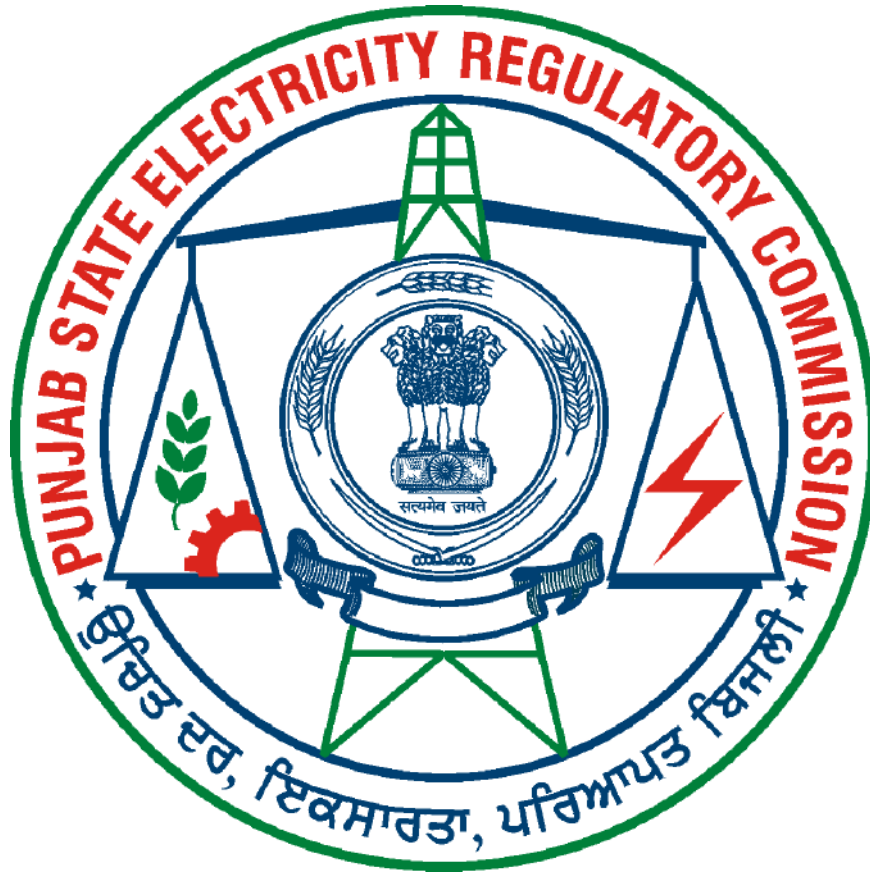


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PUNJAB STATE ELECTRICITY REGULATORY COMMISSION



PSTCL
TARIFF ORDER FOR FY 2023-24
AND
ARR FOR 3RD MYT CONTROL PERIOD
FY 2023-24 to FY 2025-26

**PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SITE NO. 3, BLOCK B, SECTOR 18-A MADHYA MARG,
CHANDIGARH**



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**PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SITE NO. 3, BLOCK B, SECTOR 18-A MADHYA MARG, CHANDIGARH**

PETITION No. 73 OF 2022 FILED BY PUNJAB STATE TRANSMISSION CORPORATION LIMITED FOR TRUE UP OF FY 2021-22, ANNUAL PERFORMANCE REVIEW FOR FY 2022-23, APPROVAL OF ARR FOR THE 3rd CONTROL PERIOD FROM FY 2023-24 TO FY 2025-26 AND DETERMINATION OF TARIFF FOR FY 2023-24.

COMMISSION: Sh. Viswajeet Khanna, Chairperson
Sh. Paramjeet Singh, Member

Date of Order: 15th May, 2023

ORDER

The Punjab State Electricity Regulatory Commission (Commission), in exercise of the powers vested in it under the Electricity Act, 2003 (Act), passes this order for the True-Up of FY 2021-22, Annual Performance Review (APR) for FY 2022-23, approval of ARR for the 3rd Control Period from FY 2023-24 to FY 2025-26 and Determination of Tariff for FY 2023-24 for Transmission Business and SLDC Business of the Punjab State Transmission Corporation Limited (PSTCL). The Petition filed by PSTCL, facts presented by PSTCL in its various submissions, objections received by the Commission from consumer organizations and individuals, issues raised by the public in the public hearings held at Ludhiana, Jalandhar, Gobindgarh and Chandigarh, observations of the Government of Punjab (GoP) and the responses of PSTCL to the objections have been considered. The State Advisory Committee constituted by the Commission under Section 87 of the Act has also been consulted and all other relevant facts and material on record have been considered before passing this Order.

1.1 Background

The Commission has in its previous Tariff Orders determined the tariff in pursuance to the ARRs and Tariff Applications submitted for the integrated utility by the Punjab State Electricity Board (Board) for FY 2002-03 to 2006-07, 2008-09 to 2010-11 and by PSTCL for FY 2011-12 to FY 2022-23. The Tariff Order for FY 2007-08 had been passed by the Commission in Suo-Motu proceedings.

PSTCL has submitted that the Punjab State Transmission Corporation Limited is the Transmission Licensee for Transmission of Electricity in the areas as notified by the Government of Punjab vide notification No. notification. 1/9/08-EB(PR)/196 dated 16.04.2010. PSTCL is vested with the function of intra-state Transmission of electricity in the State of Punjab and the operation of the State Load Dispatch Centre (SLDC). In terms of Section 39 of the Electricity Act, 2003, the Govt. of Punjab notified PSTCL as the State Transmission Utility (STU).

The Commission notified the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2019 which came into force w.e.f. 01.04.2020. The Commission notified the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail supply Tariff) Regulations, 2022 (PSERC MYT Regulations 2022) vide notification no. PSERC/Secy/Regu.165 dated 27.10.2022. These regulations have been followed while passing the present Tariff Order for the relevant years.

1.2 True Up for FY 2021-22, Annual Performance Review for FY 2022-23, ARR for Control Period from FY 2023-24 to 2025-26 and Tariff for FY 2023-24.

PSTCL has filed the present Petition for True up of ARR for FY 2021-22, APR for FY 2022-23 and Annual Revenue Requirement for Control Period from FY 2023-24 to 2025-26 and Tariff for FY 2023-24.

The petitioner has prayed:

- a) To admit the Petition seeking approval of True-up for FY 2021-22, Annual Performance Review for FY 2022-23 in accordance with PSERC MYT Regulations, 2019, and ARR forecast for MYT 3rd Control Period from FY 2023-24 to 2025-26 for Transmission Business and SLDC and determination of Tariff for FY 2023-24 for Transmission Business and SLDC in accordance with PSERC MYT Regulations 2022, as amended from time to time;
- b) To approve Revenue Gap/Surplus arising on account of True-up of FY 2021-22 along with its carrying cost and Revenue Gap/Surplus arising on account

of Annual Performance Review for FY 2022-23 through Tariff in FY 2023-24, as worked out in this Petition;

- c) To approve the ARR forecast for 3rd Control Period FY 2023-24 to 2025-26 for Transmission Business and SLDC;
- d) To approve proposed Tariff for FY 2023-24 for Transmission Business and SLDC;
- e) To invoke its power under Regulation 64 in order to allow the deviations from PSERC MYT Regulations, 2019 & PSERC MYT Regulations 2022, wherever sought in this Petition;
- f) To allow additions/alterations/modifications/changes to the Petition at a future date;
- g) To allow any other relief, order or direction, which the Commission deems fit to be issued;
- h) To condone any error/omission and to give opportunity to rectify the same;

The petition was admitted vide Order dated 21.12.2022. The deficiencies observed in the petition by the Commission were conveyed to PSTCL vide Order dated 21.12.2022. The reply to the deficiencies was furnished by PSTCL vide memo No. SPL-1 dated 28.12.2022. Various meetings were taken with PSTCL on the data submitted in the ARR. The relevant correspondence between the Commission and PSTCL has been placed on the website of the Commission.

1.3 Objections & Public Hearing:

A public notice was published by PSTCL in The Tribune (English), Indian Express (English), Jagbani (Punjabi), Punjabi Jagran (Punjabi) & Dainik Jagran (Hindi) on 28.12.2022 inviting objections from the general public and stake holders on the said petition filed by PSTCL. Copies of the Petition including deficiencies pointed out by the Commission and the reply of PSTCL to the deficiencies were made available in the offices of the CAO (Finance & Audit), PSTCL 3rd Floor Shakti Sadan, Opposite Kali Mata Mandir, the Mall Patiala. Liaison Officer, PSTCL Guest House, near Yadvindra Public School, Phase-8, Mohali, Chief Engineer/P&M, PSTCL, Ludhiana and offices of Superintending Engineers, P&M Circles, Ludhiana, Patiala, Jalandhar, Amritsar and Bhatinda. The information was made available on the website of

PSTCL i.e. www.pstcl.org and the Commission's website i.e. www.pserc.gov.in. The relevant correspondence with PSTCL was also uploaded on the website of the Commission. In the said public notice dated 28.12.2022, objectors were advised to file their objections with the Secretary of the Commission within 21 days of the publication of notice, with an advance copy to PSTCL. The public notice also indicated that the Commission, after perusing the objections received, may invite such objector(s) as it considers appropriate for hearing on the dates to be notified in due course. The public hearings were held at Ludhiana, Jalandhar, Gobindgarh & Chandigarh, as per details hereunder:

Venue	Proposed Date & time of public hearing	Category of consumers to be heard
LUDHIANA Multi Purpose Hall, Power Colony, PSPCL, Opp. PAU Ferozepur Road, Ludhiana	January 09, 2023 (Monday) 11:30 AM onwards	All consumers/organizations of the area
JALANDHAR Conference Room, office of Chief Engineer/Operation (North), PSPCL, Shakti Sadan, G.T. Road, Near Khalsa College, Jalandhar.	January 12, 2023 (Thursday) 11:30 AM onwards	All consumers/organizations of the area including consumers/organizations of Amritsar area
GOBINDGARH Golden Grain Club, Bullepur Road, Khanna.	January 16, 2023 (Monday) 12:00 PM onwards	All consumers/organizations of the area
CHANDIGARH Commission's office i.e. Site No 3, Sector 18-A, Madhya Marg, Chandigarh – 160018.	January 19, 2023 (Thursday) 11.30 AM onwards	All consumers/ organizations
	12.30 PM onwards	Officers'/ Staff Associations of PSPCL and PSTCL

A public notice to this effect was published in various newspapers on 31.12.2022 and was also uploaded on the website of the Commission. All the objectors who had filed their objections and other persons/organizations interested in presenting their views /suggestions were invited to participate in the public hearings.

- 1.4** The Commission held public hearings as per schedule from 09.01.2023 to 19.01.2023 at Ludhiana, Jalandhar, Gobindgarh & Chandigarh. The views of PSTCL on the objections/comments received from public and other stakeholders were heard by the Commission on 28.02.2023

1.5 The Government of Punjab was approached by the Commission vide DO letter No. 01 dated 04.01.2023, and DO No. 369-70 dated 13.02.2023 seeking its views on Petition no. 73 of 2022 filed by Punjab State Transmission Corporation Limited. In response, Government of Punjab, vide Memo POWER PR012 /1/ 2023- OSD POWER/269 dated 31.03.2023, submitted its comments/ observations on the same.

1.6 The Commission received 08 written objections including the comments of Government of Punjab. PSTCL was directed to send its response to the objections raised by the respective objectors. The Commission considered all these objections. The number of objections/comments received from consumer groups, organizations and others are detailed below:

Sr. No.	Category	No. of Objections
1.	Chamber of Industrial and Commercial Undertakings	1
2.	Industries	6
3.	Government of Punjab	1
	Total	8

The complete list of objectors is given in **Annexure-I** of this Tariff Order. PSTCL submitted its comments on the objections to the Commission. PSTCL was directed to send the responses to the respective objectors also. A summary of issues raised in objections, the response of PSTCL and the view of the Commission are contained in **Annexure-II** to this Tariff Order.

1.7 State Advisory Committee

A meeting of the State Advisory Committee constituted under Section 87 of the Act was convened on 16.02.2023 for taking its views on the ARR. The minutes of the meeting of the State Advisory Committee are enclosed as **Annexure-III** to this Order.

1.8 In addition, all subsequent and relevant correspondence between the Commission and PSTCL was made available on the website of the Commission. The Commission has, thus, taken the necessary steps to ensure that due process, as contemplated under the Act and Regulations framed by

the Commission, is followed and adequate opportunity is given to all stakeholders to present their views.

1.9 Compliance of Directives

In its previous Tariff Orders, the Commission issued certain directives to PSTCL in the public interest. A summary of directives issued during previous years, status of compliance along with the fresh directives of the Commission in this petition is given in **Chapter-5** of this Tariff Order.

Chapter 2

True up for FY 2021-22

2.1 Background

The Commission had approved the Annual Revenue Requirement (ARR) of PSTCL for FY 2021-22 in its Order dated 01.06.2020 for the 2nd MYT Control Period of FY 2017-18 to FY 2019-20, which was based on expenditure and revenue estimates of PSTCL for its Transmission and SLDC Businesses. Subsequently, the Commission, in the Tariff Orders of FY 2021-22 and FY 2022-23, reviewed the estimates and revised the ARR for FY 2021-22 based on the revised data made available by PSTCL.

This Chapter contains the true-up of FY 2021-22, based on the prudence check conducted by the Commission of the data submitted by PSTCL in Petition No. 73 of 2022.

2.2 Transmission System Availability

PSTCL has submitted its month-wise Transmission System (TS) Availability for FY 2021-22 as under:

Table 1: Transmission System (TS) Availability of PSTCL for FY 2021-22

Sr. No.	Month	TS Availability (%)
1.	April-21	99.6328%
2.	May-21	99.6729%
3.	June-21	99.8274%
4.	July-21	99.9070%
5.	August-21	99.9360%
6.	September-21	99.8874%
7.	October-21	99.9044%
8.	November-21	99.9821%
9.	December-21	99.8015%
10.	January-22	99.9510%
11.	February-22	99.9438%
12.	March-22	99.9587%
	Average Availability	99.8713%

This is further discussed in **para 2.18**.

2.3 Transmission Loss

In the Tariff Order for PSTCL in FY 2020-21, the Commission had provisionally approved the transmission loss level at 2.46% for FY 2021-22. However, in tariff Order for FY 2021-22 dated 28.05.2021 and tariff Order for FY 2022-23 dated 31.03.2022, the Commission retained provisionally approved transmission loss level of 2.46% for FY 2021-22.

PSTCL's Submission:

Actual transmission loss submitted by PSTCL is as under:

Table 2: Transmission Losses as submitted by PSTCL for FY 2021-22

Sr. No.	Month	Energy injected in PSTCL Substations	Energy exported from PSTCL Substations	Transmission Losses	
		MWh	MWh	MWh	%
1.	April,2021	3340249.62	3258429.96	81819.66	2.45
2.	May,2021	4232518.39	4141629.84	90888.55	2.15
3.	June,2021	6469406.39	6336021.40	133384.99	2.06
4.	July,2021	7644340.76	7490203.59	154137.17	2.02
5.	August,2021	7746231.97	7574879.16	171352.81	2.21
6.	September,2021	6020346.15	5878788.02	141558.14	2.35
7.	October,2021	4491258.88	4377668.58	113590.29	2.53
8.	November-2021	3085052.19	3002146.03	82906.16	2.69
9.	December-2021	3818058.29	3711614.02	106444.27	2.79
10.	January-2022	3459740.05	3378139.36	81600.69	2.36
11.	February-2022	3210649.88	3131966.64	78683.24	2.45
12.	March-2022	4188936.12	4093407.45	95528.67	2.28
13.	Total Losses for FY 2021-22	57706788.69	56374894.06	1331894.63	2.31

PSTCL submitted that:

- Actual Transmission Losses of PSTCL for FY 2021-22 are 2.31% against the Targeted Transmission losses of 2.46%.
- PSERC MYT Regulations, 2019 with regards to Gain/Loss on account of Transmission losses is as under:-

"54. TRANSMISSION LOSS

.....

54.3 *The Commission may stipulate a trajectory for Transmission Loss in accordance with Regulation 4.4(c) as part of the Multi-Year Tariff framework applicable to the Transmission Licensee:*

Provided further that any variation between the actual level of Transmission Loss, as determined by the State Load Despatch Centre and the approved level shall be subject to provisions of Regulation 30:

Provided further that any gain / loss sharing with the Transmission Licensee on account of over-achievement/under-achievement of the Transmission Loss trajectory specified by the Commission, shall be capped to the Return on Equity earned by the Transmission Licensee for the respective year.

"30. SHARING OF GAINS AND LOSSES ON ACCOUNT OF CONTROLLABLE AND UNCONTROLLABLE FACTORS

....

30.3. The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:

- (a) 50% of such gain shall be passed on to consumer over such period as may be specified in the Order of the Commission;
- (b) The balance amount of such gain shall be allowed to be retained by the Applicant;
- (c) Loss, if any, will be borne by the Applicant."

- Accordingly, PSTCL has claimed its share of over-achievement of Transmission loss trajectory on the same grounds as in FY 2020-21 where it had borne the loss on account of under-achievement of TS losses. The calculations of gain on over achievement of TS Loss target are based on the Short Term Power Purchase rate provided by the office of CE/PPR, PSPCL, as per table below :-

Table 3: Calculation of Short Term Power Purchase Rate for FY 2021-22

Sr. No.	Particulars	FY 2021-22
1	Short Term Power Purchase including through exchange (Rs. Crore)	4064
2	Energy Purchase in units (MU)	10,874
3	Short Term Power Purchase Rate Per unit (Rs./Unit)	3.74

Table 4: Gain on Account of Over Achievement of TS loss Target

Sr. No.	Particulars	Working	Amount (in Crores)/Unit
1	Energy Inflow (in MU)		57,706.79
2	Actual Transmission Loss (in MU) (A)		1,331.89
3	Transmission Loss Trajectory for FY 2021-22		2.46%
4	Target Transmission Loss (MU) (B)	57706.79 X 2.46%	1419.59
5	Over-Achievement (in MU) (B-A)		87.69
6	Short-term power purchase rate (Rs./kwh)		3.74
7	Gain on account of Over-achievement of Target (Rs. In crore)	3.74 x 87.7 (MU) x 10^6)	32.77
8	Share of PSTCL as per Regulation 30 (In Rs. Crore)	50% of 32.78	16.39

PSTCL has requested the Commission to approve the amount of Rs. 16.39 Crore as gain on account of over-achievement of Transmission loss Trajectory specified by the Commission for FY 2021-22.

