-21 is shown in the following Table:

Table 3-43: Approved ARR for CSPGCL's Generating Stations for FY 2020-21 (Rs. Cr.)

Particulars	KTPS			HTPS			DSPM			KWTPP			Hasdeo Bango			ABVTPP		
	MYT/ Tariff Order	Petition	Approved	MYT/ Tariff Order	Petition	Approved	MYT/ Tariff Order	Petition	Approved	MYT/ Tariff Order	Petition	Approved	MYT/ Tariff Order	Petition	Approved	MYT/ Tariff Order	Petition	Approved
Depreciation	60.53	49.94*	49.94	33.54	30.99	30.99	130.28	129.84	129.84	190.71	185.94	185.94	2.65	2.77	2.77	468.54	466.47	466.47
Interest & Finance Charges	0.00	0.00	0.00	21.64	18.45	18.45	22.44	21.78	21.78	193.99	184.43	184.43	0.00	0.00	0.00	615.34	610.79	610.79
Return on Equity	18.33	13.79	13.79	69.00	66.85	66.85	109.62	109.51	109.51	98.50	95.84	95.84	5.85	5.88	5.88	167.94	168.09	168.09
O&M Expenses	167.04	105.54	105.54	347.56	291.05	291.05	174.45	169.24	169.24	104.90	84.66	84.66	15.00	8.22	8.22	209.80	183.66	183.66
Impact of Wage Revision	13.59	0.00	0.00	35.09	0.00	0.00	5.92	0.00	0.00	3.78	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00
Additional R&M Expenses	0.00	0.00	0.00	18.32	10.31	10.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ash Utilization Expenses	0.00	1.89	1.89	0.00	6.37	6.37	0.00	3.08	3.08	0.00	4.43	4.43	0.00	0.00	0.00	0.00	10.33	10.33
Interest on Working Capital	13.60	8.66	8.66	33.12	28.99	28.99	24.92	20.86	20.86	17.68	18.61	18.61	0.70	1.11	1.11	46.69	39.45	39.45
Less: Non-Tariff Income	9.89	1.60	1.60	19.36	7.63	7.63	11.21	4.11	4.11	5.26	3.69	3.69	0.00	0.02	0.02	0.00	7.64	7.64
Total Annual Capacity Charge	263.20	178.21	178.21	538.91	445.37	445.37	456.42	450.20	450.20	604.30	570.21	570.21	25.60	17.96	17.96	1,508.31	1,471.14	1,471.14
Cost of Coal	215.46	163.73	163.73	622.59	727.02	727.02	432.04	493.78	493.78	340.44	504.84	504.84	0.00	0.00	0.00	874.45	779.62	779.62
Cost of Oil	9.50	5.07	5.07	19.02	23.69	23.69	6.01	6.31	6.31	7.24	7.52	7.52	0.00	0.00	0.00	12.58	20.79	20.79
Total Energy Charges	224.96	168.80	168.80	641.61	750.71	750.71	438.05	500.08	500.08	347.68	512.36	512.36	0.00	0.00	0.00	887.03	800.41	800.41
Pension and Gratuity Contribution	65.60	65.60	65.60	67.92	67.92	67.92	11.16	11.16	11.16	10.99	10.99	10.99	4.53	4.53	4.53	24.81	24.81	24.81
Net prior period (income)/expenses	0.00	0.64	0.64	0.00	2.88	2.88	0.00	2.26	2.26	0.00	2.00	2.00	0.00	0.00	0.00	0.00	6.85	6.85
Aggregate Revenue Requirement	553.76	413.25	413.25	1,248.44	1,266.88	1,266.88	905.63	963.70	963.70	962.97	1,095.55	1,095.55	30.13	22.49	22.49	2,420.15	2,303.22	2,303.22

*In reply to queries, CSPGCL has revised Depreciation for KTPS from Rs. 49.96 Crore to Rs. 49.94 Crore. Further, values of AFC components in the MYT order refers to value updated in the T.O. FY 2019-20

3.25 Sharing of Gains and Losses

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

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

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

Provided that the mechanism for sharing of aggregate net gain on

account of over achievement in reference to the target set in tariff order for energy losses computed in accordance to Regulation 71 shall be passed on to the consumer(s) and retained by the licensee, as the case may be, in the ratio of 2: 1 or as may be specified in the Order of the Commission passed under these Regulations.

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

CSPGCL's Submission

CSPGCL submitted that Regulation 13 specifies the method for sharing of gains and losses. The well settled principles, as adopted by the Commission in previous Orders, has been adopted. In accordance with Regulations and as per settled methodology in previous Orders, the pension fund contribution, being old unfunded statutory liability, has been segregated from AFC and considered as a separate line item. Further, as per amendment to the CSERC MYT Regulations, 2015 dated June 16, 2017, Employee cost has been excluded from the O&M cost for the purpose of sharing of Gains/Losses. Also, in line with previous Order, impact of DSM charges has been shared in 50:50 ratio. CSPGCL submitted the sharing of loss of Rs. 164.83 Crore for FY 2020-21.

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 2020-21 is as shown in the Table below:

Table 3-44: Approved Sharing of Gains and Losses for final True-up for FY 2020-21 for CSPGCL's Generating Stations

Particulars	Units	KTPS	HTPS	DSPM	KWTPP	ABVTPP	HBPS
Fixed Charges @ NPAF							
Installed capacity	MW	240.00	840.00	500.00	500.00	1000.00	120.00
NPAF	%	70.00%	78.69%	85.00%	85.00%	76.50%	-
Actual PAF achieved (billed)	%	62.03%	71.72%	82.57%	92.64%	55.06%	-
Normative Net Generation	MU	984.06	5228.66	3387.93	3527.54	6349.58	414.99
Actual net generation	MU	860.16	4781.01	3056.38	3856.71	4428.06	418.29
Total generation available for Fuel Cost recovery	MU	860.16	4781.01	3056.38	3856.71	4428.06	418.29
Fixed Cost (norm-wise)							

Particulars	Units	KTPS	HTPS	DSPM	KWTPP	ABVTPP	HBPS
Depreciation	Rs Cr	49.94	30.99	129.84	185.94	466.47	2.77
Interest on Loan and Finance charges	Rs Cr	0.00	18.45	21.78	184.43	610.79	0.00
Return on Equity	Rs Cr	13.79	66.85	109.51	95.84	168.09	5.88
Interest on Working Capital	Rs Cr	8.66	28.99	20.86	18.61	39.45	1.11
O & M Expenses	Rs Cr	135.88	370.86	177.11	106.38	212.76	15.88
Less - Non-Tariff Income	Rs Cr	1.60	7.63	4.11	3.69	7.64	0.02
Fixed Cost allowed on Normative Basis	Rs Cr	206.66	508.50	454.99	587.50	1489.91	25.62
Fixed cost expenditure excluding O&M	Rs Cr	70.78	137.64	277.88	481.12	1277.15	9.74
Normative Fixed Cost (Cr. Rs/% of PAF) excluding O&M	Rs Cr./% PAF	1.01	1.75	3.27	5.66	16.69	0.02
Pro-rata Fixed cost allowable from Actual PAF	Rs Cr	62.72	125.45	269.94	524.36	919.22	9.82
Fixed cost gain from normative cost	Rs Cr	(8.06)	(12.19)	(7.94)	43.24	(357.94)	0.08
Total Gain/(Loss)	Rs Cr	(342.81)					
R&M and A&G expenses							
Normative R&M and A&G Cost allowed	Rs Cr.	35.89	118.48	92.72	60.64	121.27	3.87
Normative R&M and A&G Cost (Cr. Rs/% of PAF)	Rs Cr./%PAF	0.51	1.51	1.09	0.71	1.59	0.01
Pro-rata R&M and A&G cost allowable from actual PAF	Rs Cr.	31.80	107.99	90.07	66.09	87.28	3.90
Actual R&M and A&G expenditure	Rs Cr.	27.60	118.09	88.01	48.66	82.73	3.73
Difference of recovery and expenditure	Rs Cr	4.20	(10.10)	2.06	17.42	4.55	0.17
Total Gain/(Loss)	Rs Cr	18.31					
Secondary Fuel Cost							
Normative SFC	Rs Cr	10.69	27.96	10.59	9.99	24.60	
Normative SF Cost derived from NPLF	Rs/kWh	0.11	0.05	0.03	0.03	0.04	
Secondary fuel cost recovery from actual generation	Rs Cr	9.34	25.57	9.56	10.92	17.15	
Actual SFC incurred	Rs Cr	5.07	23.69	6.31	7.52	20.79	
Savings due to performance improvement	Rs Cr	4.28	1.88	3.25	3.40	(3.64)	
Total Impact of Savings/Excess Expenditure due to SFC	Rs Cr	9.16					
Coal Cost (primary fuel)							
Normative Coal Cost	Rs Cr	195.19	773.82	571.79	444.69	1029.07	
Normative ECR (Coal)	Rs/kWh	1.98	1.48	1.69	1.26	1.62	
Normative fuel cost on actual sent out	Rs Cr	170.62	707.57	515.83	486.19	717.66	
Actual fuel cost	Rs Cr	163.73	727.02	493.78	504.84	779.62	

Particulars	Units	KTPS	HTPS	DSPM	KWTPP	ABVTPP	HBPS
Coal Cost Surplus/(deficit)	Rs Cr	6.88	(19.44)	22.06	(18.65)	(61.97)	
Total Impact of Savings/Excess Expenditure due to Coal	Rs Cr	(71.12)					
Total plant wise impact of gain/ loss	Rs Cr	7.31	(39.86)	19.42	45.42	(418.99)	0.25
Total Impact of Savings/Excess Expenditure	Rs Cr	(386.46)					
Plant-wise impact of DSM Charges	Rs Cr	0.86	17.76	11.35	8.66	18.17	0.00
Total Impact of DSM Charges	Rs Cr	56.80					
Net total Impact Savings/Excess Expenditure	Rs Cr	(329.66)					
Net applicable Gain/(Loss) to CSPGCL on 50:50 basis	Rs Cr	(164.83)					

From the above table, it is seen that CSPGCL has incurred loss of Rs. 329.66 Crore in FY 2020-21. 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. 164.83 Crore for FY 2020-21, after undertaking the sharing of gains and losses.

3.26 Revenue Gap/(Surplus) for CSPGCL for FY 2020-21

Commission's view

The Commission has considered the revenue from sale of power based on the Audited Accounts submitted by CSPGCL for FY 2020-21.

The Water Charges, SLDC Charges and Start Up Power Charges have been considered separately for FY 2020-21. The revenue from DSM Charges has been apportioned for respective Generating Station.

The Commission has considered the Income Tax of Rs. 8.90 Crore approved in earlier section of this Order separately in the Revenue Gap/(Surplus) Table for FY 2020-21.

In view of the above, the Revenue Gap/(Surplus) for CSPGCL for FY 2020-21 after final truing up has been approved as shown in the Table below:

Table 3-45: Revenue Gap/(Surplus) after True-up for FY 2020-21 for CSPGCL (Rs. Cr.)

Particulars	Petition	Approved
ARR for KTPS	413.25	413.25
ARR for HTPS	1,266.88	1,266.88
ARR for DSPM TPS	963.70	963.70
ARR for KWTPP	1,095.55	1,095.55
ARR for ABVTPP	2,303.22	2,303.22
ARR for Hasdeo Bango	22.49	22.49
Total ARR for Generating Stations of CSPGCL	6,065.09	6,065.09
Sharing of Gain/(Losses)	(164.83)	(164.83)
Petition Filing Fee & Advertising expenses	0.41	0.41

Particulars	Petition	Approved
Impact of previous year's Revenue Gap	(225.51)	(225.51)
Water, SLDC Charges and Start up power for recovery	147.41	147.41
Income Tax for Current Year	8.90	8.90
Total ARR	5,831.47	5,831.47
Revenue from sale of power for KTPS	424.97	424.97
Revenue from sale of power for HTPS	1,289.93	1289.93
Revenue from sale of power for DSPM TPS	974.25	974.25
Revenue from sale of power for KWTPP	1,130.20	1130.20
Revenue from sale of power for ABVTPP	1,847.25	1847.25
Revenue from sale of power for Hasdeo Bango	44.02	44.02
Total Revenue from Sale of Power for CSPGCL	5,710.62	5,710.62
Water, SLDC charges & start up power for recovery	147.41	147.41
Recovery Impact previous year Revenue Gap	(225.51)	(225.51)
Total Recovery and Revenue	5,632.52	5,632.52
Standalone ARR Gap/(Surplus)for the year	198.95	198.95

The Commission approves Standalone Revenue Gap of Rs. 198.95 Crore after Truing-up of FY 2020-21.

The Commission has considered carrying cost on the Revenue Gap arrived after final Truing-up of FY 2020-21. The Commission has considered the interest rates as SBI Base Rate plus 350 basis points for FY 2020-21 as specified in the Regulations:

Table 3-46: Revenue Gap after True-up for FY 2020-21 for CSPGCL along with carrying cost (Rs. Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Opening Gap/(Surplus) for the year	-	210.54	233.48
Gap/(Surplus) for the year	198.95		
Closing Gap/(Surplus)	198.95	210.54	-
Interest Rate (%)	11.65%	10.90%	10.90%
Carrying Interest/Cost for the year	11.59	22.95	12.72
Total Closing Gap/(Surplus)	210.54	233.48	246.21

Accordingly, the Revenue Gap including carrying cost, which is required to be factored in the revenue requirement of CSPDCL for FY 2022-23 works out to Rs. 246.21 Crore.

The Commission, hence, approves cumulative Revenue Gap of Rs. 246.21 Crore up to FY 2022-23 for CSPGCL. CSPGCL is allowed to recover the same in 12 equal monthly instalments from April 2022 from CSPDCL. This Revenue Gap has been adjusted in ARR of CSPDCL for FY 2022-23 as discussed in subsequent Chapter.

4 TRUE-UP OF ARR FOR FY 2020-21 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. In the Tariff Order dated May 30, 2020, the Commission revised certain components of the ARR and hence, Transmission Tariff of CSPTCL for FY 2020-21.

Based on the audited accounts of FY 2020-21 CSPTCL has submitted the Petition for final true-up of ARR for FY 2020-21.

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 2020-21 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 2020-21 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, 2020 and March 31, 2021, as submitted by CSPTCL, is shown in the Table below:

Table-4-1: Physical status of transmission system of CSPTCL as on March 31, 2021

Particulars	Units	As on March 31, 2020	As on March 31, 2021
A. EHV Transmission Lines			
400 kV	ckt. km.	1918	1918

Particulars	Units	As on March 31, 2020	As on March 31, 2021
220 kV	ckt. km.	4032	4032
132 kV	ckt. km.	6802	7192
B. EHV Substations			
400 kV	No.	4	4
220 kV	No.	25	25
132 kV	No.	92	94
C. Transformation Capacity of EHV Substations			
400/220 kV	MVA	2520	2835
220/132 kV	MVA	8660	8660
132/33kV	MVA	8229	9079

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 2020-21 is 3.09%, as against the Transmission Loss of 3.22% approved for FY 2019-20 in the MYT Order dated 30th April, 2016. The computation of the transmission losses submitted by CSPTCL is shown in the Table below:

Table 4-2: Transmission Losses for FY 2020-21 as submitted by CSPTCL (MU)

Sr. No.	Particulars	FY 2020-21
1	State Generation Ex-Bus at 132 kV and above	17405.56
2a	Import from CTU Grid at CG Periphery at 132 kV and above	17532.86
2b	Export to CTU Grid at CG Periphery at 132 kV and above	7881.27
2	Net Drawal from CTU Grid at State Periphery at 132 kV and above	9651.60
3	IPPs/CPP Injection in CSPTCL System at 132 kV and above	1067.82
4	Total Injection at State Grid of STU (MU) (1+2+3)	28124.98
5	EHV Sales from Sub Station	2390.86
6	Net Output to DISCOM	24867.24
7	Total Output from CSPTCL System (5+6)	27258.10
8	Transmission Loss (4-7)	866.88
9	Transmission Loss (%) (8/4*100)	3.09%

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 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 Marwa Plant 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 3.09% for FY 2020-21.

4.4 Operations and Maintenance (O&M) Expenses

CSPTCL's Submission

Employee Expenses

CSPTCL submitted that based on the audited accounts, the gross employee expense excluding SLDC expense is Rs. 189.43 Crore for FY 2020-21, as shown in the following Table:

Table 4-3: Gross Employee Expenses for FY 2020-21 as submitted by CSPTCL (Rs. Crore.)

Sr. No.	Particulars	FY 2020-21
		Actual
1	Gross Employee Expenses (CSPTCL + SLDC) excluding Terminal Benefits	198.34
2	Less: SLDC Employee Expenses	8.91
3	CSPTCL Gross Employee Expenses	189.43

The capitalisation of employee expenses has been considered as Rs. 9.88 Crore for FY 2020-21. CSPTCL requested the Commission to approve actual net employee expenses (net of capitalization) of Rs. 179.55 Crore (189.43 – 9.88) for FY 2020-21.

CSPTCL submitted the details of sanctioned employee strength, current employee strength, and vacant positions for different class of employees, as on March 31, 2021. The total sanctioned strength of different class of employees exclusive of SLDC is 3,080 out of which 1,563 are currently working and balance 1517 are envisaged to be filled in the coming financial years, as shown in the Table below:

Table 4-4: Employee strength of CSPTCL as on 31st March 2021

Sr. No.	Particulars	Sanctioned	Working	Vacant
CSPTCL				
1	Class I	159	120	39
2	Class II	240	191	49
3	Class III	1,543	786	757
4	Class IV	1,138	466	672
5	Total	3,080	1,563	1,517
SLDC				
1	Class I	20	16	4
2	Class II	24	15	9
3	Class III	23	15	8
4	Class IV	9	2	7
5	Total	76	48	28
CSPTCL + SLDC				
1	Class I	179	136	43
2	Class II	264	206	58
3	Class III	1,566	801	765
4	Class IV	1,147	468	679
5	Total	3,156	1,611	1,545

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 2020-21 based on the audited accounts for FY 2020-21, as shown in the Table below:

Table 4-5: Gross R&M expenses and A&G expenses for FY 2020-21 as submitted by CSPTCL (Rs. Crore)

Sr. No.	Particulars	FY 2020-21
		Actual
1	Gross A&G Expenses	58.17
2	Less: SLDC Expenses	0.51
3	CSPTCL Gross A&G Expenses	57.67
4	Gross R&M Expenses	55.73
5	Less: SLDC Expenses	1.66
6	CSPTCL Gross R&M Expenses	54.07

CSPTCL submitted that it has not considered expenses on account of Corporate Social Responsibility (CSR), shortage of inventory, and penalty under A&G expenses. CSPTCL considered the capitalisation of A&G expenses as Rs. 0.93 Crore for FY 2020-21. CSPTCL submitted the comparison of actual O&M expenses vis-a-vis O&M expenses approved in the MYT Order, as shown in the following Table:

Table 4-6: O&M Expenses as submitted by CSPTCL for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	FY 2020-21	
		MYT Order	Petition
1	Gross Employee Expenses	186.72	189.43
2	Gross A&G Expenses	44.21	57.67
3	Gross R&M Expenses	45.31	54.07
4	Interim Wage Relief amount		-
5	Gross O&M Expenses (excluding SLDC)	276.24	301.17
6	Employee expenses capitalized	-	9.88
7	A&G Expenses capitalized	-	0.93
8	Net O&M Expenses (excluding SLDC)	-	290.36

CSPTCL requested the Commission to approve O&M expenses as per audited accounts as shown in the above Table.

Sharing of gains and losses on account of 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.

CSPTCL has computed gain and losses considering the Regulation 8, 11.2, and 13 of the CSERC MYT Regulations 2015. 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 2020-21.

CSPTCL submitted that the normative A&G expenses and R&M expenses for FY 2020-21 have been computed as per the Regulations and the approach of the Commission adopted in the previous Tariff Order. CSPTCL has computed the base normative A&G Expenses and R&M Expenses for FY 2020-21 by considering the normative expenses for FY 2019-20 and Wholesale Price Index (WPI). CSPTCL has computed the base normative A&G expenses and R&M Expenses for FY 2020-21 as Rs. 42.66 Crore and Rs. 43.71Crore, 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 additional normative A&G and R&M expenses on account of new transmission lines and sub-stations commissioned during FY 2020-21 have been determined based on the methodology adopted by the Commission the previous Tariff Orders.

Assets generated on account of consumer contribution has been taken as Rs. 1 in the audited accounts as per accounting practice. However, assets so generated are being maintained by CSPTCL and hence, qualify for additional R&M and A&G expenses against these assets. Total assets generated on account of consumer contribution for FY 2018-19, FY 2019-20 and FY 2020-21 are Rs. 5.78 Crore, Rs. 13.60 Crore, and Rs. 24.49 Crore, respectively.

Accordingly, CSPTCL has computed additional normative A&G and R&M expenses for FY 2020-21, as shown in the following Table:

Table 4-7: Additional Normative O&M Expenses as submitted by CSPTCL for FY 2020-21 (Rs. Crore.)

Sr. No.	Particulars	Formula	FY 2020-21
1	Average of opening and closing GFA for previous FY 2019-20	A	4,904.87
2	Average of opening and closing GFA for current FY 2020-21	B	5,278.41
3	Increase in GFA (%)	$C = (B-A)/A * 100$	7.62%
4	Normative A&G Expenses	D	42.66
5	Normative R&M Expenses	E	43.71
6	Additional A&G Expenses on account of increase in GFA	$F = D * C$	3.25
7	Additional R&M Expenses on account of increase in GFA	$G = E * C$	3.33

CSPTCL submitted the revised normative A&G Expenses and R&M Expenses for FY 2020-21 after adding Additional Normative expenses to base normative expenses, as shown in the Table below:

Table 4-8: Revised Normative A&G Expenses and R&M Expenses as submitted by CSPTCL for FY 2020-21 (Rs. Crore.)

Particulars	FY 2020-21
Normative A&G Expenses	
Base Normative Expenses	42.66

Particulars	FY 2020-21
Additional A&G Expenses	3.25
Total Normative A&G Expenses	45.91
Normative R&M Expenses	
Base Normative Expenses	43.71
Additional R&M Expenses	3.33
Total Normative R&M Expenses	47.04

CSPTCL has submitted that normative A&G expenses and R&M expenses arrived above and actual A&G expenses and R&M expenses have been considered for computation of gain/loss. CSPTCL submitted the sharing of gain/(loss) for FY 2020-21, as shown in the following Table:

Table 4-9: Sharing of gain/(loss) on A&G Expenses and R&M expenses as submitted by CSPTCL for FY 2020-21 (Rs. Crore.)

Sr. No.	Particulars	FY 2020-21		
		Normative	Actual	Gain/(Loss)
A	Net A&G expenses	45.91	56.74	(10.83)
B	Net R&M expenses	47.04	54.07	(7.04)
C	Total	92.95	110.81	(17.87)
D	CSPTCL share (1/2 of Total Gain/(Loss))			(8.93)

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 2020-21 have increased due to the reason that EHV sub-stations of CSPTCL are being outsourced for operational purposes (including cleaning, watch and ward). The details of the outsourced expenses are as under:

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

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
132 kV Substations	10.35	14.41	24.47	24.63	24.26
220 kV Substations	2.65	3.65	6.95	6.75	7.05
400 kV sub-station				0.89	0.91
Grand total	13.00	18.06	31.42	32.27	32.21

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 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 1.29% for R&M expenses and A&G Expenses for FY 2020-21 based on applicable Wholesale Price Index (WPI).

Further, Regulation 47.5 (g) of the CSERC MYT Regulations, 2015, provides for consideration of 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 Orders, 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 2020-21 are computed as shown in the Table below:

Table 4-11: Computation of Additional A&G expenses and R&M expenses for FY 2020-21 (Rs. Crore)

Particulars	Legend/Formula	FY 2020-21
Average of Opening and Closing GFA for FY Previous FY	A	4,904.87
Average of Opening and Closing GFA for current FY	B	5,278.41
Increase in GFA (%)	$C=(B-A)/A \times 100$	7.62%
Normative A&G Expenses approved for FY	D	42.66
Normative R&M Expenses approved for FY	E	43.71
Additional A&G Expenses on account of increase in GFA for FY	F=D x C	3.25
Additional R&M Expenses on account of increase in GFA for FY	G = E x C	3.33

For the purpose of true-up for FY 2020-21, 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, as shown in the following Table:

Table 4-12: Approved Normative A&G Expenses and R&M Expenses for FY 2020-21 (Rs. Crore)

Particulars	MYT Order	Petition	Revised
A&G Expenses	37.63	45.91	45.91
R&M Expenses	38.57	47.04	47.05
Grand total	76.20	92.95	92.96

The Commission has undertaken sharing of gains and losses of normative expenses vis-à-vis actual expenses for FY 2020-21 in accordance with CSERC MYT Regulations, 2015.

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

Table 4-13: Approved Actual Employee Expenses for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Gross Employee Expenses (CSPTCL + SLDC) excluding terminal benefits	198.34	198.34
2	Less: SLDC Employee Expenses	8.91	8.91
3	Gross Employee Expenses (excluding SLDC)	189.43	189.43
4	Less: Employee Cost Capitalized	9.88	9.88
5	Net Employee Expenses	179.55	179.55

The Commission has approved actual A&G expenses and R&M expenses for FY 2020-21 considering the audited annual accounts, as shown in the following Table:

Table 4-14: Approved Actual A&G Expenses and R&M Expenses for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Gross A&G Expenses	58.17	58.17
2	Less: SLDC Expenses	0.51	0.51
3	Gross A&G Expenses (Excluding SLDC)	57.67	57.67
4	A&G Expenses Capitalized	0.93	0.93
5	Net A&G Expenses	56.74	56.74
6	Gross R&M Expenses	55.73	55.73
7	Less: SLDC Expenses	1.66	1.66
8	Gross R&M Expenses (Excluding SLDC)	54.07	54.07
9	R&M Expenses Capitalized	-	-
10	Net R&M Expenses	54.07	54.07

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 2020-21.

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. According to the CSERC MYT Regulations, 2018, such expenses cannot be a part of employee expenses, and shall be booked under A&G expenses or R&M expenses, as appropriate.

Accordingly, the sharing of gains and losses in O&M expenses, computed after final true-up for FY 2020-21, is shown in the following Table:

Table 4-15: Sharing of gain/(loss) on A&G Expenses and R&M expenses for FY 2020-21 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Normative	Actual	Gain/ (Loss)
	Net A&G expenses	45.91	56.74	(10.83)
B	Net R&M expenses	47.05	54.07	(7.02)
C	Total Gain/(Loss)			(17.85)
D	CSPTCL share (1/2 of Total Gain/(Loss))			(8.93)

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 revised vide Tariff Order dated 30th May, 2020 to Rs. 69.52 Crore for FY 2020-21 net of SLDC. Accordingly, CSPTCL has made P&G contribution of Rs. 69.52 Crore.

Commission's View

The Commission approves the actual Contribution to P&G Fund for FY 2020-21 as submitted by CSPTCL, as shown in the following Table:

Table 4-16: Contribution to P&G Fund for FY 2020-21 as approved by the Commission (Rs. Crore)

Particulars	Tariff Order dated 30.05.2020	Petition	Approved
Contribution to P&G Fund	69.52	69.52	69.52

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 2020-21 has been considered as follows:

- The opening Capital Works in Progress (CWIP) of Rs. 524.42 Crore for FY 2020-21 has been considered equal to the closing CWIP of FY 2019-20;
- Closing CWIP of Rs. 494.93 Crore has been considered as per the audited accounts for FY 2020-21;
- The actual loan addition of Rs. 25.07 Crore has been considered as per the audited accounts for FY 2020-21;
- GFA addition of Rs. 339.43 Crore for FY 2020-21 (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;
- The normative debt: equity ratio has been considered as 70:30 for additional capitalisation during FY 2020-21 as per the CSERC MYT Regulations, 2015.

CSPTCL submitted that assets of Rs. 339.43 Crore created during FY 2020-21 is a part of GFA mentioned in Audited Accounts of FY 2020-21, which excludes asset created through consumer contribution/grant. However, as per Audited Accounts, it is reflected that PSDF grants received during FY 2020-21 is Rs. 12.27 Crore. The amount received from grants has not been converted to assets till date and as per accounting practice, assets created due to consumer contribution is taken as Rs. 1 irrespective of actual value of asset.

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. 237.60 Crore

and Equity amount of Rs. 101.83 Crore for FY 2020-21. CSPTCL requested the Commission to approve the capital structure and means of finance including GFA addition for FY 2020-21 as per its submissions.

Commission's View

In the previous Tariff Order, the Commission has approved the closing GFA as Rs. 5,096.45 Crore after true-up for FY 2019-20. The Commission has accordingly considered the same amount as opening GFA for FY 2020-21.

As regards GFA addition during the year, CSPTCL was asked to submit scheme-wise details of asset addition for FY 2020-21 with respect to the scheme-wise capitalisation approved for FY 2020-21, break-up of hard cost and Interest During Construction (IDC) in the total addition to GFA for FY 2020-21 and computation, and justification for the IDC considered for FY 2020-21. In the reply, CSPTCL submitted accounting head-wise details for capitalisation for FY 2020-21, submitted breakup of Hard Cost and IDC for FY 2021, and clarified that IDC has been computed from the date of loan drawal to the date of COD of such assets. CSPTCL submitted Hard Cost and IDC for FY 2020-21 as Rs. 338.60 Crore and Rs. 0.83 Crore, respectively

The Commission notes that audited accounts for FY 2020-21 indicate the capitalisation of Rs. 339.43 Crore, which is capitalisation of CSPTCL only as capitalisation by CSLDC during FY 2020-21 is Nil. Accordingly, the Commission has considered the capitalisation of Rs. 339.43 Crore for FY 2020-21.

As regards the funding of capitalisation through grants/consumer contribution, CSPTCL has not considered any grants for FY 2020-21. During TVS, CSPTCL confirmed that there is no asset addition during FY 2020-21 through grants/consumer contribution.

The Commission approves the GFA addition and its funding for FY 2020-21 as shown in the following Table:

Table 4-17: Approved GFA Addition and Means of Finance for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	GFA Addition	339.43	339.43
	Means of Finance		
2	Consumer Contribution	0.00	0.00
3	Equity	101.83	101.83
4	Debt	237.60	237.60
5	Total Capitalisation	339.43	339.43

4.7 Depreciation

CSPTCL's Submission

CSPTCL submitted that it has computed depreciation of Rs. 249.12 Crore FY 2020-21, in accordance with Regulation 24 of the CSERC MYT Regulations, 2015 and the methodology considered by the Commission in the past. CSPTCL requested the Commission to approve the same in the final true-up of ARR for FY 2020-21.

Commission's View

The Commission has approved the depreciation in accordance with the approach adopted in the past Orders. 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. The additional GFA as well as the addition of Grants and Consumer Contribution in GFA has been considered as approved by the Commission. The weighted average depreciation rate of 5.26%, computed on the basis of depreciation rates specified in the CSERC MYT Regulations, 2015, has been considered for FY 2020-21. Depreciation on assets due to Consumer Contribution and grants equates to Rs. 2.84 Crore for FY 2020-21.

CSPTCL has submitted the depreciation on fully depreciated assets during the year as Rs. 25.03 Crore for FY 2020-21 and the same has been considered by the Commission. The depreciation computed by the Commission for FY 2020-21 is shown in the following Table:

Table 4-18: Approved Depreciation for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Tariff Order	Petition	Approved
1	Opening GFA excluding CSLDC	5,028.47	5,096.45	5,096.45
2	Add: Capitalization during the year	62.35	339.43	339.43
3	GFA at the end of the year excluding CSLDC	5,090.82	5,435.88	5,435.88
4	Average GFA for the year	5,059.65	5,266.16	5,266.16
5	Depreciation Rate	5.25%	5.26%	5.26%
6	Depreciation @ applicable rates as per Regulations	265.63	277.00	276.90
7	Less: Depreciation on Consumer Contribution and grants	2.42	2.84	2.84
8	Less: Depreciation on fully depreciated assets	23.14	25.03	25.03
9	Net Depreciation	242.12	249.12	249.03

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 2020-21 as per the audited accounts. CSPTCL has considered the approved closing normative loan balance for FY 2019-20 as per the true-up Order, as the opening normative loan balance for FY 2020-21. The debt component of 70% of GFA addition after deduction of grants during FY 2020-21 has been considered as the normative loan addition during the year. The allowable depreciation for FY 2020-21 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 9.76% for FY 2020-21 has been considered for computation

of the interest on loan. CSPTCL requested the Commission to approve Interest on Loan of Rs. 192.26 Crore for FY 2020-21.

Commission's View

The Commission has approved interest on loan capital for FY 2020-21 as per Regulation 23 of the CSERC MYT Regulations, 2015.

The Commission has considered the closing net normative loan balance for FY 2019-20, as approved after True-up, as the opening net normative loan balance for FY 2020-21. The addition of normative loan for FY 2020-21 has been considered based on debt component towards the actual capitalisation of during the year, as considered earlier in this Chapter. The repayment has been considered equal to net depreciation approved for FY 2020-21 in this Order.

The Commission has computed the weighted average rate of interest of 9.76% for FY 2020-21, as per Regulation 23.5 of the CSERC MYT Regulations, 2015. Accordingly, the normative interest on loan approved for FY 2020-21 is shown in the Table below:

Table 4-19: Approved Interest on Loan for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Tariff Order	Petition	Approved
1	Total Opening Net Loan	1,883.41	1,973.98	1,973.98
2	Repayment during the period	242.12	249.12	249.03
3	Additional Capitalization of Borrowed Loan during the year	43.65	237.60	237.60
4	Total Closing Net Loan	1,684.97	1,962.46	1,962.56
5	Average Loan during the year	1,784.20	1,968.22	1,968.27
6	Weighted Average Interest Rate	10.86%	9.76%	9.76%
7	Interest Expenses	198.77	192.26	192.06

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. 1.98 Crore for FY 2020-21. CSPTCL has considered the closing permissible equity balance of FY 2019-20, as approved in the true-up Order, as the opening permissible equity balance for FY 2020-21. The equity addition has been considered as 30% of the actual capitalisation during the year. CSPTCL requested the Commission to approve RoE of Rs. 215.46 Crre for FY 2020-21.

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. 1.98 Crore for FY 2020-21. 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 2019-20 has been considered as opening equity for FY 2020-21. The equity addition has been considered based on the actual capitalisation as approved earlier in this Order. The Commission approves the RoE for FY 2020-21 as shown in the following Table:

Table 4-20: Approved Return on Equity for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Tariff Order	Petition	Approved
1	Permissible Equity in Opening GFA	1,320.01	,339.13	1,339.13
2	Addition of Permissible Equity during the year	18.71	101.83	101.83
3	Permissible Equity in Closing GFA	1,338.72	1,440.96	1,440.96
4	Average Gross Permissible Equity during the year	1,329.36	1,390.05	1,390.05
5	Rate of Return on Equity	15.50%	15.50%	15.50%
6	Return on Equity	206.00	215.46	215.46

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 2020-21. CSPTCL submitted computation of Income Tax, Income Tax challans and other documentary evidences for FY 2020-21. Further, CSPTCL clarified that no adjustment towards MAT credit has been made during FY 2020-21 and furnished the details of refund of Income Tax received towards previous years. The details of Income Tax refund submitted by CSPTCL are shown in the Table below:

Table 4-21: Income Tax Refund (Rs. Crore)

Sr. No.	Financial year	Total Refund Received	Interest Received	Refund net of interest
1	2010-11	2.83	0.38	2.45
2	2011-12	55.11	18.34	36.77
3	2013-14	76.77	20.94	55.83
4	2016-17	8.03	0.86	7.17
5	Total	142.74	40.52	102.23

Further CSPTCL submitted that the interest portion of the above Income Tax refund has been shown as Non-Tariff Income as “interest received on income tax refund”, while the principal amount of Income Tax refund has been adjusted against refund receivable.

Based on the scrutiny of the documentary evidence submitted by CSPTCL and Income Tax paid, the Commission observed that CSPTCL has adjusted interest received on Income Tax refund of Rs. 40.52 Crore in Non-Tariff Income, whereas principal amount of Income Tax received as refund has not been adjusted in the ARR for the year.

The Commission does not find merit in the justification provided by CSPTCL for not adjusting the principal amount of Income Tax refund against the ARR. The adjustment done by CSPTCL against refund receivable is a book entry. However, this does not mean that the Income Tax refund does not have to be passed on to the consumers.

CSPTCL has received Income Tax refund against Income Tax paid for the following years, i.e., FY 2010-11, FY 2011-12, FY 2013-14 and FY 2016-17. In the ARR and Tariff approved by the Commission for FY 2010-11, FY 2011-12, FY 2013-14, the RoE was grossed up with MAT, and thus, a certain amount of Income Tax was passed on to the consumers. For FY 2016-17, the Commission has allowed Rs. 14.38 Crore of actual Income Tax payment in the final true-up. Hence, for FY 2016-17 also, the Income Tax paid was passed on to the consumers.

Under such circumstances, it is necessary to compare the actual Income Tax paid by CSPTCL with the amount of Income tax allowed by the Commission in the respective years, and the refund received by CSPTCL for the respective years, in order to assess the amount of Income Tax refund to be passed on to the consumers.

CSPTCL has provided the reconciliation of the Income Tax allowed and paid with the amount of refund for the respective years, as shown in the Table below:

Table 4-22: Income Tax Paid, Allowed and Refunded (Rs. Crore)

Sr. No.	Financial year	Amount of Tax considered in pre-tax RoE	Advance Tax paid during the Year	Actual Tax	Tax Refund Net of Interest	Refund to be adjusted in FY 2020-21
1	2010-11	13.95	7.32	4.87	2.45	9.08
2	2011-12	19.83	42.74	5.97	36.77	13.86
3	2013-14	25.39	55.83	0	55.83	25.39
4	2016-17	-	26.39	14.38	7.17	-
5	Total	59.17	132.28	25.22	102.22	48.33

The Commission has verified the reconciliation provided by CSPTCL and has accordingly, adjusted principal refund of Income Tax of Rs. 48.33 Crore in the ARR as a separate row entry.

4.10 Interest on Working Capital

CSPTCL's Submission

For computation of Interest on Working Capital (IoWC) for FY 2020-21, 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 10.90% (i.e., 7.40% - SBI Base Rate on 1st September 2020 plus 350 basis points) for FY 2020-21. CSPTCL requested the Commission to approve IoWC of Rs. 13.42 Crore for FY 2020-21.

Commission's View

CSPTCL has considered rate of interest on Working Capital as 10.90% as on 1st September 2020. However, for computation of IoWC, Regulation 25.4 of CSERC MYT Regulations, 2015 provides for conspiring Base Rate of SBI as on 1st April of financial year at the time of truing up. The relevant extract of the Regulation is as follows:

“25. INTEREST ON WORKING CAPITAL

.....

*25.4. Interest on working capital shall be allowed at a rate equal to the Base rate of State Bank of India as on 30th September of the financial year in which the Petition is filed plus 350 basis points. At the time of true up, the interest rate shall be adjusted as per the **actual rate prevailing on 1st April of the financial year for which truing up exercise has been undertaken. (Emphasis added)***

..... ”

Further, in reply to data gaps CSPTCL requested the Commission to consider rate of Interest on Working Capital as on 1st April 2020. Accordingly, 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 2020-21. The interest rate has been considered as per Regulation 25.4 of the MYT Regulations, 2015, i.e., 11.65% (8.15% + 3.5%) for FY 2020-21. The normative IoWC approved by the Commission is shown in the Table below:

Table 4-23: Approved Interest on Working Capital for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Tariff Order	Petition	Approved
1	O&M expenses for One Month	23.02	24.20	21.81
2	Maintenance Spares @ 40% of R&M Expenses	18.12	21.63	18.82
3	Receivables @ 1 Month	83.61	77.27	77.27
4	Total Working Capital requirement	124.76	123.10	117.89
5	Less: Security Deposit from Transmission Users	-	-	-
6	Net Working Capital Requirement	124.76	123.10	117.89
7	Rate of Interest on Working Capital	13.20%	10.90%	11.65%
8	Interest on Working Capital	16.47	13.42	13.73

4.11 Non-Tariff Income

CSPTCL's Submission

CSPTCL submitted the Non-Tariff Income of Rs. 71.65 Crore for FY 2020-21 based on audited accounts and requested the Commission to approve the same.

Commission's View

For the purpose of true-up for FY 2020-21, the Commission has considered the Non-Tariff Income for Transmission Business as per Segmental Notes of Accounts for FY 2020-21, which also includes interest received on Income Tax of Rs. 40.52 Crore, as discussed above. Accordingly, the Commission has considered Non-Tariff income of Rs. 71.65 Crore for FY 2020-21, as shown in the Table below:

Table 4-24: Approved Non-Tariff Income for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Non-Tariff Income	22.35	71.65	71.65

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 dated 30th April 2016, 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 99.79% for FY 2020-21. Accordingly, CSPTCL has claimed the incentive of Rs. 3.62 Crore for FY 2020-21.

Commission's View

As regards Incentive/Penalty calculation related to the TSAF, the CSERC MYT Regulations, 2015 specifies as under:

"51. INCENTIVE/ PENALTY TO TRANSMISSION LICENSEE

Incentive/ Penalty may be payable/levied to a transmission licensee in case the availability of the transmission system during a year deviates from the target availability, which shall be specified by the Commission in the MYT Order for the next Control Period."

In the MYT Order for the Control Period from FY 2016-17 to FY 2020-21, the Commission 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:

$$\text{Incentive/Penalty} = \text{Annual Fixed Charges for that year} \times (\text{Annual availability achieved} - \text{Target availability}) / \text{Target availability}$$

- 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 and stipulated in the MYT Order.

The Commission has validated the actual TSAF based on CSLDC Certificate submitted for FY 2020-21. The Commission notes that the actual TSAF duly certified by CSLDC is 99.79% for FY 2020-21, 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 2020-21, as shown in the Table below:

Table 4-25: Approved Incentive for Higher Transmission System Availability for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	Annual TSAF (%)	99.79%	99.79%
2	Target TSAF (%)	99.00%	99.00%
3	Maximum TSAF that can be considered for incentive	99.75%	99.75%
4	Incentive/(Penalty)	7.24	6.87
5	Sharing of gain/(loss) (50%)	3.62	3.43

4.13 Aggregate Revenue Requirement (ARR)

Based on the above, the ARR approved after true-up for FY 2020-21 is shown in the Table below:

Table 4-26: Approved ARR after true-up for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Tariff Order	Petition	Approved
1	Employee Expenses	186.72	189.43	189.43
2	A&G Expenses	44.21	57.67	57.67
3	R&M Expenses	45.31	54.07	54.07
4	Interim Wage Relief	16.61	-	-
5	Less: Capitalization of Employee and A&G Expenses	-	10.81	10.81

Sr. No.	Particulars	Tariff Order	Petition	Approved
6	Contribution to Pension and Gratuity	69.52	69.52	69.52
7	Depreciation	242.12	249.12	249.03
8	Interest on Loan	198.77	192.26	192.06
9	Interest on Working capital	16.47	13.42	13.73
10	Return on Equity	206.00	215.46	215.46
11	Gain/(Loss) on sharing O&M efficiency	-	(8.94)	(8.93)
12	Incentive on Transmission Availability	-	3.62	3.43
13	Income Tax	-	1.98	1.98
14	Less: Refund of Income Tax (Principal Amount)	-	-	48.33
14	Aggregate Revenue Requirement (ARR)	1025.73	1,026.81	978.33
15	Less: Non-Tariff Income	22.35	71.65	71.65
16	Net ARR	1002.42	955.16	906.68

4.14 Revenue Gap/(Surplus) for FY 2020-21

CSPTCL's Submission

CSPTCL submitted the Revenue Gap/(Surplus) for FY 2020-21, as shown in the following Table:

Table 4-27: Revenue Gap/(Surplus) submitted by CSPTCL for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1	AFC for FY 2020-21 as approved in Tariff Order dated 30.05.2020	1002.42
2	Surplus adjusted with carrying cost up to FY 2019-20 as approved in Tariff Order dated 30.05.2020	53.08
3	Adjusted ARR for FY 2020-21	949.34
4	Less: Unrealized ARR in the month of April' 20 & May' 20 (as Tariff Order was applicable from 01.06.2020)	22.08
5	AFC for FY 2020-21 as approved in Tariff Order dated 30.05.2020	980.34
6	ARR determined based on True-up for FY 2020-21	955.16
7	Gap/(Surplus) (6-5)	(25.18)

CSPTCL submitted that ARR of Tariff Order FY 20-21 was issued on 30.05.2020 and was applicable from 01.06.2020 accordingly CSPTCL during the month of April' 20 and May' 20 recovered revenues based on ARR of Tariff Order for FY 2019-20 due to which CSPTCL has not realized Rs. 22.08 Crore. towards ARR for FY 2020-21.

As per CERC Order dated 16.02.2016 in Petition No. 245/TT/2013, CSPTCL has executed Revenue Sharing Agreement (RSA) and Transmission Service Agreement (TSA) with Power Grid Corporation of India Limited (PGCIL) on 02.08.2017 for disbursement of transmission charges by PGCIL in CSPTCL account in respect of 220 kV Natural Inter-State Transmission Lines belonging to CSPTCL. However, CSPTCL has received Nil amount from PGCIL during FY 2020-21 in this regard.

CSPTCL requested the Commission to approve the Revenue Surplus of Rs. 25.18 Crore for FY 2020-21.

Commission's View

The Commission sought confirmation from CSPTCL regarding the computation of Revenue Gap/(Surplus) for FY 2020-21. CSPTCL, in its reply, submitted that CSPTCL has computed Revenue Gap/(Surplus) as per the methodology adopted by the Commission in the previous Tariff Order. The over/under-recovery of ARR due to late implementation of the Transmission Tariff approved for FY 2020-21 is already reflected in the actual revenue earned by CSPTCL and need not be factored in separately. The Revenue Surplus of Rs. 53.08 Crore after True-up of FY 2018-19, that was retained by CSPTCL to meet the ARR approved for FY 2020-21, has been added to the actual Revenue of Rs. 927.24 Crore billed by CSPTCL for FY 2020-21, thereby resulting in actual Revenue of Rs. 980.32 Crore.

The Commission has computed the Revenue Gap/(Surplus) after true-up for FY 2020-21 for CSPTCL, as shown in the Table below:

Table 4-28: Approved Revenue Gap/(Surplus) for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Corrected as per CSPTCL Numbers	Approved
1	Revenue from Transmission Charges for FY 2020-21	927.24	980.32
2	ARR determined after true-up for FY 2020-21	955.16	906.68
3	Revenue Gap/(Surplus) (2-1)	27.92	(73.64)

The Commission approves the Revenue Surplus of Rs. 73.64 Crore after true-up for CSPTCL for FY 2020-21. This Revenue Surplus has been adjusted in the revenue requirement of CSPDCL for FY 2022-23 along with holding cost.

The holding cost on Revenue Surplus approved in the True up for FY 2020-21 has been computed from mid-point of FY 2020-21 to mid-point of FY 2022-23. **Accordingly, the Revenue Surplus including holding cost, which is required to be factored in the revenue requirement of CSPDCL for FY 2022-23, works out to Rs. 90.32 Crore.**

5 TRUE-UP OF ARR FOR FY 2020-21 FOR CSLDC

5.1 Background

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 SLDC Charges for FY 2016-17. In the Tariff Order dated May 30, 2020, the Commission revised certain components of the ARR and hence, SLDC Charges of CSPTCL for FY 2020-21.

Now, CSLDC has submitted the present Petition for true-up of ARR for FY 2020-21 based on the Audited Accounts of FY 2020-21.

In accordance with Regulation 10.4 of the CSERC MYT Regulations, 2015, the Commission has undertaken the true-up of FY 2020-21 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 2020-21 and undertaken the final true-up of expenses and revenue. 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 has claimed O&M expenses considering Regulation 47.5 of CSERC MYT Regulations, 2015. CSLDC submitted that O&M Expenses includes Employee expenses, A&G expenses, and R&M expenses. CSLDC has considered O&M expenses for FY 2020-21, as shown in the Table below:

Table 5-1: O&M Expenses for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1	Gross Employee Expenses	8.91
2	Gross A&G Expenses	0.51
3	Gross R&M Expenses	1.66
4	Total O&M Expenses	11.08

Also, CSLDC submitted the details of sanctioned employee strength, current employee strength, and vacant positions for different class of employees, as on March 31, 2021. The total sanctioned strength of different class of employees of SLDC is 76 out of which 48 are currently working and balance 28 are envisaged to be filled in the coming FYs, as shown in the Table below:

Table 5-2: Employee strength of CSLDC as on 31st March 2021

Sr. No.	Particulars	Sanctioned	Working	Vacant
1	Class I	20	16	4
2	Class II	24	15	9
3	Class III	23	15	8
4	Class IV	9	2	7
5	Total	76	48	28

CSLDC requested to approve actual O&M Expenses of Rs. 11.08 Crore for FY 2020-21.

Sharing of gain and losses on account of O&M Expenses

For computation of gain and losses, CSLDC has considered provisions of Regulations 8, 11.2 and 13 of CSERC MYT Regulations, 2015.

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 2020-21 by applying WPI escalation factor of 1.27% on approved expenses of FY 2019-20. The normative A&G expenses and R&M expenses for FY 2020-21, as submitted by CSLDC are shown in the Table below:

Table 5-3: Normative A&G Expenses and R&M Expenses for FY 2020-21 as submitted by CSLDC (Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1	Normative A&G Expenses	1.22
2	Normative R&M Expenses	1.78

The normative A&G expenses and R&M expenses have been considered for the purpose of sharing of gains/losses for FY 2020-21. The actual A&G expenses and R&M expenses are Rs. 0.51 Crore and Rs. 1.66 Crore (net of capitalisation), respectively, for FY 2020-21. 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 2020-21 as submitted by CSLDC (Rs. Crore)

Sr. No.	Particulars	Normative	Actual	Gain/(Loss)
1	Net A&G expenses	1.22	0.51	0.71
2	Net R&M expenses	1.78	1.66	0.12
3	Total	3.00	2.17	0.83
4	CSLDC share (1/2 of Total Gain/(Loss))	0.42		

CSLDC submitted the sharing of gains of Rs. 0.42 Crore 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 2020-21.

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 2020-21 by applying the actual inflation over base-year's approved O&M expenses. The Commission has considered the WPI as per the CSERC MYT Regulations, 2015 and, accordingly, computed escalation factor of 1.29% for R&M expenses and A&G Expenses for FY 2020-21. Accordingly, the normative O&M Expenses approved for FY 2020-21 are shown in the Table below:

Table 5-5: Approved Normative O&M Expenses for FY 2020-21 (Rs. Crore)

Particulars	Approved in MYT Order	Petition	Revised Normative Expenses
A&G Expenses	1.50	1.22	1.22
R&M Expenses	2.19	1.78	1.78

The Commission has considered actual O&M expenses for FY 2020-21 as per audited accounts and Segmental Notes, as submitted by CSLDC. Accordingly, the Commission approves actual O&M Expenses of Rs. 11.08 Crore for FY 2020-21.

The Commission has undertaken sharing of gains and losses of normative expenses vis-à-vis actual expenses for FY 2020-21, 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. 8.91 Crore for FY 2020-21.

As CSPTCL and CSLDC do not have separate accounts, the entire 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 2020-21, as shown in the Table below:

Table 5-6: Sharing of gain/(loss) on A&G expenses and R&M expenses for FY 2020-21 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Normative	Actual	Gain/(Loss)
1	Net A&G expenses	1.22	0.51	0.71
2	Net R&M expenses	1.78	1.66	0.12
3	Total	3.00	2.17	0.83
4	CSLDC share (1/2 of Total Gain/(Loss))			0.42

In this Order, the Commission approves the O&M expenses based on audited accounts for FY 2020-21. Further, the Commission approves sharing of gains of Rs. 0.42 Crore for FY 2020-21.

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. 1.71 Crore for FY 2020-21. 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 actual Contribution to Pension and Gratuity Fund of Rs. 1.71 Crore for FY 2020-21 as claimed by CSLDC.

5.5 Gross Fixed Assets and Means of Finance

CSLDC submitted that the Commission in MYT Order approved the methodology for determination of capital structure of GFA into debt and equity. CSLDC has considered GFA addition as Nil for 2020-21 as per Audited Accounts.

Commission's View

The Commission has approved the closing GFA for FY 2019-20 as Rs. 16.38 Crore after True-up in the Order dated August 02, 2021. The Commission has accordingly considered the same amount as Opening GFA for FY 2020-21. As discussed in earlier Chapter of this Order, the Commission notes that CSPTCL's audited accounts for FY 2020-21 reported the actual capitalisation of Rs. 339.43 Crore during the year, which is entirely attributable to CSPTCL. For CSLDC, capitalisation in FY 2020-21 is Nil, and the Commission has considered the same for FY 2020-21 based on submission of

CSLDC. Accordingly, the Commission approves the GFA and its funding for FY 2020-21 as shown in the following Table:

Table 5-7: Gross Fixed Assets and its Funding for FY 2020-21 for CSLDC as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Opening GFA	22.93	16.38	16.38
2	Capitalisation during the Year	0.06	0.00	0.00
3	Closing GFA	22.99	16.38	16.38
	Means of Finance			
4	Consumer Contribution/Grants	-	-	-
5	Equity	0.02	0.00	0.00
6	Debt	0.04	0.00	0.00
7	Total Capitalisation	0.06	0.00	0.00

5.6 Depreciation

CSLDC's Submission

CLSDC submitted that it has computed depreciation as per Regulation 24 of CSERC MYT Regulations, 2015. The asset base of CSLDC comprises SCADA system, computer terminals, equipment, building, etc. The asset base has been identified from the accounts of CSPTCL by the Asset Segregation Committee and the same has been considered in its computations. As the asset class-wise segregation of the SLDC's asset base is not available, the weighted average depreciation rate as considered for CSPTCL for FY 2020-21 has been considered for CSLDC. CSLDC requested to approve depreciation of Rs. 0.86 Crore for FY 2020-21.

Commission's View

The Commission has approved the depreciation for FY 2020-21 in accordance with the approach adopted in the past Orders. The closing GFA approved in the true up for FY 2019-20, has been considered as the opening GFA for FY 2020-21. The GFA addition for FY 2020-21 has been considered as approved in earlier Section of this Chapter. The weighted average depreciation rate of 5.26%, computed for CSPTCL on the basis of depreciation rates provided in the CSERC MYT Regulations, 2015, has been considered for FY 2020-21 for CSLDC. The depreciation approved by the Commission for FY 2020-21 is shown in the Table below:

Table 5-8: Depreciation for FY 2020-21 for CSLDC as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Opening GFA	22.93	16.38	16.38
2	Additional capitalization during the year	0.06	0.00	0.00
3	GFA at the end of the year	22.99	16.38	16.38
4	Average GFA for the year	22.96	16.38	16.38

Sr. No.	Particulars	MYT Order	Petition	Approved
5	Depreciation Rate	5.25%	5.26%	5.26%
6	Depreciation	1.21	0.86	0.86

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 2019-20 as per the true-up order, as the opening normative loan balance for FY 2020-21. 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 9.76% for FY 2020-21 has been considered by CSLDC for computation of the interest on loan. CSLDC requested to approve the Interest and Finance Charges of Rs. 0.20 Crore for FY 2020-21.

Commission's View

The Commission has approved interest on loan capital for FY 2020-21 as per Regulation 23 of the CSERC MYT Regulations, 2015. The Commission has considered the closing net normative loan balance for FY 2019-20, as approved after True-up, as the opening net normative loan balance for FY 2020-21. The addition of normative loan has been considered based on debt component towards additional capitalisation, as considered earlier in this Chapter, which is Nil. 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 2020-21, in absence of segregation of actual loan for CSLDC. Accordingly, the Commission has considered the weighted average rate of interest of 9.76% for FY 2020-21. The interest on loan approved for FY 2020-21 is shown in the Table below:

Table 5-9: Interest on Loan for FY 2020-21 for CSLDC approved by Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Total Opening Net Loan	5.83	2.48	2.48
2	Repayment during the period	1.21	0.86	0.86
3	Additional Capitalization of Borrowed Loan during the year	0.04	0.00	0.00

Sr. No.	Particulars	MYT Order	Petition	Approved
4	Total Closing Net Loan	4.66	1.62	1.62
5	Average Loan during the year	5.24	2.05	2.05
6	Weighted Average Interest Rate	12.20%	9.76%	9.76%
7	Interest Expenses	0.64	0.20	0.20

5.8 Return on Equity (RoE) and Income Tax

CSLDC's Submission

CSLDC has computed RoE as per the Regulation 22 of the CSERC MYT Regulations, 2015. The closing permissible equity balance of FY 2019-20, as approved in the true-up Order, has been considered as opening equity balance for true-up of FY 2020-21. The equity addition during FY 2020-21 is Nil. CSLDC has considered base rate of RoE of 15.50% (without grossing up by MAT rate). CSLDC requested to approve RoE of Rs. 0.82 Crore 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 2019-20 after True-up, as opening equity for FY 2020-21. The equity addition for FY 2020-21 has been considered as Nil as submitted by CSLDC. The Commission approves the RoE for FY 2020-21 as shown in the Table below:

Table 5-10: Return on Equity for FY 2020-21 for CSLDC as approved by Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Permissible Equity in Opening GFA	7.28	5.28	5.28
2	Addition of Permissible Equity during the year		0.00	0.00
3	Permissible Equity in Closing GFA	7.29	5.28	5.28
4	Average Gross Permissible Equity during the year	7.28	5.28	5.28
5	Rate of Return on Equity	15.50%	15.50%	15.50%
6	Return on Equity	1.13	0.82	0.82

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 2020-21. CSLDC has considered the interest rate of 11.65% (SBI Base Rate on 1st April 2020 @ 8.15% plus 350 basis points) for FY 2020-21 for computing the IoWC for FY 2020-21. CSLDC requested to approve IoWC of Rs. 0.33 Crore for FY 2020-21.

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 2020-21, as approved earlier in this Order. The receivables have been considered based on the actual revenue of CSLDC during FY 2020-21, as compared to CSLDC's approach of calculating the receivables from the revenue required for FY 2020-21. The interest rate of 11.65% (8.15% + 3.5%) has been considered for FY 2020-21, as per Regulation 25.4 of the MYT Regulations, 2015. The normative IoWC approved for FY 2020-21 is shown in the Table below:

Table 5-11: IoWC approved for FY 2020-21 for CSLDC by the Commission (Rs. Crore)

Sr. No.	Particulars	MYT Order	CSLDC Petition	Approved
1	O&M expenses for One Month	1.07	0.92	0.99
2	Maintenance Spares @ 40% of R&M Expenses	0.88	0.66	0.71
3	Receivables @ 1 Month	1.41	1.28	1.51
4	Total Working Capital requirement	3.36	2.87	3.21
5	Rate of Interest on WC	13.20%	11.65%	11.65%
6	Net Interest on Working Capital	0.44	0.33	0.37

5.10 Non-Tariff Income

CSLDC's Submission

CSLDC submitted that it has considered Non-Tariff Income (NTI) as Rs. 0.02 Crore for FY 2020-21 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 2020-21. Accordingly, the Commission considers NTI of Rs. 0.02 Crore for FY 2020-21.

5.11 Aggregate Revenue Requirement for CSLDC

Based on the above, the ARR approved for CSLDC after final true-up for FY 2020-21 is shown in the Table below:

Table 5-12: Aggregate Revenue Requirement (ARR) for FY 2020-21 approved by the Commission (Rs. Crore)

Sr. No	Particulars	Tariff Order	Petition	Approved after True-up
1	Employee Expense	7.42	8.91	8.91
2	A&G Expenses	1.22	0.51	0.51
3	R&M Expenses	1.79	1.66	1.66
4	Provision for Interim Wage Relief	0.44	-	-
5	Sharing of Gain/(Loss) for O&M Efficiency	-	0.42	0.42
6	Contribution to P&G	1.71	1.71	1.71
7	Depreciation	1.21	0.86	0.86
8	Interest on Loan	0.64	0.20	0.20
9	Interest on Working Capital	0.44	0.33	0.34
10	Return on Equity	1.13	0.82	0.82
11	Gross Aggregate Revenue Requirement		15.42	15.42
12	Less: Non-Tariff Income	1.05	0.02	0.02
13	Net Aggregate Revenue Requirement	13.71	15.40	15.40

5.12 Revenue from CSLDC Charges

CSLDC's Submission

CSLDC submitted the revenue from CSLDC Charges of Rs. 18.11 Crore for FY 2020-21 based on the audited accounts.

Commission's View

The Commission has considered the actual revenue from CSLDC Charges of Rs. 18.11 Crore in the true-up for FY 2020-21.

5.13 Revenue Gap/(Surplus) for CSLDC

CSLDC's Submission

CSLDC submitted the Revenue Gap/(Surplus) for FY 2020-21, as shown in the Table below:

Table 5-13: Revenue Gap/(Surplus) for FY 2020-21 as submitted by CSLDC (Rs. Crore)

Sr. No.	Particulars	Amount
1	Aggregate Revenue Requirement	15.40
2	<i>Less: Revenue from SLDC Charges</i>	18.11
3	Standalone Revenue Gap/(Surplus)	(2.71)
4	Previous Gap	0.00
5	Total Revenue Gap/(Surplus)	(2.71)

CSLDC requested the Commission to approve the Surplus for FY 2020-21 and adjust Rs. 3.34 Crore (with carrying cost) in the ARR of FY 2022-23.

Commission's View

After undertaking the final true-up for FY 2020-21, the Commission has computed the Revenue Gap/(Surplus) for FY 2020-21, as shown in the following Table:

Table 5-14: Revenue Gap/(Surplus) for FY 2020-21 for CSLDC as approved by the Commission (Rs. Crore)

Sr. No	Particulars	Petition	Approved
1	Aggregate Revenue Requirement	15.40	15.40
2	Less: Revenue from SLDC Charges	18.11	18.11
3	Revenue Gap/(Surplus)	(2.71)	(2.71)

For computing the cumulative Revenue Surplus on account of final true-up for FY 2020-21, the Commission has computed the holding cost on Revenue Surplus approved in final True up for FY 2020-21 from mid-point of FY 2020-21 to mid-point of FY 2022-23.

Accordingly, the Revenue Surplus including holding cost, which is required to be factored in the ARR of CSPDCL for FY 2022-23, works out to Rs. 3.32 Crore.

6 REVIEW OF ORDER FOR FY 2021-22 FOR CSPDCL

6.1 Background

The Commission issued the Tariff Order on 2nd August 2021 in Case No. 03/2021, wherein the Commission approved the final true up of FY 2018-19 and FY 2019-20 for CSPDCL and also approved the expenses and revenue for FY 2021-22 along with cumulative Revenue Gap.

CSPDCL had initially filed for provisional true up for FY 2019-20, which was later converted into final true up for FY 2019-20 at the request of CSPDCL. CSPDCL submitted the audited accounts for FY 2019-20 along with changes in cumulative Revenue Gap vide letter dated 7th July 2021 during a presentation before the reconstituted Commission in pursuance to the Commission's letter dated 5th July 2021.

CSPDCL has submitted that since the initial Petition was for approval of provisional true up for FY 2019-20, the data submitted by CSPDCL in its original Petition was also for approval of provisional true up and the TVS was conducted with CSPDCL based on the provisional data submitted by CSPDCL.

CSPDCL submitted that in the Tariff Order dated 2nd August 2021, there are various inconsistencies in the true-up of FY 2018-19 and FY 2019-20, as well as in the approval of ARR for FY 2021-22, which have resulted in understatement of the cumulative Revenue Gap by more than Rs. 1088.56 crore for FY 2021-22, as the conclusions are based on incomplete data.

Therefore, CSPDCL filed a Review Petition in Case No. 54/2021 on 4th October 2021. The Commission heard the matter on 29th October 2021 and issued the Order on the same day. In the said Order, the Commission granted leave to CSPDCL to raise all the issues of the Review Petition along with its MYT Petition for the next Control Period. Accordingly, CSPDCL has incorporated its Review Petition on the Tariff Order for FY 2021-22, as part of its MYT Petition.

CSPDCL further submitted that since, it would be difficult to adjust the modifications made in the true-up of FY 2018-19 and FY 2019-20 in FY 2021-22, therefore, the adjustments allowed in view of the instant Review application may be taken into consideration while determining the Tariff for FY 2022-23 along with applicable carrying cost.

Considering the issues raised by CSPDCL and the concerns about inconsistencies raised by CSPDCL, the Commission sought several clarifications from CSPDCL on its submissions and also held four (4) TVS with the concerned officials of CSPDCL, in order to ensure complete clarity on the various expenses and revenues to be considered in the final True-up for FY 2018-19 and FY 2019-20 and ARR approved for FY 2021-22.

All the issues raised by CSPDCL in its Review, along with all consequent clarifications sought by the Commission, replies/clarifications submitted by CSPDCL, and the Commission's analysis and ruling on all the issues have been addressed in this Chapter.

While the Commission has taken due care to consider all submissions made by CSPDCL while approving the impact of the Review of the Tariff Order for FY 2021-22, it needs to be noted that some amounts claimed by CSPDCL in its Review have been revised by CSPDCL in its subsequent replies. As the consequential impact of such changes have not been reflected in CSPDCL's Petition, it is possible that the amounts stated against CSPDCL Petition may give rise to some confusion. The Commission has considered all the submissions made by CSPDCL in its Petition and replies, for its analysis before arriving at any conclusions.

6.2 Grounds for Review

CSPDCL's Submission

CSPDCL submitted that since, its initial Petition was for approval of provisional true up for FY 2019-20, the data submitted by CSPDCL in its original Petition was also submitted accordingly, and the Technical Validation Session (TVS) was conducted with CSPDCL based on the provisional data submitted by CSPDCL. However, after the submission of the audited data by CSPDCL for the Final true up for FY 2019-20, the Commission did not conduct a TVS. CSPDCL submitted that the TVS is conducted in Tariff proceedings as a practice due to voluminous data submitted and to remove inconsistencies in the data. However, even though CSPDCL had submitted revised audited data, no TVS was conducted, which resulted in huge gaps in the data submitted by CSPDCL and the Order passed by the Commission with various inconsistencies in the final Order dated 2nd August, 2021.

CSPDCL submitted that a bare perusal of Table 6-11 of the impugned Tariff Order would reveal that the Commission has considered CSPDCL's claim of Rs. 13,805.35 Crore as the gross power purchase cost even though CSPDCL had duly submitted its audited accounts and had claimed Gross power purchase cost of Rs. 14019.63 Crore in the Final True up for FY 2019-20. Thus, this an error apparent on the face of the record and the Review application can be allowed on this ground alone.

CSPDCL submitted that the Commission has not taken into consideration the revised audited data submitted by the Applicant and has carried out the Final true up for FY 2019-20 based on the provisional data. CSPDCL added that the Commission has made several assumptions in calculating the power purchase expense incurred by CSPDCL in FY 2018-19 and FY 2019-20 and has ignored the exact data statements submitted by CSPDCL.

CSPDCL submitted that the erroneous calculations/conclusions have caused understatement of cumulative Revenue Gap of more than Rs. 1088.56 crore for FY 2021-22 as the conclusions are based on incomplete data. Hence, CSPDCL has filed this Review Petition.

Commission's View

CSPDCL submitted the audited accounts for FY 2019-20 along with a very brief Note on 16th July 2021, seeking final true-up for FY 2019-20, with very limited details about the changes made with respect to the provisional true-up for FY 2019-20. On account of the paucity of time, the final true-up for FY 2019-20 was done based on the available information.

CSPDCL has stated in its Review that the final true-up for FY 2019-20 has been done based on incomplete data. CSERC has also contended that the Commission should have conducted second TVS after submission of audited data for FY 2019-20. The Commission is of the view that the onus is on CSPDCL to ensure that complete and correct data and information is submitted to the Commission. Further, the Commission clarifies that TVS is not mandatory, and has not been held again in the past on account of submission of audited accounts at later stage.

The grounds for Review as per Regulation 23 of CSERC (Conduct of Business) Regulations, 2009, are based on Order 47, Rule 1 of Code of Civil Procedure, 1908, i.e.:

- Error apparent on the face of the record;
- On submission of new and important evidence that was not in the knowledge of the Petitioner at the time of the original Order;
- On account of any other sufficient reasons.

As stated above, the scope for Review of any Order is very limited, and the Petitioner has to either prove a case of error apparent on the face of the record or there should be new and important evidence that was not in the knowledge of the Petitioner at the time of issue of original Order. However, considering the issues raised by CSPDCL and the large impact of some of the issues on the concerned years as well as future years, the Commission has adopted a holistic approach rather than limiting itself to the narrow scope of Review, and has addressed each issue raised by CSPDCL in its Review and the consequential issues, if any, on merits, with the objective that CSPDCL should be able to recover all prudently incurred expenses through the ARR and Tariff, even though the same may not qualify within the narrow scope of a Review Petition.

In accordance with the above, the Commission has approved the revised final true-up for FY 2018-19 and FY 2019-20 and the revised ARR for FY 2021-22, on account of the Review filed by CSPDCL.

6.3 Erroneous approval of power purchase cost by deducting excess Delayed Payment Charges

CSPDCL's Submission

CSPDCL submitted that the Commission has dealt with the power purchase cost incurred by CSPDCL while carrying out final true up for FY 2018-19 and FY 2019-20 in Paragraph 6.5 of the impugned Tariff Order, with CSPDCL's claims and the Commission's approval for FY 2018-19 and FY 2019-20 separately summarized at Tables 6.10 and 6.11, respectively.

CSPDCL submitted that the Commission has erroneously relied on provisional statements submitted by CSPDCL and carried out final true up for FY 2019-20 based on such provisional data even when CSPDCL had duly submitted the audited data prior to passing of the impugned Order. Apart from relying on the provisional data for FY 2019-20, the Commission has also erred in deducing the final figures for FY 2018-19 as the power purchase expenses incurred by CSPDCL in FY 2018-19 are drastically reduced since the Commission has deducted the Delayed Payment Charges (DPC) twice from the power purchase expenses claimed by CSPDCL.

CSPDCL submitted that the summary at Table 6.10 of the impugned Order reveals about deduction of Rs. 249.61 crore as DPC from the power purchase expenses, however, the Commission has not provided any rationale for such deduction and has deducted DPC based on assumptions. CSPDCL submitted that the Commission while approving the Transmission Charges incurred by CSPDCL has held that CSPDCL has likely included the DPC in Transmission Charges booked against other entities apart from CSPTCL. The relevant part of the Commission's Order is reproduced below for reference:

“Transmission Charges

...

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....”(emphasis added)

CSPDCL submitted that a bare perusal of the above reveals that the Commission has deduced DPC based on assumptions and these assumptions are unreasonable and arbitrary as CSPDCL had submitted a detailed audited data/account statement pertaining to charges incurred by it in purchasing power, which leaves no room for any assumptions. Thus, the Commission had erred in deducing the final power purchase expense of CSPDCL for FY 2018-19.

CSPDCL further submitted that the Commission while deducing the intra-State Transmission Charges of CSPDCL has merely relied on the revenue booked by CSPTCL for FY 2018-19 and has ignored the fact that CSPDCL pays Transmission Charges to other entities too, which have not been accounted for in the impugned Order. The breakup of Transmission Charges as per audited accounts of CSPDCL for FY 2018-19 and FY 2019-20 is provided in the Tables below:

Table 6-1: Breakup of Transmission Charges as Per Audited Accounts for FY 2018-19

Sl. No.	Name of the Party	Amount (Rs.)
1.	Orissa Power Transmission	40,97,817.00
2.	Power Grid Corporation Of India Ltd.	4,70,41,92,453.00
3.	CSPTCL	9,75,02,00,375.39
4.	Western Region Load Despatch Centre	24,96,78,915.00

Sl. No.	Name of the Party	Amount (Rs.)
5.	Tata Power Trading Company Ltd.	26,42,000.00
6.	M/s. N T P C V V N Ltd.	-
7.	M.P. Power Management Co. Ltd.	2,72,06,231.00
8.	Tata Power Trading Company Ltd.	45,000.00
9.	SLDC, CSPTCL	14,02,99,519.60
10.	M/s. N T P C V V N Ltd.	21,32,514.00
11.	Western Region Load Despatch Centre	9,55,60,400.00
12.	Mittal Processors Pvt. Ltd.	4,55,19,406.00
13.	M.P. Power Management Co. Ltd.	3,35,52,540.00
14.	Manikaran Power Ltd.	9,45,95,000.00
15.	Arunachal Pradesh Power Co. Pvt. Ltd.	4,27,90,541.00
16.	NTPC NVVN Ltd.	9,99,63,513.00
	Total	15,29,24,76,224.99
	DPS for CSPTCL (Rs. Crore)	57.59
	Transmission Charges Excluding DPS (Rs. Crore)	1471.65

Table 6-2: Breakup of Transmission Charges as per Audited Accounts for FY 2019-20

Sl. No.	Name of the Party	Amount (Rs.)
1.	P.G.C.I.L.	5069901418
2.	CSPTCL	8064515377
3.	OPTCL	4120332
4.	POSOCO WRLDC	372224624
5.	Arunachal Pradesh Power Corporation Pvt. Ltd.	14336
6.	Tata Power Trading Co. Ltd.	104350862
	SLDC	106833069.2
1.	SLDC (Soc/Moc Charges)	73894275
2.	SLDC Application fees	2752226.24
3.	SLDC Transmission charges	4647355
4.	POSOCO WRLDC	25539213
	Transmission Charges paid on sale of power	583344
1.	NTPC VVN Ltd.	583344
	TRANSMISSION CHARGES power banking	206030785.9
1.	M/s. Manikaran Power Ltd.	71700072

Sl. No.	Name of the Party	Amount (Rs.)
2.	Arunachal Pradesh Power Corporation Pvt. Ltd.	33108654.87
3.	MP Power Management Co. Ltd.	78336594
4.	NTPC VVN Ltd.	37564
5.	Kreate Energy (I) Pvt. Ltd.	18306050
6.	GMR Energy Trading Ltd.	4541851
		13928574148
	Adjustments	-102558273
1.	PGCIL	22953267
2.	WRLDC	1142532
3.	WRLDC	223149
4.	WRLDC	-47601800
5.	WRLDC	-24200808
6.	PGCIL	-55074613
7.	Surcharge CSPTCL	609790000
	Total	14435805875
	Amount in Rs. Crore	1443.58

Commission's View

The Commission has verified the computation of Transmission Charges allowed in the final true-up for FY 2018-19.

The Commission confirms that the DPC has been deducted as per CSPDCL claim only; the difference of Rs. 108.86 crore between amount claimed and allowed is not on account of excess disallowance of DPC as claimed by CSPDCL in its Review Petition. In its replies to the queries, CSPDCL has clarified that it has deducted that the amount has been deducted against DPC; this is the difference between actual Transmission Charges claimed and allowed.

The total amount of Transmission Charges claimed by CSPDCL and approved by the Commission in the true-up for FY 2018-19 are shown in the Table below:

**Table 6-3: Transmission Charges claimed and approved for FY 2018-19
(Rs. Crore)**

Particulars	CSPDCL Petition	Final True-up	Difference
Inter-State Transmission Charges	398.67	398.67	0.00
Intra-State Transmission Charges	1072.41	963.48	(108.93)
CSLDC Charges	14.03	14.10	0.07
Transmission other charges	44.14	44.14	0.00
TOTAL	1529.25	1420.39	(108.86)

From the above Table, it is observed that:

- CSPTCL had submitted very few details of the Transmission Charges incurred in FY 2018-19, with overall break-up between inter-State and intra-State Transmission Charges;
- The Commission has allowed the entire amount of Transmission Charges claimed by CSPDCL against inter-State Transmission Charges;
- The Commission has allowed the entire amount claimed against ‘Transmission Other Charges’;
- The disallowance of Rs. 108.86 Crore is on account of considering the Intra-State Transmission Charges as Rs. 963.48 crore and CSLDC Charges as Rs. 14.10 Crore, i.e., equal to the revenue considered in the true-up for CSPTCL and CSLDC, as per usual practice.

Hence, the Transmission Charges allowed by the Commission in the final true-up for FY 2018-19 are correct, considering the data submitted by CSPDCL before the issue of the impugned Tariff Order.