Commission’s Analysis:

- 2.3.1.** The Commission observes that the Actual Transmission loss submitted by PSTCL is 2.31% (1331.89 M kWh) whereas the Commission has approved the Transmission loss of 2.46% for FY 2021-22.
- 2.3.2.** The relevant section of Regulation 30.3 and 54.3 of PSERC MYT Regulation 2019 is as under:

“30. SHARING OF GAINS AND LOSSES ON ACCOUNT OF CONTROLLABLE AND UNCONTROLLABLE FACTORS

....
 30.3. The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:
 (a) 50% of such gain shall be passed on to consumer over such period as may be specified in the Order of the Commission;
 (b) The balance amount of such gain shall be allowed to be retained by the Applicant;
 (c) Loss, if any, will be borne by the Applicant.”

“54. TRANSMISSION LOSS

....
 54.3. The Commission may stipulate a trajectory for Transmission Loss in accordance with Regulation 4.4(c) as part of the Multi-Year Tariff framework applicable to the Transmission Licensee:
 Provided further that any variation between the actual level of Transmission Loss, as determined by the State Load Dispatch Centre and the approved level, shall be subject to provisions of Regulation 30:
 Provided further that any gain / loss sharing with the Transmission Licensee on account of overachievement/ under-achievement of the Transmission Loss trajectory specified by the Commission shall be capped to the Return on Equity earned by the Transmission Licensee for the respective year.”

- 2.3.3.** Accordingly, the Commission has calculated the gain on account of over achievement of transmission loss by PSTCL as under:

Table 5: Gain on account of over-achievement of Transmission Loss

Sr. No.	Particulars	Formulae	
1.	Actual Transmission Loss (in MU)	A	1331.89
2.	Target Transmission Loss (in MU)	$B = 2.46\% \times 57706.79^*$	1419.58
3.	Over achievement (in MU)	$C = A - B$	87.69
4.	Short-term power purchase rate (Rs./kWh)	D	3.74
5.	Gain on account of over-achievement of Transmission Loss (in Rs. Crore)	$E = C \times D / 10$	32.79
6.	Share of PSTCL in total Gain (Rs. Crore)	$F = E \times 50\%$	16.39

*Total Import at PSTCL substations in MUs as submitted by PSTCL

2.3.4. Thus, the Commission allows an amount of Rs. 16.39 Crore as gain sharing to PSTCL on account of over-achievement of Transmission Loss trajectory specified by the Commission. Since the amount allowed is less than the RoE earned by PSTCL in FY 2021-22, the entire amount of Rs. 16.39 Crore is allowed.

2.3.5. For True-up of FY 2021-22, the Commission approves the absolute value of transmission loss of 1331.89 MWh which is 2.46%.

2.4 Capital Expenditure:

2.4.1 The Commission vide Order dated 03.12.2019 for 2nd MYT Capital Investment Plan (CIP) in Petition No. 19 of 2019 had approved the Capital Investment Plan of Rs. 618.35 Crore and Rs.17.79 Crore for Transmission and SLDC business respectively for FY 2021-22. In the Tariff Order for FY 2020-21 dated 1.6.2020, the Commission capped the Capital Expenditure (inclusive of IEDC and IDC) of PSTCL to Rs. 400 Crore for FY 2021-22. In the Tariff Order for FY 2021-22 dated 28.5.2021, the Commission provisionally retained the Capital Expenditure (inclusive of IEDC and IDC) of Rs. 400 Crore for FY 2021-22. In the Tariff Order for FY 2022-23, the Commission approved the Capital Investment Plan of Rs. 436.90 Crore for Transmission and Rs.12.24 Crore for SLDC business respectively for FY 2021-22.

PSTCL's Submission:

2.4.2 The Petitioner had made Investment of Rs. 321.40 Crore during FY 2021-22 and capitalization of CWIP during FY 2021-22 is Rs. 370.60 Crore and Rs. 0.29 crore is written off. The remaining investment was carried over as Capital Work in Progress to the next year.

2.4.3 The Capital Expenditure of Rs. 34.08 Crore (31.63+2.45) was funded through Contributory Works and works under PSDF scheme in FY 2021-22.

2.4.4 Further PSTCL in its reply to deficiencies vide letter dated 28.12.2022 submitted that:

- i) The works submitted at Sr. No. 190 to 196 in form T14 of the petition amounting to Rs. 0.46 Crore have been approved by WTDs.
- ii) The works submitted at Sr. No. 197 to 201 in form T14 of the petition are R&M works amounting to (-) Rs. 0.03 Crore. PSTCL has submitted that During the FY 2021-22, PSTCL has reduced 0.03 crore (-0.03) expenditure from R&M expenses, which is reversal of R & M expenses already disallowed in FY 2020-21 and reduced from the

Opening balance of CWIP as on 01.04.2021. Therefore Rs. 0.03 crore has been adjusted in Capital Expenditure of FY 2021-22.

iii) The works submitted at Sr. No. 205-291 in form T14 of the petition are the works amounting to Rs. 2.39 Crores which are ratified by BoDs and have been approved by the Commission in 3rd MYT (FY 2023-24 to FY 2025-26). The works planned by PSTCL beyond MYT are intended for avoiding any emergent or exigent conditions in the Transmission system of Punjab. Although specific word “Emergent” is missing in the agendas put up before the BoDs of PSTCL and/or in the petitions put up before the PSERC for those works. PSTCL requested the Commission to consider these works as emergent nature. Moreover, the preliminary works like route survey, land demarcation, drawing preparation, tender processing etc. are carried out at no major expense so as to save time and safeguard ROW.

2.4.5 PSTCL has submitted that during FY 2020-21 an amount of Rs. 0.79 Crore was inadvertently added in Capital Expenditure instead of R&M expenditure. Although, the Commission has disallowed Rs.0.79 Crore in Capital Expenditure during FY 2020-21 yet this amount stands included in the Opening CWIP in Audited Accounts. Thus, PSTCL claims the opening CWIP of Rs. 302.06 Crore (302.85 crore - 0.79 crore).

2.4.6 The details of Capital Expenditure as submitted by PSTCL for FY 2021-22 is as under:

Table 6: Details of Capital Expenditure submitted by PSTCL for FY 2021-22
(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capital Expenditure on Spillover schemes during FY 2021-22			
1a	Contributory works	31.63	0	31.63
1b	Works under PSDF Scheme	2.45	0	2.45
1c	Others	135.72	0.66	136.38
1	Total Capital Expenditure on Spillover schemes	169.80	0.66	170.46
2	Total Capital Expenditure on New schemes	145.54	5.44	150.98
3	Total Capital Expenditure during FY 2021-22 as per Accounts (1+2)	315.34	6.10	321.44
4	Add: Assets directly purchased and transferred to GFA	28.40	0	28.40
5	Add R&M	-0.03		-0.03
6	Total Capital Expenditure (3+4)	343.71	6.10	349.81

Table 7: Detailed break-up of assets directly transferred to GFA during FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	Land	0.70
2	Plant and Machinery	26.86
3	Vehicles	0.75
4	Furniture and fixture	0.05
5	Office Equipment	0.04
6	Total Assets directly transferred to GFA	28.40

Commission's Analysis:

2.4.7 The Commission observes that Capital Investment Plan for FY 2021-22 approved in the 2nd MYT CIP Order dated 03.12.2019, in Order dated 01.06.2020 for determining the ARR, subsequently revised in APR and capital expenditure now submitted by PSTCL for true up of FY 2021-22, is as under:

Table 8: Capital Expenditure for FY 2021-22

(Rs. Crore)

Sr. No.	Description	Approved in 2 nd CIP Order	Revised CIP approved for FY 2021-22 in Tariff Order for FY 2020-21 & FY 2021-22	Revised CIP approved for FY 2021-22 in Tariff Order for FY 2022-23	Now Submitted by PSTCL for true-up
1.	Transmission Business	618.35	382.20	436.90	315.34
2.	SLDC Business	17.79	17.80	12.24	6.10
3.	PSTCL	636.14	400.00	449.14	321.44

2.4.8 Further, the Commission notes that the works submitted at Sr. No. 190 to 196 in form T14 of the petition amounting to Rs. 0.46 Crore have been shown approved by Whole Time Directors (WTDs) but these are not approved by the Commission and hence disallowed.

2.4.9 As per PSTCL submission, the works submitted at Sr. No. 197 to 201 in form T14 of the petition are R&M works amounting to (-) Rs. 0.03 Crore and are not part of capital expenditure and hence are excluded.

2.4.10 The works submitted at Sr. No. 205-291 in form T14 of the petition amounting to Rs. 2.39 Crores are ratified by the Board of Directors (BoDs) and have been approved by the Commission in the 3rd MYT (FY 2023-24 to FY 2025-26). The Commission notes that these works have not been approved in the 2nd MYT Control period (FY 2020-21 to FY 2022-23).

Further, Regulation 9.14 of PSERC MYT Regulations 2019 specifies that

9.14 *In case capital expenditure is required for emergency work which has not been approved in the capital investment plan, the Applicant shall submit an application (containing all relevant information along with reasons justifying the emergency nature of the proposed work) seeking approval by the Commission. The Applicant may take up the work prior to the approval of the Commission provided that the scheme has been approved by its Board of Directors as being of emergent nature:*

Provided that the Applicant shall submit the pending details required as per Regulation 9.8 and 9.9 within 10 days of the submission of the application for emergency work:

Provided further that for the purpose of Regulation 9.11, such approved capital expenditure shall be treated as a part of actual capital expenditure incurred by the Applicant in addition to the capital expenditure already approved by the Commission.

PSTCL has submitted that the works planned by PSTCL beyond MYT are intended for avoiding any emergent or exigent conditions in the Transmission system of Punjab. However, the specific word “Emergent” is missing in the agendas put up before the BoDs of PSTCL and/or in the petitions put up before the PSERC for those works. As these works have not been approved by the Board of Directors as being of emergent nature, the Commission disallows the capital expenditure of Rs. 2.39 Crore incurred on the works.

2.4.11 PSTCL has also incurred expenditure of Rs.28.40 Crore during FY 2021-22 on procurement of assets directly, which is being allowed provisionally.

Table 9: Capital expenditure as approved by the Commission for FY 2021-22**(Rs. Crore)**

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capital Expenditure on Spillover schemes during FY 2021-22			
1a	Contributory works	31.63	0	31.63
1b	Works under PSDF Scheme	2.45	0	2.45
1c	Others	135.72	0.66	136.38
1	Total Capital Expenditure on Spillover schemes	169.80	0.66	170.46
2	Total Capital Expenditure on New schemes	145.54	5.44	150.98
3	Total Capital Expenditure during FY 2021-22 (1+2)	315.34	6.10	321.44
4.	Less: R&M expenses (New Schemes)	-0.03	0.00	-0.03
5	Less: Works not approved by BoDs as emergent (New schemes)	2.39	0.00	2.39
6	Less: Works not approved by the Commission (New schemes)	0.46	0.00	0.46
7	Total Capital Expenditure (3+4-5-6)	312.52	6.10	318.62
8	Add: Assets directly purchased and transferred to GFA	28.40	0.00	28.40
9	Net Capital Expenditure	340.92	6.10	347.02

2.4.12 Thus, the Capital Expenditure of Rs. 347.02 Crore for FY 2021-22 is being considered by the Commission for provisional approval. The true up of the Capital expenditure shall be carried out after prudence check after the end of the 2nd MYT Control Period as per regulation 9.15 of PSERC MYT Regulations 2019.

2.5 Capitalization and Capital Works in Progress

PSTCL's Submission:

2.5.1 PSTCL stated that the Capital Expenditure of Rs. 34.08 Crore (31.63+2.45) was funded through Contributory Works and works under PSDF scheme in FY 2021-22. Since these assets were funded through Contributory Works and works under PSDF schemes and were capitalized in FY 2021-22, PSTCL has excluded the Depreciation on these assets in FY 2021-22. The Capital Expenditure to the extent of Rs.34.08 Crore on the assets funded through Contributory Work & PSDF in FY 2021-22 has not been considered for funding through Equity or Loans in FY 2021-22.

2.5.2 The details of Capitalization as submitted by PSTCL for FY 2021-22 is as under:

Table 10: Details of Capitalization submitted by PSTCL for FY 2021-22**(Rs. Crore)**

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capitalization on Spillover schemes during FY 2021-22			
1a	Contributory works	149.71	0.0	149.71
1b	Works under PSDF Scheme	6.90	0.0	6.90
1c	Others	120.98	0.08	121.06
1	Total Capitalization on Spill over schemes	277.59	0.08	277.67
2	Total Capitalization on New schemes	92.70	0.22	92.92
3	Total Capitalization during FY 2021-22 as per Accounts (1+2)	370.29	0.30	370.59
4	ADD written off	0.29	0.0	0.29
5	Add: Assets directly purchased and transferred to GFA	28.40	0.0	28.40
6	Total Capitalization (3+4 +5)	398.98	0.30	399.28

2.5.3 PSTCL has further submitted that Opening CWIP includes R&M works of Rs. 0.79 Crore which are not capital works. Although the Commission has disallowed the same in tariff order dated 31.03.2022 but the same was included in CWIP in Audited accounts. Accordingly, CWIP be considered as Rs.302.06 crores (302.85-0.79).

2.5.4 PSTCL has submitted that it had made an investment of Rs. 321.41 Crore during FY 2021-22 besides directly purchased assets of Rs.28.40 crores. Assets of Rs 370.59 crores have been capitalized during FY 2021-22. The remaining investment of Rs. 352.59 crores was carried over as Capital Work in Progress to the next year.

2.5.5 The details for Capital Works in Progress for Transmission and SLDC as claimed by PSTCL are as under:

Table 11: Capital Works in Progress submitted by PSTCL for FY 2021-22**(Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital Work in Progress	300.69	1.37	302.06
2	Add: Addition of Capital Expenditure during the year	343.71	6.10	349.81
3	Less: Transferred to GFA during the Year	398.98	0.30	399.28
4	Closing Capital Work in Progress	245.42	7.17	252.59

Commission's Analysis:

- 2.5.6** PSTCL has purchased assets amounting to Rs.28.40 Crore and has directly capitalized these assets.
- 2.5.7** The Commission notes that the Capital expenditure for Transmission Business for FY 2021-22 is Rs.312.52 Crore and Rs 6.10 Crores for SLDC business (Table 9) (excluding capital expenditure of Rs 28.40 Crores of assets directly capitalized and Rs. 0.29 crore which has been written off). The Commission in the para 2.4.5,2.4.6 and 2.4.7 has provisionally disallowed capex of Rs.0.46 Crore, Rs.(-)0.03 Crore and Rs 2.39 Crore respectively pertaining to new schemes and therefore also disallows capitalization on these capex of Rs. 0.43 Crore, Rs.0.82 Crore and Rs.2.11 Crore respectively.
- 2.5.8** The Commission had determined the Closing CWIP for True Up of FY 2020-21 for transmission and SLDC as Rs 354.36 crores and 1.44 Crores in the Tariff Order of FY 2022-23.
- 2.5.9** The commission notes that during true up of FY 2020-21 the opening CWIP of Rs 25.86 crores (pertaining to assets directly transferred to GFA during FY 2017-18) was inadvertently added to the CWIP instead of being reduced. As. no financial implication is involved in amending the figures of CWIP, therefore the opening CWIP for FY 2021-22 is considered as under:

Table 12: Opening CWIP of FY 2021-22 as determined by the Commission

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Closing CWIP of FY 2020-21 as approved in Tariff Order for FY 2022-23	354.36	1.44	355.80
2	Less: Asset directly transferred to GFA (Rs.25.86 crores) during FY 2017-18 added in True up of FY2020-21 instead of being reduced	51.72	-	51.72
3	Opening CWIP of FY 2021-22	302.64	1.44	*304.08

**Difference in CWIP of Rs.2.02 Crores is due to previous years disallowances..*

- 2.5.10** The Capitalization as per audited accounts of PSTCL is Rs.370.29 Crore for FY 2021-22 excluding assets directly capitalized. PSTCL has directly capitalized the assets of Rs.28.40 Crore. Therefore, Capitalization of Rs. 398.69(370.29 + 28.40) Crore has been considered for Transmission business of PSTCL. For SLDC Business, PSTCL has submitted addition of GFA during the year as Rs. 0.30

Cre. After verifying the Trial Balance of SLDC submitted by PSTCL, the Commission has considered the addition of GFA during the year as Rs.0.30 Crore for SLDC Business. Accordingly, the net transfer to GFA during FY 2021-22 is as under:

Table 13: Transfer to GFA considered by the Commission for CWIP of FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Transferred to GFA during the Year as per audited accounts (excluding assets directly transferred to GFA) (Table 10 serial no 3)	370.29	0.30	370.59
2	Add: Capitalization of Assets directly transferred to GFA(table 7)	28.40	0.00	28.40
3	Transferred to GFA during the Year	398.69	0.30	398.99
4	Less: Capitalization of works not approved by the Commission as per para 2.5.7 (0.43+0.82+2.11)	3.36	0.00	3.36
5	Net Transferred to GFA considered during the Year	395.33	0.30	395.63

2.5.11 The details for Capital Works in Progress approved by the Commission for Transmission and SLDC Business are as under:

Table 14: Capital Works in Progress approved by the Commission for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital Work in Progress (Table 12)	302.64	1.44	304.08
2	Add: Capital Expenditure during the year (Table 9)	340.92	6.10	347.02
3	Less: Transferred to GFA during the Year (Table 13)	395.33	0.30	395.63
4	Less: Capitalisation written off (as submitted by PSTCL)	0.29	0.00	0.29
5	Closing Capital Work in Progress	247.94	7.24	255.18

2.6 Funding of Capital Expenditure

PSTCL's Submission:

2.6.1 PSTCL submits that funding requirement consists of Capital Expenditure of Spill over Schemes from 1st MYT Control Period from 2017-18 to FY 2019-20 and Capitalization of New Schemes i.e. Schemes of 2nd Control Period i.e. starts from 01.04.2020.