In the Review Petition, CSPDCL has submitted much more detailed break-up of Transmission Charges, which have been detailed in Table 6-1 above. From the details submitted by CSPDCL in the Review Petition, it is observed that:

- The detailed break-up does not match with the head-wise totals submitted earlier;
- The intra-State Transmission Charges were originally claimed as Rs. 398.67 Crore, with Transmission Other Charges of Rs. 44.14 Crore. Even if added, this amounts to Rs. 442.81 Crore claimed by CSPDCL against intra-State Transmission Charges. However, the details provided in the Review Petition show the expense against PGCIL alone as Rs. 470.02 Crore;
- As any intra-State Transmission Charges or CSLDC Charges can be levied only as approved by the Commission, the inter-State Transmission Charges or CSLDC Charges have to be considered equal to the revenue considered in the true-up of CSPTCL and CSLDC, respectively, as has been done in the impugned Order;
- Though all other heads of expenses booked under Transmission Charges can only be part of inter-State Transmission Charges, CSPDCL has claimed inter-State Transmission Charges of only Rs. 398.67 Crore;
- From the details provided in Table 6.1 and Table 6.2, it is clear that the difference of Rs. 108.86 Crore claimed by CSPDCL in the Review is based on the total Transmission Charges of Rs. 1529.25 Crore;
- The amount of Rs. 1529.25 Crore claimed by CSPDCL against Transmission Charges in the true-up for FY 2018-19 include DPC of CSPTCL of Rs. 57.59 Crore. Hence, the Commission has correctly disallowed this amount of Rs. 57.59 Crore from the Transmission Charges in the true-up for FY 2018-19;
- The other heads of Transmission Charges as submitted in the Review Petition are allowable.

The confusion has thus, arisen because of the incorrect categorisation of Transmission Charges by CSPTCL in its Petition. However, as the heads of Transmission Charges

as submitted in the Review Petition except DPC are allowable, the Commission has allowed the Transmission Charges in the revised True-up for FY 2018-19, as under:

- The CSPTCL DPC of Rs. 57.59 Crore has been disallowed;
- Disallowance of Rs. 11.54 Crore, due to consideration of CSPTCL expenses as Rs. 963.48 Crore equal to the revenue considered in the true-up of FY 2018-19 for CSPTCL, as against Rs. 975.02 Crore claimed by CSPDCL.

Thus, the total allowable additional Transmission Charges for FY 2018-19 are Rs. 39.73 Crore (Rs. 108.86 Crore – Rs. 57.59 Crore – Rs. 11.54 Crore).

Accordingly, the Commission grants the review on this issue, and has allowed the impact of the same along with due carrying cost, as detailed subsequently.

Further, henceforth, CSPDCL shall claim intra-State Transmission Charges considering only CSPTCL and CSLDC bills, with PGCIL amount being shown under intra-State Transmission Charges, and break-up of all other Transmission Charges being shown separately under ‘Other Transmission Charges’.

6.4 Understatement of Power Purchase Expenses from CSPGCL for FY 2019-20

CSPDCL’s Submission

CSPDCL submitted that the Commission in Para 3.24 of the impugned Order has dealt with and considered revenue booked by CSPGCL from sale of power to CSPDCL as power purchase cost of CSPDCL for FY 2019-20. Further, the Commission in Table 6.11 of the impugned Order has considered such power purchase expense to be Rs. 5766.94 Crore. However, the expense considered by the Commission contradicts Table 3.42 of the impugned Order where total revenue of CSPGCL for FY 2019-20 is considered as Rs. 6,115.70 crore. The Commission has erred in considering Rs. 5,766.94 crore as expense incurred by CSPDCL in purchasing power from CSPGCL, as it has failed to take into consideration the expense of CSPDCL to the extent of Rs. 348.76 Crore due to the impact of Hon’ble APTEL’s Judgment, even when the same is considered as revenue of CSGPCL in Table 3-42 of the impugned Order.

Hence, CSPDCL requested that the impugned Order may be reviewed to include the expense of Rs. 348.76 Crore made by CSPDCL due to impact of the Hon’ble APTEL’s Judgment and previous year’s Revenue Gap.

Commission’s View

The Commission has dealt with this issue in Para 6.5 of the impugned Order, as reproduced below:

“6.5 Power Purchase Cost

...

Commission’s View

...

CSPGCL Stations

...

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...”

The above extract of the impugned Tariff Order provides the basis for the amount of power purchase expenses allowed by the Commission, as the Commission has explained that “the Commission has considered the revenue booked by CSPGCL from sale of power to CSPDCL, excluding the Gap of previous years”.

The amount of Rs. 348.76 crore paid by CSPDCL to CSPGCL against the APTEL Judgment is included in the amount of Rs. 2247.41 crore claimed by CSPDCL and allowed under the head “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”. The relevant Table of the impugned Order is reproduced below for reference:

“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 break-up of Rs. 2,247.41 Crore allowed as Revenue Gap/Surplus for FY 2017-18 including carrying cost as given in Tariff Order for FY 2019-20 and shown in the Table above, is given below:

Table 6-4: Break-up of Past Gap/(Surplus) allowed in True-up for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	Amount
1	Gap/(Surplus) after true-up for FY 2017-18 for CSPGCL	348.76
2	Gap/(Surplus) after true-up for FY 2017-18 for CSPTCL	(182.61)
3	Gap/(Surplus) after true-up for FY 2017-18 for CSLDC	5.33
4	Gap/(Surplus) after true-up for FY 2017-18 for CSPDCL	2,075.93
5	Total Past Gap/(Surplus) considered in True-up for FY 2019-20	2,247.41

The Revenue Gap of Rs. 348.76 Crore due to true-up of CSPGCL for FY 2017-18 has thus, correctly not been considered in the cost of power purchase from CSPGCL, as the same has been correctly considered under the head of ‘past Gap/(Surplus)’.

CSPDCL has double-counted this amount, by including this in CSPGCL power purchase cost based on the Accounts, as well as in the past Gap amount.

There is no error in the Order on this issue, as the amount of Rs. 348.76 Crore paid/payable by CSPDCL to CSPGCL due to impact of the Hon’ble APTEL’s Judgment and previous year’s Revenue Gap has been allowed by the Commission in the impugned Order.

6.5 Non-consideration of State DSM account in final true up of FY 2018-19 and FY 2019-20

CSPDCL’s Submission

CSPDCL submitted that Tables 6.10 and 6.11 of the impugned Order include Net DSM charges, which are towards inter-State injection and inter-State drawal computed at Table 6.8. These charges did not consider the State DSM pool account, which is also an integral part of CSPDCL’s power purchase cost. The year-wise details of Unscheduled Interchange (UI) showing inter and intra-State quantum of injection/drawal with rate and amount in respect of FY 2018-19 and FY 2019-20 is given in the Table below :

Table 6-5: Details of UI for FY 2018-19 and FY 2019-20

Particulars	Quantum (MU)	Rate (Rs./kWh)	Cost (Rs. crore)
FY 2018-19			
UI drawal Inter-State	173.76	4.71	81.89
UI drawal Intra-State	43.04	5.83	25.10
DSM CSPGCL	306.69	2.93	89.89
UI drawl (A)	523.48	3.76	196.89
UI injection Inter-State	152.79	1.31	20.04

Particulars	Quantum (MU)	Rate (Rs./kWh)	Cost (Rs. crore)
UI injection Intra-State	16.91	8.27	13.99
DSM CSPGCL	104.14	2.83	29.43
UI injection (B)	273.85	2.32	63.46
Net UI (A – B)			133.43
FY 2019-20			
Inter-State injection	205.05	1.77	36.39
Intra-State injection	19.73	7.82	15.43
CSPGCL DSM	69.05	2.93	20.25
UI injection (Open access)	5.38	2.27	1.22
UI injection (C)	486.3	3.97	193.19
Inter-State drawal	198.04	4.00	79.24
Intra-State drawal	43.54	5.99	26.10
CSPGCL	227.19	78.95	3.48
UI drawal (Open access)	17.53	5.07	8.90
UI drawal (D)	299.21	2.44	73.29
Net UI (C – D)	187.09		119.9

CSPDCL submitted that the above Table reveals a net expenditure of Rs. 133.43 Crore in FY 2018-19 and Rs. 119.90 Crore in FY 2019-20, but the Commission has approved net expenditure of Rs. 61.85 Crore and Rs. 43.14 Crore for these years, respectively. Thus, there is an understatement of power purchase expenses of Rs. 71.58 Crore for FY 2018-19 and Rs. 76.76 Crore for FY 2019-20.

Commission's View

The Commission has dealt with this issue in Para 6.5 of the impugned Order, as reproduced below:

“6.5 Power Purchase Cost

...

Commission's View

...

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."

As can be seen from the above extract of the impugned Tariff Order, the Commission has considered the net expenditure of Rs. 61.85 Crore and Rs. 43.14 Crore for FY 2018-19 and FY 2019-20, respectively, as per CSPDCL's submissions.

However, CSPDCL has now contended that the net expenditure is Rs. 133.43 Crore in FY 2018-19 and Rs. 119.90 Crore in FY 2019-20, instead of Rs. 61.85 Crore and Rs. 43.14 Crore for FY 2018-19 and FY 2019-20, respectively, and has claimed the entire difference under its Review Petition.

CSPDCL has thus, revised its numbers, and is claiming review based on such revised submissions. Further, in the Review, CSPDCL has submitted that these charges did not consider the State DSM pool account, which is also an integral part of CSPDCL's power purchase cost. However, in its original submission and replies based on which the impugned Tariff Order was issued, CSPDCL has clarified that both UI purchase as well as DSM charges paid within the State and outside the State are included, and submitted Net UI data, which has been considered in the Order [refer Table 6-8 of the Order reproduced above].

From the grounds of Review elaborated earlier, it is clear that Review cannot be granted based on completely different set of data, when such data was available with CSPDCL earlier also.

However, as stated earlier, for this exercise, the Commission has not limited itself to the narrow grounds of review and has taken a holistic approach, so that CSPDCL is allowed to recover all legitimate expenses and revenue. Hence, the Commission has examined this issue on merit.

The Commission sought further clarifications from CSPDCL regarding the additional expenses claimed by CSPDCL under Review of FY 2018-19 and FY 2019-20 against

DSM (State DSM/Net DSM). CSPDCL was asked to clarify under which head/source of power purchase, the expenses claimed against DSM (State DSM/Net DSM) are included, as reconciled with the Audited Accounts of FY 2018-19 and FY 2019-20. CSPDCL was also asked to clarify whether these expenses are already claimed under some other head of Power Purchase expenses.

In its reply dated 10th March 2022, CSPDCL submitted that the DSM charges against UI Drawal inter-State and UI drawal intra-State are covered under Power Purchase expenses against GL Code E170115 and E170116 whereas DSM Charges of CSPGCL are covered under the GL Code E170102 under power purchase expenses only.

This matter was again clarified during the TVS with CSPDCL, and CSPDCL clarified that these additional expenses claimed in the Review Petition against State DSM account are already included in the cost of power purchase from CSPGCL. As the Commission has already allowed the entire cost of power purchase from CSPGCL based on the revenue considered against CSPGCL, the State DSM account is also already allowed. Hence, there is no requirement of allowing any further additional amount as claimed in the Review Petition against State DSM account.

There is no error in the Order on this issue, as the amounts claimed by CSPDCL against State DSM Account have been allowed by the Commission in the impugned Order under cost of power purchase from CSPGCL.

6.6 Revision in Power Purchase Quantum towards banking for FY 2019-20

CSPDCL's Submission

CSPDCL submitted that the Commission has dealt with the power purchase quantum for FY 2019-20 at Table 6.11 under Para 6.5 of the impugned Tariff Order.

CSPDCL submitted that it had availed power banking during FY 2019-20 to meet the demand-supply gap. Further, under the terms and conditions of Banking Agreements, CSPDCL had also returned the banking units. However, the provisional Petition did not contain banking availed as well as units of power returned in banking. The exact figures pertaining to banking were arrived after final audit of CSPDCL's accounts and data statements.

CSPDCL requested that the following quantum towards banking availed and banking return may be considered for the final true up for FY 2019-20:

Table 6-6: Details of Power Banking for FY 2019-20

Particulars	Quantum (MU)
Banking availed	845.62
Banking return	2217.02

CSPDCL added that even though the aforesaid correction will not have any bearing on power purchase cost, however, it would have a bearing on the calculation of loss on account of under-achievement of distribution losses, which will impact the overall true up for FY 2019-20.

Commission's View

The Commission has dealt with this issue in Para 6.5 of the impugned Order, as reproduced below:

“6.5 Power Purchase Cost

...

Commission's View

...

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.**”(emphasis added)*

As can be seen from the above extract, the Commission considered the banking purchase and sale in FY 2019-20 as Nil, based on CSPDCL's submissions.

In the Review Petition, CSPDCL has admitted that the Petition for provisional true-up for FY 2019-20 did not contain the quantum of banking availed as well as units of power returned in banking, and the exact figures pertaining to banking were arrived after final audit of CSPDCL's accounts and data statements. However, the Audited Accounts were available with CSPDCL before the issue of the Order and CSPDCL had submitted the Audited Accounts to the Commission along with the request for undertaking final true-up for FY 2019-20. Hence, the onus for submission of the relevant data was on CSPDCL, which failed to submit the relevant data to the Commission.

From the grounds of Review elaborated earlier, it is clear that Review cannot be sought when the data was not submitted at all to the Commission even though such data was available with CSPDCL earlier also.

However, as stated earlier, for this exercise, the Commission has not limited itself to the narrow grounds of review and has taken a holistic approach, so that CSPDCL is allowed to recover all legitimate expenses and revenue. Hence, the Commission has examined this issue on merit.

The Commission always considers the banking purchase and sale units, while computing the actual Distribution Loss and impact of under-achievement due to sharing of Distribution Losses, at the time of truing up. Had this data been submitted by CSPDCL at the time of truing up for FY 2019-20, the Commission would have factored in the same. Hence, **notwithstanding the delay in submission of this data by CSPDCL, the Commission has considered the input provided by CSPDCL in its Review Petition.**

However, the onus of submission of correct and timely data is on CSPDCL, and CSPDCL should ensure that all relevant data is submitted to the Commission, without waiting for the Commission to ask for this data.

In reply to the Commission's query regarding the impact of considering the banking purchase and sale units, CSPDCL submitted that the impact of consideration of such units is on the computation of under-achievement due to sharing of Distribution Losses, and has been considered by CSPDCL along with the impact of Issue F: "Computation of under-achievement due to sharing of Distribution Losses".

Accordingly, the Commission has also considered the banking purchase and sale units, while computing the impact of the Review sought in the computation of under-achievement due to sharing of Distribution Losses, as elaborated subsequently in this Chapter.

6.7 Erroneous Consideration of Rs. 300.00 Crore as subsidy from State Government in computation of revenue from sale of power for FY 2019-20

CSPDCL's submission

CSPDCL submitted that the Commission has dealt with this issue at Para 6.16 of the Tariff Order. CSPDCL submitted that the Commission has erroneously considered Rs.300.00 Crore as subsidy received by CSPDCL from the State Government in addition to Rs. 39.66 Crore, which is already included in the final true up figures. CSPDCL submitted that it has not received subsidy to the tune of Rs. 300 crore from the State Government and further the revenue submitted by CSPDCL amounting to Rs. 13,315.23 Crore is inclusive of subsidy received from the State Government, which is merely to the tune of Rs. 39.66 Crore. Thus, the Commission has overstated the revenue of the Applicant to the tune of Rs. 300 Crore.

Commission's View

The Commission has dealt with this issue in Para 6.16 of the impugned Order, as reproduced below:

"6.16 Revenue from Sale of Power

...

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...

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

”(emphasis added)

As can be seen from the above extract of the impugned Tariff Order, the Commission has considered the Subsidy from State Government for FY 2019-20 as Rs. 300.00 Crore as against Rs. 39.66 Crore considered by CSPDCL.

The Commission observes that the representation in Table 6-31 of the impugned Tariff Order may have caused part of the confusion, as the revenue of Rs. 13,110.02 Crore considered by CSPDCL includes the GoCG subsidy of Rs. 39.66 Crore. There is a typo in Table 6-31, as the individual amounts shown in the Table do not add up to Rs. 15,166.24 Crore. For ample clarity, the Commission has provided the revised break-up of the Revenue of Rs. 15,166.24 Crore considered in the impugned Tariff Order based on the audited accounts of CSPDCL for FY 2019-20, as shown in the Table below:

Table 6-7: Details of Revenue for FY 2019-20 (Rs. Crore)

Particulars	CSPDCL	Approved
Revenue from Retail Sale of Electricity	13,070.36	13,070.36
Add: Steel Subsidy	205.21	205.21
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		15,166.24

Note: * - has been considered towards reduction of power purchase cost by CSPDCL

Thus, the Commission has considered additional subsidy of Rs. 260.34 Crore (Rs. 300 Crore – Rs. 39.66 Crore) in the true-up for FY 2019-20, rather than additional subsidy of Rs. 300 Crore as claimed by CSPDCL in its Review Petition.

From the above extract of the impugned Tariff Order, it can be observed that the Commission has considered that the actual subsidy amount receivable from GoCG is Rs. 300 Crore, out of which CSPDCL has received only Rs. 39.66 Crore. Hence, the Commission had ruled in the impugned Tariff Order that *“it is the Licensee’s responsibility to recover the subsidy from the GoCG.”*

In its Review Petition, CSPDCL has again submitted that it has not received subsidy to the tune of Rs. 300 crore from the State Government. However, the actual receipt of subsidy was never the issue, but the amount of subsidy that was due from the State Government.

In order to have complete clarity on the issue, the Commission sought the following data from CSPDCL, along with the necessary documentary evidence:

- Copies of all Subsidy commitments of GoCG (under all heads – revenue subsidy, power purchase subsidy, category-wise subsidy including subsidy for HV-4 Steel category, COVID-related support, etc.) along with the copy of the relevant Government Order/Resolution (GO/GR);
- Amount of subsidy sought by CSPDCL against each of the above separate Subsidy commitments of GoCG;
- Amount of subsidy received by CSPDCL against each of the above separate Subsidy commitments of GoCG.

CSPDCL submitted the above data duly reconciled with its submissions and the documentary evidence. From the analysis of CSPDCL’s replies in this regard, it is observed that:

- The amount of targeted subsidy receivable by CSPDCL against various commitments of GoCG have been considered as revenue against the respective category;
- The additional amount of subsidy of Rs. 39.66 Crore considered by CSPDCL as revenue in FY 2019-20 is against Subsidy under UDAY MoU;
- The actual subsidy commitment due under UDAY for FY 2019-20 was Rs. 39.66 Crore, and CSPDCL has also claimed and received the same amount from GoCG.

In other words, the excess amount of GoCG subsidy considered by the Commission as revenue in the True-up for FY 2019-20 is Rs. 260.34 Crore.

Hence, this is an error in the impugned Order and the revenue of CSPDCL for FY 2019-20 needs to be reduced by Rs. 260.34 Crore in the True-up for FY 2019-20. Accordingly, the Commission grants the review on this issue, and has allowed the impact of the same along with due carrying cost, as detailed subsequently.

6.8 Computation of under-achievement due to sharing of Distribution Losses

CSPDCL’s submission

CSPDCL submitted that the Commission has dealt with this issue at Para 6.4 of the impugned Order. CSPDCL submitted that disallowance towards sharing of loss on account of under-achievement of distribution loss below 33 kV level is computed on energy sales (in MU) over and above targeted loss with Average Power Purchase Cost

(APPC) at distribution periphery. CSPDCL submitted that the computation of APPC itself is incorrect as it considers cost of Marwah power and expenditure towards inter and intra-State Transmission Charges. However, Marwah power is dedicated for sale to Telangana and Transmission Charges are payable on allocated/contracted capacity, irrespective of whether any unit is consumed or not.

CSPDCL submitted that the under-achievement amount ought to have been computed excluding cost of Marwah power and gross Transmission Charges. CSPDCL submitted the revised computation of under-achievement amount by considering the above basis, as given in the Table below:

Table 6-8: Revised Computation of Under-achievement of Distribution Losses for FY 2019-20 as submitted by CSPDCL (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	FY 2019-20
1	Gross Power Purchase Cost excluding Transmission Charges	11728.42	12120.29
2	(Less) Sale of Power to Marwah	2339.34	1166.63
3	Net Cost of under-achievement (1-2)	9389.08	10953.66
4	Energy input for distribution business (MU)	26644.93	27490.11
5	Average Power Purchase cost for under-achievement (3/4) (Rs./kWh)	3.30	3.30
6	Under-achievement in percentage (%)	2.44%	2.72%
7	Under-achievement amount	214.32	255.43
8	Under-achievement to be borne by CSPDCL	107.16	127.72
9	Amount deducted	126.23	152.80
10	Excess deduction	19.07	25.08

CSPDCL submitted that the above table reveals that the under-achievement for FY 2018-19 and 2019-20 is overstated by Rs. 19.07 Crore and Rs. 25.08 Crore, respectively.

Commission's View

In its Review on this issue, CSPDCL has contended that the under-achievement amount ought to have been computed excluding the cost of Marwah power and gross Transmission Charges.

In this context, it may be noted that CSPDCL last claimed incentive on Distribution Loss in the Tariff Petition for FY 2017-18, wherein CSPDCL considered the APPC as Rs. 4.18/kWh considering total power purchase cost, including Marwah and Transmission Charges, while claiming incentive on Distribution Loss.

Though CSPDCL did not claim incentive on Distribution Loss in the true-up for FY 2018-19 and FY 2019-20, in the Model, CSPDCL had computed incentive on Distribution Losses considering APPC as Rs. 4.12/kWh and Rs. 4.48/kWh for FY 2018-19 and FY 2019-20, respectively, which includes Marwah as well as Transmission Charges.

Hence, the approach in the impugned Tariff Order of computing APPC as Rs. 3.88/kWh and Rs. 4.01/kWh for FY 2018-19 and FY 2019-20, respectively, is consistent with CSPDCL's own approach in this regard in the past. Notwithstanding the above, the issue raised by CSPDCL in Review has been considered on merits.

As regards CSPDCL's contention that cost of power purchase from Marwah should not be considered for computing APPC as Marwah power is dedicated for sale to Telangana, the Commission sought the following clarifications from CSPDCL:

- whether the PPA with CSPGCL states the same, and whether the PPA with Telangana is a back-to-back PPA with Marwah PPA;
- Whether the entire quantum purchased from Marwah since its COD has been sold to Telangana?
- The year-wise summary of quantum of power and rate of power purchased from Marwah since COD and the quantum and rate of power sold to Telangana over the same period

In its reply, CSPDCL submitted that it has entered into long-term PPA with CSPGCL for purchase of power from 2x500 MW Marwah Thermal Power Plant. Further, it has entered into long-term PPA for back-to-back sale of 2x500 MW Marwah to Telangana Discoms. However, based on the demand supply gap in the State, CSPDCL utilizes availability from Marwa for use of its own consumers. CSPDCL also submitted the details of power purchased from Marwa and sale of power to Telangana since the COD of Marwa.

In its replies, CSPDCL has admitted that it utilizes availability from Marwa for use of its own consumers. Over the period from date of COD till January 2022, CSPDCL has purchased 22598 MU from Marwah, as against which, it has sold 17831 MU to Telangana. Further, the quantum of power sold to Telangana has no direct correlation with the power purchased from Marwa each year. Thus, it is clear that Marwah power is not exclusively meant for Telangana, and Marwah power is used for supply to CSPDCL's own consumers, as well.

Moreover, CSPDCL is purchasing power from Marwa and selling power to Telangana as part of its regulated business, and not under any unregulated business. Hence, there is no question of not considering the cost of power purchase from Marwah for computing the APPC.

CSPDCL's second contention in its Review Petition is that the Transmission Charges should not be considered for computing APPC. The Commission finds merit in this contention, as the Transmission Charges are fixed based on the share of Transmission capacity, and will not be reduced if the quantum of power purchase is reduced because of lower Distribution Losses. Hence, **review is admissible on this issue, as Transmission Charges should be excluded while computing APPC for the purpose of computing excess power purchase cost due to Distribution Losses.**

The Commission has computed the revised APPC after excluding the Transmission Charges for FY 2018-19 and FY 2019-20, and after considering the banked units, as ruled earlier in this Chapter. The revised APPC works out to Rs. 3.41/kWh and Rs. 3.76/kWh for FY 2018-19 and FY 2019-20, respectively, as against Rs. 3.88/kWh and Rs. 4.01/kWh, respectively, considered in the Tariff Order.

Table 6-9: Revised Sharing of Loss on account of underachievement of Distribution loss for FY 2018-19 and FY 2019-20 (Rs. Crore)

Sr. No	Particulars	FY 2018-19	FY 2019-20
1	Energy recorded at 33 kV Outgoing feeder of all EHV S/s (MU)	23,259.69	24,217.74
2	Add: Net Energy injected generators connected at 33/11 kV S/s (MU)	149.76	253.08
3	Energy Input at Distribution Periphery below EHV level (MU)	23,409.45	24,470.82
4	Add: EHV Sales (MU)	3,235.48	3,019.29
5	Energy Input considered for Distribution Business (MU)	26,644.93	27,490.11
6	Distribution Losses (%) below 33 kV Level	18.94%	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)	3.41	3.76
10	Under-achievement amount	(222.18)	(286.12)
11	Under-achievement to be borne by CSPDCL	(111.09)	(143.06)
12	CSPDCL share of under-achievement considered in Tariff Order	(126.23)	(152.80)
13	Excess deduction	15.14	9.74

Accordingly, the Commission grants the review on this issue, and has allowed the impact of the same along with due carrying cost, as detailed subsequently.

6.9 Under-statement of Contribution to Pension and Gratuity Trust for FY 2021-22 CSPDCL's Submission

CSPDCL submitted that the Commission has dealt with this issue at Para 10.7 of the impugned Tariff Order. CSPDCL submitted that the Pension & Gratuity (P&G) Trust is a common Fund wherein CSPDCL's Group Power Companies contribute to meet the past unfunded liabilities. The contribution of Petitioner Companies is determined by the Commission on proportionate basis. For contribution to P&G Trust in FY 2021-22, the Commission has considered an increase of 5.17% on approved cumulative P&G contribution of CSPGCL, CSPTCL, CSLDC and CSPDCL allowed for FY 2020-21, which works out to a cumulative amount of Rs. 713.85 Crore (Para 7.6.7 on Page 239 of the impugned Order).

CSPDCL submitted accordingly, contribution for FY 2021-22 in respect of CSPGCL, CSPTCL and CSLDC have been determined as Rs. 194.58 Crore, Rs. 73.10 Crore,

and Rs. 1.80 Crore, respectively. Further, as the summation of these contributions is only Rs. 269.48 Crore, it is reasonable to allow the entire balance of contribution to CSPDCL. Accordingly, the Commission ought to have allowed Rs. 444.37 Crore (Rs. 713.85 Crore - Rs. 269.48 Crore) as contribution to P&G Fund in respect of CSPDCL for FY 2021-22.

However, Table 10.29 reveals that the contribution to P&G Fund allowed to CSPDCL for FY 2021-22 is Rs. 360.86 Crore only. Thus, there is clear deficit of Rs. 83.51 Crore. As the contribution to P&G Trust would require uniformity among all beneficiaries, it would be appropriate to allow additional contribution of Rs. 83.51 Crore to CSPDCL for FY 2021-22.

Commission's View

The Commission has dealt with this issue in Para 10.7 of the impugned Order, as reproduced below:

“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 6-10: 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

”

From the above extract of the impugned Tariff Order, it is clear that the Commission has allowed the entire amount of contribution to P&G Trust for FY 2021-22 as claimed by CSPDCL in its Petition. In addition, the Commission has also allowed additional amount against past shortfall in P&G Trust, as allowed to the other Companies, even though CSPDCL had not prayed for the same.

The total amount of P&G Trust contribution allowed to CSPDCL for FY 2021-22 is Rs. 449.48 Crore, as against Rs. 444.37 Crore claimed by CSPDCL in its Review Petition.

The Commission is of the view that CSPDCL cannot raise an entirely different claim under Review, when such claim has not been made in the original Petition, and more so, when the amount allowed is more than that claimed.

However, it is a fact that a different approach has been adopted for allowing P&G Trust contribution for CSPDCL, as compared to the approach adopted for CSPGCL, CSPTCL, CSLDC in the same Order. As the overall contribution to P&G Trust is based on the payments made by the P&G Trust, and the share of the Companies is only apportioned based on the number of employees and pensioners, the same philosophy needs to be adopted for allowing contribution to P&G Trust for all the Companies.

As stated earlier, the Commission has not limited itself to the narrow interpretation of Review, and has adopted a holistic approach, so that all legitimate expenses and revenues are approved. Hence, **the Commission has accepted the Review filed by CSPDCL on this issue and has allowed the impact of the same along with due carrying cost, as detailed subsequently.**

6.10 Provisioning towards Renewable Energy Purchase Cost

This issue has not been raised by CSPDCL in its Review Petition. However, this issue has come to light based on the further detailed analysis of power purchase expenses, that was initiated based on CSPDCL's Review Petition raising the issue of errors in the power purchase expenses allowed to CSPDCL for FY 2018-19 and FY 2019-20.

In the power purchase expenses claimed by CSPDCL in the final True-up for FY 2018-19, CSPDCL has claimed 'Other Charges – RE' of Rs. 250.62 Crore, which was allowed by the Commission in the true-up for FY 2018-19 in the impugned Tariff Order for FY 2021-22. While analysing each head of the power purchase expenses based on the Review Petition filed by CSPDCL, in order to ensure that all legitimate expenses are allowed, the Commission asked CSPDCL to provide the details of the 'Other Charges – RE' of Rs. 250.62 Crore.

In its initial reply, CSPDCL submitted that this expense of Rs. 250.62 was against purchase of Solar RECs. On being asked to submit documentary evidence for purchase of Solar RECs, CSPDCL revised its reply and submitted that out of the total expense of Rs. 250.62 Crore claimed against this head, **Rs. 161.14 Crore was against provisioning for Solar RPO, which was only provisioning and had not been incurred.**

Similarly, in the power purchase expenses claimed by CSPDCL in the final True-up for FY 2019-20, CSPDCL has claimed expenses of Rs. 158.44 Crore against 'Non-

Solar REC's', which was allowed by the Commission in the true-up for FY 2019-20 in the impugned Tariff Order for FY 2021-22. In its Review Petition, CSPDCL submitted revised break-up of RE purchase cost based on the Audited Accounts, and claimed 'Other RE' cost of Rs. 154.67 Crore. While analysing each head of the power purchase expenses based on the Review Petition filed by CSPDCL, in order to ensure that all legitimate expenses are allowed, the Commission asked CSPDCL to provide the details and documentary evidence for 'Other RE' cost of Rs. 154.67 Crore. CSPDCL submitted the following details of Other RE cost:

Table 6-11: Other RE Cost for FY 2019-20 as submitted by CSPDCL in Review (Rs. Crore)

Sl. No.	Description	Amount
1.	Being provision for Power Purchase made	3.76
2.	Being reversal of opening provision for Power Purchase made	-4.82
3.	Provision of RPO for FY 2019-20	157.78
4.	Reversal of GBI Claim from Dec18 to March19 received on 20.09.2019 but already taken into accounts of FY 2018-19	1.05
5.	Reversal of GBI Claim from Dec18 to March 19 received on 20.09.2019 but already taken into accounts of FY 2018-19	-1.03
6.	Being provision of GBI Claim for the month of Nov19 to March 20	-0.99
7.	Being provision of GBI Claim for the month of Nov19 to March 20	-1.08
	Total	154.67

From the above details, it is clear that the expenses of Rs. 154.67 Crore are not actually incurred, but are expenses provisioned in the Accounts for FY 2019-20.

The Commission has consistently not been allowing provisioning of expenses under any head, and only allows the expenses when they are actually incurred.

The Commission disallows the provisioning of Rs. 161.14 Crore and Rs. 154.67 Crore done by CSPDCL under cost of power purchase from RE sources in the revised true-up for FY 2018-19 and FY 2019-20, respectively along with due carrying cost, as detailed subsequently. Further, the Commission has given a directive to CSPDCL to submit details and reconciliation of year-wise amount provisioned against "RPO Obligation" or any such similar name/purpose till date, and actual amount spent/utilised against this provisioning till date. This data is to be submitted along with the true-up Petition for each year, henceforth. Also, CSPDCL is directed to ensure that all past shortfall w.r.t. RPO target be fulfilled by utilising the funds provisioned under "RPO Obligation" or any such similar name/purpose till date, and ensure that such expenses towards meeting RPO obligations not be claimed separately, till such time as the entire provisioning amount is exhausted.

6.11 Provisioning towards Power Banking

This issue has not been raised by CSPDCL in its Review Petition. However, this issue has come to light based on the further detailed analysis of power purchase expenses, that was initiated based on CSPDCL's Review Petition raising the issue of errors in the power purchase expenses allowed to CSPDCL for FY 2018-19 and FY 2019-20.

In the power purchase expenses claimed by CSPDCL in the final True-up for FY 2018-19, CSPDCL had claimed 'Other Charges' of Rs. 194.55 Crore, which was allowed by the Commission in the true-up for FY 2018-19 in the impugned Tariff Order for FY 2021-22.

While analysing each head of the power purchase expenses based on the Review Petition filed by CSPDCL, in order to ensure that all legitimate expenses are allowed, the Commission asked CSPDCL to provide the details of 'Other Charges' as claimed in the true-up for FY 2018-19. In reply, CSPDCL submitted the following details:

Table 6-12: Other Charges under CGS Power Purchase Cost for FY 2018-19 as submitted by CSPDCL (Rs. Crore)

Sl. No.	Particulars	Amount
1.	Being reversal of Opening Provision of Power Banking	-309.93
2.	Being provision of water charges/ROE & FCA bill of NPCIL pertaining to FY 2018-19 but bill received in FY 2019-20	11.58
3.	Already reversed in FY 2017-18, now to be corrected	4.16
4.	Being Amount bifurcated as Prepaid Expenditure in FY 2017-18, now Reversed in FY 2018-19	0.05
5.	Being Provision for Power Banking	488.69
	Total	194.55

Thus, CSPDCL has considered provision for Power Banking of Rs. 488.69 Crore in the power purchase cost for FY 2018-19.

In its Petition seeking final true-up for FY 2018-19, CSPDCL had stated as under:

*"5.12 CSPDCL further submits that it has purchased 2220.37 MU through banking arrangement and has sold 1182.01 MU through banking arrangement, **the cost of both the transactions has been considered as NIL. This is in line with the judgement of Hon'ble APTEL dated 01st July 2014 in Appeal No.220 of 2013. The relevant extract of the judgement is reproduced below;***

"In the present case, the electricity is actually available to distribution licensee during financial year when it requires the electricity. The said electricity has been accounted for and has been supplied to the consumers but the same ought not to be taken for calculating the total quantum of electricity available with the distribution licensee during the year only for the purposes of calculation of APPC. We may further observe that there can be no notional cost attributed to such banked energy and the cost, if any, has to be included in the total power purchase cost of the distribution licensee when the corresponding electricity is supplied to the third party. In our view, the State

Commission has correctly taken the price of the banked energy as available with the distribution licensee/HPSEBL at a zero cost. The banking is a continuous transaction. The principle of banking of energy is that the electricity received by the distribution licensee is to be returned. When the banked energy is rolled over, its return is only postponed. It is not that electricity is not to be received. The quantum of electricity to be returned would only increase in the subsequent years in future to compensate for the roll over and thereby increase the APPC substantially.”(emphasis added)

The Commission has dealt with this issue in Para 6.5 of the impugned Order, as reproduced below:

“6.5 Power Purchase Cost

...

Commission’s View

...

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.”(emphasis added)

Thus, it is clear that though CSPDCL has been specifically claiming in all its Petitions that it has considered the cost of banking purchase and sale as Nil in accordance with the above-said Judgment of the Hon’ble APTEL, the Commission observes that CSPDCL has been including the provision made against such banked power quantum every year in its Petitions, and adjusting it in the next year through the necessary set-off, when the banked units are returned. While such treatment is necessary for accounting purposes, these expenses are not to be considered upfront for regulatory purposes, in the year of forward banking.

In this Order, the Commission has disallowed the provision for Power Banking of Rs. 488.69 Crore in the revised true-up of power purchase cost for FY 2018-19, along with the associated carrying cost.

Further, in the replies to the queries on true-up for FY 2020-21, CSPDCL has submitted that it has made provision for power banking for FY 2019-20 for 269.24 MU at the rate of 3.72/kWh, which has been reversed in the power purchase cost of FY 2020-21, amounting to Rs. 100.16 Crore. The Commission has not considered this reversal as a credit entry in the true-up for FY 2020-21, as it is not clear where this banking cost is included in the power purchase cost for FY 2019-20. It could be included in the ‘Other Charges’ of Rs. 384.55 Crore claimed and allowed in the true-up for FY 2019-20. Hence, there is a credit amount of Rs. 100.16 Crore, which has been adjusted in the books of accounts of CSPDCL, but which is yet to be adjusted in

the regulatory accounts. In this Order on revised true-up for FY 2019-20, the Commission has not disallowed any expenses against provision for Power Banking, in the absence of clear data in this regard.

Further, the Commission has given a directive to CSPDCL to submit details and reconciliation of year-wise amount provisioned against Banked Power till date, and actual amount spent/utilised against this provisioning till date. This data is to be submitted along with the true-up Petition for each year, henceforth. Also, CSPDCL is directed to ensure that all expenses towards return of banked power be fulfilled by utilising the funds provisioned against Banked Power or any such similar name/purpose till date, and ensure that such expenses are not claimed separately, till such time as the entire provisioning amount is exhausted.

In future, CSPDCL shall not include the expenses provisioned against banked power in its power purchase cost, and shall consider the actual expenses incurred for the banking return, once the amount of provisioning made till date is exhausted. CSPDCL shall submit a complete passbook of forward banking and return banking showing all transactions in energy terms till date, including the amount of expense provisioning done, expense provisioning set off till date, and balance provisioning available for future set-off, along with the true-up Petition for each year.

6.12 Summary of Impact of Review filed by CSPDCL

CSPDCL's Submission

CSPDCL has submitted the summary of the issue-wise impact on account of the relief sought in the Review Petition on the Final True up of FY 2018-19, Final True Up of FY 2019-20, and determination of ARR for FY 2021-22, as shown in the Table below:

Table 6-13: Issue-wise Impact as submitted by CSPDCL (Rs. Crore)

Sl. No.	Issue	FY 2018-19	FY 2019-20	FY 2021-22
1	Erroneous approval of Power Purchase Cost by deducting excessive DPC in FY 2018-19	108.86	-	-
2	Understatement of Power Purchase expenses from CSPGCL for FY 2019-20	-	348.76	-
3	Non-consideration of state DSM Account	71.58	76.76	-
4	Revision in Power Purchase Quantum towards banking for FY 2019-20	No Revenue Implication but has bearing on computing of sharing of loss on account of under-achievement of distribution losses.		
5	Erroneous consideration of Rs. 300 Cr as subsidy from state government in computation of revenue from sale of power for FY 2019-20	-	300.00	-

Sl. No.	Issue	FY 2018-19	FY 2019-20	FY 2021-22
6	Computation of under achievement of sharing of loss at clause 6.4 of Impugned order	19.07	25.08	-
7	Under statement of contribution to Pension and Gratuity trust for FY 2021-22	-	-	83.51
	Sub Total	199.51	750.60	83.51
	Grand Total	1033.62		

The aforesaid gap of Rs.1033.62 Crore transforms to Rs. 1228.47 Crore after applying carrying cost for the relevant periods and the same has been considered in the closing True-up gap of FY 2020-21. CSPDCL requested the Commission to approve the Revenue Gap of Rs. 1228.47 Crore including carrying cost in the cumulative Revenue Gap.

Commission's View

In response to the Commission's query regarding the detailed computation of carrying cost on the Gap of Rs. 1033.62 Crore claimed by CSPDCL in its Review Petition, CSPDCL submitted the revised calculations of carrying cost, as under:

Table 6-14: Revised Carrying Cost computation submitted by CSPDCL (Rs. Crore)

Particulars	After Final True Up of FY 2018-19	After Final True Up of FY 2019-20
Opening Gap	0.00	211.68
Current Year Gap	199.51	750.60
Total Gap	199.51	962.28
Rate of interest	12.20%	12.55%
(Carrying Cost)/Holding Cost	12.17	107.48
Total Closing Revenue Gap/(Surplus) at end of the year	211.68	1069.76
Add: Revenue Gap for review pertaining to FY 2021-22		83.51
Grand Total		1153.27

Thus, CSPDCL revised its claim after Review to Rs. 1153.27 Crore, as against Rs. 1228.47 Crore stated in the Petition.

CSPDCL was again asked to clarify the computation of carrying cost of Rs. 107.48 Crore for FY 2019-20, as shown in the Table above. In reply, CSPDCL submitted that by oversight, it had applied carrying cost on complete current year Gap of Rs. 750.60 Crore and 50% on opening Gap of Rs. 211.68 Crore to arrive at carrying cost of Rs.

107.48 Crore for FY 2019-20. The revised computation of carrying cost as per CSPDCL is shown in the Table below:

Table 6-15: Further Revised Carrying Cost computation submitted by CSPDCL (Rs. Crore)

Particulars	After Final True Up of FY 2018-19	After Final True Up of FY 2019-20
Opening Gap	0.00	211.68
Current Year Gap	199.51	750.60
Total Gap	199.51	962.28
Rate of interest	12.20%	12.55%
(Carrying Cost)/Holding Cost	12.17	73.67
Total Closing Revenue Gap/(Surplus) at end of the year	211.68	1035.95
Add: Revenue Gap for review pertaining to FY 2021-22		83.51
Grand Total		1119.46

Based on the Commission's analysis as elaborated in earlier Sections of this Chapter, the Commission has approved the impact of the revised true-up for FY 2018-19 and FY 2019-20 based on the Review filed by CSPDCL, as shown in the Table below:

Table 6-16: Issue-wise Impact as approved by the Commission (Rs. Crore)

Sl.	Issue	Impact claimed by CSPDCL			Impact approved by the Commission		
		FY 2018-19	FY 2019-20	FY 2021-22	FY 2018-19	FY 2019-20	FY 2021-22
1	Excess deduction of DPC	108.86			39.73		
2	Understatement of cost of Power Purchase from CSPGCL		348.76			0.00	
3	Non-consideration of State DSM account	71.58	76.76		0.00	0.00	
4	Erroneous consideration of State Government subsidy		300			260.34	

Sl.	Issue	Impact claimed by CSPDCL			Impact approved by the Commission		
		FY 2018-19	FY 2019-20	FY 2021-22	FY 2018-19	FY 2019-20	FY 2021-22
5	Computation of under-achievement of sharing of Distribution Losses	19.07	25.08		15.14	9.74	
6	Under-statement of contribution to P&G Trust for FY 2021-22			83.51			83.51
7	Disallowance of Provisioning towards RPO & RE Purchase				(161.14)	(154.67)	
8	Disallowance of provisioning for Power Banking				(488.69)		
	Sub-total	199.51	750.6	83.51	(594.95)	115.41	83.51
	TOTAL	1033.62			(396.04)		

Thus, the net additional amount allowable to CSPDCL after the revised true-up of FY 2018-19 and FY 2019-20, based on the Review Petition filed by CSPDCL is Rs. (396.04) Crore, as compared to the additional amount of Rs. 1033.62 Crore claimed by CSPDCL in its Review Petition.

Further, in its Petition, CSPDCL has considered the entire amount of Rs. 1119.46 Crore (revised in replies; original amount of Rs. 1228.47 Crore) along with the true-up Revenue Gap of FY 2020-21, and computed carrying cost accordingly. However, out of the total amount claimed by CSPDCL, the amount of Rs. 83.51 Crore against contribution to P&G Trust is for FY 2021-22 and carrying cost should not be computed on this amount from FY 2020-21 onwards. Hence, the Commission has computed the carrying/(holding) cost on the additional amount allowable to CSPDCL by considering the amounts in the respective years.

The total amount allowable to CSPDCL after Review along with carrying/(holding) cost, is shown in the Table below:

Table 6-17: Additional Amount approved by the Commission after Review, along with carrying cost (Rs. Crore)

Particulars	CSPDCL		Approved after Review	
	FY 2018-19	FY 2019-20	FY 2018-19	FY 2019-20
Opening Gap	0.00	211.68		(667.54)
Current Year Gap	199.51	750.60	(594.95)	115.41
Total Gap	199.51	962.28	(594.95)	(552.13)
Rate of interest	12.20%	12.55%	12.20%	12.55%
(Carrying Cost)/Holding Cost	12.17	73.67	(72.58)	(76.53)
Total Closing Revenue Gap/(Surplus) at end of the year	211.68	1035.95	(667.54)	(628.66)
Add: Revenue Gap pertaining to FY 2021-22		83.51		83.51
Grand Total		1119.46		(545.15)

Thus, the net additional amount allowable to CSPDCL after the revised true-up of FY 2018-19 and FY 2019-20, based on the Review Petition filed by CSPDCL is Rs. (545.15) Crore along with carrying/(holding) cost, as compared to the revised additional amount of Rs. 1119.46 Crore claimed by CSPDCL along with carrying cost in its Review Petition.

The additional amount of Rs. (628.66) Crore has been considered along with the Revenue Gap/(Surplus) of FY 2020-21, and the amount of Rs. 83.51 Crore has been considered for FY 2021-22, while computing the cumulative Revenue Gap/(Surplus) for FY 2022-23, as elaborated in subsequent Chapters of this Order.

7 TRUE-UP OF FY 2020-21 FOR CSPDCL

7.1 Background

CSPDCL has filed the Petition for final True-up of FY 2020-21 based on the Final 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 revenue impact of the issues raised in the review of the Tariff Order dated August 2, 2021 has also been included in the true up gap of FY 2020-21. CSPDCL added that though the accounts for FY 2020-21 are finalized, however, the audit is under process and hence, the expenses and income submitted in the True-up Petition for FY 2020-21 might undergo minor changes.

A similar situation had arisen while truing up for FY 2019-20, as CSPDCL in its Petition had sought provisional true-up based on provisional accounts and later on sought final true-up for FY 2019-20 based on the final audited accounts. CSPDCL had accordingly submitted detailed explanation for the provisional true-up for FY 2019-20 in its Petition, but had not submitted the complete revised Petition based on the audited Accounts for FY 2019-20. As discussed in the earlier Chapter, CSPDCL filed a Review Petition on the Tariff Order dated August 2, 2021, which has now been combined with this Petition, wherein CSPDCL has claimed review on several aspects citing error apparent in the treatment of certain heads of expenses and revenue, primarily on account of the difference in amounts between the provisional Accounts and the final audited Accounts for FY 2019-20, apart from certain issues for FY 2018-19.

In order to ensure against a repeat of the same issues related to reconciliation between final Accounts and Audited Accounts for FY 2020-21 and interpretation of the variation in amounts between the final Accounts and Audited Accounts for FY 2020-21, the Commission directed CSPDCL to submit the Audited Accounts for FY 2020-21 along with all the implications and impact of changes w.r.t. Final Accounts (unaudited) in complete detail and with all revised Tables affected by the changes. Vide its reply dated 9 February 2022, CSPDCL submitted several revised Tables to be considered for the True-up for FY 2020-21 based on the audited accounts, and also revised the amount of Standalone Revenue Gap to be passed on to FY 2022-23.

Considering the significant changes made by CSPDCL in its request for True-up for FY 2020-21 on account of the Audited Accounts, the Commission directed CSPDCL to submit the consolidated revised Petition incorporating the changes, rather than just

the revised Tables, in order to avoid confusion. Vide its reply dated 9 February 2022, CSPDCL submitted the revised Chapter seeking True-up for FY 2020-21 based on the Audited Accounts for FY 2020-21.

While the Commission has taken due care to consider all submissions made by CSPDCL while truing up for FY 2020-21, it needs to be noted that CSPDCL has made so many changes to the numbers that it is not possible to capture each and every change in the Order. Quite a few amounts claimed by CSPDCL in its original Petition have been revised by CSPDCL in its subsequent replies. Further, in many cases, CSPDCL has revised the components of the ARR on account of some error/typo in its submissions, but has not submitted the consequential impact on the the total ARR and/or Revenue Gap. As a result, it is possible that the amounts stated against CSPDCL Petition may give rise to some confusion. **CSPDCL is directed to take due care and diligence while submitting its Petitions, in order to avoid such situations of erroneous submissions that required to be revised, in its future submissions. Further, the onus is on CSPDCL to ensure that complete and correct data and information is submitted to the Commission, and in case any data or computation is revised, then all the corresponding changes also need to be submitted.**

In accordance with the above, the Commission has undertaken the final true-up for FY 2020-21. In this Chapter, the Commission has analysed all the elements of audited expenditure and revenue of CSPDCL for FY 2020-21 and undertaken final true-up of expenses and revenue in accordance with Regulation 10 of CSERC MYT Regulations, 2015. The Commission has approved the sharing of gains and losses on account of controllable factors between CSPDCL and the consumers, in accordance with Regulation 13 of the CSERC MYT Regulations, 2015.

7.2 Energy Sales

CSPDCL's Submission

CSPDCL submitted that there were 59,03,506 consumers at LV level and 3,182 consumers at HV and EHV level during FY 2020-21. 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 2020-21 was 6,496.67 MW at LV level and 3,169.13 MW at EHV and HV level.

The category-wise energy sales were recorded as 23,361.34 MU for FY 2020-21, comprising 14,138.53 MU sales to LT consumers and 9,222.81 MU to HV and EHV consumers.

CSPDCL submitted that there has been substantial increase in the sales to LV category and reduction in the sales to HV category as compared to the sales approved by the Commission for FY 2020-21, due to COVID-19 imposed guidelines.

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 2020-21. The Commission also sought voltage-wise break up for HV and EHV sales for FY 2020-21. CSPDCL submitted the R-15 data for FY 2020-21.

It is seen from the R-15 that the incidence of assessment-based billing and defective meters is still on the higher side. **Even in the first nine months (April to November) of FY 2021-22, the overall number of assessed cases and burnt/defective meters is as high as 7.3% and 8.4% of the total LV consumers, respectively. A closer analysis shows that the primary contributors are the LV-1 Domestic category with assessed cases and burnt/defective meters of 1.2% and 5.9%, respectively, LV-3 Agriculture category with 41.1% and 8.3%, respectively, and Temporary connections with 15.9% and 3.8%, respectively.**

The Commission notes that it has repeatedly directed CSPDCL to take corrective measures to bring down the percentage of defective meters and assessment-based billing within the prescribed ceiling in the earlier Tariff Orders. **CSPDCL is once again directed to take up the same in mission mode and submit the same along with its next Tariff Petition. The Commission may be constrained to assess the revenue for categories having such high percentage of assessed cases and burnt/defective meters on alternative basis, if the percentage is not brought within control in the next 1-2 years.**

Agriculture Consumption

The Commission sought explanation for the higher actual agricultural sales reported by CSPDCL as compared to the approved sales. In its reply dated 9th February 2022, CSPDCL submitted that the actual number of consumers have been higher, and the actual consumption per HP is 260 units/month against the estimated consumption of 265 units/month. CSPDCL also submitted the Division-wise status of metering in Distribution Transformers (DTs) dedicated for agriculture connections, and stated that up to 31st March 2021, overall 3080 DTs have been metered. CSPDCL further submitted month-wise average hours of supply to agriculture category, which shows average supply in excess of 22 hours/day for each month of FY 2020-21.

The Commission has studied the Division-wise status of DT metering as submitted by CSPDCL, and observes that for many Divisions, there is nil/marginal progress. Overall, out of 1,91,297 DTs, there are only 7,892 DTs (4.1%) with functional meters, 320 DTs (0.2%) with AMR/communicating meters, 5,132 DTs (2.7%) with non-functioning meters, and the balance 1,77,953 DTs (93%) are un-metered. Effectively, if the non-functioning DTs are also considered, then 95.7% of the DTs are not metered. This kind of situation is completely unsatisfactory, and **CSPDCL is directed to take immediate and urgent steps to complete the DT metering (especially for agricultural connections) within the next 2 years. CSPDCL should submit an action plan to achieve this target, within 2 months of issue of this Order.**

The Commission also sought details of load factor of consumption by LV Agriculture category. In response, CSPDCL submitted the details of month-wise load factor for FY 2020-21. It is observed that actual average annual load factor recorded was 47.60% for FY 2020-21, which translates to average running of more than 11 hours per day throughout the year. Further examination reveals that in some months, the actual load factor has been reported much higher, at 56% for July 2020 which is a monsoon month, and 56.38%, 64.75%, and 65.63% for January 2021, February 2021, and March 2021, respectively. This translates to average running hours of 13.5 hours in July 2020 and January 2021, and as high as ~15.5 hours in February and March

2021. Such data lacks credibility and **CSPDCL is directed to ensure that the agricultural connections are metered properly and meters read on time, so that the agricultural consumption is reported realistically and correctly.**

Further, the Commission observes that the actual Average Billing Rate (ABR) realised for Agriculture category continues to be much lower than the approved ABR. CSPDCL has submitted in the past 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 (GoCG) 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.

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.

The Commission, in the previous Tariff Orders, has adopted the approach of consideration of additional revenue for Agriculture Category, as CSPDCL is bound to levy the tariff approved by the Commission in its respective Tariff Order for all categories including Agriculture consumers. 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 were submitted as shown in the Table below:

Table 7-1: Sales and Energy Charge for Agriculture Category for FY 2020-21 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
A-Metered KJJY	1,40,956	863	377	4.37	4.40
B-Flat rate KJJY	1,74,697	2,189	568	2.59	4.40
General/Other	1,44,033	1,887	830	4.40	4.40
Total	4,59,686	4,939	1,775	3.59	4.40
Difference in Energy Charge Recovery					0.81

The Commission observed that the above data tallies with the data as per R-15, however, the number of consumers and consumption in each sub-category submitted by CSPDCL is significantly different from the number of consumers and consumption submitted to the Commission in the true-up for FY 2019-20, and sought clarification from CSPDCL during the Technical Validation Session (TVS) held in this matter.

During the TVS, CSPDCL submitted that the difference was on account of Temporary agricultural connections. In its written reply dated 22nd February 2022, CSPDCL further clarified that the changes in number of consumers and consumption are due to transition of consumers within the sub-categories at their option, which is revealed from the fact that total number of consumers in FY 2020-21 is increased by 39,912. CSPDCL also submitted the revised details of agricultural consumption for FY 2020-21, including the temporary connections, as shown in the Table below:

Table 7-2: Revised Sales and Energy Charge for Agriculture Category for FY 2020-21 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
A-Metered KJJY	1,40,956	863	399	4.63	4.40
B-Flat rate KJJY	1,72,417	2,162	585	2.70	4.40
General/Other	1,46,313	1,914	892	4.66	4.40
Temporary	1,22,113	878	339	3.86	4.40
Total	5,81,799	5816	2215	3.81	4.40
Difference in Energy Charge Recovery					0.59

The Commission observed that the revised data submitted by CSPDCL does not tally with the R-15, which is the actual commercial database of CSPDCL. Moreover, CSPDCL has reported average Energy Charge billed of Rs. 4.63/kWh and Rs. 4.66/kWh for metered KJJY and General/other categories, respectively, which is higher than the approved Energy Charge of Rs. 4.40/kWh. This revised data submitted by CSPDCL is obviously not reliable on account of such inaccuracies/inconsistencies.

Hence, the Commission has re-computed the difference in energy charge recovery for FY 2020-21 based on the actual sales and revenue reported in the R-15 data submitted by CSPDCL, as shown in the Table below. 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 under-recovery of revenue from sales to LT agricultural category, as under:

Table 7-3: 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
LV-3	4,59,686	4,938.62	1,774.41	3.59	4.40	0.81
Temporary Agriculture	1,22,113	877.54	320.52	3.65	4.40	0.75
Total	5,81,799	5,816.16	2,094.93	3.60	4.40	0.80

From the above table, it is observed that there is under-recovery of energy charge, i.e., of Rs. 0.80/kWh for FY 2020-21, which translates to under-recovery of Rs. 464.18 Crore for FY 2020-21.

In view of the above, the Commission has considered the amount of Rs. 464.18 Crore as an additional revenue while approving the final true-up for FY 2020-21.

As regards CSPDCL's difficulty regarding recovery of amount on account of difference between the tariff approved by the Commission and the Subsidy notification of the GoCG, CSPDCL has submitted a request in its Tariff Proposal, which has been addressed in the Tariff Philosophy Chapter of this Order.

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 Petition for final True-up of FY 2020-21. However, as stated earlier, the data lacks credibility because of the high percentage of assessed bills and burnt/defective meters, and the extremely high agricultural consumption reported in some months. In the absence of any other data, the Commission has considered the sales as reported by CSPDCL in its Petition.

The consumer category-wise sales for FY 2020-21 approved in the Tariff Order, actual sales as submitted by CSPDCL, and Trued-up sales approved in this Order are shown in the Table below:

Table 7-4: Approved Energy Sales for FY 2020-21 (MU)

Consumer Category	Tariff Order	Petition	Final True-up
LV Categories (A)	11,992.89	14,138.53	14,138.53
Domestic Including BPL Consumers	5,424.96	6,236.02	6,236.02
Non-Domestic (Normal Tariff)	990.07	236.64	236.64
Non-Domestic (Demand Based)		663.05	663.05
Agriculture Metered	3,983.57	4,938.63	4,938.63
Agriculture allied	16.61	26.92	26.92
LT Industry	547.97	608.65	608.65
Public Utilities	387.52	440.90	440.90
IT Industry	0.01	0.06	0.06
Temporary	642.17	987.66	987.66
HV Categories (B)	11,295.33	9222.81	9222.81
Railway Traction	983.48	908.45	908.45
Mines (Coal & Others)	633.26	660.16	660.16
Other Industry & General Purpose Non-Industrial	2,050.45	1,843.13	1,843.13
Steel Industries	7,289.66	5,445.41	5,445.41
PWW, Irrigation & Agriculture allied activities	142.93	169.04	169.04
Residential Purpose	182.36	178.81	178.81
Start-up Power Tariff	12.36	14.66	14.66

Consumer Category	Tariff Order	Petition	Final True-up
Industries related to manufacturing of equipment for RE power generation	0.39	2.26	2.26
IT Industries	0.44	0.89	0.89
Temporary	-	-	-
Grand Total (A+B)	23,288.22	23,361.34	23,361.34

7.3 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 has submitted the Distribution Loss and Energy Balance for FY 2020-21, as shown in the Table below:

Table 7-5: Energy Balance for FY 2020-21 as submitted by CSPDCL (MU)

Sl.	Particulars	Tariff Order	Petition
1	LV Sales	11,992.89	14,138.53
2	HV Sales	7,847.00	6,704.03
3	Total Sales below EHV Level	19,839.89	20,842.39
4	Distribution Loss below 33 kV (in %)	16.00%	18.50%
5	Distribution Loss below 33 kV (in MU)	3,779.03	4,731.99
6	Gross Energy requirement at 33 kV Level	23,618.92	25,574.38
7	Less: Direct Input to distribution at 33 kV Level	150.75	351.77
8	Net Energy Input required at Distribution Periphery at 33 kV Level	23,468.17	25,222.61
9	Sales to EHV consumers	3448.33	2,518.78
10	Net energy requirement at Distribution periphery	26,916.50	27,741.39
11	Distribution loss including EHV Sales	13.96%	16.84%

Commission's View

In the previous Tariff Order, the Commission had directed CSPDCL to submit the energy input/output duly certified by CSLDC for the year for which True-up is being sought along with the next Tariff Petition. However, CSPDCL has not submitted such certification from CSLDC. For the purpose of true-up for FY 2020-21, the Commission has accepted the energy input as submitted by CSPDCL, after applying due prudence check on the data submitted by CSPTCL.

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, in the absence of which, the Commission may be constrained to reject the data submitted by CSPDCL.

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 2020-21.

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 2020-21, in the format adopted in the previous Tariff Order, is shown in the Table below:

Table 7-6: Approved Energy Balance and Distribution Loss for FY 2020-21

Sl.	Particulars	Tariff Order	Petition	Final True-up
A	Input: Total Energy available (MU)	27,067.25	28,093.16	28,093.16
	i. Available at 33 kV outgoing feeder	23,468.17	25,222.61	25,222.61
	ii. Injected by CPP/IPP at 33/11kV S/s	150.75	351.77	351.77
	iii. Available a EHV Level	3448.33	2518.78	2,518.78
B	Output: Total Energy Sales (MU)	23,288.22	23,361.34	23,361.33
	i. LV Sales	11,992.89	14,138.53	14,138.53
	ii. HV Sales	7,847.00	6,704.03	6,704.02
	iii. EHV Sales	3448.33	2518.78	2,518.78
C	Energy Loss below 33 kV (MU) $\{(A_i + A_{ii}) - (B_i + B_{ii})\}$	3,779.03	4,731.82	4,731.82
D	Energy Loss below 33 kV (%) $\{C/(A_i + A_{ii}) * 100\}$	16.00%	18.50%	18.50%
E	Distribution Loss Including EHV Sales (MU) $(A - B)$	3,779.03	4,731.82	4,731.83
F	Distribution loss including EHV Sales $(E/A * 100)$	13.96%	16.84%	16.84%

7.4 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 for FY 2020-21 was

18%. However, as per the MoU signed under Ujwal DISCOM Assurance Yojana (UDAY) Scheme, the Distribution Loss target for FY 2018-19 onwards 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 in consideration of the revised targets set by the Commission due to signing of UDAY MoU, CSPDCL has computed the under-achievement, which demonstrates a deduction of Rs. 106.40 Crore from the ARR, as shown in the Table below:

Table 7-7: Sharing of Loss on account of underachievement of Distribution loss for FY 2020-21 as submitted by CSPDCL (Rs. Crore)

Sl.	Particulars	Legend	Petition
1	Energy Input considered for Distribution Business (MU)	A	27,741.39
2	Total Sales (MU)	B	23,361.34
3	Power Purchase Cost (Rs. Crore)	C	13,871.46
4	Gross Power Purchase Quantum (MU)	D	34,990.15
5	Power Purchase Cost excluding Transmission Charges (Rs. Crore)	E	12,214.04
6	Power Sales to Marwah quantum (MU)	F	3,275.37
7	Less: Power Sale of Marwah (Rs. Crore)	G	1,477.92
8	Net Power Purchase Cost for Loss Sharing (Rs. Crore)	H = E - G	10,736.12
9	Per Unit Cost of Power Purchase (Rs/kWh)	I = H/D*10	3.07
10	Targeted Distribution Losses (%)	J	16.00%
11	Actual Distribution Losses (%)	K	18.50%
12	Under achievement (%)	L = K – J	2.50%
13	MU Shortfall	M = L*A	693.53
14	Loss Due to Under-achievement (Rs. Crore)	N=(M*I*1000)/100	212.80
15	CSPDCL Share (Rs. Crore)	O = N/2	106.40

CSPDCL further submitted that as the target revisions due to UDAY MoU did not involve any material revision to capital investment plan, which is necessary for reduction of distribution losses, hence, CSPDCL has not considered the aforesaid under-achievement in its ARR. Further, the Commission in the backdrop of no revision in capital investment plan, may evaluate under-achievement on the basis of pre-revised targets. CSPDCL submitted that the Commission has powers to relax the aforesaid provisions in accordance with Regulation 83 of the CSERC MYT Regulations, 2015.

Commission's View

As regards the target Distribution Losses, the CSERC MYT Regulations, 2015 specified 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 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.”

The Distribution Loss target below 33 kV approved by the Commission in the Tariff Order for FY 2020-21 based on the UDAY scheme, is 16.00%. The actual Distribution Loss below 33 kV achieved by CSPDCL during FY 2020-21 as submitted by CSPDCL and as computed by the Commission based on actual energy sales and power purchase, works out to 18.50%. Thus, CSPDCL has reported higher Distribution Loss for FY 2020-21, 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 Tariff Order for FY 2021-22, the Commission ruled that despite considering the assessed consumption as stated by CSPDCL, there is still significant under-achievement vis-à-vis the Distribution Loss target, hence, 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.”

Further, while computing the efficiency loss on account of higher than approved Distribution Losses, CSPDCL has excluded the Transmission Charges and quantum and cost of purchase from Marwah station of CSPGCL. As already ruled in the earlier Chapter on Review of the Tariff Order for FY 2021-22, the Transmission Charges should be excluded while computing the average cost of power purchase for the purpose of computing efficiency gains/losses on account of Distribution Losses, the quantum and cost of purchase from Marwah station of CSPGCL cannot be excluded.

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 7-8: Sharing of Loss approved by the Commission on account of underachievement of Distribution loss for FY 2020-21 (Rs. Crore)

Sl.	Particulars	Final True-up
1	Energy recorded at 33 kV Outgoing feeder of all EHV S/s (MU)	25,222.61
2	Add: Net Energy injected generators connected at 33/11 kV S/s (MU)	351.77
3	Add: Available at EHV level (MU)	2,518.78
4	Energy Input considered for Distribution Business (MU)	28,093.16
5	Distribution Losses (%) below 33 kV Level	18.50%
6	Targeted Distribution Losses (%)	16.00%
7	Over/(Under) achievement (%)	(2.50%)
8	Total Power Purchase Cost excluding Transmission Charges (Rs. Crore)	12,322.19
9	Power Purchase Quantum (MU)	35,192.15
9	Average Power Purchase Cost at Distribution Periphery (Incl. EHV) (Rs/kWh)	3.50
10	Under-achievement amount	(246.13)
11	Under-achievement to be borne by CSPDCL	(123.07)

The above impact of under-achievement to be borne by CSPDCL has been adjusted against the ARR of CSPDCL for FY 2020-21.

7.5 Power Purchase Cost

CSPDCL's Submission

CSPDCL has purchased power from different 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 (CSPTTrDCL) and other sources such as Power Exchanges, etc., to meet the energy requirement of the State during FY 2020-21.

CSPDCL submitted that the gross power purchase cost as per final audited accounts is Rs.13,871.46 Crore for purchase of 34,990.15 MU, i.e., average cost per unit of Rs. 3.96/kWh, which includes Transmission Charges of Rs. 1657.42 Crore. CSPDCL further submitted that it has purchased 592.80 MU through banking arrangement and has sold 806 MU through banking arrangement, with the cost of both the transactions being considered as NIL, in line with the Judgment of Hon'ble APTEL dated 1st July 2014 in Appeal No. 220 of 2013. CSPDCL also submitted that the Delayed Payment Charges (DPC) billed by CSPGCL, CSG Stations and Transmission Utilities has not been included in the power purchase cost claimed against CSPGCL.

CSPDCL has considered the revenue from sale of surplus power to Telangana and others as 1895.96 Crore. The net power purchase cost claimed by CSPDCL for purchase of 29,265.60 MU for FY 2020-21 is Rs. 11975.50 Crore, resulting in average cost per unit of Rs. 4.09/kWh, including the Transmission Charges.

Commission's View

The Commission has scrutinized the available records including the power purchase cost reflecting in the audited accounts of FY 2020-21, and the actual source-wise power purchase cost for FY 2020-21 as submitted by CSPDCL in its Petition and replies to queries.

CSPDCL has purchased power from CSPGCL Stations, CGS Stations, RE Sources, and Short-Term sources. CSPDCL has claimed gross power purchase cost of Rs.13,871.46 Crore for purchase of 34,990.15 MU, i.e., average cost per unit of Rs. 3.96/kWh, including Transmission Charges of Rs. 1657.42 Crore. CSPDCL has submitted that it has only considered the forward Banking and return Banking units and no cost has been considered against these units, in accordance with the related APTEL Judgment.

CSPDCL has claimed net power purchase cost of Rs. 11975.50 Crore for purchase of 29,265.60 MU for FY 2020-21 at an average cost of Rs. 4.09/kWh, including the Transmission Charges, and after netting off the revenue from sale of surplus power.

The Commission has analysed the source-wise power purchase quantum and costs and approved the same after prudence check in the final truing up for FY 2020-21, as discussed in the paragraphs below.

CSPGCL Stations

CSPDCL has claimed purchase of 17,271.68 MU at a cost of Rs. 5665.73 Crore from CSPGCL Stations. Subsequently, vide its Additional Submission dated 17th March 2022, CSPDCL submitted that it has inadvertently omitted the quantum of power purchase and sale in respect of intra-State DSM (RE generator, Open Access and CSPGCL) in Table 10 (Table 6 of revised True-up Chapter), which pertains to power purchase expenses for FY 2020-21. CSPDCL submitted the revised quantum to be considered against 'CSPGCL – Thermal & Hydro' as 16954.08 MU and the revised quantum to be considered against 'UI Purchase' as 178.09 MU. CSPDCL added that no additional commercial implication arises due to the said submission, as the gross and net power purchase cost remains the same.

The Commission has hence, considered power purchase of 17,419.96 MU at a cost of Rs. 5,665.73 Crore from CSPGCL stations for FY 2020-21 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, CSPGCL has passed on the surplus of Rs. 225.51 Crore to CSPDCL in FY 2020-21, as approved by the Commission after final true-up for FY 2017-18 and FY 2018-19. As a result, CSPGCL's billed amount is lower in FY 2020-21 to that extent. CSPDCL has considered this reduction of Rs. 225.51 Crore in power purchase expenses as well as in the overall summary True-up of ARR, thereby, double-counting this reduction of Rs. 225.51 Crore. Hence, the Commission has rectified CSPDCL's claim in this regard, by considering the reduction of Rs. 225.51 Crore only in the overall summary True-up of ARR, and added back Rs. 225.51 Crore against power purchase cost from CSPGCL for FY 2020-21.

The Commission has hence, approved power purchase of 17,419.96 MU at a total cost of Rs. 5,785.09 Crore from CSPGCL stations for FY 2020-21.

Central Generating Stations (CGS)

CSPDCL has claimed purchase of 12,297.06 MU at a cost of Rs. 4600.14 Crore from CGS Stations. The Commission has verified these expenses from the Audited Accounts.

The Commission asked CSPDCL to submit the details of 'Other Charges' of Rs. (136.04) Crore claimed by CSPDCL under CGS Power Purchase. Vide its reply dated 22nd February 2022, CSPDCL submitted the details of the 'Other Charges', as under:

Table 7-9: Details of 'Other Charges' under CGS Power Purchase for FY 2020-21 (Rs. Crore)

Sl.	Details	Amount (Rs. Crore)
1	Reversal of Provisioning of Power Banking for FY 2019-20 of 269.24 MU @ Rs. 3.72/kWh	(100.14)
2	One-time COVID-19 relief given by NTPC	(63.43)
3	One-time COVID-19 relief given by NHPC	(2.36)
4	Net of power banking provision and credit of COVID-19 relief given by NTPC & NHPC	29.89
	Total	(136.04)

As clarified by the Commission in the earlier Chapter on Review of FY 2022-22 Tariff Order, the Commission has not considered the "Provisioning of Power Banking for FY 2019-20", hence, the reversal of the provisioning to the extent of Rs. 100.14 Crore in FY 2020-21 as well as "power banking provision" of Rs. 29.89 Crore for FY 2020-21 have both not been considered under Power Purchase expenses against CGS in the true-up for FY 2020-21. Hence, the Commission has considered "Other Charges" as Rs. (65.79) Crore in the true-up for FY 2020-21.

The Commission sought confirmation from CSPDCL regarding whether the amount of rebate (in AFC and/or Transmission Charges and/or power purchase cost) received from various Parties on account of COVID-19, has been considered in the power purchase cost, and if considered, under which head it has been considered. In reply, CSPDCL submitted that the actual rebate received in terms of AFC of CGS and

Transmission Charges of PGCIL is Rs. 82.26 Crore and the same has already been adjusted in the respective power purchase expenses, and no further adjustment is required on this head.

The power purchase quantum and cost against other CGS sources, viz., NTPC, NTPC-SAIL, NPCIL and OHPCL, NHPCL, NEEPCO, etc., have been considered as submitted by CSPDCL.

The Commission has accordingly approved the quantum and cost of power purchase from CGS for FY 2020-21 as 12,297.07 MU at the cost of Rs. 4,670.39 Crore in the true-up for FY 2020-21.

Renewable Energy Sources

The Commission has scrutinised the source-wise details of RE purchase during FY 2020-21. The Commission has verified the rates of power purchase based on tariffs approved by the Commission in the past.

The Commission asked CSPDCL to submit the details of ‘Other Charges - RE’ of Rs. 187.09 Crore claimed by CSPDCL under RE Power Purchase. Vide its reply dated 9th February 2022, CSPDCL submitted the details of the ‘Other Charges - RE’, and stated that the cost was booked against “Provisioning for RPO Obligation” as under:

Table 7-10: Details of ‘Other Charges-RE’ under RE Power Purchase for FY 2020-21 (Rs. Crore)

RE Source	Total Sales (MU)	RPO Shortfall (MU)	RPO Shortfall (kWh)	Rate per kWh (Rs.)	Amount (Rs. Crore)
Solar	23361.33	1,011.04	1011040000	1.00	101.10
Non-Solar		859.90	859900000	1.00	85.99
Total		1,870.94	1870940000		187.09

The Commission sought clarification from CSPDCL whether this expense has actually been incurred, or is a provisioning for expense under the Accounts. Vide its reply dated 22nd February 2022, CSPDCL clarified that this amount is provisioning for expenses under accounts and is liable to be adjusted in subsequent years against actual expenses/reversals. CSPDCL requested that considering the aforesaid entry progressive in nature, the same may be treated as power purchase expenses for FY 2020-21.

The same issue has been addressed in the earlier Chapter on Review of the Tariff Order for FY 2021-22.

The Commission disallows the provisioning of Rs. 187.09 Crore done by CSPDCL under cost of power purchase from RE sources in the true-up for FY 2020-21. Further, **the Commission has given a directive to CSPDCL to submit details and reconciliation of year-wise amount provisioned against “RPO Obligation” or any such similar name/purpose till date, and actual amount spent/utilised against this provisioning till date. This data is to be submitted along with the true-up Petition for each year, henceforth. Also, CSPDCL is directed to ensure that all past shortfall w.r.t. RPO target be fulfilled by utilising the funds provisioned under “RPO Obligation” or any such similar name/purpose till date, and ensure that such expenses towards meeting RPO obligations not be claimed separately, till such time as the entire provisioning amount is exhausted.**

The Commission has approved the quantum and cost of purchase from RE sources, viz., Biomass, Solar, and Hydel/Other RE as submitted by CSPDCL, after verification from the Audited Accounts of FY 2020-21.

The Commission has accordingly approved the quantum and cost of power purchase from RE Sources for FY 2020-21 as 1,547.71 MU at the cost of Rs. 1,007.87 Crore in the true-up for FY 2020-21.

Power Purchase from CSPTrdCL (Concessional Power)

It is observed that CSPDCL has purchased 2,395.56 MU during FY 2020-21 at an average rate of Rs. 1.86/kWh. The Commission has accepted the submission of CSPDCL and considered the cost of Rs. 444.52 Crore towards purchase of Concessional Power for FY 2020-21.

Other Sources

During FY 2020-21, CSPDCL has purchased 469.09 MU from short-term sources such as Traders and Power Exchanges at a cost of Rs. 193.06 Crore at an average rate of Rs. 4.12/kWh. The Commission, after due prudence check, has accepted the total cost of short-term purchase of Rs. 193.06 Crore, as submitted by CSPDCL.

CSPDCL has also shown power purchase of 1 MU at an exorbitant cost of Rs. 14.12 Crore from Border Villages for FY 2020-21. In response to the Commission's query in this regard, CSPDCL submitted that the rate of power purchase from Janakpur village has been higher, which has impacted the overall power purchase from the border villages. Subsequent to energization of new 33 kV feeder of approximate length 100 km emanating from 132 kV Sub-station Manendragarh, which was pending due to issues of forest clearances in 2019, the main supply from Madhya Pradesh (MP) being billed on border village tariff turned redundant. Later on, the aforesaid connection was terminated in October 2020. The excessive rate during FY 2020-21 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 received of 290.87 MU of Unscheduled power at a nominal rate of 2 paise/kWh, with total cost of Rs. 0.59 Crore. In its Petition, CSPDCL has considered 124.37 MU against Unscheduled Interchange (UI) purchase at a cost of Rs. 134.53 Crore.

The Commission has accepted such UI power purchase as submitted by CSPDCL.

Banking Purchase and Sale

CSPDCL has submitted that it purchased 592.80 MU through banking arrangement and sold 806 MU of banked power during FY 2020-21. CSPDCL has stated that it has considered the cost of banking purchase and sale in FY 2020-21 as Nil, in accordance with the Judgment of the Hon'ble APTEL dated 1st July 2014 in Appeal No. 220 of 2013.

The relevant extract of the Judgment is reproduced below:

“In the present case, the electricity is actually available to distribution licensee during financial year when it requires the electricity. The said electricity has been accounted for and has been supplied to the consumers but the same ought not to be taken for calculating the total quantum of electricity available with the distribution licensee during the year only for the purposes of calculation of APPC. We may further observe that there can be no notional cost attributed to such banked energy and the cost, if any, has to be included in the total power purchase cost of the distribution licensee when the corresponding electricity is supplied to the third party. In our view, the State Commission has correctly taken the price of the banked energy as available with the distribution licensee/HPSEBL at a zero cost. The banking is a continuous transaction. The principle of banking of energy is that the electricity received by the distribution licensee is to be returned. When the banked energy is rolled over, its return is only postponed. It is not that electricity is not to be received. The quantum of electricity to be returned would only increase in the subsequent years in future to compensate for the roll over and thereby increase the APPC substantially.”

Though CSPDCL has been specifically claiming in all its Petitions that it has considered the cost of banking purchase and sale as Nil in accordance with the above-said Judgment of the Hon’ble APTEL, the Commission has observed earlier in this Chapter and the earlier Chapter on Review of the Tariff Order for FY 2021-22 that CSPDCL has been including the provision made against such banked power quantum every year in its Petitions.

The Commission has not considered the provisioning made by CSPDCL towards power banking in FY 2020-21 under the power purchase cost. Further, the Commission has given a directive to CSPDCL to submit details and reconciliation of year-wise amount provisioned against Banked Power till date, and actual amount spent/utilised against this provisioning till date. This data is to be submitted along with the true-up Petition for each year, henceforth. Also, CSPDCL is directed to ensure that all expenses towards return of banked power be fulfilled by utilising the funds provisioned against Banked Power or any such similar name/purpose till date, and ensure that such expenses are not claimed separately, till such time as the entire provisioning amount is exhausted.

In future, CSPDCL shall not include the expenses provisioned against banked power in its power purchase cost, and shall consider the actual expenses incurred for the banking return, once the amount of provisioning made till date is exhausted. CSPDCL shall submit a complete passbook of forward banking and return banking showing all transactions in energy terms till date, including the amount of expense provisioning done, expense provisioning set off till date, and balance provisioning available for future set-off, along with the true-up Petition for each year. In the absence of such complete data, the Commission may be constrained to disallow a part of the power purchase expenses in future Orders.

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 2020-21.

Delayed Payment Charges

The Commission notes that the power purchase cost booked in the audited accounts of CSPDL for FY 2020-21 includes DPC of Rs. 560.26 Crore against CSPGCL, provision for surcharge of Rs. 10.21 Crore, and small amounts of DPC against PTC, WLDC, NPCIL, etc., which amounts to total of Rs. 571.19 Crore.

CSPDCL submitted that it has not claimed the DPC booked in the Accounts of FY 2020-21 under the power purchase expenses in the true-up for FY 2020-21, which has been verified by the Commission.

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. 571.19 Crore in the final true-up for FY 2020-21.

Reactive Charges and RRAS

CSPDCL has claimed expense of Rs. 0.38 Crore against Reactive Charges. The Commission has verified CSPDCL's claim and considered the same in the true-up for FY 2020-21.

CSPDCL has also considered credit amount of Rs. (34) against RRAS settlement. In reply to the Commission's query, CSPDCL submitted the break-up of the RRAS settlement and stated that the credit amount has been adjusted against the gross power purchase cost being a revenue receipt. The Commission has verified CSPDCL's claim and considered the same in the true-up for FY 2020-21.

Transmission Charges

CSPDCL has claimed inter-State Transmission Charges of Rs. 724.69 Crore, intra-State Transmission Charges of Rs. 921.07 Crore, and CSLDC Charges of Rs. 11.66 Crore, totalling to Transmission Charges of Rs. 1657.42 Crore.

In response to the Commission's query, CSPDCL submitted the break-up of inter-State Transmission Charges in the same format as submitted in the Review for FY 2018-19 and FY 2019-20.

The Commission has scrutinized the Transmission Charges as submitted by CSPDCL for FY 2019-20 in its true-up Petition and verified the same from the audited Accounts of FY 2020-21. CSPTCL's claim of Transmission Charges tallies with the amount booked in the Audited Accounts, excluding the DPC amount, which has not been claimed by CSPDCL.

The Commission has allowed the inter-State Transmission Charges 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 2020-21, i.e., Rs. 927.24 Crore. Further, CSPTCL has passed on the surplus of Rs. 53.08 Crore to CSPDCL in FY 2020-21, as approved by the Commission after final true-up for FY 2017-18 and FY 2018-19. As a result, CSPTCL's billed amount is lower in FY 2020-21 to that extent. CSPDCL has considered this reduction of Rs. 53.08 Crore in power purchase expenses as well as in the overall summary True-up of ARR, thereby, double-counting this reduction of Rs. 53.08 Crore. Hence, the Commission has rectified CSPDCL's claim in this regard, by considering the reduction of Rs. 53.08

Crore only in the overall summary True-up of ARR, and added back Rs. 53.08 Crore against intra-State Transmission Charges of CSPTCL for FY 2020-21.

CSPDCL has claimed CSLDC Charges of Rs. 11.66 Crore for FY 2020-21, as against CSLDC's claim of revenue of Rs. 17.29 Crore for FY 2020-21. In reply to the Commission's query in this regard, CSPDCL submitted that the revenue claimed by CSLDC is summation of bills raised to CSPDCL and CSPGCL. Against the aforesaid revenue, CSPDCL has incurred an expenditure of Rs.11.66 Crore. The CSLDC charges billed to CSPGCL are included in the power purchase expenses of CSPGCL in the true up Petition of CSPDCL. The Commission has verified CSPDCL's explanation in this regard, and accepts CSPDCL's claim of Rs. 11.66 Crore against CSLDC Charges for FY 2020-21.

However, CSLDC has passed on the Revenue Gap of Rs. 3.18 Crore to CSPDCL in FY 2020-21, as approved by the Commission after final true-up for FY 2017-18 and FY 2018-19. As a result, CSLDC's billed amount is higher in FY 2020-21 to that extent. CSPDCL has considered this Gap of Rs. 3.18 Crore in power purchase expenses as well as in the overall summary True-up of ARR, thereby, double-counting this additional amount of Rs. 3.18 Crore. Hence, the Commission has rectified CSPDCL's claim in this regard, by considering the addition of Rs. 3.18 Crore only in the overall summary True-up of ARR, and deducted Rs. 3.18 Crore against CSLDC Charges for FY 2020-21.

In view of the above, after due prudence check, the Commission approves the Transmission Charges of Rs. 1,713.49 Crore for FY 2020-21.

Revenue from Sale of Surplus Power

CSPDCL has submitted the revenue from sale of surplus power for FY 2020-21. 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, and considering the revenue from sale of surplus power under revenue rather than to reduce the gross power purchase expenses. The revenue from sale of surplus power considered by the Commission is shown in the Table below:

Table 7-11: Revenue from Sale of Power as approved by the Commission

Particulars	MU	Rs. Crore	Rs/kWh
Sale of Surplus Power to Telangana	3,275.37	1,477.92	4.51
Sale of Surplus Power to Power Exchange	1,469.87	367.69	2.50
UI Sale	221.78	50.35	2.27
Banking Sale	806.00		
Grand Total	5773.02	1895.95	3.28

The source-wise power purchase quantum and cost considered by the Commission after final true-up for FY 2020-21, is shown in the Table below:

Table 7-12: Approved Power Purchase Cost after True-up for FY 2020-21 (Rs. Cr.)

Source	Tariff Order			Petition			Final True-up		
	Quantum (MU)	Cost (Rs. Cr.)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr.)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr.)	Rate (Rs./kWh)
Central Generating Stations	11,352.57	3,753.34	3.31	12,297.07	4,600.14	3.74	12,297.07	4,670.39	3.80
NTPC	10,745.10	3,537.91	3.29	11,243.96	4,300.43	3.82	11,243.96	4,300.43	3.82
NTPC-SAIL (NSPCL)	24.78	61.99		219.90	115.62	5.26	219.90	115.62	5.26
NPCIL	568.74	235.20	4.14	303.81	108.36	3.57	303.81	108.36	3.57
Others (NVVN, Hirakud, Subhansiri)	13.95	3.17	2.27	529.39	211.77	4.00	529.39	211.77	4.00
Less: Rebate in AFC – COVID-19	-	(84.92)	-		-			-	
Other Charges	-	-	-	-	(136.04)	-	-	(65.79)	-
CSPGCL	20,050.21	6,698.37	3.34	17,419.96	5,665.73	3.25	17,419.96	5,890.73	3.38
Total CSPGCL Thermal & Hydro	19,677.08	6,627.88	3.37	16,954.08	5,560.09	3.28	16,954.08	5,785.09	3.41
CSPGCL – Renewables	373.13	70.49	1.89	465.88	105.64	2.27	465.88	105.64	2.27
Short-term Purchase	124.49	37.35	3.00	469.09	193.06	4.12	469.09	193.06	4.12
Concessional Power - through CSPTrdCL	1,530.87	244.94	1.60	2,395.56	444.52	1.86	2,395.56	444.52	1.86
Others - Renewables	1,351.93	1,006.70	7.45	1,547.71	1,194.96	7.72	1,547.71	1,007.87	6.51
Biomass	686.28	421.38	6.14	886.58	610.52	6.89	886.58	610.52	6.89
Solar	571.60	371.10	6.49	487.90	287.08	5.88	487.90	287.08	5.88
Hydel/Other RE	94.05	36.21	3.85	173.23	110.27	6.37	173.23	110.27	6.37
Other Charges - RE		178.02			187.09		-	-	-
Transmission Charges	-	1,589.87	-	-	1,657.42			1,713.49	
Inter-State Transmission Charges	-	603.93	-	-	724.69	-	-	724.69	-
Intra-State Transmission Charges	-	1,002.42	-	-	921.07	-	-	980.32	-
CSLDC Charges	-	13.71	-	-	11.66	-	-	8.48	-

Source	Tariff Order			Petition			Final True-up		
	Quantum (MU)	Cost (Rs. Cr.)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr.)	Rate (Rs./kWh)	Quantum (MU)	Cost (Rs. Cr.)	Rate (Rs./kWh)
Less: Rebate in AFC – COVID-19	-	(30.20)	-	-	-	-	-	-	-
Unscheduled Power				290.87	0.59	0.02	290.87	0.59	0.02
UI Purchase	-	-	-	178.09	134.53	7.55	178.09	134.53	7.55
Border Villages	-	-	-	1.00	14.12	-	1.00	14.12	-
Banking Purchase	-	-	-	592.80	-	-	592.80	-	-
Reactive Charges	-	-	-		0.38			0.38	
RRAS Settlement	-	-	-		(34.00)			(34.00)	
Gross Power Purchase Cost excluding Transmission Charges	-	-	-	35,192.15	12,214.04	3.47	35,192.15	12,322.19	3.50
Gross Power Purchase Cost including Transmission Charges	34,410.08	13,330.57	3.87	35,192.15	13,871.45	3.94	35,192.15	14,035.68	3.99
Less: Adjustments	6,159.09	2,515.08	4.08	5,773.02	1,895.95	3.28	5,773.02	1,895.95	3.28
Sale to Telangana*	6,159.09	2,515.08	4.08	3,275.37	1,477.92	4.51	3,275.37	1,477.92	4.51
Sale of Surplus power to Power Exchange*	-	-	-	1,469.87	367.69	2.50	1,469.87	367.69	2.50
UI Sales	-	-	-	221.78	50.35	2.27	221.78	50.35	2.27
Banking Sale	-	-	-	806.00		-	806.00		-
Net Power Purchase Cost	28,250.99	10,815.48	3.83	29,419.13	11,975.50	4.07	29,419.13	12,139.72	4.13

*Note - *Sale of surplus power approved by the Commission is included in Revenue in subsequent Section of this Order*

The Commission approves Gross Power Purchase Cost of Rs. 14,035.68 Crore and Net Power Purchase Cost of Rs. 12,139.72 Crore after final Truing-up of FY 2020-21.

7.6 O&M Expenses

CSPDCL's Submission

Based on audited accounts, CSPDCL submitted the O&M expenses of Rs. 1,385.31 Crore for FY 2020-21 excluding terminal benefits (pension and gratuity), as shown in the Table below:

Table 7-13: Actual O&M expenses as submitted by CSPDCL (Rs. Cr.)

Sl. No.	Particulars	Tariff Order	Petition
1	Employee Costs	900.97	871.65
2	A&G Expenses	143.27	149.08
3	R&M Expenses	133.15	364.57
4	Interim Wage Relief	76.38	
5	Total O&M Expenses	1,253.77	1,385.31

CSPDCL requested the Commission to approve actual employee expenses of Rs 871.65 Crore for FY 2020-21 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 7-14: Details of contract services as submitted by CSPDCL (Rs. Cr.)

Sl.	Particulars	A&G Exp.	R&M Exp.
1	Security services	1.58	-
2	Meter reading and other manpower service contracts	89.39	-
3	33/11 kV operations & Other manpower service contracts	-	49.68
4	Grand Total	90.98	49.68

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 2020-21 by escalating the normative A&G expenses and R&M expenses of FY 2019-20 with the increase in WPI of 1.27%.

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 gain against A&G expenses as Rs. 42.30 Crore and efficiency loss against R&M expenses as Rs. 91.13 Crore for FY 2020-21, after excluding the A&G expenses and R&M expenses that should be considered as employee expenses.

Commission's View

The Commission had approved O&M expenses of Rs. 1,253.77 Crore in the Tariff Order for FY 2020-21, including impact of Interim Wage Relief. As against this, CSPDCL has claimed actual O&M Expenses of Rs. 1,385.31 Crore for FY 2020-21 based on audited accounts.

Actual O&M Expenses

CSPDCL has claimed actual employee expenses of Rs 871.65 Crore for FY 2020-21 based on the Audited Accounts. The Interim Wage Revision component allowed in the Tariff Order for FY 2020-21 has not been claimed separately, and is included in the actual employee expenses. The Commission has verified the actual employee expenses from the Audited Accounts of FY 2020-21, and allows the actual employee expenses as claimed by CSPDCL.

CSPDCL has claimed A&G Expenses of Rs. 149.08 Crore in the final true-up for FY 2020-21. The Commission notes that CSPDCL's claim for A&G expenses includes penalty charges of Rs. 2.22 lakh and compensation of Rs. 17 lakh paid to outsiders against injury. 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. Hence, the Commission has disallowed expenses of Rs. 0.02 Crore for FY 2020-21 under these heads, while approving the actual A&G expenses.

CSPDCL has claimed actual R&M Expenses of Rs. 354.57 Crore for FY 2020-21. The Commission has verified these expenses from the Audited Accounts of FY 2020-21, and allows 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 7-15: Actual O&M expenses as considered by the Commission (Rs. Crore)

Sl.	Particulars	Tariff Order	Petition	True-up
1	Employee Costs	900.97	871.65	871.65
2	A&G Expenses	143.27	149.08	149.06
3	R&M Expenses	133.15	364.57	364.57
4	Interim Wage Relief	76.38		
5	Total O&M Expenses	1,253.77	1,385.31	1,385.28

Normative O&M Expenses

Regulation 57.4 of the CSERC MYT Regulations, 2015 specifies as under:

- “
- (a) *Operation and Maintenance (O&M) Expenses for the distribution licensee shall include:*
 - I. *Employee Cost;*
 - II. *Administrative and general Expenses*
 - III. *Repairs and Maintenance Expenses*
 - (b) *The Commission shall stipulate a separate trajectory for each of the components of O&M expenses viz. employee cost, R&M expense and A&G expense for the control period.*
 - (c) *The employee cost, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 2015-16 shall be derived on the basis of the normalized average of the actual employee expenses, excluding pension fund contribution and impact of pay revision arrears, available in the accounts for the previous five years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission. Any other expense of non-recurring nature shall also be excluded while determining normalized average for the previous five years.*
 - (d) *The normalization shall be done by applying last five years average increase in Consumer Price Index (CPI) on year to year basis. The average of normalized net present value for FY 2010-11 to FY 2014-15, shall then be used to project base year value for FY 2015-16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the employee expenses (excluding impact of pension fund contribution and pay revision, if any) for each year of the control period.*

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

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

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 2020-21.

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 CSERC MYT Regulations, 2015 do not allow such treatment for A&G expenses and R&M expenses. 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 1.27% for R&M expenses and A&G Expenses for FY 2020-21 based on the applicable WPI.

The revised normative A&G expenses and R&M expenses approved for FY 2020-21 are shown in the Table below:

Table 7-16: Revised Normative R&M and A&G Expenses for FY 2020-21 (Rs. Crore)

Sl.	Particulars	Petition	True-up
1	A&G Expenses	142.70	142.70
2	R&M Expenses	132.63	132.63

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 truing-up of FY 2020-21 after due prudence check, are considered without any sharing of efficiency gains/losses. The Commission therefore, approves employee cost of Rs. 871.65 Crore after Truing-up for FY 2020-21.

As per the provisions in the Regulations for sharing of gains/(losses) of O&M expenses, the Commission has computed the efficiency gains/losses for FY 2020-21 on the basis of revised normative A&G expenses and R&M expenses, in accordance with the CSERC MYT Regulations, 2015, as shown in the following Table:

Table 7-17: 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	142.70	149.06	6.36	3.18	3.18
R&M Expenses	132.63	364.57	231.95	115.97	115.97
Total	275.33	513.63	238.31	119.15	119.15

The Commission approves the sharing of efficiency loss of Rs. 119.15 Crore after true-up for FY 2020-21.

7.7 Contribution to Pension and Gratuity

CSPDCL's submission

CSPDCL claimed the contribution to Pension and Gratuity of Rs. 422.51 Crore for FY 2020-21 as approved in the Tariff Order dated 30th May 2020.

Commission's View

The Commission has considered the contribution to Pension and Gratuity of Rs. 422.51 Crore for FY 2020-21 as approved in the Tariff Order dated 30th May 2020.

7.8 Capital Structure

CSPDCL's submission

CSPDCL has determined the capital structure for FY 2020-21 based on the following principles:

- The actual loan addition for FY 2020-21 has been considered as Rs. 309.88 Crore based on the Audited Accounts;
- Addition in consumer contribution/grants has been considered as Rs. 74.34 Crore as per the Audited Accounts for FY 2020-21;
- Normative equity addition has been considered based on capital restructuring methodology as approved by the Commission in the Tariff Order dated July 12, 2013;
- GFA addition has been considered as Rs. 850.96 Crore as per the Audited Accounts for FY 2020-21.

CSPDCL submitted the Capital Structure for FY 2020-21 as given in the Table below:

Table 7-18: Capital Structure for FY 2020-21 as submitted by CSPDCL (Rs. Crore)

Particulars	Legend	Petition
Gross Fixed Assets (GFA)		
Opening GFA	A	8,918.39
Opening CWIP	B	3,189.96
Opening CAPEX	$C=A+B$	12,108.35
Capitalization during the year	D	850.96
Closing GFA	$E=D+A$	9,769.35
Closing CWIP	F	3,284.50
Closing CAPEX	$G=F+E$	13,053.85
Grants and Consumer Contribution		
Opening Grant and Contribution	H	5,415.39
Consumer contribution/grants during the year	I	74.34
Closing Consumer Contribution	$J=H+I$	5,489.73
Consumer Contribution in Opening GFA	$K=H*A/C$	3,988.70
Consumer Contribution in Closing GFA	$L=J*E/G$	4,108.45
Loan Borrowed		
Opening Borrowed Loan	M	2,816.14
Loan Borrowed during the year	N	309.88
Closing Borrowed Loan	$O=M+N$	3,126.02
Borrowed Loan in Opening GFA	$P=M*A/C$	2,074.22
Borrowed Loan in Closing GFA	$Q=MAX(O*E/G, P)$	2,339.48
Equity		
Opening Gross Equity	$R=C-H-M$	3,876.82
Equity Addition During the Year	$T=S-R$	561.28
Closing Gross Equity	$S=G-J-O$	4,438.10
Gross Equity in Opening GFA	$U=A-K-P$	2,855.47
Gross Equity in Closing GFA	$V=C-L-Q$	3,321.42
Average Gross Equity During the year	$W=Avg. (U, V)$	3,088.45
Funding of Capitalized Assets		
Total Capitalization		850.96
Contribution of Grant in Capitalized Assets		119.75
Contribution of Equity in Capitalized Assets		511.85
Contribution of Loan in Capitalized Assets		219.36

Commission's View

The approved closing balance after final True-up of FY 2019-20 has been considered as the opening balance of FY 2020-21 for Gross Fixed Assets (GFA), Capital Work in Progress (CWIP), Capital Expenditure, Grants/Consumer Contribution, Loan and Equity.

The addition to GFA, Grant/Consumer Contribution has been considered for FY 2020-21 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 2020-21 are shown in the Table below:

Table 7-19: Approved GFA and Funding for FY 2020-21 (Rs. Crore)

Sl.	Particulars	Petition	True-Up
	Gross Fixed Assets (GFA)		
1	Opening GFA	8918.39	8918.39
2	Capitalisation during the year	850.96	850.96
3	Closing GFA	9769.35	9769.35
	Funding of Capitalisation		
4	Grant	119.75	119.75
5	Equity	219.36	219.36
6	Debt	511.85	511.85
7	Total Capitalisation	850.96	850.96

The Commission approves the total capitalization of Rs. 850.96 Crore and its funding after true-up for FY 2020-21 as shown in the Table above.

7.9 Depreciation

CSPDCL's Submission

CSPDCL submitted that depreciation has been calculated as per Regulation 24 of the CSERC MYT Regulations, 2015. CSPDCL has claimed depreciation of Rs. 277.57 Crore for FY 2020-21.

Commission's View

For the purpose of final true-up for FY 2020-21, 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 group. Accordingly, the weighted average depreciation rates has been computed as 5.53% for FY 2020-21.

The Commission has considered the depreciation on fully depreciated assets for FY 2020-21 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 2020-21 is shown in the Table below:

Table 7-20: Approved Depreciation for FY 2020-21 (Rs. Crore)

Particulars	Tariff Order	Petition	True-up
Opening GFA	11135.61	8918.39	8918.39
Additional Capitalisation during the Year	668.25	850.96	850.96
Closing GFA	11803.86	9769.35	9769.35
Average GFA for the year	11469.74	9343.87	9343.87
Depreciation Rates (%)	4.95%	5.53%	5.53%
Gross Depreciation	567.66	516.90	516.93
<i>Less: Depreciation on consumer contribution on live assets</i>	328.08	176.92	176.92
<i>Less: Depreciation on Fully Depreciated Assets</i>	16.94	16.51	16.51
<i>Less: Depreciation on assets converted from loan to grant under UDAY</i>	-	46.20	46.20
Net Depreciation	222.64	277.57	277.30

The Commission approves the total depreciation of Rs. 277.30 Crore after true-up for FY 2020-21 as shown in the Table above.

7.10 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 9.96% has been considered for FY 2020-21 based on the actual loan portfolio for the year. CSPDCL claimed the interest on loan capital as Rs. 183.44 Crore for FY 2020-21.

Commission's View

The closing Net normative loan approved in final True-up for FY 2019-20 has been considered as opening net normative opening loan for FY 2020-21. Loan addition during FY 2020-21 has been considered based on the approved capitalisation and funding for FY 2020-21, as discussed in the 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 2020-21. The actual weighted average interest rate has been computed as 9.96% for FY 2020-21, based on the interest expenses paid against the outstanding debt.

The interest expense approved for FY 2020-21 after final true-up is shown in the Table below:

Table 7-21: Approved Interest Expenses for FY 2020-21 (Rs. Crore)

Particulars	Tariff Order	Petition	True-up
Opening Net Normative Loan	2027.65	1693.55	1693.55
Repayment during the year	222.64	277.57	277.30
Normative loan addition during the year	70.03	511.85	511.85
Closing Net Normative Loan	1875.04	1927.83	1928.10
Average Normative loan during the year	1951.35	1810.69	1810.82
Weighted Average Rate of Interest	8.24%	9.96%	9.96%
Interest Expenses	160.75	180.41	180.36
Add: Other Finance Charges	-	3.03	3.03
Total Interest on Loan	160.75	183.44	183.39
Less: Impact of UDAY Scheme	70.24		
Net Interest on Loan	90.51		

The Commission approves the Interest on Loan of Rs. 183.39 Crore after true-up for FY 2020-21, as shown in the Table above.

7.11 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. 100.38 Crore for FY 2020-21 as per the Audited Accounts.

Commission's View

The Commission has verified the actual interest paid on the CSD as per the Audited Accounts for FY 2020-21. Accordingly, the Commission approves interest on CSD of Rs. 100.38 Crore for FY 2020-21, as shown in the Table below:

Table 7-22: Approved Interest on CSD for FY 2020-21 (Rs. Crore)

Particulars	Tariff Order	Petition	True-up
Interest on CSD	132.04	100.38	100.38

7.12 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 11.65% for computing the IoWC for FY 2020-21.

CSPDCL submitted the normative IoWC as Rs. (125.65) Crore for FY 2020-21.

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. 2,337.71 Crore for FY 2020-21, as per the Audited Accounts submitted by CSPDCL. The interest rate for computing IoWC has been considered as equal to the SBI Base Rate as on 1st April of 2020 (8.15%) plus 350 basis points, i.e., 11.65% for FY 2020-21, in accordance with the CSERC MYT Regulations, 2015. The normative IoWC for FY 2020-21 works out to be negative, as shown in the Table below:

Table 7-23: Approved IoWC for FY 2020-21 (Rs. Crore)

Particulars	Tariff Order	Petition	True-up
O&M Expenses for one month	98.12	95.58	95.58
Maintenance spares @ 40% of R&M expenses	53.26	53.05	53.05
Receivables equal to 1 month of revenue from sale of power	1,151.06	1,110.54	1,110.54
Total Working Capital	1,302.44	1,259.17	1,259.17
Less: Security Deposit	2,226.58	2,337.71	2,337.71
Net Working Capital Requirement	(924.14)	(1,078.54)	(1,078.54)
Rate of Interest (%)	12.45%	11.65%	11.65%
Interest on Working Capital requirement	(115.06)	(125.65)	(125.65)

The Commission approves the Interest on Working Capital of Rs. (125.65) Crore after true-up for FY 2020-21, as shown in the Table above.

7.13 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 2020-21. CSPDCL has claimed Return on Equity of Rs. 326.02 Crore for FY 2020-21.

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 2019-20, as the opening permissible equity for FY 2020-21. The

equity portion of the additional capitalisation for FY 2020-21 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 true-up for FY 2020-21 is shown in the Table below:

Table 7-24: Approved RoE for FY 2020-21 (Rs. Crore)

Particulars	Tariff Order	Petition	True-up
Permissible Equity in Opening GFA	1598.00	1,927.95	1,927.95
Permissible Equity in Closing GFA	1701.22	2,147.31	2,147.31
Average Equity during the year	1649.61	2,037.63	2,037.63
Rate of Return (%)	16.00%	16%	16%
Return on Equity	263.94	326.02	326.02

The Commission approves Return on Equity of Rs. 326.02 Crore after true-up for FY 2020-21, as shown in the Table above.

7.14 Non-Tariff Income

CSPDCL's Submission

CSPDCL submitted Non-Tariff Income (NTI) of Rs. 185.43 Crore for FY 2020-21 based on the Audited Accounts, comprising Rs. 55.10 Crore towards Non-Tariff income and Rs. 130.33 Crore towards revenue from Wheeling Charges, Open Access and Cross-Subsidy Charges. CSPDCL submitted that the amount of Rs. 176.62 Crore considered under the head Other Income in the Audited Accounts of FY 2020-21 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.

CSPDCL further submitted that an amount of Rs. 9.20 Crore has been taken under the head Other Income in the Audited Accounts. CSPDCL submitted that this amount pertains to the back-to-back arrangement of CSPDCL with GoCG, wherein CSPDCL has taken loan against the receivables from GoCG and the interest on the same is being paid by GoCG. Thus, the entry of Rs. 9.20 Crore is a balancing entry and hence, does not qualify for Non-Tariff Income.

Commission's View

The Commission notes that CSPDCL has claimed Non-Tariff Income of Rs. 185.43 Crore for FY 2020-21.

The Commission accepts CSPDCL's justification regarding non-consideration of the amounts of Rs. 176.62 Crore and Rs. 9.20 Crore, and has not considered this interest income under Non-Tariff Income. The Commission has considered the actual Non-Tariff income for FY 2020-21 based on the audited accounts.

The Non-Tariff Income approved after true-up for FY 2020-21 is shown in the Table below:

Table 7-25: Approved Non-Tariff Income for FY 2020-21 (Rs. Crore)

Particulars	Tariff Order	Petition	True-up
Non-Tariff Income	368.97	55.10	55.10
Wheeling Charges, Open Access & CSS	176.25	130.33	130.33
Total Non-Tariff Income	545.22	185.43	185.43

The Commission approves Non-Tariff Income of Rs. 185.43 after true-up for FY 2020-21.

7.15 Aggregate Revenue Requirement

The summary of ARR approved in the True-up for FY 2020-21, based on the approved values of different components of the ARR, is shown in the Table below:

Table 7-26: Approved ARR for FY 2020-21 (Rs. Crore)

Sl.	Particulars	Tariff Order	Petition	True-up
A	Gross Power Purchase Expenses	13,330.57	13,871.46	14,035.68
1	Power Purchase Cost	11,740.70	12,214.04	12,322.19
2	Inter-State Transmission charge	573.74	724.69	724.69
3	Intra-State Transmission Charges	1,002.42	921.07	980.32
4	CSLDC Charges	13.71	11.66	8.48
B	Operation & Maintenance Expenses	1,676.28	1,807.85	1,807.79
1	Net Employee Expenses	900.97	871.65	871.65
2	Net A&G Expenses	143.27	149.08	149.06
3	Net R&M charges	133.15	364.57	364.57
4	Pension & Gratuity	422.51	422.51	422.51
5	Interim Wage Relief	76.38		
C	Interest & Finance Expenses	107.49	158.16	158.11
1	Interest on Loan	90.51	183.44	183.39
2	Interest on Security Deposit	132.04	100.38	100.38
3	Interest on Working Capital Requirement	(115.06)	(125.65)	(125.65)
D	Other Expenses	432.86	603.59	603.32
1	Depreciation	168.92	277.57	277.30
2	Return on Equity	263.94	326.02	326.02
E	Gain/(Loss) on Efficiency		(48.83)	(242.22)
1	Gain/(Loss) on Sharing O&M Efficiency		(48.83)	(119.15)
2	Gain/(Loss) on account of Distribution Losses			(123.07)
F	Less: Non-Tariff Income	545.22	185.43	185.43
1	Non-Tariff Income	441.53	55.10	55.10
2	Wheeling Charges, Open Access & Cross Subsidy Charges	103.69	130.33	130.33
G	Aggregate Revenue Requirement	15,001.98	16,206.78	16,177.25

Note: The revenue from sale of power to Telangana, surplus power, and UI sale have been considered under Revenue, in the true-up for FY 2020-21

7.16 Revenue from Sale of Power

CSPDCL's Submission

CSPDCL submitted the total revenue from sale of power as Rs. 15,222.26 Crore for FY 2020-21 as per Audited Accounts, as against revenue of Rs. 16,246.14 approved by the Commission in the Tariff Order, including the revenue from sale of surplus power and sale of power to Telangana. CSPDCL has included the revenue subsidy of Rs. 198.97 Crore provided by GoCG on account of UDAY Scheme in the revenue considered in the Petition. The revenue of Rs. 1895.96 Crore from sale of surplus power is included in the total revenue of Rs. 15,222.26 Crore for FY 2020-21.

Commission's View

The Commission notes that CSPDCL has submitted the revenue from sale of power as Rs. 15,222.26 Crore for FY 2020-21 based on the audited accounts of the respective years. Further, CSPDCL has included the revenue subsidy of Rs. 198.97 Crore provided by GoCG on account of UDAY Scheme in the revenue for FY 2020-21.

As per the methodology adopted in previous Tariff Orders, the Commission has treated revenue on account of sale of surplus power as revenue in the true-up for FY 2020-21. 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 2020-21 towards Agriculture category.

The Commission has accordingly considered total Revenue for FY 2020-21 as shown in the Table below:

Table 7-27: Approved Revenue for FY 2020-21 (Rs. Crore)

Particulars	Tariff Order	Petition	True-up
Revenue from Retail Sale of Electricity	13,731.06	13,127.33	13,127.33
Add: Subsidy from State Government	-	198.97	198.97
Add: Additional revenue for Agriculture Metered category	-	-	464.18
Add: Revenue from sale of Power to Telangana and Surplus Power	2,515.08	1895.96	1895.96
Total Revenue from Sale	16,246.14	15,222.26	15,686.59

The Commission approves total revenue of Rs. 15,686.59 Crore after true-up for FY 2020-21, after including revenue from sale of surplus power.

7.17 Revenue Gap/(Surplus)

CSPDCL's Submission

CSPDCL has submitted a standalone Revenue Gap of Rs. 984.34 Crore for FY 2020-21. Further, after considering the adjustment of past Revenue Gaps/(Surplus), impact of Review Petition filed by CSPDCL, and the associated carrying cost, CSPDCL has submitted the cumulative Revenue Gap at the end of FY 2020-21 as Rs. 3,900.68 Crore. CSPDCL has also submitted that the aforesaid Gap translates to Rs. 4325.85 Crore for FY 2022-23, after applying the carrying cost for the relevant period.

Commission's View

The Commission has considered the ARR approved for CSPDCL after true-up for FY 2020-21 and the Revenue approved in the earlier Sections of this Chapter, to compute the Revenue Gap/(Surplus) for FY 2020-21. Further, the Commission has considered the Past Gap/(Surplus) considered by the Commission for CSPDCL, CSPGCL, and CSLDC, while approving the ARR and Tariff of CSPDCL for FY 2020-21, for correct computation of the Revenue Gap/(Surplus) after true-up. The Past Surplus of CSPTCL has been adjusted in the True-up for CSPTCL for FY 2020-21, and has hence, not been considered here, in order to avoid double-accounting. The impact of the Review Petition filed by CSPDCL on the Tariff Order for FY 2021-22 has been considered as approved in the earlier Chapter of this Order.

The summary of Revenue Gap/(Surplus) approved after true-up of FY 2020-21 for CSPDCL is shown in the Table below:

Table 7-28: Approved Revenue Gap/(Surplus) for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Tariff Order	Petition	True-up
1	Net ARR	15,001.98	16,206.76	16,177.25
2	Revenue from Sale of Power	16,246.14	15,222.42	15,686.59
3	Standalone Revenue Gap/(Surplus)	(1,244.16)	984.34	490.66
4	Add: Revenue Gap/(Surplus) after true-up for FY 2017-18 and FY 2018-19 for CSPGCL	(225.51)	(225.51)	(225.51)
5	Add: Revenue Gap/(Surplus) after true-up for FY 2017-18 and FY 2018-19 for CSPTCL	(53.08)	(53.08)	\$
6	Add: Revenue Gap/(Surplus) after true-up for FY 2017-18 and FY 2018-19 for CSLDC	3.18	3.18	3.18
7	Add: Revenue Gap/(Surplus) after true-up for FY 2017-18 and FY 2018-19 for CSPDCL	1716.64	1716.64	1716.64
8	Impact of Review Petition	-	1,119.46	(628.66)*
9	Closing Revenue Gap/(Surplus)	197.06	3,545.03	1,356.30
10	Rate of Interest (%)		11.65%	11.65%
11	(Carrying)/Holding cost	106.86	355.66	79.00
12	Total Closing Revenue Gap/(Surplus) at end of the year	303.92	3,900.68	1435.31

Note:

\$ - already considered in CSPTCL True-up, hence, not considered here in order to avoid double-accounting

* The impact of additional contribution for Pension and Gratuity approved in the Review Order for CSPDCL for FY 2021-22, has been considered against FY 2021-22 rather than FY 2020-21 as considered by CSPDCL, for correct computation of carrying cost

The Commission approves cumulative Revenue Gap of Rs. 1,435.31 Crore at the end of FY 2020-21 for CSPDCL. This Revenue Gap has been adjusted against the ARR of CSPDCL for FY 2022-23, along with the due Carrying Cost, as discussed in subsequent Chapter.

8 DETERMINATION OF INPUT COAL PRICE AT GARE PALMA-III MINE END FOR ABVTPS

8.1 Background

CSPGCL has submitted the present Petition for determination of Input Price of coal from Gare Palma-III (GP-III) coal mine for ABVTPS for the Control Period from FY 2022-23 to FY 2024-25. CSPGCL has submitted details of its projected expenses likely to be incurred during the Control Period under various heads, viz., O&M expenses, depreciation, interest on loans, interest on working capital, etc., and the total input price of coal for ABVTPS for the Control Period as per the CSERC MYT Regulations, 2021.

Regulation 5.9 and Regulation 49 of the CSERC MYT Regulations, 2021 specifies as under:

“5.9.

In respect of Integrated mine, the generating company shall file separate mine wise petition for determination of input price of coal from such mine.”

“49. Input Price of coal and lignite for energy charges:

49.1. Where the generating company has the arrangement for supply of coal from the integrated mine(s) allocated to it, for use in one or more of its generating stations as end use, partially or fully, the energy charge component of tariff of the generating station shall be determined based on the input price of coal, as the case may be, from such integrated mines determined in accordance with these regulations.”

In accordance with the above Regulations, in the present Order, the Commission has determined the Input Price of coal from GP-III coal mine for ABVTPS for the Control Period from FY 2022-23 to FY 2024-25 based on the submission by CSPGCL as discussed in the subsequent sections of this Order.

8.2 Submission of CSPGCL

8.2.1 Allocation of Gare Palma-III coal mine

CSPGCL submitted that initially, the Parsa coal block was allotted to the erstwhile CSEB and subsequently to CSPGCL for ABVTPP. The Gare Palma-III (GP-III) coal block was allotted to M/s Goa Industrial Development Corporation (GIDC) vide letter No. 38039/14/2008 CA-I dated November 12, 2008 by the Ministry of Coal, GOI. GIDC, in terms of the provisions of Rule 22(4) of the Mines and Mineral Concession Rules, 1960 as amended from time to time, prepared the Mining Plan for GP-III mine. The Mining Plan for GP-III mine was approved by the Ministry of Coal, GOI vide letter No. 13016/57/2009 CA-I dated May 17, 2010. Further, the approval for Mining Lease was accorded by the GOI in terms of the provisions of Section 5(1) and Section 6(1) of the Mines and Mineral (Development and Regulation) Act, 1957 vide letter No.13016/57/2009- CA-I dated May 30, 2011.

The Hon’ble Supreme Court vide its Judgment dated September 24, 2014, cancelled the allocation of 218 no. of coal blocks. In light of the aforesaid Judgment, the Parsa

coal block was deallocated from CSPGCL and the Gare Palma III coal block was deallocated from GIDC.

Subsequently, after enactment of the Coal Mine (Special Provisions) Act, 2015, the GP-III coal block was classified under Schedule I of the said Act. In terms of the provisions of Section 5 of the said Act, the GP-III coal block was allocated to CSPGCL for utilization of coal in end-use plant of ABVTPP.

In terms of Section 8 of the Coal Mine (Special Provisions) Act, 2015 and clause (c) of sub rule (2) of Rule 7 and sub-rule (1) of Rule 13 of the Coal Mine (Special Provisions) Rule, 2014, the Nominated Authority issued the Allotment Order (Order No. 103/23/2015/NA) dated September 14, 2015 for allotment of the GP-III coal block to CSPGCL.

In terms of Section 8 of the Coal Mine (Special Provisions) Act, 2015, all the statutory permits and approvals accorded to prior allottee were transferred to CSPGCL.

The brief description of the GP-III coal block is tabulated below:

Table 8-1: Brief Description of GP-III Coal Block

Name of Coal Mine	Gare Palma Sector III
Latitude	22 ⁰ 10'24.36" N to 22 ⁰ 11'15.84" N
Longitude	83 ⁰ 27'26.62" E to 83 ⁰ 31'56.85" E
Coalfield	Mand Raigarh
Villages	Bajarmuda, Dholnara
District	Raigarh
State	Chhattisgarh
Lease hold land for mining (Private)	444.58 (Hectares)
Lease hold land for compensatory afforestation (Government)	400 (Hectares)

8.2.1 Methodology followed in Petition

CSPGCL submitted that it has followed the Regulations specified in Chapter 5 of CSERC MYT Regulations, 2021 for preparation of the Petition for determination of Input Price of coal from GP-III coal mine for ABVTPS for the Control Period from FY 2022-23 to FY 2024-25.

For determination of Input Price from an integrated mine, CERC included certain provisions in the draft CERC Tariff Regulations, 2019. However, considering various suggestions, the same could not find place in the final Regulations. The same was finally notified vide second amendment to CERC Tariff Regulations, 2019. Provisionally, the generating plants were allowed to bill the coal from integrated mines at the notified rates of Coal India Ltd. CSPGCL submitted that the Commission vide letter dated January 27, 2020, also directed CSPGCL to provisionally bill the coal from integrated mines of GP-III at the notified rates of Coal India Ltd.

CSPGCL submitted that it has appointed Gare Palma III Collieries Limited as the Mine Developer and Operator (MDO) vide Agreement dated November 16, 2017

through transparent process of open competitive bidding. The MDO charges payable to the MDO are governed as per the Agreement and there are certain price variation clauses linked with certain indices. For the purpose of the Petition, as per the settled methodology, average of the past escalation rates have been considered and the escalation in the MDO rates have been considered accordingly.

CSPGCL submitted that Crushing is in the scope of MDO. Similarly, the mine-end transportation (Surface Transportation Charges (STC) in the Coal India parlance) is also in the MDO scope. CSPGCL submitted that the bare reading of the first proviso of Regulation 54.1 indicates that transportation charge implies transportation up to the loading point associated with the integrated mine. Hence, in order to avoid duplicity, no separate loading of transportation charge is included. The cost of transportation of coal from mine to the power plant (as is applicable in case of other plants too) is covered in the MYT Petition. On aggregate basis, such transposition would not make any material difference.

CSPGCL submitted that the Statutory Charges like Royalty, District Mineral Foundation (DMF), National Mineral Exploration Trust (NMET), Infrastructure Development Cess, Environment Cess, etc., have been considered as per the relevant notifications. Impact of changes in the Statutory Charges and the Transportation Charges (from mine to power plant) may be allowed as pass through in the FCA.

Commission's View

Chapter 5 of the CSERC MYT Regulations, 2021 provides the framework for determination of Input Price of coal and lignite from integrated mine. In accordance with these Regulations, in the present Order, the Commission has determined the Input Price of coal from GP-III coal mine for ABVTPS for the Control Period from FY 2022-23 to FY 2024-25 based on the submission by CSPGCL.

Based on the Input Price approved for coal from the integrated mine, the Commission has considered the landed price of coal for ABVTPS for the MYT Control Period from FY 2022-23 to FY 2024-25 as discussed in the MYT Chapter of CSPGCL in this Order. The cost of transportation of coal from mine to the power plant is also covered in the MYT Chapter of this Order.

As regards CSPGCL's submission on MDO charges and Statutory charges, the same are dealt with by the Commission in the relevant sections of this Chapter.

8.2.2 Date of Commercial Operation for GP-III mine

CSPGCL submitted that the production from the GP-III mine has commenced in December 2019; thus, the two-year period has been completed in December 2021. The progress on mining is better than the Mine Plan. Further, in none of the subsequent years, i.e., FY 2019-20 or FY 2020-21, the value of production exceeded the total expenditure up to that year. However, during FY 2020-21, the production from the mine crossed 1.6 MTPA. As the peak rated capacity of the mine as per the approved mining plan is 5 MTPA, the first conditionality of provisions of Regulation 3.19 (iii) of the CSERC MYT Regulations, 2021 was met in FY 2020-21. Thus, the Date of Commercial Operation (COD) of the mine has been achieved on April 1, 2021 as per the CSERC MYT Regulations, 2021.

CSPGCL submitted that the fourth proviso of Regulation 3.19 (iii) of the CSERC MYT Regulations, 2021 specifies that in cases wherein COD of the mine occurred before these Regulations came into force, the COD shall be deemed on compliance of the conditionality specified in clause (iii) and prior notice shall not be required. As such, the compliance of the condition is sufficient to consider the COD. CSPGCL requested the Commission to accept the same.

Commission's View

Regulation 3.19 (iii) of the CSERC MYT Regulations, 2021 specifies as under:

"3.19. "Date of Commercial Operation" or "COD" means

....

(iii) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —

- a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or*
- b) the first date of the year succeeding the year in which the value of production estimated in accordance with these regulations, exceeds total expenditure up to that year; or*
- c) the date of two years from the date of commencement of production:”*

The Commission notes that the peak rated capacity of the mine, as per the approved mining plan, is 5 MTPA and the production from the GP-III mine has crossed 1.6 MTPA during FY 2020-21. Thus, the first conditionality of Regulation 3.19 (iii) of the CSERC MYT Regulations, 2021 was met in FY 2020-21. Accordingly, CSPGCL has submitted the COD of the mine as April 1, 2021. The Commission accepts the COD of the GP-III mine as April 1, 2021.

8.3 Capital Cost

CSPGCL's submission

CSPGCL submitted that the Capital Cost as approved by the Board of Directors (BOD) of CSPGCL vide Resolution No. 1132 dated October 13, 2021, has been considered provisionally for the purpose of the Petition. Further, in accordance with the standard regulatory practice and philosophy, few additional components and adjustments have been considered.

CSPGCL submitted the components of the Capital Cost approved by the BOD of CSPGCL as shown below:

Table 8-2: Breakup of Capital Cost as per Investment Approval as submitted by CSPGCL

Sl. No.	Particulars	Expenditure (Rs. Crore)
A. Statutory Charges		
1	Upfront Amount paid to Ministry of Coal	39.94
2	Fixed Cost (Consent Cost + Cost of Geological Report)	30.99
3	Incremental Cost of Geological Report	1.96

Sl. No.	Particulars	Expenditure (Rs. Crore)
4	Mining Lease Agreement	21.48
5	Compensation for obtaining surface rights of private land of four villages on the basis of 1 & 2	190.14
6	Additional compensation for private land and forest land due to land diversion and having van Adhikari Patta	3.44
7	Afforestation charges for diversion of forest land	2.05
8	Reimbursement of GIDC claim for tree felling	1.20
9	Dead Rent	0.09
	Total (A)	291.29
B. Other Expenses		
10	Payment towards consultancy fees, BG charges to bank, Hiring of vehicles, office rent, deployment of manpower, Annual watch and ward of office and rest house and other A&G expenses such as purchase of desktop and printer	9.03
	Total A+B	300.32
Expenses to be Incurred		
11	Payment of compensation of land for obtaining surface right of remaining one village Bajarmuda	415.03
12	Payment of compensation of land adjacent to main road of village Dholnara and Milupara	5.99
13	Land acquisition of village Bhalumar for Rehabilitation and resettlement (R &R) of project affected families of village Bajarmuda	12.64
14	Rerouting of Spur line (Railway Line) passing through GP-III coal mine	53.45
15	Drilling of boreholes and preparation of GR for proving coal reserve in mining lease area and unexplored 59.431 Ha on western part of GPIII coal mine	25.60
16	Construction of Rest house, office building and other works	4.39
17	Construction of Approach Road (C.C. Road) from Gharghoda – Chhal Main Road to Gharghoda Railway Siding for transportation of Coal of GP-III Coal Block	2.65
	Total Expenses to be Incurred	519.75
	Grand Total (Expenses Incurred+ To be incurred)	820.07

CSPGCL submitted that the upfront fees have been paid in terms of the provisions of Clause 5 of the Allotment Agreement.

CSPGCL further submitted that the expenditure toward compensation of land has been made in accordance with the letter from the Energy Department, Government of Chhattisgarh bearing No. 2647/ R-124/2019/13/2 dated November 18, 2019. The letter initially also directed CSPGCL to obtain approval of the Commission for the compensation to be paid for land before making such payment. Accordingly,

CSPGCL had approached the Commission vide letter No. 03-09/Reg-2/49 dated October 20, 2020 to grant in-principle approval for the compensation to be paid towards land. In response, the Commission vide letter No. 13-GH30/ 2020/186 dated January 27, 2020 communicated that the matter of approval of rate of compensation to be paid to the landowners does not come under the jurisdiction of the Commission. The relevant extract of the communication received from the Commission is reproduced below:

“.....The said provisions do not contain any reference to approval of the rate of compensation to be paid for land acquisition by the generating company. Thus, the matter of approval of the rate of compensation to the landowners for operating/ commissioning the coal mines sanctioned in Gare Palma- 3 does not come under the purview of Section 86 of the Electricity Act, 2003”

“..... In the light of the aforesaid, the Commission is of the view that the matter does not require approval of the Commission.”

Accordingly, the land compensation is being paid as per the Government directive. CSPGCL prayed the Commission to accept the same as uncontrollable and legally binding expense for CSPGCL.

CSPGCL also submitted that the item No. 15 of the Table above pertains to the additional 59.431 Hectare of unexplored coal reserves, the mining rights of which are yet to be obtained. Hence, though the amount of Rs. 25.60 Crore is part of the Capital Cost, the same has not been considered for capitalization and it would be capitalized along with the mining rights for the unexplored additional coal reserves.

Further, as per Clause 6 of the Allotment Agreement, CSPGCL was required to submit the Bank Guarantee (BG) of Rs. 110.20 Crore against performance security. It is a statutory requirement and without such investment, coal mine possession cannot materialize. Against this BG, a Fixed Deposit Receipt (FDR) was created with SBI. The amount of FDR created with SBI has been considered as an expense in the first quarter of FY 2015-16. The Commission in previous Orders has also ruled that set off of any cost would lie where such cost is booked. Further, since true up of FY 2016-17, the Commission has adopted a consistent approach that interest income from such FDR would be liable for set off against the Capital Cost. Accordingly, the cost of the FDR and income from FDR both have been adjusted in the capital structure. The interest received on this FDR has been adjusted as a deduction from the Capital Cost in the quarter/ year it is received. Further, the BG has to be maintained till the peak rated capacity is achieved as per the terms of the Allotment Agreement. Considering the Annual Target Quantity as per the Mining Plan, the peak rated capacity would be achieved in FY 2024-25. Therefore, the amount of FDR is considered as decapitalization in FY 2024-25. Thus, the total project cost has remained unaltered.

CSPGCL further submitted that an amount equivalent to 5% of the total Capital Cost has been anticipated as contingency to meet unforeseen expenses. However, the prayer for approval is only for in-principle approval and no claim is made in the instant Petition for capitalization or impact on Input Price. The intent of the prior submission is only that during execution of such large project, which is also first of its type, unforeseen capital investment requirement may arise and such in-principle approval would obviate the need for approaching the Commission, each time such urgencies arise. The details of actual expenditure against such contingency, if any,

shall be submitted at the time of truing up of the year in which the expenditure is incurred. CSPGCL requested the Commission to grant in-principle approval for the same as this would not have any impact on the Input Price of coal at present.

CSPGCL submitted that it has not taken any debt prior to COD of the mine and all the expenditure was met through internal funding. However, CSPGCL is entitled for normative IDC considering the normative debt:equity ratio.

CSPGCL submitted that the second proviso to Regulation 24.5 of CSERC MYT Regulations, 2021 specifies as under:

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

CSPGCL submitted that the APTEL vide Judgment dated October 3, 2019 in Appeal No. 231 of 2017 has decided that in the absence of actual loan, the developer shall be entitled for the normative IDC. The relevant extract of the Judgment has been reproduced below:

“The Central Commission should have taken into consideration the aspect that whatever be the types of funds it is never free of cost. There is always a cost of funding. The argument that no actual loan for additional capital expenditure was taken and therefore it is not admissible for any normative IDC is wrong. It is the commercial decision of the Appellant whether to borrow the money from the market for the purpose of additional capitalisation or use its internal accruals. In either case, the capitalisation deserves to be given the Interest During Construction. For the simple reasons that if the internal accruals were not to be used as additional capital than it would have been invested in the market in any interest earning instrument. Additional capitalisation is therefore entitled to be compensated in terms of normative IDC. The Central Commission should have considered this aspect that no funds are free funds.”

Accordingly, for the purpose of calculation of IDC, CSPGCL has considered the rate of interest approved by the Commission in the true up Orders from FY 2015-16 to FY 2019-20 for Hasdeo Bango (i.e., weighted average rate of interest of the Generating Company). For FY 2020-21 too, the rate of interest claimed for Hasdeo Bango in the true up section of the Petition is adopted. Accordingly, CSPGCL has calculated the normative IDC on normative debt component of the expenses prior to COD of the mine and has considered the same as a part of Capital Cost.

CSPGCL also submitted that GIDC has lodged a claim in the Hon’ble Tribunal at Bilaspur (CG) constituted under the Coal Bearing Areas (Acquisition and Development) Act, 1957. The amount related to this claim is Rs. 232.06 Crore. As at present, no such cost has been incurred, hence, in line with the previous Orders of the Commission, the same has not been considered as a part of Capital Cost in the instant Petition. Since it is a contingent legal liability on CSPGCL, CSPGCL craved leave for submission of the cost as and when it crystallises.

CSPGCL submitted that the Commission vide letter No. 13-GH30/ 2020/186 dated January 27, 2020 has provisionally permitted CSPGCL to continue to adopt the notified price of Coal India Ltd. commensurate with the Grade of coal from integrated mines. Accordingly, CSPGCL continued ongoing methodology of adopting the SECL

rates till the COD of the mine. However, while ascertaining the Capital Cost, it is necessary to set off the additional revenue earned over and above the expenses towards coal production in a similar manner as to that of infirm power. Accordingly, CSPGCL has considered the quantity already submitted to the Commission through FCA (which is RR (Railway Receipt) quantity) and has replaced the rates of the SECL commensurate with the Grade of coal supplied by the MDO after adjusting for the transit loss of 0.4% (half of the normative transit loss) in rail transport. During the period before COD, the set off results in additional revenue to CSPGCL. Though no such adjustment was considered in the BoD approved Capital Cost (as it stands on different footing), in compliance of the regulatory spirit, the additional revenue recovered has been reduced from the Capital Cost on COD.

CSPGCL submitted that in FY 2016-17 and FY 2018-19, certain overhead expenses (like salaries and other expenses on mine development project) have been incurred during the period prior to COD from its central account. At the time of true up, such expenses of about Rs. 1.27 Crore in FY 2016-17 and about Rs. 3.52 Crore in FY 2017-18 were not claimed with the submission that as per settled regulatory principle, the same would be part of the Capital Cost of the mine. The Commission has decided the same in the respective true ups. Accordingly, exactly the same amount has now been added in the Capital Cost as ‘prior period unrecovered overhead’.

CSPGCL further submitted that the Statutory Charges payable prior to COD have been calculated on the basis of RR quantity by grossing it up with the transit loss of 0.4% in road transport. However, these charges are subject to change once the final reconciliation of quantity supplied from mine to Marwa at various stages is complete. CSPGCL submitted the Capital Cost of Rs. 905.85 Crore for GP-III mine. CSPGCL requested the Commission to provisionally approve the adjustments made to the Capital Cost in the instant Petition and craved leave to submit the revised and final adjustment at the time of truing up for FY 2022-23.

CSPGCL submitted that as the COD has been achieved on April 1, 2021, the certified values of the capital cost would flow in the accounts of FY 2021-22. The reconciliation of data would take some time and hence, in the interest of transparency, the data considered in the Petition is provisional and leave is craved for submission of certified details along-with truing up of FY 2021-22.

Commission’s View

As regards the Capital Cost for integrated mine, Regulation 55 of the CSERC MYT Regulations, 2021 specifies as under:

“55. Capital Cost:

55.1. The expenditure incurred, including IDC and IEDC, duly certified by the Chartered Accountant, for development of the integrated mine(s) up to the date of commercial operation, shall be considered for arriving at the capital cost.

55.2. Capital expenditure incurred shall be admitted by the Commission after prudence check.

55.3. Capital expenditure incurred on infrastructure for crushing, transportation, handling, washing and other mining activities required for

mining operations shall be arrived at separately in accordance with these regulations:

Provided that where crushing, transportation, handling or washing are undertaken by the generating company, the expenditure incurred on infrastructures of these components shall be capitalized;

Provided further that where mine development and operation, with or without any component of crushing, transportation, handling or washing are undertaken by the generating company by engaging Mine Developer and Operator or an agency other than Mine Developer and Operator, the capital expenditure incurred by Mine Developer and Operator or such agency shall not be capitalised by the generating company and shall not be considered for the determination of input price.

55.4. The capital expenditure shall be determined by considering, but not limited to, the Mining Plan, detailed project report, mine closure plan, cost audit report and such other details as deemed fit by the Commission.

55.5. In case of integrated mine(s) which have declared the date of commercial operation prior to 1.4.2022, the capital expenditure allowed by the Commission for the period ending 31.3.2022 as per provisions of these regulations shall form the basis for computation of input price.”

In view of the above Regulations, the Commission has undertaken the approval of the Capital Cost for GP-III coal mine as discussed below:

The Commission sought the copy of the Board Approval for the Capital Cost of GP-III from CSPGCL and the Commission verified the same with Capital Cost as per Investment Approval as submitted by CSPGCL in the Petition. The Commission noted that CSPGCL has taken the approval for investment for GP-III mine from the BOD on October 13, 2021, which is after the COD on April 1, 2021. Therefore, the Commission asked CSPGCL to submit the following:

- a. Original Investment approval from BOD before start of work;
- b. Original scheduled date of COD for GP-III mine and delay, if any, in COD;
- c. Variation with originally approved cost and reasons for the same.

In this regard, CSPGCL submitted that originally the Board approval was for applying for the three mines. However, at that time there was no precedence. Coal mining by State Generation Company was first of its kind. It was not possible to estimate all the expenses, which may occur in the course of exploration. The approvals were obtained on activity to activity basis on the expenditure side. From the breakup of costs, it may also be noted that most of the cost incurred relate to payment to Government/ designated agencies and the compensatory payment against surface rights, which is awarded by the Revenue Authorities. Thus, there is no variation with respect to the approved cost. CSPGCL submitted that the stage-wise scheduled dates have been defined in the Allotment Agreement/Mining Plan approved by the GoI. Further, there is no delay vis-à-vis the scheduled dates (including the COD), rather CSPGCL is running ahead on most of the benchmarks.

As per Regulation 55.1, the expenditure incurred, including IDC and IEDC, duly certified by the Chartered Accountant, for development of the integrated mine(s) up to

the date of commercial operation, shall be considered for arriving at the capital cost. Therefore, the Commission asked CSPGCL to submit the expenditure incurred, including IDC and IEDC, duly certified by the Chartered Accountant, for development of the integrated mine(s) up to the COD for GP-III mine.

In reply, CSPGCL submitted that as submitted in the Petition, the Capital Cost claimed in the instant Petition is on provisional basis. The COD has been achieved during FY 2021-22, and finalisation of accounts with due certification would take place after completion of the year. Based on the final accounts certified by the statutory auditors, CSPGCL would file the Petition for true up of Input Price at the time of truing up of FY 2021-22.

The Commission noted that CSPGCL in the Petition has submitted the Capital Cost of Rs. 820.07 Crore. However, in Capital Cost sheet of Input Pricing model, the total cost claimed is shown as Rs. 905.85 Crore. Therefore, CSPGCL was asked to justify increase in capital cost. In this regard, CSPGCL submitted that in the Petition, it has summarized the investment approval of the board for Rs. 820.07 Crore. Further, in the Petition, it has submitted detailed justification of the various additional components/ adjustments that have been considered as part of Capital Cost. Detailed clarification regarding IDC is given earlier. On same lines, the adjustments that occur due to difference in price charged from the beneficiary and operational cost incurred is a regulatory component and is not a budgetary cost. Capitalisation of costs takes place at the end of Control Period and as the COD has been achieved in FY 2021-22 only, hence, the capitalisation of overheads may appear in the final accounts of FY 2021-22.

CSPGCL also submitted that it is not the case that only additional costs have been considered, rather there are costs that have been considered in the BoD approval but have been excluded in the Tariff computation. The cost of Rs. 25.60 Crore for Drilling of Bore Holes, etc., falls in this category. This cost has not been considered at this juncture because the coal to be mined has not been accounted in the approved Mining Plan.

CSPGCL submitted the components of Capital Cost considered in the Petition as shown in the Table below:

Table 8-3: Capital Cost for GP-III mines as submitted by CSPGCL

Sl. No.	Description	Amount in Rs. Crore
1	Capital Cost considered by BoD	820.07
2	Additional Capital Cost not part of BoD approval	
	(i) Notional IDC	111.91
	(ii) Prior period unrecovered overheads	4.79
3	Adjustment	-30.92
4	Net Capital Cost (1+2+3)	905.85
5	Not Considered as Capital Cost in this Control Period	-25.60
6	Closing capital Cost at the end of Control Period	880.25

Upfront fees

The Commission approves the upfront fees paid by CSPGCL as per the terms of the provisions of Clause 5 of the Allotment Agreement. The Commission also approves the expenditure toward compensation of land, which has been incurred by CSPGCL in accordance with the letter from the Energy Department, Government of Chhattisgarh.

Expenditure for unexplored Coal Reserves

The Commission noted that CSPGCL has considered amount of Rs. 25.60 Crore in Capital Cost against the additional 59.431 Hectare of unexplored coal reserves. However, since the mining rights for these reserves are yet to be obtained, CSPGCL has not claimed this amount in capitalisation for the Control Period. Therefore, the Commission considers the amount of Rs. 25.60 Crore in Capital Cost against the additional 59.431 Hectare of unexplored coal reserves; however, the same is not considered in capitalisation for the Control Period.

Expenditure for FDR

The Commission approves the amount of FDR of Rs. 110.20 Crore as part of Capital Cost as on COD. The Commission based on the submission of CSPGCL, has considered the de-capitalization of FDR amount in FY 2024-25 since the peak rated capacity would be achieved in FY 2024-25.

Contingency Expenses

CSPGCL has requested the Commission to grant in-principle approval for contingency expenses @5% of the total Capital Cost. However, no claim for contingency expenses is made in the instant Petition for capitalization or impact on Input Price. The Commission agrees with the submission of CSPGCL that during execution of such large project, which is also first of its type, unforeseen capital investment requirement may arise and such in-principle approval would obviate the need for approaching the Commission, in case such exigencies arise. Accordingly, the Commission directs CSPGCL to submit the actual expenditure against such contingency, if any, with due justification at the time of truing up of the year in which the expenditure is incurred.

Interest during Construction (IDC)

The Commission noted that CSPGCL has not taken any debt prior to COD of the mine and all the expenditure was met through internal funding. However, CSPGCL has claimed normative IDC of Rs. 111.91 Crore considering the normative debt:equity ratio as per Regulation 24.5 of the CSERC MYT Regulations, 2021.

It is also noted that CSPGCL has not considered IDC amount of Rs. 111.91 Crore in Investment approval from the BOD. In this regard, CSPGCL submitted that the Board approval has been taken on the basis of cash expenditure, which have been either actually incurred or are to be incurred in future. IDC does not find place in the BOD approval of project cost, which is for the purpose of internal budgeting, fund flow, accounting and auditing. Notional IDC has been claimed in accordance with Regulation 24.5 of the CSERC MYT Regulations, 2021 and as per regulatory practice and settled legal position in number of decisions of the Hon'ble APTEL. CSPGCL submitted that as per settled position and practice adopted in all the CIPs and Tariff Orders, the Commission has allowed interest on notional / normative loan.

For the purpose for calculation of IDC, the Commission has considered the weighted average rate of interest for CSPGCL as a whole as approved in the True up Orders for FY 2015-16 to FY 2019-20. For FY 2020-21, the weighted average rate of interest for CSPGCL as a whole for FY 2020-21 approved in this Order has been considered. Accordingly, the Commission has calculated normative IDC of Rs. 111.91 Crore on normative debt component of the expenses prior to COD of the mine and has considered the same as a part of Capital Cost for GP-III mine.

Claim of GIDC

The Commission asked CSPGCL to elaborate the matter and the nature of claim of GIDC. In this regard, CSPGCL submitted that the claim has been lodged by prior allottee GIDC before the Hon'ble Tribunal at Bilaspur (CG) amounting to Rs. 346.80 Crore (including interest up to August 31, 2017) against which Rs. 114.74 Crore has already been deposited by CSPGCL to concerned department towards Land Compensation, Geological Report, Tree Cutting, etc. Regarding the balance amount of Rs. 232.06 Crore, pending decision of the Hon'ble Tribunal, no amount has been considered in the instant proposal of Project Cost. The same shall be applicable on settlement of legal proceedings. CSPGCL craved leave for approaching the Commission at such time as per the regulatory provisions. CSPGCL also submitted the copy of GIDC's Petition.

The Commission has not considered the GIDC claim of Rs. 232.06 Crore in the Capital Cost as no such cost has been incurred by CSPGCL. CSPGCL shall submit the final incurred cost against such claim, once the matter is settled by the Hon'ble Tribunal at Bilaspur (CG).

Adjustment of Additional Revenue

During the period before COD, the Commission had permitted CSPGCL to provisionally continue to adopt the notified price of Coal India Ltd. CSPGCL has adjusted the additional revenue of Rs. 30.92 Crore earned over and above the expenses towards coal production from the Capital Cost in a similar manner as to that of infirm power. Accordingly, the Commission has adjusted the additional revenue of Rs. 30.92 Crore from the Capital Cost under the head of adjustment.

Overhead Expenses

It is noted that CSPGCL has claimed expenses of Rs. 1.27 Crore and Rs. 3.52 Crore incurred towards certain overhead expenses (like salaries and other expenses on mine development project) in FY 2016-17 and FY 2017-18, respectively. The Commission approves these overhead expenses in the Capital Cost as 'prior period unrecovered overhead'.

Since CSPGCL has submitted that the provisional data for the Capital Cost for GP-III mine and the expenditure incurred, including IDC and IEDC, are yet to be duly certified by the Chartered Accountant, the Commission has approved the Capital Cost for GP-III mine on provisional basis as shown in the Table below. CSPGCL shall file the Petition for true up of Input Price at the time of true up of FY 2021-22 based on the final accounts certified by the statutory auditors.

Table 8-4: Provisionally Approved Capital Cost for GP-III Mines

Sl. No.	Particulars	Capital Cost claimed	Capital Cost approved	Year Incurred
A	Statutory expenses			
1	Upfront amount paid to Ministry of Coal	39.94	39.94	COD
2	Fixed cost (Consents Cost + Cost of Geological Report)	30.99	30.99	COD
3	Incremental cost of Geological Report	1.96	1.96	COD
4	Mining Lease agreement	21.48	21.48	COD
5	Compensation for obtaining surface right of Private land of four villages on the basis of factor 1&2	190.14	190.14	COD
6	Addl. Compensation for private and forest land due to land diversion and having Van Adhikar Patta	3.44	3.44	COD
7	Afforestation Charges for diversion of forest land	2.05	2.05	COD
8	Reimbursement of GIDC claim for tree felling	1.20	1.20	COD
9	Dead rent	0.09	0.09	COD
B	Other expenses			
10	Payment towards Consultancy fee, BG charges to Bank, Hiring of vehicles, Office rent, deployment of manpower, Annual watch ward of office & rest house, and other A & G expenses such as purchase of desktop/printer, etc.	9.03	9.03	COD
11	Prior period unrecovered overheads	4.79	4.79	COD
12	FDR Amount	110.20	110.20	COD
	Total Expenses Incurred	415.31	415.31	
13	Adjustment	-30.92	-30.92	COD
	Net Expenses Incurred	384.39	384.39	
C	Statutory expenses to be incurred			
14	Payment of compensation of land for obtaining surface right of remaining one village Bajarmuda	415.03	415.03	FY 2021-22
15	Payment of compensation of land adjacent to main road of village Dholnara and Milupara	5.99	5.99	FY 2022-23
16	Land acquisition of village Bhalumar for Rehabilitation and resettlement (R &R) of project affected families of village Bajarmuda	12.64	12.64	FY 2022-23
17	Rerouting of Spur line (Railway Line) passing through GP-III coal mine	53.45	53.45	FY 2021-22
18	Drilling of boreholes and preparation of GR for proving coal reserve in mining lease area and unexplored 59.431 Ha on western part of GPIII coal mine.	25.60	25.60	
19	Construction of Rest house, office building and other works	4.39	4.39	FY 2023-24
20	Construction of Approach Road (C.C. Road) from Gharghoda - Chhal Main Road to Ghargoda Railway Siding for transportation of Coal of GP-III Coal Block.	2.65	2.65	FY 2023-24

Sl. No.	Particulars	Capital Cost claimed	Capital Cost approved	Year Incurred
	Expenses To Be Incurred	519.75	519.75	
	Grand Total	904.14	904.14	
21	Contingency @ 5% of IA Cost)	0.00	0.00	Reserve
22	Notional IDC	111.91	111.91	COD
	Total Capital Cost	1016.05	1016.05	
23	De-capitalization on achieving peak rated capacity	-110.20	-110.20	FY 2024-25
	Net Capital Cost	905.85	905.85	

Capital Cost and Capitalisation

The Capital Cost and Capitalisation approved provisionally as on COD and in subsequent years have been shown in the following Table:

Table 8-5: Provisionally Approved Yearly Capital Cost and Capitalisation for GP-III Mines (Rs. Crore)

Particulars	As on COD April 1, 2021	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	Estimated Expenses for Unexplored Coal Reserves	Total
Capital Cost	496.30	468.48	18.63	7.04	-110.20	25.60	905.85
Capitalisation	496.30	468.48	18.63	7.04	-110.20	0.00	880.25
Closing GFA	496.30	964.78	983.41	990.45	880.25		

Means of Finance

As regards the means of finance, the Commission notes that CSPGCL has considered normative debt:equity ratio of 70:30. Accordingly, the Commission has considered the normative debt: equity ratio of 70:30 for GP-III mines.

The funding of the provisional capitalisation approved by the Commission is shown in the following Table:

Table 8-6: Provisionally Approved Yearly Funding of Capitalisation for GP-III Mines (Rs. Crore)

Particulars	As on COD April 1, 2021	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	Total
Equity	148.89	140.54	5.59	2.11	-33.06	264.07
Debt	347.41	327.94	13.04	4.93	-77.14	616.17
Total	496.30	468.48	18.63	7.04	-110.20	880.25

**Table 8-7: Provisionally Approved Closing GFA, Debt & Equity for GP-III Mines
(Rs. Crore)**

Particulars	As on COD April 1, 2021	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Closing Equity	148.89	289.43	295.02	297.13	264.07
Closing Debt	347.41	675.35	688.39	693.32	616.17
Closing GFA	496.30	964.78	983.41	990.45	880.25

8.4 Mining Plan

CSPGCL's submission

CSPGCL submitted that the Mining Plan for the GP- III coal block was prepared by prior allottee, i.e., GIDC and approval was accorded on the same by the Ministry of Coal, GoI vide its letter No. 13016/57/2009-CA-I dated May 17, 2010. As per the approved Mining Plan, the peak rated quantity is 4.0 MTPA from opencast mining and 1.0 MTPA from underground mining. The life of the opencast and underground mine is 26 and 45 years, respectively.

CSPGCL submitted that the Annual Target Quantity (ATQ) has been considered in accordance with the Mining Plan. The fixed reserve price of Rs. 100/MT with GST @18% has been considered in accordance with the notifications of the Ministry of Coal, GOI.

CSPGCL submitted that as over ground mining is more cost effective and major coal stock is over ground, as per standard industry practice, at present only over ground mining has been undertaken, hence, the instant Petition is for coal excavated from over ground mines only.

The coal mine has been allocated to CSPGCL for end use of coal at ABVTPP. The phasing of coal production from the mine and requirement of the plant are tabulated below:

Table 8-8: Annual Target Quantity and Requirement for ABVTPS as submitted by CSPGCL (Million Tonnes)

Year	Coal Production from Gare Palma III as per Mining Plan	Coal Requirement for 1000 MW ABVTPS at Normative PLF	Excess/ (Shortfall)
FY 2022-23	4.20	5.13	(0.93)
FY 2023-24	4.50	5.34	(0.84)
FY 2024-25	5.00	5.52	(0.52)

CSPGCL submitted that the Input Price of coal from GP-III mines has been calculated on the ATQ as per the Mining Plan, shown in column 2 of the above Table. Further, in the MYT Petition, for determination of tariff for ABVTPP, the cost of coal has been computed on the basis of Input Price arrived at in the instant Petition (after applying the transportation cost and the normative transit loss for non-pit head station). However, it is evident from the above Table that the quantity extracted from the GP-III mines may not be sufficient for meeting the normative PLF specified in the

CSERC MYT Regulations, 2021 for ABVTPP. CSPGCL may have to make arrangements for the shortfall of coal through alternate arrangements like auction/import. CSPGCL craved leave for approval of such alternate arrangement with impact on cost of coal due to such arrangements as pass through as and when the same occurs.

Commission's View

The Commission sought the copy of the approved Mining Plan for GP-III coal block from CSPGCL and validated the details of ATQ as per the Mining Plan submitted by CSPGCL in reply to data gaps.

The Commission notes that CSPGCL has calculated the Input Price of coal from GP-III mines based on the ATQ as per the Mining Plan approved by the Ministry of Coal, GoI. CSPGCL has also submitted that the coal supplied from GP-III mine would not be sufficient for meeting the normative PLF specified in the CSERC MYT Regulations, 2021 for ABVTPS and it may have to rely on other alternatives like coal auction/import to meet the demand for coal, thereby impacting the cost of coal. The Commission has taken cognizance of the same and directs CSPGCL to submit the required details and justification in this regard, along with the Tariff Petition as and when such arrangements are undertaken.

8.5 Computation of Input Price of Coal

CSPGCL's submission

Regulation 52 of the CSERC MYT Regulations, 2021 specifies as under:

"52. Input Price of coal:

52.1 Input price of coal or lignite from the integrated mine(s) shall be determined based on the following components:

- I) Run of Mine (ROM) Cost; and*
- II) Additional charges:*
 - a. crushing charges.*
 - b. transportation charge within the mine up to the washery end or coal handling plant associated with the integrated mine, as the case may be;*
 - c. handling charges at mine end;*
 - d. washing charges; and*
 - e. transportation charges beyond the washery end or coal handling plant, as the case may be, and up to the loading point:*

Provided that in cases where the transportation is in two stages i.e from mine to the storage yard and then from the yard to the plant, the transportation charge shall imply cumulative of the two.

Provided that one or more components of additional charges may be applicable in case of the integrated mine(s), based on the scope and nature of the mining activities;

52.2. Statutory Charges, as applicable, shall be allowed."

Regulation 53.2 of the CSERC MYT Regulations, 2021 specifies as under:

“53.2. Run of Mine Cost of coal in case of integrated mine allocated through allotment route under Coal Mines (Special Provisions) Act, 2015 shall be worked out as under:

ROM Cost = [(Annual Extraction Cost / ATQ) + Mining Charge] + (Fixed Reserve Price).

Where,

(i) Annual Extraction Cost is the cost of extraction of coal as computed in accordance with Regulation 36F of these regulations;

(ii) Mining Charge is the charge per tonne of coal paid by the generating company to the Mine Developer and Operator engaged by the generating company for mining, wherever applicable; and

(iii) Fixed Reserve Price is the fixed reserve price per tonne along with subsequent escalation, if any, as provided in the Coal Mine Development and Production Agreement.”

Further, Regulation 57 of the CSERC MYT Regulations, 2021 defines the components of Annual Extraction Cost, as follows:

“57. Annual Extraction Cost: *The Annual Extraction Cost of integrated mine(s) shall consist of the following components:*

(1) Depreciation;

(2) Interest on Loan;

(3) Return on Equity;

(4) O&M Expenses, excluding mining charge;

a. HR expenses

b. M&G Expenses

(5) Interest on Working Capital;

(6) Mine closure expenses, if not included in mining charge; and

(7) Statutory charges, if applicable.”

The Annual Extraction Cost for GP-III mines has been accordingly computed as described below.

8.5.1 Depreciation

CSPGCL's submission

Depreciation has been calculated as per Regulation 59 of the CSERC MYT Regulations, 2021. Further, since CSPGCL owns only the mining rights for the GP-III mines, the depreciation rate on Mine Development Expenses, i.e., 5% have been considered as per CSERC MYT Regulations, 2021. Further, since the expense incurred on compliance of the statutory condition is in the form of FDR, which is not a depreciable asset, no depreciation has been claimed on the same.

The depreciation submitted by CSPGCL for the Control Period is as under:

Table 8-9: Depreciation for GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Capital Cost	854.58	873.21	880.25
Closing Capital Cost	873.21	880.25	880.25
Average Capital Cost	863.89	876.73	880.25
Depreciable Value (100%)	863.89	876.73	880.25
Rate of Depreciation	5.00%	5.00%	5.00%
Depreciation	43.19	43.84	44.01

Commission's View

Regulation 59 of the CSERC MYT Regulations, 2021 specifies as under:

“59. DEPRECIATION

59.1. Depreciation in respect of integrated mine(s) shall be computed from the date of commercial operation by applying Straight Line Method

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

Provided that,

i) freehold land or assets purchased from grant shall not be considered as depreciable assets and their cost shall be excluded from the capital cost while computing depreciable value of the assets;

ii) where the allotment of freehold land is conditional and is required to be returned, the cost of such land shall be part of value base for the purpose of depreciation, subject to prudence check by the Commission; and

iii) lease, hold land / Intangible assets towards mining/surface rights, associated statutory payments and Rehabilitation & Resettlement (R&R) expenses shall be amortized over the lease period or remaining life of the integrated mine(s), whichever is lower.