2.6.2 PSTCL further stated that during FY 2021-22, funding requirement for Transmission Business is Rs. 256.82 Crore (Rs. 135.72 Crore for Capital Expenditure of Spill over schemes, Rs. 92.70 Crore for Capitalization of New Schemes and Rs. 28.40 Crore for Directly Capitalized Asset). Funding requirement for Capital Investment for SLDC Business is Rs. 0.88 Crore (Rs. 0.66 Crore for Capital Expenditure of Spill over schemes, Rs. 0.22 Crore for Capitalization of New Schemes). Thus, the total funding for Capital Investment for PSTCL as a whole is Rs. 257.70 (256.82+.088) Crore during FY 2021-22.

2.6.3 The Capital Investment claimed by PSTCL for funding through Loans and Equity for Transmission Business and SLDC Business for FY 2021-22 is as under:

Table 15: Funding Requirement for Capital Investment for FY 2021-22 as claimed by PSTCL

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
A	Transmission			
1	CAPEX of Spill over Schemes (excluding Contributory & PSDF)	135.72	0.66	136.38
2	Capitalization of New Schemes (excluding Contributory & PSDF)	92.70	0.22	92.92
3	Directly Capitalised	28.40	0	28.40
4	Total funding for CAPEX	256.82	0.88	257.70
a	Funding through Equity (Spill over Schemes) (30%)	77.31	0.00	77.31
b	Funding through Loan (70%)	179.51	0.88	180.39
b (i)	Funding through Loan (New Schemes)	43.79	0.22	44.01
b(ii)	Funding through Loan (Spill Over Schemes)	135.72	0.66	136.38

2.6.4 PSTCL stated that it has considered the Capital Investment of Rs. 257.70 Crore for the purpose of funding from Loan and Equity which includes Rs. 256.82 Crore for Transmission Business and Rs. 0.88 Crore in SLDC Business. During FY 2021-22, PSTCL has booked a profit of Rs. 216.48 Crore. As per the MYT Regulations and methodology adopted by the Commission in previous Orders, PSTCL undertook funding of 30% of Funding Requirement i.e., Rs. 77.31 Crore through equity for FY 2021-22. The remaining requirement of Rs. 180.39 Crore in FY 2021-22 was funded by availing loans from Banks/Financial Institutions.

Commission's Analysis:

2.6.5 In Tariff Order for FY 2020-21 dated 01.06.2020, the Commission observes the following:

“ 4.5.8..... The Commission allows the funding through loan as explained below: During the 2nd Capital Investment Plan, the Financing Plan was given as per the Capital expenditure approved by the Commission. Since, the funding of assets is to be approved for PSTCL only after the assets are put to use, the Commission has decided to fund the new schemes on Capitalization. In order to avoid funding of the Spillover schemes twice, The Commission has considered to fund the Spillover Schemes as per capital expenditure incurred for FY 2020-21 to FY 2022-23.”

2.6.6 The Commission has considered the funding of Assets directly transferred to GFA as per capitalization. Accordingly, the Funding requirement is as under:

Table 16: Funding Requirement for Capital Investment for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Capital Expenditure of Spill over Schemes	135.72	0.66	136.38
2	Less: Funding through Grant and Contribution	0.00	0.00	0.00
3	Total Funding Required for Capital Expenditure- Spill over schemes (1-2-3)	135.72	0.66	136.38
4	Funding required for Capitalization of New Schemes	92.70	0.22	92.92
5	Assets Directly Capitalised	28.40	0.0	28.40
6	Less: Capitalization not approved by the Commission/BoDs	3.36	0.00	3.36
7	Total Funding Required for Capitalization- New Schemes (4+5-6)	117.74	0.22	117.96
8	Total Funding required (3+7)	253.46	0.88	254.34

2.6.7 The relevant section of Regulation 19.2 of PSERC MYT Regulation 2019 is as under:

“ 19. DEBT EQUITY RATIO

....

19.2. New Projects – For capital expenditure projects declared under commercial operation on or after the effective date:

(a) A Normative debt-equity ratio of 70:30 shall be considered for the purpose of determination of Tariff;

(b) In case the actual equity employed is in excess of 30%, the amount of equity for the purpose of tariff determination shall be limited to 30%, and the balance amount shall be considered as normative loan;

(c) In case, the actual equity employed is less than 30%, the actual debt-equity ratio shall be considered;

(d) The premium, if any raised by the Applicant while issuing share capital and investment of internal accruals created out of free reserve, shall also be reckoned as paid up capital for the purpose of computing return on equity subject to the normative debt-equity ratio of 70:30, provided such premium amount and internal accruals are actually utilized for meeting capital expenditure of the Applicant's business."

2.6.8 Since PSTCL has booked a profit of Rs. 216.48 Crore in FY 2021-22 and funding requirement is of Rs. 254.34 Crores, therefore equity addition of Rs 76.30 Crores is considered. For funding of Spillover schemes of Rs 136.38 Crores, Rs 40.91 Crores (30% of 136.38) is funded through equity and the rest Rs 95.47 Crores is funded through loan in Transmission Business for FY 2021-22. For new schemes, since the funding required is for Capitalization of Rs. 117.96 Crore, Rs. 35.39 Crore (30% of 117.96) is funded through equity and the rest i.e. Rs. 82.57 Crore is funded through loan.

2.6.9 PSTCL has not considered funding of SLDC schemes through equity and have considered 100% funding through loan of Rs.0.88 Crore for SLDC business.

2.6.10 Therefore, the details of funding through loan and equity allowed by the Commission for FY 2021-22 are as under:

Table 17: Funding for Capital Investment allowed by the Commission for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Spillover Schemes	Funding through Loan	94.81	95.47
2		Funding through Equity	40.91	40.91
3		Total funding required (1+2)	135.72	0.66
4	New Schemes	Funding through Loan	82.35	82.57
5		Funding through Equity	35.39	35.39
6		Total funding required (4+5)	117.74	0.22
7	Total	Funding through Loan	177.16	178.04
8		Funding through Equity	76.30	76.30
9		Total funding required (7+8)	253.46	0.88

2.7 Operation and Maintenance Expenses

A. Employee Expenses

2.7.1 In the ARR Petition for FY 2021-22, PSTCL had projected employee expenses of Rs. 536.37 Crore for its Transmission Business and Rs. 7.32 Crore for its SLDC Business for FY 2021-22. The Commission had approved employee cost of Rs. 531.43 Crore for Transmission Business and Rs. 7.95 Crore for SLDC Business to PSTCL for FY 2021-22.

2.7.2 In the ARR Petition for FY 2022-23, PSTCL had projected employee expenses of Rs. 597.89 Crore for its Transmission Business and Rs. 8.97 Crore for its SLDC Business for FY 2021-22. The Commission had approved employee cost of Rs. 593.61 Crore for Transmission Business and Rs. 8.30 Crore for SLDC Business to PSTCL for FY 2021-22.

PSTCL's Submission:

2.7.3 PSTCL has calculated the Normative O&M expenses as per Regulation 26.1 of PSERC MYT Regulations, 2019.

2.7.4 PSTCL has stated that the Terminal Liabilities on actual basis have been considered. The following table shows the actual amount of Terminal Benefits for FY 2021-22:

Table 18: Terminal Benefits submitted by PSTCL for FY 2021-22

(Rs. Crore)				
Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Share of Pension, Gratuity and Medical	315.60	0	315.60
2	Share of Leave Encashment	19.02	0	19.02
3	NPS CPF, PF, LWF	9.26	0.31	9.57
4	Miscellaneous - PF inspection fees, solatium, Memento etc.	0.18	0.01	0.19
5	Additional share of pension etc intimated by PSPCL after finalisation of accounts	11.01	0.00	11.01
6	Total Employee Terminal Benefits Cost	355.06	0.32	355.38

2.7.5 PSTCL stated that it has taken the base value of other employee expense of FY 2020-21 as approved by the Commission in Tariff Order date 31.03.2022 for FY 2022-23.

2.7.6 PSTCL further submitted that, impact of pay revision and employee cost related to 220 KV S/s Bathinda (newly added during the year) was not included in the base value of other employee expenses has been claimed separately.

2.7.7 PSTCL further submitted that 220 kV GNDTP Bathinda substation was taken over by PSTCL from PSPCL on October 1, 2021. Thus the employee cost for six months, i.e., October 2021 to March 2022 has been claimed separately, amounting to Rs. 0.60 crore.

2.7.8 PSTCL has applied the weighted average escalation of CPI and WPI indices @9.06% for FY 2021-22 as per calculations given below:

Table 19: Calculation of Index of FY 2021-22

Sr. No.	Particulars	FY 2020-21	FY 2021-22	Increase (%)
1	CPI (Month Wise Average)	117.61	123.63	5.12%
2	WPI (Month Wise Average)	123.38	139.41	13.00%

INDEX n/INDEX n-1 = (0.5*5.12) + (0.5*13.00) = 9.06%

2.7.9 PSTCL has considered the computation of Normative Employee cost on the basis of net amount after adjustment of expenses capitalised instead of gross amount in line with the approach adopted by the Commission, without prejudice to the outcome of appeals filed by PSTCL with the APTEL. The effect of the same may be considered by the Commission if the matter is ruled in favour of PSTCL.

2.7.10 PSTCL has considered the additional Impact of pay revision from 01.07.2021 to 31.03.2022 amounting to Rs. 14.89 Crore only for the employees' whose scales were revised till 31.03.2022 (approx. 50% employees'). The above figure does not include the arrears on account of pay revision which will be claimed according to the Punjab Government's notification to be issued for this purpose, when it is issued.

2.7.11 PSTCL has computed the Normative Employee Costs for FY 2021-22 as shown in the following table:

Table 20: Normative Other Employee Cost claimed by PSTCL for FY 2021-22

(Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Net Other Employee Cost approved for FY 2020-21 (Baseline Expenses)	195.32	8.85	204.17
2	Escalation Factor (CPI:WPI: 50:50)	9.06%	9.06%	
3	Net Other Employee Cost for FY 2021-22	213.01	9.65	222.66
4	Employee Cost for 220 KV S/s Bathinda transferred from PSPCL to PSTCL	0.60	0.00	0.60

Sr No.	Particulars	Transmission	SLDC	PSTCL
5	Total other Employee cost for FY2021-22	213.61	9.65	223.27
6	Impact of Pay Revision	13.96	0.93	14.89
7	Total Employee Terminal Benefits Cost	355.06	0.32	355.38
8	Normative Employee Cost for FY 2021-22	582.63	10.90	593.53

Commission's Analysis:

A. 1) Terminal Benefits

2.7.12 The Terminal benefits expenses are to be determined as per Regulation 26.1 of PSERC MYT Regulations, 2019. Relevant notes of Regulation 26 of MYT Regulations, 2019 are reproduced below for reference:

"Note-4: Terminal Liabilities such as death-cum-retirement gratuity, Ex-Gratia, pension including family pension, commuted pension, leave encashment, LTC, medical reimbursement including fixed medical allowance in respect of the State PSU / Government pensioners will be approved as per the actuals paid by the Applicant.

...

Note 9: With regard to unfunded past liabilities of pension and gratuity, the Commission will follow the principle of 'pay as you go'. The Commission shall not allow any other amount towards creating fund for meeting unfunded past liability of pension and gratuity."

2.7.13 The terminal benefits of employees of erstwhile PSEB are to be apportioned in the ratio of 88.64% and 11.36% between PSPCL and PSTCL respectively as per the Transfer Scheme. PSTCL's share @11.36% of terminal benefit claimed as Rs.315.60 Crore is allowed.

2.7.14 In addition to the above, an amount of Rs. 19.02 Crore of terminal benefits towards share of Earned leave encashment, an amount of Rs.0.19 Crore of 'other terminal benefits' relating to Miscellaneous-P.F. inspection fees, Solatium, Memento, etc. and an amount of Rs.9.57Crore of terminal benefits towards NPS, CPF, PL and LWF are also allowed for FY 2021-22.

2.7.15 PSTCL has not claimed 'Provision for Gratuity & leave encashment for employees recruited by PSTCL amounting to Rs.9.94 Crore as per Annual Audited Accounts. The Commission shall allow this expenditure on "Pay as you

go” basis when it is actually paid out. PSTCL has claimed additional share of Pension after finalization of accounts amounting to Rs 11.01 crores. The same has been considered as reflected in the balance sheet.

2.7.16 The Terminal benefits thus allowed by the Commission are as under:

Table 21: Terminal Benefits approved by the Commission for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Share of Pension Gratuity and Medical	315.60	0	315.60
2	Share of Leave Encashment	19.02	0	19.02
3	NPS, CPF, PF, LWF	9.25	0.31	9.56
4	Miscellaneous - P.F inspection fees, solatium, Memento etc.	0.18	0.01	0.19
5	Additional share of pension etc intimated by PSPCL after finalisation of accounts	11.01	0.00	11.01
6	Total Terminal Liabilities	355.06	0.32	355.38

Therefore, the Commission allows terminal benefits of Rs. 355.06 Crore for Transmission Business and Rs.0.32 Crore for SLDC Business for FY 2021-22 i.e. a total of Rs. 355.38 Crore for PSTCL.

A. 2) Other Employee Cost

2.7.17 The Employee Costs are determined as per Regulation 26.1 of PSERC MYT Regulations, 2019. Relevant sections of Regulation 26.1 of MYT Regulations, 2019 are reproduced below for reference:

“26.1. The O&M expenses for the nth year of the Control Period shall be approved based on the formulashown below:

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1-X_n)$$

Where,

- *R&M_n –Repair and Maintenance Costs of the Applicant for the nth year;*
- *EMP_n –Employee Cost of the Applicant for the nth year;*
- *A&G_n –Administrative and General Costs of the Applicant for the nth year;*

It should be ensured that all such expenses capitalized should not form a part of the O&M expensesbeing specified here. The above components shall be computed in the manner specified below:

....

$$(ii) EMP_n = EMP_{n-1} + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDEX_n / INDEX_{n-1})$$

INDEX_n - Inflation Factor to be used for indexing the Employee Cost and Administrative and General Costs for nth year. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) of nth year and shall be calculated as under:-

$$INDEX_n = 0.50 * CPI_n + 0.50 * WPI_n$$

'WPI_n' means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year.

'CPI_n' means the average rate (on monthly basis) of Consumer Price Index (Industrial workers) over the year for the nth year."

2.7.18 The Commission vide order dated 31.03.2022 had considered the other employee cost of Rs.195.32 Crore for Transmission Business and Rs. 8.85 Crore for SLDC Business i.e. a total of Rs. 204.17 Crore for PSTCL. Further, the Commission vide order dated 31.03.2022 had accepted that the employee expenses of the communication wing amounting to Rs.1.58 Crore is to be in considered in the Transmission Business for FY 2021-22 and not in the SLDC Business and had allowed the employee cost of the communication wing of Rs 1.63 crores (Rs 1.58*1.0316) as part of the Transmission Business and removed the same from the SLDC Business. Accordingly, the Commission now considers the Other employee cost of Rs.196.95 Crore (Rs.195.32 Crore +1.63 Crore) for Transmission Business and Rs. 7.22 Crore (Rs.8.85 Crore -1.63 Crore) for the SLDC Business for the True up FY 2021-22.

2.7.19 Further, the Commission has calculated the Price **INDEX** as under:

Table 22: Calculation of INDEX

Sr. No.	Particulars	FY 2020-21	FY 2021-22	Increase (%)
1	CPI	338.69	356.06	5.128%
2	WPI	123.37	139.40	12.995%

$$INDEX_n / INDEX_{n-1} = (0.5 * 5.128) + (0.5 * 12.995) = 9.062\%$$

2.7.20 Accordingly, the Commission has calculated the Normative Other Employee Cost as under:

Table 23: Normative Other Employee Cost calculations**(Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
Transmission Business				
1.	Other Employee Cost of previous year	196.95	7.22	204.17
2.	Inflation Factor	9.06%	9.06%	
3.	Other Employee Cost	214.80	7.88	222.68
4.	Employee Cost for 220 kV Bathinda S/s transferred from PSPCL to PSTCL	0.60	0.00	0.60
5.	Pay Revision impact according to PSTCL Computation	13.96	0.93	14.89
6.	Terminal Benefits	355.06	0.32	355.38
7.	Total Employee Cost	584.42	9.13	593.55

2.7.21 Accordingly, the Commission approves “employee cost” of Rs.584.42 Crore for Transmission Business and Rs. 9.13 Crore for SLDC Business i.e. a total of Rs. 593.55 Crore for PSTCL for FY 2021-22.

B. A&G Expenses

2.7.22 In the ARR Petition for FY 2021-22, PSTCL had projected A&G expenses of Rs. 27.40 Crore for its Transmission Business and Rs. 0.81 Crore for its SLDC Business for FY 2021-22. The Commission had approved A&G expenses of Rs. 27.12 Crore for the Transmission Business and Rs. 0.83 Crore for the SLDC Business for FY 2021-22.

2.7.23 In the ARR Petition for FY 2022-23, PSTCL had projected A&G expenses of Rs. 29.47 Crore for its the Transmission Business and Rs. 0.87 Crore for its SLDC Business for FY 2021-22. The Commission had approved A&G expenses of Rs. 29.44 Crore for the Transmission Business and Rs. 0.88 Crore for the SLDC Business for FY 2021-22.

PSTCL’s Submission:

2.7.24 PSTCL submitted that the Commission in its Tariff Order dated May 28, 2021, approved A&G Expenses of Rs. 27.12 Crore for the Transmission business and Rs. 0.83 Crore for the SLDC for FY 2021-22.

2.7.25 PSTCL further stated that in the APR for FY 2021-22, the Commission has approved A&G Expenses as Rs 29.44 Crore for Transmission and Rs 0.88 Crores for SLDC for FY 2021-22.

2.7.26 PSTCL further stated that it has also projected additional A & G expense on account of asset addition during the FY 2021-22 as per MYT Regulations, 2019.

2.7.27 PSTCL has also calculated the revised base of FY 2020-21 considering the additional A & G expenses on account of asset addition during FY 2020-21. However, PSTCL has not claimed the additional A&G expenses on account of asset addition during FY 2020-21.