59.3. The salvage value of an asset shall be considered as 5% of the capital cost of the asset:

Provided that the salvage value shall be:

i) zero for IT equipment and software;

ii) zero for intangible assets towards mining/surface rights, associated statutory payments and R&R works

iii) zero or as agreed by the generating company with the State Government for land; and

iv) as notified by the Ministry of Corporate Affairs under the Companies Act, 2013 for specialized mining equipment.

59.4. Depreciation in respect of integrated mine(s) shall be arrived at annually by applying depreciation rates or on the basis of expected useful life specified in Appendix 1A of these regulations:

Provided that specialized mining equipment shall be depreciated as per the useful life and depreciation rate as notified by the Ministry of Corporate Affairs under the Companies Act, 2013.”

For computation of depreciation, the Commission has considered the Capital Cost as on COD as the opening GFA for FY 2021-22. Since, FDR is not a depreciable asset, no depreciation has been considered on the same. Addition during the year has been worked out based on the capitalisation allowed during FY 2021-22. Accordingly, the closing GFA for FY 2021-22 has been calculated, which has been considered as opening GFA for FY 2022-23. Addition during each year of the Control Period has been considered as per the capitalisation allowed as discussed earlier.

As CSPGCL owns only the mining rights for the GP-III mines, the Commission has considered the depreciation rate of 5% as specified in CSERC MYT Regulations, 2021 for Mine Development Expenses.

The depreciation approved by the Commission for the Control Period is as under:

Table 8-10: Approved Depreciation for GP-III mines for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	854.58	873.21	880.25
Addition during the year	18.63	7.04	-110.20
Closing GFA	873.21	880.25	880.25
Average GFA	863.89	876.73	880.25
Depreciable Value (100%)	863.89	876.73	880.25
Rate of Depreciation	5.00%	5.00%	5.00%
Depreciation	43.19	43.84	44.01

8.5.2 Interest on Loan

CSPGCL's submission

The interest on loan has been calculated on normative basis by considering 70% of the capital cost as debt. CSPGCL has got loan sanctioned from the consortium of PFC and REC with both the lenders having 50% share of the amount of loan. The rate of interest as per the initial loan agreement was 11.80% with a special discount of 1.5% to CSPGCL. Owing to continuous vigorous efforts, CSPGCL has been able to further revise the interest rate, vide amendment to the Agreement dated June 17, 2021. As per the amendment, PFC and REC both have agreed to further lower the rate of interest applicable on the borrowing to 8.88% and the same has been considered for calculating the interest on loan during the Control Period for FY 2022-23 to FY 2024-25. As per the provisions of the CSERC MYT Regulations, 2021 the depreciation has been considered as normative repayment for each year of the Control Period.

The interest on loan submitted by CSPGCL for the Control Period is as under:

Table 8-11: Interest on Loan for GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Loan	675.35	688.39	693.31
Addition of Loan	13.04	4.93	-77.14
Repayment during the Year	43.19	43.84	44.01
Closing Loan	645.19	649.48	572.16
Average Loan	660.27	668.93	632.74
Interest Rate	8.88%	8.88%	8.88%
Interest on Loan	58.63	59.40	56.19

Commission's View

The Commission noted that CSPGCL in its additional submission has submitted the revised Interest on Loan on account of correction of linking error as shown below:

Table 8-12: Revised Interest on Loan for GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Loan	644.33	614.17	575.27
Addition of Loan	13.04	4.93	-77.14
Repayment during the Year	43.19	43.84	44.01
Closing Loan	614.17	575.27	454.11
Average Loan	629.25	594.72	514.69
Interest Rate	8.88%	8.88%	8.88%
Interest on Loan	55.88	52.81	45.70

Regulation 24 and 58 of the CSERC MYT Regulations, 2021 specify the method of computation of Interest and Finance charges for loan capital. The Commission has considered the opening normative loan for FY 2021-22 equal to debt component considered for capital cost as on COD. The addition of loan during FY 2021-22 has been considered equal to debt portion of capitalised works as approved in this Order.

By applying the depreciation @5% on the average GFA (excluding the FDR value) during FY 2021-22, the computed depreciation comes out to Rs. 31.02 Crore. The loan repayment has been considered equivalent to Depreciation approved in this Order. Accordingly, the closing loan for FY 2021-22 has been calculated, which has been considered as opening loan for FY 2022-23. The loan addition for each year of the Control Period has been considered on funding of additional capitalisation discussed in the means of finance section of this Order.

The repayment during the year has been considered equivalent to the approved depreciation for the year under consideration.

For the Control Period, the revised rate of interest of 8.88% has been accepted as submitted by CSPGCL.

The interest on loan has been computed on the normative average loan of the year by applying rate of interest as shown in the Table below:

**Table 8-13: Approved Interest on Loan for GP-III mines for the Control Period
(Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Loan	644.33	614.17	575.27
Addition of Loan	13.04	4.93	-77.14
Repayment during the Year	43.19	43.84	44.01
Closing Loan	614.17	575.27	454.11
Average Loan	629.25	594.72	514.69
Interest Rate	8.88%	8.88%	8.88%
Interest on Loan	55.88	52.81	45.70

8.5.3 Return on Equity

CSPGCL's submission

RoE has been calculated in terms of Regulation 23.1 read with Regulation 17 of the CSERC MYT Regulations, 2021. The normative equity has been considered as 30% of the capital cost and the RoE has been calculated on average of opening and closing equity. The base rate of RoE has been considered as 14% in line with Regulation 23.1 of CSERC MYT Regulations, 2021. This base rate of RoE has been further grossed up with the current MAT Rate (including surcharge), i.e., 17.472%.

The RoE submitted by CSPGCL for the Control Period is as under:

**Table 8-14: RoE for GP-III mines for the Control Period as submitted by CSPGCL
(Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity	289.43	295.02	297.13
Addition of Equity	5.59	2.11	-33.06
Closing Equity	295.02	297.13	264.07
Average Equity	292.23	296.08	280.60
Rate of RoE	14.00%	14.00%	14.00%
MAT Rate	17.472%	17.472%	17.472%
Effective Rate of RoE	16.96%	16.96%	16.96%
Return on Equity	49.57	50.23	47.60

Commission's View

Regulation 23 and 58 of the CSERC MYT Regulations, 2021 specify the method of computation of RoE. The Commission has considered the opening equity for FY 2021-22 equal to equity component considered for capital cost as on COD. The addition of equity during FY 2021-22 has been considered equal to equity portion of capitalised works as approved in this Order. Accordingly, the closing equity for FY 2021-22 has been calculated, which has been considered as opening equity for FY 2022-23. The equity addition for each year of the Control Period has been considered on funding of additional capitalisation discussed in the means of finance section of this Order.

Further, return of 14% has been considered for the MYT Control Period on the average permissible equity base during the year as per CSERC MYT Regulations, 2021. In line with the approach adopted in previous Tariff Orders for CSPGCL and CSPTCL, the rate of RoE has not been grossed up with the MAT rate, and the RoE rate of 14% has been considered for the purpose of approving RoE for the Control Period. The Commission shall allow the Income Tax on actual basis at the time of Truing-up of respective years of the Control Period.

Accordingly, the Return on Equity has been approved for GP-III mines for the Control Period, as under:

Table 8-15: Approved RoE for GP-III mines for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity	289.43	295.02	297.13
Addition of Equity	5.59	2.11	-33.06
Closing Equity	295.02	297.13	264.07
Average Equity	292.23	296.08	280.60
Rate of Return on Equity	14.00%	14.00%	14.00%
Return on Equity	40.91	41.45	39.28

8.5.4 Operation and Maintenance Expenses

CSPGCL's submission

CSPGCL submitted that it has appointed M/s. Gare Palma Collieries Limited as the MDO, through a transparent process of competitive bidding. The major operation and maintenance activities are in the scope of the MDO appointed. However, there are certain statutory requirements, which are to be fulfilled by CSPGCL. As per the provisions contained in the Mines Act, 1952 and Coal Mines Regulation, 2017, a manager and certain statutory manpower are required to be deployed by mine owner to perform and discharge the duties laid down in the Mines Act and the rules laid down thereunder. The statutory requirement of manpower as per the provisions of above Act and Rule is minimum 87 and the total persons to be deployed may be around 105. Further, in a project of such size and such critical importance (coal being the primary need for a thermal power station, apart from compliance of the minimum statutory provisions), it is in the interest of all the stakeholders that the owner spares some managerial resources for supervision of contract. Supervision itself involves incurrence of certain expenses, which range from HR expenses to A&G expenses related to site, siding office and head office too. As no Order by CERC is available in this regard and working out the trajectory is also not feasible at this stage, working out an empirical methodology is the best way out. With the provision of true up, such expenses shall automatically get rationalized.

CSPGCL submitted that for the purpose of this Petition, the O&M expenses have been provisionally considered as 15% of the MDO charges payable during the year. The 15% supervision charges, being proposed, have been allowed by the Commission in the past, though in a different spectrum of cases. The details of the actual O&M expenses shall be submitted at the time of truing up of FY 2022-23.

The O&M expenses submitted by CSPGCL for the Control Period are as under:

Table 8-16: O&M Expenses for GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
MDO Charges	284.49	314.97	361.63
O&M Expenses as % of MDO Charges	15.00%	15.00%	15.00%
O&M Expenses	42.67	47.25	54.24

Commission's View

Regulation 60 of the CSERC MYT Regulations, 2021 specify as under:

“60. Operation and Maintenance (O&M) Expenses

60.1. The O&M expenses in respect of integrated mine(s) of coal, shall be allowed based on the projected O&M Expenses for each year of the tariff period subject to prudence check by the Commission;

Provided that the O&M expenses allowed under this clause shall be trued up yearly based on actual expenses.

60.2. The O&M expenses for the tariff period ending on 31st March 2022 in respect of the integrated mine(s) of coal commissioned on or before 31st March 2022, shall be allowed at actual after prudence check.

60.3. Where the development and operation of the integrated mine(s) is undertaken by the generating company by engaging Mine Developer and Operator, the Mining Charge of such Mine Developer and Operator shall not be included in O&M Expenses;

Provided that if any additional liability arises on the Generating company due to any change in law which is not a pass through the mine developer, the same shall be pass through as additional O&M charges to the generating company.

60.4. Where an agency other than Mine Developer and Operator is engaged by the generating company, through a transparent competitive bidding process, for crushing or transportation or handling or washing or any combination thereof, the annual charges of such agency shall be considered as part of O&M Expenses under this Regulation, subject to prudence check by the Commission.”

The Commission notes that CSPGCL has appointed M/s. Gare Palma Collieries Limited as the MDO through a transparent process of competitive bidding for undertaking the major operation and maintenance activities. The Commission takes cognizance of the requirement of a manager and certain statutory manpower to be deployed by mine owner to perform and discharge the duties laid down in the Mines Act, 1952 and Coal Mines Regulation, 2017.

Since there is no CERC Order or any other reference document to project O&M expenses for integrated mines, CSPGCL has projected O&M expenses at 15% of MDO charges. The Commission accepts the methodology adopted by CSPGCL for projecting O&M expenses for the Control Period, which shall be trued up based on actuals and prudence check. However, there shall be no sharing of gains /losses, in case the actual O&M expenses are lower than the approved provisional O&M expenses, since the O&M expenses are being approved on adhoc basis.

Accordingly, the O&M expenses approved by the Commission for the Control Period are as under:

Table 8-17: Approved O&M Expenses for GP-III mines for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
MDO Charges	284.49	314.97	361.63
O&M Expenses as % of MDO Charges	15.00%	15.00%	15.00%
O&M Expenses	42.67	47.25	54.24

8.5.5 Interest on Working Capital

CSPGCL's submission

CSPGCL submitted that the Interest on Working Capital has been calculated in line with the provisions of Regulation 61 of CSERC MYT Regulations, 2021. The rate of Interest on Working Capital has been considered in line with the provisions of Regulations, i.e., SBI one year MCLR Rate as on April 1, 2021 plus 200 basis points which works out to be 9.00%.

The Interest on Working Capital submitted by CSPGCL for the Control Period is as under:

Table 8-18: Interest on Working Capital for GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
ATQ in Million Tonnes	4.20	4.50	5.00
Input Price for 7 days of Stock	12.44	13.37	14.72
Working Capital for Spares	6.40	7.09	8.14
Working Capital for O&M	1.75	1.94	2.23
Total Working Capital Requirement	20.59	22.39	25.09
Rate of Interest on WC	9.00%	9.00%	9.00%
Interest on WC	1.85	2.02	2.26

Commission's View

Regulation 61 of the CSERC MYT Regulations, 2021 specifies as under:

“61. Interest on Working Capital:

61.1. The working capital of the integrated mine(s) of coal shall cover:

- (i) Input cost of coal stock for 7 days of production corresponding to the Annual Target Quantity for the relevant year;*
- (ii) Consumption of stores and spares including explosives, lubricants and fuel @ 15% of O&M expenses, excluding mining charge of Mine Developer and Operator and annual charges of the agency other than Mine Developer and Operator, engaged by the generating company; and*

(iii) O&M expenses for 15 days, excluding mining charge of Mine Developer and Operator and annual charges of the agency other than Mine Developer and Operator, engaged by the generating company.

61.2. The rate of interest for working capital shall be determined in accordance with Regulation 26.4 of these regulations. Truing up shall be done as per Regulation 26.4 of these Regulations.”

The Commission noted that in reply to data gaps, CSPGCL has revised IoWC for GP-III mines as shown below:

Table 8-19: Revised Interest on Working Capital for GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
ATQ in Million Tonnes	4.20	4.50	5.00
Input Price for 7 days of Stock	12.37	13.21	14.47
Working Capital for Spares	6.40	7.09	8.14
Working Capital for O&M	1.75	1.94	2.23
Total Working Capital Requirement	20.53	22.23	24.84
Rate of Interest on WC	9.00%	9.00%	9.00%
Interest on WC	1.85	2.00	2.24

The Interest on Working Capital for the Control Period has been computed in accordance with Regulation 61 of the CSERC MYT Regulations, 2021. Input cost of coal stock has been considered for 7 days of production corresponding to the ATQ for the respective year. Working capital for Spares has been worked out on the basis of 15% O&M expenses approved in this Order. Further, 15 days of O&M expenses have been considered in working capital for GP-III mines.

The interest rate of 9% (MCLR Rate- one year tenor of SBI as on September 30, 2021 plus 200 basis points) has been considered, for computing the Interest on Working Capital.

The Interest on Working Capital approved for the Control Period is as under:

Table 8-20: Approved Interest on Working Capital for GP-III mines for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
ATQ in Million Tonnes	4.20	4.50	5.00
Input Price for 7 days of Stock	12.17	13.00	14.28
Working Capital for Spares	6.40	7.09	8.14
Working Capital for O&M	1.75	1.94	2.23
Total Working Capital Requirement	20.32	22.03	24.64
Rate of Interest on WC	9.00%	9.00%	9.00%
Interest on WC	1.83	1.98	2.22

8.5.6 Mine Closure Charges

CSPGCL's submission

CSPGCL submitted that the liability of Mine Closure Expenses rests with the MDO as per the provisions of Coal Mines Service Agreement (CMSA) and hence, no expenses towards mine closure has been considered for the purpose of calculation of Input Price of coal in this Petition.

Commission's View

In line with the submission of CSPGCL, the Commission has not considered Mine Closure Expenses for GP-III mines for the Control Period.

8.5.7 Statutory Charges

CSPGCL's submission

CSPGCL submitted that the Statutory charges have been considered as per various notifications/guidelines of the Ministry of Coal. The Statutory charges considered for the purpose of calculation of input price are tabulated below:

Table 8-21: Statutory Charges for GP-III mines for the Control Period as submitted by CSPGCL

Particulars	Rate	Applicable on
GST	18.00%	Mining Charges
Royalty	14.00%	On Base Price
DMF	10.00%	Royalty
NMET Fund	2.00%	Royalty
Environment Cess	11.25	Rs. per Tonne
Infrastructure Development CESS	11.25	Rs. per Tonne
Forest Tax	26.23%	Rs.15/Tonne
GST on Royalty, DMF and NMET	18.00%	

Statutory charges submitted by CSPGCL for the Control Period is as under:

Table 8-22: Statutory Charges for GP-III mines for the Control Period as submitted by CSPGCL

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
ATQ	Mn. Tonnes	4.20	4.50	5.00
Per Unit Cost	Rs./Tonne	1426.34	1435.05	1417.23
Royalty	Rs./Tonne	199.69	200.91	198.41
DMF	Rs./Tonne	19.97	20.09	19.84
NMET Fund	Rs./Tonne	3.99	4.02	3.97
Environment Cess	Rs./Tonne	11.25	11.25	11.25
Infrastructure Development CESS	Rs./Tonne	11.25	11.25	11.25
Forest Tax	Rs./Tonne	3.93	3.93	3.93

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
GST on Royalty	Rs./Tonne	40.26	40.50	40.00
Tax Collected at Source (TCS) on Royalty	Rs./Tonne	0.00	0.00	0.00
Statutory Charges	Rs./Tonne	290.34	291.95	288.65
Statutory Charges	Rs. Crore	121.94	131.38	144.33

CSPGCL, in its additional submission, submitted that post filing of the Petition, recently demand note has been received from Chhattisgarh Environment Control Board (CECB), citing conditions of environment clearance, for one-time payment of Rs. 34 Crore and a recurring payment of Rs. 5 per MT of coal being excavated. In the instant Petition, these costs have not been considered. At present the payment mechanism is under consideration. Upon settlement of payment, the one-time payment shall be claimed in the revised Capital Cost and the recurring payment, if applicable, shall be claimed in the FCA, as statutory charges. Accordingly, in future, there may be slight increase in the cost of coal, however, at this point of time no advance claim is being made on account of the same.

CSPGCL further submitted that a 600 metre Coal Transport Road has been constructed by M/s. Gare Palma Collieries Limited and another 950 metre road proposal is under preparation. As the costs of both the roads are still to be assessed by the designated Committee, the same is not part of Board approved cost and the instant Petition too. However, upon finalisation, the same may become part of revised cost. If undertaken, the cost implication may be about Rs. 6 Crore.

Another additional cost would be the cost of Railway Siding (about Rs. 60 Crore), which will be required for transport of coal from mine directly by rail. It will reduce the road transport cost very substantially. This cost is not being considered at this stage and the same shall be claimed in the revision of Capital Cost and impact on tariff shall be charged with corresponding reduction in Road Transport Charges.

CSPGCL also submitted that there are some arbitration cases with the MDO. Such arbitrations relate to claim for unloading amount, claim of one-time settlement of Project Affected Persons (about 1090), settlement of environment clearance issues, etc. The total principal amount involved is about Rs. 90 Crore. No claim towards such pending cases have been included in the Petition. CSPGCL craved leave for submission of such claim as and when the legal positions get settled.

Commission's View

The Commission noted that in reply to data gaps, CSPGCL has submitted the copies of all relevant Government notifications for levy of Statutory charges as claimed in the Petition. The Commission has verified the same.

Regulation 52.1 of the CSERC MYT Regulations, 2021 provides that the Statutory charges, as applicable shall be allowed in Input Price of coal.

Statutory charges approved by the Commission for GP-III mines for the Control Period are as under:

Table 8-23: Approved Statutory Charges for GP-III mines

Particulars	Rate	Applicable on
GST	18.00%	Mining Charges
Royalty	14.00%	On Base Price
DMF	10.00%	Royalty
NMET Fund	2.00%	Royalty
Environment Cess	11.25	Rs. per Tonne
Infrastructure Development CESS	11.25	Rs. per Tonne
Forest Tax	26.23%	Rs.15/Tonne
GST on Royalty, DMF and NMET	18.00%	

It is also noted that as per CSPGCL submission fixed reserve price would also attract GST @18%. The same is also approved.

However, it is clarified that the compliance of the statutory provisions remain unfettered responsibility of the Petitioner and it is for CSPGCL to ensure that the statutory charges are paid in accordance to the prevailing rules without delay and demur. CSPGCL is expected to exercise due care against excess / short payment of statutory charges. In case of any changes in the relevant provisions or applicability of any other statutory charge, CSPGCL may pay the same and leave is granted for claim against such payment along with due justification at the time of true up.

Based on the above, the Commission has considered the Statutory charges for GP-III mines as under:

Table 8-24: Approved Statutory Charges for GP-III mines for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Statutory Charges	119.34	127.88	140.05

It is noted that the approved Statutory charges are lower than the Statutory charges submitted by CSPGCL due to difference in per unit cost (which is based on Annual Extraction Cost and MDO charges) approved by the Commission and per unit cost claimed by CSPGCL.

Further, as regards possible additional capital cost as submitted by CSPGCL in its additional submission, the Commission directs CSPGCL to submit the details of the same along with the Petition along with proper justification, when these expenses are actually incurred.

8.5.8 Non-Tariff Income

CSPGCL's submission

CSPGCL submitted that the interest received on FDR of Rs. 110.20 Crore has been adjusted as a deduction from the AEC in the year it is received. The interest income considered as NTI for the Control Period is shown in the Table below:

Table 8-25: NTI for GP-III mines for the Control Period as submitted by CSPGCL (Rs./Tonne)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
NTI/ Interest Income	3.30	3.30	1.65

Commission's View

The Commission noted that in reply to data gaps, CSPGCL on account of typo error has revised the NTI for the Control Period as shown in the Table below:

Table 8-26: Revised NTI for GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
NTI/ Interest Income	3.31	3.31	3.31	1.65

It is noted that CSPGCL has projected Interest Income on FDR amount of Rs. 110.20 Crore at 3% for the period from FY 2021-22 to FY 2023-24. For FY 2024-25, CSPGCL has projected Interest Income only for the half year since the refund of BG and maturity of FDR is expected during FY 2024-25.

The Commission accepts the Interest Income projected by the CSPGCL for the Control Period as shown below:

Table 8-27: Approved NTI for GP-III mines for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
NTI/ Interest Income	3.31	3.31	1.65

8.5.9 MDO Charges

CSPGCL's submission

CSPGCL has appointed M/s. Gare Palma III Collieries Ltd. as MDO through open transparent competitive bidding process. As per Section 63 of the Electricity Act, 2003, the Commission is supposed to adopt the rates of electricity arrived at through competitive bidding. Considering the provisions of the aforesaid section as a principle, CSPGCL requested the Commission to consider the rates of MDO arrived at through transparent competitive bidding conducted by CSPGCL for selection of MDO.

CSPGCL submitted that as per Clause 27.2 of CMSA, the MDO charges are subject to price variation based on movement of certain indices, which are listed below:

Table 8-28: Indices submitted by CSPGCL

Index	Weightage
WPI	10%
CPI	20%
WPI-Tyres	10%
WPI- Matches, Explosive Chemicals	10%
WPI- Heavy Machinery	25%
WPI- HSD Coal	25%

The agreement also states that the applicable price adjustment shall be governed by the escalation rates published by CERC for the captive mines. However, CERC has discontinued the publication of escalation index for coal from captive mines. Hence, the price adjustment shall be governed by the above indices only.

In all the provisions/orders related to prediction of future indices, the Commission has adopted the trajectory-based approach. Since FY 2017-18 to FY 2021-22, the MDO charges, based on the above indices, have increased by about 3.33%. The same has been considered for escalation on the existing MDO charges of FY 2021-22. Any adjustment required in the MDO charges based on movement of above indices shall be adjusted through the FCA/at the time of true-up, as may be directed by the Commission.

The MDO charges as submitted by CSPGCL for the Control Period are as under:

Table 8-29: MDO Charges for GP-III mines for the Control Period as submitted by CSPGCL (Rs./Tonne)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
MDO Charges	677.36	699.94	723.26

Commission's View

As per Regulation 53.2 of the CSERC MYT Regulations, 2025, the Run of Mine cost will include the Mining Charge, which is the charge per tonne of coal paid by the Generating Company to the MDO engaged by the Generating Company for mining, wherever applicable. Since CSPGCL has appointed MDO through the process of competitive bidding and MDO charges are discovered through bidding process, the Commission accepts the MDO charges for FY 2021-22 as submitted by CSPGCL for GP-III mines. For deriving MDO charges for the Control Period, the Commission has considered escalation of 3.33% on the MDO charges of FY 2021-22, based on CSPGCL's submissions. Any adjustment required in the MDO charges based on movement of above indices shall be adjusted at the time of true-up.

Accordingly, the approved MDO charges for the Control Period are as shown below:

Table 8-30: Approved MDO Charges for GP-III mines for the Control Period (Rs./Tonne)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
MDO Charges	677.36	699.94	723.26

8.5.10 Fixed Reserve Price

CSPGCL's submission

CSPGCL submitted that the Ministry of Coal, GoI, vide Notification No. 13016/9/2014 -CA III dated December 26, 2014 has fixed the Floor/ Reserve Price for auction and allotment of coal mine/ blocks as Rs. 100/MT for coal blocks allocated to Government Companies for specified end use. Further, GST is applicable on the same @18%. Accordingly, the Fixed Reserve Price has been considered at Rs. 118/MT for the calculation of Input Price of coal for the Control Period.

Commission's View

The Commission has verified the Notification of the Ministry of Coal, GoI specifying the Fixed Reserve Price of Rs. 100/MT. The Commission allows the Fixed Reserve Price of Rs. 118/MT for the calculation of Input Price of coal for the Control Period in line with the Notification issued by the Ministry of Coal, GoI and considering the applicable GST.

8.5.11 Input Price of Coal

CSPGCL's submission

CSPGCL computed the Input Price of coal from GP-III mines for ABVTPS for the Control Period as shown below:

Table 8-31: Input Price of Coal from GP-III mines for the Control Period as submitted by CSPGCL

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
Depreciation	Rs. Crore	43.19	43.84	44.01
Interest on Working Capital	Rs. Crore	1.85	2.02	2.26
Interest on loan	Rs. Crore	58.63	59.40	56.19
Return on Equity	Rs. Crore	49.57	50.23	47.60
O&M Charges	Rs. Crore	42.67	47.25	54.24
Statutory Charges	Rs. Crore	121.94	131.38	144.33
Less -NTI (Interest Income)	Rs. Crore	3.30	3.30	1.65
Annual Extraction Cost	Rs. Crore	314.57	330.80	346.98
ATQ	Million Tonnes	4.20	4.50	5.00
Annual Extraction Cost	Rs./MT	748.97	735.12	693.96
MDO Charges	Rs./MT	677.36	699.94	723.26
Sub Total	Rs./MT	1426.34	1435.05	1417.23
Fixed Reserve Price	Rs./MT	118.00	118.00	118.00
Total Price/Tonne	Rs./MT	1544.34	1553.05	1535.23

Commission's View

The Commission noted that in reply to data gaps, CSPGCL has revised the Input Price of coal from GP-III mines as shown below:

Table 8-32: Revised Input Price of Coal from GP-III mines for the Control Period as submitted by CSPGCL (Rs. Crore)

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
Depreciation	Rs. Crore	43.19	43.84	44.01
Interest on Working Capital	Rs. Crore	1.85	2.00	2.24
Interest on loan	Rs. Crore	55.88	52.81	45.70
Return on Equity	Rs. Crore	49.57	50.23	47.60
O&M Charges	Rs. Crore	42.67	47.25	54.24
Statutory Charges	Rs. Crore	121.31	129.88	141.94

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
Less: NTI (Interest Income)	Rs. Crore	3.31	3.31	1.65
Annual Extraction Cost	Rs. Crore	311.18	322.69	334.09
ATQ	Million Tonnes	4.20	4.50	5.00
Annual Extraction Cost	Rs./MT	740.89	717.10	668.18
MDO Charges	Rs./MT	677.36	699.94	723.26
Sub Total	Rs./MT	1418.26	1417.03	1391.44
Fixed Reserve Price	Rs./MT	118.00	118.00	118.00
Total Price/Tonne	Rs./MT	1536.26	1535.03	1509.44

Based on various components of expense and income discussed above, the approved Input Price of coal from GP-III mines for ABVTPS for the Control Period from FY 2022-23 to FY 2024-25 is given in the following Table:

Table 8-33: Approved Input Price of Coal from GP-III mines for the Control Period (Rs. Crore)

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
Depreciation	Rs. Crore	43.19	43.84	44.01
Interest on Working Capital	Rs. Crore	1.83	1.98	2.22
Interest on loan	Rs. Crore	55.88	52.81	45.70
Return on Equity	Rs. Crore	40.91	41.45	39.28
O&M Charges	Rs. Crore	42.67	47.25	54.24
Statutory Charges	Rs. Crore	119.34	127.88	140.05
Less: NTI (Interest Income)	Rs. Crore	3.31	3.31	1.65
Annual Extraction Cost	Rs. Crore	300.53	311.90	323.86
ATQ	Million Tonnes	4.20	4.50	5.00
Annual Extraction Cost	Rs./MT	715.54	693.12	647.72
MDO Charges	Rs./MT	677.36	699.94	723.26
Sub Total	Rs./MT	1392.90	1393.05	1370.99
Fixed Reserve Price including GST	Rs./MT	118.00	118.00	118.00
Total Price/Tonne	Rs./MT	1510.90	1511.05	1488.99

In the above presentation, Statutory Charges have been shown under Annual Extraction Cost. However, Statutory Charges are not part of the Basic Price. Taxes and duties are applicable on Basic Price and not on the total price. . Hence, the Commission has provided the breakup of the total input price of coal from GP-III mines, as under.

Table 8-34: Breakup of Approved Input Price of Coal from GP-III mines for the Control Period

Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
Base Price for invoicing at Mine end	Rs./MT	1108.75	1108.87	1090.89
Statutory Charges	Rs./MT	284.15	284.18	280.10
Fixed Reserve Price including GST	Rs./MT	118.00	118.00	118.00
Total Price/Tonne	Rs./MT	1510.90	1511.05	1488.99

8.5.12 Recovery of FCA

The Commission notes that GP-III mine is an Integrated Coal Mine and it is one of the first Integrated Coal Mines to be operational in the State. Since, the recovery of Fuel Cost Adjustment (FCA) for Integrated Coal Mine would be implemented for the first time as per the CSERC MYT Regulations, 2021, the Commission asked CSPGCL to submit its proposal for recovery of FCA for the Control Period from FY 2022-23 to FY 2024-25.

In reply, CSPGCL submitted that for ABVTPS Station, the Input Price of the coal from integrated mine has been filed based on provisional data. As submitted during the TVS and in the additional submission, CA certified cost will be available on completion of audited accounts, and the mine has yet to achieve peak rated capacity, and change in loading mix from different Rail Sidings seems inevitable. Further, this is the first Order of such kind and no preceding example has been set by CERC in any of its Orders. Under these circumstances and looking to the complexities involved, CSPGCL prayed for continuation of the FCA format in vogue with minor modifications. CSPGCL craved leave for submission of deviations arising out of the above factors and the logical and logistical differences attached with integrated mines at the time of respective true up. CSPGCL submitted that such an approach would allow compliance of the Hon'ble APTEL directive on one hand and on the other, would permit simple and smooth computation of FCA. CSPGCL also submitted the soft copy of the proposed format for FCA recovery for ABVTPP.

The Commission in view of the complexities faced by CSPGCL for FCA recovery for ABVTPP, allows recovery of FCA as per the format proposed by CSPGCL. The modality and frequency of the FCA shall be as per details given in the MYT Chapter of this order. CSPGCL shall submit the deviations, if any, at the time of true up of respective years.

9 ARR AND GENERATION TARIFF OF CSPGCL FOR FY 2022-23 TO FY 2024-25

9.1 Background

The Commission notified the CSERC MYT Regulations, 2021 for the Control Period from FY 2022-23 to FY 2024-25 on November 14, 2021.

CSPGCL has submitted the present Petition for determination of ARR and Generation Tariff for its conventional thermal and hydro power plants for the Control Period from FY 2022-23 to FY 2024-25. CSPGCL has submitted details of its projected expenses likely to be incurred during the Control Period under various heads, viz., O&M expenses, depreciation, interest on loans, interest on working capital, etc., as per the CSERC MYT Regulations, 2021.

Regulation 5.7 of the CSERC MYT Regulations, 2021 specifies as under:

“5.7. The filing for the Control Period under this Regulation shall be as under;

(a) MYT Petition shall comprise of:

i. For Generation, Transmission and SLDC business

- 1. Truing up for previous year;*
- 2. Multi-Year Aggregate Revenue Requirement for each year of the entire Control Period;*
- 3. Application for determination of tariff and fees and charges for each year of the entire Control Period;”*

Regulation 9.1 and 9.2 of the CSERC MYT Regulations, 2021 specify 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 Generation Tariff for CSPGCL Stations for the Control Period from FY 2022-23 to FY 2024-25 based on the submissions by CSPGCL and prudence check.

9.2 Generation Capacity of Existing Generating Stations

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

Table 9-1: Generation Capacity (MW) of existing Generating Stations

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

9.3 Norms of Operation for CSPGCL Generating Stations

CSPGCL's Submission

CSPGCL submitted the plant-wise normative operational parameters in accordance with the CSERC MYT Regulations, 2021, as shown in the following Tables:

Table 9-2: Normative Operational Parameters for DSPM as submitted by CSPGCL

Sl. No.	Parameter	DSPM TPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	85.00%	85.00%	85.00%
2	Auxiliary Consumption (%)	9.00%	9.00%	9.00%
3	Sp. Oil Consumption (ml/kWh)	0.50	0.50	0.50
4	Station Heat Rate (kcal/kWh)	2430	2430	2430
5	Transit Loss (%)	0.20%	0.20%	0.20%

Table 9-3: Normative Operational Parameters for HTPS as submitted by CSPGCL

Sl. No.	Parameter	HTPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	79.00%	78.00%	76.50%
2	Auxiliary Consumption (%)	9.70%	9.70%	9.70%
3	Sp. Oil Consumption (ml/kWh)	0.80	0.80	0.80
4	Station Heat Rate (kcal/kWh)	2650	2650	2650
5	Transit Loss (%)	0.20%	0.20%	0.20%

Table 9-4: Normative Operational Parameters for KWTPP as submitted by CSPGCL

Sl. No.	Parameter	KWTPP		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	85.00%	85.00%	85.00%
2	Auxiliary Consumption (%)	5.25%	5.25%	5.25%
3	Sp. Oil Consumption (ml/kWh)	0.50	0.50	0.50
4	Station Heat Rate (kcal/kWh)	2390	2390	2390
5	Transit Loss (%)	0.20%	0.20%	0.20%

Table 9-5: Normative Operational Parameters for ABVTPS as submitted by CSPGCL

Sl. No.	Parameter	ABVTPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	79%	82%	85%
2	Auxiliary Consumption (%)	5.25%	5.25%	5.25%
3	Sp. Oil Consumption (ml/kWh)	0.50	0.50	0.50
4	Station Heat Rate (kcal/kWh)	2390	2390	2390
5	Transit Loss (%)	0.80%	0.80%	0.80%

Table 9-6: Normative Operational Parameters for HBPS as submitted by CSPGCL

Sl. No.	Parameter	HBPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Design Energy (MU)	274	274	274
2	Auxiliary Consumption (%)	1.20%	1.20%	1.20%

Commission's View

The norms for operation of the conventional generation plants of CSPGCL have been specified in the CSERC MYT Regulations, 2021 notified for the MYT Control Period. The Commission has approved the normative operational parameters for the thermal generating stations for the Control Period as per Regulation 43 of CSERC MYT Regulations, 2021.

CSPGCL has submitted the gross generation of 274 MU for HBPS, which is equal to the design energy of the plant approved for the earlier Control Period. The same has been accepted. The auxiliary consumption for Hasdeo Bango has been considered in accordance with Regulation 44 of CSERC MYT Regulations, 2021.

The normative operational parameters approved by the Commission for the generating stations of CSPGCL for the Control Period from FY 2022-23 to FY 2024-25 are shown in the Tables below:

Table 9-7: Approved Normative Operational Parameters for DSPM

Sl. No.	Parameter	DSPM TPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	85.00%	85.00%	85.00%
2	Auxiliary Consumption (%)	9.00%	9.00%	9.00%
3	Sp. Oil Consumption (ml/kWh)	0.50	0.50	0.50
4	Station Heat Rate (kcal/kWh)	2430	2430	2430
5	Transit Loss (%)	0.20%	0.20%	0.20%

Table 9-8: Approved Normative Operational Parameters for HTPS

Sl. No.	Parameter	HTPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	79.00%	78.00%	76.50%
2	Auxiliary Consumption (%)	9.70%	9.70%	9.70%
3	Sp. Oil Consumption (ml/kWh)	0.80	0.80	0.80
4	Station Heat Rate (kcal/kWh)	2650	2650	2650
5	Transit Loss (%)	0.20%	0.20%	0.20%

Table 9-9: Approved Normative Operational Parameters for KWTPP

Sl. No.	Parameter	KWTPP		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	85.00%	85.00%	85.00%
2	Auxiliary Consumption (%)	5.25%	5.25%	5.25%
3	Sp. Oil Consumption (ml/kWh)	0.50	0.50	0.50
4	Station Heat Rate (kcal/kWh)	2390	2390	2390
5	Transit Loss (%)	0.20%	0.20%	0.20%

Table 9-10: Approved Normative Operational Parameters for ABVTPS

Sl. No.	Parameter	ABVTPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	PAF (%)	79%	82%	85%
2	Auxiliary Consumption (%)	5.25%	5.25%	5.25%
3	Sp. Oil Consumption (ml/kWh)	0.50	0.50	0.50
4	Station Heat Rate (kcal/kWh)	2390	2390	2390
5	Transit Loss (%)	0.80%	0.80%	0.80%

Table 9-11: Approved Normative Operational Parameters for HBPS

Sl. No.	Parameter	HBPS		
		FY 2022-23	FY 2023-24	FY 2024-25
1	Design Energy (MU)	274	274	274
2	Auxiliary Consumption (%)	1.20%	1.20%	1.20%

9.4 Generation from CSPGCL Generating Stations

CSPGCL's Submission

CSPGCL has projected gross and net generation for the Control Period for thermal and hydro stations based on installed capacity and projected NAPAF and auxiliary consumption.

Commission's View

The generation for the Control Period has been approved on the basis of installed capacity, approved NAPAF and normative auxiliary consumption. The station-wise gross generation and net generation for each year of the Control Period approved is summarised in the following Table.

Table 9-12: Approved Gross Generation and Net Generation (MU)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Gross Generation			
HTPS	5813.14	5755.28	5629.18
DSPM	3723.00	3733.20	3723.00
KWTPP	3723.00	3733.20	3723.00
ABVTPS	6920.40	7202.88	7446.00
HBPS	274.00	274.00	274.00
Net Generation			
HTPS	5249.26	5197.01	5083.15
DSPM	3387.93	3397.21	3387.93
KWTPP	3527.54	3537.21	3527.54
ABVTPS	6557.08	6824.73	7055.09
HBPS	270.71	270.71	270.71

9.5 Energy Charges

9.5.1 GCV and Price of Fuel

CSPGCL's Submission

CSPGCL submitted that as per Regulation 45.5 of the CSERC MYT Regulations, 2021, energy charges include Primary Fuel, i.e., Coal cost and Secondary Fuel, i.e., Oil Cost. CSPGCL has computed the cost of Coal and Oil taking into account the

normative transit losses. Landed price of fuel and GCV are based on the procurement details of three months, i.e., July 2021 to September 2021.

As per the CSERC MYT Regulations, 2021, the coal data for computation of ECR is to be considered on 'as received' basis, however, as the CSERC MYT Regulations, 2021 have been notified recently, preparation of capital scheme for such sampling may take some time. While framing the CSERC MYT Regulations, 2021, the Commission has provided a formula for computation of GCV of coal in such cases on the basis of sampling done on 'as billed' basis. In the instant Petition, CSPGCL has followed the same.

In case of ABVTPS, the coal is procured through Gare-Palma III mine and hence, the landed price of coal for the MYT Control Period from FY 2022-23 to FY 2024-25 has been computed based on the input price of coal from the integrated mine. CSPGCL, in the present Petition, has derived the input price as per the CSERC MYT Regulations, 2021.

Regulation 45.11 and Regulation 93 allow for recovery of the variation in the coal cost. With the change in Regulations from 'as fired' CV to 'as billed' CV by third party, due to the delay in reporting by Central Institute of Mining and Fuel Research (CIMFR) (the designated third party) the prevailing FCA modality/timeline may need modification/realignment. CSPGCL craved leave for detailed submission based on the further inputs during the proceedings.

The landed price of primary fuel, i.e., coal, for various stations considered by CSPGCL is summarised in the following Tables:

Table 9-13: Landed Cost of Coal submitted by CSPGCL for HTPS and KWTPP

Sl. No.	Particulars	Unit	HTPS and KWTPP		
			Jul-21	Aug-21	Sept-21
1	Quantity of Coal supplied by Coal Company	MT	549382.00	520510.00	440491.00
2	Adjustment (+/-) in quantity supplied made by Coal Company	MT	0.00	0.00	0.00
3	Coal supplied by Coal Company (1+2)	MT	549382.00	520510.00	440491.00
4	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%
5	Net coal Supplied (3-4)	MT	548283.24	519468.98	439610.02
6	Amount charged by the Coal Company	Rs. Crore	98.69	94.05	79.59
7	Adjustment (+/-) in amount charged made by Coal*	Rs. Crore	0.00	0.00	0.00
8	Additional claim by coal company as per FSA	Rs. Crore	0.00	0.00	0.00
9	Total amount Charged (6+7+8)	Rs. Crore	98.69	94.05	79.59
10	Rate of Coal Charged by Coal Company	Rs./ MT	1799.92	1810.44	1810.44
11	Transportation charges by Rail / Road Transport #	Rs. Crore	-	-	-

Sl. No.	Particulars	Unit	HTPS and KWTPP		
			Jul-21	Aug-21	Sept-21
12	Adjustment (+/-) in amount charged made by Railways / Transport Company	Rs. Crore	-	-	-
13	Other Charges / Cost of coal unloading	Rs. Crore	-	-	-
14	Total Transportation Charges (11+12+13)	Rs. Crore	5.21	5.40	4.64
15	Transportation Charge/MT	Rs./ MT	95.06	103.88	105.47
16	Total amount Charged for coal supplied including Transportation (9+14)	Rs./ MT	103.90	99.44	84.23
17	Rate of Coal per MT at actual Transit Loss (15/4)	Rs./ MT	1894.98	1914.33	1915.91
18	Weighted Average landed price of coal	Rs./ MT	1907.75		

Table 9-14: Landed Cost of Coal submitted by CSPGCL for DSPM

Sl. No.	Particulars	Unit	DSPM		
			Jul-21	Aug-21	Sept-21
1	Quantity of Coal supplied by Coal Company	MT	218631.11	205143.08	229145.38
2	Adjustment (+/-) in quantity supplied made by Coal Company	MT	0.00	0.00	0.00
3	Coal supplied by Coal Company (1+2)	MT	218631.11	205143.08	229145.38
4	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%
5	Net coal Supplied (3-4)	MT	218193.85	204732.79	228687.09
6	Amount charged by the Coal Company	Rs. Crore	40.52	38.19	42.65
7	Adjustment (+/-) in amount charged made by Coal*	Rs. Crore	0.00	0.00	0.00
8	Additional claim by coal company as per FSA	Rs. Crore	0.00	0.00	0.00
9	Total amount Charged (6+7+8)	Rs. Crore	40.52	38.19	42.65
10	Rate of Coal Charged by Coal Company	Rs./ MT	1857.18	1865.26	1864.96
11	Transportation charges by Rail / Road Transport #	Rs. Crore	-	-	-
12	Adjustment (+/-) in amount charged made by Railways / Transport Company	Rs. Crore	-	-	-
13	Other Charges / Cost of coal unloading	Rs. Crore	-	-	-
14	Total Transportation Charges (11+12+13)	Rs. Crore	4.58	4.20	5.07

Sl. No.	Particulars	Unit	DSPM		
			Jul-21	Aug-21	Sept-21
15	Transportation Charge/MT	Rs./ MT	210.09	205.29	221.52
16	Total amount Charged for coal supplied including Transportation (9+14)	Rs./ MT	45.11	42.39	47.72
17	Rate of Coal per MT at actual Transit Loss (15/4)	Rs./ MT	2067.27	2070.55	2086.48
18	Weighted Average landed price of coal	Rs./ MT	2075.04		

Table 9-15: Landed Cost of Coal submitted by CSPGCL for ABVTPS

Sl. No.	Particulars	Unit	ABVTPS		
			FY 22-23	FY 23-24	FY 24-25
1	Input Price of Coal at Mine End	Rs./ MT	1544.34	1553.05	1535.23
2	Road transportation Cost / rate	Rs./ MT	837.36	837.36	837.36
3	Transit Loss from Mine to railway Siding	%	0.40%	0.40%	0.40%
4	Per Ton Cost of Coal at railway siding	Rs./ MT	2391.26	2400.02	2382.12
5	Rail Transportation Charges	Rs./ MT	252.15	252.15	252.15
6	Average of other charges	Rs./ MT	12.40	12.40	12.40
7	Transit Loss from Railway Siding to power Plant	%	0.40%	0.40%	0.40%
8	Landed Cost of Coal at Plant end	Rs./ MT	2666.48	2675.27	2657.30

Commission's View

The Commission noted that CSPGCL has computed fuel cost in the Petition considering the landed price of fuel and GCV based on the procurement details of three months, i.e., July 2021 to September 2021, as shown in the Tables above. The Commission asked CSPGCL to submit the landed price of fuel and GCV based on the procurement details of latest available three months of October 2021 to December 2021. In reply, CSPGCL submitted the landed price of fuel and GCV details for October 2021 to December 2021. CSPGCL also submitted that due to latest fuel data, there is reduction in the Energy Charge Rate (ECR) of HTPS, KWTPP and ABVTPS; however, there is a slight increase in the ECR of DSPM. On overall basis, there is significant reduction in the ARR of CSPGCL for the Control Period.

For computation of variable cost, the revised Price and GCV of Fuel as submitted by CSPGCL for October 2021 to December 2021 in reply has been considered. The landed price of primary fuel, i.e., coal, for various stations considered by the Commission is summarised in the following Tables:

Table 9-16: Landed Cost of Coal considered by the Commission for HTPS and KWTPP

Sl. No.	Particulars	Unit	HTPS and KWTPP		
			Oct-21	Nov-21	Dec-21
1	Quantity of Coal supplied by Coal Company	MT	562899.00	623012.00	601363.00
2	Adjustment (+/-) in quantity supplied made by Coal Company	MT	0.00	0.00	0.00
3	Coal supplied by Coal Company (1+2)	MT	562899.00	623012.00	601363.00
4	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%
5	Net coal Supplied (3-4)	MT	561773.20	621765.98	600160.27
6	Amount charged by the Coal Company	Rs. Crore	101.71	112.57	108.66
7	Adjustment (+/-) in amount charged made by Coal*	Rs. Crore	0.00	0.00	0.00
8	Additional claim by coal company as per FSA	Rs. Crore	0.00	0.00	0.00
9	Total amount Charged (6+7+8)	Rs. Crore	101.71	112.57	108.66
10	Rate of Coal Charged by Coal Company	Rs./ MT	1810.44	1810.44	1810.44
11	Transportation charges by Rail / Road Transport #	Rs. Crore	-	-	-
12	Adjustment (+/-) in amount charged made by Railways / Transport Company	Rs. Crore	-	-	-
13	Other Charges / Cost of coal unloading	Rs. Crore	-	-	-
14	Total Transportation Charges including coal sampling charges (11+12+13)	Rs. Crore	5.34	5.34	4.89
15	Transportation Charge/MT	Rs./ MT	94.99	85.81	81.48
16	Weighted average rate of Transportation (including coal sampling charge)	Rs./ MT	87.24		
17	Total amount Charged for coal supplied including Transportation (9+14)	Rs. Crore	107.04	117.90	113.55
18	Rate of Coal per MT at normative Transit Loss (17/5)	Rs./ MT	1905.43	1896.25	1891.92
19	Weighted Average landed price of coal	Rs./ MT	1897.68		

Table 9-17: Landed Cost of Coal considered by the Commission for DSPM

Sl. No.	Particulars	Unit	DSPM		
			Oct-21	Nov-21	Dec-21
1	Quantity of Coal supplied by Coal Company	MT	192158.69	167869.18	162607.34
2	Adjustment (+/-) in quantity supplied made by Coal Company	MT	0.00	0.00	0.00
3	Coal supplied by Coal Company (1+2)	MT	192158.69	167869.18	162607.34

Sl. No.	Particulars	Unit	DSPM		
			Oct-21	Nov-21	Dec-21
4	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%
5	Net coal Supplied (3-4)	MT	191774.37	167533.44	162282.13
6	Amount charged by the Coal Company	Rs. Crore	36.05	29.95	29.35
7	Adjustment (+/-) in amount charged made by Coal*	Rs. Crore	0.00	0.00	0.00
8	Additional claim by coal company as per FSA	Rs. Crore	0.00	0.00	0.00
9	Total amount Charged (6+7+8)	Rs. Crore	36.05	29.95	29.35
10	Rate of Coal Charged by Coal Company	Rs./ MT	1879.66	1787.47	1808.35
11	Transportation charges by Rail / Road Transport #	Rs. Crore	-	-	-
12	Adjustment (+/-) in amount charged made by Railways / Transport Company	Rs. Crore	-	-	-
13	Other Charges (including unloading, sampling etc)	Rs. Crore	0.21	0.17	0.21
14	Per Ton Other Charges	Rs./ MT	11.06	10.08	13.22
15	Weighted Average other charge rate	Rs./ MT	11.42		
16	Total Transportation Charges	Rs. Crore	4.27	3.43	2.35
17	Transportation Charge/MT	Rs./ MT	222.51	204.65	144.76
18	Weighted Average Transportation Charge rate	Rs./ MT	192.59		
19	Total amount Charged for coal supplied including Transportation (9+13+16)	Rs./ MT	40.53	33.54	31.91
20	Rate of Coal per MT at actual Transit Loss ((14+17)/4)	Rs./ MT	2113.26	2002.23	1966.36
21	Weighted Average landed price of coal	Rs./ MT	2031.89		

CSPGCL, in the present Petition, has sought the approval for determination of input price of coal from the integrated mine of Gare-Palma III used for ABVTPS. The Commission has derived the input price for coal from Gare-Palma III as per the CSERC MYT Regulations, 2021 as discussed in the subsequent sections of this Order.

Based on the input price approved for coal from the integrated mine, the Commission has considered the landed price of coal for ABVTPS for the MYT Control Period from FY 2022-23 to FY 2024-25 as shown below:

Table 9-18: Transportation and other charges considered by the Commission for ABVTPS

Sl. No.	Particulars	Unit	ABVTPS		
			Oct-21	Nov-21	Dec-21
1	Coal Quantity	MT	261559.44	168242.39	293425.99
2	Rail Freight Charges	Rs. Crore	6.74	5.59	12.22
3	Rail Freight / Ton	Rs/ Ton	257.78	332.30	416.40
4	Average rail freight / ton	Rs/ Ton	335.49		
5	Road Transportation Charges / Ton	Rs/ Ton	850.12	713.96	597.17
6	Average Road Transport charges / ton	Rs/ Ton	720.42		
7	Other Charges including Coal sampling charges	Rs. Crore	0.63	0.19	0.43
8	Other Charges / Ton	Rs/ Ton	23.90	11.42	14.74
9	Average other charges / ton	Rs/ Ton	16.69		

Table 9-19: Landed Cost of Coal considered by the Commission for ABVTPS

Sl. No.	Particulars	Unit	ABVTPS		
			FY 22-23	FY 23-24	FY 24-25
1	Input Cost (Price) of Coal at Mine End	Rs./ MT	1510.90	1511.05	1488.99
2	Road transportation Cost / rate	Rs./ MT	720.42	720.42	720.42
3	Transit Loss from Mine to railway Siding	%	0.40%	0.40%	0.40%
4	Per Ton Cost of Coal at railway siding	Rs./ MT	2240.28	2240.43	2218.28
5	Rail Transportation Charges	Rs./ MT	335.49	335.49	335.49
6	Average of other charges	Rs./ MT	16.69	16.69	16.69
7	Transit Loss from Railway Siding to power Plant	%	0.40%	0.40%	0.40%
8	Landed Cost of Coal at Plant end	Rs./ MT	2602.86	2603.02	2580.78

9.5.2 Variable Cost and Energy Charges

CSPGCL's Submission

CSPGCL has computed fuel cost and energy charges based on norms of operation submitted in the Petition and GCV and Price of Fuel considered in the Petition as Shown in the Tables below:

Table 9-20: Variable Cost for Control Period as submitted by CSPGCL

Sl. No.	Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
A	HTPS				
1	Coal Cost	Rs. Crore	907.49	898.45	878.77
2	Oil Cost	Rs. Crore	28.95	28.66	28.04
3	Total Fuel Cost	Rs. Crore	936.44	927.12	906.81
4	Net Generation	MU	5249.26	5197.01	5083.15
5	Energy Charges	Rs./kWh	1.784	1.784	1.784
B	DSPM				
1	Coal Cost	Rs. Crore	552.03	553.54	552.03
2	Oil Cost	Rs. Crore	10.82	10.85	10.82
3	Total Fuel Cost	Rs. Crore	562.85	564.39	562.85
4	Net Generation	MU	3387.93	3397.21	3387.93
5	Energy Charges	Rs./kWh	1.661	1.661	1.661
C	KWTPP				
1	Coal Cost	Rs. Crore	524.66	526.10	524.66
2	Oil Cost	Rs. Crore	11.59	11.62	11.59
3	Total Fuel Cost	Rs. Crore	536.25	537.72	536.25
4	Net Generation	MU	3527.54	3537.21	3527.54
5	Energy Charges	Rs./kWh	1.520	1.520	1.520
D	ABVTPS				
1	Coal Cost	Rs. Crore	1367.99	1428.52	1466.82
2	Oil Cost	Rs. Crore	21.32	22.19	22.94
3	Total Fuel Cost	Rs. Crore	1389.31	1450.71	1489.76
4	Net Generation	MU	6557.08	6824.73	7055.09
5	Energy Charges	Rs./kWh	2.119	2.126	2.112

Commission's View

As regards the computation of energy charges, CSERC MYT Regulations, 2021 specifies as under:

“45.5 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:

$ECR = \frac{[(GHR - SFC \times CVSF) \times LPPF / CVPF] + SFC \times LPSFi}{100} \times 100 / (100 - AUX)$ Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF=(a) Gross calorific value of primary fuel as received at generating station, in kCal per kg, per litre or per standard cubic meter, as applicable after prudence check.

Provided where arrangements for taking samples for 'as received' basis is not in place, GCV of coal as received may be computed from GCV of coal "as billed"

Adjustment for total moistures shall be computed as per the CERC formula given as under:

$$GCV \times (1 - TM) / (1 - IM)$$

Where, GCV = Gross calorific value of coal

TM = Total Moisture

IM = Inherent Moisture

- (b) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/kg on account of variation during storage at generating station;

Provided that at the time of true-up the GCV of coal on account of variation during storage at generating station shall be allowed at maximum value of 85 Kcal/kg.

- (c) In case of blending of fuel received through different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio.

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.

Provided that, in case of blending of fuel from different sources, the weighted average, landed cost of the primary fuel shall be arrived by considering the blending ratio.

Provided that, in case of primary fuel supply from integrated mines, the cost of fuel shall be computed in accordance with the regulations notified by CSERC. In the absence of State regulation, regulation notified by CERC shall be adopted.

SFC= Specific fuel oil consumption, in ml per kWh.

LPSFi: Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially

45.6 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.

45.7. 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.

45.8. 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,

45.9. For reduction in cost of generation, Ministry of Power, Govt. of India has prescribed the methodology for use of transferred coal in Independent Power Producers (IPPs), generating unit for efficient utilization of domestic coal. Accordingly, the generation company, with prior approval of the Commission, shall be permitted to have flexibility in utilization of domestic coal and other resources for reducing the cost of power generation.

45.10 The landed cost of fuel for the month shall include price of fuel or input price, washery charges wherever applicable 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 43.6.

Provided that cost of primary fuel or the landed cost of primary fuel as the case may be, procured through transparent competitive bidding process, the lowest rate discovered through such bidding shall be considered after adjusting for the account of quantity and quality.

Provided also that in case of coal-fired thermal generating station the Gross Calorific Value of primary fuel shall be considered on the basis of certificate/test report issued by reputed third party agency after prudence check. The expenses towards the third party testing shall be reimbursed by the beneficiaries.

45.11 The bi-monthly increase in the primary fuel cost shall be recovered as per the Fuel Cost Adjustment mechanism as per Regulation 93 of this Regulations.”

As mentioned earlier, CSPGCL in reply to data gaps, has revised the landed price of fuel and GCV based on fuel details for October 2021 to December 2021. Thus, CSPGCL has also revised fuel cost and variable cost for thermal stations as shown below:

Table 9-21: Revised Variable Cost for Control Period as submitted by CSPGCL

S. No.	Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
A	HTPS				
1	Coal Cost	Rs. Crore	797.10	789.17	771.88
2	Oil Cost	Rs. Crore	28.95	28.66	28.04
3	Total Fuel Cost	Rs. Crore	826.05	817.83	799.91
4	Net Generation	MU	5249.26	5197.01	5083.15
5	Energy Charges	Rs./kWh	1.574	1.574	1.574

S. No.	Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
B	DSPM				
1	Coal Cost	Rs. Crore	561.11	562.65	561.11
2	Oil Cost	Rs. Crore	10.82	10.85	10.82
3	Total Fuel Cost	Rs. Crore	571.93	573.50	571.93
4	Net Generation	MU	3387.93	3397.21	3387.93
5	Energy Charges	Rs./kWh	1.688	1.688	1.688
C	KWTPP				
1	Coal Cost	Rs. Crore	460.84	462.10	460.84
2	Oil Cost	Rs. Crore	11.59	11.62	11.59
3	Total Fuel Cost	Rs. Crore	472.43	473.73	472.43
4	Net Generation	MU	3527.54	3537.21	3527.54
5	Energy Charges	Rs./kWh	1.339	1.339	1.339
D	ABVTPS				
1	Coal Cost	Rs. Crore	1195.47	1243.68	1273.04
2	Oil Cost	Rs. Crore	21.32	22.19	22.94
3	Total Fuel Cost	Rs. Crore	1216.80	1265.88	1295.98
4	Net Generation	MU	6557.08	6824.73	7055.09
5	Energy Charges	Rs./kWh	1.856	1.855	1.837

The Commission has considered the revised fuel cost and variable cost for thermal stations submitted by CSPGCL as above as Petition value for the purpose of comparison.

The Commission has computed the variable cost for each generating station for each year of the Control Period by considering the norms of operation and GCV and Price of Fuel as approved.

During the Control Period, the changes in primary fuel cost shall be recovered by CSPGCL as per Fuel Cost Adjustment specified in Regulation 93 of CSERC MYT Regulations, 2021 and the formats as provided in this Order.

The summary of Generating Station-wise cost of Primary Fuel, Secondary Fuel and energy charges as submitted by CSPGCL and as approved are shown in the following tables:

Table 9-22: Variable Cost for HTPS for the Control Period

S. No.	Particulars	Unit	FY 2022-23		FY 2023-24		FY 2024-25	
			Petition	Approved	Petition	Approved	Petition	Approved
1	Rated Capacity	MW	840.00	840.00	840.00	840.00	840.00	840.00
2	Target Availability (PLF)	%	79.00%	79.00%	78.00%	78.00%	76.50%	76.50%
3	Units of Generation at Normative PLF	MU	5813.14	5813.14	5755.28	5755.28	5629.18	5629.18
4	Gross Station Heat Rate (SHR)	kcal/kWh	2650.00	2650.00	2650.00	2650.00	2650.00	2650.00
5	Specific Fuel Oil Consumption (SFC)	ml/ kWh	0.80	0.80	0.80	0.80	0.80	0.80
6	Calorific Value of Secondary Fuel (CVSF)	kcal/L	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00
7	Weighted Average Landed Price of Primary Fuel (LPPF)	Rs./MT	1897.68	1897.68	1897.68	1897.68	1897.68	1897.68
8	Weighted Average Landed Price of Secondary Fuel	Rs. / kL	62256.20	62256.20	62256.20	62256.20	62256.20	62256.20
9	Gross Calorific Value of Primary Fuel (CVPF)	kcal/Kg	3656.40	3656.40	3656.40	3656.40	3656.40	3656.40
10	Normative Auxiliary Consumption (%)	%	9.70%	9.70%	9.70%	9.70%	9.70%	9.70%
11	Overall Heat	G Cal	15404810.40	15404810.40	15251483.52	15251483.52	14917316.40	14917316.40
12	Heat from Oil	G Cal	46505.09	46505.09	46042.21	46042.21	45033.41	45033.41
13	Heat from Coal	G Cal	15358305.31	15358305.31	15205441.31	15205441.31	14872282.99	14872282.99
14	Transit Losses	%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
15	Projected Oil Consumption	kL	4650.51	4650.51	4604.22	4604.22	4503.34	4503.34
16	Projected Coal Consumption	MT	4200389.81	4200389.81	4158582.57	4158582.57	4067466.08	4067466.08
17	Specific Coal Consumption	kg/kWh	0.72	0.72	0.72	0.72	0.72	0.72
18	Coal Cost	Rs. Crore	797.10	797.10	789.17	789.17	771.88	771.88
19	Oil Cost	Rs. Crore	28.95	28.95	28.66	28.66	28.04	28.04
20	Total Fuel Cost	Rs. Crore	826.05	826.05	817.83	817.83	799.91	799.91
21	Net Generation	MU	5249.26	5249.26	5197.01	5197.01	5083.15	5083.15
22	Energy Charges for Coal	Rs./kWh	1.519	1.519	1.519	1.519	1.519	1.519
23	Energy Charges for Oil	Rs./kWh	0.055	0.055	0.055	0.055	0.055	0.055
24	Total ECR	Rs./kWh	1.574	1.574	1.574	1.574	1.574	1.574

Table 9-23: Variable Cost for DSPM for the Control Period

S. No.	Particulars	Unit	FY 2022-23		FY 2023-24		FY 2024-25	
			Petition	Approved	Petition	Approved	Petition	Approved
1	Rated Capacity	MW	500.00	500.00	500.00	500.00	500.00	500.00
2	Target Availability (PLF)	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
3	Units of Generation at Normative PLF	MU	3723.00	3723.00	3733.20	3733.20	3723.00	3723.00
4	Gross Station Heat Rate (SHR)	kcal/kWh	2430.00	2430.00	2430.00	2430.00	2430.00	2430.00
5	Specific Fuel Oil Consumption (SFC)	ml/ kWh	0.50	0.50	0.50	0.50	0.50	0.50
6	Calorific Value of Secondary Fuel (CVSF)	kcal/L	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00
7	Weighted Average Landed Price of Primary Fuel (LPPF)	Rs./MT	2031.89	2031.89	2031.89	2031.89	2031.89	2031.89
8	Weighted Average Landed Price of Secondary Fuel	Rs. / KL	58137.00	58137.00	58137.00	58137.00	58137.00	58137.00
9	Gross Calorific Value of Primary Fuel (CVPF)	kcal/kg	3269.32	3269.32	3269.32	3269.32	3269.32	3269.32
10	Normative Auxiliary Consumption (%)	%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
11	Overall Heat	G Cal	9046890.00	9046890.00	9071676.00	9071676.00	9046890.00	9046890.00
12	Heat from Oil	G Cal	18615.00	18615.00	18666.00	18666.00	18615.00	18615.00
13	Heat from Coal	G Cal	9028275.00	9028275.00	9053010.00	9053010.00	9028275.00	9028275.00
14	Transit Losses	%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
15	Projected Oil Consumption	kL	1861.50	1861.50	1866.60	1866.60	1861.50	1861.50
16	Projected Coal Consumption	MT	2761514.63	2761514.63	2769080.42	2769080.42	2761514.63	2761514.63
17	Specific Coal Consumption	kg/kWh	0.74	0.74	0.74	0.74	0.74	0.74
18	Coal Cost	Rs. Crore	561.11	561.11	562.65	562.65	561.11	561.11
19	Oil Cost	Rs. Crore	10.82	10.82	10.85	10.85	10.82	10.82
20	Total Fuel Cost	Rs. Crore	571.93	571.93	573.50	573.50	571.93	571.93
21	Net Generation	MU	3387.93	3387.93	3397.21	3397.21	3387.93	3387.93
22	Energy Charges for Coal	Rs./kWh	1.656	1.656	1.656	1.656	1.656	1.656
23	Energy Charges for Oil	Rs./kWh	0.032	0.032	0.032	0.032	0.032	0.032
24	Total Energy Charges	Rs./kWh	1.688	1.688	1.688	1.688	1.688	1.688

Table 9-24: Variable Cost for KWTPP for the Control Period

S. No.	Particulars	Unit	FY 2022-23		FY 2023-24		FY 2024-25	
			Petition	Approved	Petition	Approved	Petition	Approved
1	Rated Capacity	MW	500.00	500.00	500.00	500.00	500.00	500.00
2	Target Availability (PLF)	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
3	Units of Generation at Normative PLF	MU	3723.00	3723.00	3733.20	3733.20	3723.00	3723.00
4	Gross Station Heat Rate (SHR)	kcal/kWh	2390.00	2390.00	2390.00	2390.00	2390.00	2390.00
5	Specific Fuel Oil Consumption (SFC)	ml/ kWh	0.50	0.50	0.50	0.50	0.50	0.50
6	Calorific Value of Secondary Fuel (CVSF)	kcal/L	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00
7	Weighted Average Landed Price of Primary Fuel (LPPF)	Rs./MT	1897.68	1897.68	1897.68	1897.68	1897.68	1897.68
8	Weighted Average Landed Price of Secondary Fuel	Rs. / kL	62256.20	62256.20	62256.20	62256.20	62256.20	62256.20
9	Gross Calorific Value of Primary Fuel (CVPF)	kcal/kg	3656.40	3656.40	3656.40	3656.40	3656.40	3656.40
10	Normative Auxiliary Consumption (%)	%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%
11	Overall Heat	G Cal	8897970.00	8897970.00	8922348.00	8922348.00	8897970.00	8897970.00
12	Heat from Oil	G Cal	18615.00	18615.00	18666.00	18666.00	18615.00	18615.00
13	Heat from Coal	G Cal	8879355.00	8879355.00	8903682.00	8903682.00	8879355.00	8879355.00
14	Transit Losses	%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
15	Projected Oil Consumption	kL	1861.50	1861.50	1866.60	1866.60	1861.50	1861.50
16	Projected Coal Consumption	MT	2428441.91	2428441.91	2435095.18	2435095.18	2428441.91	2428441.91
17	Specific Coal Consumption	kg/kWh	0.65	0.65	0.65	0.65	0.65	0.65
18	Coal Cost	Rs. Crore	460.84	460.84	462.10	462.10	460.84	460.84
19	Oil Cost	Rs. Crore	11.59	11.59	11.62	11.62	11.59	11.59
20	Total Fuel Cost	Rs. Crore	472.43	472.43	473.73	473.73	472.43	472.43
21	Net Generation	MU	3527.54	3527.54	3537.21	3537.21	3527.54	3527.54
22	Energy Charges for Coal	Rs./kWh	1.306	1.306	1.306	1.306	1.306	1.306
23	Energy Charges for Oil	Rs./kWh	0.033	0.033	0.033	0.033	0.033	0.033
24	Total Energy Charges	Rs./kWh	1.339	1.339	1.339	1.339	1.339	1.339

Table 9-25: Variable Cost for ABVTPS for the Control Period

S. No.	Particulars	Unit	FY 2022-23		FY 2023-24		FY 2024-25	
			Petition	Approved	Petition	Approved	Petition	Approved
1	Rated Capacity	MW	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00
2	Target Availability (PLF)	%	79.00%	79.00%	82.00%	82.00%	85.00%	85.00%
3	Units of Generation at Normative PLF	MU	6920.40	6920.40	7202.88	7202.88	7446.00	7446.00
4	Gross Station Heat Rate (SHR)	kcal/kWh	2390.00	2390.00	2390.00	2390.00	2390.00	2390.00
5	Specific Fuel Oil Consumption (SFC)	ml/ kWh	0.50	0.50	0.50	0.50	0.50	0.50
6	Calorific Value of Secondary Fuel (CVSF)	kcal/L	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00
7	Weighted Average Landed Price of Primary Fuel (LPPF)	Rs./MT	2628.43	2602.86	2627.19	2603.02	2601.39	2580.78
8	Weighted Average Landed Price of Secondary Fuel	Rs. / kL	61620.80	61620.80	61620.80	61620.80	61620.80	61620.80
9	Gross Calorific Value of Primary Fuel (CVPF)	kcal/Kg	3628.91	3628.91	3628.91	3628.91	3628.91	3628.91
10	Normative Auxiliary Consumption (%)	%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%
11	Overall Heat	G Cal	16539756.0 0	16539756.0 0	17214883.2 0	17214883.2 0	17795940.0 0	17795940.0 0
12	Heat from Oil	G Cal	34602.00	34602.00	36014.40	36014.40	37230.00	37230.00
13	Heat from Coal	G Cal	16505154.0 0	16505154.0 0	17178868.8 0	17178868.8 0	17758710.0 0	17758710.0 0
14	Transit Losses	%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
15	Projected Oil Consumption	kL	3460.20	3460.20	3601.44	3601.44	3723.00	3723.00
16	Projected Coal Consumption	MT	4548240.11	4548240.11	4733892.22	4733892.22	4893676.06	4893676.06
17	Specific Coal Consumption	kg/kWh	0.66	0.66	0.66	0.66	0.66	0.66
18	Coal Cost	Rs. Crore	1195.47	1183.84	1243.68	1232.24	1273.04	1262.95
19	Oil Cost	Rs. Crore	21.32	21.32	22.19	22.19	22.94	22.94
20	Total Fuel Cost	Rs. Crore	1216.80	1205.17	1265.88	1254.43	1295.98	1285.89
21	Net Generation	MU	6557.08	6557.08	6824.73	6824.73	7055.09	7055.09
22	Energy Charges for Coal	Rs./kWh	1.823	1.805	1.822	1.806	1.804	1.790
23	Energy Charges for Oil	Rs./kWh	0.033	0.033	0.033	0.033	0.033	0.033
24	Total Energy Charges	Rs./kWh	1.856	1.838	1.855	1.838	1.837	1.823

9.6 Annual Fixed Charges

Regulations 36 and 37 of the CSERC MYT Regulations, 2021 specify the components of Tariff and Annual Fixed Charges for Generation Stations as under:

“36. COMPONENTS OF TARIFF

36.1. The tariff for supply of electricity from a thermal generating station shall comprise two parts, namely, capacity charge (for recovery of annual fixed cost consisting of the components specified in Regulation 37) and energy charge (for recovery of fuel cost).

36.2. 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 46, (consisting of the components referred in Regulation 37).

37. ANNUAL FIXED CHARGES

37.1. The annual fixed cost (AFC) of a generating station shall consist of the following components:

- (1) Return on equity;*
- (2) Interest and finance charges;*
- (3) Depreciation;*
- (4) Interest on working capital;*
- (5) O&M expenses;*
 - a. HR expenses;*
 - (i) Employee expenses;*
 - (ii) Impact of Pay revision*
 - (iii) Manpower deployed on outsourcing basis;*
 - b. M&G expenses;*
- (6) Pension & Gratuity fund contribution*
- Less:*
- (7) Non Tariff Income*
- (8) Income from other business, to the extent specified in regulation 42 of this Regulation.*

NOTE:

- 1. Non-Tariff Income as specified in the Regulation 41, shall be subtracted from the sum of above (a to e) to arrive at AFC.*
- 2. The SLDC charges shall be recovered in accordance with fees and charges determined in accordance with provisions of Chapter 9 of this regulation.*

3. *Pension & Gratuity Fund Contribution shall be recoverable in equal monthly installments as may be determined by the Commission in the Tariff order.*
4. *The water charges, statutory taxes, duties and cess actually paid, shall be pass through.*

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 this Regulation.”

The Annual Fixed Charges for CSPGCL Generating Stations have been accordingly computed as described below.

9.6.1 Capital Cost and Additional Capitalisation

CSPGCL’s Submission

CSPGCL submitted that the opening GFA for FY 2022-23 for all the generating plants have been computed by addition of additional capitalization approved by the Commission in the Capital Investment Plan (CIP) Petition Nos. 63 of 2020 and 10 of 2021 to the closing GFA computed in the True up of FY 2020-21. Additional capitalization in subsequent years has been considered as per CIP Petition filed separately by CSPGCL.

The Commission in the CSERC MYT Regulations, 2021, has introduced the definition of Expenditure Incurred. As per standard industry practice, the Central Public Sector Undertakings (CPSUs) normally do not estimate liabilities at the time of initial Tariff determination and the same is taken into consideration only at the time of truing up of tariff. However, in compliance of the spirit of the Regulations, CSPGCL has considered simple estimates of liabilities in the opening GFA and additional capitalization and the same have been reduced from opening GFA and additional capitalization, respectively, to estimate GFA/capitalization on cash basis. Opening equity and normative loan have also been derived in the similar manner considering closing values of the True up FY 2020-21 on cash basis.

Commission’s View

As regards GFA addition for FY 2021-22, the Commission asked CSPGCL to submit the basis for GFA addition of Rs. 113.17 Crore considered for HTPS as against approved GFA addition of Rs. 114.20 Crore. In reply CSPGCL submitted that the revision in the expected capitalisation for HTPS during FY 2021-22 is due to revision of estimates. However, as normally all such deviations are dealt in the True up, CSPGCL, in the revised model, revised the expected capitalisation to original estimate of Rs. 114.20 Crore for HTPS for FY 2021-22. The Commission noted that the revision in GFA addition for HTPS for FY 2021-22 has led to revision in the opening GFA for each year of the Control Period, which has also impacted Depreciation, Interest on Loan and RoE for HTPS for the Control Period. The Commission has considered this revised submission for HTPS, as Petition value for the purpose of comparison.

The Commission noted that CSPGCL has not considered any GFA addition for Hasdeo Bango in FY 2021-22 whereas the approved GFA addition for FY 2021-22 is

Rs. 3.07 Crore. In this regard, CSPGCL submitted that in the Petition for approval of CIP, it has prayed for rescheduling it for the next Control Period. Accordingly, no capitalization has been considered for FY 2021-22 for HBPS.

The Commission has considered and approved the opening GFA for FY 2021-22 equal to closing GFA approved in true-up of FY 2020-21 and additional capitalisation during FY 2021-22 as approved in Tariff Order dated August 2, 2021. The Commission has accordingly arrived at the closing GFA for FY 2021-22, which is the opening GFA for FY 2022-23.

CSPGCL has filed a Petition for approval of Capital Investment Plan for the MYT Control Period from FY 2022-23 to FY 2024-25. The Commission has considered the additional capitalisation for CSPGCL generating stations for FY 2022-23 to FY 2024-25, based on the CIP Petition filed by CSPGCL in Case No. 73 of 2021.

The additional capitalisation approved is shown in the table as under:

Table 9-26: Approved Additional Capitalisation (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	10.70	9.96	9.46
2	DSPM	11.03	22.71	0.87
3	KWTPP	10.41	8.55	0.00
4	ABVTPS	2.31	0.00	0.00
5	HBPS	5.01	8.56	9.02
	Total Additional Capitalisation	39.46	49.78	19.35

The Commission notes that CSPGCL has considered estimates of liabilities in the opening GFA and additional capitalization and the same have been reduced from opening GFA and additional capitalization, respectively, to estimate GFA/capitalization on cash basis. CSPGCL has also derived the opening equity and normative loan in the similar manner considering closing values of the True up for FY 2020-21 on cash basis. The Commission has accepted the submission of CSPGCL for estimating the GFA/capitalization on cash basis for FY 2022-23 to FY 2024-25.

The matter related to cut-off date extension and spill over works have been dealt in the order on Capital Investment Plan petition No. 73 of 2021.

9.6.2 Means of Finance

CSPGCL's Submission

CSPGCL submitted that the capital structure (Debt:Equity ratio) has been considered in accordance with the well settled methodology in the previous Orders. For HTPS, DSPM and Bango, no actual debt has been drawn or is proposed to be drawn. Therefore, normative Debt:Equity ratio of 70:30 is used for the purpose of ARR computations. For KWTPP and ABVTPS, for additional capitalization for FY 2021-22 which is a part of the project cost, opening Debt:Equity ratio is considered to arrive at opening values for FY 2022-23. However, for additional capitalization on account of deferred work of the project, i.e., Ash dyke raising works, the normative Debt Equity ratio of 70:30 has been considered as per Regulations.

Commission's View

CSPGCL has considered the Debt Equity ratio of 70:30 for the additional capitalisation proposed for the Control Period for HTPS, DSPM and Hasdeo Bango in accordance with Regulation 17 of the CSERC MYT Regulations, 2021. As regards KWTPP and ABVTPS, CSPGCL has considered the opening Debt:Equity ratio to arrive at opening values for FY 2022-23 and for additional capitalization on account of deferred work of the project, CSPGCL has considered Debt Equity ratio of 70:30. The Commission has accepted the Debt Equity ratio for additional capitalisation as submitted by CSPGCL for the Control Period.

9.6.3 Depreciation

CSPGCL's Submission

CSPGCL submitted that for the purpose of computation of depreciation for DSPM, depreciation rate is considered at same level as computed in True-Up for FY 2020-21.

As regards depreciation for KWTPP and ABVTPS, CSPGCL submitted that the 2nd proviso of Regulation 25.6 of the CSERC MYT Regulations, 2021, 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 this Regulation 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.”

CSPGCL submitted that the above provision is the same as provided in 2nd proviso of the Regulation 24.4 of CSERC MYT Regulations, 2015. The Commission, in the Tariff Order for FY 2021-22 dated August 2, 2021 read with the detailed Order dated August 10, 2021, has allowed depreciation for KWTPP and AVBTPP. As the enabling provision is same, CSPGCL has adopted the same methodology in the instant Petition.

For HTPS, depreciation has been claimed as per the 3rd proviso of the Regulation 25.6 of CSERC MYT Regulations, 2021, which specifies that:

“Provided that in the case where additional capital investment is approved by the commission for a plant at the end of its useful life or after its useful life is already over, the recoverable depreciation in respect of additional capital investment, shall be spread over the balance projected physical life as submitted by the generation company or the licensee in the capital investment plan after prudence check by the Commission.”

CSPGCL submitted that the decision regarding the retirement/ life extension of HTPS plant is going through active brainstorming. Such decision has multi-fold implications. On one hand, as HTPS Units have remained economic war horse in the State grid, the retirement of Units may lead to replacement by costly power and on the other hand, such retirement may pave way for the new more efficient Units by CSPGCL. On one side, the compliance of new emission norms poses a challenge before the old Units and on the other side, the retirement of the old Units may cause a serious Human Resource (HR) issue not only for the employees but for thousands of dependent family members of the outsourced employees/vendors too. Residual Life Assessment (RLA) studies have been completed and a high-level Committee of

experienced HOD's has been constituted to explore all the aspects and feasible options. Based on the recommendations, the final view shall be taken by the competent authority.

CSPGCL further submitted that in the previous CIP Order dated May 2, 2020, the Commission has directed for CIP filing for HTPS after a comprehensive plan based on RLA and other inputs, covering the capital investments required for Life Extension (LE)/ Performance Improvement (PI) and compliance of statutory requirement laid down in the MOEF&CC notification is finalized. CSPGCL submitted that the finalization of the plan may take some time. In the present condition, Central Electricity Authority (CEA) has presumed these Units as retiring Units.

MOEF&CC has issued a new notification on March 31, 2021, which has prescribed new timelines for compliance of the emission norms based on the location / area. For retiring units, Korba region falls in the category B with the timeline for compliance of the new environment norms as December 31, 2025. Thus, irrespective of the extended future plan of HTPS, the Units are very well expected to serve during the Control Period, i.e., up to March 31, 2025. It does not by any means imply that CSPGCL or any statutory authority has contemplated closure of the plant. Rather, the notification allows that if such Unit continues to operate beyond the date specified in the undertaking of retirement, they shall be levied environment compensation at the rate of Rs. 0.20 per unit electricity generated. Thus, the instant submission only implies that for any life extension, considerable capital investments on LE and statutory compliances would be required.

In view of the above and in line with the principle adopted by the Commission in the past (in light of the Hon'ble APTEL Judgment in Appeal No. 238 of 2014), CSPGCL proposed that all the current assets may be allowed to be depreciated over the Control Period from FY 2022-23 to FY 2024-25 and the new capital investments in accordance to the comprehensive plan may be serviced in the future years. This would on one hand allow a prudent spread of the depreciation over the envisaged useful life and on the other, it would eliminate the risk of tariff shock at the time of closure of the plant. The original useful life of the plant got completed in year 2010 and as per the National Perspective Plan by CEA, the life extension to be achieved through Renovation is about 15 years only. The Commission has also adopted this principle at the time of retirement of KTPS. The 15 years window is also closing in FY 2024-25, which is the last year of the Control Period. Thus, the proposed methodology also finds favour from the history.

The depreciation submitted by CSPGCL for the Control Period is as under:

Table 9-27: Depreciation for the Control Period as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	148.09	152.41	160.95
2	DSPM	130.92	131.84	132.50
3	KWTPP	255.67	258.33	259.99
4	ABVTPS	554.96	555.53	556.04
5	HBPS	2.17	2.76	3.44

Commission's View

Regulation 25 of the CSERC MYT Regulations, 2021 specifies as under:

“25. DEPRECIATION

25.1. The value base for the purpose of depreciation shall be the capital cost of the asset as admitted by the Commission:

25.2. 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 22.

25.3. 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.

25.4. 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.

25.5. 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. Subject to specific provisions, Land for integrated mine shall also be considered for depreciation.

25.6. Depreciation shall be calculated annually based on Straight Line Method and at rates as specified in Appendix-I to this regulation for the assets of the generating station, transmission system, distribution system and SLDC and Appendix -I (A) for integrated coal mine:

Provided that, in case of the existing projects, the balance depreciable value as on 01.04.2022 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.03.2022 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 this Regulation 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.

Provided that in the case where additional capital investment is approved by the commission for a plant at the end of its useful life or after its useful life is already over, the recoverable depreciation in respect of additional capital investment, shall be spread over the balance projected physical life as submitted by the generation company or the licensee in the capital investment plan after prudence check by the Commission.

....

25.7. 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 that for the new generating station or unit, assets of transmission licensee or assets of distribution licensee or SLDC, as the case may be, the depreciation on such new assets shall be charged on day-wise pro-rata basis during the first year the asset has been declared under commercial operation. For subsequent years, the depreciation shall be computed on the average asset base during the year.”

The Commission noted that in calculation of accumulated depreciation for DSPM, KWTPP, ABVTPS and HBPS for FY 2021-22, CSPGCL has not considered the depreciation for FY 2020-21. In this regard, CSPGCL submitted that due to linking error in computation, error in presenting the accumulated depreciation has occurred. There is no change in yearly depreciation and ARR due to such revision for DSPM, KWTPP and ABVTPS Stations. However, CSPGCL submitted that there is some reduction in depreciation for Hasdeo Bango. As mentioned earlier, CSPGCL has also revised depreciation for HTPS due to revision in addition of GFA for FY 2021-22. Thus, the revised depreciation for HTPS and HBPS is as shown in the Table below.

Table 9-28: Revised Depreciation for HTPS and HBPS as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	148.39	152.71	161.25
2	HBPS	1.99	2.58	3.25

The Commission has considered the closing GFA for FY 2020-21 as approved in the true-up for FY 2020-21, as the opening GFA for FY 2021-22. As discussed in the previous section on additional capitalisation, GFA addition for FY 2021-22 has been considered as approved in Tariff Order dated August 2, 2021.

The Commission has considered the average depreciation rates for DSPM as approved in True-up of FY 2020-21. As regards HTPS and 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 ABVTPS, the Commission in accordance with the provision specified in Regulation 25.6 of the CSERC MYT Regulations, 2021 has accepted the submission of CSPGCL. Since, the depreciation rates as provided in CSERC MYT Regulations, 2021 are insufficient for the repayment of loan, the Commission has considered the average depreciation rates of 6.86%, 6.91% and 6.93%, for KWTPP for FY 2022-23 to FY 2024-25, respectively, as submitted by CSPGCL required for meeting repayment obligation. The average depreciation rates for ABVTPS are considered at 6.24%, 6.25% and 6.25% for FY 2022-23 to FY 2024-25, respectively, as submitted by CSPGCL.

The depreciation as approved for the Control Period is given in the following Tables:

Table 9-29: Approved Depreciation for HTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	734.38	754.71	764.31
Additional Capitalization	20.33	9.60	9.49
Closing GFA	754.71	764.31	773.79
Average GFA	744.55	759.51	769.05

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Cost of Land	0.00	0.00	0.00
90% of GFA excluding Land	679.24	687.88	696.42
Previously Accumulated Depreciation	234.07	382.46	535.17
Balance Depreciable value	445.18	305.42	161.25
Balance years for recovery of Dep excluding investment on LE & ECS	3.00	2.00	1.00
Depreciation	148.39	152.71	161.25

Table 9-30: Approved Depreciation for DSPM (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	2,387.96	2,398.99	2,421.55
Additional Capitalization	11.03	22.57	1.36
Closing GFA	2,398.99	2,421.55	2,422.92
Average GFA	2,393.47	2,410.27	2,422.23
Average Rate of Depreciation	5.47%	5.47%	5.47%
Depreciation	130.92	131.84	132.50

Table 9-31: Approved Depreciation for KWTPP (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	3720.50	3734.51	3747.16
Additional Capitalization	14.01	12.64	4.25
Closing GFA	3734.51	3747.16	3751.41
Average GFA	3727.51	3740.83	3749.28
Average Rate of Depreciation	6.86%	6.91%	6.93%
Depreciation	255.67	258.33	259.99

Table 9-32: Approved Depreciation for ABVTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	8886.39	8892.86	8897.14
Additional Capitalization	6.47	4.28	4.16
Closing GFA	8892.86	8897.14	8901.31
Average GFA	8889.63	8895.00	8899.22
Average Rate of Depreciation	6.24%	6.25%	6.25%
Depreciation	554.96	555.53	556.04

Table 9-33: Approved Depreciation for HBPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	111.22	116.23	124.79
Additional Capitalization	5.01	8.56	9.02
Closing GFA	116.23	124.79	133.81
Accumulated Depreciation up to last year	76.82	78.81	81.38
90% of Gross Block	104.60	112.31	120.42
Amount Left to be Depreciated	27.78	33.50	39.04
Remaining Life	14.00	13.00	12.00
Depreciation	1.98	2.58	3.25

9.6.4 Return on Equity

CSPGCL's Submission

CSPGCL submitted that the RoE for the Control Period has been computed as per Regulation 23 of the CSERC MYT Regulations, 2021. As CSPGCL is paying MAT for last 3 consecutive years, RoE has been considered as per Regulation 23.1 on pre-tax basis at base rate of 14% and it is grossed up with tax rate of 17.47% as per Regulation 23.3. The applicable tax rate has been considered as MAT and the rate is same as applicable for current year.

RoE submitted by CSPGCL for Control Period is as under:

Table 9-34: Return on Equity for the Control Period as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	80.82	81.58	82.07
2	DSPM	120.90	121.76	122.37
3	KWTTP	108.56	109.15	109.50
4	ABVTPS	187.78	187.93	188.02
5	HBPS	6.59	6.94	7.39

Commission's View

Regulation 23 of the CSERC MYT Regulations, 2021 specifies as under:

“23. RETURN ON EQUITY

23.1. Base rate for 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 at the rate of 14.0% for Generation and Transmission and SLDC.

...

23.3 The ROE shall be grossed up at the time of tariff by MAT rate for the year in which tariff is being determined, subject to the condition that MAT / Corporate tax has been paid for last three consecutive years for regulated business filed petition under these Regulations. In such case, Rate of return on

equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of return on equity} = \text{Base rate} / (1 - \text{MAT Rate})$$

At the time of True up, the income tax shall be pass through on actual basis, subject to ceiling as following:

$$= \text{Average Permissible Equity} \times \text{Base Rate of Return} \times (t / (1 - t))$$

Where "t" is the actual tax rate for the year. The tax rate shall be calculated without considering the delay payment surcharge received or receivable during the said financial year by generating company or licensee as the case may be."

As mentioned earlier, CSPGCL in reply to data gaps, has revised RoE for HTPS for the Control Period as shown in the Table below.

Table 9-35: Revised RoE for HTPS as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	80.87	81.63	82.12

The closing equity for FY 2020-21 as approved in this Order has been considered as the opening equity for FY 2021-22. The equity towards the additional capitalisation for FY 2021-22 has been added to arrive at closing equity for FY 2021-22, which has been considered as the opening equity for FY 2022-23. The equity addition for each year of the Control Period has been considered 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 ABVTPS, the Commission has considered the equity funding of 17.14% and 12.44%, respectively, for additional capitalisation on account of project cost and at 30% for additional capitalisation on account of other additions in line with the submission of CSPGCL for the Control Period. The balance additional capitalisation is expected to be funded through loan.

Further, return of 14% has been considered for the MYT Control Period on the average permissible equity base during the year as per CSERC MYT Regulations, 2021. In line with the approach adopted in previous Tariff Orders for CSPGCL and CSPTCL, the rate of RoE has not been grossed up with the MAT rate, and the RoE rate of 14% has been considered for the purpose of approving RoE for the Control Period. The Commission shall allow the Income Tax on actual basis at the time of Truing-up of respective years of the Control Period.

Accordingly, the Return on Equity has been approved for CSPGCL generating Stations for the Control Period, as under:

Table 9-36: Approved Return of Equity for HTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity in Cash	473.67	479.77	482.65
Additional Cap	10.70	9.96	9.46
Liability in Add cap	0.14	0.50	0.47

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Net Additional Capitalization	10.57	9.46	8.99
Addition due to Discharge of CIP Liability	9.77	0.14	0.50
Equity % on additional capitalization	30.00%	30.00%	30.00%
Equity Addition due to Capitalization	3.17	2.84	2.70
Addition due to Undischarged Liability	2.93	0.04	0.15
Equity portion of addition during the year	6.10	2.88	2.85
Equity in Closing GFA	479.77	482.65	485.50
Average Permissible Equity during the year	476.72	481.21	484.07
Rate of return on Equity	14.00%	14.00%	14.00%
Return on Equity	66.74	67.37	67.77

Table 9-37: Approved Return of Equity for DSPM (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity in Cash	711.05	714.36	721.13
Additional Cap	11.03	22.71	0.87
Liability in Add cap	0.39	0.54	0.04
Net Additional Capitalization	10.64	22.17	0.83
Addition due to Discharge of Project cost Liability	0.00	0.00	0.00
Addition due to Discharge of CIP Liability	0.39	0.39	0.54
Equity % on additional capitalization	30.00%	30.00%	30.00%
Equity Addition due to Capitalization	3.19	6.65	0.25
Addition due to Undischarged Liability	0.12	0.12	0.16
Equity portion of addition during the year	3.31	6.77	0.41
Equity in Closing GFA	714.36	721.13	721.54
Average Permissible Equity during the year	712.70	717.74	721.33
Rate of return on Equity	14.00%	14.00%	14.00%
Return on Equity	99.78	100.48	100.99

Table 9-38: Approved Return of Equity for KWTPP (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity in Cash	638.12	641.81	645.10
Additional Cap	10.41	8.55	0.00
Liability in Add cap	0.46	0.31	0.00
Net Additional Capitalization	9.95	8.24	0.00
Addition due to Discharge of Project cost Liability	3.94	3.94	3.94
Addition due to Discharge of CIP Liability	0.12	0.46	0.31
Equity % on additional capitalization in Project Cost	17.14%	17.14%	17.14%

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Equity % on additional capitalization on other additions	30.00%	30.00%	30.00%
Equity Addition due to Capitalization	2.98	2.47	0.00
Addition due to Undischarged Liability	0.71	0.81	0.77
Equity portion of addition during the year	3.70	3.29	0.77
Equity in Closing GFA	641.81	645.10	645.87
Average Permissible Equity during the year	639.96	643.45	645.48
Rate of return on Equity	14.00%	14.00%	14.00%
Return on Equity	89.59	90.08	90.37

Table 9-39: Approved Return of Equity for ABVTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity in Cash	1106.35	1107.56	1108.11
Additional Cap	2.31	0.00	0.00
Liability in Add cap	0.12	0.00	0.00
Net Additional Capitalization	2.19	0.00	0.00
Addition due to Discharge of Project cost Liability	4.16	4.16	4.16
Addition due to Discharge of CIP Liability	0.11	0.12	0.00
Equity % on additional capitalization in Project Cost	12.44%	12.44%	12.44%
Equity % on additional capitalization on other additions	30.00%	30.00%	30.00%
Equity Addition due to Capitalization	0.66	0.00	0.00
Addition due to Undischarged Liability	0.55	0.55	0.52
Equity portion of addition during the year	1.21	0.55	0.52
Equity in Closing GFA	1107.56	1108.11	1108.63
Average Permissible Equity during the year	1106.95	1107.83	1108.37
Rate of return on Equity	14.00%	14.00%	14.00%
Return on Equity	154.97	155.10	155.17

Table 9-40: Approved Return of Equity for HBPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Equity in Cash	38.11	39.62	42.19
Additional Cap	5.01	8.56	9.02
Liability in Add cap	0.00	0.00	0.00
Net Additional Capitalization	5.01	8.56	9.02
Equity % on additional capitalization	30.00%	30.00%	30.00%
Equity Addition due to Capitalization	1.50	2.57	2.71
Addition due to Undischarged Liability	0.00	0.00	0.00

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Equity portion of addition during the year	1.50	2.57	2.71
Equity in Closing GFA	39.62	42.19	44.89
Average Permissible Equity during the year	38.87	40.90	43.54
Rate of return on Equity	14.00%	14.00%	14.00%
Return on Equity	5.44	5.73	6.10

9.6.5 Interest and Finance Charges

CSPGCL's Submission

CSPGCL submitted that the Interest and Finance charges on loan capital have been computed as per Regulation 24 of the CSERC MYT Regulations, 2021. Savings from refinancing have been claimed in accordance with the methodology adopted by the Commission in previous Order/s.

Consequent to vigilant and rigorous efforts in the wider interest of all the stakeholders, CSPGCL has achieved further reduction in the interest rates for the existing loans for KWTPP and ABVTPS. Accordingly, the revised interest rate of 8.88% has been considered for the Control Period for KWTPP and ABVTPS. The savings from loan financing have also been computed in accordance with the Regulations and the settled methodology in the previous Order/s.

The Interest and Finance charges submitted by CSPGCL for the Control Period are shown in the Table below:

Table 9-41: Interest & Finance Charges for the Control Period as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	16.14	4.25	0.00
2	DSPM	0.88	0.00	0.00
3	KWTPP	133.45	110.18	86.10
4	ABVTPS	459.94	407.79	355.50
5	HBPS	0.06	0.26	0.53

Commission's View

The Commission noted that CSPGCL has considered interest rate of 11.42% for HTPS for calculation of Interest and Finance charges for the Control Period compared interest rate of 11.43% derived based on calculations of weighted average interest rate. In reply, CSPGCL submitted that due to linking error, interest rate of 11.43% was considered as 11.42%. CSPGCL requested the Commission to consider the rate of 11.43% for HTPS for the Control Period.

CSPGCL in reply to data gaps, has revised Interest and Finance charges for HTPS and HBPS for the Control Period as shown in the Table below.

Table 9-42: Revised RoE for HTPS as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	16.21	4.27	0.00
2	HBPS	0.07	0.29	0.57

Regulation 24 of the CSERC MYT Regulations, 2021 specifies the method of computation of Interest and Finance charges for loan capital. The closing normative loan for FY 2020-21 as approved in True-up of FY 2020-21 has been considered as opening loan for FY 2021-22. For FY 2021-22, the normative loan towards the additional capitalisation for FY 2021-22 has been added, to arrive at closing normative loan for FY 2021-22, which has been considered as the opening normative loan for FY 2022-23. The loan addition for each year of the Control Period has been considered on funding of additional capitalisation discussed in the means of finance section of this Order.

The repayment during the year has been considered equivalent to the approved depreciation for the year under consideration.

As per Regulation 24.5 of the CSERC MYT Regulations, 2021, the rate of interest shall be weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of year. CSPGCL has estimated the actual loan as on April 1, 2022 based on the actual loan portfolio and actual repayment and computed the weighted average rate of interest. The weighted average rate of interest computed on the basis of estimated actual loan portfolio as on April 1, 2022 for each generating station, as submitted by CSPGCL, has been accepted.

The interest on loan capital has been computed on the normative average loan of the year by applying weighted average rate of interest. Any finance charges have not been considered, however, the same will be considered at time of True up of respective years based on actual values. 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 ABVTPS power stations.

Accordingly, the approved Interest and finance charges on loan capital for CSPGCL generating Stations for the Control Period, are as under:

Table 9-43: Approved Interest & Finance Charges for HTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	209.01	74.84	0.00
Additional Capitalisation	20.33	9.60	9.49
Loan addition due to additional capitalization	14.23	6.72	6.64
Total additions in loan	14.23	6.72	6.64
Repayment during the period	148.39	81.56	6.64
Closing Net Normative Loan	74.84	0.00	0.00
Average Loan during the year	141.92	37.42	0.00
Weighted Average Interest Rate	11.43%	11.43%	11.43%

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Interest Expense for the Period	16.22	4.28	0.00
Finance and Other Charges	0.00	0.00	0.00
Total Interest Expenses	16.22	4.28	0.00

Table 9-44: Approved Interest & Finance Charges for DSPM (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	16.95	0.00	0.00
Additional Capitalisation	11.03	22.57	1.36
Loan addition due to additional capitalization	7.72	15.80	0.95
Total additions in loan	7.72	15.80	0.95
Repayment during the period	24.67	15.80	0.95
Closing Net Normative Loan	0.00	0.00	0.00
Average Loan during the year	8.48	0.00	0.00
Weighted Average Interest Rate	10.25%	10.25%	10.25%
Interest Expense for the Period	0.87	0.00	0.00
Savings due to refinancing (Int rate %)	0.49%	0.49%	0.49%
Share of savings due to interest rate	0.01	0.00	0.00
Finance and Other Charges	0.00	0.00	0.00
Total Interest Expenses	0.88	0.00	0.00

Table 9-45: Approved Interest & Finance Charges for KWTPP (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	1530.18	1288.12	1038.74
Additional Capitalisation	14.01	12.64	4.25
Loan addition due to additional capitalization	13.60	8.95	0.97
Total additions in loan	13.60	8.95	0.97
Repayment during the period	255.67	258.33	259.99
Closing Net Normative Loan	1288.12	1038.74	779.72
Average Loan during the year	1409.15	1163.43	909.23
Weighted Average Interest Rate	8.88%	8.88%	8.88%
Interest Expense for the Period	125.13	103.31	80.74
Savings due to refinancing (Int rate %)	1.77%	1.77%	1.77%
Share of savings due to interest rate	8.31	6.86	5.36
Finance and Other Charges	0.00	0.00	0.00
Total Interest Expenses	133.45	110.18	86.10

Table 9-46: Approved Interest & Finance Charges for ABVTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	5131.68	4581.98	4030.17
Additional Capitalisation	6.47	4.28	4.16
Loan addition due to additional capitalization	5.26	3.73	3.65
Total additions in loan	5.26	3.73	3.65
Repayment during the period	554.96	555.53	556.04
Closing Net Normative Loan	4581.98	4030.17	3477.78
Average Loan during the year	4856.83	4306.08	3753.98
Weighted Average Interest Rate	8.88%	8.88%	8.88%
Interest Expense for the Period	431.29	382.38	333.35
Savings due to refinancing (Int rate %)	1.77%	1.77%	1.77%
Share of savings due to interest rate	28.66	25.41	22.15
Finance and Other Charges	0.00	0.00	0.00
Total Interest Expenses	459.94	407.79	355.50

Table 9-47: Approved Interest & Finance Charges for HBPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	0.00	1.52	4.94
Additional Capitalisation	5.01	8.56	9.02
Loan addition due to additional capitalization	3.51	5.99	6.31
Total additions in loan	3.51	5.99	6.31
Repayment during the period	1.98	2.58	3.25
Closing Net Normative Loan	1.52	4.94	8.00
Average Loan during the year	0.76	3.23	6.47
Weighted Average Interest Rate	8.88%	8.88%	8.88%
Interest Expense for the Period	0.07	0.29	0.57
Finance and Other Charges	0.00	0.00	0.00
Total Interest Expenses	0.07	0.29	0.57

9.6.6 Operation and Maintenance Charges

CSPGCL's Submission

CSPGCL has submitted the O&M expenses for the existing thermal generating stations as per Regulation 40.5 of the CSERC MYT Regulations, 2021. For the Control Period, the normative employee expenses including the expense on

manpower deployed on outsourcing basis have been calculated by applying last five-year average increase in CPI (IW) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, has then used to project the base year value for FY 2021-22. On the base year value, last five-year average increase in CPI (IW) has been applied to project the employee expenses for the Control Period.

Maintenance and General (M&G) expenses for all the thermal plants has been computed considering the year wise projections of M&G expenses tabulated in the Regulation 40.5.2.1 of the CSERC MYT Regulations, 2021.

CSPGCL submitted that for plants, which have completed the useful life, Regulation 21.4 of the CSERC MYT Regulations, 2021 provides for special allowance as mentioned below:

“21.4 In case the generating station other than HTPS decides to operate any of its coal-based thermal generating unit(s) which has completed useful life without investment in “Renovation & Modernisation” and meets the operational performance benchmark in accordance with the norms specified in this regulation then such generating station shall be eligible for annual “special allowance” @ Rs. 9.5 lakh/ MW/ year. In case of HTPS, the special allowance may be decided in the tariff petition/Capital investment plan.”

CSPGCL submitted that looking at the vintage of the plant, technological obsolescence, for safe operation of the units and achieving the norms specified in the Regulations, some capital nature investments would be inevitable. Unless such expenses are incurred, the safe operation of the plant may face compromises. Thus, continuation of the plant in the next Control Period is undisputedly in the interest of all the stakeholders.

In view of the above submission and also keeping in mind the minimum loading on ARR, CSPGCL prayed for grant of special allowance of Rs. 4.75 Lakh per MW per year for HTPS plant. The proposed allowance is half of the allowance specified in Regulation 21.4 of the CSERC MYT Regulations, 2021. CSPGCL requested the Commission to approve the same.

For Hasdeo Bango, out of the three components of O&M expenses, HR expenses and A&G expenses have been computed in accordance with the CSERC MYT Regulations, 2021. However, regarding the R&M expenses, CSPGCL craved leave for an exception.

CSPGCL submitted that the R&M expenses for HEP Bango is a deserving case for consideration under the Power to Relax, Power to Remove difficulties and all other inherent powers vested with the Commission.

CSPGCL understands that Power to Relax, Power to remove difficulties and the inherent powers vested with the Commission pass through narrow margins. Accordingly, CSPGCL has undertaken an exercise of self-check before proceeding with the prayer in the public domain. CSPGCL applied following three checks:

- a. Whether there exists a legal provision?
- b. If yes, what is the nature of that provision?
- c. Whether such an exercise will lead to larger public good?
- d. The extent to which any such power should be exercised?

A. Legal provision

CSERC MYT Regulations, 2021 provides:

“110 POWER TO RELAX

The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.”

“112 POWER TO REMOVE DIFFICULTIES

If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations.”

In the above context, CSPGCL submitted that as per well settled principle ‘Removal of Difficulty’ or ‘Power to Relax’ is needed as it is not possible to foresee all the difficulties, which might arise in its working and in order to obviate the need to amend the Regulations, the power to relax or remove difficulties is granted to enable adjustments. CSPGCL submitted that the process of determination of ARR is the right opportunity to consider the specific circumstances and consider relaxation of norms / removal of difficulty.

CSPGCL submitted the following two citations/ authorities to supplement the role of the above powers:

In the Hindustan Paper Corporation Limited v Government of Kerala (1986) 3 SCC 398, the Hon’ble Supreme Court observed:

“9. ... In almost all the statutes by which the fiscal or economic interests of the State are regulated, provision for granting exemption in appropriate cases would have necessarily to be there and the power to grant exemption is invariably conferred on the Government concerned. The validity of provisions conferring the power of exemption has been consistently upheld by this Court in a number of decisions commencing with the State of Bombay and Anr. v. F.N. Balsara [1951]2SCR682.”

M.P. Jain – Cases and Materials on Indian Administrative Law – 1994 Edition Volume 1, Page 117:

“At times, a statute may contain a "removal of difficulty" clause. The need for such a clause arises because at the time of passing a new law, it may not be possible to foresee all the difficulties which might arise in its working. In order to obviate the need to go to the legislature to pass a law to remove any difficulty howsoever trivial, the executive is given power to remove any such difficulty by making an order. According to the Committee on Ministers Powers, the sole purpose of Parliament in enacting such a provision is "to enable minor adjustments of its own handiwork to be made for the purpose of fitting its principal into the fabric of existing legislation, general or local.”

B. Nature of the provision

CSERC submitted that any power vested with a public / statutory authority is always coupled with some duty. The Hon'ble Supreme Court has relied on the doctrine of 'Power coupled with duty' in many Judgments. CSPGCL submitted some important citations as below:

In S.P. Gupta (1981 Supp (1) SCC 87) seven member constitutional bench of the Hon'ble Supreme Court held:

"It is true that the words in Article 216 of the Constitution are undoubtedly empowering but it has been so often decided as to have become an axiom that in public statutes words only directory, permissive or enabling may have a compulsory force where the thing to be done is for the public benefit or in advancement of public justice. Thus, the enabling power cannot be refused to be exercised by the repository of that power, as such refusal would be contrary to the constitutional principles and such action is not permissible under the scheme of the Constitution." - (Emphasis supplied)

State of Rajasthan v. Harishanker Rajendrapal (AIR 1966 SC 296), the Hon'ble Supreme Court held:

"Often when a public authority is vested with power, the expression "may" has been construed as "shall" because power, if the conditions for the exercise are fulfilled, is coupled with duty."

CSPGCL submitted that the principle was laid down as early as 1880 by the Privy Council in Julius v. Lord Bishop of Oxford. Earl Cairns, Lord Chancellor speaking for the judicial committee explained:

"...there may be something in the nature of the thing empowered to be done, something in the object for which it is to be done, something in the conditions under which it is to be done, something in the title of the person or persons for whose benefit the power is to be exercised, which may couple the power with a duty, and make it the duty of the person in whom the power is reposed, to exercise that power when called upon to do so. Whether the power is one coupled with a duty must depend upon the facts and circumstances of each case and must be so decided by the courts in each case."

In view of the above settled legal spectrum, CSPGCL submitted that the powers vested with the Commission deserve to be exercised by the Commission when a case for such consideration is made out.

C. Public Interest involved

CSERC submitted that the preamble to the Electricity Act, 2003 among other things, commits to ensure for taking measures conducive to development of electricity industry. Further, one of the key objectives of the Tariff Policy notified by the Government of India is to "Ensure financial viability of the sector and attract investments". Specific reference is invited to para 5.10 of the policy:

"5.10 Consumer interest is best served in ensuring viability and sustainability of the entire value chain viz., generation, transmission and distribution of

electricity, while at the same time facilitating power supply at reasonable rate to consumers.”

CSPGCL submitted that often relaxation of norm is misconceived as loading to the end user. The far reaching implications and irreparable loss need to be looked at before considering the short-term gains. CSPGCL submitted that if the genuine cost of a generator, which is supplying relatively cheaper power in the grid is denied, it results in cash starvation. An analysis of the broad factors of O&M reveals that employee salary has to be paid in time and the Government taxes also cannot be defaulted. Thus, the deficiency in O&M head hits the R&M activity worst. The lower than required level of expenses on repair and maintenance results in more forced outages than envisaged. Higher forced outages and partial losses lead to further underperformance. Thus, with unrealistic and non-achievable norms, gradually but certainly, cheaper power gets replaced by costlier alternate power.

CSPGCL submitted that the HEP Bango plant supplies the cheapest power in the State. Further, it is green power helping protection of an environment. Also, the plant results in high revenue gain to the State Exchequer. In FY 2020-21, the State gained Rs 44.85 Crore, while the total ARR of Bango was just Rs 22.49 Crore. Thus, the continuous availability of the plant is also in the interest of the consumer, the Government and the society. Therefore, higher than the trajectory based R&M certainly qualifies as “Public Interest”. If no relaxation is considered, in the longer run, the consumer would be saddled with costlier power. With no other source of hydro power in State, thermal power would replace the green power and the State would lose considerable revenue. Even with relaxed norms, generation tariff of CSPGCL would remain cheaper (just about Rs. 1/unit). The relaxation is prayed only to the extent that genuine costs of CSPGCL get covered and repair and maintenance may not suffer. Such consideration shall in fact serve the public cause in more sustainable manner.

D. Extent to which any such power should be exercised

CSERC submitted that the purpose of relaxation rests in ensuring genuine cost of operation. CSERC also submitted following:

- **Inadequacy of the normative O&M under CSERC provisions**

As per the Regulation 40.5 of the CSERC MYT Regulations, 2021, the O&M cost for the existing Hydro plants shall consist of separate trajectory for each of the components, i.e., HR expenses, R&M expenses and A&G expenses. Such trajectory shall be based on the normalised average of the actual expenses for the previous 5 years, while the O&M expenses for the new Hydro stations will be 1.25% of the project cost (excluding cost of R&R works).

As any machine gets older, the cost of R&M increases. Conversely it is also true that as the machine gets older, any omission of the maintenance requirements for want of funds has multiple ramifications and ultimately such apparent savings prove very costly to all the stakeholders.

CSPGCL submitted that presently the per MW capital cost generally ranges from Rs. 8 to 10 Crore. This is a conservative estimate keeping in view the fact that already some of the developers have submitted their Hydro project cost ranging from Rs. 14

Crore/MW to more than Rs. 17 Crore/MW. The Commission has also allowed capital cost of Rs. 8 Crore/MW to the RE plants of up to 25 MW capacity at the base year FY 2019-20. Taking the conservative estimate of Rs. 9 Crore/MW, only the O&M cost for a new plant for FY 2022-23 comes out to about Rs. 13.5 Crore. For a 20 years old plant, the allowable O&M cost should be at least about Rs.17 Crore, i.e., 25% higher than the aforesaid cost. However, when the O&M cost for Bango plant is computed on the trajectory basis, for FY 2022-23, the normative value comes out to be less than Rs. 11 Crore. Thus, from the Regulations itself, it is apparent that HEP Bango may not get sufficient O&M just because of the low expenditures in the past.

- **O&M cost allowed by CERC**

CSPGCL has looked into the issue from another perspective also. CERC determines the ARR/Tariff for number of Hydro power stations throughout the country. The CERC Tariff Regulations, 2019 specify O&M norms for about 30 no. of power stations. These Hydro power stations range from the total installed capacity of 4 MW to 1500 MW with unit sizes varying from 2 MW to 250 MW. As may be seen from the normative O&M cost allowed for the Thermal power stations, the O&M cost per MW has co-relation with the unit size and the plant size. Therefore, to establish a more prudent and rational comparison, CSPGCL has sorted out such Hydro stations, which have unit sizes ranging from 20 MW to 60 MW and plant size ranging from 60 MW to 180 MW, i.e., $\pm 50\%$ of the Bango HEP (unit size of 40 MW and the total installed capacity of 120 MW). There are total 7 such plants covered by CERC Tariff Regulations, 2019. The average O&M cost for FY 2022-23 allowed by CERC for the 9 plants is about Rs. 76.89 Lakh/MW, the minimum is about Rs 31.50 Lakh / MW and the highest is about Rs. 128.42 Lakh/MW as shown in the Table below:

Table 9-48: O&M Expenses approved by CERC as submitted by CSPGCL

Particulars	Utility	Unit Size MW	Installed capacity MW	O&M For FY 2022-23 in Rs. Lakh	Rs. Lakh / MW For FY 2022-23
Bairasul	NHPC	60.00	180.00	9,535.28	52.97
Loktak	NHPC	35.00	105.00	10,968.25	104.46
Tanakpur	NHPC	31.40	94.20	12,097.55	128.42
Rangit	NHPC	20.00	60.00	6,136.18	102.27
Sewa-II	NHPC	40.00	120.00	8,140.68	67.84
TLDP III	NHPC	33.00	132.00	8,670.12	65.68
Doyang	NEEPCO	25.00	75.00	6,502.31	86.70
Maithon	NHPC	20.00	63.80	3,326.03	52.13
Panchet	DVC	40.00	80.00	2,519.90	31.50

CSPGCL submitted that the aggregated average of all the 30 plants (including the mega hydro power projects of capacity more than 1000 MW) is about Rs. 57 Lakh/MW. Compared to the same, the less than Rs. 11 Lakh/MW for Bango HEP speaks volumes of inadequacy of O&M provision for the period.

- **Actual R&M expenses by NHPC Ltd.**

CSPGCL submitted that the undisputed leader in the Hydro Power Sector in India is NHPC Ltd. A bare review of NHPC's balance sheet shows that the actual per MW O&M expenses are much higher than what is being allowed to HEP Bango. Note 29 read with Note 25.2 of NHPC's P&L statement for FY 2020-21 reveals that NHPC incurred total maintenance expenses of about Rs. 300.27 Crore on the total installed capacity of 5051.2 MW, which translates to about Rs. 5.41 Lakh per MW. In comparison, the trajectory basis R&M projection for HEP Bango returns a value of just about Rs. 1.58 Lakh per MW, which shows the infeasibility of the same.

CSPGCL submitted that it is not pleading exception on O&M as a whole. The trajectory basis projections for HR expenses and A&G expenses, though lower than the industry average and the CERC Tariff Regulations (Employee benefit expenses of NHPC for FY 2020-21 were about Rs. 25.38 Lakh/MW while for Bango HEP the same was just Rs. 3.7 Lakh/MW), yet for HR and A&G expenses, CSPGCL is ready to accept the legacy based projection, though managing such expenses is difficult but not infeasible. However, the same cannot be said about R&M expenses. They are not a matter of choice but as the machines become older, higher R&M become inevitable for safe and smooth operation of the plant. In the regulated environment, if the R&M norms are skewed and are far lower than the desirable values then it ultimately results into outage of units, which is detrimental for all the stakeholders.

In view of the above, CSPGCL prayed for allowing R&M expense for the Bango HEP at the rate of Rs. 5 Lakh/MW for FY 2022-23 (less than R&M expenses of NHPC in FY 2020-21) with yearly escalation of 4.7% (i.e., the escalation allowed by CERC for Hydro plants in the CERC Tariff Regulations, 2019).

O&M expenses projected by CSPGCL for the Control Period are as under:

**Table 9-49: O&M Expenses for the Control Period as submitted by CSPGCL
(Rs. Crore)**

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS			
	Employee Expenses	220.87	232.51	244.77
	M&G Expenses	156.66	162.12	167.75
	Total O&M Expenses	377.53	394.63	412.51
2	DSPM			
	Employee Expenses	88.85	93.53	98.46
	M&G Expenses	93.25	96.50	99.85
	Total O&M Expenses	182.10	190.03	198.31
3	KWTTP			
	Employee Expenses	44.16	46.49	48.94
	M&G Expenses	63.65	65.90	68.20
	Total O&M Expenses	107.81	112.39	117.14
4	ABVTPS			
	Employee Expenses	108.74	114.47	120.51

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	M&G Expenses	127.30	131.80	136.40
	Total O&M Expenses	236.04	246.27	256.91
5	HBPS			
	Employee Expenses	7.40	7.79	8.20
	M&G Expenses	7.68	8.00	8.34
	Total O&M Expenses	15.08	15.80	16.55

CSPGCL vide letter dated February 11, 2022, had made some additional submissions to this Petition with respect to certain developments on Ash Utilization and Utilization of Biomass, 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 submitted that MOEF&CC's notification dated December 31, 2021 on 100% utilization of Ash is Change in Law, which may have substantial impact on the revenue as well as capital expenditure during the Control Period and as per CSERC MYT Regulations, 2021, impact of Change in Law is a pass through. The preliminary estimation ranges from Rs. 150 to 200 Crore/annum. However, pending finalization of comprehensive plan in this regard, CSPGCL has not prayed for any capex / revenue expense at this juncture. CSPGCL has submitted prayers for In Principle approval for meeting the mandate of ash utilization with leave for claiming actual expenses incurred during true up for FY 2022-23 and submission of the detailed claim along with filing of true up for FY 2021-22.

In view of MOP's revised Policy for Biomass Utilization for Power generation through Co-firing in Coal based Power Plants, CSPGCL submitted that at present CSPGCL is exploring the probability of exemption from such compulsion and no capital / revenue expenditure has been claimed in the instant CIP / Tariff Petition. CSPGCL submitted prayers for In Principle approval for complying with the revised guidelines for biomass with leave for claiming actual expenses incurred during true up for FY 2022-23 and resetting of ECR along with true up for FY 2021-22.

Commission's View

Regulation 40.5 of the CSERC MYT Regulations, 2021 specifies as under:

"40.5. Operation And Maintenance (O&M) Expenses

40.5.1. Human Resource (HR) Expenses

a) HR expenses for generating company shall include:

(i) employees costs;

(ii) impact of Pay revision:

(iii) manpower deployed on outsourcing basis

b) The Commission shall stipulate a separate trajectory for each of the components of HR expenses for the Control Period for all existing generating stations.

c) The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expenses of non-recurring nature related to HR. The base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expenses of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission.

d) The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR expenses (excluding impact of pension fund contribution and pay revision and any other expenses of non-recurring nature, if any) for each year of the control period.

e) At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.

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

f) CPI (IW) (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001:100}.

40.5.2. Maintenance & General (M&G) Expenses

40.5.2.1. Thermal Generating Station:

Maintenance and General (M&G) expenses for generating company shall include:

a) Administrative and General (A&G) expenses;

b) Repair and Maintenance (R&M) expenses

the year wise projections for M&G expenses for the control period with annual escalation of 3.50% are as under

(in Rs. Lakh/MW)

Year	200/210/250 MW Series	300/330/350 MW Series	500 MW Series	600 MW Series	800 MW & above
<i>FY 2022-23</i>	18.65	15.69	12.73	11.46	10.31
<i>FY 2023-24</i>	19.30	16.24	13.18	11.86	10.67
<i>FY 2024-25</i>	19.97	16.80	13.64	12.28	11.05

At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis.

Provided further that the O&M expenses on account of emission control system in coal based thermal generating station shall be 2% of the admitted capital expenditure (excluding IDC and IEDC) as on its date of commercial operation, which shall be escalated annually @3.5% during the tariff period subject to true up as above.

Provided that in all cases the additional O&M cost incurred due to any change/compliance of law or any direction by in statutory authority including but not limited to expenses on ash utilization (not covered in additional capitalisation) shall be pass through over and above the O&M charges allowed in tariff order.

Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India {Base Year: 2011-12 Series};

Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001:100}.

Provided that water charges shall be pass-through in tariff on reimbursement on actual basis.”

Similarly, Regulation 40.5.2.2 of the CSERC MYT Regulations, 2021 specify the principles for estimation of the O&M expenses of the existing hydro generation stations.

The O&M expenses for the Control Period from FY 2022-23 to FY 2024-25 have been estimated on the basis of methodology prescribed in the CSERC MYT Regulations, 2021.

The data published by Labour Bureau, Government of India and the Office of Economic Advisor, Ministry of Commerce & Industry, Government of India for CPI and WPI, respectively, has been relied upon to compute average increase in CPI and WPI over past five years from FY 2016-17 to FY 2020-21.

The Commission noted that CSPGCL has considered CPI of 5.27% and WPI of 2.54% derived based on the four-year average increase in indices on year-to-year basis. In other words, though CPI and WPI of 5 years have been considered, only 4 data points for increase in CPI and WPI have been considered, whereas the CSERC MYT Regulations, 2021 require the normalization of expenses to be done by applying last five-year average increase in indices on year to year basis. Therefore, the Commission has considered the indices data for deriving the last five-year average increase.

The summary of the yearly inflation and the average inflation considered for projecting the O&M expenses is shown in the Table below:

Table 9-50: Computation of Inflation Rate for Projections (%)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Average of 5 years increase
CPI- IW (%)	4.12%	3.08%	5.45%	7.53%	5.02%	5.04%
WPI- AC (%)	1.73%	2.92%	4.28%	1.68%	1.29%	2.38%

The MYT Regulations requires to consider the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expenses of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22. Hence, the net HR expenses for FY 2016-17 to FY 2020-21 have been normalised up to FY 2020-21 by escalating net expenses of each year by average increase in CPI for past five years, i.e., 5.04%.

The average of the net present value in FY 2020-21 of HR expenses of FY 2016-17 to FY 2020-21 has then been escalated at the same rate of CPI increase, i.e., 5.04%, for deriving the base HR expenses for FY 2021-22. The employee expenses for each year of the MYT Control Period from FY 2022-23 to FY 2024-25 have been projected by escalating the base value for FY 2021-22 at the same rate of CPI increase, i.e., 5.04%.

The Commission has projected M&G expenses for the Thermal stations of HTPS, DSPM, KWTPP and ABVTPS for the Control Period from FY 2022-23 to FY 2024-25 based on the norms for M&G expenses as specified in the Regulation 40.5.2.1 of the CSERC MYT Regulations, 2021.

CSPGCL has computed A&G expenses for HBPS as per the methodology specified in Regulation 40.5.2.2 of CSERC MYT Regulations, 2021. As regards A&G expenses for Hydro stations, the CSERC MYT Regulations, 2021 requires to consider the normalized average of the actual A&G expenses (excluding water charges) available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22. Hence, the net A&G expenses for FY 2016-17 to FY 2020-21 have been normalised up to FY 2020-21 by escalating net expenses of each year by average increase in WPI for past five years, i.e., 2.38%.

The average of the net present value in FY 2020-21 of A&G expenses of FY 2016-17 to FY 2020-21 has then been escalated at the same rate of WPI increase, i.e., 2.38%, for deriving the base A&G expenses for FY 2021-22. The A&G expenses for each year of the MYT Control Period from FY 2022-23 to FY 2024-25 have been projected by escalating the base value for FY 2021-22 at the same rate of WPI increase, i.e., 2.38%.

As regards R&M expenses for HBPS, the Commission notes that CSPGCL has craved for an exception from calculating R&M expenses in accordance with the MYT Regulations. CSPGCL has prayed for allowing R&M expense at the rate of Rs.5 Lakh/MW for FY 2022-23 with yearly escalation of 4.7%. CSPGCL has submitted detailed justification in the Petition as mentioned earlier in CSPGCL's submission.

In reply to data gaps, CSPGCL submitted that the leave is craved by CSPGCL for R&M for an exception since normative O&M under MYT Regulations are inadequate

for Bango HEP. Due to various reasons (including but not limited to utilisation of HTPS resources, deferment of AOH/COH, etc.), in last few years the actual booking under R&M head for Bango HEP is very low as shown below:

Table 9-51: R&M Expenses for HBPS as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
R&M Expenses	1.06	1.17	1.27	2.14	3.09

CSPGCL submitted that if O&M cost for HEP Bango is computed on trajectory basis, for FY 2022-23, the normative value comes out to be less than Rs. 11 Crore and plant may not get sufficient O&M just because of the low expenditures in the past. Against average O&M expenses of Rs.57 Lakh/MW allowed by CERC for 30 no. of stations, expenses for Bango HEP will be less than Rs. 11 Lakh/MW.

CSPGCL has cited various Orders of the Hon'ble Supreme Court and CERC to substantiate that R&M cost for HEP Bango is a deserving case for consideration under the Power to Relax. It has also submitted that plant supplies the cheapest power in the State and it results in high revenue gain to the State Exchequer. Therefore, CSPGCL has prayed for allowing R&M expense for Bango HEP at the rate of Rs. 5 Lakh/MW for FY 2022-23 with yearly escalation of 4.7%, i.e., the escalation allowed by CERC for Hydro plants in the CERC Tariff Regulations, 2019.

The Commission accepts the justification submitted by CSPGCL for R&M expenses for HBPS. Therefore, the Commission has approved the R&M expense for Bango HEP at the rate of Rs. 5 Lakh/MW for FY 2022-23 with yearly escalation of 4.7% for the next two years of the Control Period. However, this additional amount shall actually be spent, and no gains shall be allowed to CSPGCL in case the actual R&M expenses are lower, because the Commission has allowed additional R&M expenses over and above the normative R&M expenses specified in the CSERC MYT Regulations, 2021 as a special case, by utilising its power to relax.

As per the CSERC MYT Regulations, 2021, 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.

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 the Control Period is summarised in the following Table:

Table 9-52: Approved O&M Expenses for the Control Period (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS			
	Employee Expenses	218.90	229.93	241.52
	M&G Expenses	156.66	162.12	167.75

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	Total O&M Expenses	375.56	392.05	409.27
2	DSPM			
	Employee Expenses	88.08	92.53	97.19
	M&G Expenses	93.25	96.50	99.85
	Total O&M Expenses	181.33	189.02	197.04
3	KWTPP			
	Employee Expenses	43.78	45.98	48.30
	M&G Expenses	63.65	65.90	68.20
	Total O&M Expenses	107.43	111.88	116.50
4	ABVTPS			
	Employee Expenses	107.83	113.26	118.97
	M&G Expenses	127.30	131.80	136.40
	Total O&M Expenses	235.13	245.06	255.37
5	HBPS			
	Employee Expenses	7.33	7.70	8.09
	M&G Expenses	7.67	7.99	8.32
	Total O&M Expenses	15.00	15.69	16.41

Regulation 21.4 of the CSERC MYT Regulations, 2021 provides for the special allowance of Rs. 9.5 lakh/ MW/ year for the generating station other than HTPS who decides to operate any of its coal-based thermal generating unit(s), which has completed useful life without investment in “Renovation & Modernisation” and meets the operational performance benchmark in accordance with the norms specified in the Regulations. The Regulation also specifies that in case of HTPS, the special allowance may be decided in the Tariff Petition/Capital Investment Plan.

The Commission notes that CSPGCL has prayed for grant of special allowance of Rs. 39.90 Crore computed at Rs. 4.75 Lakh/MW/year (@ 50% of special allowance specified in Regulations) for the old HTPS plant. CSPGCL has submitted that for safe operation of the units and achieving the norms specified in the Regulations, some capital nature investments would be inevitable. The decision regarding the Retirement/Life Extension of the HTPS plant is going through active brainstorming. RLA studies have been completed and a high-level Committee has been constituted to explore all the aspects and feasible options. Irrespective of the extended future plan of HTPS, the Units shall certainly serve up to March 31, 2025. Also, continuation of plant in the next Control Period is in the interest of all stakeholders.

During the TVS, CSPGCL has submitted that against capex of Rs. 248 Crore approved for HTPS, the actual capex incurred till FY 2019-20 is Rs. 82 Crore. Lower capex by Rs. 166 Crore has resulted in saving in ROE, Depreciation, Loan, etc. Therefore, special allowance should be allowed for HTPS. CSPGCL also submitted that if CSPGCL undertakes investment on Life Extension and FGD installation, it will not claim special allowance commensurately.

Considering the submission of CSPGCL as above, the Commission has allowed special allowance of Rs. 4.75 Lakh/MW/year for HTPS as claimed by CSPGCL for the Control Period. The special allowance has been considered as separate item in ARR.

Table 9-53: Approved Special Allowance for the Control Period (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Special Allowance for HTPS	39.90	39.90	39.90

As regards the additional submission made by CSPGCL vide letter dated February 11, 2022, the Commission has taken cognizance of the matter concerning the additional expenses under “Change in Law” for Ash Utilization and Utilization of Biomass for this Control Period. These expenses have been notified as change in law; hence, the Commission principally approves the same. CSPGCL is directed to submit the required details and justification in this regard, in the respective True-up Petition. The expenses shall be considered after prudence check.

As stated in Chapter 2 of this Order, the Commission is of the opinion that Group medical insurance for employees and pensioners is a genuine requirement. Further, the impact of such Group medical insurance is not expected to be very significant but can go a long way to improve the morale of the employees. The Companies may consider all implications on merit. The Commission grants in-principle approval for pass through of such expenses in the head “HR expenses” as and when they are actually incurred.

9.6.7 Interest on Working Capital

CSPGCL’s Submission

CSPGCL has submitted that the Interest on Working Capital (IoWC) has been computed on normative basis as per the methodology given in Regulation 26 of the CSERC MYT Regulations, 2021. The rate of interest has been considered as MCLR Rate- one year tenor of State Bank of India as on September 30, 2021 plus 200 basis points. The Interest on Working Capital submitted for the Control Period is as under:

Table 9-54: Interest on Working Capital for the Control Period as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	26.55	26.70	26.80
2	DSPM	17.20	17.40	17.59
3	KWTPP	15.63	15.61	15.56
4	ABVTPS	42.29	43.32	44.02
5	HBPS	0.41	0.43	0.46

Commission’s View

In reply to data gaps, CSPGCL has revised IoWC for all Thermal Stations as shown below:

Table 9-55: Revised Interest on Working Capital for Thermal Stations as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	24.62	24.79	24.93
2	DSPM	17.38	17.58	17.77
3	KWTPP	14.57	14.54	14.48
4	ABVTPS	38.84	39.64	40.14

The Interest on Working Capital for the Control Period has been computed in accordance with Regulation 26 of the CSERC MYT Regulations, 2021.

The Commission noted that CSPGCL has considered cost of coal for DSPM for 20 days applicable for non-pithead stations based on the definition of pit head stations provided in the CSERC MYT Regulations, 2021. The Commission accepts the submission of CSPGCL in this regard. Thus, the cost of coal has been considered for 10 days for pithead generating stations (HTPS and KWTPP), and 20 days for non-pithead stations (ABVTPS and DSPM). Advance payment for 30 days has been considered towards cost of coal for generation. Cost of secondary fuel oil for one month, Operation and Maintenance expenses for 15 days, maintenance spares as 20% of the M&G expenses, and receivables equivalent to one month have been considered for computing the working capital requirement for thermal generating stations.

For Hasdeo Bango HEP, 15 days O&M expenses, Maintenance Spares at 20% of M&G expenses and receivables equivalent to one month have been considered for computing the working capital requirement. The interest rate of 9% (MCLR Rate- one year tenor of State Bank of India as on September 30, 2021 plus 200 basis points) has been considered, for computing the Interest on Working Capital. The Interest on Working Capital as approved for the Control Period are as under:

Table 9-56: Approved IoWC for HTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Cost of Coal	87.35	86.25	84.59
Cost of Main Secondary Fuel Oil	2.41	2.39	2.34
O&M Expenses	15.43	16.07	16.82
Maintenance Spares	31.33	32.42	33.55
Receivable	135.59	136.78	138.05
Total working capital requirement	272.12	273.91	275.34
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	24.49	24.65	24.78

Table 9-57: Approved IoWC for DSPM (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Cost of Coal	76.86	76.86	76.86
Cost of Main Secondary Fuel Oil	0.90	0.90	0.90

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
O&M Expenses	7.45	7.75	8.10
Maintenance Spares	18.65	19.30	19.97
Receivable	87.41	88.65	89.64
Total working capital requirement	191.27	193.46	195.47
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	17.21	17.41	17.59

Table 9-58: Approved IoWC for KWTPP (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Cost of Coal	50.50	50.50	50.50
Cost of Main Secondary Fuel Oil	0.97	0.97	0.97
O&M Expenses	4.41	4.59	4.79
Maintenance Spares	12.73	13.18	13.64
Receivable	91.64	90.68	89.31
Total working capital requirement	160.26	159.91	159.20
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	14.42	14.39	14.33

Table 9-59: Approved IoWC for ABVTPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Cost of Coal	162.17	168.34	173.01
Cost of Main Secondary Fuel Oil	1.78	1.85	1.91
O&M Expenses	9.66	10.04	10.49
Maintenance Spares	25.46	26.36	27.28
Receivable	227.01	228.37	228.14
Total working capital requirement	426.08	434.96	440.83
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	38.35	39.15	39.68

Table 9-60: Approved IoWC for HBPS (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
O&M Expenses	0.62	0.64	0.67
Maintenance Spares	1.53	1.60	1.66
Receivable	2.27	2.45	2.66
Total working capital requirement	4.42	4.70	5.00
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	0.40	0.42	0.45

9.6.8 Contribution to Pension and Gratuity

CSPGCL's Submission

CSPGCL has submitted that as per the Gazette Notification dated June 18, 2001, the Chhattisgarh Gratuity and Pension Trust may review the contribution required on year to year basis and the CSEB (consequently the successors) are bound to contribute the same on monthly basis to the Trust. The Trust, vide letter dated October 25, 2021 read with letter dated November 23, 2021 has asked for CSPGCL contribution of Rs. 307.47 Crore, Rs. 336.46 Crore and Rs. 361.82 Crore for FY 2022-23, FY 2023-24 and FY 2024-25, respectively. The Trust has considered CSPGCL's share in the total contribution in the same ratio, which was decided by the Commission in the previous Orders. Further, inter-plant allocation of P&G fund has been considered in the Petition in the same ratio, which was adopted by the Commission vide its Order dated August 10, 2021.

The Contribution to Pension and Gratuity submitted by CSPGCL for the Control Period is as under:

Table 9-61: Contribution to Pension and Gratuity for the Control Period as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	137.75	150.74	162.10
2	DSPM	51.11	55.92	60.14
3	KWTPP	30.59	33.48	36.00
4	ABVTPS	83.66	91.55	98.45
5	HBPS	4.36	4.77	5.13

Commission's View

Regulation 34 of the CSERC MYT Regulations, 2021 specifies as under:

“34. PENSION FUND

34.1. For meeting up the past unfunded liabilities of employees appointed before 01.01.2004 erstwhile CSEB State Power Companies, a pension and gratuity trust has been constituted and funding to the same has been allowed in the past by the Commission. The contribution to this fund shall be specified 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. The pension outflow shall be met from the Pension and Gratuity Fund. Contribution to the pension fund as approved by the Commission shall be recoverable as specified in this regulations.”

The Commission noted that CSPGCL has projected the Contribution to Pension and Gratuity for the Control Period based on the letters received from the Chhattisgarh Gratuity and Pension Trust. CSPGCL also submitted that the retirements are expected to be very high during FY 2022-23 to FY 2024-25. Therefore, with increased number of pensioners, the actual outgo from the Fund is expected to spiral up significantly. Due to the approach by the Commission from inception, a corpus has come into existence, which has catered to a portion of the liabilities by way of interest on the

corpus. At the same time, the actuarial liabilities are spiralling up fast. As per the Trust letter dated October 25, 2021, the actuarial liability as on March 31, 2020 was Rs. 15,129 Crore whereas actual availability of Fund was to the tune of Rs. 4,786 Crore only, resulting in a shortfall of about Rs. 10,343 Crore. CSPGCL submitted that unless the contribution is increased significantly, there may arise a very precarious situation wherein the assets may melt down to meet the liabilities. As the Regulations and the Government notification require that the actual outgo has to be met by the Trust; therefore, maintaining sufficient funds in the Trust corpus is not only desirable but may be treated as the intent of the law also. Therefore, CSPGCL requested the Commission to allow the P&G Trust contributions as asked by the Trust from the Companies.

The Contribution to the P&G Trust has to be seen in totality for CSPGCL, CSPTCL, CSLDC and CSPDCL, with the shares of each entity clearly identified. The Pension Trust vide its letter dated 25th October, 2021 has submitted the request for increase in the Contribution to the P&G Trust for FY 2022-23, on the basis of actuarial valuation and availability of funds with the Trust. Subsequently, vide its letter dated 13th December 2021, the Pension Trust has submitted the request for Contribution to the P&G Trust for all three years of the Control Period and has provided the share of each Company in the overall Contribution, based on the ratio of allocation decided by the Commission in the last Tariff Order.

However, it is observed that the share considered by the Trust is marginally different from the share approved in the Tariff Order for FY 2021-22, and also each Company has claimed slightly different amounts, though the overall Contribution to P&G Trust has been considered by each Company as Rs. 1128.00 Crore, Rs. 1234.39 Crore, and Rs. 1327.43 Crore for FY 2022-23, FY 2023-24, and FY 2024-25, respectively.

The overall Contribution to the P&G Fund as claimed by the P&G Trust is based on actuarial analysis, expected pension outflow for the State Power Companies and availability of funds with the Pension trust, which is in accordance with the CSERC MYT Regulations, 2021. Hence, the Commission has considered the overall Contribution to P&G Trust, as claimed by the P&G Trust, for each Year of the Control Period. Further, in order to avoid confusion and mismatch in the amounts allowed to each Company, the Commission has considered the allocation of each entity in the same ratio as approved in the Tariff Order for FY 2021-22.

The Contribution to the P&G Trust as approved for each Year of the Control Period for CSPGCL, CSPTCL, CSLDC and CSPDCL is shown in the Table below:

Table 9-62: P&G Contribution for the Control Period as approved by the Commission (Rs. Crore)

Entity	% Allocation	FY 2022-23	FY 2023-24	FY 2024-25
CSPGCL	27.258%	307.47	336.47	361.83
CSPTCL	10.240%	115.51	126.40	135.93
CSLDC	0.252%	2.84	3.11	3.35
CSPDCL	62.250%	702.18	768.40	826.32
TOTAL	100.00%	1128.00	1234.39	1327.43

Thus, CSPGCL contribution of Rs. 307.47 Crore, Rs. 336.46 Crore and Rs. 361.82 Crore has been approved for FY 2022-23, FY 2023-24 and FY 2024-25, respectively. It is further clarified that if the actual expenses on payment of Gratuity and Pension during the respective year significantly overshoots the estimation, then at the end of the respective year, the Companies may make additional contribution in accordance with their share to meet such additional expense. Subject to prudence check, the same shall be considered at the time of true up. Further, plant-wise allocation of P&G fund has been considered in the same ratio, which was adopted by the Commission vide Order dated August 10, 2021.

The Contribution to Pension and Gratuity approved by the Commission for the Control Period is as under:

Table 9-63: Approved Contribution to Pension and Gratuity for the Control Period (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	137.750	150.742	162.104
2	DSPM	51.105	55.925	60.140
3	KWTPP	30.594	33.479	36.002
4	ABVTPS	83.658	91.549	98.449
5	HBPS	4.361	4.773	5.133

9.6.9 Non-Tariff Income (NTI)

CSPGCL's Submission

CSPGCL has submitted that the NTI as computed in True-Up for FY 2020-21 has been escalated by average increase in WPI during last 5 years to derive NTI for FY 2022-23 to FY 2024-25, as shown in the Table below:

Table 9-64: Non-Tariff Income for the Control Period as submitted by CSPGCL (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	7.77	7.96	8.14
2	DSPM	4.18	4.28	4.38
3	KWTPP	3.76	3.85	3.94
4	ABVTPS	7.78	7.97	8.16
5	HBPS	0.02	0.02	0.02

Commission's View

The Commission noted that in its reply to data gaps, CSPGCL has revised the NTI for the Control Period as shown below due to correction of linking errors:

**Table 9-65: Non-Tariff Income for the Control Period as submitted by CSPGCL
(Rs. Crore)**

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	8.00	8.19	8.38
2	DSPM	4.31	4.41	4.52
3	KWTTP	3.87	3.96	4.05
4	ABVTPS	8.01	8.20	8.39
5	HBPS	0.02	0.02	0.02

The Commission has projected NTI for the Control Period by applying average increase in WPI during last 5 years on the NTI for FY 2020-21 approved in this Order as shown below:

Table 9-66: Approved Non-Tariff Income for the Control Period (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	7.99	8.18	8.38
2	DSPM	4.30	4.41	4.51
3	KWTTP	3.87	3.96	4.06
4	ABVTPS	8.01	8.20	8.40
5	HBPS	0.02	0.02	0.02

9.6.10 Statutory Charges

Commission's View

As regards the applicability of the statutory charges, CSERC MYT Regulations, 2021 specifies as under:

1. Regulation 37.1 specifies that the water charges, statutory taxes, duties and cess actually paid, shall be pass through.
2. Regulation 40.5.2.1 specifies that water charges shall be pass through in tariff on reimbursement on actual basis.

In view of the above specific 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.

9.6.11 ARR for the Control Period

CSPGCL's Submission

CSPGCL in reply to data gaps has revised the ARR for all stations for the Control Period. The ARR submitted by CSPGCL in the Petition and revised ARR submitted in reply to data gap have been summarised as shown in the Tables below:

Table 9-67: ARR for HTPS as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR
Annual Capacity Charges						
Depreciation	148.09	148.39	152.41	152.71	160.95	161.25
Interest & Finance Charges	16.14	16.21	4.25	4.27	0.00	0.00
Return on Equity	80.82	80.87	81.58	81.63	82.07	82.12
O&M Expense	377.53	377.53	394.63	394.63	412.51	412.51
Special Allowances	39.90	39.90	39.90	39.90	39.90	39.90
Interest on Working Capital	26.55	24.62	26.70	24.79	26.80	24.93
Less: Non-Tariff Income	7.77	8.00	7.96	8.19	8.14	8.38
Total Annual Capacity charge	681.26	679.53	691.51	689.75	714.08	712.32
Cost of Coal	907.49	797.10	898.45	789.17	878.77	771.88
Cost of Oil	28.95	28.95	28.66	28.66	28.04	28.04
Total Energy Charges	936.44	826.05	927.12	817.83	906.81	799.91
Contribution to P&G Fund	137.75	137.75	150.74	150.74	162.10	162.10
ARR	1,755.45	1,643.33	1,769.37	1,658.32	1,782.98	1,674.33

Table 9-68: ARR for DSPM as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR
Annual Capacity Charges						
Depreciation	130.92	130.92	131.84	131.84	132.50	132.50
Interest & Finance Charges	0.88	0.88	0.00	0.00	0.00	0.00
Return on Equity	120.90	120.90	121.76	121.76	122.37	122.37
O&M Expense	182.10	182.10	190.03	190.03	198.31	198.31
Interest on Working Capital	17.20	17.38	17.40	17.58	17.59	17.77
Less: Non-Tariff Income	4.18	4.31	4.28	4.41	4.38	4.52
Total Annual Capacity charge	447.83	447.88	456.75	456.80	466.38	466.42
Cost of Coal	552.03	561.11	553.54	562.65	552.03	561.11
Cost of Oil	10.82	10.82	10.85	10.85	10.82	10.82
Total Energy Charges	562.85	571.93	564.39	573.50	562.85	571.93
Contribution to P&G Fund	51.11	51.11	55.92	55.92	60.14	60.14
ARR	1,061.77	1,070.92	1,077.07	1,086.22	1,089.37	1,098.49

Table 9-69: ARR for KWTPP as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR
Annual Capacity Charges						
Depreciation	255.67	255.67	258.33	258.33	259.99	259.99
Interest & Finance Charges	125.13	133.45	103.31	110.18	80.74	86.10
Return on Equity	108.56	108.56	109.15	109.15	109.50	109.50
O&M Expense	107.81	107.81	112.39	112.39	117.14	117.14
Interest on Working Capital	15.63	14.57	15.61	14.54	15.56	14.48
Less: Non-Tariff Income	3.76	3.87	3.85	3.96	3.94	4.05
Total Annual Capacity charge	609.04	616.19	594.94	600.63	578.98	583.16
Cost of Coal	524.66	460.84	526.10	462.10	524.66	460.84
Cost of Oil	11.59	11.59	11.62	11.62	11.59	11.59
Total Energy Charges	536.25	472.43	537.72	473.73	536.25	472.43
Contribution to P&G Fund	30.59	30.59	33.48	33.48	36.00	36.00
ARR	1175.89	1,119.22	1166.14	1,107.83	1151.24	1,091.59

Table 9-70: ARR for ABVTPS as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR
Annual Capacity Charges						
Depreciation	554.96	554.96	555.53	555.53	556.04	556.04
Interest & Finance Charges	459.94	459.94	407.79	407.79	355.50	355.50
Return on Equity	187.78	187.78	187.93	187.93	188.02	188.02
O&M Expense	236.04	236.04	246.27	246.27	256.91	256.91
Interest on Working Capital	42.29	38.84	43.32	39.64	44.02	40.14
Less: Non-Tariff Income	7.78	8.01	7.97	8.20	8.16	8.39
Total Annual Capacity charge	1,473.23	1,469.56	1,432.88	1,428.96	1,392.33	1,388.22
Cost of Coal	1,367.99	1,195.47	1428.52	1243.68	1,466.82	1,273.04
Cost of Oil	21.32	21.32	22.19	22.19	22.94	22.94
Total Energy Charges	1,389.31	1,216.80	1,450.71	1,265.88	1,489.76	1,295.98
Contribution to P&G Fund	83.66	83.66	91.55	91.55	98.45	98.45

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR
ARR	2,946.20	2,770.01	2,975.14	2,786.38	2,980.53	2,782.64

Table 9-71: ARR for HBPS as submitted by CSPGCL (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR	ARR as per Petition	Revised ARR
Annual Capacity Charges						
Depreciation	2.17	1.99	2.76	2.58	3.44	3.25
Interest & Finance Charges	0.06	0.07	0.26	0.29	0.53	0.57
Return on Equity	6.59	6.59	6.94	6.94	7.39	7.39
O&M Expense	15.08	15.08	15.80	15.80	16.55	16.55
Interest on Working Capital	0.41	0.41	0.43	0.43	0.46	0.46
Less: Non-Tariff Income	0.02	0.02	0.02	0.02	0.02	0.02
Total Annual Capacity charge	24.30	24.11	26.18	26.01	28.35	28.20
Cost of Coal	0.00	0.00	0.00	0.00	0.00	0.00
Cost of Oil	0.00	0.00	0.00	0.00	0.00	0.00
Total Energy Charges	0.00	0.00	0.00	0.00	0.00	0.00
Contribution to P&G Fund	4.36	4.36	4.77	4.77	5.13	5.13
ARR	28.66	28.47	30.95	30.78	33.48	33.33

Commission's View

Based on various components of expense and income discussed above, the station-wise summary of ARR for the Control Period from FY 2022-23 to FY 2024-25 is given in the following Tables. The Commission has considered the revised ARR submitted by CSPGCL, as Petition value for the purpose of comparison. 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 9-72: Approved ARR for HTPS (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Petition	Approved	Petition	Approved	Petition	Approved
Annual Capacity Charges						
Depreciation	148.39	148.39	152.71	152.71	161.25	161.25
Interest & Finance Charges	16.21	16.22	4.27	4.28	0.00	0.00
Return on Equity	80.87	66.74	81.63	67.37	82.12	67.77
O&M Expense	377.53	375.56	394.63	392.05	412.51	409.27
Special Allowances	39.90	39.90	39.90	39.90	39.90	39.90
Interest on Working Capital	24.62	24.49	24.79	24.65	24.93	24.78
Less: Non-Tariff Income	8.00	7.99	8.19	8.18	8.38	8.38
Total Annual Capacity charge	679.53	663.30	689.75	672.77	712.32	694.59
Cost of Coal	797.10	797.10	789.17	789.17	771.88	771.88
Cost of Oil	28.95	28.95	28.66	28.66	28.04	28.04
Total Energy Charges	826.05	826.05	817.83	817.83	799.91	799.91
Contribution to Gratuity/Pension Fund	137.75	137.75	150.74	150.74	162.10	162.10
Aggregate Revenue Requirement (ARR)	1,643.33	1,627.11	1,658.32	1,641.35	1,674.33	1,656.60

Table 9-73: Approved ARR for DSPM (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Petition	Approved	Petition	Approved	Petition	Approved
Annual Capacity Charges						
Depreciation	130.92	130.92	131.84	131.84	132.50	132.50
Interest & Finance Charges	0.88	0.88	0.00	0.00	0.00	0.00
Return on Equity	120.90	99.78	121.76	100.48	122.37	100.99
O&M Expense	182.10	181.33	190.03	189.02	198.31	197.04
Interest on Working Capital	17.38	17.21	17.58	17.41	17.77	17.59
Less: Non-Tariff Income	4.31	4.30	4.41	4.41	4.52	4.51
Total Annual Capacity charge	447.88	425.83	456.80	434.35	466.42	443.60
Cost of Coal	561.11	561.11	562.65	562.65	561.11	561.11
Cost of Oil	10.82	10.82	10.85	10.85	10.82	10.82
Total Energy Charges	571.93	571.93	573.50	573.50	571.93	571.93
Contribution to Gratuity/Pension Fund	51.11	51.11	55.92	55.93	60.14	60.14
Aggregate Revenue Requirement (ARR)	1,070.92	1,048.87	1,086.22	1,063.78	1,098.49	1,075.67

Table 9-74: Approved ARR for KWTPP (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Petition	Approved	Petition	Approved	Petition	Approved
Annual Capacity Charges						
Depreciation	255.67	255.67	258.33	258.33	259.99	259.99
Interest & Finance Charges	133.45	133.45	110.18	110.18	86.10	86.10
Return on Equity	108.56	89.59	109.15	90.08	109.50	90.37
O&M Expense	107.81	107.43	112.39	111.88	117.14	116.50
Interest on Working Capital	14.57	14.42	14.54	14.39	14.48	14.33
Less: Non-Tariff Income	3.87	3.87	3.96	3.96	4.05	4.06
Total Annual Capacity charge	616.19	596.69	600.63	580.90	583.16	563.23
Cost of Coal	460.84	460.84	462.10	462.10	460.84	460.84
Cost of Oil	11.59	11.59	11.62	11.62	11.59	11.59
Total Energy Charges	472.43	472.43	473.73	473.73	472.43	472.43
Contribution to Gratuity/Pension Fund	30.59	30.59	33.48	33.48	36.00	36.00
Aggregate Revenue Requirement (ARR)	1,119.22	1,099.71	1,107.83	1,088.10	1,091.59	1,071.66

Table 9-75: Approved ARR for ABVTPS (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Petition	Approved	Petition	Approved	Petition	Approved
Annual Capacity Charges						
Depreciation	554.96	554.96	555.53	555.53	556.04	556.04
Interest & Finance Charges	459.94	459.94	407.79	407.79	355.50	355.50
Return on Equity	187.78	154.97	187.93	155.10	188.02	155.17
O&M Expense	236.04	235.13	246.27	245.06	256.91	255.37
Interest on Working Capital	38.84	38.35	39.64	39.15	40.14	39.68
Less: Non-Tariff Income	8.01	8.01	8.20	8.20	8.39	8.40
Total Annual Capacity charge	1,469.56	1,435.34	1,428.96	1,394.41	1,388.22	1,353.36
Cost of Coal	1,195.47	1,183.84	1243.68	1,232.24	1,273.04	1,262.95
Cost of Oil	21.32	21.32	22.19	22.19	22.94	22.94
Total Energy Charges	1,216.80	1,205.17	1,265.88	1,254.43	1,295.98	1,285.89
Contribution to Gratuity/Pension Fund	83.66	83.66	91.55	91.55	98.45	98.45
Aggregate Revenue Requirement (ARR)	2,770.01	2,724.16	2,786.38	2,740.40	2,782.64	2,737.70

Table 9-76: Approved ARR for HBPS (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Petition	Approved	Petition	Approved	Petition	Approved
Annual Capacity Charges						
Depreciation	1.99	1.98	2.58	2.58	3.25	3.25
Interest & Finance Charges	0.07	0.07	0.29	0.29	0.57	0.57
Return on Equity	6.59	5.44	6.94	5.73	7.39	6.10
O&M Expense	15.08	15.00	15.80	15.69	16.55	16.41
Interest on Working Capital	0.41	0.40	0.43	0.42	0.46	0.45
Less: Non-Tariff Income	0.02	0.02	0.02	0.02	0.02	0.02
Total Annual Capacity charge	24.11	22.87	26.01	24.68	28.20	26.77
Cost of Coal	0.00	0.00	0.00	0.00	0.00	0.00
Cost of Oil	0.00	0.00	0.00	0.00	0.00	0.00
Total Energy Charges	0.00	0.00	0.00	0.00	0.00	0.00
Contribution to Gratuity/Pension Fund	4.36	4.36	4.77	4.77	5.13	5.13
Aggregate Revenue Requirement (ARR)	28.47	27.23	30.78	29.46	33.33	31.90

9.7 Billing for the Control Period

The recovery of fixed cost shall be through station-wise capacity charges in accordance with the formulae specified in Regulation 45 of CSERC MYT Regulations, 2021; and recovery of energy charges shall be through the station-wise energy charge rate (in Rs/kWh) in accordance with the formulae specified in Regulation 45 of the CSERC MYT Regulations, 2021. It may be noted that AFC does not comprise contribution to P&G Fund, SLDC charges, water charges and other statutory charges. CSPGCL shall raise the amount approved towards contribution to P&G Fund in twelve equal monthly instalments in its monthly bill raised for power supply to the CSPDCL. SLDC charges, water charges, start up power and other statutory charges shall be claimed on reimbursement basis.