Table 24: Calculation of K Factor for A&G expenses (Base FY 2020-21) (Rs. Crore)

Sr. No	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (Including Land) as on 01.04.2020	10104.44	23.77	10128.21
2	Add: Addition to GFA during FY 2020-21	197.65	4.86	202.51
3	Less: Retirement to GFA during FY 2020-21	14.49	0.00	14.49
4	Closing GFA (Including Land) as on 31.03.2021	10287.60	28.63	10316.23
5	Average GFA for FY 2020-21	10196.02	26.20	10222.22
6	Actual A & G expenditure for 2020-21	25.45	0.58	26.03
7	Relationship Factor	0.250%	2.224%	

Table 25: Calculation of Baseline A & G Expenses for FY 2021-22 (Rs. crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Asset added during FY 2020-21 (Table no.24, Sr.No.2-Sr.No.3)	183.16	4.86	188.02
2	K-Factor for A&G expenses	0.250%	2.224%	
3	Add: Additional A&G expenses on account of asset addition during FY 2020-21	0.46	0.11	0.57
4	A & G Expenses approved for FY 2019-20 (Baseline Expenses)	25.78	0.78	26.56
5	Total A&G expenses for FY 2020-21 before escalation	26.24	0.89	27.13
6	Escalation Factor (CPI:WPI: 50:50)	3.16%	3.16%	
7	Escalated A & G Expenses for FY 2020-21	27.07	0.92	27.99

2.7.28 After applying the escalation of CPI and WPI indices of 9.06%, the Normative A&G Expenses for FY 2021-22 are shown in the following table:

Table 26: Computation of Normative A & G Expenses for FY 2021-22
(Rs. crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Asset added during FY 2021-22	367.89	0.26	368.15
2	K-Factor for A&G expenses	0.250%	2.224%	
3	Add: Additional A&G expenses on account of asset addition during FY 2021-22	0.92	0.01	0.92
4	Revised Base A & G Expenses for FY 2020-21 (As per Table 9A above)	27.07	0.92	27.98
5	A&G expenses for FY 2021-22 before escalation	27.99	0.92	28.91
6	Escalation Factor (CPI:WPI: 50:50)	9.06%	9.06%	
7	Escalated A&G expenses for FY 2021-22	30.52	1.01	31.53
8	Add: Audit fee	0.05	0	0.05
9	Add: License fee	0.52	0	0.52
10	Normative A&G Expenses	31.09	1.01	32.10

Commission's Analysis:

- 2.7.29** PSTCL has changed the methodology from its previous submission in ARR and APR petitions for working out the base A&G expenses for true up of FY 2021-22 on the basis of K factor.
- 2.7.30** PSTCL replied to the deficiencies vide letter dated 28.12.2022 that there is no change in methodology and "K Factor" is only %age of expenses to be applied on asset addition during FY 2021-22 as per regulation.
- 2.7.31** The A&G expenses are to be determined as per Regulation 26.1 of PSERC MYT Regulations, 2019. The relevant sections are as given in para 2.7.17 wherein no formula has been prescribed for determination of baseline A&G expenses on the basis of K factor.
- 2.7.32** Accordingly, the Commission has considered the baseline value for A&G expenses as Rs. 26.60 Crore for transmission business and Rs. 0.80 crores for SLDC business on the basis of A&G expenses of FY 2020-21.
- 2.7.33** Further, the Commission has calculated the INDEX as 9.06% as given in para 2.7.19.
- 2.7.34** Accordingly, the Commission has calculated the Normative A&G expenses as under:

Table 27: Calculation for Normative A&G expenses for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	A&G expenses for FY 2020-21	26.60	0.80	27.40
2.	Escalation Factor (CPI:WPI::50:50)	9.06%	9.06%	9.06%
3.	Normative A&G expenses for FY 2021-22	29.01	0.88	29.89

2.7.35 Note 7 of Regulation 26.1 of PSERC MYT Regulations 2019 states as under:

“ ...

Note 7: Any expenditure on account of license fee, initial or renewal, fee for determination of tariff and audit fee shall be allowed on actual basis, over and above the A&G expenses approved by the Commission.”

2.7.36 Accordingly, the Commission approves the A&G expenses for the FY 2021-22 as under:

Table 28: Normative A&G expenses as approved by the Commission for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Normative A&G expenses for FY 2021-22	29.01	0.88	29.89
2.	Add: Audit fee	0.05	0	0.05
3.	Add: License fee	0.52	0	0.52
8.	Total A&G Expenses	29.58	0.88	30.46

2.7.37 Thus, the Commission approves A&G expenses as Rs. 29.58 Crore for Transmission Business and Rs. 0.88 Crore for SLDC Business i.e. Rs. 30.46 Crore for PSTCL for FY 2021-22.

C. Repair & Maintenance (R&M) Expenses

2.7.38 In the ARR Petition for FY 2021-22, PSTCL projected R&M Expenses of Rs. 35.50 Crore for its Transmission Business and Rs. 0.76 Crore for its SLDC Business for FY 2021-22. The Commission approved Rs. 31.85 Crore and Rs. 0.70 Crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

2.7.39 In the ARR Petition for FY 2022-23, PSTCL projected R&M Expenses of Rs. 36.24 Crore for its Transmission Business and Rs. 0.48 Crore for its SLDC Business for FY 2021-22. The Commission approved Rs. 36.40 Crore and Rs. 0.80 Crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

PSTCL's Submission:

2.7.40 PSTCL has computed the K-factor by dividing actual R&M Expense of FY 2020-21 with average GFA of FY 2020-21 as baseline value of R&M Expense for computing the normative R&M Expenses of FY 2021-22.

Table 29: Computation of K - Factor for R&M expenses for FY 2021-22 (Rs. crore)

Sr No.	Particulars	Transmission	SLDC
1	Opening GFA (Including Land) as on 01.04.2020	10104.44	23.77
2	Add: Addition to GFA during FY 2020-21	197.65	4.86
3	Less: Retirement to GFA during FY 2020-21	14.49	0.00
4	Closing GFA (Including Land) as on 31.03.2021	10287.60	28.63
5	Average GFA for FY 2020-21	10196.02	26.20
6	Actual R & M expenditure for 2020-21	31.50	0.37
7	K – Factor	0.309%	1.420%

2.7.41 Accordingly, PSTCL has computed the Normative R&M expenses for Transmission and SLDC Business as under:

Table 30: Normative R & M Expenses for FY 2021-22 as claimed by PSTCL (Rs. crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA as on 01.04.2021	10287.61	28.63	10316.24
2	Add: Addition to GFA during FY 2021-22	398.71	0.30	399.01
3	Less: Retirement to GFA during FY 2021-22	30.81	0.04	30.86
4	Closing GFA (Including Land) as on 31.03.2022	10655.50	28.89	10684.39
5	Average GFA for FY 2021-22	10471.55	28.76	10500.31
6	K - Factor (Based on Actual Figures for FY 2020-21)	0.309%	1.420%	
7	Escalation Factor (WPI Index)	13.00%	13.00%	
8	Total Normative R & M Expenses for FY 2021-22	36.55	0.46	37.02

2.7.42 PSTCL submits the normative O&M Expenses for FY 2021-22 are as per table below:

**Table 31: Total Normative O & M Expenses as claimed by PSTCL for FY 2021-22
(Rs in Crore)**

Sr.No	Particulars	Transmission	SLDC	PSTCL
1	Employee Expenses	582.63	10.90	593.54
2	A&G Expenses	31.09	1.01	30.10
3	R&M Expenses	36.55	0.46	37.02
4	Total Normative O & M Expenses	650.28	12.37	662.65

PSTCL further request the Commission to approve the Normative O&M expenses of Rs. 650.28 Crore for Transmission business and Rs 12.37 Crores for SLDC business for FY 2021-22 according to the PSERC MYT Regulations, 2019.

Commission’s Analysis:

2.7.43 The R&M expenses are to be determined as per Regulation 26.1 of PSERC MYT Regulations, 2019. Relevant sections of Regulation 26.1 of MYT Regulations, 2019 are reproduced below for reference:

“26.1. The O&M expenses for the nth year of the Control Period shall be approved based on the formula shown below:

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1-X_n)$$

Where,

- *R&M_n –Repair and Maintenance Costs of the Applicant for the nth year;*
- *EMP_n –Employee Cost of the Applicant for the nth year;*
- *A&G_n –Administrative and General Costs of the Applicant for the nth year;*

It should be ensured that all such expenses capitalized should not form a part of the O&M expenses being specified here. The above components shall be computed in the manner specified below:

(i) $R\&M_n = K * GFA * WPI_n / WPI_{n-1}$

Where,

- *‘K’ is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) for the nth year. The value of ‘K’ will be specified by the Commission in the MYT order.*
- *‘GFA’ is the average value of the gross fixed assets of the nth year.*
- *WPI_n means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year.”*

2.7.44 The Commission agrees that R&M expenses for the assets funded through Contributory Works and assets funded through Government Grant under PSDF

Scheme shall be borne by PSTCL since these assets are operated and maintained by the Petitioner.

2.7.45 The Opening GFA for Transmission Business and SLDC for the purpose of calculating R&M expenses is considered as Rs 10287.60 Crore and Rs 28.63 crores respectively as per closing of true up of FY 2020-21 in tariff order of FY 2022-23.

2.7.46 The addition of GFA during the year is considered based on the addition of GFA as mentioned in Table no 13. Retirement of assets of Rs 30.81 Crores for transmission business and Rs 0.04 Crores for SLDC business have been considered.

2.7.47 The increase in WPI Index is considered as 12.995% as per Table no 22.

2.7.48 K factor has been taken as determined in the tariff order dated 31.03.2022(Table 31) which is constant for the 2nd MYT Control Period. Accordingly, the R&M expenses for FY 2021-22 are determined by the Commission as under:

Table 32: R&M expenses determined by the Commission for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Opening GFA for the purpose of R&M expenses (as per closing of FY 2020-21)	10287.60	28.63	10316.23
2.	Addition during the year (Table 13)	395.33	0.30	395.63
3.	(-) Retirement of assets	30.81	0.04	30.85
4.	Closing GFA for the purpose of R&M expenses	10652.12	28.89	10681.01
5.	Average GFA for the purpose of R&M expenses	10469.86	28.76	10498.62
6.	K factor (as determined in true-up of FY 2020-21)	0.303%	2.323%	
7.	Escalation Factor (<i>Increase in WPI Index</i>)(Table 22)	12.995%	12.995%	
8.	R&M Expenses	35.87	0.75	36.62

2.7.49 Thus, the Commission approves Rs. 36.62 Crore (Rs. 35.87 Crore for Transmission Business + Rs. 0.75 Crore for SLDC Business) of R&M expense for FY 2021-22.

2.7.50 The O&M expenses as approved by the Commission for FY 2021-22 are as under:

Table 33: O&M Expenses for FY 2021-22 as approved by the Commission**(Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Total Employee Cost	584.42	9.13	593.55
2	Total A&G Expenses	29.58	0.88	30.46
3	Total R&M Expenses	35.87	0.75	36.62
4	Total O&M Expenses	649.87	10.76	660.63

2.8 Depreciation Charges

2.8.1 In the ARR Petition of FY 2021-22, PSTCL had claimed depreciation charges of Rs. 305.92 Crore for Transmission Business and Rs. 2.18 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 301.84 Crore for Transmission Schemes and Rs. 1.88 Crore for SLDC Business for FY 2021-22.

2.8.2 In the ARR Petition of FY 2022-23, PSTCL had claimed revised estimates of depreciation charges of Rs. 309.16 Crore for Transmission Business and Rs. 1.50 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 309.09 Crore for Transmission Schemes and Rs. 1.50 Crore for SLDC Business for FY 2021-22.

PSTCL's Submission:

2.8.3 PSTCL submitted that it has been charging depreciation in audited accounts of FY 2021-22 in line with the methodology specified in Regulation 21 of the PSERC MYT Regulations, 2019, as amended from time to time. Regulation 21 of the PSERC MYT Regulations, 2019, provides for computation of Depreciation for each year of the Control Period. The Commission approved the Depreciation charges of Rs. 309.09 Crore for Transmission Business and Rs. 1.50 Crore for SLDC in APR for FY 2021-22.

2.8.4 PSTCL further submitted that it has been charging Depreciation in Audited Accounts of FY 2021-22 in line with the methodology specified in Regulation 21 of the PSERC MYT Regulations, 2019, as amended from time to time.

2.8.5 Accordingly, for the purpose of True-up of FY 2021-22, PSTCL submits the details of depreciation as per the annual audited accounts for FY 2021-22, after excluding depreciation towards impairment loss. PSTCL has also not considered any Depreciation on account of assets funded through Contributory Works and works under PSDF Scheme in FY 2021-22.

Table 34: Depreciation for Total Assets for FY 2021-22 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Revised Opening GFA (net of land and land rights) (excluding Contributory and PSDF Grant Assets)	7,265.22	23.88	7,289.13
2	Addition of GFA	242.09	0.30	242.39
3	Retirement of GFA	30.81	0.04	30.86
4	Less addition of land during the year	0.71	-	0.71
5	Closing GFA	7,475.82	24.14	7,499.96
6	Average GFA for FY 2021-22	7370.54	24.01	7394.54
7	Depreciation	302.43	1.73	304.16
8	Depreciation as percentage of Opening and Closing GFA	4.10%	7.21%	

Table 35: Depreciation for Spillover Assets for FY 2021-22 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (net of land and land rights) (excluding Contributory and PSDF Grant Assets) as on 1.04.2021	7,250.85	23.84	7,274.69
2	Addition of GFA	120.98	0.08	121.06
3	Retirement of GFA	30.81	0.04	30.86
4	Less addition of land during the year	-	-	-
5	Closing GFA	7,341.02	23.88	7,364.89
6	Average GFA for 2021-22	7295.93	23.86	7319.79
7	Depreciation	299.37	1.72	301.09
8	Depreciation as percentage of Opening and Closing GFA	4.10%	7.21%	
9	Depreciation for FY 2021-22 on assets Commissioned on or before FY 2009-10	18.23	0.03	18.26
10	Depreciation for FY 2021-22 on assets Commissioned on or after FY 2010-11	281.14	1.69	282.82

Table 36: Depreciation for New Assets for FY 2021-22 as claimed by PSTCL

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (net of land and land rights) (excluding Contributory and PSDF Grant Assets)	14.40	0.04	14.44
2	Addition of GFA	121.10	0.22	121.32
3	Retirement of GFA	0.00	0.00	0.00
4	Less addition of land during the year	0.71	-	0.71
5	Closing GFA	134.79	0.26	135.05
6	Average GFA	74.60	0.15	74.75
7	Depreciation	3.06	0.01	3.07
8	Depreciation as percentage of Opening and Closing GFA	4.10%	7.21%	

2.8.6 Thus, PSTCL has requested the Commission to approve the Depreciation of Rs. 302.43 Crore for Transmission Business and Rs. 1.73 Crore for SLDC, based on the Audited Accounts of FY 2021-22.

Commission's Analysis:

2.8.7 The Depreciation Charges are determined as per Regulation 21 of PSERC MYT Regulations, 2019. Regulation 21 of the PSERC MYT Regulations, 2019 specifies as under:

“21.1. The value base for the purpose of depreciation shall be the capital cost of the assets admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided that the land, other than the land held under lease and land for reservoir in case of hydro generating station, shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets:

Provided further that Government. grants and consumer contribution shall also be recognized as defined under Indian Accounting Standard 20 (IND AS 20) notified by the Ministry of Corporate Affairs.

21.2. The residual/salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of historical capital cost of the asset:

Provided that I.T. Equipment and Software shall be depreciated 100% with zero salvage value.

21.3. The Cost of the asset shall include additional capitalization.

21.4. The Generating Company, Transmission and Distribution Licensee shall provide the list of assets added during each Year of the Control Period and the

- list of assets completing 90% of depreciation in the Year along with Petition for Annual Performance Review, true-up and tariff determination for ensuing Year.*
- 21.5. *Depreciation for Distribution, generation and transmission assets shall be calculated annually as per straight line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time:
Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation/ put in use of the asset shall be spread over the balance useful life of the assets:
Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the asset.*
- 21.6. *Depreciation shall be chargeable from the first year of commercial operation/asset is put in use. In case of commercial operation of the asset/put in use of asset for part of the year, depreciation shall be charged on pro rata basis.”*
- 2.8.8** The Commission determines the depreciation for FY 2021-22 as per the Regulation 21 stated above. The Opening GFA for the Spillover schemes and new schemes is considered as per the closing GFA for FY 2020-21 in the tariff order of FY 2022-23 and the same is net of land and land rights and consumer contribution and grants.
- 2.8.9** PSTCL has bifurcated depreciation into assets commissioned on and before FY 2009-10 and on and after FY 2010-11 in Table no 37 which has no impact on depreciation allowable.
- 2.8.10** The Commission has considered the addition of GFA as approved by the Commission and has not considered the addition of assets funded through Contributory Work and works under PSDF scheme as given below:-

Table 37: Net capitalisation for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	Total
1	Transferred to GFA (Table no 13)	395.33	0.30	395.63
2	Less Contributory works (Table no 10)	149.71	0.00	149.71
3	Less: PSDF works (Table no 10)	6.90	0.00	6.90
4	Net capitalization	238.72	0.30	239.02
5	Capitalization of spillover schemes (Table no 10)	120.98	0.08	121.06
6	Capitalization of new schemes (Table no 16)	117.74	0.22	117.96

- 2.8.11** The Commission has considered the Fixed Asset Register submitted by PSTCL vide reply dated 28.12.2022 and further determined weighted average rate of depreciation based on Fixed Asset Register of FY 2021-22 as under:

Table 38: Weighted average rate of depreciation for FY 2021-22 as considered by the Commission

(Rs.Crore)

Sr. No.	Particulars	Transmission	SLDC
1	Opening GFA as on 01.04.2021	10287.60	28.63
2	Less Land as on 31.03.2021	2939.60	4.75
3	Less Consumer contributions and grants	82.75	0.00
4	Opening GFA (net of land and land rights and consumer contribution and grant)	7265.25	23.88
5	Add: Additions during the year (net of land and land rights and consumer contribution and grant)	242.08	0.30
6	Less: Retirement of assets	30.81	0.04
7	Less addition of land during the year	0.71	-
8	Closing GFA (net of land and land rights)	7475.81	24.18
9	Average Gross Fixed Assets	7370.53	24.03
10	Depreciation	302.43	1.73
11	Average rate of depreciation	4.10%	7.20%

2.8.12 Accordingly, the depreciation approved by the Commission for Spillover and New Schemes for Transmission and SLDC Business is as under:

Table 39: Depreciation approved by the Commission for FY 2021-22 for Transm Business

(Rs. Crore)

Sr. No	Particulars	Amount
(I)	Spillover Schemes	
1.	Opening GFA (excluding land and land rights as per closing of FY 2020-21)	7250.85
2.	Add: Additions to GFA during the year (Table 37)	120.98
3.	Less: Retirement of GFA	30.81
4.	Less: GFA due to Contributory Works and PSDF grants	-
5.	Closing GFA	7341.02
6.	Average GFA	7295.93
7.	Depreciation @4.10% of average GFA	299.37
(II)	New Schemes	
8.	Opening GFA (excluding land and land rights as per closing of FY 2020-21)	14.40
9.	Add: Additions to GFA during the year (Table 37)	117.74
10.	Less Addition of land during the year	0.71
11.	Closing GFA	131.43
12.	Average GFA	72.92
13.	Depreciation @ 4.10% of average GFA	2.99
14.	Total Depreciation (7+13)	302.36

Table 40: Depreciation approved by the Commission for FY 2021-22 for SLDC Business

(Rs. Crore)

Sr. No	Particulars	Amount
(I)	Spillover Schemes	
1.	Opening GFA (excluding land and land rights as per closing of FY 2020-21)	23.84
2.	Add: Additions to GFA during the year	0.08
3.	Less Retirement of assets	0.04
4.	Closing GFA	23.88
5.	Average GFA	23.86
6.	Depreciation @7.20% of average GFA	1.72
(II)	New Schemes	
7.	Opening GFA (excluding land and land rights as per closing of FY 2020-21)	0.04
8.	Add: Additions to GFA during the year	0.22
9.	Closing GFA	0.26
10.	Average GFA	0.15
12.	Depreciation @7.20% of average GFA	0.01
13.	Total Depreciation	1.73

Table 41: Depreciation approved by the Commission for FY 2021-22 for PSTCL

(Rs. Crore)

Sr. No	Particulars	Amount
(I)	Transmission	
1.	Opening GFA (excluding land and land rights)	7265.25
2.	Add: Additions to GFA during the year	238.72
3.	Less: Retirement of GFA	30.81
4.	Less: Addition of land during the year	0.71
5.	Closing GFA	7472.45
6.	Average GFA	7368.85
7.	Depreciation @4.10% of average GFA	302.36
(II)	SLDC	
1.	Opening GFA (excluding land and land rights)	23.88
2.	Add: Additions to GFA during the year	0.30
3.	Less: Retirement to GFA	0.04
4.	Closing GFA	24.14
5.	Average GFA	24.01
6.	Depreciation @7.20% of average GFA	1.73
7.	Total Depreciation	304.09

2.8.13 The Commission approves depreciation of Rs. 302.36 Crore for Transmission Business and Rs. 1.73 Crore for SLDC Business for FY 2021-22.