Further in case of thermal stations, the bi-monthly increase in the primary fuel cost for the MYT Control Period from FY 2022-23 to FY 2024-25 shall be recovered as per the Fuel Cost Adjustment mechanism specified in Regulation 93 of the CSERC MYT Regulations, 2021. CSPGCL shall compute the CHFC for each thermal generating station separately for each month and convey the bi-monthly amount to CSPDCL for payment as part of Fuel Cost Adjustment. During TVS, CSPGCL apprised that as per the Regulations now GCV has to be considered on coal 'as received' basis tested by third party. Report of third party sampling for measurement of GCV takes around two months' time. Considering the same, it is decided that CSPGCL shall convey such amount by last day of the second month following the last day of the bi-monthly period. For example, the CHFC for the month of April and May shall be conveyed by 31st July and for June and July by 30th September, and so on. CHFC shall be computed for existing thermal generating stations of CSPGCL, i.e., HTPS, DSPM, KWTPP, ABVTPS and new generating Stations or Units to be commissioned during the Control Period. The variation in secondary fuel oil GCV and Cost shall be considered at the time of truing up for the respective year. The amount of CHFC (in Rupees) payable by CSPDCL shall be paid in two equal monthly instalments. For the bi-monthly period of April and May, CSPGCL shall raise the bill for CHFC in two equal monthly instalments in the month of September and October. For bills for bi-monthly period of June and July, CSPGCL shall raise the bill for CHFC in two equal monthly instalments in the month of November and December. Similar schedule shall be followed for payment of CHFC for other bi-monthly period in the financial year. The formats for calculation of FCA charges are enclosed as **Annexure-IV**.

Station-wise Annual Fixed Cost approved for each thermal generating station for each year of the Control Period is summarised in the Table below:

Table 9-77: Approved Annual Fixed Cost (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	663.30	672.77	694.59
2	DSPM	425.83	434.35	443.60
3	KWTPP	596.69	580.90	563.23
4	ABVTPS	1435.34	1394.41	1353.36

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 9-78: Approved Contribution to Pension and Gratuity (Rs. Crore)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	137.750	150.742	162.104
2	DSPM	51.105	55.925	60.140
3	KWTTP	30.594	33.479	36.002
4	ABVTPS	83.658	91.549	98.449
5	HBPS	4.361	4.773	5.133

The Station-wise approved energy charge rate for each year of the Control Period is summarised in the Table below:

Table 9-79: Approved Energy Charge Rate (Rs./kWh)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	HTPS	1.574	1.574	1.574
2	DSPM	1.688	1.688	1.688
3	KWTTP	1.339	1.339	1.339
4	ABVTPS	1.838	1.838	1.823

Regulation 46 of the MYT Regulations, 2021 specifies that tariff for hydro power plant shall be single-part tariff. Accordingly, the approved tariff for Hasdeo Bango for the Control Period, excluding P&G contribution and statutory charges such as water charges, is summarised in the following Table:

Table 9-80: Approved Tariff for HBPS

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Approved AFC (Rs. Crore)	22.87	24.68	26.77
2	Approved Net Generation (MU)	270.71	270.71	270.71
3	Approved Tariff for Hasdeo Bango	0.845	0.912	0.989

10 ARR AND TRANSMISSION TARIFF OF CSPTCL FOR FY 2022-23 TO FY 2024-25

10.1 Background

The Commission notified the CSERC MYT Regulations, 2021 for the Control Period from FY 2022-23 to FY 2024-25 on November 14, 2021.

CSPTCL has submitted the present Petition for determination of ARR and Transmission Charges for the Control Period from FY 2022-23 to FY 2024-25. CSPTCL has submitted details of the expenses likely to be incurred during the Control Period under various heads, viz., O&M expenses, depreciation, interest on loans, interest on working capital, etc., as per the CSERC MYT Regulations, 2021.

Regulation 5.7 of the CSERC MYT Regulations, 2021 specifies as under:

“5.7. The filing for the Control Period under this Regulation shall be as under;

(a) MYT Petition shall comprise of:

i. For Generation, Transmission and SLDC business

- 1. Truing up for previous year;*
- 2. Multi-Year Aggregate Revenue Requirement for each year of the entire Control Period;*
- 3. Application for determination of tariff and fees and charges for each year of the entire Control Period;”*

Regulation 9.1 and 9.2 of the CSERC MYT Regulations, 2021 specify 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 Transmission Charges for CSPTCL for the Control Period from FY 2022-23 to FY 2024-25, based on the submission by CSPTCL.

10.2 Operations and Maintenance (O&M) Expenses

CSPTCL's Submission

CSPTCL submitted that as per the provisions of Regulation 73.5.1, 73.5.2 and 73.5.3 of CSERC MYT Regulations, 2021, O&M expenses include Human Resource (HR) Expenses and Maintenance & General (M&G) Expenses.

HR Expenses

CSPTCL has derived HR expenses for the base year, i.e., FY 2021-22 on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expenses of non-recurring nature, as per the Annual Accounts for the previous five years immediately preceding the base year, i.e., FY 2021-22.

The HR expenses have been normalized based on the average CPI (IW) increase for the past five years on year-to-year basis, i.e., 5.27%. The average of normalized net present value of HR expenses for FY 2016-17 to FY 2020-21, has been used to project the value for the base year FY 2021-22. Further, base value of HR expenses derived for FY 2021-22 has been escalated by the above-mentioned inflation rate to project the HR expenses for the Control Period.

A&G Expenses

CSPTCL has derived A&G expenses for the base year, i.e., FY 2021-22 on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower if any), as per the Annual Accounts for the previous five years immediately preceding the base year, i.e., FY 2021-22.

The A&G expenses has been normalized based on the average inflation increase for the past five years on year-to-year basis considering 40% weightage to WPI and 60% weightage to CPI, i.e., 4.18%. The average of normalized net present value of A&G expenses for FY 2016-17 to FY 2020-21, has been used to project the value for the base year FY 2021-22. Further, base value of A&G expenses derived for FY 2021-22 has been escalated by the above-mentioned inflation rate to project the A&G expenses for the Control Period.

R&M Expenses

CSPTCL submitted that R&M Expenses for the base year, i.e., FY 2021-22 has been derived as 1% of opening GFA of FY 2021-22 and then escalated with average increase in WPI% of last 5 years, i.e., 2.54%.

Total O&M expenses projected by CSPTCL for the Control Period from FY 2022-23 to FY 2024-25 are shown in the Table below:

Table 10-1: O&M Expenses projected by CSPTCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
HR Expenses	249.08	262.20	276.02
A&G Expense	50.71	52.82	55.03
R&M Expense	55.74	57.15	58.60
Total O&M Expenses	355.52	372.18	389.66

Commission's View

As regards O&M Expenses, Regulation 73.5 of the CSERC MYT Regulations, 2021 specifies as under:

“73.5. Operation And Maintenance (O&M) Expenses

73.5.1. Human Resource (HR) Expenses

(a) HR expenses shall include:

(i) employees costs;

(ii) impact of Pay revision;

(iii) manpower deployed on outsourcing basis;

(b) The Commission shall stipulate a separate trajectory for each of the components of HR expenses for the Control Period.

(c) The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expense of non-recurring nature related to HR. The base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual HR 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 2021-22, subject to prudence check by the Commission.

(d) The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR 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.

(e) At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.

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

(f) CPI (IW) (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.

73.5.2. Maintenance & General (M&G) Expenses

(a) Maintenance & General (M&G) expenses shall include:

(i) Administrative and General (A&G) expenses;

(ii) Repair and Maintenance (R&M) expenses

(b) The Commission shall stipulate a separate trajectory for M&G expenses i.e., R&M and A&G expenses for the Control Period.

(c) The A&G expenses (excluding expenses towards outsourcing manpower if any) for the base year i.e. FY 2020-21, shall be derived on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower if any) available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, 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.

(d) For normalization of A&G expenses shall be estimated by applying last five year average increase/decrease in inflation to be considered on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2020-21. The projected base year value shall be escalated by the above inflation rate to estimate the A&G expense.

(e) R&M expenses for the first year of the control period shall be calculated as a percentage (as per the norm decided in the tariff order) of opening Gross Fixed Assets. For arriving at the R&M expenses of subsequent years of the control period, projected WPI rate shall be applied on the estimated R&M expenses of first year.

(f) Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India

{Base Year: 2011-12 Series}; (g) Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.

(h) At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

73.5.3. In cases the additional O&M expenses incurred due to additional capital investment or any change in law or any direction by any statutory authority shall be pass-through over and above the O&M charges allowed in the Tariff order after prudence check by the Commission."

The O&M expenses for the Control Period from FY 2022-23 to FY 2024-25 have been approved 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 HR Expenses and weightage of 40% of WPI and 60% CPI for A&G expenses.

The data published by Labour Bureau, Government of India and the Office of Economic Advisor, Ministry of Commerce & Industry, Government of India for CPI and WPI, respectively, has been relied upon to compute average increase in CPI and WPI over past five years from FY 2016-17 to FY 2020-21.

The Commission noted that CSPTCL has considered CPI of 5.27% and WPI of 2.54% derived based on the four-year average increase in indices on year-to-year basis. In other words, though CPI and WPI of 5 years have been considered, only 4 data points for increase in CPI and WPI have been considered, whereas the CSERC MYT Regulations, 2021 require the normalization of expenses to be done by applying last five-year average increase in indices on year to year basis. Therefore, the Commission has considered the indices data for deriving the last five-year average increase.

The summary of the yearly inflation and the average inflation considered for projecting the HR expenses and A&G expenses is shown in the Table below:

Table 10-2: Computation of Inflation Rate for projections (%)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Average of 5 years increase
CPI- IW (%)	4.12%	3.08%	5.45%	7.53%	5.02%	5.04%
WPI- AC (%)	1.73%	2.92%	4.28%	1.68%	1.27%	2.38%
WPI@40% & CPI 60%	3.16%	3.02%	4.98%	5.19%	3.52%	3.97%

As per the above Regulation, the Commission considered actual expenses excluding Pension & Gratuity contribution and impact of pay revision) incurred for the past five years, i.e., from FY 2016-17 to FY 2020-21 to derive HR expenses for the base year, i.e., FY 2021-22. The HR expenses have been normalized based on the average CPI (IW) increase for the past five years on year to year basis, i.e., 5.04%.

For A&G Expenses, the Commission has computed A&G expenses for the base year, i.e., FY 2021-22 on the basis of the normalized average of the prudent actual A&G expenses (excluding expenses towards outsourcing manpower) for the previous five years immediately preceding the base year, i.e., FY 2021-22.

The A&G expenses have been normalized based on the average inflation increase for the past five years on year to year basis considering the 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis, i.e., 3.97%. The average of normalized net present value of A&G expenses for FY 2016-17 to FY 2020-21, has been used to project base year value for FY 2021-22. Further, base value of A&G expenses derived for FY 2021-22 has been escalated by the above-mentioned inflation rate to project the A&G expenses for the Control Period.

The approved HR Expenses and A&G Expenses for the Control Period are shown in the Table below:

Table 10-3: Approved HR Expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
HR Expenses	167.34	184.02	231.17	219.08	216.82				
Normalized FY 2016-17 to net present value FY 2020-21	167.34	175.77	184.63	193.94	203.71				
Normalized FY 2017-18 to net present value FY 2020-21		184.02	193.29	203.04	213.27				
Normalized FY 2018-19 to net present value FY 2020-21			231.17	242.82	255.06				
Normalized FY 2019-20 to net present value FY 2020-21				219.08	230.12				
Normalized net present value FY 2020-21					216.82				
Average of NPV of 5 FY's used for projection of base year FY 2021-22					223.80				
HR Expenses for Control Period				Projected Base year value for 2021-22		235.08	246.92	259.37	272.44

As stated in Chapter 2 of this Order, the Commission is of the opinion that Group medical insurance for employees and pensioners is a genuine requirement. Further, the impact of such Group medical insurance is not expected to be very significant but can go a long way to improve the morale of the employees. The Companies may consider all implications on merit. The Commission grants in-principle approval for pass through of such expenses in the head “HR expenses” as and when they are actually incurred.

Table 10-4: Approved A&G Expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
A&G Expenses	37.05	42.78	40.61	44.01	51.68				
Normalized FY 2016-17 to net present value FY 2020-21	37.05	38.52	40.05	41.65	43.30				
Normalized FY 2017-18 to net present value FY 2020-21		42.78	44.48	46.25	48.09				

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Normalized FY 2018-19 to net present value FY 2020-21			40.61	42.22	43.90				
Normalized FY 2019-20 to net present value FY 2020-21				44.01	45.76				
Normalized net present value FY 2020-21					51.68				
Average of NPV of 5 FY's used for projection of base year FY 2021-22					46.55				
A&G Expenses for Control Period				Projected Base year value for 2021-22		48.40	50.32	52.32	54.40

The Petitioner has proposed R&M expenses for FY 2021-22 as 1% of Opening GFA and then escalated this value with WPI for projecting the R&M expenses for each Year of the Control Period. However, as per above Regulation, R&M expenses for first year of the Control Period have to be computed as a percentage of Opening GFA, rather than the R&M expenses for the base year i.e., FY 2021-22. Accordingly, the Commission has approved R&M expenses for FY 2022-23 as 1% of Opening GFA of FY 2022-23, and then escalated the same with WPI of 2.38% to determine the normative R&M expenses for the remaining two years of the Control Period. The approved R&M expenses for the Control Period are shown in the Table below:

Table 10-5: Approved R&M expenses for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
R&M Expenses	55.87	57.20	58.56

The summary of O&M Expenses approved by the Commission for CSPTCL for the Control Period, is shown in the Table below:

Table 10-6: O&M Expenses approved for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
HR Expenses	246.92	259.37	272.44
A&G Expenses	50.32	52.32	54.40
R&M Expenses	55.87	57.20	58.56
Total O&M Expenses	353.12	368.89	385.40

10.3 Contribution to Pension and Gratuity Fund

CSPTCL's Submission

CSPTCL submitted that contribution towards P&G Fund for the Control Period from FY 2022-23 to FY 2024-25 has been considered based on the demand raised by P&G Trust as per the latest Actuarial Valuation. CSPTCL submitted that share of CSPTCL and CSLDC has been considered based on the percentage share determined by the Commission in the Tariff Order dated April 30, 2016. Further, the total share CSPTCL and CSLDC has been bifurcated between the two Companies based on their working strength of employees. CSPTCL requested the Commission to approve contribution towards P&G Fund, as shown in the Table below:

Table 10-7: Contribution to P&G Fund Submitted by CSPTCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Contribution to P&G Fund	114.41	125.20	134.63

Commission's View

Regulation 34 of the MYT Regulations, 2021 specifies as under:

“34. PENSION FUND

34.1. For meeting up the past unfunded liabilities of employees appointed before 01.01.2004 erstwhile CSEB State Power Companies, a pension and gratuity trust has been constituted and funding to the same has been allowed in the past by the Commission. The contribution to this fund shall be specified 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. The pension outflow shall be met from the Pension and Gratuity Fund. Contribution to the pension fund as approved by the Commission shall be recoverable as specified in this regulations.

Provided till the time SLDC is administered by STU, SLDC's share to the Pension and Gratuity Fund shall be met by the STU on pro-rata basis. For the purpose of ratio determination, the employee strength of SLDC and STU as on 1st April of the preceding year shall be considered.”

The Commission noted that CSPTCL has projected the Contribution to Pension and Gratuity for the Control Period based on the letters received from the Chhattisgarh Gratuity and Pension Trust.

The Contribution to the P&G Trust has to be seen in totality for CSPGCL, CSPTCL, CSLDC and CSPDCL, with the shares of each entity clearly identified. The Pension Trust vide its letter dated 25th October, 2021 has submitted the request for increase in the Contribution to the P&G Trust for FY 2022-23, on the basis of actuarial valuation and availability of funds with the Trust. Subsequently, vide its letter dated 13th December 2021, the Pension Trust has submitted the request for Contribution to the P&G Trust for all three years of the Control Period and has provided the share of each Company in the overall Contribution, based on the ratio of allocation decided by the Commission in the last Tariff Order.

However, it is observed that the share considered by the Trust is marginally different from the share approved in the Tariff Order for FY 2021-22, and also each Company has claimed slightly different amounts, though the overall Contribution to P&G Trust has been considered by each Company as Rs. 1128.00 Crore, Rs. 1234.39 Crore, and Rs. 1327.43 Crore for FY 2022-23, FY 2023-24, and FY 2024-25, respectively.

The overall Contribution to the P&G Fund as claimed by the P&G Trust is based on actuarial analysis, expected pension outflow for the State Power Companies and availability of funds with the Pension trust, which is in accordance with the CSERC MYT Regulations, 2021. Hence, the Commission has considered the overall Contribution to P&G Trust, as claimed by the P&G Trust, for each Year of the Control Period. Further, in order to avoid confusion and mismatch in the amounts allowed to each Company, the Commission has considered the allocation of each entity in the same ratio as approved in the Tariff Order for FY 2021-22.

The Contribution to the P&G Trust as approved for each Year of the Control Period for CSPGCL, CSPTCL, CSLDC and CSPDCL is shown in the Table below:

Table 10-8: P&G Contribution for the Control Period as approved by the Commission (Rs. Crore)

Entity	% Allocation	FY 2022-23	FY 2023-24	FY 2024-25
CSPGCL	27.258%	307.47	336.47	361.83
CSPTCL	10.240%	115.51	126.40	135.93
CSLDC	0.252%	2.84	3.11	3.35
CSPDCL	62.250%	702.18	768.40	826.32
TOTAL	100.00%	1128.00	1234.39	1327.43

It is further clarified that if the actual expenses on payment of Gratuity and Pension during the respective year significantly overshoots the estimation, then at the end of the respective year, the Companies may make additional contribution in accordance with their share to meet such additional expense. Subject to prudence check, the same shall be considered at the time of true up.

10.4 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. CSPTCL has submitted the capital structure for the Control Period considering the following:

- Closing GFA of FY 2020-21 has been considered as opening GFA for FY 2021-22 and addition during each year of the Control Period has been considered as submitted in the CIP Petition;
- Opening consumer contribution has been considered as approved by the Commission for FY 2019-20 i.e., Rs. 54.04 Crore;
- Closing CWIP of Rs. 494.93 Crore for FY 2020-21 has been considered as opening CWIP for FY 2021-22 and any addition as discussed in CIP Petition;

- Loan addition has been considered as 70% of the total asset addition;
- Addition in consumer contribution has been considered as Nil for FY 2020-21 and onwards;
- Equity addition has been considered as 30% of the total asset addition;
- GFA addition of Rs. 202.98 Crore, Rs. 1455.30 Crore and Rs. 3142.35 Crore has been considered for FY 2022-23 to FY 2024-25 based on schedule and plan submitted in Capital Investment Plan Petition;

CSPTCL has requested the Commission to approve Capital Structure for the Control Period as shown in the Table below:

Table 10-9: Capital Structure submitted by CSPTCL for the Control Period from FY 2022-23 to FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
A	GROSS FIXED ASSETS (GFA)			
1	Opening GFA	5,587.38	5,790.36	7,245.66
2	Opening CWIP	743.43	2,401.43	3,275.08
3	Opening Capex	6,330.81	8,191.79	10,520.74
4	Capitalization during the year	202.98	1455.30	3142.35
5	Closing GFA	5,790.36	7,245.66	10,388.01
6	Closing CWIP	2,401.43	3,275.08	1,375.34
7	Closing Capex	8,191.79	10,520.74	11,763.35
B	GRANTS & CONSUMER CONTRIBUTION			
1	Opening Grant and Contribution	109.54	109.54	109.54
2	Consumer Contribution/Grants during the Year			
3	Closing Consumer Contribution	109.54	109.54	109.54
4	Consumer Contribution in Opening GFA	54.04	54.04	54.04
5	Consumer Contribution in Closing GFA	54.04	54.04	54.04
C	LOAN BORROWED			
1	Opening Borrowed Loan	2,878.44	3,005.20	3,131.96
2	Loan Borrowed during the Year	126.76	126.76	126.76
3	Closing Borrowed Loan	3005.20	3131.96	3258.72
4	Borrowed Loan in Opening GFA	3,669.81	3,811.90	4,830.61
5	Borrowed Loan in Closing GFA	3,811.90	4,830.61	7,030.25
D	Equity			
1	Opening Gross Equity	3,342.83	5,077.05	7,279.24
2	Equity addition during the Year	1734.22	2202.19	1115.85
3	Closing Gross Equity	5,077.05	7,279.24	8,395.09
4	Gross Equity in Opening GFA	1,863.53	1,924.43	2,361.02
5	Gross Equity in Closing GFA	1,924.43	2,361.02	3,303.72

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
6	Average Gross Equity during the year	1,893.98	2,142.72	2,832.37
E	FUNDING OF CAPITALISED ASSETS			
1	Total Capitalization	202.98	1455.30	3142.35
2	Grant Contribution	-	-	-
3	Equity Contribution	60.89	436.59	942.71
4	Loan Contribution	142.09	1,018.71	2,199.65

Commission's View

The Closing GFA of FY 2020-21 as approved in this Order has been considered as the opening GFA of FY 2021-22. Capitalisation for FY 2021-22 has been considered as approved in the Tariff Order dated August 02, 2021. Closing GFA for FY 2021-22 has been considered as opening GFA for FY 2022-23 and onwards.

The Commission observed that CSPTCL has projected capitalisation of Rs. 202.98 Crore for FY 2022-23, whereas, the capitalisation projected by CSPTCL for FY 2023-24 and 2024-25 is much higher than the capitalisation typically achieved in the past years. CSPTCL has achieved actual average capitalisation of Rs. 434.70 Crore during the last three financial years, as against the projected capitalisation of Rs. 1455.30 Crore and Rs. 3142.35 Crore for FY 2023-24 and 2024-25, respectively. Therefore, CSPTCL was asked to justify the high projection of capitalisation for FY 2023-24 and 2024-25.

In reply, CSPTCL submitted that new capital works proposed other than spill over works will be taken up only after approval from the Commission and approval from Board of Directors (BOD) of CSPTCL. However, all the efforts shall be made towards timely completion of capital works as per scheduled commissioning date. During the TVS, CSPTCL submitted that all proposed works are necessary to be taken up, and many schemes are linked to match the corresponding PGCIL network for bringing power into the State.

The Commission is of the view that it may not be appropriate to consider such high level of capitalisation, as it will result in increase in ARR and tariff approved for the Control Period, in the absence of any such track record on the part of CSPTCL. Hence, the Commission has considered capitalisation for FY 2022-23 as submitted by CSPTCL. For FY 2023-24 and FY 2024-25, the Commission has considered the capitalisation as Rs. 450 Crore for ARR and tariff purposes, which is close to the average capitalisation achieved during last three financial years. It is clarified that CSPTCL is not restricted to the capitalisation considered by the Commission for ARR and Tariff purposes, and should take up and complete all Schemes as per the CIP Petition filed by CSPTCL in Case No. 5 of 2022. Further, the actual capitalisation achieved by CSPTCL shall be considered at the time of true up for the respective years.

Further, in additional submission CSPTCL submitted that it has proposed IDC for the Control Period only for representation purposes, which is not considered in capitalisation proposed for the Control Period. However, actual IDC shall be claimed at the time of true up of respective year. Accordingly, the Commission has not

considered IDC in the computation of capitalisation for the Control Period. The funding of the capitalisation has been considered in the normative Debt:Equity ratio of 70:30, with Grant/Consumer Contribution being considered as Nil, as submitted by CSPTCL. The actual Grant/Consumer Contribution utilised for capitalisation, if any, shall be considered at the time of true-up for the respective year.

Accordingly, the Commission has approved capitalisation and its funding for the Control Period, as shown in the Table below:

Table 10-10: Approved GFA Addition and Means of Finance for the Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening GFA	5,587.38	5,790.36	6,240.36
2	Capitalisation during the year	202.98	450.00	450.00
3	Closing GFA	5,790.36	6,240.36	6,690.36
4	Grant/Consumer Contribution	0.00	0.00	0.00
5	Equity	60.89	135.00	135.00
6	Debt	142.086	315	315

10.5 Depreciation

CSPTCL's Submission

CSPTCL submitted that it has computed depreciation in accordance with Regulation 25 of the CSERC MYT Regulations, 2021. CSPTCL requested the Commission to approve depreciation for the Control Period as shown in the Table below:

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening GFA excluding SLDC	5,587.38	5,790.36	7,245.66
2	Add: Additional capitalization during the year	202.98	1455.3	3142.35
3	GFA at the end of the year excluding SLDC	5,790.36	7,245.66	10,388.01
4	Average GFA for the year	5,688.87	6,518.01	8,816.84
5	Depreciation Rate	5.26%	5.26%	5.26%
6	Depreciation @ applicable rates	299.23	342.85	463.77
7	Opening consumer contribution	54.04	54.04	54.04
8	Addition: consumer contribution during the year	-	-	-
9	Closing consumer contribution	54.04	54.04	54.04
10	Average consumer contribution	54.04	54.04	54.04
11	Less: Depreciation on consumer contribution on live assets	2.84	2.84	2.84
12	Less: Depreciation on fully depreciated assets	25.03	25.03	25.03
13	Net Depreciation	271.36	314.97	435.89

Commission's View

The Commission has approved the depreciation in accordance with the provisions of Regulation 25 of the CSERC MYT Regulations, 2021 and the approach adopted in the past Orders. The opening and closing GFA for the Control Period 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, 2021, has been considered for each year of the Control Period.

As regards depreciation on fully depreciated assets, in response of the Commission's query, CSPTCL submitted that it is difficult to project the fully depreciated assets for the coming years, therefore, CSPTCL has considered amount of depreciation regarding fully depreciated assets as claimed for FY 2020-21, i.e., Rs. 25.03 Crore for each year of the Control Period. However, CSPTCL will submit actual depreciation on fully depreciated assets at the time of true up.

The depreciation approved by the Commission for the Control Period is shown in the Table below:

Table 10-11: Depreciation Approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening GFA excluding CSLDC	5,587.38	5,790.36	6,240.36
2	Add: Capitalization during the year	202.98	450.00	450.00
3	GFA at the end of the year excluding CSLDC	5,790.36	6,240.36	6,690.36
4	Average GFA for the year	5,688.87	6,015.36	6,465.36
5	Depreciation Rate	5.26%	5.26%	5.26%
6	Depreciation @ applicable rates	299.13	316.30	339.96
7	Less: Depreciation on Consumer Contribution on live assets	2.84	2.84	2.84
8	Less: Depreciation on fully depreciated assets	25.03	25.03	25.03
9	Net Depreciation	271.25	288.42	312.08

10.6 Interest on Loan

CSPTCL's Submission

CSPTCL submitted that it has calculated interest and finance charges as per Regulation 24 of the CSERC MYT Regulations, 2021. CSPTCL has considered the closing balance for FY 2020-21 as opening balance for FY 2021-22. The debt component of GFA addition in FY 2022-23 and thereon has been considered as the loan addition during the year for projects in the Control Period. The allowable depreciation for each year of the Control Period has been considered as the normative repayment for respective year of the Control Period. The annual weighted average interest has been considered as same level considered for FY 2020-21. The Interest on Loan for the Control Period as submitted by CSPTCL is shown in the Table below:

Table 10-12: Interest on Loan projected by CSPTCL (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Total Opening Net Loan	1,806.47	1,677.20	2,380.94
2	Repayment during the period	271.36	314.97	435.89
3	Additional Loan during the year	142.09	1,018.71	2,199.65
4	Total Closing Net Loan	1,677.20	2,380.94	4,144.69
5	Average Loan during the year	1,741.84	2,029.07	3,262.82
6	Weighted Average Interest Rate	9.76%	9.76%	9.76%
7	Interest Expenses	169.97	198.00	318.39

Commission's View

Regulation 24 of the CSERC MYT Regulations, 2021 specifies as under:

“24. INTEREST AND FINANCE CHARGES ON LOAN CAPITAL

24.1. *The debt arrived at in the manner indicated in Regulation 17 shall be considered as gross normative loan for calculation of interest on loan.*

24.2. *The normative loan outstanding as on 01.04.2022 shall be worked out by deducting, the cumulative repayment as admitted by the Commission up to 31.03.2022, from the gross normative loan.*

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

24.4. *Notwithstanding any moratorium period availed by the generating company or the licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.*

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the licensee, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the licensee as a whole shall be considered:

Provided further, in case of new generating station or the licensee commencing its operation after the date of effectiveness of this Regulation, and which don't have actual loan portfolio, the rate of interest shall be considered on normative basis and shall be equal to the Marginal Cost of Fund based Lending Rate (MCLR - one year tenor) of State Bank of India plus 150 basis points as applicable on the date of COD.

24.6. *The interest on loan shall be calculated on the average of opening and closing loan of the year. For the computation of interest amount, the interest rate shall be the weighted average rate of interest for the same year.*

24.7. *The interest amount as per regulation 24.6 shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, grants or deposit works carried out by generating company, transmission licensee, SLDC or distribution licensee, as the case may be.*

24.8. *The generating company or SLDC or the licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the STU or the transmission licensee, as the case may be, in the ratio of 2:1.*

Provided in case of SLDC, this provision shall be applicable only to those intra-State entities who are availing services of SLDC on long-term basis. Provided that re-finance shall not be done if it results in net increase on interest or shall not be subject to any adverse terms and conditions leading to additional cost.

Provided also that the net savings in interest shall be computed after factoring all the terms and conditions, and based on the weighted average rate of interest of actual portfolio of loans taken from Banks and Financial Institutions recognised by the Reserve Bank of India, before and after re-financing of loans:

Provided that the beneficiary shall not withhold any payment on account of the interest claimed by the generating company or the licensee during the pendency of any dispute arising out of re-financing of loan.

24.9. *The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.*

24.10. *In case of licensee, the interest paid on security deposit to the consumers shall not be allowed as a part of Annual Revenue Requirement. The licensee shall bear the interest liability on security deposit.”*

The Commission has calculated interest on loan capital for the Control Period in accordance with the above Regulation.

The closing balance of loan capital as approved in the truing up for FY 2020-21 has been considered as the opening balance of loan for FY 2021-22. The normative debt addition in FY 2021-22 has been considered equivalent to 70% of the capitalisation approved for FY 2021-22 in the Tariff Order dated August 02, 2021. The closing balance of loan of FY 2021-22 has been considered as the opening loan balance for FY 2022-23 and onwards. The addition of normative loan for FY 2022-23 and onwards has been considered based on debt component towards the approved capitalisation for each year of the Control Period, as discussed in the earlier section on this Order. The repayment has been considered equal to the net depreciation approved for respective year of the Control Period in this Chapter.

The Commission has adopted the weighted average rate of interest of 9.76 % for each year of the Control Period, same as computed for FY 2020-21. Accordingly, the interest on loan approved for the Control Period is shown in the Table below:

Table 10-13: Interest on Loan approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	2024-25
1	Total Opening Net Loan	1,806.67	1,677.50	1,704.08
2	Repayment during the period	271.25	288.42	312.08
3	Additional Loan during the year	142.09	315.00	315.00
4	Total Closing Net Loan	1,677.50	1,704.08	1,707.00
5	Average Loan during the year	1,742.09	1,690.79	1,705.54
6	Weighted Average Interest Rate	9.76%	9.76%	9.76%
7	Interest Expenses	169.99	164.99	166.43

10.7 Return on Equity (RoE) and Income Tax**CSPTCL's Submission**

CSPTCL has computed RoE as per Regulation 23 of the CSERC MYT Regulations, 2021, using the base rate of Return on Equity of 14%. CSPTCL requested the Commission to approve RoE projected by CSPTCL for the Control Period, as shown in the Table below:

Table 10-14: RoE projected by CSPTCL (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Permissible Equity in Opening GFA	1,486.41	1,547.31	1,983.90
2	Addition of Permissible Equity during the year	60.89	436.59	942.71
3	Permissible Equity in Closing GFA	1,547.31	1,983.90	2,926.60
4	Average Gross Permissible Equity during the year	1,516.86	1,765.60	2,455.25
5	Rate of Return on Equity	14.00%	14.00%	14.00%
6	RoE	212.36	247.18	343.73

Commission's View

Regulation 23 of CSERC MYT Regulations, 2021 specifies as under:

“23. RETURN ON EQUITY

23.1. Base rate for 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 at the rate of 14.0% for Generation and Transmission and SLDC.

23.2. Distribution: Base rate for 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 at the rate of 16.0%.

23.3. The ROE shall be grossed up at the time of tariff by MAT rate for the year in which tariff is being determined, subject to the condition that MAT / Corporate tax has been paid for last three consecutive years for regulated business filed petition

under these Regulations. In such case, Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of return on equity} = \text{Base rate} / (1 - \text{MAT Rate})$$

At the time of True up, the income tax shall be pass through on actual basis, subject to ceiling as following:

$$= \text{Average Permissible Equity} \times \text{Base Rate of Return} \times ((t / (1 - t)))$$

Where “t” is the actual tax rate for the year. The tax rate shall be calculated without considering the delay payment surcharge received or receivable during the said financial year by generating company or licensee as the case may be.”

RoE has been calculated as per the above Regulation. The closing balance of permissible equity as approved in the truing up for FY 2020-21 has been considered as the opening balance of equity for FY 2021-22. The normative equity addition for FY 2021-22 has been considered equivalent to 30% of the capitalisation approved for FY 2021-22 in the Tariff Order dated August 02, 2021. The closing balance of equity for FY 2021-22 has been considered as the opening equity balance for FY 2022-23 and onwards. The addition of normative equity for each year of the Control Period has been considered based on equity component of the capitalisation for each year of the Control Period, as discussed in the earlier section on this Order.

The Commission approved RoE for the Control Period considering the base rate of RoE as 14%. Any Income Tax/MAT paid shall be allowed as per actual at the time of true up, as shown in the Table below:

Table 10-15: Return on Equity approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Permissible Equity in Opening GFA	1,486.41	1,547.31	1,682.31
2	Addition of Permissible Equity during the year	60.89	135.00	135.00
3	Permissible Equity in Closing GFA	1,547.31	1,682.31	1,817.31
4	Average Gross Permissible Equity during the year	1,516.86	1,614.81	1,749.81
5	Rate of Return on Equity	14.00%	14.00%	14.00%
6	Return on Equity	212.36	226.07	244.97

10.8 Interest on Working Capital

CSPTCL's Submission

CSPTCL has submitted that it has computed IoWC as per the Regulation 26 of the CSERC MYT Regulations, 2021.

For computation of IoWC, CSPTCL has considered projected O&M expenses of 15 days, maintenance spares at 20% of Maintenance and General expenses (M&G) and receivables equivalent to one month of fixed cost. CSPTCL has considered the interest rate of 9.00% (i.e., 7.00% - SBI Base Rate on 30th September 2021 plus 200 basis points) for computation of IoWC for the Control Period. CSPTCL requested the Commission to approve IoWC, as shown in the Table below:

Table 10-16: IoWC projected by CSPTCL (Rs. Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	O&M	14.81	15.51	16.24
2	Maintenance Spares	21.29	22.00	22.73
3	Receivables	93.48	104.74	135.37
4	Total WC requirement	129.58	142.24	174.34
5	Rate of Interest on WC	9.00%	9.00%	9.00%
6	Net Interest on Working Capital	11.66	12.80	15.69

Commission's View

Regulation 26.1 (c) of the MYT Regulations, 2021 specifies as under:

“(c) For Transmission business:

- i. O&M expenses for 15 days; plus*
- ii. Maintenance spares @ 20% of Maintenance and General expenses specified in Regulation 73.5.1; plus*
- iii. Receivables equivalent to one (1) month of fixed cost.*

.....

26.4. Interest on working capital shall be estimated at the rate equal to the Marginal Cost of Fund based Lending Rate (MCLR - one year tenor) of State Bank of India plus 200 basis point prevailing on 30th September of current financial year. During truing-up, the interest on working capital shall be computed at an average actual sanctioned rate of interest during the year.”

The Commission has computed IoWC in accordance with Regulation 26 of the CSERC MYT Regulations, 2021. For computation of working capital requirement as per the formula provided in the CSERC MYT Regulations, 2021, the Commission has considered the normative value of O&M expenses for 15 days as approved in this Order, maintenance spares at 20% of the approved M&G expenses and receivables equivalent to one month of fixed cost as approved in this Order. The interest rate has been considered as per Regulation 26.4 of the CSERC MYT Regulations, 2021, i.e., 9.00% for the Control Period. The normative IoWC approved by the Commission for the Control Period is shown in the Table below:

Table 10-17: Approved IoWC for the Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	O&M	14.71	15.37	16.06
2	Maintenance Spares	21.24	21.90	22.59
3	Receivables	91.88	96.30	102.19
4	Total WC requirement	127.83	133.57	140.84
5	Rate of Interest on WC	9.00%	9.00%	9.00%
6	Interest on Working Capital	11.50	12.02	12.68

10.9 Non-Tariff Income

CSPTCL's Submission

CSPTCL submitted that it has considered the Non-Tariff Income for the Control Period as approved by the Commission for FY 2021-22 in the Tariff Order dated August 02, 2021. CSPTCL requested the Commission to consider Non-Tariff Income of Rs. 13.50 Crore for each year of the Control Period.

Commission's View

The actual Non-Tariff Income for FY 2020-21 is Rs. 71.65 Crore, which includes Rs. 40.52 Crore received as interest on Income Tax Refund. The Commission is of the view that interest on Income Tax Refund is non-recurring in nature. Hence, the Commission has approved Non-Tariff Income for the Control Period as per actuals of FY 2020-21, excluding interest on Income Tax Refund. Non-Tariff Income approved by the Commission for the Control Period is shown in the Table below:

Table 10-18: Approved Non-Tariff Income (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Non-Tariff Income	31.19	31.19	31.19

10.10 Aggregate Revenue Requirement (ARR)

Based on the above, the Commission has approved the ARR for the Control Period from FY 2022-23 to FY 2024-25, as shown in the Table below:

Table 10-19: Approved ARR for the Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
		Petition	Approved	Petition	Approved	Petition	Approved
1	Employee expenses	249.08	246.92	262.20	259.37	276.02	272.44
2	A&G expenses	50.71	50.32	52.82	52.32	55.03	54.40
3	R&M expenses	55.74	55.87	57.15	57.20	58.60	58.56
4	Contribution to Pension and Gratuity	114.41	115.51	125.20	126.40	134.63	135.93
5	Depreciation	271.36	271.25	314.97	288.42	435.89	312.08
6	Interest on Loan	169.97	169.99	198.00	164.99	318.39	166.43
7	Interest on Working capital	11.66	11.50	12.80	12.02	15.69	12.68
8	Return on Equity	212.36	212.36	247.18	226.07	343.73	244.97
9	Aggregate Revenue Requirement (ARR)	1,135.28	1,133.74	1,270.33	1,186.80	1,637.99	1,257.49
10	Less: Non-Tariff Income	13.5	31.19	13.5	31.19	13.5	31.19
11	Net ARR	1,121.78	1,102.55	1,256.83	1,155.61	1,624.49	1,226.30

10.11 Adjusted ARR for FY 2022-23

CSPTCL's Submission

CSPTCL has submitted cumulative Surplus for FY 2022-23, as shown in the Table below:

Sr. No.	Particulars	FY 2020-21	FY 2021-22	FY 2022-23
1.	Opening Surplus	0.00	26.55	29.45
2.	Standalone Surplus	25.18	0.00	0.00
3.	Closing Surplus	25.18	26.55	29.45
4.	Interest Rate	10.90%	10.90%	9.00%
5.	Carrying Cost	1.37	2.89	1.33
6.	Total Closing Surplus	26.55	29.45	30.77

Commission's View

The Commission has considered the Revenue Surplus of Rs. 73.64 Crore approved after true up for FY 2020-21 along with holding cost, which amounts to Rs. 90.32 Crore. This Revenue Surplus has been adjusted against the approved ARR for FY 2022-23 as shown in the Table below:

Table 10-20: Adjusted approved ARR for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition*	Approved
1	ARR for FY 2022-23	1121.78	1102.55
2	Adjustment of Gap/(Surplus) of FY 2020-21 with carrying cost up to FY 2022-23	35.71	(90.32)
3	Adjusted ARR for FY 2022-23	1157.49	1012.23

**Computed by the Commission considering the submission of CSPTCL.*

10.12 Transmission Charges for FY 2022-23

CSPTCL's Submission

CSPTCL submitted that it has computed net ARR for FY 2022-23 by considering the provisions of Regulation 71 of the CSERC MYT Regulations, 2021.

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 2022-23 by considering the projected maximum demand of 4878 MW. The estimated energy input to be handled by CSPTCL's system for FY 2022-23, based on load factor of 70% on maximum demand met, has been considered as 29,912 MU.

Commission's View

Regulations 71.2 and 71.2 of the CSERC MYT Regulations, 2021 specify as under:

“71.1. Annual Transmission Charges for 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 income from other business, as approved by the Commission:

71.2. 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 this Regulation.”

As per the CSERC MYT Regulations, 2021, 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 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.

In the response of the Commission's query, CSPTCL requested the Commission to consider maximum demand of 5057 MW instead of 4878 MW. Accordingly, the Commission considered Maximum Demand in the State for FY 2022-23 as 5057 MW. The estimated energy input to be handled by CSPTCL's system for FY 2022-23, based on load factor of 70% on Maximum Demand met, is computed as 29,912 MU. Accordingly, the Transmission Charges for STOA for FY 2022-23 have been determined as shown in the Table below:

Table 10-21: Approved STOA Charges for FY 2022-23

Sr. No.	Particulars	Petition*	Approved
1	ARR approved in this Order (Rs. Crore)	1121.78	1102.55
2	Less: Revenue Gap/(Surplus) with holding cost till FY 2022-23 (Rs. Crore)	35.71	(90.32)
3	Total ARR for FY 2022-23 (Rs. Crore)	1157.49	1012.23
4	Maximum Demand Projected (MW)	4878	5057
5	Energy Input considering 70% Load Factor (MU)	29912	29911.90
6	STOA Charges (Paise/kWh)	38.70	33.84

**Computed by the Commission considering the submission of CSPTCL*

11 ARR AND SLDC CHARGES OF CSLDC FOR FY 2022-23 TO FY 2024-25

11.1 Background

The Commission notified the CSERC MYT Regulations, 2021 for the Control Period from FY 2022-23 to FY 2024-25 on November 14, 2021.

CSLDC has submitted the present Petition for determination of ARR and SLDC Charges for the Control Period from FY 2022-23 to FY 2024-25. CSLDC has submitted details of its projected expenses likely to be incurred during the Control Period under various heads, viz., O&M expenses, depreciation, interest on loans, interest on working capital, etc., as per the CSERC MYT Regulations, 2021.

In accordance with the CSERC MYT Regulations, 2021, in the present Order, the Commission has determined the ARR and SLDC Charges for the Control Period from FY 2022-23 to FY 2024-25 based on the submission by CSLDC.

11.2 Annual Charges for SLDC

Regulation 101.1 of the CSERC MYT Regulations, 2021 specifies the components of Annual Charges for SLDC as under:

- 1) O&M Expenses;
- 2) Pension and Gratuity Fund Contribution;
- 3) Return on Equity;
- 4) Interest on loan capital;
- 5) Depreciation; and
- 6) Interest on Working Capital.

11.3 Operation and Maintenance (O&M) expenses

CSLDC's Submission

CSLDC has computed O&M expenses considering the provisions of Regulation 101.5.1 and 101.5.2 of CSERC MYT Regulations, 2021, which comprises Human Resource and Maintenance & General expenses.

Human Resource (HR) Expenses

CSLDC has derived HR expenses for the base year, i.e., FY 2021-22 on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expenses of non-recurring nature, as per the Annual Accounts for the previous five years immediately preceding the base year i.e., FY 2021-22.

The HR expenses have been normalized based on the average CPI (IW) increase for the past five years on year-to-year basis i.e., 5.27%. The average of normalized net present value of HR expenses for FY 2016-17 to FY 2020-21, has been used to project the value for the base year FY 2021-22. Further, base value of HR expenses derived for FY 2021-22 has been escalated by the above-mentioned inflation rate to project the HR expenses for the Control Period.

A&G Expenses

CSLDC has derived A&G expenses for the base year i.e., FY 2021-22 on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower if any), as per the Annual Accounts for the previous five years immediately preceding the base year i.e., FY 2021-22.

The A&G expenses has been normalized based on the average inflation increase for the past five years on year-to-year basis considering 40% weightage to WPI and 60% weightage to CPI, i.e., 4.18%. The average of normalized net present value of A&G expenses for FY 2016-17 to FY 2020-21, has been used to project the value for the base year FY 2021-22. Further, base value of A&G expenses derived for FY 2021-22 has been escalated by the above-mentioned inflation rate to project the A&G expenses for the Control Period.

R&M Expenses

CSLDC has derived R&M expenses for the base year, i.e., FY 2021-22, on the basis of the normalized average of the actual R&M expenses (excluding expenses towards outsourcing manpower), as per the Annual Accounts for the previous five years immediately preceding the base year, i.e., FY 2021-22.

The R&M expenses has been normalized by applying last five year average increase in WPI on year-to-year basis, i.e., 2.54 %. The average of normalized net present value of R&M expenses for FY 2016-17 to FY 2020-21, has been used to project the value for the base year FY 2021-22. Further, the R&M expenses derived for the base year FY 2021-22 has been escalated by the above-mentioned inflation rate to project the R&M expenses for the Control Period.

Total O&M expenses projected by CSLDC for the Control Period from FY 2022-23 to FY 2024-25 are shown in the Table below

Table 11-1: O&M Expenses projected by CSLDC (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
A&G expenses	0.82	0.85	0.89
R&M expenses	1.34	1.38	1.41
HR expenses	10.63	11.19	11.78
Total O&M expenses	12.79	13.42	14.08

Commission's View

As regards O&M Expenses, Regulation 101.5 of the CSERC MYT Regulations, 2021 specifies as under:

“101.5 Operation and Maintenance expenses

101.5.1. Human Resource (HR) Expenses

(c) The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expense of non-recurring nature related to HR. The base year i.e. FY 2021-22,

shall be derived on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expense of nonrecurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission.

- (d) *The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016- 17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR 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.*
- (e) *At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.*

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

101.5.2. Maintenance & General (M&G) Expenses

- c) *Maintenance & General (M&G) expenses shall include:*
 - (i) *Administrative and General (A&G) expenses;*
 - (ii) *Repair and Maintenance (R&M) expenses*
- d) *The Commission shall stipulate a separate trajectory for each of the components of M&G expenses viz., R&M and A&G expenses for the Control Period.*

Provided further that in all the cases the additional O&M cost incurred due to additional capital investment or any change in law or any direction by any statutory authority shall be pass through over and above the O&M charges allowed in the Tariff order after prudence check by the Commission.

- e) *The A&G expenses (excluding expenses towards outsourcing manpower) (A&G) and R&M expenses (excluding expenses towards outsourcing manpower) (R&M) for the base year i.e. FY 2020-21, shall be derived on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower) and R&M expenses (excluding expenses towards outsourcing manpower), respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission. Any other expense of nonrecurring nature shall be excluded while determining normalized average for the previous five (5) years.*

- f) *The normalization of R&M expenses shall be done by applying last five year average increase/decrease in Wholesale Price Index (WPI) of all commodities on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22.*
- g) *For normalization of A&G expenses shall be estimated by applying last five year average increase/decrease in Inflation to be considered on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2020-21.*
- h) *The projected base year value shall be escalated by the above inflation rate to estimate the A&G and R&M expenses for each year of the control period.*
- i) *Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India {Base Year: 2011-12 Series};*
- j) *Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.*
- k) *At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.”*

The O&M expenses for the Control Period from FY 2022-23 to FY 2024-25 have been approved 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 HR expenses, WPI R&M expenses and weightage of 40% of WPI and 60% CPI for A&G expenses.

The data published by Labour Bureau, Government of India and the Office of Economic Advisor, Ministry of Commerce & Industry, Government of India for CPI and WPI, respectively, has been relied upon to compute average increase in CPI and WPI over past five years from FY 2016-17 to FY 2020-21.

The Commission noted that CSPTCL has considered CPI of 5.27% and WPI of 2.54% derived based on the four-year average increase in indices on year-to-year basis. In other words, though CPI and WPI of 5 years have been considered, only 4 data points for increase in CPI and WPI have been considered, whereas the CSERC MYT Regulations, 2021 require the normalization of expenses to be done by applying last five-year average increase in indices on year to year basis. Therefore, the Commission has considered the indices data for deriving the last five-year average increase.

The summary of the yearly inflation and the average inflation considered for projecting the HR expenses, A&G expenses and R&M expenses is shown in the Table below:

Table 11-2: Computation of Inflation Rate for projections (%)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Average of 5 years increase
CPI- IW (%)	4.12%	3.08%	5.45%	7.53%	5.02%	5.04%
WPI- AC (%)	1.73%	2.92%	4.28%	1.68%	1.27%	2.38%
WPI@40% & CPI 60%	3.16%	3.02%	4.98%	5.19%	3.52%	3.97%

As per the above Regulation, the Commission has determined the HR expenses for the base year, i.e., FY 2021-22 on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expenses of non-recurring nature, as per the Annual Accounts for the previous five years immediately preceding the base year, i.e., FY 2021-22.

Then, the HR expenses has been normalized based on the average CPI (IW) increase for the past five years on year-to-year basis, i.e., 5.04%. The average of normalized net present value of HR expenses for FY 2016-17 to FY 2020-21, has been used to project the value for the base year FY 2021-22. Further, the HR expenses derived for base value FY 2021-22 has been escalated by the above-mentioned inflation rate to project the HR expenses for the Control Period.

For A&G expenses, the Commission has computed A&G expenses for the base year, i.e., FY 2021-22 on the basis of the normalized average of the prudent actual A&G expenses (excluding expenses towards outsourcing manpower), for the previous five years immediately preceding the base year, i.e., FY 2021-22.

The A&G expenses have been normalized based on the average inflation increase for the past five years on year-to-year basis considering 40% weightage of WPI and 60% weightage of CPI, i.e., 3.97%. The average of normalized net present value of A&G expenses for FY 2016-17 to FY 2020-21, has been used to project the value for base year FY 2021-22. Further, A&G expenses derived for base year FY 2021-22 has been escalated by the above-mentioned inflation rate to project the A&G expenses for the Control Period.

The Commission has computed R&M expenses for the base year, i.e., FY 2021-22 on the basis of the normalized average of the prudent actual R&M expenses (excluding expenses towards outsourcing manpower), for the previous five years immediately preceding the base year, i.e., FY 2021-22.

Then, the R&M expenses have been normalized based on average inflation increase for past five years on year-to-year basis, i.e. 2.38 %. The average of normalized net present value for FY 2016-17 to FY 2020-21, is then used to project the value for base year FY 2021-22. Further, the base of A&G expenses derived for base year FY 2021-22 has been escalated by the above-mentioned inflation rate to project the R&M expenses for the Control Period.

The approved HR expenses, A&G expenses and R&M expenses for the Control Period are shown in the Table below:

Table 11-3: Approved HR Expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
HR Expenses	7.54	9.02	9.32	8.29	9.12				
Normalized FY 2016-17 to net present value FY 2020-21	7.54	7.92	8.32	8.74	9.18				
Normalized FY 2017-18 to net present value FY 2020-21		9.02	9.48	9.96	10.46				
Normalized FY 2018-19 to net present value FY 2020-21			9.32	9.79	10.28				
Normalized FY 2019-20 to net present value FY 2020-21				8.29	8.71				
Normalized net present value FY 2020-21					9.12				
Average of NPV of 5 FY's used for projection of base year FY 2021-22					9.55				
HR Expenses for Control Period				Projected Base year value for 2021-22		10.03	10.54	11.07	11.62

As stated in Chapter 2 of this Order, the Commission is of the opinion that Group medical insurance for employees and pensioners is a genuine requirement. Further, the impact of such Group medical insurance is not expected to be very significant but can go a long way to improve the morale of the employees. The Companies may consider all implications on merit. The Commission grants in-principle approval for pass through of such expenses in the head “HR expenses” as and when they are actually incurred.

Table 11-4: Approved A&G Expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
A&G Expenses	1.13	0.93	0.71	0.30	0.30				
Normalized FY 2016-17 to net present value FY 2020-21	1.13	1.17	1.22	1.27	1.32				
Normalized FY 2017-18 to net present value FY 2020-21		0.93	0.96	1.00	1.04				

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Normalized FY 2018-19 to net present value FY 2020-21			0.71	0.74	0.77				
Normalized FY 2019-20 to net present value FY 2020-21				0.30	0.31				
Normalized net present value FY 2020-21					0.30				
Average of NPV of 5 FY's used for projection of base year FY 2021-22					0.75				
A&G Expenses for Control Period				Projected Base year value for 2021-22		0.78	0.81	0.84	0.88

Table 11-5: Approved R&M Expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
R&M Expenses	1.32	0.61	1.37	1.14	1.66				
Normalized FY 2016-17 to net present value FY 2020-21	1.32	1.35	1.38	1.42	1.45				
Normalized FY 2017-18 to net present value FY 2020-21		0.61	0.62	0.64	0.65				
Normalized FY 2018-19 to net present value FY 2020-21			1.37	1.40	1.44				
Normalized FY 2019-20 to net present value FY 2020-21				1.14	1.17				
Normalized net present value FY 2020-21					1.66				
Average of NPV of 5 FY's used for					1.27				

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
projection of base year FY 2021-22									
R&M Expenses for Control Period				Projected Base year value for 2021-22		1.30	1.33	1.37	1.40

Based on the above, the Commission has approved O&M expenses for the Control Period, as shown in the Table below:

Table 11-6: O&M Expenses approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
A&G expense	0.81	0.84	0.88
R&M expense	1.33	1.37	1.40
HR expense	10.54	11.07	11.62
Total O&M expenses	12.68	13.27	13.90

11.4 Contribution to Pension and Gratuity (P&G) Fund

CSLDC's Submission

CSLDC submitted that contribution towards P&G Fund for the Control Period from FY 2022-23 to FY 2024-25 has been claimed as per the latest Actuarial Valuation Report. CSLDC submitted that share of CSPTCL (including CSLDC) has been considered based on the percentage share determined by the Commission in the Tariff Order dated April 30, 2016. Further, the total share CSPTCL and CSLDC has been bifurcated between the two Companies based on their working strength of employees, as shown in the Table below:

Table 11-7: Contribution to P&G Fund projected by CSLDC (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Contribution to P&G Fund	3.51	3.84	4.13

Commission's View

Regulation 34 of the MYT Regulations, 2021 specifies as under:

"34. PENSION FUND

34.1. For meeting up the past unfunded liabilities of employees appointed before 01.01.2004 erstwhile CSEB State Power Companies, a pension and gratuity trust has been constituted and funding to the same has been allowed in the past by the Commission. The contribution to this fund shall be specified 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. The pension outflow shall be met from the Pension and Gratuity Fund. Contribution to the pension fund as approved by the Commission shall be recoverable as specified in this regulations.

Provided till the time SLDC is administered by STU, SLDC's share to the Pension and Gratuity Fund shall be met by the STU on pro-rata basis. For the purpose of ratio determination, the employee strength of SLDC and STU as on 1st April of the preceding year shall be considered."

The Commission noted that CSLDC has projected the Contribution to Pension and Gratuity for the Control Period based on the letters received from the Chhattisgarh Gratuity and Pension Trust.

The Contribution to the P&G Trust has to be seen in totality for CSPGCL, CSPTCL, CSLDC and CSPDCL, with the shares of each entity clearly identified. The Pension Trust vide its letter dated 25th October, 2021 has submitted the request for increase in the Contribution to the P&G Trust for FY 2022-23, on the basis of actuarial valuation and availability of funds with the Trust. Subsequently, vide its letter dated 13th December 2021, the Pension Trust has submitted the request for Contribution to the P&G Trust for all three years of the Control Period and has provided the share of each Company in the overall Contribution, based on the ratio of allocation decided by the Commission in the last Tariff Order.

However, it is observed that the share considered by the Trust is marginally different from the share approved in the Tariff Order for FY 2021-22, and also each Company has claimed slightly different amounts, though the overall Contribution to P&G Trust has been considered by each Company as Rs. 1128.00 Crore, Rs. 1234.39 Crore, and Rs. 1327.43 Crore for FY 2022-23, FY 2023-24, and FY 2024-25, respectively.

The overall Contribution to the P&G Fund as claimed by the P&G Trust is based on actuarial analysis, expected pension outflow for the State Power Companies and availability of funds with the Pension trust, which is in accordance with the CSERC MYT Regulations, 2021. Hence, the Commission has considered the overall Contribution to P&G Trust, as claimed by the P&G Trust, for each Year of the Control Period. Further, in order to avoid confusion and mismatch in the amounts allowed to each Company, the Commission has considered the allocation of each entity in the same ratio as approved in the Tariff Order for FY 2021-22.

The Contribution to the P&G Trust as approved for each Year of the Control Period for CSPGCL, CSPTCL, CSLDC and CSPDCL is shown in the Table below:

Table 11-8: P&G Contribution for the Control Period as approved by the Commission (Rs. Crore)

Entity	% Allocation	FY 2022-23	FY 2023-24	FY 2024-25
CSPGCL	27.258%	307.47	336.47	361.83
CSPTCL	10.240%	115.51	126.40	135.93
CSLDC	0.252%	2.84	3.11	3.35
CSPDCL	62.250%	702.18	768.40	826.32
TOTAL	100.00%	1128.00	1234.39	1327.43

It is further clarified that if the actual expenses on payment of Gratuity and Pension during the respective year significantly overshoots the estimation, then at the end of the respective year, the Companies may make additional contribution in accordance with their share to meet such additional expense. Subject to prudence check, the same shall be considered at the time of true up.

11.5 Gross Fixed Assets

CSLDC's Submission

CSLDC has submitted that the capital structure for FY 2022-23 to FY 2024-25 has been determined based on the methodology adopted by the Commission in the previous year Orders and considering the following:

- Closing GFA for FY 2020-21 has been considered as opening GFA for FY 2021-22 and addition during each year of the Control Period has been considered as submitted in the CIP Petition;
- Loan addition has been considered as 70% of the total asset addition;
- Addition in consumer contribution has been considered as Nil for FY 2020-21 and onwards;
- Equity addition has been considered as 30% of the total asset addition;
- GFA addition of Rs. 5.815 Crore, Rs. 12.495 Crore and Rs. 10.76 Crore has been considered for FY 2022-23, FY 2023-24 and FY 2024-25 based on schedule and plan submitted in Capital Investment Plan Petition.

CSLDC has requested the Commission to approve Capital Structure for the Control Period as shown in the Table below:

Table 11-9: Capital Structure Projected by CSLDC (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening GFA	18.39	24.21	36.70
2	Capitalisation during the Year	5.82	12.50	10.76
3	Closing GFA	24.21	36.70	47.46
4	Average of GFA	21.30	30.45	42.08

Commission's View

The Closing GFA of FY 2020-21 as approved in this Order has been considered as the opening GFA of FY 2021-22. Capitalisation for FY 2021-22 has been considered as approved in the Tariff Order dated August 02, 2021. Closing GFA for FY 2021-22 has been considered as opening GFA for FY 2022-23 and onwards.

The Commission observed that capitalisation projected by CSLDC for FY 2023-24 and 2024-25 is on higher side. CSLDC was asked to justify the projected high capitalisation.

Also, the Commission observed that CSLDC has considered part capitalisation for the schemes, i.e., upgradation/replacement of SCADA, SAMAST and ADMS and considered total capital investment during the year as capitalisation. In response to the

Commission's query, CSLDC revised its submission, however, retaining part capitalisation for these assets. The Commission has considered capitalisation of the assets based on 'Put to Use' philosophy. The Commission has approved the capitalisation for the Control Period as shown in the Table below:

Table 11-10: Capitalization approved for the Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Considered by CSLDC	5.82	12.50	10.76
2	Approved by the Commission	5.24	3.25	20.52

As regards the funding of capitalisation, in response of the Commission's query, CSLDC has submitted that CSLDC shall receive PSDF grants for Automatic Demand Management System (ADMS) and Scheduling, Accounting, Metering and Settlement of Transaction (SAMAST). Further, CSLDC submitted that it has claimed capital investment for these two projects net of tentative PSDF grants. However, actual amount of grants may change based on actuals. Details submitted by CSLDC are shown in the Table below:

Table 11-11: Details of Grants Submitted by CSLDC (Rs. Crore)

Sr. No	Name of Project	Estimated Cost	Approved Estimate by PSDF	Sanctioned Grant by PSDF	Contribution of SLDC
A	B	C	D	E	F
1	ADMS	5.68	5.03	4.53 (90 % of D)	1.15
2	SAMAST	19.52	10.00*	under process of scrutiny and evaluation	9.52

**Tentative Bench Mark approval*

Further, normative Debt: Equity ratio of 70:30 has been considered as per Regulation 17 of the CSERC MYT Regulations, 2021.

Based on the above, the Commission has approved the GFA addition and its funding for the Control Period as shown in the Table below:

Table 11-12: GFA Addition and Means of Finance approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening GFA	18.39	23.63	26.88
2	Capitalisation during the year	5.24	3.25	20.52
3	Closing GFA	23.63	26.88	47.40
4	Consumer Contribution	0.00	0.00	0.00
5	Equity	1.57	0.93	6.16
6	Debt	3.67	2.28	14.36

11.6 Depreciation

CSLDC's Submission

CSLDC submitted that it has computed depreciation in accordance with Regulation 25 of the CSERC MYT Regulations, 2021. CSLDC requested the Commission to approve depreciation for the Control Period as shown in the Table below:

Table 11-13: Depreciation projected by CSLDC (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	2024-25
1	Opening GFA	18.39	24.21	36.70
2	Add: Capitalization during the year	5.82	12.50	10.76
3	GFA at the end of the year	24.21	36.70	47.46
4	Average GFA for the year	21.30	30.45	42.08
5	Depreciation Rate	5.26%	5.26%	5.26%
6	Net Depreciation	1.12	1.60	2.21

Commission's View

The Commission has approved the depreciation in accordance with the provisions of Regulation 25 of the CSERC MYT Regulations, 2021 and approach adopted in the past Orders. The opening and closing GFA for the Control Period have been considered as approved in this Chapter earlier. The weighted average depreciation rate of 5.26%, computed on the basis of depreciation rates provided in the CSERC MYT Regulations, 2021, has been considered for each year of the Control Period.

The depreciation computed by the Commission for the Control Period is shown in the Table below:

Table 11-14: Depreciation approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	2024-25
1	Opening GFA	18.39	23.63	26.88
2	Add: Capitalization during the year	5.24	3.25	20.52
3	GFA at the end of the year	23.63	26.88	47.40
4	Average GFA for the year	21.01	25.26	37.14
5	Depreciation Rate	5.26%	5.26%	5.26%
6	Net Depreciation	1.11	1.33	1.95

11.7 Interest on Loan

CSLDC's Submission

CSLDC submitted that it has calculated interest and finance charges as per Regulation 24 of the CSERC MYT Regulations, 2021. CSLDC has considered the closing balance for FY 2020-21 as opening balance for FY 2021-22. The debt component of GFA addition in FY 2022-23 and thereon has been considered as the loan addition during the year for projects in the Control Period. The allowable depreciation for each

year of the Control Period has been considered as the normative repayment for respective year of the Control Period. The annual weighted average interest has been considered as same level considered for FY 2020-21. The Interest on Loan for the Control Period as submitted by CSLDC is shown in the Table below:

Table 11-15: Interest on Loan projected by CSLDC (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	2024-25
1	Total Opening Net Loan	2.11	5.06	12.21
2	Repayment during the period	1.12	1.60	2.21
3	Additional Loan during the year	4.07	8.75	7.53
4	Total Closing Net Loan	5.06	12.21	17.52
5	Average Loan during the year	3.59	8.63	14.87
6	Weighted Average Interest Rate	9.76%	9.76%	9.76%
7	Interest Expenses	0.35	0.84	1.45

Commission's View

Regulation 24 of CSERC MYT Regulations, 2021 specifies as under:

24. INTEREST AND FINANCE CHARGES ON LOAN CAPITAL

24.1. The debt arrived at in the manner indicated in Regulation 17 shall be considered as gross normative loan for calculation of interest on loan.

24.2. The normative loan outstanding as on 01.04.2022 shall be worked out by deducting, the cumulative repayment as admitted by the Commission up to 31.03.2022, from the gross normative loan.

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

24.4. Notwithstanding any moratorium period availed by the generating company or the licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the licensee, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the licensee as a whole shall be considered:

Provided further, in case of new generating station or the licensee commencing its operation after the date of effectiveness of this Regulation, and which don't have actual loan portfolio, the rate of interest shall be considered on normative basis and shall be equal to the Marginal Cost of

Fund based Lending Rate (MCLR - one year tenor) of State Bank of India plus 150 basis points as applicable on the date of COD.

24.6. The interest on loan shall be calculated on the average of opening and closing loan of the year. For the computation of interest amount, the interest rate shall be the weighted average rate of interest for the same year.

24.7. The interest amount as per regulation 24.6 shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, grants or deposit works carried out by generating company, transmission licensee, SLDC or distribution licensee, as the case may be.

24.8. The generating company or SLDC or the licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the STU or the transmission licensee, as the case may be, in

the ratio of 2:1.

Provided in case of SLDC, this provision shall be applicable only to those intra-State entities who are availing services of SLDC on long-term basis. Provided that re-finance shall not be done if it results in net increase on interest or shall not be subject to any adverse terms and conditions leading to additional cost.

Provided also that the net savings in interest shall be computed after factoring all the terms and conditions, and based on the weighted average rate of interest of actual portfolio of loans taken from Banks and Financial Institutions recognised by the Reserve Bank of India, before and after re-financing of loans:

Provided that the beneficiary shall not withhold any payment on account of the interest claimed by the generating company or the licensee during the pendency of any dispute arising out of re-financing of loan.

24.9. The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

24.10. In case of licensee, the interest paid on security deposit to the consumers shall not be allowed as a part of Annual Revenue Requirement. The licensee shall bear the interest liability on security deposit.”

The Commission has approved interest on loan capital for the Control Period in accordance with the above Regulations. The closing balance of loan capital as approved in the truing up for FY 2020-21 has been considered as the opening balance of loan for FY 2021-22. The normative debt addition in FY 2021-22 has been considered equivalent to 70% of the capitalisation approved for FY 2021-22 in the Tariff Order dated August 02, 2021. The closing balance of loan of FY 2021-22 has been considered as the opening loan balance for FY 2022-23 and onwards. The addition of normative loan for FY 2022-23 and onwards has been considered based on debt component towards the approved capitalisation for each year of the Control Period, as discussed in the earlier section on this Order. The repayment has been

considered equal to the net depreciation approved for respective year of the Control Period in this Chapter.

The Commission has adopted the weighted average rate of interest of 9.76 % for each year of the Control Period, same as computed for FY 2020-21, as per Regulation 24.5 of the CSERC MYT Regulations, 2021.

Accordingly, the interest on loan approved for the Control Period is shown in the Table below:

Table 11-16: Interest on Loan approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Total Opening Net Loan	2.11	4.67	5.62
2	Repayment during the period	3.67	2.28	14.36
3	Additional Loan during the year	1.11	1.33	1.95
4	Total Closing Net Loan	4.67	5.62	18.03
5	Average Loan during the year	3.39	5.15	11.83
6	Weighted Average Interest Rate	9.76%	9.76%	9.76%
7	Interest Expenses	0.33	0.50	1.15

11.8 Return on Equity (RoE) and Income Tax

CSLDC's Submission

CSLDC has computed RoE as per Regulation 23 of the CSERC MYT Regulations, 2021, using the base rate of Return on Equity of 14%. RoE projected by CSLDC for the Control Period is shown in the Table below:

Table 11-17: RoE projected by CSLDC (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Permissible Equity in Opening GFA	5.88	7.63	11.38
2	Addition of Permissible Equity during the year	1.74	3.75	3.23
3	Permissible Equity in Closing GFA	7.63	11.38	14.60
4	Average Gross Permissible Equity during the year	6.76	9.50	12.99
5	Rate of Return on Equity	14.00%	14.00%	14.00%
6	RoE	0.95	1.33	1.82

Commission's View

Regulation 23 of CSERC MYT Regulations, 2021 specifies as under:

“23. RETURN ON EQUITY

23.1. Base rate for 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 at the rate of 14.0% for Generation and Transmission and SLDC.

23.2. *Distribution: Base rate for 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 at the rate of 16.0%.*

23.3. *The ROE shall be grossed up at the time of tariff by MAT rate for the year in which tariff is being determined, subject to the condition that MAT / Corporate tax has been paid for last three consecutive years for regulated business filed petition under these Regulations. In such case, Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:*

$$\text{Rate of return on equity} = \text{Base rate} / (1 - \text{MAT Rate})$$

At the time of True up, the income tax shall be pass through on actual basis, subject to

ceiling as following:

$$= \text{Average Permissible Equity} \times \text{Base Rate of Return} \times ((t / (1 - t)))$$

Where “t” is the actual tax rate for the year. The tax rate shall be calculated without considering the delay payment surcharge received or receivable during the said financial year by generating company or licensee as the case may be.”

RoE has been calculated as per the above Regulation. The closing balance of permissible equity as approved in the truing up for FY 2020-21 has been considered as the opening balance of equity for FY 2021-22. The normative equity addition for FY 2021-22 has been considered equivalent to 30% of the capitalisation approved for FY 2021-22 in the Tariff Order dated August 02, 2021. The closing balance of equity for FY 2021-22 has been considered as the opening equity balance for FY 2022-23 and onwards. The addition of normative equity for each year of the Control Period has been considered based on equity component of the capitalisation for each year of the Control Period, as discussed in the earlier section on this Order.

The Commission approved RoE for the Control Period considering the base rate of RoE as 14%. As CSLDC is not a separate entity, there will be no incidence of Income Tax. The RoE allowed for CSLDC for the Control Period is shown in the Table below:

Table 11-18: Return on Equity approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Permissible Equity in Opening GFA	5.88	7.46	8.43
2	Addition of Permissible Equity during the year	1.57	0.98	6.16
3	Permissible Equity in Closing GFA	7.46	8.43	14.59
4	Average Gross Permissible Equity during the year	6.67	7.94	11.51
5	Rate of Return on Equity	14.00%	14.00%	14.00%
6	Return on Equity	0.93	1.11	1.61

11.9 Interest on Working Capital

CSLDC's Submission

CSPTCL has submitted that it has computed IoWC as per the Regulation 26 of the CSERC MYT Regulations, 2021.

For computation of IoWC, CSLDC has considered projected O&M expenses of 15 days, maintenance spares at 20% of Maintenance and General expenses (M&G) and receivables equivalent to one month of fixed cost. CSPTCL has considered the interest rate of 9.00% (i.e., 7.00% - SBI Base Rate on 30th September 2021 plus 200 basis points) for computation of IoWC for the Control Period. CSLDC requested the Commission to approve IoWC, as shown in the Table below:

Table 11-19: IoWC projected by CSLDC (Rs. Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-23	FY 2024-25
1	O&M	0.53	0.56	0.59
2	Maintenance Spares	0.43	0.45	0.46
3	Receivables	1.58	1.77	2.00
4	Total WC requirement	2.54	2.78	3.04
5	Rate of Interest on WC	9.00%	9.00%	9.00%
6	Net Interest on Working Capital	0.23	0.25	0.27

Commission's View

Regulation 26.1 (f) of the MYT Regulations, 2021 specifies as under:

“(f) For SLDC business:

- iv. O&M expenses for 15 days; plus*
- v. Maintenance spares @ 20% of Maintenance and General expenses specified in Regulation 101.5; plus*
- vi. Receivables equivalent to one (1) month of system operation charges and market operation charges as approved by the Commission.*

.....

26.4. Interest on working capital shall be estimated at the rate equal to the Marginal Cost of Fund based Lending Rate (MCLR - one year tenor) of State Bank of India plus 200 basis point prevailing on 30th September of current financial year. During truing-up, the interest on working capital shall be computed at an average actual sanctioned rate of interest during the year.”

The Commission has computed IoWC in accordance with Regulation 26 of the CSERC MYT Regulations, 2021. For computation of working capital requirement as per the formula provided in the CSERC MYT Regulations, 2021, the Commission has considered the normative value of O&M expenses for one month as approved in this Order, maintenance spares at 20% of the approved M&G expenses and receivables equivalent to one month of system operation charges and market operation charges as approved in this Order. The interest rate has been considered as per Regulation 26.4 of the CSERC MYT Regulations, 2021, i.e., 9.00% for the Control Period. The

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

Table 11-20: Approved IoWC for the Control Period (Rs. Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-23	FY 2024-25
1	O&M	0.53	0.55	0.58
2	Maintenance Spares	0.43	0.44	0.45
3	Receivables	1.51	1.63	1.85
4	Total WC requirement	2.47	2.62	2.88
5	Rate of Interest on WC	9.00%	9.00%	9.00%
6	Interest on Working Capital	0.22	0.24	0.26

11.10 Non-Tariff Income

CSLDC's Submission

CSLDC submitted that it has considered the Non-Tariff Income for the Control Period same as approved for FY 2019-20. CSLDC requested the Commission to consider Non-Tariff Income of Rs. 0.02 Crore for each year of the Control Period.

Commission's View

The Commission has considered the Non-Tariff Income for the Control Period at the same level as that approved in Truing up of FY 2020-21, i.e., Rs. 0.02 Crore, as shown in the Table below:

Table 11-21: Approved Non-Tariff Income (Rs. Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Non-Tariff Income	0.02	0.02	0.02

11.11 Aggregate Revenue Requirement (ARR)

Based on the above, the Commission has approved ARR for the Control Period from FY 2022-23 to FY 2024-25, shown in the Table below:

Table 11-22: Approved ARR for the Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
		Petition	Approved	Petition	Approved	Petition	Approved
1	Employee expenses	10.63	10.54	11.19	11.07	11.78	11.62
2	A&G expenses	0.82	0.81	0.85	0.84	0.89	0.88
3	R&M expenses	1.34	1.33	1.38	1.37	1.41	1.40
4	P&G Contribution	3.51	2.84	3.84	3.11	4.13	3.35
5	Depreciation	1.12	1.11	1.60	1.33	2.21	1.95
6	Interest on Loan	0.35	0.33	0.84	0.50	1.45	1.15
7	Interest on Working	0.23	0.22	0.25	0.24	0.27	0.26

Sr. No.	Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
		Petition	Approved	Petition	Approved	Petition	Approved
	capital						
8	Return on Equity	0.95	0.93	1.33	1.11	1.82	1.61
9	ARR	18.95	18.12	21.29	19.57	23.97	22.22
10	Less: Non-Tariff Income	0.02	0.02	0.02	0.02	0.02	0.02
11	Net ARR	18.93	18.10	21.27	19.55	23.95	22.21

11.12 SLDC Fees and Charges

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 102.2 of the CSERC MYT Regulations, 2021. In accordance with the Regulation, 80% of the annual SLDC Charges determined above for FY 2022-23 have been allocated to System Operation Charges, and 20% of the annual SLDC Charges determined as above for FY 2022-23 have been allocated to intra-State Market Operation Charges.

CSLDC has projected net ARR for FY 2022-23 as Rs. 18.93 Crore. CSLDC has computed adjusted ARR for FY 2022-23 by considering net ARR of Rs. 18.93 Crore and surplus arrived for FY 2020-21 along with holding cost of Rs. 3.34 Crore, as discussed in the true up Chapter of this Order. Accordingly, CSLDC has requested the Commission to approve total SLDC charges as Rs. 15.58 Crore, as shown in the Table below:

Table 11-23: SLDC Charges claimed by CSLDC for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1	ARR for FY 2022-23	18.93
2	Adjustment of Surplus of FY 2020-21 with carrying cost up to FY 2022-23	3.34
3	Adjusted ARR for FY 2022-23	15.58
4	System Operation Charges	12.47
5	Intra-State Market Operation Charges	3.12
6	Total SLDC Charges	15.58

Commission's View

Regulation 102.2 of the MYT Regulations, 2021 specifies as under:

“102.2. 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."

The Commission in the final true up of FY 2020-21 has approved Surplus of Rs. 2.71 Crore. This Surplus along with carrying cost, amounting to Rs. 3.46 Crore has been adjusted against the ARR approved for FY 2022-23. Considering the adjusted ARR for FY 2022-23 and above Regulation, the Commission has approved the System Operation Charges and Intra-State Market Operation Charges, as shown in the Table below:

Table 11-24: Adjusted ARR and SLDC Charges approved for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Petition	Approved
1	ARR for FY 2022-23	18.93	18.10
2	Adjustment of Surplus of FY 2020-21 with carrying cost up to FY 2022-23	(3.34)	(3.32)
3	Adjusted ARR for FY 2022-23	15.58	14.78
4	System Operation Charges	12.47	11.82
5	Intra-State Market Operation Charges	3.12	2.96
6	Total SLDC Charges	15.58	14.78

Accordingly, the Commission approves System Operation Charges and Intra-State Market Operation Charges as Rs. 11.82 Crore and Rs. 2.96 Crore, respectively.