2.9 Interest and Finance Charges

2.9.1 In the ARR Petition of FY 2021-22, PSTCL had claimed Interest and Finance charges of Rs. 313.47 Crore (net of capitalization of Rs. 41.14 Crore of interest charges) for its Transmission Business and Rs. 1.28 Crore for SLDC Business for FY 2021-22. The Commission approved interest charges of Rs. 297.24 Crore for Transmission Business (including Spillover and new schemes) and Rs. 1.20 Crore for SLDC Business for FY 2021-22.

2.9.2 In the ARR Petition of FY 2022-23, PSTCL had claimed revised estimates of Interest and Finance charges of Rs. 332.24 Crore (net of capitalization of Rs. 11.55 Crore of interest charges) for its Transmission Business and Rs. 1.27 Crore for SLDC Business for FY 2021-22. The Commission approved interest charges of Rs. 331.46 Crore for Transmission Business (including Spillover and new schemes) and Rs. 1.27 Crore for SLDC Business for FY 2021-22.

PSTCL’s Submission:

2.9.3 PSTCL submitted that for the purpose of the true-up for FY 2021-22, it has considered the opening balance of loan for FY 2021-22 equal to closing balance of loan for FY 2020-21 as approved by the Commission. The PSTCL has considered the Interest Charges based on Audited Accounts and actual loan taken against the investment done during FY 2021-22.

2.9.4 Calculation of weighted average rate of interest on long-term loans of Transmission Business and SLDC Business for FY 2021-22 are shown in the following table:

Table: 42: Calculation of Interest rate for Transmission for FY 2021-22

Sr. No.	Name of Source	Rate of Interest	Average Utilisation (Rs. crore)	Weighted Average Rate of Interest
1	REC	9.23%	2213.43	6.82%
2	PFC (New)	8.88%	14.19	0.04%
3	SBI	7.17%	127.43	0.31%
4	NABARD	9.35%	166.77	0.52%
5	PSPCL	0.00%	5.69	0.00%
6	PFC - 2	9.16%	467.62	1.43%
7	Total		2995.13	9.12%

Table: 43: Calculation of Interest rate for SLDC for FY 2021-22 (Rs. Crore)

Sr. No.	Period of Utilization	Addition/ (Repayment)	Balance	Average Utilisation
1	01.04.2021 to 14.10.2021 (197 days)		6.65	3.59
2	15.10.2021 to 30.01.2022 (108 days)	-0.34	6.31	1.87
3	31.01.2022 to 14.02.2022 (15 days)	5.48	11.79	0.48
4	15.02.2022 to 31.03.2022 (45 days)	-0.35	11.44	1.41
5	Total			7.35
6	Weighted Average Rate of Interest			9.11%

2.9.5 PSTCL has considered addition of loans of Rs. 179.51 Crore for Transmission and Rs. 0.88 crore for SLDC. Out of Rs. 179.51 Crore of Transmission, Rs. 43.79 crore additions is on account of New Schemes and Rs. 135.72 crore is on account of Spill over Schemes. Loan Addition of Rs. 0.88 crore of SLDC includes 0.22 crore on account of New Schemes and Rs. 0.66 crore is on account of Spill over Schemes. PSTCL has considered capitalisation of interest charges of Rs. 5.55 Crore, instead of 11.70 Crore only for the Spill over CAPEX of Rs 136.38 crores during FY 2020-21 rather than total expenditure incurred Rs 287.36 crores during FY 2021-22.

Table 44: Interest on Loan for all Schemes of PSTCL for FY 2021-22**(Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3303.92	12.01	43.91	3359.84
2	Addition of loan during year	179.51	0.88	-	180.39
3	Repayment of loan during year	284.20	1.70	21.95	307.85
4	Closing loan balance for year	3199.23	11.19	21.96	3232.38
5	Average Loan Balance for year	3251.58	11.60	32.94	3296.11
6	Interest Rate	9.12%	9.11%		
7	Interest Charges	296.51	1.06	2.40	299.97
8	Less: Interest charges capitalised	5.55	0.00	0.00	5.55
9	Add: Guarantee Fee	1.70	0.00	0.00	1.70
10	Add: Miscellaneous Interest and Finance Charges	0.14	0.01	0.00	0.14
11	Interest and Finance Charges	292.79	1.06	2.40	296.26

Table: 45: Interest on Loan for New Schemes of PSTCL for FY 2021-22

(Rs. Crore)					
Sr No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Balance 01.04.2021	9.78	0.04	-	9.82
2	Add: Addition of Loan during the year	43.79	0.22	-	44.01
3	Less: Repayment of Loan during the year	3.06	0.01	-	3.07
4	Closing Balance as on 31.03.2022	50.51	0.24	0.00	50.76
5	Average Loan Balance for the year	30.15	0.14	0.00	30.29
6	Interest Rate	9.12%	9.11%	-	-
7	Interest Charges for the year	2.75	0.01	-	2.76
8	Less: Interest Capitalized	-	-	-	0.00
9	Normative Interest & Finance Charges	2.75	0.01	0.00	2.76

2.9.6 PSTCL has considered Repayment of Loan at par with depreciation on assets excluding the assets commissioned before 16.04.2010.

Table: 46 Interest on Loan for Spill Over Schemes for FY 2021-22

(Rs. Crore)					
Sr. No.	Particulars	TRANSMISSION	SLDC	GPF	PSTCL
1	Opening Balance 01.04.2021	3294.14	11.97	43.91	3350.02
2	Add: Addition during the year	135.72	0.66	0.00	136.38
3	Less: Repayment during the year	281.14	1.69	21.95	304.77
4	Closing Balance as on 31.03.2022	3148.72	10.95	21.96	3181.63
5	Average Loan for the year	3221.43	11.46	32.94	3265.82
6	Interest Rate	9.12%	9.11%		
7	Interest Charges for the year	293.76	1.05	2.40	297.21
8	Less: Interest Capitalized	5.55	0.00	0.00	5.55
9	Add: Guarantee Fee	1.70	0.00	0.00	1.70
10	Add: Misc& Finance Charges	0.14	0.00	0.00	0.14
11	Normative Interest & Finance Charges	290.04	1.05	2.40	293.49

PSTCL prays the Commission to approve the Interest Charges Rs. 296.26 (292.79+2.40) Crore for Transmission Business including interest on GPF and Rs. 1.06 Crore for SLDC for FY 2021-22.

Commission's Analysis:

A. Interest and Finance Charges for Transmission

2.9.7 The Commission determines the Interest on loan capital as per Regulation 24 of the PSERC MYT Regulations, 2019. Relevant sections are reproduced as under:

“24.1. For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the Licensee.

24.2. Interest and finance charges on the future loan capital for new investments shall be computed on the loans, based on one (1) year State Bank of India (SBI) MCLR/ any replacement there of as notified by RBI as may be applicable as on 1st April of the relevant year, plus a margin determined on the basis of current actual rate of interest of the capital expenditure loan taken by the Generating Company, Licensee or SLDC and prevailing SBIMCLR.

24.3. The repayment for each year of the tariff period shall be deemed to be equal to the depreciation allowed for the corresponding year. In case of de-capitalisation of assets, the repayment shall be adjusted by taking into account cumulative depreciation made to the extent of de-capitalisation.

24.4. The Commission shall allow obligatory taxes on interest, finance charges (including guarantee fee payable to the Government) and any exchange rate difference arising from foreign currency borrowings, as finance cost.

24.5. The interest on excess equity treated as loan shall be serviced at the weighted average interest rate of actual loan taken from the lenders.

Provided also 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 for the actual loan shall be considered.”

- 2.9.8** The Commission has considered the opening balance of loans for Spillover schemes of Transmission Business for FY 2021-22 as Rs.3294.14 Crore while the opening of loan for new schemes is considered as Rs. 9.78 crores as approved in tariff order for FY 2022-23.
- 2.9.9** The Commission has considered the approved addition of loan as explained in Table no 16 and 17.
- 2.9.10** PSTCL has not provided loan masters to determine the rate of interest but only provided the average utilization of loans during the year for working the rate of interest for transmission and SLDC business. PSTCL while replying to the deficiencies vide letter dated 28.12.2022 again did not supply the required information. Therefore, commission is constrained to take the rates as given by PSTCL

2.9.11 PSTCL has considered repayment of loan equal to depreciation on assets commissioned on or after FY 2010-11 instead of the total depreciation allowed for the year for transmission and SLDC business. The Commission observes that PSTCL has changed the methodology of considering the repayment of loan and considers the repayment of loan equal to depreciation allowed for the corresponding year as per regulation 24.3 of PSERC MYT Regulation 2019.

2.9.12 The Commission has considered the following as long-term loans as submitted by PSTCL for determination of interest rate for Transmission business and calculated the rate of interest on loan capital as per Regulation 24.1 as under:

2.9.13 Accordingly, the Commission has calculated the interest on loan for Transmission Business for FY 2021-22 as under:

Table 47: Interest on loan for Spill over schemes of Transmission Business approved by the Commission for FY 2021-22

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Opening balance of loan	3294.14
2.	Add: Receipt of loan during the year	94.81
3.	Less: Repayment of loan during the year	299.37
4.	Closing balance of loan	3089.58
5.	Average Loan	3191.86
6.	Interest Charges @ 9.12%	291.10

Table 48: Interest on loan for New schemes of Transmission Business as approved by the Commission for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	9.78
2.	Add: Receipt of loan during the year	82.35
3.	Less: Repayment of loan during the year	2.99
4.	Closing balance of loan	89.14
5.	Average Loan	49.46
6.	Interest Charges @ 9.12%	4.51

Interest on GP Fund

2.9.14 PSTCL has claimed an interest on GP fund of Rs.2.40 Crore during FY 2021-22.

The Commission approves interest of Rs.2.40 Crore on GP Fund as per the Audited Accounts, being statutory payment, submitted by PSTCL for FY 2021-22.

Capitalization of Interest Charges

2.9.15 In the True up Petition for FY 2021-22, PSTCL has considered capitalization of interest charges of Rs.5.55 Crore, only for the Spill over capital expenditure up to FY 2020-21, instead of Rs. 11.70 Crore as given in the Audited Accounts.

The Commission, as per past practice, approves capitalization of interest of Rs.5.55 Crore for FY 2021-22 for capital expenditure due to spillover schemes.

Finance Charges and Guarantee Charges

2.9.16 PSTCL has claimed Miscellaneous Interest and Finance charges of Rs.0.14 Crore and Guarantee charges of Rs.1.70 Crore for Transmission Business based on Audited Annual Accounts for FY 2021-22.

2.9.17 The Commission approves the Finance charges of Rs. 0.14 Crore and Guarantee charges of Rs. 1.70 Crore for Transmission Business as per Regulation 24.4 of PSERC MYT Regulations 2019.

2.9.18 The Commission approves interest and finance charges for Transmission Business of PSTCL for FY 2021-22 as under:

Table 49: Interest & Finance Charges for Transmission Business for FY 2021-22 as approved by the Commission

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Interest on Loans due to Spillover schemes	291.10
2.	Interest on Loans due to New schemes	4.51
3.	Interest on GP Fund	2.40
4.	Finance Charges	0.14
5.	Guarantee Charges	1.70
6.	Gross Interest on Long Term Loans (1+2+3+4+5)	299.85
7.	Less: Capitalization	5.55
8.	Net Interest and finance Charges on Long Term Loans (6-7)	294.30

Thus, the Commission approves Net Interest and Finance Charges of Rs. 294.30 Crore for Transmission Business for FY 2021-22.

B. Interest and Finance charges for SLDC Business

2.9.19 The Commission has considered the closing balance of loans for SLDC Business of Rs. 11.97 Crore for FY 2020-21 as the opening balance of loans for Spillover schemes of SLDC Business for FY 2021-22, while the opening of loan for new schemes is

considered as Rs.0.04 Crores as approved in tariff order for FY 2022-23.

2.9.20 The Commission has considered the approved addition of loan as explained in Table no. 16 and Table no. 17.

2.9.21 As per Regulation 24.3 of PSERC MYT Regulation 2019, the repayment of loan is considered equal to depreciation allowed for the corresponding year.

2.9.22 PSTCL has not submitted loan master, therefore the Commission is constraint to considered the rate of interest of 9.11% on long-term loans as submitted by PSTCL for determination of interest for SLDC business.

2.9.23 The Commission has calculated the interest on loan for SLDC Business for FY 2021-22 as under:

Table 50: Interest on loan for Spill over schemes of SLDC Business for FY 2021-22

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Opening balance of loan	11.97
2.	Add: Receipt of loan during the year	0.66
3.	Less: Repayment of loan during the year	1.72
4.	Closing balance of loan	10.91
5.	Average Loan	11.44
6.	Interest Charges @ 9.11%	1.04

Table 51: Interest on loan for New schemes of SLDC Business for FY 2021-22

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Opening balance of loan	0.04
2.	Add: Receipt of loan during the year	0.22
3.	Less: Repayment of loan during the year	0.01
4.	Closing balance of loan	0.25
5.	Average Loan	0.15
6.	Interest Charges @ 9.11%	0.01

Miscellaneous Interest and Finance Charges and Guarantee Charges

2.9.24 PSTCL has not claimed Finance Charges for SLDC Business.

2.9.25 The Commission approves interest and finance charges for SLDC Business of PSTCL for FY 2021-22 as under:

Table 52: Interest & Finance Charges for SLDC Business for FY 2021-22 as approved by the Commission

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Interest on Loans due to Spillover schemes	1.04
2.	Interest on Loans due to New schemes	0.01
3.	Gross Interest on Long Term Loans (1+2+3)	1.05

Thus, the Commission approves Interest and Finance Charges of Rs. 1.05 Crore for SLDC Business for FY 2021-22.

2.9.26 Total Interest on loan approved by the Commission for PSTCL for FY 2021-22 is as under:

Table 53: Interest on loan approved by the Commission for PSTCL for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Interest on loan	294.30	1.05	295.35

2.10 Interest on Working Capital for Transmission Business

2.10.1 In the ARR Petition for FY 2021-22, PSTCL had claimed interest on working capital for Transmission Business of Rs. 36.85 Crore for FY 2021-22, on a total working capital of Rs. 361.81 Crore against which the Commission approved interest on working Capital of Rs.35.93 Crore for FY 2021-22 on total working capital of Rs 355.90 Crore.

2.10.2 In the ARR Petition for FY 2022-23, PSTCL had claimed revised estimated of interest on working capital of Rs. 38.33 Crore on the total working capital of Rs. 395.80 Crore for Transmission Business against which the Commission approved interest on working Capital of Rs. 37.53 Crore for FY 2021-22 on total working capital of Rs. 389.02 Crore.

PSTCL's Submission:

2.10.3 PSTCL submitted that for the purpose of True-up, it has computed the Interest on Working Capital as per the provisions of PSERC MYT Regulations, 2019. PSTCL has considered the actual weighted average rate of interest for Working Capital loans for Transmission business and SLDC. The computation of Rate of Interest on Working Capital Loans is submitted in the following table:

Table: 54: Calculation of ROI on Working Capital Loans for FY 2021-22

(Rs. Crore)

Sr. No.	Source of Loan	Opening Balance	Repayments	Additions	Closing Balance	Interest Cost
1	SBI	111.44	32.93	0.00	78.51	6.88
2	BOI	107.66	44.01	0.00	63.65	7.14
3	SBI CC Limit	34.79	0.00	121.60	156.39	8.17
4	SBI	14.44	13.34	0.00	1.10	0.59
5	SBI	100.00	100.00	0.00	0.00	3.99
6	PFC	421.42	71.43	0.00	349.99	33.92
7	UCO	165.00	0.00	85.00	250.00	16.37
8	IREDA	300.00	70.00	0.00	230.00	20.63
9	REC	0.00	0.00	100.00	100.00	3.82
10	PFC	0.00	0.00	100.00	100.00	1.79
11	Total	1254.75	331.71	406.60	1329.64	103.30
Average Rate of Interest on Working Capital Loans						7.99%

2.10.4 The one (1) Year State Bank of India (SBI) MCLR rate plus 350 basis point as on 1st April, 2021 is 10.5% (7% + 3.5%). PSTCL has applied the lower of above two i.e. 7.99%. The calculation of Interest on Working Capital is as follows:

Table 55: Interest on Working Capital for Transmission as submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months of fixed cost	226.42
2.	Maintenance spares @ 15% of O&M expenses	97.54
3.	Operation and Maintenance expenses for one month	54.19
4.	Total Working Capital (Normative)	378.15
5.	Rate of Interest applied	7.99%
6.	Interest on Working Capital	30.23

2.10.5 PSTCL prays to approve the Interest on Working capital Rs. 30.23 Crore for Transmission Business for FY 2021-22 .

Commission's Analysis:

2.10.6 The Commission has computed the interest on working capital as per Regulation 51 of the PSERC MYT Regulations, 2019 specifies as under:

“51.1. Components of Working Capital

The Working Capital shall cover the following:

(a) O&M Expenses for 1month;

(b) Maintenance spares @ 15% of the O&M expenses;

(c) Receivables equivalent to two (2) months of fixed cost calculated on normative target availability.

51.2. Rate of Interest

The rate of interest on working capital shall be as per Regulation 25.1.”

2.10.7 The Commission has considered the short-term loans as submitted by PSTCL for determination of interest rate for Transmission business and calculated the rate of interest on loan capital as per Regulation 24.1 .

2.10.8 Accordingly, the Commission considers the interest at the weighted average rate of approved loans which works out to 7.99 % for Transmission Business and approves the Interest on Working Capital as under:

Table 56: Interest on Working Capital for Transmission Business of PSTCL for FY 2021-22 approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months i.e. 2 x (ARR/12)	226.17
2.	Maintenance spares @ 15% of Operation and Maintenance expenses	97.48
3.	Operation and Maintenance expenses for one month as approved by the Commission	54.16
4.	Working Capital requirement	377.80
5.	Interest on Working Capital (@7.99% for FY 2021-22)	30.19

2.10.9 The Commission approves working capital requirements of Rs. 377.80 Crore and interest thereon of Rs. 30.19 Crore for Transmission Business of PSTCL for FY 2021-22.

2.11 Interest on Working Capital for SLDC Business

2.11.1 In the ARR Petition for FY 2021-22, PSTCL had claimed interest on working capital of Rs. 0.56 Crore on the total working capital of Rs. 5.50 Crore for SLDC Business. The Commission approved the interest on working capital of Rs. 0.59 Crore on total working capital of Rs. 5.73 Crore for FY 2021-22.

2.11.2 In the ARR Petition for FY 2022-23, PSTCL had claimed interest on working capital of Rs. 0.61 Crore on the total working capital of Rs. 6.29 Crore for SLDC Business. The Commission approved the interest on working capital of Rs. 0.59 Crore on total working capital Rs. 6.12 Crore for FY 2021-22.

PSTCL's Submission:

2.11.3 As per Regulation 25.1 of the PSERC MYT Regulations, 2019, the Petitioner has considered the actual weighted average rate of interest for Working Capital loans for SLDC Business, as the actual interest rate is lower than the one-year MCLR rate of State Bank of India plus 350 basis points, as on 1st April of the year. The computation of Interest on Working Capital as submitted by PSTCL for FY 2021-22 is as under:

Table 57: Interest on Working Capital for SLDC as submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months of fixed cost	4.04
2.	Maintenance spares @ 15% of O&M expenses	1.86
3.	Operation and Maintenance expenses for one month	1.03
4.	Total Working Capital (Normative)	6.93
5.	Rate of Interest applied	7.99%
6.	Interest on Working Capital	0.55

Commission's Analysis:

The commission considers the interest on working capital as 7.99% for SLDC Business and approves the Interest on Working Capital as under:

Table 58: Interest on working capital for SLDC Business of PSTCL for FY 2021-22 approved by the Commission

(Rs. Crore)

Sr. No	Particulars	Amount
1.	Receivables equivalent to two months i.e. 2 x (ARR/12)	3.77
2.	Maintenance spares @ 15% of Operation and Maintenance expenses	1.61
3.	Operation and Maintenance expenses for one month as approved by the Commission	0.90
4.	Working Capital requirement	6.28
5.	Interest on Working Capital (@7.99% for FY 2021-22)	0.50

2.11.4 The Commission approves working capital requirements of Rs. 6.28 Crore and interest thereon of Rs. 0.50 Crore for SLDC Business of PSTCL for FY 2021-22.

2.11.5 The Total Interest on Working Capital approved by the Commission for PSTCL for FY 2021-22 is as under:

Table 59: Interest on Working Capital approved by the Commission for PSTCL for FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Interest on Working Capital	30.19	0.50	30.69

The Commission approves total Interest on Working Capital as Rs.30.69 Crore for PSTCL for FY 2021-22.

2.12 Return on Equity

2.12.1 In the ARR Petition for FY 2021-22, PSTCL had claimed Return on equity of Rs. 109.27 Crore on opening equity of Rs. 704.97 Crore and no addition of during FY 2020-21. The Commission had approved Return on equity of Rs. 109.38 Crore on opening equity of Rs. 705.70 Crore and no addition during the year.

2.12.2 In the ARR Petition for FY 2022-23, PSTCL had claimed Return on equity of Rs. 112.59 Crore on opening equity of Rs. 726.38 Crore and no addition during FY 2021-22. The Commission had approved Return on equity of Rs. 112.59 Crore on opening equity of Rs. 726.36 Crore and no addition during the year.

PSTCL's Submission:

2.12.3 PSTCL submitted that the Commission in Tariff Order for FY 2021-22 had approved the Return on Equity of Rs. 109.38 Crore for FY 2021-22.

2.12.4 Further, it stated that in APR of FY 2021-22, the Commission had approved the Return on Equity of Rs. 112.59 Crore for PSTCL.

2.12.5 PSTCL has booked the profit of Rs. 216.48 crore as per Audited Accounts for FY 2021-22. Further, PSTCL submits that it has partly funded the Capital Expenditure (30% for Capital Expenditure) through equity infusion in FY 2021-22, by reinvesting Rs. 77.31 crore in FY 2021-22. Thus, equity addition has been considered as Rs. 77.31 crore as discussed in earlier Section of this Chapter.

2.12.6 Further For the purpose of calculating Return on Equity for FY 2021-22 on normative basis, PSTCL has considered the RoE at the rate of 15.50% in accordance with the PSERC MYT Regulations, 2019. The computation of normative RoE for FY 2021-22 is submitted in the following table:

Table 60: Return on Equity for FY 2021-22 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening Balance of Equity	726.36
2.	Addition of equity during the year	77.31
3.	Closing Balance of Equity	803.67
4.	Average Equity during the year	765.02
5.	Rate of Return (%)	15.50%
6.	Return on Equity	118.58

2.12.7 Therefore, PSTCL prays to the Commission to approve the RoE of Rs. 118.58 Crore for FY 2021-22.

Commission’s Analysis:

2.12.8 The Commission determines the Return on Equity for FY 2020-21 in accordance with Regulation 20 of PSERC MYT Regulations, 2019 which is reproduced as under:

“20. Return on equity

Return on equity shall be computed at the base rate of 15.5% for thermal generating stations, Transmission Licensee, SLDC and run of the river hydro generating stations and at the base rate of 16.5% for the storage type hydro generating stations and run of river generating stations with pondage and 16% for Distribution Licensee on the paid-up equity capital determined in accordance with Regulation 19: Provided that Equity invested in foreign currency shall be converted to rupee currency based on the exchange rate prevailing on the date(s) it is subscribed:

Provided further that asset funded by consumer contributions, capital subsidies/Government. grants shall not form part of the capital base for the purpose of calculation of Return on Equity.”

2.12.9 The Commission has considered the opening of equity for FY 2021-22 from the closing of equity approved in the True-Up of FY 2020-21.

2.12.10 As explained in para 2.6.8, since PSTCL has booked profit of Rs. 216.48 Crore in audited accounts for FY 2021-22 and funded 30% of the capital expenditure amounting to Rs 76.30 crores through equity infusion by reinvesting. The Commission has considered addition of equity of Rs. 76.30 Crore.

2.12.11 In response to the Commissions query regarding PSTCL not claiming funding of SLDC schemes through equity of Rs. 76.30 Crore between Transmission Business and SLDC Business, the Petitioner responded that as there is no separate balance sheet of SLDC, so equity has been attributed to Transmission business only. The same has been considered.

2.12.12 The Commission determines Return on Equity @15.50% on the average equity for the year which is calculated as under:

Table 61: Return on Equity for FY 2021-22 for Transmission as allowed by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1.	Opening Equity	726.36
2.	Addition of equity during the year	76.30
3.	Closing Equity	802.66
4.	Average Equity	764.51
5.	Rate of Return on Equity (%)	15.50%
6.	Return on Equity	118.50

2.12.13 Thus, the Commission approves ROE of Rs.118.50 Crore to PSTCL for FY 2021-22 as under:

Table 62: Return on Equity approved by the Commission for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Return on Equity	118.50	-	118.50

2.13 Unified Load Dispatch & Communication (ULDC) Charges

2.13.1 In the ARR Petition for FY 2021-22, PSTCL had claimed ULDC Charges of Rs. 9.53 Crore each for FY 2020-21 for its SLDC Business. The Commission approved the same

2.13.2 In the ARR Petition for FY 2022-23, PSTCL had revised its estimates for ULDC Charges to Rs. 9.80 Crore as per the Audited Annual Accounts of FY 2020-21 for its SLDC Business and the Commission had approved the same.

2.13.3 In the True up Petition for FY 2021-22, PSTCL has claimed ULDC of Rs.8.88 Crore for FY 2021-22 as per the Audited Annual Accounts for its SLDC Business. The details are as under:

Table 63: ULDC Charges submitted by PSTCL for FY 2021-22

Sr. No.	Particulars	Transmission	(Rs. Crore)	
			SLDC	PSTCL
1.	ULDC Charges - SLDC own share	-	3.60	3.60
2.	ULDC Charges - BBMB share	-	1.21	1.21
3.	ULDC Charges - Central Sector share	-	0.00	0.00
4.	NRLDC fees and Charges	-	4.06	4.06
5.	Total	-	8.88	8.88

Accordingly, the Commission approves ULDC charges of Rs. 8.88 Crore for the SLDC Business of PSTCL for FY 2021-22.

2.14 Non-Tariff Income

2.14.1 In the ARR Petition for FY 2021-22, PSTCL had projected Rs. 32.90 Crore of Non-Tariff Income for its Transmission Business and Rs. 0.78 Crore for SLDC Business against which the Commission approved the Non-Tariff Income of Rs. 25.94 Crore for Transmission Business and Rs. 0.58 Crore for its SLDC Business.

2.14.2 In the ARR Petition for FY 2022-23, PSTCL had projected revised estimates of Rs.12.54 Crore for Non-Tariff Income for its Transmission Business and Rs. 0.21 Crore for SLDC Business for FY 2020-21 against which the Commission approved Non-Tariff Income of Rs.35.58 Crore for Transmission Business and Rs. 0.35 Crore for its SLDC Business for FY 2021-22.

PSTCL's Submission:

2.14.3 In the True-up Petition for FY 2021-22, PSTCL has considered the Non-tariff income as indicated in Note 31 of audited accounts. The Petitioner has not considered the income towards certain heads wherein expenses were not allowed by the Commission in previous Tariff Orders:

- (a) Income of Rs. 2.87 Crore towards interest received on refund of income tax has not been considered because the Commission neither allowed expenses under the head of Income Tax nor interest on amount deducted as TDS.
- (b) Income of Rs. 1.74 Crore towards reversal of excess provision of impairment loss has not been considered as impairment loss was not allowed in the previous year.
- (c) Income of Rs. 0.01 Crore towards provision withdrawn on unserviceable / obsolete items and losses under investigation.

- (d) PSTCL has earned late payment surcharge (LPS) of Rs. 1.91 crore for late Payment Charges. PSTCL also considered the adjustment of Rs. 1.17 crore of financing cost on Late Payment. Thus, Net Income from Late Payment Surcharges is Rs. 0.74 crore.
- (e) PSTCL has earned rebate on early payment of NRLDC Charges of Rs. 0.14 crore. PSTCL also considered the adjustment of Rs. 0.08 crore of financing cost borne due to early payment. Thus, Net Income from Rebate on early payment is Rs. 0.06 crore.
- (f) PSTCL has not considered the amount of Rs. 0.03 crore for interest earned on fixed deposits reflected in Audited Accounts under Non-Tariff Income. PSTCL would like to submit that income from interest on Fixed deposits are not actually earnings made on surplus amounts available with PSTCL, whereas these are Fixed deposits made so as to issue letter of credit for availing cash credit facility and cost of funds is more than the interest earned.

In view of above, Petitioner submits NTI for FY 2021-22 as shown in following table:-

Table: 64: Non-Tariff Income claimed by PSTCL for FY 2021-22
(Rs Crore)

Sr No.	Particulars	TRANSMISSION	SLDC	PSTCL
1	Income from sale of scrap	4.46	0.00	4.46
2	Gain on account of :			
a	-sale of land - additional compensation	0.03	0.00	0.03
b	-sale of other fixed assets	16.00	0.00	16.00
3	Income from staff welfare activities	0.01	0.00	0.01
4	Rental for staff quarters	0.40	0.05	0.45
5	Penalty imposed on suppliers/contractors	3.42	0.06	3.48
6	NOC charges from Open access customers	0.02	0.06	0.08
7	Credit balances written back :			
a	- Sundry creditors	0.37	0.00	0.37
8	Departmental Charges on Contribution/Deposit Works	4.26	0.00	4.26
9	Oil Testing fees	0.49	0.00	0.49
10	Usage of Crane/truck/loader	0.17	0.00	0.17
11	Salary deposit - short period notice of resignation/retirement/surety bonds	0.13	0.00	0.13
12	Lease Rental fibre optic- PGCIL	0.23	0.00	0.23
13	Work appraisal fee	0.12	0.00	0.12
14	Sale of trees	0.77	0.00	0.77
15	Net Late Payment Surcharge - PSPCL <i>Late Payment Surcharge</i> 1.91 <i>Less: Finance cost</i> 1.17	0.74	0.00	0.74
16	Net Late Payment Surcharge -NRLDC <i>Rebate on early payment</i> 0.14 <i>Less: Finance cost</i> 0.08	0.00	0.06	0.06
17	Income from O & M of bays of PGCIL	3.55	0.00	3.55
18	Miscellaneous Income *	0.39	0.00	0.39
19	Total	35.57	0.23	35.80

2.14.4 Accordingly, the PSTCL prays to approve for True up the Non-tariff Income of Rs. 35.57 crore for Transmission Business and Rs. 0.23 crore for SLDC Business as shown in the above table for FY 2021-22.

Commission's Analysis:

2.14.5 The Commission determines the Non-Tariff Income for FY 2021-22 in accordance with Regulation 28 of PSERC MYT Regulations, 2019 which is reproduced as under:

" 28.1 The following components of income shall be treated as non-tariff income for the generation, transmission, SLDC and distribution businesses, as applicable:

- (a) Meter/metering equipment rentals;*
- (b) Service line charges;*
- (c) Net revenue from late payment surcharge (late payment surcharge less financing cost of late payment surcharge);*
- (d) Interest on advances to suppliers/contractors;*
- (e) Interest on staff loans and advances;*
- (f) Income from trading;*
- (g) Income from staff welfare activities;*
- (h) Excess found on physical verification;*
- (i) Interest on investments, fixed and call deposits and bank balances;*
- (j) Net recovery from penalty on coal liaison agents;*
- (k) Prior period income;*
- (l) Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and/or wheeling charges, scheduling charges etc.;*
- (m) Rebate on timely payment of power purchase including transmission bills:
Provided that only 50% of the 'rebate for timely payment of power purchase and transmission charges' received by the Licensee shall be considered as non-tariff income;*
- (n) Miscellaneous receipts and any other income not included above; The Applicant shall submit full details of its forecast of non-tariff income to the Commission as a part of ARR filing. The amount received by the Applicant on account of non-tariff Income shall be deducted from the aggregate revenue requirement for calculating the net revenue requirement of Applicant's business."*

2.14.6 Accordingly, the Commission approves Rs. 35.57 Crore for Transmission Business and Rs. 0.23 Crore for SLDC Business as Non-Tariff Income for FY 2021-22.

2.15 Other Expenses

PSTCL's Submission:

2.15.1 PSTCL has considered the other debits of Rs. 1.23 crore for FY 2021-22 as per Note 38 of Annual Audited accounts.

2.15.2 Bad debts written off amounting to Rs. 0.68 Crore on account of reversal of delayed payment surcharge (DPS) income is considered upto the extent of income claimed in FY 2020-21 amounting to Rs. 0.32 Crore.

2.15.3 Loss on Stock amounting to Rs. 0.67 Crore is on account of previous year loss restated in accounts of FY 2020-21.

Details of other expenses are shown as follows:

Table 65: Other Expenses as claimed by PSTCL for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	Total
1	Delayed Payment charges income written off	0.32	-	0.32
2	Sundry debits written off	0.02	-	0.02
3	Infructuous capital expenditure written off	0.01	-	0.01
4	Loss on stock	0.67	-	0.67
5	Total	1.02	0.00	1.02

2.15.4 PSTCL has therefore claimed Rs. 1.02 Crore as Other Expenses for True-up of FY 2021-22 for Transmission Business.

Commission's Analysis:

2.15.5 Regulation 47 of PSERC MYT Regulations 2019 for Distribution Business is reproduced as under:

"47. BAD AND DOUBTFUL DEBTS AND OTHER DEBITS

47.1. Bad and doubtful debts shall be allowed to the extent the Distribution Licensee has identified/actually written off bad debts, subject to a maximum of 1% of annual sales revenue excluding subsidy, and according to a transparent policy approved by the Commission. In case, there is any recovery of bad debts

already written off, the recovered bad debts will be treated as Other Income.

47.2. Other debits including miscellaneous losses and write offs, sundry debts, material cost variance, losses on account of flood, cyclone, fire etc. shall be considered by the Commission.”