12 ARR OF CSPDCL FOR MYT CONTROL PERIOD FROM FY 2022-23 TO FY 2024-25

12.1 Background

CSPDCL submitted the projected ARR for the MYT Control Period from FY 2022-23 to FY 2024-25 under various heads, viz., Sales, Power Purchase expenses, O&M expenses, depreciation, interest on loans, interest on working capital, etc., in accordance with the CSERC MYT Regulations, 2021. The Commission has carried out prudence check for approval of each of the above expenditure heads and ARR of CSPDCL for the MYT Control Period from FY 2022-23 to FY 2024-25, in the following sections.

12.2 Sales Projections

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 submitted that in the CSERC MYT Regulations, 2021, sales mix and quantum of sales are considered as uncontrollable.

CSPDCL submitted that for projecting the category-wise energy sales for FY 2022-23 to FY 2024-25, it has considered the past growth trends for each consumer category as per the categorisation approved in the latest Tariff Order.

CSPDCL submitted that Compounded Annual Growth Rates (CAGR) of sales have been computed from the past sales for each category, corresponding to different lengths of time in the past three years, i.e., FY 2018-19, FY 2019-20, and FY 2020-21 for LV category, and FY 2017-18, FY 2018-19, and FY 2019-20, for HV category. CSPDCL submitted that the consideration of separate duration of three year period for LV and HV category is to avoid the effect of COVID-19 period in future projections, as industrial consumption has been affected adversely during COVID-19 period.

Subject to the specific characteristics of each consumer category, three-year CAGR has been chosen as the basis of sales projection for that category. For example, if an abnormal growth rate (high or low), relative to the current trend, is observed at the beginning of the three-year period considered, then a shorter period is considered for the trend analysis and projections. In cases where the past data shows a declining trend, a nil growth has been considered. Similarly, a trend, which is not consistent is substituted with assumptions of growth.

Further, for projection of number of consumers, sales and connected load of sub-categories/slabs of any consumer category, CSPDCL has used the ratio of sales in the sub-category to total sales of the category observed in FY 2020-21. Further, the actual sales, connected load and number of consumers has been shown as per old categories/sub-categories as approved in the Tariff Order dated 2nd August, 2021.

CSPDCL has projected the category-wise sales for the Control Period from FY 2022-23 to FY 2024-25, as shown in the Table below:

Table 12-1: Category-Wise Sales Projected by CSPDCL for FY 2022-23 to FY 2024-25 (MU)

Sl. No.	Category Description	Category	CAGR (%)	FY 2022-23	FY 2023-24	FY 2024-25
A	LV			16,037.02	17,686.20	19,536.60
1	Domestic Including BPL Consumers	LV 1	11.71%	7781.48	8692.39	9709.94
2	Non-Domestic Normal	LV 2.1	0.00%	236.64	236.64	236.64
3	Non-Domestic Demand Based	LV 2.2	10.00%	802.29	882.52	970.77
4	Agriculture	LV 3	5.93%	4,759.60	5,041.98	5,341.13
5	Agriculture Allied Activities	LV 4	27.74%	37.25	47.59	60.79
6	Industry	LV 5	6.30%	687.72	731.02	777.05
7	Public Utilities	LV 6	10.00%	440.25	484.27	532.7
8	IT & Textile Industries	LV 7	10.00%	0.02	0.02	0.03
9	Temporary	LV 8	21.52%	1,291.78	1,569.76	1,907.56
B	HV			12,578.15	13,913.70	15,441.04
1	Railway Traction	HV 1	3.30%	1,053.78	1,088.55	1,124.48
2	Mines	HV 2	3.39%	701.87	724.95	748.79
3	Other Industrial & General Purpose Non-Industrial	HV 3	0.00%	2,011.96	2,011.96	2,011.96
4	Steel Industries	HV 4	14.94%	8,443.03	9,704.54	11,154.54
6	Irrigation & Agriculture Allied Activities, PWW	HV 5	8.72%	176.63	192.03	208.78
7	Residential	HV 6	0.00%	176.64	176.64	176.64
8	Start Up Power	HV 7	5.00%	12.77	13.41	14.08
9	Industries related to manufacturing of equipment for RE power generation	HV 8	0.00%	0.47	0.47	0.47
10	IT & Textile Industries	HV 9	13.79%	1.01	1.15	1.31
11	Temporary	HV 10		-	-	-
C	Total (A+B)			28,615.18	31,599.90	34,977.64

Commission's View

For projecting the category-wise sales for the Control Period, CSPDCL has considered the CAGR of sales over the three-year period from FY 2018-19 to FY 2020-21 for LV category, and from FY 2017-18 to FY 2019-20 for HV category. CSPDCL has submitted that the consideration of different three-year period for LV and HV category is to avoid the effect of COVID-19 period in future projections, as industrial consumption has been affected adversely during COVID-19 period.

The Commission has observed that CSPDCL has computed the growth rates incorrectly, as instead of computing 3-year CAGR based on sales of past 4 years, CSPDCL has computed and considered 2-year CAGR, by considering the sales of 3 years. **CSPDCL should ensure against such basic errors in its Petition.**

While it is true that the COVID-19 pandemic has significantly affected the category-wise sales, especially in FY 2020-21 and partly in FY 2021-22, 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 the Control Period.

Hence, in order to ensure more realistic projection of the category-wise sales for the Control Period, 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 for FY 2021-22. CSPDCL submitted the actual monthly sales till November 2021 for LV and HV categories. Based on the category-wise sales data for 9 months of FY 2021-22 submitted by CSPDCL, the Commission has estimated the sales for FY 2021-22. The Commission has also computed the CAGR for different periods, with different base years, viz., FY 2019-20, FY 2020-21, and FY 2021-22.

The Commission has observed that while the sales of most LV categories have steadily increased over the last few years including the COVID affected years, the sales of HV categories including the HV-4 Steel category, which contributes 26% of the total sales, has reached pre-pandemic levels in FY 2021-22. The CAGR trends also show that the growth trajectory is almost normalised, and not skewed as was the case earlier. Hence, it can be considered that the situation is reaching normalcy.

In view of the above, the Commission has considered the estimated sales for FY 2021-22 as the base, and also computed the CAGR for different period with respect to the estimated sales for FY 2021-22, for the purpose of projecting the sales for the Control Period.

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 the Control Period, over the sales estimated for FY 2021-22, 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 each year of the Control Period. 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 2020-21 has been applied to the sales projected for the category for the Control Period.

The category-wise connected load/Contract Demand and number of consumers have also been projected on similar basis.

The sales projected by CSPDCL and the sales approved by the Commission for each consumer category is shown in the Table below:

Table 12-2: Approved Category-Wise Sales for FY 2022-23 to FY 2024-25 (MU)

Sl. No.	Category Description	CSPDCL Petition			Approved		
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
A	LV	16,037.02	17,686.20	19,536.60	16,190.38	17,285.79	18,463.47
1	Domestic Including BPL Consumers	7781.48	8692.39	9709.94	7,255.63	7,794.11	8,372.56
2	Non-Domestic Normal	236.64	236.64	236.64	285.29	295.87	306.85
3	Non-Domestic Demand Based	802.29	882.52	970.77	787.50	816.70	846.99
4	Agriculture	4,759.60	5,041.98	5,341.13	5,454.33	5,747.09	6,055.56
5	Agriculture Allied Activities	37.25	47.59	60.79	32.98	34.75	36.61
6	Industry	687.72	731.02	777.05	617.09	637.41	658.40
7	Public Utilities	440.25	484.27	532.7	489.35	526.29	566.02
8	IT & Textile Industries	0.02	0.02	0.03	1.06	1.17	1.29
9	Temporary	1,291.78	1,569.76	1,907.56	1,267.14	1,432.39	1,619.20
B	HV	12,578.15	13,913.70	15,441.04	11,312.82	12,121.64	13,002.43
1	Railway Traction	1,053.78	1,088.55	1,124.48	1,176.58	1,229.69	1,285.19
2	Mines	701.87	724.95	748.79	693.33	709.77	726.61
3	Other Industrial & General Purpose Non-Industrial	2,011.96	2,011.96	2,011.96	1,892.64	1,917.89	1,943.48
4	Steel Industries	8,443.03	9,704.54	11,154.54	7,114.88	7,798.66	8,548.17
6	Irrigation & Agriculture Allied Activities, PWW	176.63	192.03	208.78	218.62	243.95	272.21
7	Residential	176.64	176.64	176.64	184.17	186.92	189.70
8	Start Up Power	12.77	13.41	14.08	21.94	23.03	24.18
9	Industries related to manufacturing of equipment for RE power generation	0.47	0.47	0.47	3.12	3.44	3.78
10	IT & Textile Industries	1.01	1.15	1.31	7.53	8.28	9.11
11	Temporary	-	-	-	-	-	-
C	Total (A+B)	28,615.18	31,599.90	34,977.64	27,503.20	29,407.43	31,465.90

12.3 Inter-State Transmission Losses

CSPDCL's Submission

CSPDCL has considered actual weighted average all-India transmission loss of last 12 months, as the same practice is adopted by all State Commissions and is more practical as it captures varying loss. CSPDCL requested the Commission to consider the inter-State transmission losses as 3.43%.

Commission's View

The inter-State transmission losses have been considered as 3.43%, as proposed by CSPDCL, for the purpose of computing the energy available to CSPDCL from its inter-State generation sources.

12.4 Intra-State Transmission Losses

CSPDCL's Submission

CSPDCL has considered the intra-State Transmission Loss as 3% for each Year of the Control Period based on the Transmission Loss approved by the Commission for CSPTCL for FY 2021-22.

Commission's View

The intra-State transmission losses have been considered as 3.00% for each year of the MYT Control Period, as approved for CSPTCL in this Order, for the purpose of computing the energy requirement for CSPDCL.

12.5 Distribution Losses

CSPDCL's Submission

CSPDCL submitted that Regulation 98.3 of the CSERC MYT Regulations, 2021 specifies as under:

"98.3. Energy Loss trajectory for distribution licensee shall be as specified by the Commission in the tariff order."

CSPDCL submitted that the Regulations provide that the Distribution Losses shall be specified by the Commission in the Tariff Order. The Ministry of Power vide its Office Memorandum No. 20/9/2019-IPDS provided the details of "Revamped Distribution Sector Scheme" with the objective of reduction of AT&C loss at pan-India level to 12-15% by FY 2024-25. The terms and conditions of the aforesaid scheme require approval of the State Government, which is pending so far. As the CSERC MYT Regulations, 2021 do not specify any target for energy loss trajectory, for the purpose of projecting energy balance for the entire Control Period, CSPDCL has considered the latest approved target of 16% for each year of the Control Period. CSPDCL added that the aforesaid loss trajectory would change in case the Revamped Distribution Sector Scheme (RDSS) is implemented in the State.

CSPDCL submitted that while setting the energy loss trajectory for each year of the Control Period, the Commission should consider CSPDCL's actual achievement in the True Up years.

Commission's View

The Commission had approved the Distribution Loss level of 16% for FY 2021-22, considering that FY 2021-22 was part of the extended Control Period. CSPDCL has considered the same Distribution Loss level of 16% for each Year of the Control Period, without any improvement.

The Commission is of the view that considering the capital investments being made regularly by CSPDCL, CSPDCL should have achieved the Distribution Loss level of 16% approved by the Commission. However, CSPDCL is far from achieving this target.

At the same time, the Commission also appreciates that loss reduction will get progressively more difficult as the base loss levels reduce. Keeping in mind the Distribution Loss level proposed by CSPDCL, projected capital investments, as well as the likely capital investments under the RDSS in metering and distribution infrastructure improvement, the Commission has conservatively approved the Distribution Loss levels for each Year of the Control Period in such a manner that the Distribution Loss level reaches 15% by FY 2024-25, as shown in the Table below:

Table 12-3: Approved Distribution Losses for FY 2022-23 to FY 2024-25 (%)

Sl. No.	Particulars	CSPDCL Petition			Approved		
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
A	Distribution Losses	16%	16%	16%	15.67%	15.33%	15.00%

The Commission may further revise the Distribution Loss levels for the Control Period depending on the capital investments being made under RDSS.

12.6 Energy Balance

CSPDCL's Submission

CSPDCL has submitted the Energy Balance for each Year of the Control Period based on the projected sales, and trajectory proposed for Distribution Losses, inter-State Transmission Losses, and intra-State Transmission Losses, as shown in the Table below:

Table 12-4: Energy Balance Projected by CSPDCL for FY 2022-23 to FY 2024-25 (MU)

Sl.	Particulars	Legend	FY 2022-23	FY 2023-24	FY 2024-25
1	LV Sales	A	16,037.02	17,686.20	19,536.60
2	HV Sales	B	9,068.48	10,115.82	11,317.13
3	Total Below EHV Level	C=A+B	25,105.51	27,802.02	30,853.73
4	Energy Loss below 33 kV (in %)	D	16.00%	16.00%	16.00%
5	Energy Loss below 33 kV (in MU)	E	4,016.88	4,448.32	4,936.60
6	Gross Energy requirement at 33 kV Level	F=C+E	29,122.39	32,250.35	35,790.33

Sl.	Particulars	Legend	FY 2022-23	FY 2023-24	FY 2024-25
7	Less: Direct Input to distribution at 33 kV Level	G	351.77	351.77	351.77
8	Net Energy Input required at Distribution Periphery at 33 kV Level	H=F-G	28,770.62	31,898.58	35,438.56
9	Sales to EHV consumers	I	3,509.67	3,797.88	4,123.91
10	Net energy requirement at Distribution periphery	J=H+I	32,280.29	35,696.45	39,562.47
11	Distribution loss including EHV Sales	K	12.31%	12.34%	12.37%

Commission's View

The Commission observed that CSPDCL has incorrectly computed the energy requirement for the Control Period in its Petition, as CSPDCL has multiplied the Distribution Loss (in %) with the Sales, rather than grossing up the Sales with Distribution Losses, and considering the difference as the loss (in MU). The Commission asked CSPDCL to submit its clarifications in this regard.

In its reply, CSPDCL submitted that the distribution losses have been calculated on the sales instead of grossing up of sales with the distribution losses due to inadvertent error. CSPDCL submitted the corrected Table of Energy Balance by using the correct methodology as shown in the below:

Table 12-5: Revised Energy Balance Projected by CSPDCL for FY 2022-23 to FY 2024-25 (MU)

Sl. No.	Particulars	Legend	FY 2022-23	FY 2023-24	FY 2024-25
1	LV Sales	A	16,037.02	17,686.20	19,536.60
2	HV Sales	B	9,068.48	10,115.82	11,317.13
3	Total Below EHV Level	C=A+B	25,105.51	27,802.02	30,853.73
4	Energy Loss below 33 kV (in %)	D	16.00%	16.00%	16.00%
5	Energy Loss below 33 kV (in MU)	E	4,782.00	5,295.62	5,876.90
6	Gross Energy requirement at 33 kV Level	F=C+E	29,887.51	33,097.65	36,730.64
7	Less: Direct Input to distribution at 33 kV Level	G	351.77	351.77	351.77
8	Net Energy Input required at Distribution Periphery at 33 kV Level	H=F-G	29,535.74	32,745.88	36,378.87
9	Sales to EHV consumers	I	3,509.67	3,797.88	4,123.91
10	Net energy requirement at Distribution periphery	J=H+I	33,045.41	36,543.75	40,502.77
11	Distribution loss including EHV Sales	K	14.32%	14.35%	14.38%

While CSPDCL has submitted the revised Energy Balance in its replies, the Petition itself has not been revised. This has resulted in CSPDCL under-projecting the power purchase requirement, the ARR and the Revenue Gap for FY 2022-23, as well as remaining Years of the Control Period.

In order to avoid confusion by considering two different and mismatched sets of numbers, the Commission has considered the energy balance submitted in CSPDCL's Petition as the reference value. **CSPDCL should ensure against such basic mistakes in its Petition, which have completely changed its Petition.**

The Commission has approved the Energy Balance for each Year of the Control Period based on the approved sales, and approved trajectory for Distribution Losses, inter-State Transmission Losses, and intra-State Transmission Losses, as shown in the Table below:

Table 12-6: Approved Energy Balance for the MYT Control Period from FY 2022-23 to FY 2024-25

Particulars	Legend	CSPDCL Petition			Approved		
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
LV Sales	A	16,037.02	17,686.20	19,536.60	16,190.38	17,285.79	18,463.47
HV Sales	B	9,068.48	10,115.82	11,317.13	7,851.29	8,441.35	9,086.03
Total Below EHV Level	C=A+B	25,105.51	27,802.02	30,853.73	24,041.66	25,727.14	27,549.50
Energy Loss below 33 kV (in %)	D	16.00%	16.00%	16.00%	15.67%	15.33%	15.00%
Gross Energy requirement at 33 kV Level	E=C/(1-D)	29,887.51	33,097.65	36,730.64	28,507.90	30,386.39	32,411.18
Energy Loss below 33 kV (in MU)	F=E-C	4,782.00	5,295.62	5,876.90	4,466.24	4,659.25	4,861.68
Less: Direct Input to distribution at 33 kV Level	G	351.77	351.77	351.77	351.77	351.77	351.77
Net Energy Input required at Distribution Periphery at 33 kV Level	H=E-G	29,535.74	32,745.88	36,378.87	28,156.13	30,034.62	32,059.41
EHV Sales	I	3,509.67	3,797.88	4,123.91	3,461.53	3,680.29	3,916.40
Net energy requirement at Distribution periphery	J=H+I	33,045.41	36,543.75	40,502.77	31,617.67	33,714.91	35,975.81
Distribution loss including EHV Sales (in %)	K	14.32%	14.35%	14.38%	13.97%	13.68%	13.38%
Intra-State Transmission loss (in %)	L				3.00%	3.00%	3.00%
Intra-State Transmission loss (in MU)	M				977.87	1,042.73	1,112.65
Net energy requirement at Transmission periphery	N=J+M				32,595.53	34,757.63	37,088.46
Inter-State Transmission loss (in MU)	O				518.53	523.63	535.49
Net Power Purchase requirement	P = N + O				33,114.07	35,281.27	37,623.95

12.7 Power Purchase Quantum and Cost

CSPDCL's Submission

CSPDCL submitted that it had broadly categorised the sources of energy into Allocation (firm and non-firm) from Central Generating Stations (CGS), State Owned Generation, i.e., Generation from CSPGCL, Solar Power Plants, Independent Power Producers (IPPs), and Short-Term/Bilateral purchases, etc. CSPDCL added that the plants, which are scheduled to commence generation during the Control Period are Renewable Energy (RE) plants only and it has considered the availability from such new plants.

CSPDCL has projected the purchase of power from various sources as detailed below.

i. Existing Central Generating Stations

CSPDCL submitted that it has firm allocation of power from Central Generating Stations (CGS) like Korba Super Thermal Power Station (STPS), Vindhyachal Thermal Power Station, Sipat Super Thermal Power Station, Kahalgaon Super Thermal Power Station, Mauda Super Thermal Power Station, Solapur Super Thermal Power Station, Tarapur Atomic Power Stations and LARA Super Thermal Power Station (STPS) Unit I, etc. to meet its energy requirement.

The power purchase cost mainly comprises fixed charges and energy charges for two-part tariff stations, i.e., NTPC, NPCL and others. As CERC has not issued the Order for Annual Fixed Charges (AFC) of CGS for the Control Period (FY 2019-20 to FY 2023-24), CSPDCL has considered the fixed charges all the generating stations as allowed by the Commission in Tariff Order dated 2nd August 2021 for FY 2021-22 for projecting power purchase expenses for the Control Period from FY 2022-23 to FY 2024-25. The existing rates of energy charges during FY 2021-22 are considered. Further, Energy Charges of Lara Station have been reduced by Rs. 0.30/kWh on the basis of intimation given by project developer about expected commissioning of Merry-Go-Round (MGR) railway system for coal transportation by April 2022. CSPDCL has considered only the fixed and energy charge and has estimated that any cost over and above 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 actual average Plant Load Factor (PLF) for the past five years sourced from CEA and same has been considered for the Control Period from FY 2022-23 to FY 2024-25.

ii. State Generating Stations

CSPDCL submitted that it mainly relies on the power from State Generating Stations, i.e., CSPGCL stations. Currently, it has allocation of 2985 MW from CSPGCL.

Availability of State Generating Stations other than Marwah has been considered on actual basis, with availability from Marwah being considered at 70% PLF based on conservative approach after commissioning of Captive Coal mine.

For estimating the cost of power purchase from CSPGCL, CSPDCL has considered the fixed charges as approved by the Commission in the Tariff Order dated 2nd August 2021 for FY 2021-22. CSPDCL while projecting energy charges for FY 2022-23 has

considered actual energy charges for FY 2021-22. For FY 2023-24 and FY 2024-25, CSPDCL has considered Nil escalation for projection of energy charges and has estimated that any cost over and above would be passed though on actual basis.

CSPDCL has considered sale of the power of Marwah to Telangana at State periphery for the Control Period from FY 2022-23 to FY 2024-25 on back-to-back arrangement without any trading margin at actual prevailing rates.

iii. Power Purchase from RE Sources

CSPDCL submitted that the Commission in its CSERC (Renewable Purchase Obligation and REC Framework Implementation) Regulations, 2021 notified on 29th October 2021 has specified the RPO trajectory till FY 2023-24. CSPDCL has considered the same RPO target for FY 2024-25 also, as shown in the Table below:

Table 12-7: RPO Target for FY 2022-23 to FY 2024-25 (%)

Sl. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Solar	11.50%	12.50%	12.50%
2	Non-Solar (HPO)	0.35%	0.66%	0.66%
3	Non-Solar (Others)	10.50%	10.50%	10.50%

CSPDCL has also considered purchase from new RE plants. CSPDCL has envisaged that additional RE capacity of 2373 MW would be commissioned in the Control Period from FY 2022-23 to FY 2024-25. The details of RE capacity addition with expected commissioning date is given in the Table below:

Table 12-8: RE Capacity Addition envisaged for FY 2022-23 to FY 2024-25

Sl. No.	Source	Capacity (MW)	Expected Commissioning Date
1	SECI (Wind)	300	22-04-2022
2	SECI(Hybrid)	400	01-11-2021
3	SECI (Solar+BESS)	100	01-04-2023
4	NHPC (Solar)	400	01-04-2022
5	SECI (Hybrid)	400	01-01-2023
6	SECI (Blended wind)	170	01-06-2021
7	MBPCL	113	01-10-2023
8	SECI (Solar +Manufacturing)	300	01-10-2023
9	NTPC Solar	190	01-04-2022
10	Total	2373	

CSPDCL submitted that after availability of cheaper non-solar RE sources due to expected commissioning of dedicated wind as well as blended wind source during the Control Period, CSPDCL has not considered availability from biomass generating

stations for estimation of power purchase expenses. This estimation is in line with the Commission's views in the Tariff Order dated 2nd August 2021 on management of surplus power sale and economic despatch principles. CSPDCL requested the Commission to consider biomass stations under the purview of Merit Order Despatch in the best interest of power purchase cost as these stations contain two-part Tariff and are not intermittent in nature like Wind Generating Stations. CSPDCL stated that there would be a fixed cost liability arising out of non-scheduling of electricity and CSPDC may be allowed to claim actual expenditure towards payment of its fixed cost towards biomass generators at the time of True up for the respective year.

iv. Concessional Power Purchase

CSPDCL has considered actual payments made to concessional power sources during FY 2021-22, for the purpose of projections for each Year of the Control Period. CSPDCL has considered purchase of 1530.87 MU at a cost of Rs. 257.19 Crore, i.e., average rate of Rs. 1.68/kWh for each Year of the Control Period.

v. Short-term Power Purchase

CSPDCL submitted that while there is estimated net surplus of power, there is still shortage of power during certain duration of day/month/year as seen from past trends. Further, CSPDCL has considered the impact of capacity outage of KTPS (East) of CSPGCL for estimation of quantum from short-term sources. Accordingly, CSPDCL has considered short-term purchase of 450 MU from Power Exchanges at actual weighted average rates during FY 2021-22. Further, CSPDCL has not considered availability from Unscheduled sources of power as after stability of 2x800 MW Lara Station, it has surplus availability during the entire Control Period from other tied-up sources. Further, the inconsistent nature of injection by unscheduled sources also makes it difficult for CSPDCL to plan the demand-supply gap.

CSPDCL has considered purchase of 450 MU at a cost of Rs. 252 Crore, i.e., average rate of Rs. 5.60/kWh for each Year of the Control Period.

vi. Transmission – Inter, Intra & CSLDC Charges

CSPDCL has to pay transmission charges to PGCIL for use of transmission facilities enabling power drawal from the Western and Eastern Region.

CSPDCL has considered the PGCIL charges at same levels as approved by the Commission in the Tariff Order dated 2nd August 2021 for FY 2022-23, which has been escalated annually by 3% for FY 2023-24 and FY 2024-25.

The intra-State Transmission Charges and CSLDC charges have also been considered at the same level as approved by the Commission in the Tariff Order dated 2nd August 2021 for FY 2022-23, and escalated annually by 3% for FY 2023-24 and FY 2024-25.

Commission's View

CSPDCL's submissions and assumptions have been analysed in detail and additional information was asked on the same. The power purchase expenses have been estimated based on the power purchase requirement as approved above. CSPDCL's projections of quantum of power available from different sources and the rate of purchase from different sources have been accepted, with the following modifications:

- a) The quantum and rate of power purchase from CGS has been considered as projected by CSPGCL for each year of the Control Period;
- b) No escalation has been considered on the rate of power purchase from any source, as the variation in rates will be adjusted through the FCA and VCA mechanism;
- c) The generation from CSPGCL Stations have been considered based on the normative PLF values and considering the past trend;
- d) The PLF of Marwah has been considered as 70%, as proposed by CSPDCL in its Petition;
- e) The rate of power purchase from different generating stations of CSPGCL has been considered as approved in this Order for the MYT Control Period;
- f) Purchase from Traders/Power Exchanges and other short-term sources have been considered as Nil for FY 2022-23 and FY 2023-24 in view of the overall surplus power availability in these years, whereas purchase of 556 MU has been considered from short-term sources in FY 2024-25 to meet the projected demand-supply gap; any short-term power purchase to meet the system requirements and to overcome power shortage during certain periods of the day/month/year shall be addressed at the time of true-up for the respective year;
- g) The rate of purchase from short-term sources in FY 2024-25 has been considered as Rs. 4.12/kWh, based on the actual rate of power purchase in FY 2020-21;
- h) The quantum and rate of concessional power purchase have been considered as 2396 MU and Rs. 1.86/kWh for each year of the Control Period, at the same levels as per actuals of FY 2020-21;
- i) The Commission has considered the quantum and cost of purchase from biomass sources for each year of the Control Period at the same levels as per actuals of FY 2020-21 for meeting the RPO target of CSPDCL, as these stations are not subject to Merit Order Despatch and the PPAs are approved by the Commission;
- j) The Commission has considered the quantum and cost of purchase from existing and new RE sources as projected by CSPDCL for each year of the Control Period, in order to meet the RPO targets for the respective year;
- k) In case of shortfall in meeting the RPO targets on account of delay in the commissioning of new RE plants or lesser generation from the existing RE plants, CSPDCL should ensure that the RPO targets are met through purchase from other RE sources or RECs, etc.;
- l) The inter-State transmission charges payable to PGCIL have been considered at the same level as per actuals of FY 2020-21, for each year of the Control Period from FY 2022-23 to FY 2024-25, without any escalation;
- m) The intra-State Transmission Charges have been considered based on the ARR of CSPTCL approved in this Order for the MYT Control Period;
- n) The CSLDC charges have been considered based on the ARR of CSLDC approved in this Order for the MYT Control Period;
- o) The statutory and other charges such as water charges, SLDC charges, start-up power charges, etc., incurred by CSPGCL have also been included in the power purchase expenses based on the actuals of FY 2020-21, as these are reimbursed

to CSPGCL at actuals, in order to reflect the power purchase expenses more realistically;

- p) The revenue from sale of surplus energy has been considered separately, and has not been shown as a reduction of power purchase costs.

The approved quantum and cost of power purchase from different sources of power for each year of the Control Period are given in the Tables below:

Table 12-9: Approved Power Purchase Quantum and Cost for FY 2022-23

Sl.	Particulars	CSPDCL Petition			Approved		
		Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)	Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)
A	Purchase from Central Generating Stations						
1	NTPC	14008.29	4442.42	3.17	14008.29	4442.42	3.17
2	NTPC - SAIL	271.13	100.27	3.70	271.13	100.27	3.70
3	NPC Limited	295.36	95.24	3.22	295.36	95.24	3.22
4	Others	550.89	409.14	7.43	550.89	409.14	7.43
	Sub Total A	15125.67	5047.08	3.34	15125.67	5047.08	3.34
B	Purchase from Thermal and Hydel State Generating Stations						
5	CSPGCL – Thermal	18023.59	5793.78	3.21	18721.81	6647.26	3.55
6	CSPDCL - Renewables	674.25	72.51	1.08	372.58	69.61	1.87
	Sub Total B	18697.84	5866.28	3.14	19094.40	6716.87	3.52
C	Purchase from Traders, IPPs, and others sources						
7	Short-term Purchase	450.00	252.00	5.60	0.00	0.00	0.00
8	Concessional Power	1530.87	257.19	1.68	2395.56	444.52	1.86
	Sub Total C	1980.87	509.19	2.57	2395.56	444.52	1.86
D	Purchase from Renewable Sources						
9	Biomass	0.00	0.00	0.00	886.58	610.52	6.89
10	Solar	1994.01	754.86	3.79	1994.01	498.50	2.50
11	Hydel/Other RE	464.72	158.64	3.41	464.72	158.47	3.41
12	Other/New RE	1206.14	301.54	2.50	1206.14	301.54	2.50
	Sub Total D	3664.88	1215.04	3.32	4551.46	1569.03	3.45
E	Transmission & Other Charges						
13	Inter-State Transmission Charges		603.93			724.69	
14	Intra-State Transmission Charges		1,025.74			1102.55	
15	CSLDC Charges		14.93			18.10	
	Sub Total E		1,644.60			1845.34	
F	Gross Power Purchase Cost	39,469.26	14,282.19	3.62	41,167.08	15,622.84	3.79

Sl.	Particulars	CSPDCL Petition			Approved		
		Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)	Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)
G	Adjustments/Revenue from Sale of Surplus Power						
16	Inter-State Transmission Losses	518.53			-		
17	Sale to Telangana	5635.77	2530.46	4.49			
18	Sale of Surplus Power	66.26	20.61	3.11			
	Sub-total G	6,220.56	2,551.07	4.10			
H	Net Power Purchase Cost	33,248.70	11,731.12	3.53			

Table 12-10: Approved Power Purchase Quantum and Cost for FY 2023-24

Sl.	Particulars	CSPDCL Petition			Approved		
		Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)	Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)
A	Purchase from Central Generating Stations						
1	NTPC	14237.60	4512.38	3.17	14059.70	4457.11	3.17
2	NTPC - SAIL	271.13	100.27	3.70	271.13	100.27	3.70
3	NPC Limited	295.36	95.24	3.22	295.36	95.24	3.22
4	Others	648.28	442.76	6.83	648.28	442.76	6.83
	Sub Total A	15,452.38	5,150.65	3.33	15274.48	5095.38	3.34
B	Purchase from Thermal and Hydel State Generating Stations						
5	CSPGCL – Thermal	18023.59	5793.78	3.21	18956.16	6683.26	3.53
6	CSPDCL - Renewables	674.25	72.51	1.08	372.58	69.61	1.87
	Sub Total B	18697.84	5866.28	3.14	19328.74	6752.87	3.49
C	Purchase from Traders, IPPs, and others sources						
7	Short-term Purchase	450.00	252.00	5.60	0.00	0.00	0.00
8	Concessional Power	1530.87	257.19	1.68	2395.56	444.52	1.86
	Sub Total C	1980.87	509.19	2.57	2395.56	444.52	1.86
D	Purchase from Renewable Sources						
9	Biomass	0.00	0.00	0.00	886.58	610.52	6.89
10	Solar	1994.01	754.86	3.79	1994.01	498.50	2.50
11	Hydel/Other RE	464.72	158.64	3.41	464.72	158.47	3.41
12	Other/New RE	2061.23	515.31	2.50	2061.23	515.31	2.50

Sl.	Particulars	CSPDCL Petition			Approved		
		Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)	Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)
	Sub Total D	4,519.96	1,428.81	3.16	5406.54	1782.80	3.30
E	Transmission & Other Charges						
13	Inter-State Transmission Charges		622.05			724.69	
14	Intra-State Transmission Charges		1,056.51			1155.61	
15	CSLDC Charges		15.38			19.55	
	Sub Total E		1,693.94			1899.84	
F	Gross Power Purchase Cost	40,651.05	14,648.87	3.60	42,405.32	15,975.42	3.77
G	Adjustments/Revenue from Sale of Surplus Power						
16	Inter-State Transmission Losses	529.73			-		
17	Sale to Telangana	5635.77	2530.46	4.49			
18	Sale of Surplus Power	2281.80	709.64	3.11			
	Sub-total G	8,447.30	3,240.10	3.84			
H	Net Power Purchase Cost	32,203.74	11,408.77	3.54			

Table 12-11: Approved Power Purchase Quantum and Cost for FY 2024-25

Sl.	Particulars	CSPDCL Petition			Approved		
		Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)	Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)
A	Purchase from Central Generating Stations						
1	NTPC	14238.70	4507.08	3.17	14366.08	4543.56	3.16
2	NTPC - SAIL	304.91	106.21	3.48	304.91	106.21	3.48
3	NPC Limited	300.94	97.04	3.22	300.94	97.04	3.22
4	Others	648.28	442.76	6.83	648.28	442.76	6.83
	Sub Total A	15,492.83	5,153.09	3.33	15620.21	5189.57	3.32
B	Purchase from Thermal and Hydel State Generating Stations						
5	CSPGCL – Thermal	18023.59	5793.78	3.21	19053.70	6693.72	3.51
6	CSPDCL - Renewables	674.25	72.51	1.08	372.58	69.61	1.87

Sl.	Particulars	CSPDCL Petition			Approved		
		Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)	Quantum (in MU)	Amount (in Rs. Crore)	Per unit Rate (Rs/ kWh)
	Sub Total B	18697.84	5866.28	3.14	19426.29	6763.33	3.48
C	Purchase from Traders, IPPs, and others sources						
7	Short-term Purchase	450.00	252.00	5.60	556.20	228.91	4.12
8	Concessional Power	1530.87	257.19	1.68	2395.56	444.52	1.86
	Sub Total C	1980.87	509.19	2.57	2951.76	673.44	2.28
D	Purchase from Renewable Sources						
9	Biomass	0.00	0.00	0.00	886.58	610.52	6.89
10	Solar	1994.01	754.86	3.79	1994.01	498.50	2.50
11	Hydel/Other RE	464.72	158.64	3.41	464.72	158.47	3.41
12	Other/New RE	3123.82	780.95	2.50	3123.82	780.95	2.50
	Sub Total D	5,582.55	1,694.46	3.04	6469.13	2048.45	3.17
E	Transmission & Other Charges						
13	Inter-State Transmission Charges		640.71			724.69	
14	Intra-State Transmission Charges		1,088.21			1226.30	
15	CSLDC Charges		15.84			22.21	
	Sub Total E		1,744.76			1973.20	
F	Gross Power Purchase Cost	41,754.08	14,967.77	3.58	44,467.38	16,647.98	3.74
G	Adjustments/Revenue from Sale of Surplus Power						
16	Inter-State Transmission Losses	531.12			-		
17	Sale to Telangana	5635.77	2530.46	4.49			
18	Sale of Surplus Power	5162.15	1605.43	3.11			
	Sub-total G	11,329.03	4,135.89	3.65			
H	Net Power Purchase Cost	30,425.05	10,831.88	3.56			

12.8 Operation & Maintenance Expenses

CSPDCL's Submission

CSPDCL submitted that it has computed the Operation and Maintenance (O&M) expenses, comprising employee expenses, A&G expenses, and Repair & Maintenance (R&M) expenses for the Control Period from FY 2022-23 to FY 2024-25, in accordance with Regulation 83.4 of the CSERC MYT Regulations, 2021.

The years considered for calculation of average WPI and CPI escalation are FY 2016-17 to FY 2020-21. CSPDCL submitted the average growth of WPI and CPI for these years.

12.8.1 Employee Expenses

CSPDCL submitted that it has derived the employee expenses on the basis of the normalized average of the actual Human Resource (HR) expenses excluding pension fund contribution available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22.

The normalization has been done by applying last five-year average increase in CPI on year-to-year basis. The average of normalized net present value for FY 2016-17 to FY 21, has then been used to project base-year value for FY 2021-22. The projected base-year value so arrived, has been escalated by the above inflation rate to estimate the HR expense (excluding impact of pension fund contribution and pay revision and any other expense of non-recurring nature) for each year of the Control Period.

CSPDCL further submitted that during COVID-19, the State Government had put on hold the Dearness Allowances (DA) at 17%, which was later increased to 31% in FY 2021-22. Such increase of 14% is considered in the basic pay of FY 2022-23 and then has been escalated as per the same methodology provided in the Regulations for Human Resource expenses.

12.8.2 A&G Expenses

CSPDCL submitted that the A&G expenses (excluding expenses towards outsourcing manpower) has been derived on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower) available in the accounts for the previous five (5) years immediately preceding the base-year FY 2021-22.

The normalisation of A&G expenses has been done by applying last five-year average increase/decrease in Inflation on the basis of 40% weightage of WPI and 60% weightage of CPI, respectively, on year-to-year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, has then been used to project base-year value for FY 2021-22. The projected base-year value has been escalated by the above inflation rate to estimate the A&G expenses for each year of the Control Period.

12.8.3 R&M Expenses

CSPDCL submitted that the R&M expenses (excluding expenses towards outsourcing manpower) has been derived on the basis of the normalized average of the actual R&M expenses (excluding expenses towards outsourcing manpower) available in the accounts for the previous five (5) years immediately preceding the base-year FY 2021-22.

The normalization of R&M expenses has been done by applying last five-year average increase/decrease in WPI of all commodities on year-to-year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, has then been used to project base-year value for FY 2021-22. The projected base-year value has been escalated by the above inflation rate to estimate the R&M expenses for each year of the Control Period.

The O&M expenses projected by CSPDCL for the MYT Control Period from FY 2022-23 to FY 2024-25 are shown in the Table below:

**Table 12-12: O&M Expenses for the Control Period as submitted by CSPDCL
(Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Employee Expenses	1,377.73	1,450.34	1,526.78
A&G Expenses	104.36	109.27	114.41
R&M Expenses	335.86	344.38	353.12
Total O&M Expenses	1,817.95	1,903.99	1,994.31

Commission's View

Regulation 83.4 of the CSERC MYT Regulations, 2021 specifies as under as regards the O&M Expenses:

"83.4. Operation And Maintenance (O&M) Expenses

83.4.1. Human Resource (HR) Expenses

- (a) *HR expenses shall include:*
 - (i) *employees costs;*
 - (ii) *impact of Pay revision;*
 - (iii) *manpower deployed on outsourcing basis;*
- (b) *The Commission shall stipulate a separate trajectory for each of the components of HR expenses for the Control Period.*
- (c) *The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expense of non-recurring nature related to HR. The base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual HR 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 2021-22, subject to prudence check by the Commission.*
- (d) *The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR expenses (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.*

- (e) At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.

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

- (f) CPI (IW) (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001:100}.

83.4.2. Maintenance and General (M&G) Expenses

- (a) Maintenance and General (M&G) expenses shall include:
- (i) Administrative and General (A&G) expenses;
 - (ii) Repair and Maintenance (R&M) expenses
- (b) The Commission shall stipulate a separate trajectory for each of the components of M&G expenses viz., R&M and A&G expenses for the Control Period.
- (c) The A&G expenses (excluding expenses towards outsourcing manpower) (A&G) and R&M expenses (excluding expenses towards outsourcing manpower) (R&M) for the base year i.e. FY 2020-21, shall be derived on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower) and R&M expenses (excluding expenses towards outsourcing manpower), respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, 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.
- (d) The normalization of R&M expenses shall be done by applying last five year average increase/decrease in Wholesale Price Index (WPI) of all commodities on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22.
- (e) For normalization of A&G expenses shall be estimated by applying last five year average increase/decrease in Inflation to be considered on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2020-21.
- (f) The projected base year value shall be escalated by the above inflation rate to estimate the A&G and R&M expenses for each year of the control period.
- (g) Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India {Base Year: 2011-12 Series};

- (h) *Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001:100}.*
- (i) *At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.”*

The Commission observed that CSPDCL has incorrectly computed the R&M expenses, as the HR expenses had not been deducted correctly, while projecting the R&M expenses. In its replies, CSPDCL admitted that while computing the R&M expenses, CSPDCL had erred to include the 33/11 kV manpower expenses and submitted the revised A&G expenses and R&M expenses for each Year of the Control Period as shown in the Table below:

Table 12-13: Revised A&G Expenses and R&M Expenses for the Control Period as submitted by CSPDCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
A&G Expenses	102.60	107.43	112.48
R&M Expenses	273.94	280.89	288.02
Total O&M Expenses	376.54	388.32	400.50

However, as CSPDCL has not revised the total O&M expenses and ARR for each Year of the Control Period to reflect the above change, the Commission has considered the original submission of CSPDCL in its Petition for comparison purposes, in order to avoid confusion of number mismatch because of revision of only some numbers without consequential impact being reflected in other numbers.

The O&M expenses for the Control Period from FY 2022-23 to FY 2024-25 have been estimated in accordance with the methodology specified in the CSERC MYT Regulations, 2021.

The summary of the yearly escalation in CPI and WPI over the last five years up to FY 2020-21 and the average escalation rate considered for projecting the O&M expenses is shown in the following Table:

Table 12-14: Computation of Escalation Rate for Projections (%)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Average of 5 years increase
CPI-IW (%)	4.12%	3.08%	5.45%	7.53%	5.02%	5.04%
WPI-AC (%)	1.73%	2.92%	4.27%	1.68%	1.27%	2.38%

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

12.8.4 Employee Expenses

In accordance with the CSERC MYT Regulations, 2021, the Commission has considered the employee expenses on the basis of the normalized average of the actual prudent Human Resource (HR) expenses excluding pension fund contribution available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22.

The normalization has been done by applying last five-year average increase in CPI on year-to-year basis. The average of normalized net present value for FY 2016-17 to FY 21, has then been used to project base-year value for FY 2021-22. The projected base-year value so arrived, has been escalated by the above inflation rate to estimate the HR expense (excluding impact of pension fund contribution and pay revision and any other expense of non-recurring nature) for each year of the Control Period.

The Commission has not accepted CSPDCL's approach of considering increase of 14% in DA in the basic pay of FY 2022-23 and then escalating the same. The Commission has computed the employee expenses strictly in accordance with the CSERC MYT Regulations, 2021, which does not envisage such treatment for the DA expenses, over and above the escalation already being considered. Further, the increase in DA reflects the inflation, which has already been factored into the projections by considering the CPI escalation, hence, there is no justification for separately building in the increase in DA into the employee expenses. Also, there is no sharing of gains and losses in employee expenses, and any increase in employee expenses on this account can be claimed at the time of true-up for the respective year.

12.8.5 A&G Expenses

In accordance with the CSERC MYT Regulations, 2021, the Commission has considered the A&G expenses (excluding expenses towards outsourcing manpower) on the basis of the normalized average of the actual prudent A&G expenses (excluding expenses towards outsourcing manpower) available in the accounts for the previous five (5) years immediately preceding the base-year FY 2021-22.

The normalisation of A&G expenses has been done by applying last five-year average increase/decrease in Inflation on the basis of 40% weightage of WPI and 60% weightage of CPI, respectively, on year-to-year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, has then been used to project base-year value for FY 2021-22. The projected base-year value has been escalated by the above inflation rate to estimate the A&G expenses for each year of the Control Period.

12.8.6 R&M Expenses

In accordance with the CSERC MYT Regulations, 2021, the Commission has considered the R&M expenses (excluding expenses towards outsourcing manpower) has been derived on the basis of the normalized average of the actual prudent R&M expenses (excluding expenses towards outsourcing manpower) available in the accounts for the previous five (5) years immediately preceding the base-year FY 2021-22.

The normalization of R&M expenses has been done by applying last five-year average increase/decrease in WPI of all commodities on year-to-year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, has then been

used to project base-year value for FY 2021-22. The projected base-year value has been escalated by the above inflation rate to estimate the R&M expenses for each year of the Control Period.

The normative Employee expenses, A&G expenses and R&M expenses as approved for the Control Period from FY 2022-23 to FY 2024-25 are shown in the Tables below:

Table 12-15: Approved Employee Expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Employee Expenses	867.27	1,059.27	1,052.01	1,063.29	1,012.31				
Normalised FY 2016-17 value to FY 2020-21 NPV	867.27	893.98	942.70	1,013.69	1,064.61				
Normalised FY 2017-18 value to FY 2020-21 NPV		1,059.27	1,117.00	1,201.11	1,261.44				
Normalised FY 2018-19 value to FY 2020-21 NPV			1,052.01	1,131.23	1,188.05				
Normalised FY 2019-20 value to FY 2020-21 NPV				1,063.29	1,116.70				
Normalised FY 2020-21 value					1,012.31				
Net Employee Expenses					1,128.62	1185.51	1245.27	1308.04	1373.97

Table 12-16: Approved A&G expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
A&G Expenses	90.99	90.16	80.35	53.40	58.08				
Normalised FY 2016-17 value to FY 2020-21 NPV	90.99	93.74	98.40	103.51	107.16				
Normalised FY 2017-18 value to FY 2020-21 NPV		90.16	94.65	99.57	103.07				
Normalised FY 2018-19 value to FY 2020-21 NPV			80.35	84.52	87.49				
Normalised FY 2019-20 value to FY 2020-21 NPV				53.40	55.28				
Normalised FY 2020-21 value					58.08				
Net A&G Expenses					82.22	85.48	88.88	92.42	96.09

Table 12-17: Approved R&M expenses for the Control Period (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
R&M Expenses	170.39	136.87	264.52	294.33	314.89				
Normalised FY 2016-17 value to FY 2020-21 NPV	170.39	175.36	182.86	185.94	188.30				
Normalised FY 2017-18 value to FY 2020-21 NPV		136.87	142.71	145.12	146.96				
Normalised FY 2018-19 value to FY 2020-21 NPV			264.52	268.97	272.40				
Normalised FY 2019-20 value to FY 2020-21 NPV				294.33	298.08				
Normalised FY 2020-21 value					314.89				
Net R&M Expenses					244.13	249.93	255.87	261.95	268.17

The summary of O&M expenses approved for the Control Period is shown in the Table below:

Table 12-18 Approved O&M expenses for the Control Period (Rs. Crore)

Particulars	CSPDCL Petition			Approved		
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
Employee Expenses	1,377.73	1,450.34	1,526.78	1,245.27	1,308.04	1,373.97
A&G Expenses	104.36	109.27	114.41	88.88	92.42	96.09
R&M Expenses	335.86	344.38	353.12	255.87	261.95	268.17
Total O&M Expenses	1,817.95	1,903.99	1,994.31	1,590.02	1,662.40	1,738.23

As stated in Chapter 2 of this Order, the Commission is of the opinion that Group medical insurance for employees and pensioners is a genuine requirement. Further, the impact of such Group medical insurance is not expected to be very significant but can go a long way to improve the morale of the employees. The Companies may consider all implications on merit. The Commission grants in-principle approval for pass through of such expenses in the head “HR expenses” as and when they are actually incurred.

12.9 Contribution to Pension & Gratuity (P&G)

CSPDCL’s submission

CSPDCL submitted that it has considered the contribution to P&G as per the request of Pension Trust dated 25th October, 2021 for FY 2022-23. CSPDCL, added that it has considered the same methodology specified for HR Expenses for projection of these expenses for FY 2023-24 and FY 2024-25, i.e., by escalating the contribution for FY 2022-23 by average of last five years of CPI preceding the base year FY 2021-22.

The P&G Contribution projected by CSPDCL for the Control Period from FY 2022-23 to FY 2024-25 is shown in the Table below:

Table 12-19: P&G Contribution as submitted by CSPDCL (in Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Contribution to P&G	702.61	739.64	778.62

CSPDCL requested the Commission to approve the contribution to Pension & Gratuity as claimed. CSPDCL added that the aforesaid assessment is based on projections however, the actuarial valuation for FY 2020-21 is pending. Hence, CSPDCL craved leave to submit the revised contribution towards P&G Trust based on the actuarial valuation report at a later stage of this Petition.

Commission's View

In its replies to queries dated 23rd February 2022, CSPDCL submitted the revised Contribution to P&G for the Control Period from FY 2022-23 to FY 2024-25, based on the letter received from the P&G Trust for FY 2023-24 and FY 2024-25, as shown in the Table below:

Table 12-20: P&G Contribution as submitted by CSPDCL (in Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Contribution to P&G	702.52	768.78	826.72

Regulation 34 of the CSERC MYT Regulations, 2021 specifies as under:

“34. PENSION FUND

34.1. For meeting up the past unfunded liabilities of employees appointed before 01.01.2004 erstwhile CSEB State Power Companies, a pension and gratuity trust has been constituted and funding to the same has been allowed in the past by the Commission. The contribution to this fund shall be specified 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. The pension outflow shall be met from the Pension and Gratuity Fund. Contribution to the pension fund as approved by the Commission shall be recoverable as specified in this regulations.”

The Contribution to the P&G Trust has to be seen in totality for CSPGCL, CSPTCL, CSLDC and CSPDCL, with the shares of each entity clearly identified. The Pension Trust vide its letter dated 25th October, 2021 has submitted the request for increase in the Contribution to the P&G Trust for FY 2022-23, on the basis of actuarial valuation and availability of funds with the Trust. Subsequently, vide its letter dated 13th December 2021, the Pension Trust has submitted the request for Contribution to the P&G Trust for all three years of the Control Period and has provided the share of each Company in the overall Contribution, based on the ratio of allocation decided by the Commission in the last Tariff Order.

However, it is observed that the share considered by the Trust is marginally different from the share approved in the Tariff Order for FY 2021-22, and also each Company has claimed slightly different amounts, though the overall Contribution to P&G Trust has been considered by each Company as Rs. 1128.00 Crore, Rs. 1234.39 Crore, and Rs. 1327.43 Crore for FY 2022-23, FY 2023-24, and FY 2024-25, respectively.

The overall Contribution to the P&G Fund as claimed by the P&G Trust is based on actuarial analysis, expected pension outflow for the State Power Companies and availability of funds with the Pension trust, which is in accordance with the CSERC MYT Regulations, 2021. Hence, the Commission has considered the overall Contribution to P&G Trust, as claimed by the P&G Trust, for each Year of the Control Period. Further, in order to avoid confusion and mismatch in the amounts

allowed to each Company, the Commission has considered the allocation of each entity in the same ratio as approved in the Tariff Order for FY 2021-22.

The Contribution to the P&G Trust as approved for each Year of the Control Period for CSPGCL, CSPTCL, CSLDC and CSPDCL is shown in the Table below:

Table 12-21: P&G Contribution for the Control Period as approved by the Commission (Rs. Crore)

Entity	% Allocation	FY 2022-23	FY 2023-24	FY 2024-25
CSPGCL	27.258%	307.47	336.47	361.83
CSPTCL	10.240%	115.51	126.40	135.93
CSLDC	0.252%	2.84	3.11	3.35
CSPDCL	62.250%	702.18	768.40	826.32
TOTAL	100.00%	1128.00	1234.39	1327.43

It is further clarified that if the actual expenses on payment of Gratuity and Pension during the respective year significantly overshoots the estimation, then at the end of the respective year, the Companies may make additional contribution in accordance with their share to meet such additional expense. Subject to prudence check, the same shall be considered at the time of true up.

12.10 Gross Fixed Assets

CSPDCL's Submission

CSPDCL submitted that the capital structure for the Control Period from FY 2022-23 to FY 2024-25 has been determined based on the following methodology:

- The actual loan addition for the Control Period has been considered as Rs 268.18 Crore;
- Addition in consumer contribution/grants has been considered Rs 450 Crore;
- Normative equity addition has been considered based on capital restructuring methodology as approved by the Commission in the Tariff Order dated 12th July 2013;
- GFA addition of Rs 240.07 Crore, Rs. 560.16 Crore, and Rs. 800.23 Crore has been projected based on the Capital Investment Plan for the Control Period from FY 2022-23 to FY 2024-25;
- Capital expenditure against RDSS has not been considered as the Scheme is still in the draft phase and has been not approved by the State Government.

The Capital Structure submitted by CSPDCL for the Control Period is shown in the Table below:

**Table 12-22: Capital Structure for the Control Period as submitted by CSPDCL
(Rs. Crore)**

Particulars	Legend	FY 2022-23	FY 2023-24	FY 2024-25
Gross Fixed Assets (GFA)				
Opening GFA	A	10,069.22	10,309.29	10,869.45
Opening CWIP	B	3571.27	4131.43	3891.36
Opening CAPEX	C=A+B	13,640.49	14,440.72	14,760.81
Capitalization during the year	D	240.07	560.16	800.23
Closing GFA	E=D+A	10,309.29	10,869.45	11,669.68
Closing CWIP	F	4131.43	3891.36	3891.36
Closing CAPEX	G=F+E	14,440.72	14,760.81	15,561.04
Grants and Consumer Contribution				
Opening Grant and Contribution	H	5,740.17	6,190.17	6,640.17
Consumer contribution/grants during the year	I	450	450	450
Closing Consumer Contribution	J=H+I	6,190.17	6,640.17	7,090.17
Consumer Contribution in Opening GFA	K=H*A/C	4,237.32	4,419.19	4,889.64
Consumer Contribution in Closing GFA	L=J*E/G	4,419.19	4,889.64	5,317.13
Loan				
Opening Loan	M	3,304.66	3,345.39	3,408.19
Loan Addition	N	268.18	268.18	268.18
Closing Loan	O=M+N	3,345.39	3,408.19	3,669.11
Loan in Opening GFA	P=M*A/C	2,439.45	2,388.29	2,509.70
Loan in Closing GFA	Q=MAX (O*E/G, P)	2,439.45	2,509.70	2,751.57
Equity				
Opening Gross Equity	R=C-H-M	4,595.66	4,905.15	4,712.44
Equity Addition	T=S-R	309.49	-192.71	89.31
Closing Gross Equity	S=G-J-O	4,905.15	4,712.44	4,801.76
Gross Equity in Opening GFA	U=A-K-P	3,392.45	3,501.81	3,470.11
Gross Equity in Closing GFA	V=C-L-Q	3,450.65	3,470.11	3,600.98
Average Gross Equity	W=Avg. (U, V)	3,421.55	3,485.96	3,535.55
Funding of Capitalized Assets				
Total Capitalization		240.07	560.16	800.23
Grant Contribution		181.87	470.45	427.49
Equity Contribution		17.46	26.91	111.82
Loan Contribution		40.74	62.80	260.92

Commission's View

The closing GFA for CSPDCL for FY 2020-21, as approved in the true-up for FY 2020-21 in this Order, has been considered as the opening GFA for FY 2021-22. Capitalisation for FY 2021-22 as approved in the Tariff Order for FY 2021-22 has been added to arrive at the closing GFA for FY 2021-22.

The closing GFA of FY 2021-22 has been considered as the opening GFA for FY 2022-23. Similarly, for each year of the Control Period, closing balance of the previous year has been considered as the opening balance for the next year. The capitalisation approved for the Control Period of CSPDCL from FY 2022-23 to FY 2024-25 is shown in the Table below:

Table 12-23: Approved Capitalisation for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Capitalisation	240.07	560.16	800.23

The opening and closing GFA approved, as well as the funding pattern for the capitalisation approved for each year of the Control Period is given in the Table below:

Table 12-24: Funding of GFA Addition approved by the Commission for the Control Period (Rs. Crore)

Particulars	CSPDCL Petition			Approved		
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
Gross Fixed Assets (GFA)						
Opening GFA	10,069.22	10,309.29	10,869.45	10,069.22	10,309.29	10,869.45
Capitalization during the year	240.07	560.16	800.23	240.07	560.16	800.23
Closing GFA	10,309.29	10,869.45	11,669.68	10,309.29	10,869.45	11,669.68
Funding of Capitalized Assets						
Grant Contribution	181.87	470.45	427.49	181.87	470.45	427.49
Equity Contribution	17.46	26.91	111.82	17.46	26.91	111.82
Loan Contribution	40.74	62.80	260.92	40.74	62.80	260.92

12.11 Depreciation

CSPDCL's submission

CSPDCL submitted that depreciation for the MYT Control Period has been calculated in accordance with Regulation 25 of the CSERC MYT Regulations, 2021. Depreciation projected by CSPDCL for the MYT Control Period from FY 2022-23 to FY 2024-25 is shown in the Table below:

**Table 12-25: Depreciation for the Control Period as submitted by
CSPDCL (Rs. Crore)**

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	10,069.35	10,309.42	10,869.58
Capitalization during the year	240.069	560.16	800.23
Closing GFA	10,309.42	10,869.58	11,669.81
Average GFA for the year	10,189.39	10,589.50	11,269.70
Depreciation Rate (%)	5.51%	5.50%	5.48%
Gross Depreciation	561.32	582.32	618.04
Less: Depreciation on consumer contribution on live assets	226.50	226.50	226.50
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	272.11	293.11	328.83

Commission's View

Regulation 25 of the CSERC MYT Regulations, 2021 specifies as under:

“25. DEPRECIATION

25.1. The value base for the purpose of depreciation shall be the capital cost of the asset as admitted by the Commission:

25.2. 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 22.

25.3. 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.

25.4. 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.

25.5. 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. Subject to specific provisions, Land for integrated mine shall also be considered for depreciation.

25.6. Depreciation shall be calculated annually based on Straight Line Method and at rates as specified in Appendix-I to this regulation for the assets of the generating station, transmission system, distribution system and SLDC and Appendix –I (A) for integrated coal mine:

Provided that, in case of the existing projects, the balance depreciable value as on 01.04.2022 shall be worked out by deducting the cumulative

depreciation as admitted by the Commission up to 31.03.2022 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 this Regulation 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.

Provided that in the case where additional capital investment is approved by the commission for a plant at the end of its useful life or after its useful life is already over, the recoverable depreciation in respect of additional capital investment, shall be spread over the balance projected physical life as submitted by the generation company or the licensee in the capital investment plan after prudence check by the Commission.

Provided that until a Government company or any authority or corporation is notified for operating the SLDC, the depreciation shall be calculated as applicable for the STU under these Regulations.

Provided further the balance depreciable value as on the date of transfer shall be worked out by deducting the cumulative depreciation from the gross depreciable value of the assets appearing in the books of accounts of the SLDC for the SLDC as on the date of transfer.”

Depreciation for the Control Period from FY 2022-23 to FY 2024-25 has been calculated in accordance with the above mentioned Regulations, on the average GFA during the year. The depreciation has been computed considering the weighted average depreciation rate of 5.53% as approved in the true-up for FY 2020-21.

The depreciation related to consumer contribution on live assets has been deducted based on the projected increase in consumer contribution during the Control Period. Further, the depreciation on fully depreciated assets has been considered equal to the depreciation approved in the true-up for FY 2020-21. However, this value will increase as more and more assets get fully depreciated. CSPDCL should submit the details of fully depreciated assets for each year at the time of true-up for the respective year.

The depreciation approved for the MYT Control Period is shown in the Table below:

Table 12-26: Depreciation Approved for the Control Period (Rs. Crore)

Particulars	CSPDCL Petition			Approved		
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
Opening GFA	10,069.35	10,309.42	10,869.58	10069.35	10309.42	10869.58
Capitalization during the year	240.069	560.16	800.23	240.07	560.16	800.23
Closing GFA	10,309.42	10,869.58	11,669.81	10309.42	10869.58	11669.81
Average GFA	10,189.39	10,589.50	11,269.70	10189.39	10589.50	11269.70
Depreciation Rate (%)	5.51%	5.50%	5.48%	5.53%	5.53%	5.53%

Particulars	CSPDCL Petition			Approved		
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
Gross Depreciation	561.32	582.32	618.04	563.70	585.84	623.47
Less: Depreciation on consumer contribution	226.50	226.50	226.50	226.50	226.50	226.50
Less: Depreciation on fully depreciated Assets	16.51	16.51	16.51	16.51	16.51	16.51
Less: Depreciation on assets converted to grant under UDAY	46.20	46.20	46.20	46.20	46.20	46.20
Net Depreciation	272.11	293.11	328.83	274.49	296.63	334.26

12.12 Interest on Loan

CSPDCL's submission

CSPDCL submitted that it has computed Interest on Loan as per Regulation 24 of the CSERC MYT Regulations, 2021. CSPDCL has considered the loan addition for FY 2022-23 to FY 2024-25 as Rs. 268.18 Crore. The interest rates considered in True Up of FY 2020-21 has been considered for calculation of the interest expenses for the Control Period.

The Interest on Loan as submitted by CSPDCL for the MYT Control Period from FY 2022-23 to FY 2024-25 is shown in the Table below:

Table 12-27: Interest on Loan for the Control Period as submitted by CSPDCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	1,855.28	1,823.25	2,090.29
Repayment during the year	272.11	293.11	328.83
Additional Capitalization of Borrowed Loan during the year	-	121.41	241.88
Addition/(Reduction) in Normative loan during the year	240.07	438.75	558.35
Closing Net Normative Loan	1,823.25	2,090.29	2,561.70
Average Normative loan during the year	1,839.26	1,956.77	2,325.99
Weighted Average Rate of Interest	9.96%	9.96%	9.96%
Interest Expense	183.19	194.89	231.67
Add: Other Finance Charges			
Total Interest on Loan	183.19	194.89	231.67

Commission's View

The Commission observed that CSPDCL had considered the loan addition incorrectly, as CSPDCL had considered loan addition equal to the GFA addition for FY 2023-24 and FY 2024-25, instead of considering the loan addition equal to 70% of the capitalisation, after deducting contribution of Grants and Consumer Contribution. In reply to the Commission's query in this regard, CSPDCL submitted that the loan addition has been considered erroneously in the Tariff Petition due to inadvertent error, and submitted the revised Interest on Loan for the MYT Control Period from FY 2022-23 to FY 2024-25, as shown in the Table below:

Table 12-28: Revised Interest on Loan for the Control Period as submitted by CSPDCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	1,855.28	1,823.25	2,090.29
Repayment during the year	272.11	293.11	328.83
Additional Capitalization of Borrowed Loan during the year	-	121.41	241.88
Addition/(Reduction) in Normative loan during the year	40.74	62.80	260.92
Closing Net Normative Loan	1,623.91	1,515.00	1,688.97
Average Normative loan during the year	1,739.60	1,569.46	1,601.99
Weighted Average Rate of Interest	9.96%	9.96%	9.96%
Interest Expense	173.26	156.32	159.56
Add: Other Finance Charges			
Total Interest on Loan	173.26	156.32	159.56

However, as CSPDCL has not revised the total ARR for each Year of the Control Period to reflect the above change, the Commission has considered the original submission of CSPDCL in its Petition for comparison purposes, in order to avoid confusion of number mismatch because of revision of only some numbers without consequential impact being reflected in other numbers.

Regulation 24 of the CSERC MYT Regulations, 2021 specifies as under:

“24. INTEREST AND FINANCE CHARGES ON LOAN CAPITAL

24.1 The debt arrived at in the manner indicated in Regulation 17 shall be considered as gross normative loan for calculation of interest on loan.

24.2. The normative loan outstanding as on 01.04.2022 shall be worked out by deducting, the cumulative repayment as admitted by the Commission up to 31.03.2022, from the gross normative loan.

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

24.4. Notwithstanding any moratorium period availed by the generating company or the licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

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

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

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

Provided further, in case of new generating station or the licensee commencing its operation after the date of effectiveness of this Regulation, and which don't have actual loan portfolio, the rate of interest shall be considered on normative basis and shall be equal to the Marginal Cost of Fund based Lending Rate (MCLR - one year tenor) of State Bank of India plus 150 basis points as applicable on the date of COD.

24.6. The interest on loan shall be calculated on the average of opening and closing loan of the year. For the computation of interest amount, the interest rate shall be the weighted average rate of interest for the same year.

24.7. The interest amount as per regulation 24.6 shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, grants or deposit works carried out by generating company, transmission licensee, SLDC or distribution licensee, as the case may be”.

For computing Interest on Loan, the closing normative loan as approved in the true-up of FY 2020-21 has been considered as the opening normative loan for FY 2021-22. The normative loan addition approved in the Tariff Order for FY 2021-22 has been considered to determine the closing normative loan for FY 2021-22. For each year of the Control Period, the closing normative loan for previous year has been considered as the opening normative loan for that year.

The debt component has been considered based on the approved funding of capitalisation as approved earlier in this Chapter. Repayment of normative loan for each year has been considered equal to the depreciation allowed for that year. The rate of interest has been computed at the same rate as the actual weighted average rate of interest as approved in the true-up for FY 2020-21 in this Order. The interest on loan approved for the Control Period is shown in the Table below:

Table 12-29: Approved Interest on Loan for the Control Period (Rs. Crore)

Particulars	CSPDCL Petition			Approved		
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
Opening Net Normative Loan	1,855.28	1,823.25	2,090.29	1847.74	1616.37	1386.06
Repayment	272.11	293.11	328.83	272.11	293.11	328.83
Additional Loan	-	121.41	241.88			
Addition/(Reduction) in Normative loan	240.07	438.75	558.35	40.74	62.80	260.92
Closing Net Normative Loan	1,823.25	2,090.29	2,561.70	1616.37	1386.06	1318.15
Average Normative loan	1,839.26	1,956.77	2,325.99	1732.06	1501.21	1352.10
Weighted Average Rate of Interest	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%
Interest Expense	183.19	194.89	231.67	172.51	149.52	134.67
Add: Other Finance Charges						
Total Interest on Loan	183.19	194.89	231.67	172.51	149.52	134.67

12.13 Interest on Consumer Security Deposit**CSPDCL's Submission**

CSPDCL submitted that as per the provisions of Regulation 6.13 of the Chhattisgarh Supply Code, 2011, interest on security deposits is payable by CSPDCL to consumers. The relevant clause is reproduced below:

"The licensee shall pay interest as per directive / guidelines of Reserve Bank of India (RBI) on the security deposits. It shall be the responsibility of the licensee to ascertain the such rate from RBI and to inform the consumers through the billing mechanism."

Further, Regulation 24.10 of the CSERC MYT Regulations, 2021 specifies as under:

"24.10. In case of licensee, the interest paid on security deposit to the consumers shall not be allowed as a part of Annual Revenue Requirement. The licensee shall bear the interest liability on security deposit."

CSPDCL submitted that in accordance with the aforesaid provisions, it is not claiming the Interest on Security Deposit in the ARR for the Control Period from FY 2022-23 to FY 2024-25.

Commission's View

In accordance with Regulation 24.10 of the CSERC MYT Regulations, 2021, the Commission has not allowed the Interest on Security Deposit as part of the ARR for the Control Period from FY 2022-23 to FY 2024-25. However, CSPDCL shall pay

interest on the Consumers' Security Deposit in accordance with Regulation 6.13 of the Chhattisgarh Supply Code, 2011.

12.14 Interest on Working Capital

CSPDCL's Submission

CSPDCL submitted that it has calculated Interest on Working Capital (IoWC) in accordance with the CSERC MYT Regulations, 2021.

CSPDCL submitted that it has estimated the working capital requirement by considering O&M Expenses for 15 days, Maintenance spares @ 20% of projected Maintenance and General expenses and receivables equivalent to one month of the revenue from sale of power at prevailing tariff within the State. CSPDCL has considered the interest rate of 9.00% (SBI MCLR of 7.00% on 30th September 2021 plus 200 basis points) for computing the Interest on Working Capital.

The Interest on Working Capital as submitted by CSPDCL for the MYT Control Period from FY 2022-23 to FY 2024-25 is shown in the Table below:

Table 12-30: Interest on Working Capital for the Control Period as submitted by CSPDCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Operation and Maintenance Expenses for 15 days	103.58	108.64	113.96
Maintenance spares @ 20% of Maintenance and General Expenses	88.04	90.73	93.51
Receivables equal to 1 month of expected revenue from charges	1,550.98	1,708.97	1,961.93
Total Working Capital	1,742.61	1,908.34	2,169.39
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	156.83	171.75	195.25

Commission's View

Regulation 26.1 (e) of the CSERC MYT Regulations, 2021 specifies as under:

"26.1. The working capital shall include:

...

(e) For Retail Supply of Electricity:

i. O&M expenses for 15 days; plus

ii. Maintenance spares @ 20% of maintenance and general expenses specified in Regulation 92.6.2; plus

iii. Receivables equivalent to one (1) month of the revenue from sale of electricity at the prevailing tariffs within state;

...

26.4. "Interest on working capital shall be allowed at a rate equal to the Marginal Cost of Fund based Lending Rate (MCLR – one year tenor) of State Bank of India plus 200 basis point prevailing on 30th September of current financial year. During true up, the interest on working capital shall be computed at an average actual sanctioned rate of interest during the year."

The Interest on Working Capital has been calculated in accordance with the above-said Regulations. The working capital requirement has been computed by considering O&M Expenses for 15 days, Maintenance spares @ 20% of approved Maintenance and General expenses and receivables equivalent to one month of the revenue from sale of power at approved tariff for FY 2022-23 within the State and one month equivalent of the ARR approved for FY 2023-24 and FY 2024-25.

The interest rate of 9.00% has been considered, which is the one-year MCLR of SBI as on September 30, 2021, plus 200 basis points, for computing the Interest on Working Capital for the entire Control Period. The Interest on Working Capital approved for the Control Period is shown in the Table below:

Table 12-31: Approved Interest on Working Capital (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Operation and Maintenance Expenses for 15 days	94.20	99.62	105.39
Maintenance spares @ 20% of Maintenance and General Expenses	68.95	70.87	72.85
Receivables equal to 1 month of expected revenue from charges	1,426.10	1,334.95	1,410.25
Total Working Capital	1,589.25	1,505.44	1,588.49
Rate of Interest (%)	9.00%	9.00%	9.00%
Interest on Working Capital	143.03	135.49	142.96

12.15 Return on Equity

CSPDCL's submission

CSPDCL submitted that it has calculated Return on Equity (RoE) in accordance with Regulation 23 of the CSERC MYT Regulations, 2021. The RoE projected by CSPDCL for the MYT Control Period from FY 2022-23 to FY 2024-25 has been shown in the Table below:

Table 12-32: RoE for the Control Period as submitted by CSPDCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Permissible Equity in Opening GFA	2,227.85	2,245.31	2,272.22
Permissible Equity in Closing GFA	2,245.31	2,272.22	2,384.05
Average Gross Permissible Equity	2,236.58	2,258.77	2,328.14
Rate of Return (%)	16%	16%	16%
Return on Equity	357.85	361.40	372.50

Commission's View

Regulation 23 of the CSERC MYT Regulations, 2021 specifies as under:

“23 RETURN ON EQUITY

23.1. Base rate for 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 at the rate of 14.0% for Generation and Transmission and SLDC.

23.2. Distribution: Base rate for 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 at the rate of 16.0%.

23.3. The ROE shall be grossed up at the time of tariff by MAT rate for the year in which tariff is being determined, subject to the condition that MAT / Corporate tax has been paid for last three consecutive years for regulated business filed petition under these Regulations. In such case, Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of return on equity = Base rate / (1-MAT Rate)

At the time of True up, the income tax shall be pass through on actual basis, subject to ceiling as following:

= Average Permissible Equity X Base Rate of Return X ((t/ (1-t))

Where “t” is the actual tax rate for the year. The tax rate shall be calculated without considering the delay payment surcharge received or receivable during the said financial year by generating company or licensee as the case may be.”

The Return on Equity for the Control Period has been computed in accordance with the above Regulations. The closing normative equity as approved in the true-up of FY 2020-21 has been considered as the opening normative equity for FY 2021-22. The normative equity addition approved in the Tariff Order for FY 2021-22 has been considered to determine the closing normative equity for FY 2021-22. For each year of the Control Period, the closing normative equity for previous year has been considered as the opening normative loan for that year.

The rate of RoE has not been grossed up with the MAT rate as CSPDCL has not paid any Income Tax, and the RoE rate of 16% has been considered for the purpose of approving RoE for the Control Period. In case CSPDCL actually pays Income Tax for any year of the Control Period, then reimbursement of the actual Income Tax subject to prudence check shall be allowed at the time of truing up for the respective year.

The Return on Equity approved for the Control Period is shown in the Table below:

Table 12-33: Approved RoE for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Permissible Equity in Opening GFA	2,224.11	2,241.57	2,268.48
Permissible Equity in Closing GFA	2,241.57	2,268.48	2,380.30
Average Gross Permissible Equity	2,232.84	2,255.03	2,324.39
Rate of Return (%)	16%	16%	16%
Return on Equity	357.25	360.80	371.90

12.16 Non-Tariff Income**CSPDCL's Submission**

CSPDCL submitted that has claimed Non-Tariff Income for the Control Period from FY 2022-23 to FY 2024-25 on the basis of actuals of FY 2020-21, as shown in the Table below:

Table 12-34: Non-Tariff Income for the Control Period as submitted by CSPDCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Non-Tariff Income & Wheeling Charges, OA & CSS	253	293	340

Commission's View

The actual Non-Tariff Income in FY 2020-21 is Rs. 185.43 Crore. Though CSPDCL has claimed that it has considered Non-Tariff Income for the Control Period on the basis of actuals of FY 2020-21, it can be seen from the above Table that CSPDCL has projected Non-Tariff Income higher than the actuals of FY 2020-21.

The Commission has conservatively considered the Non-Tariff Income for the Control Period from FY 2022-23 to FY 2024-25 on the basis of actuals of FY 2020-21, as shown in the Table below:

Table 12-35: Approved Non-Tariff Income for the Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Non-Tariff Income & Wheeling Charges, OA & CSS	185.43	185.43	185.43

12.17 Inter-State Sale of Surplus Power**CSPDCL Submission**

CSPDCL submitted that it has considered the rate approved by the Commission in the Tariff Order dated 2nd August 2021 for sale of Marwah power to Telangana, while sale of balance surplus power has been considered at weighted average rates discovered in the Power Exchanges. Accordingly, sale of Marwah power to Telangana has been estimated on State periphery at Rs 4.49/kWh and the sale of

balance surplus power has been estimated at Rs 3.11/kWh during the entire Control Period.

CSPDCL added that the sale of electricity other than to retail consumers is not within the regulatory purview of the Commission. As electricity cannot be stored, the surplus energy has to be sold as and when available at the market realised rates. The availability of surplus energy is dependent on the consumption of the consumers and not on the licensee. CSPDCL submitted that the surplus energy is always sold with the objective of maximising the revenue from such sale and to pass on the accrued benefit to the retail consumers.

Commission's View

The entire quantum of power purchased from Marwah has been considered as being sold to Telangana at the rate of Rs. 4.51/kWh for each year of the Control Period, based on the actual rate of sale in FY 2020-21.

The balance quantum of power surplus after meeting the State's requirement is considered as being sold in the Power Exchanges at the average rate of Rs. 2.50/kWh, based on the actual rate of sale in FY 2020-21.