2.15.6 Accordingly, the Commission approves other debits Rs. 1.02 Crore as under:

**Table 66: Other Expenses as allowed by the Commission for FY 2021-22
(Rs. Crore)**

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	Total
1	Delayed Payment surcharge written off	0.32	-	0.32
2	Sundry debits written off	0.02	-	0.02
3	Infructuous capital expenditure written off	0.01	-	0.01
4	Loss on stock	0.67	-	0.67
5	Total	1.02	0.00	1.02

2.16 Income from Open Access Customers

2.16.1 PSTCL has claimed a receipt of Transmission charges of Rs. 3.66 Crore and SLDC charges of Rs. 0.09 Crore from Open Access Consumers based on the Audited Accounts of FY 2021-22. The amount of revenue from open access consumers is over and above the transmission charges approved by the Commission. Accordingly, PSTCL has claimed adjustment of Revenue from Open Access Consumers for True-up of FY 2021-22.

2.16.2 As per regulation 28.1 of PSERC MYT Regulations, 2019, the Commission approves Income from Open Access Customers as under:

Table 67: Income from Open Access Customers for FY 2021-22

Sr. No	Particulars	TRANSMISSION	SLDC	PSTCL
1	Transmission Charges from Railways - LTA	3.62	0.06	3.68
2	Transmission Charges from PSPCL (M/s Winsome Yarns Ltd - MTOA)	0.03	0.03	0.06
3	Transmission Charges from PSPCL (M/s Nahar Sugar - MTOA)	0.01		0.01
4	Total	3.66	0.09	3.75

2.17 Annual Revenue Requirement

The summary of the Annual Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2021-22 is shown in the following tables:

Table 68: Annual Revenue Requirement for Transmission Business for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2021-22	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2021-22	Approved by the Commission
1a	Total Employee Expenses	531.43	593.61	582.63	584.42
1b	R&M Expenses	31.85	36.40	36.55	35.87
1c	A&G Expenses	27.12	29.44	31.09	29.58
1	O&M Expenses	590.40	659.45	650.28	649.87
2	Interest Charges	297.24	331.46	295.19	294.30
3	Return on Equity	109.38	112.59	118.58	118.50
4	Depreciation	301.84	309.09	302.43	302.36
5	Interest on Working Capital	35.93	37.53	30.23	30.19
6	Other Expenses	-	-	1.02	1.02
7	Annual Revenue Requirement (ARR)	1334.79	1450.12	1397.73	1396.24
8	Less: Non-Tariff Income	25.94	35.57	35.57	35.57
9	Less: Income from Open Access Customers	-	3.69	3.66	3.66
10	Net ARR	1308.85	1410.86	1358.50	1357.01

Table 69: Annual Revenue Requirement for SLDC for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2021-22	Approved by the Commission in the Review of FY 2021-22	Claimed by PSTCL in the true up of FY 2021-22	Approved by the Commission
1a	Total Employee Expenses	7.95	8.30	10.90	9.13
1b	R&M Expenses	0.70	0.80	0.46	0.75
1c	A&G Expenses	0.83	0.88	1.01	0.88
1.	O&M Expenses	9.48	9.98	12.37	10.76
2.	Interest Charges	1.20	1.27	1.06	1.05
3.	ULDC Charges	9.53	9.80	8.88	8.88
4.	Depreciation	1.88	1.50	1.73	1.73
5.	Interest on Working Capital	0.60	0.59	0.55	0.50

Sr. No.	Particulars	Approved in Tariff Order for FY 2021-22	Approved by the Commission in the Review of FY 2021-22	Claimed by PSTCL in the true up of FY 2021-22	Approved by the Commission
6.	Other Expenses	-	-	0.00	0.00
7.	Annual Revenue Requirement (ARR)	22.69	23.13	24.59	22.92
8.	Less: Non-Tariff Income	0.58	0.35	0.23	0.23
9.	Less: Income from Open Access Customers	-	0.06	0.09	0.09
10.	Total ARR	22.11	22.72	24.26	22.60

2.17.1 The summary of the Annual Revenue Requirement of PSTCL for FY 2021-22 is as under:

Table 70: Annual Revenue Requirement for PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2021-22	Approved by the Commission in the Review of FY 2021-22	Claimed by PSTCL in the true up of FY 2021-22	Approved by the Commission
1a	Total Employee Expenses	539.38	601.91	593.54	593.55
1b	R&M Expenses	32.55	37.20	37.02	36.62
1c	A&G Expenses	27.95	30.32	32.10	30.46
1	O&M Expenses	599.88	669.43	662.66	660.63
2	Interest Charges	298.44	332.73	296.26	295.35
3	Return on Equity	108.93	112.59	118.58	118.50
4	ULDC Charges	9.53	9.80	8.88	8.88
5	Depreciation	303.72	310.59	304.16	304.09
6	Interest on Working Capital	36.53	38.12	30.78	30.69
7	Other Expenses	-	-	1.02	1.02
8	Annual Revenue Requirement (ARR)	1357.48	1473.25	1422.33	1419.16
9	Less: Non-Tariff Income	26.52	35.92	35.80	35.80
10	Less: Revenue from Open Access	-	3.75	3.76	3.75
11	Net Aggregate Revenue Requirement	1330.96	1433.58	1382.77	1379.61

2.18 Availability and Incentive on Transmission System Availability

PSTCL's Submission:

2.18.1 PSTCL has submitted that in accordance with PSERC MYT Regulations, 2019, PSTCL is eligible for incentive for overachieving the availability targets for transmission system availability which has been verified and certified by SLDC. As per PSERC MYT Regulations, 2019, the Normative Annual Transmission System Availability Factor (NATAF) for incentive computation has been considered as 99%. PSTCL has further submitted that no Incentive has been claimed for availability beyond 99.75% as per PSERC MYT Regulations, 2019. The net transmission charges inclusive of incentive based on fixed charges for Transmission and computation of incentive are given as per the table below.

Table 71: Incentive on account of TS Availability submitted by PSTCL for FY 2021-22
(Rs. Crore)

Sr No.	Month	Transmission Availability	Max Incentive Available upto 99.75	Transmission Charges at NATAF (In Crore)	Transmission Charges Inclusive of Incentives (In Crore)	Incentives (In Crore)
1	Apr-21	99.6328%	99.6328%	111.42	112.13	0.71
2	May-21	99.6729%	99.6729%	115.14	115.92	0.78
3	Jun-21	99.8274%	99.7500%	111.66	112.50	0.85
4	Jul-21	99.9070%	99.7500%	115.14	116.01	0.87
5	Aug-21	99.9360%	99.7500%	115.14	116.01	0.87
6	Sep-21	99.8874%	99.7500%	111.42	112.50	0.85
7	Oct-21	99.9044%	99.7500%	115.14	116.01	0.87
8	Nov-21	99.9821%	99.7500%	111.42	112.50	0.85
9	Dec-21	99.8015%	99.7500%	115.38	116.25	0.87
10	Jan-22	99.9510%	99.7500%	115.38	116.25	0.87
11	Feb-22	99.9438%	99.7500%	104.21	105.00	0.79
12	Mar-22	99.9587%	99.7500%	115.38	116.25	0.87
				1358.50	1368.57	10.07

Commission's Analysis:

2.18.2 The Commission determines the Incentive on Transmission System Availability for FY 2021-22 in accordance with Regulation 52 of PSERC MYT Regulations, 2019 which is reproduced as under:

“ Normative Annual Transmission System Availability Factor (NATAF) (a) For recovery of Annual Fixed Cost, NATAF shall be as 98.5% for AC system: (b) For Incentive, NATAF shall be more than 99% for AC system: Provided that no Incentive shall be payable for availability beyond 99.75%:”

2.18.3 The Commission observes that the transmission system availability of PSTCL has been verified by SLDC. Accordingly, the Commission determines the incentive for over achievement of transmission system availability by PSTCL, on the basis of the ARR of Transmission Business approved in Table 68 of this Tariff Order, as under:-

Table 72: Incentive on Transmission System (TS) Availability for FY 2021-22 determined by the Commission

(Rs. Crore)					
Sr. No.	Month	TS Availability (%)	Monthly Transmission Charges	Transmission Charges inclusive of Incentive	Incentive
I	II	III	IV	V	VI
1.	Apr-21	99.6328%	111.54	112.25	0.71
2.	May-21	99.6729%	115.26	116.04	0.78
3.	Jun-21	99.8274%	111.54	112.38	0.84
4.	Jul-21	99.9070%	115.25	116.13	0.88
5.	Aug-21	99.9360%	115.25	116.13	0.88
6.	Sep-21	99.8874%	111.54	112.38	0.84
7.	Oct-21	99.9044%	115.25	116.13	0.88
8.	Nov-21	99.9821%	111.54	112.38	0.84
9.	Dec-21	99.8015%	115.25	116.13	0.88
10.	Jan-22	99.9510%	115.25	116.13	0.88
11.	Feb-22	99.9438%	104.09	104.87	0.78
12.	Mar-22	99.9587%	115.25	116.13	0.87
13.	Total		1357.01	1367.07	10.06

2.18.4 Thus, the Commission allows the incentive of Rs. 10.06 Crore for FY 2021-22 to PSTCL for achieving higher transmission system availability than the Normative Annual Transmission System Availability Factor (NATAF) specified in the PSERC MYT Regulations, 2019.

2.19 Carrying Cost of Previous Years (FY 2020-21)

2.19.1 The Commission had allowed carrying cost including impact of true up of capital expenditure for 1st Control Period amounting to Rs 0.75 Crore in para 4.16 table no 134 of Tariff Order of FY 2021-22. This amount of Rs.0.75 Crore was inadvertently not considered in APR of FY 2021-22, therefore is now being considered in this tariff order.

2.20 Net Revenue Requirement

2.20.1. Considering the Incentive on Transmission System Availability, Penalty on under-achievement of transmission loss target and Carrying cost on Previous years, the summary of the Net Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2021-22 is shown in the following tables:

Table 73: Annual Revenue Requirement for Transmission Business for FY 2021-22
(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2021-22	Approved by the Commission in the Review of FY 2021-22	Claimed by PSTCL in the true up of FY 2021-22	Approved by the Commission
1.	Net Aggregate Revenue Requirement (Table 68)	1308.85	1410.86	1358.50	1357.01
2.	Add: Incentive on Transmission System Availability	-	-	10.07	10.06
3.	Add: Gain sharing on overachievement of Transmission Loss target	-	-	16.39	16.39
4.	Net ARR	1308.85	1410.86	1384.96	1383.46

Table 74: Annual Revenue Requirement for SLDC Business for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2021-22	Approved by the Commission in the Review of FY 2021-22	Claimed by PSTCL in the true up of FY 2021-22	Approved by the Commission
1.	Net ARR (Table 69)	22.11	22.72	24.26	22.60

2.20.2 The summary of the Annual Revenue Requirement of PSTCL for FY 2021-22 is as under:

Table 75: Annual Revenue Requirement for PSTCL for FY 2021-22

(Rs Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2021-22	Approved by the Commission in the Review of FY 2021-22	Claimed by PSTCL in the true up of FY 2021-22	Approved by the Commission
1	Total ARR (Table 73+74)	1330.96	1433.58	1409.22	1406.06
2	Add: Carrying Cost of Previous Years	0.75	0.75		0.75
3	Net ARR	1331.71	1434.33	1409.22	1406.81

Thus the Commission Trues up an annual revenue requirement of Rs. 1406.81 crores for PSTCL for FY 2021-22.

Chapter 3

Annual Performance Review of FY 2022-23

3.1 Background

3.1.1 PSTCL has projected the Annual Performance Review (APR) for FY 2022-23, separately for its Transmission business and SLDC business. The Commission in its Order dated June 01, 2020 for the 2nd MYT Control Period had approved the Net ARR of Rs. 1415.94 Crore for PSTCL for FY 2022-23. Further, in Tariff Order for FY 2022-23, the Commission approved Net ARR of Rs. 1492.56 Crore for PSTCL. The Commission has analysed the APR submitted by PSTCL in this chapter.

3.2 Transmission System Availability

3.2.1 PSTCL has submitted the average transmission system availability from April to September 2022 (H1) as per below table:

Table 76: Transmission System (TS) Availability of PSTCL for FY 2022-23 (H1)

Sr. No.	Month	TS Availability (%)
I	II	III
1.	April, 2022	99.7129%
2.	May, 2022	99.6484%
3.	June, 2022	99.9316%
4.	July, 2022	99.8926%
5.	August, 2022	99.9056%
6.	September, 2022	99.8820%

3.2.2 PSTCL has further submitted that it has maintained the transmission system Availability well above the normative annual transmission Availability factor up to September 2022, as mandated by PSERC Tariff Regulations, 2019.

3.2.3 PSTCL shall be claiming incentive on Transmission system Availability at the time of true up of FY 2022-23 on the basis of Actual Transmission System Availability.

Commission's Analysis:

3.2.4 The Commission has taken note of the submission of PSTCL and shall consider its actual Transmission System Availability for FY 2022-23 for incentive, as permissible as per PSERC MYT Regulations, 2019 at the time of true up for FY 2022-23.

3.3 Transmission Loss

PSTCL's Submission:

- 3.3.1 The Commission, in Tariff Order for FY 2022-23, approved the Transmission Loss of 2.44% for FY 2022-23. The actual transmission loss for the period from April, 2022 to September, 2022 are as under:

Table 77: Actual Transmission Loss submitted by PSTCL for FY 2022-23 (H1)

Sr. No.	Month	Energy injected in PSTCL Substations (in MWh) (A)	Energy exported from PSTCL Substations (in MWh) (B)	PSTCL Transmission Losses (A-B)	PSTCL Transmission Losses (%age)
I	II	III	IV	V	VI
1.	April,2022	4440605.173	4345355.334	95249.839	2.14
2.	May,2022	5857162.053	5736513.325	120648.728	2.06
3.	June,2022	7021609.846	6879223.990	142385.856	2.03
4.	July,2022	7610210.277	7448134.499	162075.778	2.13
5.	August,2022	8405188.762	8232192.462	172996.300	2.06
6.	September, 2022	7151922.882	6992071.316	159851.566	2.24
7.	Total Losses for FY 2022-23 (H1)	40486698.993	39633490.926	853208.067	2.11

- 3.3.2 PSTCL has further submitted that the actual Transmission loss for the whole of FY 2022-23 shall be submitted at the time of Truing-up.

Commission's Analysis:

- 3.3.3 The Commission observes that the actual Transmission loss reported by PSTCL till September of FY 2022-23 is coming to 2.11%. The commission appreciates that PSTCL transmission losses are reducing each year. Since losses in the lean months (Jan-March) are observed to be comparatively higher, the Commission decides to retain the transmission loss level at 2.44% for FY 2022-23 as approved in the 2nd MYT Order dated 01.06.2020 subject to final true-up.

3.4 Capital Expenditure

PSTCL's Submission:

- 3.4.1 PSTCL has submitted that it has revised the projections of the Capital Expenditure and Capitalization for FY 2022-23 according to actual planned expenditure in these years.

3.4.2 PSTCL has submitted that the Commission vide order dated 31st March 2022 approved Capital Investment of Rs. 608.24 Crore for Transmission Business and Rs 19.92 Crore for its SLDC Business.

3.4.3 The Opening CWIP of Spill over Schemes for FY 2021-22 is Rs. 132.38 crore (133.46 –0.79 -0.29).

Table 78: Details of CWIP, Capital Expenditure and Capitalization as claimed by PSTCL for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	Total
1	Opening WIP	245.45	7.17	252.62
a	Contributory	26.62	0.00	26.62
b	PSDF	3.11	0.00	3.11
c	Spill over Schemes	132.38	1.95	134.33
d	New Schemes	83.34	5.22	88.56
2	Capital Expenditure	689.71	21.59	711.30
a	Contributory	14.07	0.00	14.07
b	PSDF	2.88	0.00	2.88
c	Spill over Schemes	173.15	1.38	174.53
d	New Schemes	499.61	20.21	519.82
3	Capitalisation	414.25	8.37	422.62
a	Contributory	0.59	0.00	0.59
b	PSDF	0.0	0.00	0.00
c	Spill over Schemes	58.22	1.83	60.05
d	New Schemes	355.44	6.54	361.98
4	Closing WIP	520.91	20.39	541.30
a	Contributory	40.10	0.00	40.10
b	PSDF	5.99	0.00	5.99
c	Spill over Schemes	247.31	1.50	248.81
d	New Schemes	227.51	18.89	246.40

Commission’s Analysis:

3.4.4 The Commission notes PSTCL submission that the works mentioned at Sr. No. 205-291 in form T14 of the petition are the works which are ratified by BoDs and have been approved by the Commission in the 3rd MYT Control Period (i.e.FY 2023-24 to FY 2025-26). The Commission notes that these works have not been approved in the 2nd MYT Control period (FY 2020-21 to FY 2022-23). PSTCL has projected an expenditure of Rs. 162.07 Crore against these works.

3.4.5 Further, Regulation 9.14 of PSERC MYT Regulations 2019 specifies that

9.14 *In case capital expenditure is required for emergency work which has not been approved in the capital investment plan, the Applicant shall submit an application (containing all relevant information along with reasons justifying emergency nature of the proposed work) seeking approval by the Commission. The Applicant may take up the work prior to the approval of the Commission provided that the scheme has been approved by its Board of Directors as being of emergent nature:*

Provided that the Applicant shall submit the pending details required as per Regulation 9.8 and 9.9 within 10 days of the submission of the application for emergency work:

Provided further that for the purpose of Regulation 9.11, such approved capital expenditure shall be treated as a part of actual capital expenditure incurred by the Applicant in addition to the capital expenditure already approved by the Commission.

3.4.6 PSTCL has submitted that the works planned by PSTCL beyond MYT are intended for avoiding any emergent or exigent conditions in the Transmission system of Punjab, although the specific word “Emergent” is missing in the agendas put up before the BoDs of PSTCL and/or in the petitions put up before the Commission for those works.

3.4.7 As these works have not been approved by the Board of Director as being of emergent nature, the Commission disallows the capital investment of Rs. 162.07 Crore projected for these works. The Commission observes that works with such large investments/expenditure should be and are likely to be anticipated and a part of proper planning rather than being considered emergent and approved without thought or planning in the BOD.

3.4.8 Thus, the Capital Investment of Rs. 549.23 Crore (Rs. 711.30 Crore -Rs. 162.07 Crore) for FY 2022-23 is being considered by the Commission for provisional approval. The true up of the Capital expenditure shall be carried out after prudence check after the end of the 2nd MYT Control Period as per regulation 9.15 of PSERC MYT Regulations 2019.