12.18 Aggregate Revenue Requirement for the MYT Control Period from FY 2022-23 to FY 2024-25

The summary of the ARR claimed by CSPDCL and the ARR approved by the Commission for CSPDCL for the Control Period from FY 2022-23 to FY 2024-25 is shown in the Table below:

Table 12-36: Approved ARR for CSPDCL for the Control Period from FY 2022-23 to FY 2024-25 (Rs. Crore)

Sl.	Particulars	CSPDCL Petition			Approved		
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
A	Power Purchase Expenses*	14,282.19	14,648.87	14,967.77	15,622.84	15,975.42	16,647.98
1	Power Purchase Cost	12,638	12,955	13,223	13,777.50	14,075.58	14,674.78
2	Inter-State Transmission charge	604	622	641	724.69	724.69	724.69
3	Intra-State Transmission Charges	1,026	1,057	1,088	1,102.55	1,155.61	1,226.30
4	CSLDC Charges	14.93	15.38	15.84	18.10	19.55	22.21
B	Operation & Maintenance Expenses	2,520.56	2,644	2,773	2,292.19	2,430.80	2,564.55
1	Net Employee Expenses	1,378	1,450	1,527	1,245.27	1,308.04	1,373.97
2	Net A&G Expenses	104	109	114	88.88	92.42	96.09
3	Net R&M charges	336	344	353	255.87	261.95	268.17
4	Pension & Gratuity	702.61	740	779	702.18	768.40	826.32
C	Interest & Finance Expenses	340.03	367	427	315.55	285.01	277.63
1	Interest on Loan	183	195	232	172.51	149.52	134.67
2	Interest on Security Deposit	-	-	-	-	-	-
3	Interest on Working Capital Requirement	157	172	195	143.03	135.49	142.96
D	Other Expenses	629.96	655	701	631.75	657.43	706.16
1	Depreciation	272	293	329	274.49	296.63	334.26
2	Return on Equity	358	361	373	357.25	360.80	371.90
E	Less: Non-Tariff Income	253	293	340	185.43	185.43	185.43
F	Less: Revenue from Sale of Surplus Power	2,551.07	3,240.10	4,135.89	3,396.35	3,143.85	3,087.90
1	Less: Sale of Power to Telangana	2,530.46	2,530.46	2,530.46	2869.93	2987.08	3087.90
2	Less: Sale of Surplus Power	20.61	709.64	1,605.43	526.41	156.76	-
G	Aggregate Revenue Requirement	14,969.03	14,780.51	14,393.11	15,280.55	16,019.39	16,922.99

Note: * - The revenue from sale of surplus power have been shown separately rather than reducing the same from the power purchase cost in CSPDCL submissions and Commission's approval for like-to-like comparison, and numbers have been recast accordingly

12.19 Revenue from sale of power

CSPDCL's Submission

CSPDCL submitted that the Revenue from Sale of Power for FY 2022-23 has been calculated based on the tariff approved by the Commission in the Tariff Order for FY 2021-22 dated 2nd August, 2021 and the projected sales to each category. CSPDCL submitted the category-wise revenue from sale of power for FY 2022-23 at existing tariff as shown in the Table below:

Table 12-37: Revenue from sale of power at existing tariff for FY 2022-23 as submitted by CSPDCL (Rs. Crore)

Sl.	Category Name	Category	Revenue
LV Categories (A)			9,095.83
1	LV 1	Domestic Including BPL Consumers	3,930.67
2	LV 2	Non-Domestic (Normal Tariff)	200.50
3	LV 2.1	Non-Domestic (Demand Based)	724.11
4	LV 3	Agriculture Metered	2,537.67
5	LV 4	Agriculture allied	26.06
6	LV 5	LT Industry	546.45
7	LV 6	Public Utilities	300.13
8	LV 7	IT & Textile Industries	0.07
9	LV 8	Temporary	830.18
HV Categories (B)			9,515.92
10	HV 1	Railway Traction	654.52
11	HV 2	Mines (Coal & Others)	632.23
12	HV 3	Other Industry & General Purpose Non-Industrial	1,814.47
13	HV 4	Steel Industries	6,124.08
14	HV 5	PWW, Irrigation & Agriculture allied	139.19
15	HV 6	Residential Purpose	135.50
16	HV 7	Start-up Power Tariff	15.00
17	HV 8	Industries related to manufacturing of RE power generation equipment	0.32
18	HV 9	IT & Textile Industries	0.61
19	HV 10	Temporary	-
Total (A + B)			18,611.75

Commission's View

The Commission observed that CSPDCL had not correctly computed the revenue from sale of power to different categories at existing tariff. As a result, the revenue from existing tariff had been over-estimated by CSPDCL. The Commission, in its queries, asked CSPDCL to submit the revised revenue from sale of power to different categories at existing tariff, after addressing the following issues:

- The revenue from fixed charges for LV-1 category to be computed as per the approved fixed charges for each slab;
- The impact of the Load Factor rebate to HV-1 Railways category and HV-4 Steel category is to be factored in the revenue for the respective category;
- The impact of Time of Day (ToD) tariff applicable to HV-2, HV-3 and HV-4 category is to be factored in the revenue for the respective category;

In reply, CSPDCL submitted the revised computations of revenue from sale of power to different categories at existing tariff, after addressing the issues identified by the Commission. CSPDCL submitted the revised category-wise revenue from sale of power for FY 2022-23 at existing tariff as shown in the Table below:

Table 12-38: Revised Revenue from sale of power at existing tariff for FY 2022-23 as submitted by CSPDCL (Rs. Crore)

Sl.	Category Name	Category	Revenue
LV Categories (A)			9,095.83
1	LV 1	Domestic Including BPL Consumers	3,930.67
2	LV 2	Non-Domestic (Normal Tariff)	200.50
3	LV 2.1	Non-Domestic (Demand Based)	724.11
4	LV 3	Agriculture Metered	2,537.67
5	LV 4	Agriculture allied	26.06
6	LV 5	LT Industry	546.45
7	LV 6	Public Utilities	300.13
8	LV 7	IT & Textile Industries	0.07
9	LV 8	Temporary	830.18
HV Categories (B)			8,789.44
10	HV 1	Railway Traction	503.62
11	HV 2	Mines (Coal & Others)	612.45
12	HV 3	Other Industry & General Purpose Non-Industrial	1,766.42
13	HV 4	Steel Industries	5,616.32
14	HV 5	PWW, Irrigation & Agriculture allied	139.19

Sl.	Category Name	Category	Revenue
15	HV 6	Residential Purpose	135.50
16	HV 7	Start-up Power Tariff	15.00
17	HV 8	Industries related to manufacturing of RE power generation equipment	0.32
18	HV 9	IT & Textile Industries	0.61
19	HV 10	Temporary	-
Total (A + B)			17,885.27

Thus, CSPDCL submitted reduced revenue from existing tariff to the extent of Rs. 726.48 Crore. Though CSPDCL has revised the Revenue in its replies, CSPDCL has not modified the consequential Revenue Gap/(Surplus) for FY 2022-23, hence, for comparison purposes, CSPDCL Petition values are being considered, in order to avoid confusion.

Further, the Commission observed that even the revised revenue from existing tariff as submitted by CSPDCL still had certain errors, resulting in over-estimation of the revenue, as under:

- Existing tariff of 2-3 categories has not been considered as per the approved tariffs;
- The impact of the Load Factor rebate for HV-4 Steel category had been computed only on the normal consumption, and excluding the consumption during off-peak hours, peak hours, and penal consumption;
- The slab-wise sales and ToD time-slot wise consumption had been considered differently as compared to the actual proportion witnessed in FY 2020-21 and FY 2021-22;
- The Connected Load/Contract Demand data for certain categories had been considered incorrectly.

The Commission has computed the revenue from sale of power at the prevailing tariffs approved in the Tariff Order dated 2nd August, 2021 and the sales approved for each category in this Order. The revenue from sale of power for FY 2022-23 at existing tariff works out to Rs. 16,726.60 crore, as shown in the Table below:

Table 12-39: Revenue from sale of power at existing tariff for FY 2022-23 as computed by the Commission (Rs. Crore)

Sl.	Category Name	Category	Revenue
LV Categories (A)			9,043.01
1	LV 1	Domestic Including BPL Consumers	3,649.79
2	LV 2	Non-Domestic (Normal Tariff)	233.29
3	LV 2.1	Non-Domestic (Demand Based)	713.25
4	LV 3	Agriculture Metered	2,877.30

Sl.	Category Name	Category	Revenue
5	LV 4	Agriculture allied	22.68
6	LV 5	LT Industry	464.30
7	LV 6	Public Utilities	331.64
8	LV 7	IT & Textile Industries	0.59
9	LV 8	Temporary	750.18
HV Categories (B)			7,683.59
10	HV 1	Railway Traction	544.91
11	HV 2	Mines (Coal & Others)	607.55
12	HV 3	Other Industry & General Purpose Non-Industrial	1,684.42
13	HV 4	Steel Industries	4,510.95
14	HV 5	PWW, Irrigation & Agriculture allied	165.36
15	HV 6	Residential Purpose	141.95
16	HV 7	Start-up Power Tariff	23.35
17	HV 8	Industries related to manufacturing of RE power generation equipment	1.52
18	HV 9	IT & Textile Industries	3.58
19	HV 10	Temporary	-
Total (A + B)			16,726.60

12.20 Stand-alone Revenue Gap/(Surplus) for FY 2022-23

CSPDCL's Submission

CSPDCL submitted that there would be a Revenue Surplus of Rs. 3642.72 crore in FY 2022-23 on a standalone basis, based on the projected ARR and revenue from existing tariffs.

Commission's View

The Commission has computed the standalone Revenue Surplus for FY 2022-23 based on the ARR approved and Revenue from existing tariff as computed earlier, as shown in the Table below:

Table 12-40: Standalone Revenue Gap/(Surplus) for FY 2022-23 (Rs. Crore)

Particulars	CSPSCL Petition	Approved
Aggregate Revenue Requirement	14,969.03	15,280.55
Revenue from sale of power at existing tariff	18,611.75	16,726.60
Standalone Revenue Gap/(Surplus) for FY 2022-23	(3,642.72)	(1,446.06)

The Commission approves standalone Revenue Surplus of Rs. 1,446.06 Crore for FY 2022-23 for CSPDCL.

12.21 Cumulative Revenue Gap/(Surplus) for FY 2022-23

CSPDCL's Submission

CSPDCL submitted that there is net standalone Revenue Surplus of Rs. 3642.72 Crore for FY 2022-23. However, considering the net Revenue Gap of Rs 4388.23 Crore carried forward from true up along with carrying cost, there is overall Revenue Gap of Rs 745.64 Crore for FY 2022-23 as shown in the Table below:

Table 12-41: Cumulative Revenue Gap/(Surplus) for CSPDCL for FY 2022-23 as submitted by CSPDCL (Rs. Crore)

Sr. No.	Particulars	Petition
1	Aggregate Revenue Requirement (A)	14,969.03
2	Income from sale of Power at Existing Tariff (B)	18,611.75
3	Standalone Revenue Gap/(Surplus) (C=A-B)	(3,642.72)
4	Gap/(Surplus) from true-up of FY 2020-21 including Review Petition	4,388.23
5	Cumulative Revenue Gap/(Surplus)	745.64

CSPDCL requested the Commission to approve the net Revenue Gap after considering surplus/deficit position of CSPGCL/CSPTCL/CSLDC.

Subsequently, vide its replies to queries, CSPDCL submitted the revised overall Revenue Gap of Rs 725.01 Crore for FY 2022-23 as shown in the Table below:

Table 12-42: Revised Cumulative Revenue Gap/(Surplus) for CSPDCL for FY 2022-23 as submitted by CSPDCL (Rs. Crore)

Sr. No.	Particulars	Petition
1	Aggregate Revenue Requirement (A)	14,969.03
2	Income from sale of Power at Existing Tariff (B)	18,611.75
3	Standalone Revenue Gap/(Surplus) (C=A-B)	(3,642.72)
4	Gap/(Surplus) from true-up of FY 2020-21 including Review Petition	4,367.73
5	Cumulative Revenue Gap/(Surplus)	725.01

Commission's View

The standalone Revenue Surplus of CSPDCL for FY 2022-23 has been combined with the Revenue Gap/(Surplus) of CSPGCL, CSPTCL, CSLDC, and CSPDCL after truing up for FY 2020-21 and the impact of the Review Petition filed by CSPDCL on the Tariff Order for FY 2021-22, along with carrying cost, as discussed earlier.

The cumulative Revenue Gap/(Surplus) approved by the Commission for CSPDCL for FY 2022-23, after considering all the above Revenue Gap/(Surplus) of CSPDCL, CSPGCL, CSPTCL, and SLDC, is given in the table below:

Table 12-43: Cumulative Revenue Gap/(Surplus) for CSPDCL for FY 2022-23 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	CSPDCL Petition	Approved
1	Aggregate Revenue Requirement for FY 2022-23	14,969.03	15,280.55
2	Income from sale of power at existing tariff	18,611.75	16,726.60
3	Standalone Revenue Gap/(Surplus)	(3,642.72)	(1,446.06)
4	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSPGCL	-	246.21
5	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSPTCL	-	(90.32)
6	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSLDC	-	(3.32)
7	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSPDCL, including impact of Review Petition	4,367.73	1,679.82
8	Total Past Revenue Gap/(Surplus)	4,367.73	1,832.39
9	Cumulative Revenue Gap/(Surplus)	725.01	386.33
10	Adjusted ARR for Recovery	19,336.76	17,112.94
11	Total estimated sales		27,503.20
12	Stand alone cost of supply		6.85
13	Adjusted Cost of supply after considering Gap		6.22

13 TARIFF PRINCIPLES AND TARIFF DESIGN

13.1 Approach for Tariff for FY 2022-23

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 Orders as well as this Order has taken various steps to protect public interest and provided relief to the consumers and Utilities in the State of Chhattisgarh.

Based on the ARR and Sales approved, the Average Cost of Supply (ACoS) approved by the Commission for FY 2022-23 is shown in the Table below:

Table 13-1: Average Cost of Supply (Rs./kWh) for CSPDCL for FY 2022-23

Sr. No.	Particulars	CSPDCL Petition	Approved
1	Aggregate Revenue Requirement for FY 2022-23	14,969.03	15,280.55
2	Income from sale of power at existing tariff	18,611.75	16,726.60
3	Standalone Revenue Gap/(Surplus)	(3,642.72)	(1,446.06)
4	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSPGCL	-	246.21
5	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSPTCL	-	(90.32)
6	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSLDC	-	(3.32)
7	Gap/(Surplus) carried forward from final true-up of FY 2020-21 for CSPDCL, including impact of Review Petition	4,367.73	1,679.82
8	Total Past Revenue Gap/(Surplus)	4,367.73	1,832.39
9	Cumulative Revenue Gap/(Surplus)	725.01	386.33
10	Adjusted ARR for Recovery	19,336.76	17,112.94
11	Total estimated sales		27,503.20
12	Stand alone cost of supply		6.85
13	Adjusted Cost of supply after considering Gap		6.22

The Commission has not created any regulatory Assets for FY 2021-22.

13.2 Voltage-wise Cost of Supply for FY 2022-23

The Commission has computed the Voltage-wise Cost of Supply (VCoS) for FY 2022-23 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 $\pm 20\%$ of the overall ACoS for the Distribution Licensee. The Commission feels that in the absence of a realistic assessment of the voltage-wise losses, the determination of VCoS may lead to incorrect conclusions. However, the Hon'ble APTEL has directed that the tariffs and cross-subsidies have to be determined keeping in view the VCoS, while ensuring that the tariffs are within $+20\%$ 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 previous Order in this regard has been carried forward in this Order.

The VCoS for FY 2022-23, as calculated by the Commission based on approved ARR and available data, is given in the Table below:

Table 13-2: VCoS for FY 2022-23 as calculated by Commission

Sr. No.	Particulars	EHV	33 kV	11 kV and LV	Total
1	Energy Sales (MU)		7,195.21	16,846.45	24,041.66
2	Distribution Loss (%)		4.85%	19.57%	15.67%
3	Energy input at 33 kV (MU)		7,561.97	20,945.93	28,507.90
4	Less: Direct Input to Distribution at 33/11 kV (MU)		93.31	258.46	351.77
5	Energy input to Discom level (MU)		7,468.66	20,687.47	28,156.13
6	EHV Sales (MU)	3,461.53			
7	Energy requirement for Distribution (MU)	3,461.53	7,468.66	20,687.47	31,617.67
8	Transmission Loss (%)	3.00%	3.00%	3.00%	
9	Energy requirement at G<>T Interface (MU)	3,568.59	7,699.65	21,327.29	32,595.53
10	Avg. Power Purchase Cost Rate (Rs. /kWh)	3.75	3.75	3.75	
11	Power Purchase Cost (Rs. Cr.)	1,338.57	2,888.12	7,999.81	12,226.49
12	Other Cost (Rs. Cr.)	334.36	721.42	1,998.27	3,054.05
13	Past Revenue Gaps (Rs. Cr.)	200.61	432.84	1,198.94	1,832.39
14	Total Cost (Rs. Cr.)	1,873.54	4,042.38	11,197.01	17,112.94
15	Energy Sales (MU)	3,461.53	7,195.21	16,846.45	27,503.20
16	Cost of Supply (Rs. /kWh)	5.41	5.62	6.65	6.22

13.3 Tariff Philosophy for FY 2022-23

As discussed earlier, the Commission has determined the Cumulative Revenue Gap of Rs. 386.33 Crore. In order to recover the Revenue Gap, the Commission has approved increase in the category-wise Tariff for FY 2022-23.

In its Petition, CSPDCL had requested for uniform tariff hike in energy charges across all consumer categories to meet the approved Revenue Gap. The average tariff increase effectively claimed by CSPDCL was 5.39% to meet the Revenue Gap claimed by the Companies, which translates to 35 paise/kWh. The Average Billing Rate (ABR) estimated by the Commission at the existing tariff for FY 2022-23 is Rs. 6.08/kWh. Hence, the Commission has approved average tariff increase across all consumer categories of 2.31%, which translates to 14 paise/kWh, with the adjusted ACoS of Rs. 6.22/kWh.

The Commission has increased the Energy Charges across different categories/slabs from 5 paise/kWh to 15 paise/kWh, with no change being made in the Fixed/Demand Charges. 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 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. The tariff increase approved for different categories is quite nominal and far lesser than the prevalent inflation indices. The Commission has also given certain directions to CSPDCL for improving its operational efficiency including its metering, billing and collection efficiency.

13.4 Replacement of “Connected Load” with “Sanctioned Load”

The term “Connected Load” has been replaced with the more appropriate term “Sanctioned Load” at appropriate places in the Tariff Schedule.

13.5 Power Factor Incentive and Surcharge for LV category

The Commission has retained the Power Factor Incentive and Surcharge as approved in the previous Tariff Order for FY 2021-22, wherein, in order to improve the overall Power Factor, the Commission has revised the floor level of Power Factor to 0.90 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, Power Factor incentive for Power Factor of above 0.95 was extended to all categories of LV consumers in whose case power factor surcharge is applicable. Such incentive is 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.

13.6 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.

13.7 Billing on accumulated meter reading

The Commission has retained the dispensation related to billing on accumulated meter reading, as approved in the previous Tariff Order, as under:

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.

13.8 Category-wise tariff

The approach of the Commission for determination of tariff for FY 2022-23 for various consumer categories is discussed below.

13.8.1 LV 1: Domestic

The load limit for single-phase connection for LV 1 category has been retained as 5 kW.

It is clarified that Dharamshalas and working women's hostels run by Charitable Trust, as well as Government student hostels, are included in LV-1 Domestic Category.

It is clarified that only gymnasium and clubhouses within the housing society as well as farm houses for own use are included in LV-1 Domestic Category

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 2022-23. The Commission has retained the slabs for fixed charges and energy charges as approved in the Tariff Order for FY 2021-22.

The energy charges of all consumption slabs have been increased by 10 paise/kWh. 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.

13.8.2 LV 2: Non-Domestic

The load limit for single-phase connection for LV 2 category has been retained as 5 kW.

The Non-Domestic tariff category has two sub-categories, i.e., consumption-based and demand-based, which has been retained.

The Energy Charges for all sub-categories and consumption slabs have been increased by 15 paise/kWh.

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.

The Commission has retained the discount of 7% on Energy Charges 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 avam Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avam 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.

13.8.3 LV 3: Agriculture

The energy charges have been increased by 15 paise/kWh to reduce the cross-subsidy.

The Commission has accepted CSPDCL's request and incorporated the clause that consumers opting for flat rate billing under KJJY scheme shall pay Rs. 100/HP/month as flat rate charges, in addition to fixed charges on billing demand plus energy charges on consumption payable by State Government under KJJY scheme up to the applicable ceiling limit of 6000/7500 units annual consumption.

The concession of 20% provided to the consumers having second pump, which does not receive Government Subsidy, has been retained.

13.8.4 LV 4: Agriculture Allied Activities

The applicability of this category has been retained as approved in the previous Tariff Order. The Energy Charges have been increased by 15 paise/kWh to reduce the cross-subsidies.

13.8.5 LV 5: LT Industries

The Energy Charges for all sub-categories and consumption slabs have been increased by 15 paise/kWh.

A discount of 5% on Energy Charges shall be applicable for Poha and Murmura mills under LV-5 category.

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 avam Dakshin Kshetra Adivasi Vikas Pradhikaran" and "Sarguja avam 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.

13.8.6 LV 6: Public Utilities

The energy charges for the Public Utilities category has been increased by 15 paise/kWh to meet the revenue requirement, while at the same time ensuring that the cross-subsidy for this category is within limits.

13.8.7 LV 7: IT Industries & Export Oriented Textiles

The Commission has retained the export oriented Textile Industries in this category and retained the two-part tariff introduced in the previous Tariff Order. The energy charges for the Public Utilities category has been increased by 15 paise/kWh.

13.8.8 LV 7: 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 2022-23 for HV categories is discussed below:

13.8.9 HV 1: Railway Traction

The Energy Charges have been increased by 15 paise/kWh to reduce the cross-subsidies. 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%, the rebate allowed on Energy Charge calculated on entire energy consumption for that month has been reduced from 30% to 20%.

13.8.10 HV 2: Mines

The energy charges have been increased by 15 paise/kWh to meet the revenue requirement.

13.8.11 HV 3: Other Industrial and General Purpose Non-Industrial

The Energy Charges have been increased by 15 paise/kWh, to meet the revenue requirement.

Special flat rate single-part tariff is continued for Electric Vehicle charging stations.

The discount of 7% on Energy Charges 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 avam Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avam Uttar Kshetra Adivasi Vikas Pradhikaran Notified Vide Order dated August 22, 2005, has been continued.

The State Government, under the 'Bespoke Policy' aims to promote Textile, Jute, and ethanol industries. In light of this, and with the view to rationalise the tariff for these industries, a discount of 25% on Energy Charges has been provided for Textile industries including handlooms and powerlooms, Jute industries, and ethanol industries categories under HV-3 category.

The discount of 15% on Energy Charges applicable for defence establishments under Government of India has been continued.

The discount of 5% on Energy Charges applicable for rice mills/Poha and murmura mills has been continued.

The discount of 10% on Energy Charges applicable for exclusive oxygen plants connected up to 33 kV supply voltage has been continued.

13.8.12 HV 4: Steel Industries

The Energy Charges for 220 kV and 132 kV sub-categories have been increased by 5 paise/kWh, while the Energy Charges for 33 kV and 132 kV sub-categories have been increased by 15 paise/kWh, to meet the revenue requirement.

In the Tariff Order for FY 2021-22, the Commission had 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. The Commission has retained the Load Factor rebate for HV-4 category at the same level. The Load Factor rebate for HV-4 Steel category shall also be applicable to consumers 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.

The power-off (non-supply) hours have been retained as 36 hours per month, i.e., 1.5 days, for calculation of Load Factor.

The Licensee and consumers shall ensure compliance with all safety requirements specified under the applicable laws and amendments thereof from time to time.

13.8.13 HV 5: Irrigation, Agriculture Allied Activities & Public Water Works

The Energy Charges have been increased by 15 paise/kWh, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

13.8.14 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.

13.8.15 HV 7: Start up Power

The Energy Charges have been increased by 15 paise/kWh, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

13.8.16 HV 8: IT Industry & Export Oriented Textile Industries

The Commission in order to promote the textile industry and regenerate employment in this industry in the State, had included the export oriented Textile Industries in this category in the previous Tariff Order, which has been retained.

Further, the Commission had introduced a two-part tariff with lower Demand Charges and Energy Charges such that they are cross subsidized to certain extent for this category, which has been retained.

The Energy Charges have been increased by 15 paise/kWh, to meet the revenue requirement, while at the same time, reducing the cross-subsidy

13.8.17 HV 9: 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.

13.9 Minimum Billing Demand

The minimum Billing Demand for the relevant LV categories and all HV categories has been increased from 75% to 80%, for facilitating effective load management.

13.10 Time of Day Charges

The ToD time-slots and rates have been retained as approved in the previous Tariff Order.

13.11 Wheeling Charges

The Commission notes that CSPDCL in its Petition has not submitted the details of Wheeling Charges for FY 2022-23. 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 28,156.13 MU based on the approved Energy Balance for FY 2022-23.

For long-term, medium-term and short-term open access customers, Wheeling Charges shall be Rs. 287.70/MWh (or Rs. 0.2877 per kWh) for the energy computed as per the provisions made in Regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for wheeling. The same charges shall be applicable for both collective and bilateral transactions at the point of injection.

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.

For Renewable Energy Open Access transactions:

- a) The Open Access customers availing long-term/medium-term/short-term open access customers shall bear the energy loss specified as under:
 - a. Energy Losses for using only the Transmission system of CSPTCL shall be 3%.
 - b. Energy Losses/for using only distribution system of CSPDCL shall be 6%.
 - c. Energy losses for using both the transmission system of CSPTCL and distribution system of CSPDCL or Combination thereof shall be 6%.

13.12 Revenue at Approved Tariff

The approved Tariff Schedule is given in the next Chapter.

The revised tariff will be applicable with effect from April 1, 2022, for the consumers of the State, for FY 2022-23. The category-wise revenue at revised tariffs approved in this Order are shown in the Table below:

Table 13-3: Revenue in FY 2022-23 at Tariffs approved by the Commission

Sr. No.	Consumer Category	Revenue at approved Tariff
A	LV Categories	9,250.04
1	LV 1: Domestic including BPL	3,722.35
2	LV 2: Non-Domestic (Normal Tariff & Demand Based Tariff)	962.63
3	LV 3: Agriculture	2,959.11
4	LV 4: Agriculture allied industry	23.17
5	LV 5: LT Industry	437.33

Sr. No.	Consumer Category	Revenue at approved Tariff
6	LV 7: Public Utilities	338.98
7	LV 8: IT & Textiles	0.61
8	LV 9: Temporary	769.87
B	HV Categories	7,863.14
1	HV 1: Railway Traction	627.60
2	HV 2: Mines (Coals & others)	625.10
3	HV 3: Other Industry & General-purpose Industry	1,736.46
4	HV 4: Steel Industries	4,527.50
5	HV 5: Irrigation & Agriculture Allied Activities	170.80
6	HV 6: Residential	146.44
7	HV 7: Start up Power	23.94
8	HV 8: Industries related to manufacturing of RE power generation equipment	1.58
9	HV 9: IT & Textiles	3.72
C	Total Revenue from LV and HV categories	17,113.18

The computation of category-wise revenue from revised tariff approved for CSPDCL for FY 2022-23 is given as **Annexure V** to this Order.

13.13 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. 6.22 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 13-4: Cross-subsidy with Existing tariff and Approved tariff

Consumer Category		Approved in Tariff Order FY 2021-22		Approved in Tariff Order for FY 2022-23	
		ABR (Rs. /kWh)	ABR/ ACOS (%)	ABR (Rs. /kWh)	ABR/ ACOS (%)
L V	Domestic	5.00	78%	5.13	82%
	Non-Domestic	8.47	132%	8.97	144%
	Agriculture	5.35	83%	5.43	87%
	Industry	7.46	116%	7.67	123%
	Public Utilities	6.77	106%	6.93	111%
H V	Railway Traction	6.05	94%	5.33	86%
	Mines	8.64	135%	9.02	145%
	Other Industrial & General Purpose Non-Industrial	8.77	137%	9.17	147%
	Steel Industries	6.51	101%	6.36	102%

13.14 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:

Rs. 0.62 per kWh for 220 kV/132 kV consumers (which is 90% of the computed value of Rs. 0.69 per kWh)

Rs. 0.90 per kWh for 33 kV consumers (which is 90% of the computed value of Rs. 1.00 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.0.31 per kWh (which is 50% of the CSS applicable for other 220 kV/132 kV consumers).

(b) For 33 kV consumers Rs. 0.45 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, Cross Subsidy Surcharge shall be applicable as per the provisions of CSERC (Grid Interactive Distributed Renewable Energy Sources) Regulations, 2019, as amended from time to time and Orders thereunder.

13.15 Parallel Operation Charges

The Commission has retained the Parallel Operation Charges (POC) as 13 paise/kWh as determined in the previous Tariff Order.

13.16 Applicability of Order

The approved Tariff Schedule for FY 2022-23 is given in the next Chapter.

The Order will be applicable from 1st April, 2022 and will remain in force till March 31, 2023 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.

14 TARIFF SCHEDULE FOR FY 2022-23

This Tariff Schedule shall be applicable from April 1, 2022.

14.1 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 Sanctioned 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 Sanctioned load of 150 HP in case of other tariff, as applicable.

14.1.1 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 and working women's hostels run by charitable Trust, Government student 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 and club house within the housing society, Government Schools, farm houses for own use, 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 Sanctioned Load up to 5 kW;	3.70
	101-200 units		3.90
	201 - 400 units	Rs. 30/- per kW/month for Sanctioned Load above 5 kW and up to 10 kW;	5.30
	401 – 600 units		6.30
	601 and above units	Rs. 40/- per kW per month for Sanctioned Load above 10 kW	7.90

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 Sanctioned 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 Sanctioned Load for any three consecutive months, then the Sanctioned Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Sanctioned 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 Sanctioned Load for any three consecutive months, then the Sanctioned 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.

14.1.2 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- (up to 5 kW)	0 – 100 units	Rs. 50 per kW per month	5.85
	101 - 400 units		6.85
	401 and above units		8.25
LV-2.2: Three Phase Non-Domestic			
(A) Up to 15 kW	0-400 units	Demand Charges- Rs 120/kW/month on billing demand	6.85
	401 and above units		8.25
(B) Above 15 kW	All units	Demand Charges- Rs 200/kW/month on billing demand	7.55

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 Sanctioned Load for any three consecutive months, then the Sanctioned Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Sanctioned 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 Sanctioned Load for any three consecutive months, then the Sanctioned 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. The discount of 50% on Energy Charges applicable for mobile towers set up after 1st April 2021 in left-wing extremism affected districts shall continue.
- 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 avam Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avam Uttar Kshetra Adivasi Vikas Pradhikaran Notified Vide Order dated August 22, 2005.

14.1.3 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	5.05

The load of 100 W for light and fan is permitted in hutment at or near the motor pump set.

Notes:

- Fixed Charge is monthly minimum charge, whether any energy is consumed during the month or not.
- For non-subsidized agriculture pump connection, a concession of 20% on energy charges shall be allowed.
- Consumers opting for flat rate billing under KJJY scheme shall pay Rs. 100/HP/month as flat rate charges; in addition to fixed charges on billing demand plus energy charges on consumption payable by State Government under KJJY scheme up to the applicable ceiling limit of 6000/7500 units annual consumption.

14.1.4 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	5.05
LV-4.1 (B): Above 25 HP up to 150 HP	Rs. 110 per HP per month or Rs. 147 per kW per month	5.45
LV-4.2: Demand based tariff for Contract Demand of 15 to 112.5 kW	Rs. 200 per kW per month on billing demand	5.65

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.

14.1.5 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, textile industries including power looms and handlooms, rice mills, poha and murmura mills, dall-mills, oil mills, ice factories, cold storage plants, ice candies, terracotta, , Jute industries, handicraft, agro-processing units, minor forest produce, ethanol industries, 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	4.15
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 80/kW/month on billing demand	3.75

Category of Consumers		Demand Charge	Energy Charge (Rs. per kWh)
5.2	Other Industries		
5.2.1	Up to 25 HP or 18.7 kW	Rs. 120/kW/month on billing demand	5.15
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 100/kW/month on billing demand	4.15
5.2.2	Above 25 HP up to 150HP (18.7 kW to 112.5 kW)	Rs. 150/kW/month on billing demand	5.90
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 130/kW/month on billing demand	5.40

*Notified Vide Order dated August 22, 2005

Notes:

- Demand Charge on contract demand is monthly minimum charge, whether any energy is consumed during the month or not.
- In order to give impetus to LT industries located in rural areas, a rebate of 5% in energy charges for consumers specified under tariff category shall be allowed for LV industries located in rural areas notified by Government of Chhattisgarh.
- In accordance with the Section 62(3) of EA 2003 providing for differentiation in tariff based on geographical position of any area, 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).
- A rebate of 10% on Energy Charges shall be applicable for industrial activities being run exclusively by registered women self-help groups.
- A discount of 5% on Energy Charges shall be applicable for Poha and Murmura mills.

14.1.6 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	6.25

Notes:

- Fixed Charge is monthly minimum charge whether any energy is consumed during the month or not.
- If the Recorded Demand exceeds the Sanctioned Load for any three consecutive months, then the Sanctioned Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Sanctioned Load, the load enhancement charges shall be applicable; however, the Security Deposit shall not be required to be increased correspondingly.
- If the Recorded Demand is lower than the Sanctioned Load for any three consecutive months, then the Sanctioned Load can be restated to the highest demand recorded in these three months at the option of the consumer.

14.1.7 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	5.15

Note:

Demand Charge is payable as monthly minimum charge whether any energy is consumed during the month or not.

14.1.8 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:

- 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 Sanctioned 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.

14.1.9 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. Sanctioned 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 80% 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.

14.1.10 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 Sanctioned 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.

14.1.11 Provisions of billing in case of Excess Supply

1. For Sanctioned load-based tariff

- i. The consumers, except the domestic (LV-1) consumers, availing supply at Sanctioned load-based tariff shall restrict their actual connected load within the Sanctioned load. However, in case the actual connected load in any month exceeds the Sanctioned load, the Sanctioned load-based tariff shall apply only to the extent of Sanctioned load and corresponding units of energy. The connected load in excess of Sanctioned 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 Sanctioned 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 Sanctioned load and at the rate of two times of Sanctioned load based tariff if the excess connected load is found beyond 20% of Sanctioned 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 Sanctioned 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 Sanctioned Load for any three consecutive months, then the Sanctioned 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 Sanctioned Load for any three consecutive months, then the Sanctioned Load shall be restated to the highest demand recorded in these three months at the option of the consumer.

2. **For Demand Based tariff consumers**

- 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 Sanctioned load, whichever is applicable. However, contract demand for the demand-based tariff consumer can be less than Sanctioned 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. Additional Charges

Every Local Body shall pay an additional charge equivalent to any tax or fee levied by it under the provisions of any law including the Corporation Act, District Municipalities Act or Gram Panchayat Act on the poles, lines, transformers and other installations through which the Local Body receives supply.

5. Advance Payment Rebate

For advance payment made before commencement of consumption period for which bill is to be prepared, a rebate @ 0.5% per month on the amount which remains with the Licensee at the end of 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. Rounding off

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

For example: - If the total amount of bill is Rs. 235.00, then the bill shall be rounded off to Rs. 240 and Rs. 5.00 will be credited in next month's bill, whereas if the total amount of bill is Rs. 234.95, then the bill will be rounded off to Rs. 230 and Rs. 4.95 will be debited in next month's bill. In view of the above provision, no surcharge will be levied on outstanding amount, which is less than Rs. 10.

7. Applicability of tariff

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

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 April 1, 2022 as per the formula and conditions specified in the CSERC MYT Regulations, 2021 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.

As per Regulation 93.1 of the CSERC MYT Regulations, 2021, the FCA amount for CSPGCL shall be determined on bimonthly basis or as decided by the Commission in the Tariff Order.

CSPGCL shall intimate the amount of CHFC by the last day of the second month following the last day of the bi-monthly period for which the VCA is to be determined. If the CHFC is to be determined for the bi-monthly period of April 2022 and May 2022, then the CHFC shall be intimated by the CSPGCL to CSPDCL by 31st July 2022.

CSPDCL shall work out the amount of "variable cost adjustment charge" (in paise/ kWh) and shall intimate the amount thereof and manner of determination of the same to the Commission by 31st August 2022 for the bi-monthly period ending May 2022 and by 31st October 2022 for the bi-monthly period ending July 2022 and so on. The gist of VCA computation shall be widely publicized by CSPDCL in the leading newspapers of the State. Calculations of the VCA charge in paise/kWh for the particular bi-monthly period shall be displayed by the CSPDCL on its website for the information of the consumers, which shall remain on the website till truing up the ARR of the particular year.

Unless intimated otherwise by the Commission, CSPDCL shall simultaneously include the amount of "variable cost adjustment charge" to be recovered from the individual consumers on the actual sales of the period for which bills are to be raised in the period shown below;-

Period of the year for which VCA is to be determined	CSPDCL to include the variable cost charge in monthly consumers bills to be raised for the bi-monthly period	
First bi-monthly period	April and May	Monthly bills to be raised in September and October on the sales for the months of August and September, respectively
Second bi-monthly period	June and July	Monthly bills to be raised in November and December on the sales for the months of October and November, respectively
Third bi-monthly period	August and September	Monthly bills to be raised in January and February on the sales for the months of December and January, respectively

Period of the year for which VCA is to be determined	CSPDCL to include the variable cost charge in monthly consumers bills to be raised for the bi-monthly period	
Fourth bi-monthly period	October and November	Monthly bills to be raised in March and April on the sales for the months of February and March, respectively
Fifth bi-monthly period	December and January	Monthly bills to be raised in May and June on the sales for the months of April and May, respectively
Sixth bi-monthly period	February and March	Monthly bills to be raised in July and August on the sales for the months of June and July, respectively

The rate and the amount of the VCA charge shall be shown separately in the consumers' bills.

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. Conditions to have over-riding effect

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

14.2 Tariff Schedule for High Voltage (HV) Consumers

14.2.1 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	4.55

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 20% shall be allowed on Energy Charge calculated on entire energy consumption for that month.

14.2.2 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	6.75
132 kV supply	500	6.90
33 kV supply	500	7.15
11 kV supply	500	7.45

14.2.3 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	6.45
132 kV supply	375	6.60
33 kV supply (Load factor >15%)	375	6.85
33 kV supply (Load factor ≤15%)	190	7.05
11 kV supply (Load Factor >15%)	375	7.25
11 kV supply (Load Factor ≤15%)	190	7.45

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 Murrura mills.
- v. A discount of 10% on Energy Charges shall be applicable for exclusive oxygen plants connected up to 33 kV supply voltage.
- vi. A discount of 25% on Energy Charges shall be applicable for Textile industries including handlooms and powerlooms, Jute industries, and ethanol industries.

14.2.4 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	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
220 kV supply	375.00	5.45
132 kV supply	375.00	5.60
33 kV supply (Load factor >15%)*	375.00	6.10
33 kV supply (Load factor ≤15%)*	190.00	6.60
11 kV supply (Load Factor >15%)*	375.00	6.20
11 kV supply (Load Factor ≤15%)*	190.00	7.00

Notes:-

*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

Monthly Load Factor (LF)	Rebate
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
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 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.

14.2.5 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	5.85

14.2.6 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	6.05

14.2.7 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	8.35

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 up to 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.

14.2.8 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	4.15

14.2.9 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	4.25

Note:

Demand Charge is payable as monthly minimum charge, whether any energy is consumed during the month or not.

14.2.10 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.

14.2.11 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.

14.2.12 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 80% 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 April 1, 2022 as per the formula and conditions specified in the CSERC MYT Regulations, 2021 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.

As per Regulation 93.1 of the CSERC MYT Regulations, 2021, the FCA amount for CSPGCL shall be determined on bimonthly basis or as decided by the Commission in the Tariff Order.

CSPGCL shall intimate the amount of CHFC by the last day of the second month following the last day of the bi-monthly period for which the VCA is to be determined. If the CHFC is to be determined for the bi-monthly period of April 2022 and May 2022, then the CHFC shall be intimated by the CSPGCL to CSPDCL by 31st July 2022. CSPDCL shall work out the amount of "variable cost adjustment charge" (in paise/ kWh) and shall intimate the amount thereof and manner of determination of the same to the Commission by 31st August 2022 for the bi-monthly period ending

May 2022 and by 31st October 2022 for the bi-monthly period ending July 2022 and so on. The gist of VCA computation shall be widely publicized by CSPDCL in the leading newspapers of the State. Calculations of the VCA charge in paise/kWh for the particular bi-monthly period shall be displayed by the CSPDCL on its website for the information of the consumers, which shall remain on the website till truing up the ARR of the particular year.

Unless intimated otherwise by the Commission, the CSPDCL shall simultaneously include the amount of "variable cost adjustment charge" to be recovered from the individual consumers on the actual sales of the period for which bills are to be raised in the period shown below;-

Period of the year for which VCA is to be determined	CSPDCL to include the variable cost charge in monthly consumers bills to be raised for the bi-monthly period	
First bi-monthly period	April and May	Monthly bills to be raised in September and October on the sales for the months of August and September, respectively
Second bi-monthly period	June and July	Monthly bills to be raised in November and December on the sales for the months of October and November, respectively
Third bi-monthly period	August and September	Monthly bills to be raised in January and February on the sales for the months of December and January, respectively
Fourth bi-monthly period	October and November	Monthly bills to be raised in March and April on the sales for the months of February and March, respectively
Fifth bi-monthly period	December and January	Monthly bills to be raised in May and June on the sales for the months of April and May, respectively
Sixth bi-monthly period	February and March	Monthly bills to be raised in July and August on the sales for the months of June and July, respectively

The rate and the amount of the VCA charge shall be shown separately in the consumers' bills.

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.

14.3 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. 83.92 Crore.

For short-term open access customer: Rs. 336.70/MWh (or Rs. 0.3367 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. 287.70/MWh (or Rs. 0.2877 per kWh) for the energy computed as per the provisions made in Regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for wheeling. The same charges shall be applicable for both collective and bilateral transactions at the point of injection.

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 and 132 kV consumers Rs. 0.62 per kWh (which is 90% of the computed value of Rs. 0.69 per kWh).
- ii. For 33 kV consumers Rs. 0.90 per kWh (which is 90% of the computed value of Rs. 1.00 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. 10.44 per kWh (1.5 times of the average billing rate of Rs.6.96 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.13.92 per kWh (2 times of the average billing rate of Rs. 6.96 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) The Open Access customers availing long-term/medium-term/short-term open access customers shall bear the energy loss specified as under:
 - a. Energy Losses for using only the Transmission system of CSPTCL shall be 3%.
 - b. Energy Losses/for using only distribution system of CSPDCL shall be 6%.

- c. Energy losses for using both the transmission system of CSPTCL and distribution system of CSPDCL or Combination thereof shall be 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 and 132 kV consumers Rs.0.31 per kWh.
 - b) For 33 kV consumers Rs. 0.45 per kWh.
 - In case of a consumer receiving power from Solar power plants through open access, Cross Subsidy Surcharge shall be applicable as per the provisions of CSERC (Grid Interactive Distributed Renewable Energy Sources) Regulations, 2019, as amended from time to time and Orders thereunder.
 - 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.

15 DIRECTIVES

15.1 Directive to CSPDCL

The Commission has given specific directives to CSPDCL in this Order, in order to facilitate improvement in operational efficiency. CSPDCL should comply with all these directives and submit quarterly reports to the Commission regarding status of compliance of these directives. CSPDCL should also include a Chapter on Compliance of Directives along with its future ARR and Tariff Petitions.

15.1.1 Distribution Losses

Observations

For proper energy balance, energy input in the distribution system should be certified by nodal agency. To have proper control on energy loss in the distribution system, Division-wise Distribution Loss is required. Also, quarterly report on actual Division-wise Distribution losses needs to be examined. There should be some proper planning to reduce the distribution loss along with establishing separate dedicated department for the same. CSPDCL should submit a quarterly report on actual Division-wise Distribution losses achieved vis-à-vis the target Division-wise Distribution Losses.

Directives

In view of the above observation, following directives are given:

1. CSPDCL is directed to submit the CSLDC certification of energy input for the year for which True-up is being sought along with the next Tariff Petition.
2. CSPDCL should submit the data on Division-wise Distribution Losses for FY 2020-21 and FY 2021-22, within 3 months of issue of this Order.
3. CSPDCL is directed to fix up Division-wise loss reduction trajectory within six months of issue of this Order.
4. CSPDCL should create a separate cell to reduce Distribution losses, which should be headed by a senior officer with sufficient supporting staff and directly reporting to Managing Director (MD) of the Company. This cell shall be responsible for monitoring losses, implementation of all schemes and all actions for reduction of Distribution losses.
5. CSPDCL should submit a quarterly report on actual Division-wise Distribution losses achieved vis-à-vis the target Division-wise Distribution Losses.

15.1.2 DT Metering

Observations

To have proper energy accounting, energy audit, loss assessment and resolve billing related disputes, DT metering plays a very important role in the distribution business.

Directives

In view of the above observation, following directives are given:

1. The Division-wise status of DT metering for FY 2021-22 shows that for many Divisions, there is nil/marginal progress. Overall, out of 1,91,297 DTs, there are only 7,892 DTs (4.1%) with functional meters, 320 DTs (0.2%) with AMR/communicating meters, 5,132 DTs (2.7%) with non-functioning meters, and the balance 1,77,953 DTs (93%) are un-metered. Effectively, if the non-functioning DTs are also considered, then 95.7% of the DTs are not metered. This kind of situation is completely unsatisfactory, and CSPDCL is directed to take immediate and urgent steps to complete the DT metering (especially for agricultural connections) within the next 1 year. Once metered, CSPDCL should ensure that the meters are functional and are read regularly. CSPDCL should submit an action plan to achieve this target, within two months of issue of this Order.
2. In order to facilitate 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. CSPDCL should ensure that all DTs are metered and have functional meters within the next one year.

15.1.3 Separation of Agriculture Feeders

Observations

For better grid management and evaluation of agricultural consumption and losses, the dedicated feeders for agriculture pump sets are required.

Directives

CSPDCL is directed to submit a detailed plan for separation of Agriculture Feeders within two months from this order.

15.1.4 Agriculture Metering

Observations

It is observed that actual average annual load factor for agriculture category based on meter reading has been recorded as 47.60% for FY 2020-21, which translates to average running of more than 11 hours per day throughout the year. Further examination reveals that in some months, the actual load factor has been reported much higher, at 56% for July 2020 which is a monsoon month, and 56.38%, 64.75%, and 65.63% for January 2021, February 2021, and March 2021, respectively. This translates to average running hours of 13.5 hours in July 2020 and January 2021, and as high as ~15.5 hours in February and March 2021.

Directives

CSPDCL is directed to ensure that the agricultural connections are metered properly and meters read on time, so that the agricultural consumption is reported realistically and correctly.

15.1.5 Power Purchase

Observations

It is observed that data submitted in Petition does not reflect item-wise details pertaining to power purchase.

Directives

In order to analyse and to arrive at a logical conclusion, CSPDCL is directed as under:

1. Reconciliation of power purchase expenses in true-up Petition

CSPDCL should submit the following details along with necessary reconciliation:

- a. Power purchase expenses including break-up of Delayed Payment Surcharge payable/paid to CSPGCL, CSPTCL and CGS, as well as details of expenses booked under 'Other Charges'.
- b. Reconciliation of payment made by CSPDCL to CSPGCL for thermal and hydro generation, with revenue booked by CSPGCL.
- c. Reconciliation of payment made by CSPDCL to CSPTCL with revenue booked by CSPTCL.
- d. Reconciliation of payment made by CSPDCL to CSLDC with revenue booked by CSLDC.

2. Renewable Power Purchase

- a. CSPDCL shall comply with the RPO targets specified in the RPO-REC Regulations for each year. CSPDCL should ensure cost effective procurement of RE power and/or RE Certificates.
- b. CSPDCL should submit details and reconciliation of year-wise amount provisioned against "RPO Obligation" or any such similar name/purpose for all years till date, and actual amount spent/utilised against this provisioning till date. This data is to be submitted along with the true-up Petition for each year, henceforth.
- c. CSPDCL is directed to ensure that all past shortfall w.r.t. RPO target be fulfilled by utilising the funds provisioned under "RPO Obligation" or any such similar name/purpose till date, and ensure that such expenses towards meeting RPO obligations are not claimed separately, till such time as the entire provisioning amount is exhausted.

3. Power Banking

Observations

In the Order, the Commission has made certain observations on the Power Banking transactions being undertaken by CSPDCL.

Directives

- a. The Commission directs CSPDCL to maintain a separate passbook, which records the details of all power banking transactions. Along with every true-up Petition, CSPDCL should submit the details of energy received under banking (forward banking) and energy returned under banking (return banking) for that year, with the running total and balance energy returnable/receivable at the end of year.
- b. CSPDCL should submit the complete cost economics of banking transactions for each year in the true-up Petition, after considering all associated costs including Transmission Charges, Open Access charges, etc.
- c. CSPDCL should submit details and reconciliation of year-wise amount provisioned against Banked Power till date, actual amount spent/utilised against this provisioning till date, and balance provisioning available for future set-off after factoring the amount of set-off considered by the Commission in the true-up Orders. This data is to be submitted along with the true-up Petition for each year, henceforth.
- d. CSPDCL should ensure that all expenses towards return of banked power be fulfilled by utilising the funds provisioned against Banked Power or any such similar name/purpose till date, and ensure that such expenses are not claimed separately, till such time as the entire balance provisioning amount is exhausted.
- e. CSPDCL shall not include the expenses provisioned against banked power in its power purchase cost in its true-up Petitions, and shall consider the actual expenses incurred for the banking return, only after the amount of provisioning made till date is exhausted.

15.1.6 Percentage of Burnt/Defective Meters and Assessed Bills**Observation**

The incidence of assessment-based billing and defective meters is on the higher side. Even in the first nine months (April to November) of FY 2021-22, the overall number of assessed cases and burnt/defective meters is as high as 7.3% and 8.4% of the total LV consumers, respectively. The assessed cases and burnt/defective meters are 1.2% and 5.9%, respectively, for LV-1 Domestic category, 41.1% and 8.3%, respectively, for LV-3 Agriculture category, and 15.9% and 3.8%, respectively, for Temporary connections.

Directives

CSPDCL is directed to take corrective measures to bring down the percentage of defective meters and assessment-based billing within the ceiling prescribed in the earlier Tariff Orders by taking up the same in mission mode and submit the status along with its next Tariff Petition.

15.1.7 Submission of Correct Data/Information in the Petition

Observations

In the Order, the Commission has made certain observations regarding the data submitted in the Petition by CSPDCL.

Directives

1. CSPDCL is directed to take due care and diligence while submitting its Petitions, in order to avoid situations of erroneous submissions that required to be revised, in its future submissions.
2. The onus is on CSPDCL to ensure that complete and correct data and information is submitted to the Commission, and in case any data or computation is revised, then all the corresponding changes also need to be submitted.

15.1.8 Reduction in aggregate Technical and Commercial (AT&C) Loss

Observations

CSPDCL has been reporting higher than the approved Distribution Loss levels over the past several years, resulting in higher than normative power purchase quantum and costs and partial disallowances of the same.

Directives

CSPDCL should identify one division in each circle where the AT&C Losses are the highest. CSPDCL should submit a detailed Action Plan for reduction of AT&C Losses in these identified divisions within three months of issue of this Order.

Annexure - I – List of persons who submitted written submissions

S. No.	Name
1.	M/s Chhattisgarh Infotech Promotion Society, Raipur
2.	M/s SBT Textiles Pvt. Ltd., Urla, Raipur
3.	M/s Jayaswal Neco Industries Ltd., Siltara, Raipur (CG)
4.	M/s Chhattisgarh Steel Re-Roller Association, Raipur (CG)
5.	Shri Virendra Pandey, Shanti Nagar, Raipur
6.	M/s Confederation of Electricity Consumers of Chhattisgarh
7.	Udyog Sanchalnalaya, Telibhandha, Raipur
8.	M/s Chhattisgarh Sponge Iron Manufacturers Association, Raipur
9.	Vidyut Karmchari Sangh (Federation) Chotapara, Raipur
10.	Chhattisgarh Rajya Vidyut Mandal Pensioners Association, Gudhiyari, Raipur
11.	South East Central Railway, Bilaspur
12.	CSEB Gratuity and Pension Fund, Danganiya, Raipur
13.	Chhattisgarh Sanyukt Kisan Morcha, Handipara, Raipur
14.	Chhattisgarh Federation of Industries, Bhanpuri, Raipur
15.	M/s Laghu Udyog Bharti, Devendra Nagar, Raipur
16.	Chhattisgarh Wire Industries Association, Samta Colony, Raipur
17.	Chhattisgarh Rajya Vidyut Mandal Patropadhi Abhiyanta Sangh, Bilaspur
18.	Chhattisgarh Printers Association, Raipur
19.	M/s RYB Frozen Foods Pvt. Ltd., Raipur
20.	Chhattisgarh Retired Power Engineers-Officers Association, Raipur
21.	M/s JSW Ispat Special product Ltd. Raigarh
22.	Confederation of Electricity Consumers of Chhattisgarh
23.	Indian Medical Association, Branch Raipur
24.	Chhattisgarh Mini Steel Plant Association, Samta Colony, Raipur(CG)
25.	Chhattisgarh Power Producers Association
26.	Bhilai Steel Plant, Steel Authority of India Ltd.
27.	M/s Shri Bajrang Power and Ispat Ltd., Urla Growth center, Raipur (CG)

Annexure-II – List of persons who submitted comments during hearing

S. No.	Name
1.	Shri Rajkumar Gupta
2.	Shri Shyam Kabra
3.	Shri Uttam Chandrakar
4.	Shri S.K. Goyal, M/s Shri Bajrang Power and Ispat Ltd., Urla Growth center, Raipur (CG)
5.	Shri Vikram Jain, SBT Textiles Pvt. Ltd., Urla, Raipur
6.	Shri Ritesh Jindal, M/s Real Ispat and Power Ltd.
7.	Shri Yogesh Partaity, Chief Electrical Engineer (EEM), SECR, Bilaspur
8.	Shri Vikas Agrawal, M/s C.G. Mini Steel Plant Association
9.	Dr. Vikas Agrawal, Indian Medical Association, Raipur (CG)
10.	Shri Manoj Agrawal, M/s C.G. Steel Re-Roller Association
11.	Shri Paresh Kalla, M/s Jayaswal Neco Industries Ltd., Siltara, Raipur (CG)
12.	Shri Anuj Jindal, M/s Amrit Metals & Gases LLP
13.	M/s Chhattisgarh Wire Industries Association
14.	Shri Hemraj Bain, M/s RYB Frozen Foods Pvt. Ltd. Raipur
15.	Shri Surya Prakash Rathi
16.	Shri Vipin Patel Chhattisgarh Printer Association
17.	Shri Kapil Patel, Laghu Udyog Bharti, Raipur
18.	Smt. S. Lakshmi, Bhilai Steel Plant
19.	Shri Sudhir Nayak, Vidyut Karmchari Sangh (Federation)

**Annexure-III – List of Members who attend the State Advisory Committee
(SAC) Meeting**

S. No.	Name of SAC Members
1.	Managing Director, CSPDCL
2.	Director, CREDA, Raipur
3.	Chief Electrical Engineer, (Distribution) CEDE, South Eastern Central Railway, SECR, Bilaspur (C.G.)
4.	General Secretary, Urla Industries Association, Raipur
5.	Dr. Sandeep Sharma, President, Gitanjali Enclave, Bilaspur
6.	Shri Amit Verma, Electrical Engg., Grahak Panchyat, Raipur

Annexure-IV – FCA Formats

FORMAT-I					
Details/Information for Computation of Energy Charge Rates					
Name of the Company : Chhattisgarh State Power Generation Company Limited					
Name of the Power Station : 4x210 MW Hasdeo Thermal Power Station (HTPS)					
	Description	Unit	Considered in Tariff order	For Month of ---	For Month of ---
a	Quantity of Coal supplied by Coal Company	(MMT)			
b	Adjustment (+/-) in quantity supplied made by Coal Company	(MMT)			
c	Coal supplied by Coal Company (a+b)	(MMT)			
d	Normative Transit & Handling Losses	%	0.2%	0.2%	0.2%
e	Normative Transit & Handling Losses (cxd)	(MMT)			
f	Net coal Supplied (c-e)	(MMT)			
g	Amount charged by the Coal Company	(Rs.)			
h	Adjustment (+/-) in amount charged by Coal Company	(Rs.)			
i	Net amount Charged for coal (g+h)	(Rs.)			
j	Rate of Coal for the period $(i/(f*10^6))$	Rs/MT			
k	Rate of Bonus payable to Coal Company	Rs/MT			
l	Net Rate of coal payable (j+k)	Rs/MT	1810.44		
m	Transportation Charge including Coal sampling charges	Rs/MT	87.24	87.24	87.24
n	Landed Price of Coal per MT (l+m)	Rs./MT	1897.68		
o	Average GCV of coal as received	(kcal/Kg)	3656.40		
p	Normative SHR	Kcal/ KWh	2650	2650	2650
q	Normative Specific Oil Consumption	ml/ KWh	0.80	0.80	0.80
r	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10
s	Normative Auxiliary Consumption	%	9.70%	9.70%	9.70%
t	Coal ECR for the Period= $((p-(qXr))/(o)*(n/1000)/(1-s))$	Rs/ KWh			
u	Coal ECR as considered in Tariff order	Rs/ KWh	1.519	1.519	1.519
v	Change in ECR (t-u)	Rs/ KWh			
w	Scheduled Generation during the Period	KWh			
x	FCA Claim for the Period (vXw)	Rs			
	Note-				
	1. Values to be filled in shaded cells only. Adjustment towards all other parameters shall be taken care of at the time of True Up.				
	2. Other cells carry either computed values or fixed values.				
	3. For computed values formula have been indicated in the particulars column.				
	4. ECR to be worked out to third digit				

FORMAT-I					
Details/Information for Computation of Energy Charge Rates					
Name of the Company : Chhattisgarh State Power Generation Company Limited					
Name of the Power Station: - 1x500 MW Korba West Thermal Power Plant (KWTPP)					
	Description	Unit	Considered in T.O	For Month of	For Month of
a	Quantity of Coal supplied by Coal Company	(MMT)			
b	Adjustment (+/-) in quantity supplied made by Coal Company	(MMT)			
c	Coal supplied by Coal Company (a+b)	(MMT)			
d	Normative Transit & Handling Losses	%	0.2%	0.2%	0.2%
e	Normative Transit & Handling Losses (cxd)	(MMT)			
f	Net coal Supplied (c-e)	(MMT)			
g	Amount charged by the Coal Company	(Rs.)			
h	Adjustment (+/-) in amount charged by Coal Company	(Rs.)			
i	Net amount Charged for coal (g+h)	(Rs.)			
j	Rate of Coal for the period $= (i/(f*10^6))$	Rs/MT			
k	Rate of Bonus payable to Coal Company	Rs/MT			
l	Net Rate of coal payable(j+k)	Rs/MT	1810.44		
m	Transportation Charge including Coal sampling charges	Rs/MT	87.24	87.24	87.24
n	Landed Price of Coal per MT (l+m)	Rs./MT	1897.68		
o	Average GCV of coal as received	(kcal/Kg)	3656.40		
p	Normative SHR	Kcal/ KWh	2390	2390	2390
q	Normative Specific Oil Consumption	ml/ KWh	0.50	0.50	0.50
r	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10
s	Normative Auxiliary Consumption	%	5.25%	5.25%	5.25%
t	Coal ECR for the Period= $((p-(qXr))/(o)*(n/1000)/(1-s))$	Rs/ KWh			
u	Coal ECR as considered in Tariff order	Rs/ KWh	1.306	1.306	1.306
v	Change in ECR (t-u)	Rs/ KWh			
w	Scheduled Generation during the Period	KWh			
x	FCA Claim for the Period (vXw)	Rs			
	Note-				
	1. Values to be filled in shaded cells only . Adjustment towards all other parameters shall be taken care of at the time of True Up.				
	2. Other cells carry either computed values or fixed values.				
	3. For computed values formula have been indicated in the particulars column.				
	4. ECR to be worked out to third digit				

FORMAT-I**Details/Information for Computation of Energy Charge Rates**

Name of the Company : Chhattisgarh State Power Generation Company Limited

Name of the Power Station : - Dr. Shyama Prasad Mukharjee Thermal Power Station –DSPM TPS

	Description	Unit	Considered in T.O	For Month of	For Month of
a	Quantity of Coal supplied by Coal Company	(MMT)			
b	Adjustment (+/-) in quantity supplied made by Coal/ Company	(MMT)			
c	Coal supplied by Coal Company (a+b)	(MMT)			
d	Normative Transit & Handling Losses	%	0.20%	0.20%	0.20%
e	Normative Transit & Handling Losses (cXd)	(MMT)			
f	Net coal Supplied (c-e)	(MMT)			
g	Amount charged by the Coal Company	(Rs.)			
h	Adjustment (+/-) in amount charged by Coal Company	(Rs.)			
i	Net amount Charged for coal (g+h)	(Rs.)	1827.86		
j	Rate of Coal for the period $= (i/(f \times 10^6))$	Rs/MT			
k	Rate of Bonus payable to Coal Company	Rs/MT			
l	Net Rate of coal payable (j+k)	Rs/MT			
m	Transportation Charges Paid to railways	Rs			
n	Transportation Charge rate paid to Railways $(m/(f \times 10^6))$	Rs/MT	192.59		
o	Other Charges including Coal Sampling charges (per Ton) towards transportation	Rs/MT	11.44	11.44	11.44
p	Total per ton Transportation Charges (n+o)	Rs/MT	204.03		
q	Landed Price of Coal per MT (l+p)	Rs./MT	2031.89		
r	Average GCV of coal as received	(kCal/Kg)	3269.32		
s	Normative SHR	Kcal/ KWh	2430	2430	2430
t	Normative Specific Oil Consumption	ml/ KWh	0.50	0.50	0.50
u	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10
v	Normative Auxiliary Consumption	%	9.0%	9.0%	9.0%
w	Coal ECR for the Period = $((s-(tXu))/(r)*(q/1000))/(1-v)$	Rs/ KWh			
x	Coal ECR as considered in Tariff order	Rs/ KWh	1.656	1.656	1.656
y	Change in ECR (w-x)	Rs/ KWh			
z	Scheduled Generation during the Period	Kwh			
aa	FCA Claim for the Period (yXz)	Rs			

- Note:
1. Values to be filled in shaded cells only. Adjustment towards all other parameters shall be taken care of at the time of True Up.
 2. Other cells carry either computed values or fixed values.
 3. For computed values formula have been indicated in the particulars column.
 4. ECR to be worked out to third digit.

FORMAT-I

Details/Information for Computation of Energy Charge Rates

Name of the Company : Chhattisgarh State Power Generation Company Limited

Name of the Power Station : Atal Bihari Vajpayee Thermal Power Station - **ABVTPS****(consolidated => Gharghoda + Robertson)**

	Month	Unit	Considered in T.O	For Month of	For Month of
a	Quantity of Coal Transported by railway from Robertson siding	(MMT)			
b	Quantity of Coal Transported by railway to Gharghoda Siding	(MMT)			
c	Total Coal transferred through rail (a+b)	(MMT)			
d	Per ton Transportation charges from Robertson siding	Rs/ Ton			
e	Per ton Transportation charges from Gharghoda siding	Rs/ Ton			
f	Weighted Average Transportation rate of Coal $\{(aXd+bXe)/c\}$	Rs/ Ton			
g	Input Price of Coal at Mine End as per T.O.	Rs/ Ton	For FY 22-23 – 1510. 90, FY 23-24 – 1511.05, FY 24-25 – 1488.99		
h	Other charges including Coal sampling Fee	Rs/ Ton	16.69	16.69	16.69
i	Normative Transit Loss	%	0.80%	0.80%	0.80%
j	Net landed Cost of Coal $\{(f+g+h)/((1-i))\}$	Rs/ Ton			
k	GCV of coal as received	(kCal/Kg)	3628.91		
l	Normative SHR	Kcal/ KWh	2,390	2,390	2,390
m	Normative Specific Oil Consumption	ml/ KWh	0.50	0.50	0.50
n	GCV of Secondary Fuel (Oil)	Kcal/ml	10	10	10
o	Normative Auxiliary Consumption	%	5.25%	5.25%	5.25%
p	Coal ECR for the Period= $\{(1-mXn)/kX(j/1000)/(1-o)\}$	Rs/ KWh			
q	Coal ECR as considered in Tariff order	Rs/ KWh	For FY 22-23 -1.805 & FY 23-24 -1.806, FY 24-25 – 1.790		
r	Change in ECR (p-q)	Rs/ KWh			
s	Scheduled Generation during the Period	Kwh			
t	FCA Claim for the Period (rXs)	Rs			

FORMAT-I				
Name of the Power Station : ABVTPS - (Robertson)				
	Month	Unit	For Month of ...	For Month of ...
a	Quantity of Coal transferred by railway (RR quantity)	MMT		
b	Transportation Cost Paid to railways	Rs		
c	Transportation rate paid to Railways = $b/a/10^6$	Rs/ Ton		
d	Road Transportation rate	Rs/ Ton		
e	Total Transportation rate (c+d)	Rs/ Ton		
FORMAT-I				
Name of the Power Station : ABVTPS - (Gharghoda)				
	Month	Unit	For Month of ...	For Month of ...
a	Quantity of Coal transferred by railway (RR quantity)	MMT		
b	Transportation Cost Paid to railways	Rs		
c	Transportation rate paid to Railways = $b/a/10^6$	Rs/ Ton		
d	Road Transportation rate	Rs/ Ton		
e	Total Transportation rate (c+d)	Rs/ Ton		

Note-

1. Values to be filled in shaded cells only. Adjustment towards all other parameters shall be taken care of at the time of True Up.
2. Other cells carry either computed values or fixed values.
3. For computed values formula have been indicated in the particulars column.
4. ECR to be worked out to third digit

Annexure-V – Revenue from Sale of Electricity at Approved Tariffs for CSPDCL for FY 2022-23

FY 2022-23 Projected Revenue from Sale of Power to Retail Consumers at Revised Tariff													
Revenue Billed (Rs Crores)													
Sr.No	Category/Slab	Classification	Demand/Fixed Charge (Rs/kW/kWh/HP/kVA/Month)		Energy Charge (Rs/kWh/kVAh)		Sales (MUs) FY 2022-23 Total	Number of consumer FY 2022-23	Load FY 2022-23	Fixed/Demand Charge (Rs Cr)	Energy Charge Total	Total Revenue	ABR (Paisa/kWh)
A	LV						16,190.38	62,27,034	7,245.75	683.57	8,566.47	9,250.04	571
1	Domestic Including BPL Consumers	LV 1					7,255.63	50,20,303	3,444.44	93.20	3,629.14	3,722.35	513
i	0-100		20.00	Rs/kW/Month	3.70	Rs/kWh	2,247.22	39,49,812	2,044.53	49.07	831.47	880.54	392
ii	101-200		30.00	Rs/kW/Month	3.90	Rs/kWh	1,530.10	6,45,951	515.05	18.54	596.74	615.28	402
iii	201-400		30.00	Rs/kW/Month	5.30	Rs/kWh	1,668.15	3,29,095	509.81	18.35	884.12	902.47	541
iv	401-600		40.00	Rs/kW/Month	6.30	Rs/kWh	707.57	61,534	189.94	2.83	445.77	448.60	634
v	600 AND ABOVE		40.00	Rs/kW/Month	7.90	Rs/kWh	1,102.59	33,911	185.12	4.41	871.04	875.45	794
2	Non Domestic Normal	LV 2.1					285.29	3,12,683	682.76	40.97	196.61	237.57	833
i	0-100		50.00	Rs/kW/Month	5.85	Rs/kWh	91.27	2,13,534	210.74	12.64	53.39	66.04	724
ii	101-400		50.00	Rs/kW/Month	6.85	Rs/kWh	120.41	78,721	304.16	18.25	82.48	100.73	837
iii	Above 400		50.00	Rs/kW/Month	8.25	Rs/kWh	73.61	20,427	167.86	10.07	60.73	70.80	962
3	Non Domestic Demand Based Upto 15 kW	LV 2.2					787.50	81,585	444.94	105.44	619.62	725.06	921
	0-400		120.00	Rs/kW/Month	6.85	Rs/kWh	70.89	52,092	2.77	0.40	48.56	48.96	691
	Above 400		120.00	Rs/kW/Month	8.25	Rs/kWh	428.92	19,469	11.25	1.62	353.86	355.48	829
	Above 15 kW		200.00	Rs/kW/Month	7.55	Rs/kWh	287.69	10,025	430.92	103.42	217.20	320.62	1114
4	Agriculture	LV 3					5,454.33	5,03,616	1,271.89	204.68	2,754.44	2,959.11	543
i	Normal		100.00	Rs/HP/Month	5.05	Rs/kWh	5,454.33	5,03,616	1,271.89	204.68	2,754.44	2,959.11	543
5	Agriculture Allied Activities	LV 4					32.98	4,355	32.03	5.78	17.39	23.17	703
i	LV-4.1 (A): Up to 25 HP	4.1 A	100.00	Rs/HP/Month	5.05	Rs/kWh	15.97				8.06	8.06	505
ii	LV-4.1 (B): Above 25 HP up to 150 HP	4.1 B	110.00	Rs/HP/Month	5.45	Rs/kWh	14.31	4,264	30.23	5.35	7.80	13.15	919
iii	LV-4.2: Demand based tariff for Contract Demand of 15 to 112.5 kW	4.2	200.00	Rs/kW/Month	5.65	Rs/kWh	2.71	90	1.80	0.43	1.53	1.96	724

FY 2022-23 Projected Revenue from Sale of Power to Retail Consumers at Revised Tariff													
Sr.No	Category/Slab	Classificati on	Demand/Fixed Charge (Rs/kW/kWH/HP/kVA/Month)		Energy Charge (Rs/ kWh/kVAh)	Sales (MUs)	Number of consumer FY 2022- 23	Load FY 2022- 23	Revenue Billed (Rs Crores)				ABR (Paisa/kWh)
						FY 2022-23			Fixed/Demand Charge (Rs Cr)	Energy Charge Total	Total Revenue		
						Total							
6	Industry	LV 5				617.09	37,978	810.32	128.37	344.96	473.33	767	
i	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	5.1	80.00	Rs/kW/Month	4.15	Rs/kWh	9.45	15,310	122.54	11.76	3.92	15.69	1659
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	a	80.00	Rs/kW/Month	3.75	Rs/kWh	2.58	4,489	26.15	2.51			
ii	Other Industries	5.2				605.05	18,179	661.63	-	327.79	435.26	719	
a	upto 25 HP	5.2.1	120.00	Rs/kW/Month	5.15	Rs/kWh	96.51	7,894	98.18	14.14	49.70	63.84	661
	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	a	100.00	Rs/kW/Month	4.15	Rs/kWh	12.68	1,197	10.65	1.28			
iii	Above 25 HP up to 150 HP	5.2.2	150.00	Rs/kW/Month	5.90	Rs/kWh	471.34	8,463	518.47	93.32	278.09	371.41	788
a	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	a	130.00	Rs/kW/Month	5.40	Rs/kWh	24.52	625	34.33	5.36	13.24	18.60	758
7	Public Utilities	LV 6	190.00	Rs/kW/Month	6.25	Rs/kWh	489.35	50,828	145.32	33.13	305.84	338.98	693
8	IT Industries	LV 7	150.00	Rs/kW/Month	5.15	Rs/kWh	1.06	5	0.33	0.06	0.55	0.61	570
9	Temporary	LV 8				1,267.14	2,15,681	413.73	71.94	697.93	769.87	608	
i	Domestic		45.00	Rs/kW/Month	7.50	Rs/kWh	50.37	38,139	43.61	0.20	37.79	37.99	754
ii	Non- Domestic		75.00	Rs/kW/Month	10.28	Rs/kWh	78.17	18,574	48.92	4.40	80.32	84.73	1084
iii	Agriculture Metered		100.00	Rs/HP/Month	5.05	Rs/kWh	1,125.87	84,227	177.71	28.60	568.56	597.16	530
iv	Agriculture Allied Activities		165.00	Rs/HP/Month	8.18	Rs/kWh	2.49	73,631	139.15	36.95	2.03	38.98	15681
v	Industry		120.00	Rs/HP/Month	6.23	Rs/kWh	1.22	-	-	-	0.76	0.76	623
vi	Other Industry		225.00	Rs/HP/Month	50.94	Rs/kWh	-	-	1.95	0.71	-	0.71	
vii	Public Utilities		285.00	Rs/HP/Month	9.38	Rs/kWh	9.02	1,110	2.38	1.09	8.45	9.54	1059
viii	IT Industry		-	-	7.73	Rs/kWh	-	-	-	-	-	-	

FY 2022-23 Projected Revenue from Sale of Power to Retail Consumers at Revised Tariff													
Sr.No	Category/Slab	Classificati on	Revenue Billed (Rs Crores)										
			Demand/Fixed Charge (Rs/kW/kWH/HP/kVA/Month)		Energy Charge (Rs/ kWh/kVAh)		Sales (MUs) FY 2022-23	Number of consumer FY 2022- 23	Load FY 2022- 23	Fixed/Demand Charge (Rs Cr)	Energy Charge Total	Total Revenue	ABR (Paisa/kWh)
							Total						
B	HV						11,312.82	3,486	3,454.99	1,265.86	6,597.28	7,863.14	695
1	Railway Traction (132/220 kV)	HV 1	375.00	Rs/kVA/Month	4.55	Rs/kVAh	1,176.58	27	421.49	151.74	475.86	627.60	533
2	Mines	HV 2					693.33	130	214.20	102.82	522.28	625.10	902
i	220 kV		500.00	Rs/kVA/Month	6.75	Rs/kVAh	-	-	-	-	-	-	
ii	132 kV		500.00	Rs/kVA/Month	6.90	Rs/kVAh	314.60	5	86.63	41.58	232.32	273.91	871
iii	33 kV		500.00	Rs/kVA/Month	7.15	Rs/kVAh	374.25	101	122.60	58.85	286.39	345.24	922
iv	11 kV		500.00	Rs/kVA/Month	7.45	Rs/kVAh	4.48	23	4.97	2.38	3.57	5.96	1330
3	Other Industrial & General Purpose Non Industrial	HV 3					1,892.64	2,421	956.27	344.26	1,392.20	1,736.46	917
i	220 kV		375.00	Rs/kVA/Month	6.45	Rs/kVAh	30.84	1	22.20	7.99	21.39	29.39	953
ii	132 kV		375.00	Rs/kVA/Month	6.60	Rs/kVAh	345.81	16	159.98	57.59	245.42	303.02	876
iii	33 kV (Load Factor >15%)		375.00	Rs/kVA/Month	6.85	Rs/kVAh	1,313.36	1,602	621.43	223.71	967.41	1,191.13	907
iii	33 kV (Load Factor <15%)		190.00	Rs/kVA/Month	7.05	Rs/kVAh	-	-	-	-	-	-	
iv	11 kV (Load Factor >15%)		375.00	Rs/kVA/Month	7.25	Rs/kVAh	202.63	802	152.65	54.96	157.97	212.93	1051
iv	11 kV (Load Factor <15%)		190.00	Rs/kVA/Month	7.45	Rs/kVAh	-	-	-	-	-	-	
4	Steel Industries	HV 4					7,114.88	566	1,699.52	611.83	3,915.67	4,527.50	636
i	220 kV		375.00	Rs/kVA/Month	5.45	Rs/kVAh	534.91	5	305.54	110.00	314.88	424.87	794
ii	132 kV		375.00	Rs/kVA/Month	5.60	Rs/kVAh	1,058.79	21	221.44	79.72	463.73	543.45	513
iii	33 kV (Load Factor >15%)		375.00	Rs/kVA/Month	6.10	Rs/kVAh	5,507.60	517	1,164.59	419.25	3,127.39	3,546.64	644
iii	33 kV (Load Factor <15%)		190.00	Rs/kVA/Month	6.60	Rs/kVAh	-	-	-	-	-	-	
iv	11 kV (Load Factor >15%)		375.00	Rs/kVA/Month	6.20	Rs/kVAh	13.58	24	7.95	2.86	9.68	12.54	924
iv	11 kV (Load Factor <15%)		190.00	Rs/kVA/Month	7.00	Rs/kVAh	-	-	-	-	-	-	
5	Irrigation & Agriculture Allied Activities, Public Water Works	HV 5	375.00	Rs/kVA/Month	5.85	Rs/kVAh	218.62	221	79.71	28.70	142.11	170.80	781
6	Residential	HV 6	375.00	Rs/kVA/Month	6.05	Rs/kVAh	184.17	78	62.86	22.63	123.81	146.44	795
7	Start Up Power (400/220/123/33/11 kV)	HV 7	200.00	Rs/kVA/Month	8.35	Rs/kVAh	21.94	33	18.71	3.59	20.35	23.94	1092
8	Industries related to manufacturing of equipment for power generation from renewable energy sources	HV 8	130.00	Rs/kVA/Month	4.15	Rs/kVAh	3.12	5	1.09	0.14	1.44	1.58	505
9	IT Industry	HV 9	150.00	-	4.25	Rs/kVAh	7.53	5	1.14	0.16	3.56	3.72	494
C	Total						27,503.20	62,30,520	10,700.74	1,949.43	15,163.76	17,113.18	622