3.5 Capitalization & Capital Work in Progress

3.5.1 The Commission approved Capital Expenditure for FY 2022-23 as under:

**Table 79: Capital expenditure provisionally approved by the Commission
(Rs. Crore)**

Sr. No.	Particulars	Amount
1	Transmission	527.64
	Contributory	14.07
	PSDF	2.88
a	Spill over Schemes	173.15
b	New Schemes	337.54
2	SLDC	21.59
a	Spill over Schemes	1.38
b	New Schemes	20.21
3	PSTCL	549.23

3.5.2 The Opening CWIP for FY 2022-23 is considered as Rs. 247.94 Crore for Transmission Business and Rs. 7.24 Crore for SLDC Business from the Closing CWIP for True Up of FY 2021-22 as approved in para No. 2.5.12 of this Tariff Order.

3.5.3 The Commission has not allowed capital expenditure amounting to Rs.162.07 Crore out of the total capital expenditure of new schemes submitted by PSTCL of Rs 499.61 crores (as given in Table 78). The corresponding capitalization against these schemes is also reduced from the total capitalization submitted by PSTCL amounting to Rs. 96.18 Crore. The Commission approves capital expenditure of Rs 549.23 crores and capitalization of Rs. 326.44 Crore for FY 2022-23 as submitted by PSTCL. The details are as under:

**Table 80: Capital Expenditure and capitalisation approved by Commission for
FY 2022-23
(Rs. Crore)**

Sr. No.	Particulars	Capital Expenditure	Capitalisation
1	Transmission	527.64	318.07
a	Spill over Schemes	190.10	58.81
b	New Schemes	337.54	259.26
2	SLDC	21.59	8.37
a	Spill over Schemes	1.38	1.83
b	New Schemes	20.21	6.54
3	PSTCL	549.23	326.44

3.5.4 The details for Capital Works in Progress approved by the Commission for Transmission and SLDC Business for FY 2022-23 are as under:

Table 81: Capital Works in Progress approved by the Commission for FY 2022-23

(Rs. Crores)		
Sr. No.	Particulars	Amount
	Transmission	
1	Opening CWIP	247.94
2	Capital Expenditure	527.64
a	Spill over Schemes	190.10
b	New Schemes	337.54
3	Capitalisation	318.07
a	Spill over Schemes	58.81
b	New Schemes	259.26
4	Closing WIP	457.51
	SLDC	
5	Opening WIP	7.24
6	Capital Expenditure	21.59
a	Spill over Schemes	1.38
b	New Schemes	20.21
7	Capitalisation	8.37
a	Spill over Schemes	1.83
b	New Schemes	6.54
8	Closing WIP	20.46

3.6 Funding of Capital Expenditure

PSTCL's Submission:

- 3.6.1** PSTCL submitted that it has considered the Capital Expenditure from Spill-over Schemes and Capitalisation of New Schemes for computation of funding of FY 2022-23.
- 3.6.2** PSTCL submits that it has considered 30% of Funding Requirement through equity for FY 2022-23. The remaining requirement of Capex in FY 2022-23 will be funded by availing loans from Banks/Financial Institutions. However, at the time of True up, funding through equity shall be claimed as per actuals in line with the PSERC Regulations.
- 3.6.3** The funding of Capital Expenditure and Capitalization as proposed by PSTCL for FY 2022-23 is shown in the following Table:

Table 82: Funding Requirement for Investment submitted by PSTCL for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	CAPEX of Spill over Schemes (Table No.78 serial no 2 c)	173.15	1.38	174.53
2	Capitalization of New Schemes (Table 78 serial no 3 d)	355.44	6.54	361.98
3	Total funding for CAPEX	528.59	7.92	536.51
a	Funding through Equity(30%)	160.95	0.00	160.95
b	Funding through Loan (70%)	367.64	7.92	375.56
b(i)	Funding through Loan (New Schemes)	194.49	6.54	201.03
b(ii)	Funding through Loan (Spill Over Schemes)	173.15	1.38	174.53

Commission's Analysis:

3.6.4 PSTCL has proposed equity funding for FY 2022-23. The Commission has considered SLDC equity portion into Transmission Business in new schemes which will be reviewed again based on actual funding during the time of True-up of FY 2022-23. Accordingly, the Commission allows the funding as under:

Table 83: Funding for FY 2022-23 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	CAPEX of Spill over Schemes	173.15	1.38	174.53
2	Capitalization of New Schemes	259.26	6.54	265.80
3	Total funding for CAPEX	432.41	7.92	440.33
a	Funding through Equity(30%)	132.10	0.00	132.10
b	Funding through Loan (70%)	300.31	7.92	308.23
b(i)	Funding through Loan (New Schemes)	179.11	6.54	185.65
b(ii)	Funding through Loan (Spill Over Schemes)	121.21	1.38	122.59

3.7 Operation and Maintenance Expenses

3.7.1 In the MYT Petition for FY 2022-23, PSTCL had projected employee expenses and A&G expenses of Rs. 574.75 Crore and Rs. 30.55 Crore for its Transmission Business respectively. For SLDC business, PSTCL had projected employee expenses and A&G expenses of Rs. 8.01 Crore and Rs. 1.11 Crore respectively for FY 2022-23. The Commission had approved employee cost of Rs. 541.98 Crore for Transmission Business and Rs. 7.40 Crore for SLDC Business for FY 2022-23. Further, the Commission had approved A&G

expenses of Rs. 30.03 Crore for Transmission Business and Rs. 1.12 Crore for SLDC Business for FY 2022-23.

3.7.2 In the ARR Petition for FY 2022-23, PSTCL had projected employee expenses and A&G expenses of Rs. 653.89 Crore and Rs. 31.86 Crore for its Transmission Business respectively. For SLDC business, PSTCL had projected employee expenses and A&G expenses of Rs. 11.99 Crore and Rs. 0.94 Crore respectively for FY 2022-23. The Commission had approved employee cost of Rs. 594.45 Crore for Transmission Business and Rs. 9.64 Crore for SLDC Business for FY 2022-23. Further, the Commission had approved A&G expenses of Rs. 32.02 Crore for Transmission Business and Rs. 0.96 Crore for SLDC Business for FY 2022-23.

A. Employee Costs

PSTCL's Submission:

3.7.3 As per Regulation 26 of PSERC MYT Regulations, 2019, PSTCL makes its submission for Employee Costs, R&M and A&G Expenses.

3.7.4 PSTCL submitted that since, WPI and CPI index are available till September, 2022, the escalation index has been computed as per provisions of PSERC MYT Regulations, 2019. The increase in CPI index for the period from H1 of FY 2022-23 over H1 of FY 2021-22 works out as 6.26% and increase in WPI index as 14.21%. With weightage of 50:50, the inflation factor has been worked out as 10.24%.

Table 84: Calculation of Index for FY 2022-23 (Six Months Basis)

Sr. No.	Particulars	FY 2021-22 (1st Half Year)	FY 2022-23 (1st Half Year)	Increase (%)
1	CPI (Month Wise Average)	121.92	129.55	6.26%
2	WPI (Month Wise Average)	134.53	153.65	14.21%

$$\text{INDEX } n/\text{INDEX } n-1 = (0.5*6.26) + (0.5*14.21) = 10.24\%$$

Terminal Benefits

3.7.5 Regulation 26 of the PSERC MYT Regulations, 2019 specifies that Terminal Benefits shall be allowed as per actual paid by PSTCL. The terminal benefits considered by PSTCL for FY 2022-23 are as shown in the following Table:

Table 85: Employee Terminal Benefits as claimed by PSTCL for FY 2022-23

Sr. No.	Particulars	(Rs. Crore)		
		Transmission	SLDC	PSTCL
1	Terminal Benefit increased with 6% D.A from FY 21-22	376.37	0.34	376.71
2	Impact of Pay Commission on Terminal Benefits (proportionate to 11.36% - PSTCL's Share)	87.40	0	87.40
3	Total Employee Terminal Benefits Cost	463.77	0.34	464.11

Employee Costs

- 3.7.6** PSTCL submitted that the Commission, in its Order dated March 31, 2022, approved the Employee cost FY 2022-23 as Rs. 604.10 Crore.
- 3.7.7** As per PSERC MYT Regulations, 2019, Other Employee Cost has been worked out considering the Truing up figures of FY 2021-22 as the base for computing normative Other Employee Cost for FY 2022-23.
- 3.7.8** PSTCL has adopted the approach of considering Net other Employee Cost as baseline for projection purpose. Therefore, PSTCL has not considered any employee expenses capitalized for FY 2022-23.

Transfer of Bathinda Substation from PSPCL to PSTCL

- 3.7.9** Due to transfer of 220 kV GNDTP Bathinda substation to PSTCL from October 1, 2021, the employee cost for six months, i.e., October 2021 to March 2022 has already been considered in base employee cost for FY 2021-22 amounting to Rs. 0.60 crore. The remaining six months employee cost has been considered after factoring in escalation amounting to Rs. 0.66 Crore in normative employee cost computed for FY 2022-23.

Manpower requirement for New Substations at Bahaman Jassa Singh

- 3.7.10** Due to the commissioning of 400 KV substations of PSTCL at Bahaman Jassa Singh in March 2022, PSTCL has considered the Employee Cost of the additional manpower required for Bahaman Jassa Singh Substation for FY 2022-23. Therefore Rs 1.76 Crore as additional employee cost has been projected for FY 2022-23.

Impact of Pay Revision by the 6th Pay Commission

- 3.7.11** PSTCL submitted that it has already considered the additional Impact of pay revision in FY 2021-22 for 50% employees approx. from 01.07.2021 to 31.03.2022 (for 9 months only) amounting to Rs. 14.89 Crore. The employee

cost to be incurred in FY 2022-23 is annualized for all employees. In addition, impact of Pay revision of the remaining employee (50% employees) not paid during FY 2021-22 has also been considered in FY 2022-23. The above figure do not include the impact of pay revision arrears which will be claimed according to the Punjab government's notification to be issued for this purpose.

3.7.12 Normative Employee Cost for FY 2022-23, after computing Net Other Employee Cost on the basis of CPI and WPI is as shown in the Table below:

Table 86: Normative Other Employee Cost as claimed by PSTCL for FY 2022-23

(Rs. crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Other Employee Cost for FY 2021-22	213.61	9.65	223.26
2	Escalation Factor (CPI:WPI: 50:50)	10.24%	10.24%	
3	Net Other Employee Cost for FY 2022-23	235.48	10.64	246.12
4	Employee Cost for 220 KV S/s Bathinda transferred from PSPCL to PSTCL	0.66	0.00	0.66
5	Employee Cost for 400 KV S/s Bahaman Jassa Singh (New)	1.76	0.00	1.76
6	Total Other Employee Cost for FY 2022-23	237.90	10.64	248.54
7	Impact of Pay Revision	51.18	3.42	54.60
8	Total Employee Terminal Benefits Cost	463.77	0.34	464.11
9	Normative Employee Cost for FY 2022-23	752.85	14.40	767.25

Commission's Analysis:

3.7.13 The employee cost are determined as per regulation 26.1 of PSERC MYT regulation, 2019 as reproduced as under:

"26. OPERATION AND MAINTENANCE (O&M) EXPENSES)

26.1. The O&M expenses for the nth year of the Control Period shall be approved based on the formula shown below:

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1 - X_n)$$

Where,

*(i) $R\&M_n = K * GFA * WPI_n / WPI_{n-1}$*

Where,

'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) for the nth year. The value of 'K' will be specified by the Commission in the MYT order.

'GFA' is the average value of the gross fixed assets of the nth year.

WPI_n means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year.

*(ii) $EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDEX_n / INDEX_{n-1})$*

INDEX_n - Inflation Factor to be used for indexing the Employee Cost and Administrative and General Costs for nth year. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) of nth year and shall be calculated as under:-

$$INDEX_n = 0.50 * CPI_n + 0.50 * WPI_n$$

'WPI_n' means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year.

'CPI_n' means the average rate (on monthly basis) of Consumer Price Index (Industrial workers) over the year for the nth year.

...

...Note 4: Terminal Liabilities such as death-cum-retirement gratuity, pension including family pension, commuted pension, leave encashment, LTC, medical reimbursement including fixed medical allowance in respect of State PSU / Government pensioners will be approved as per the actuals paid by the Applicant.

Note 5: O&M expenses made on account of extraordinary situations (if any) shall be submitted to Commission for its approval. Such expenses shall be filed separately and will not be subjected to provisions of Regulation 30. The amount approved by the Commission shall be trued up in the Annual Performance Review.

Note 6: Exceptional increase in employee cost on account of pay Commission based revision State PSU / Government employees will be considered separately by the Commission.

Note 7: Any expenditure on account of license fee, initial or renewal, fee for determination of tariff and audit fee shall be allowed on actual basis, over and above the A&G expenses approved by the Commission.

Note 8: O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the Generating Company or the Licensee has the responsibility for its operation and maintenance and bears O&M expenses.

Note 9: With regard to unfunded past liabilities of pension and gratuity, the Commission will follow the principle of 'pay as you go'. The Commission shall not allow any other amount towards creating fund for meeting unfunded past liability of pension and gratuity.

Note 10: O&M expenses for gross fixed assets added during the year, if not accounted already, shall be considered from the date of commissioning on pro-rata basis.

..."

A. 1) Terminal Benefits

3.7.14 In ARR petition for FY 2022-23, PSTCL has submitted that the actual pay-out on account of Terminal Benefits in respect of pensioners shall be as per Punjab Power Sector Reforms Transfer Scheme approved by the Government of Punjab. PSTCL shall submit the Terminal Benefits actually paid for FY 2022-23 at the time of True-up of the respective years. The Commission had retained the

Terminal Benefits of Rs. 335.91 Crore for FY 2022-23, as approved vide MYT Order dated 01.06.2020.

3.7.15 In this petition PSTCL has submitted terminal benefits with 6% DA increase from FY 2021-22 alongwith the impact of pay revision on terminal benefits. The Commission considers terminal benefits as submitted by PSTCL amounting to Rs. 464.11 (Table 85). The same will be reviewed in true up of the year on actual paid basis.

2) Other Employee Cost

3.7.16 The Commission has calculated the **INDEX_n** as under:

Table 87: Calculation of INDEX for APR of FY 2022-23

Sr. No.	Particulars	FY 2021-22 (Apr '21-Dec '21)	FY 2022-23 (Apr '22-Dec '22)	Increase (%)
1.	CPI	354.400	375.872	6.059%
2.	WPI	137.211	153.022	11.523%

$$\text{INDEX } n/\text{INDEX } n-1 = (0.5*6.059) + (0.5*11.523) = 8.7909\%$$

3.7.17 The INDEX and WPI inflation for FY 2022-23 is considered the same as FY 2021-22 and will be revisited at the time of true of respective years.

3.7.18 The costs pertaining to transfer of Bathinda Substation from PSPCL to PSTCL, and the impact of pay revision in 6th Pay Commission as submitted by PSTCL have been allowed by the Commission.

3.7.19 PSTCL has submitted that the 400 kV substation at Bahaman Jassa Singh has been commissioned. Accordingly, the Commission has allowed the employee cost of Rs. 1.76 Crore for FY 2022-23 as claimed by PSTCL.

3.7.20 The aforesaid expenses same shall be considered based on actual figures during the time of truing up of the respective years. Accordingly, the Commission has calculated the Normative Employee Cost as under:

Table 88: Normative Employee Cost as approved by the Commission for FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	Amount
Transmission Business		
1.	Other Employee Cost of previous year	214.80
2.	Inflation Factor	8.7909%
3.	Other Employee Cost	233.67
4.	Employee Cost for 220 kV Bathinda S/s transferred from PSPCL to PSTCL	0.66
5.	Employee Cost for 400 kV New substation at Bahaman Jassa Singh in FY 2022-23	1.76
6.	Pay Revision impact according to PSTCL Computation	51.18
7.	Terminal Benefits	463.77
8.	Total Employee Cost	751.04
SLDC Business		
1.	Other Employee Cost of previous year	7.88
2.	Inflation Factor	8.7909%
3.	Other Employee Cost	8.57
4.	Pay Revision impact according to PSTCL Computation	3.42
6.	Terminal Benefits	0.34
7.	Total Employee Cost	12.33

3.7.21 Therefore, the Commission allows Employee Cost of Rs. 751.04 Crore for Transmission Business and Rs.12.33 Crore for SLDC Business i.e., Employee Cost of Rs. 763.37 Crore for FY 2022-23 to PSTCL.

A. Administration & General (A&G) Expenses

PSTCL's Submission:

3.7.22 PSTCL submitted that the Commission in its Tariff Order dated May 28, 2021, approved A&G Expenses of Rs. 30.03 Crore and Rs. 1.12 Crore for FY 2022-23 for its Transmission and SLDC Business respectively.

3.7.23 PSTCL further stated that the Commission in its Tariff Order dated March 31, 2022, revised A&G Expenses to Rs. 32.02 Crore and Rs. 0.96 Crore for FY 2022-23 for its Transmission and SLDC Business respectively.

3.7.24 PSTCL has computed the A&G expenses considering the base A&G expenses of FY 2021-22 and applying escalation of 10.24% computed on the basis of CPI Index & WPI Index (taken at 50:50 weightage) for FY 2022-23.

3.7.25 PSTCL also projected additional A& G expense on account of asset addition during the FY 2022-23. K-factor of true up of FY 2021-22 has been considered for calculations of A&G expense on asset addition during FY 2022-23 i.e. 0.250% for STU and 2.224% for SLDC. As per the PSERC MYT Regulations, 2019, PSTCL has additionally claimed Licence Fee and Audit Fee in line with the MYT, Regulations 2019.

3.7.26 The normative A&G expenses for FY 2022-23 claimed by PSTCL are as shown in the Table below:

Table 89: Computation of Normative A & G Expenses claimed by PSTCL for FY 2022-23

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Asset added during FY 2022-23	414.25	8.37	422.62
2	K-Factor for A&G expenses	0.250%	2.224%	
3	Add: Additional A&G expenses on account of asset addition during FY 2022-23	1.03	0.19	1.22
4	Baseline A & G Expenses for FY 2021-22	30.52	1.01	31.53
5	A&G expenses for FY 2022-23 before escalation	31.56	1.19	32.75
6	Escalation Factor (CPI:WPI: 50:50)	10.24%	10.24%	
7	Escalated A&G expenses for FY 2022-23	34.78	1.31	36.10
8	Add: Audit fee	0.05	0	0.05
9	Add: License fee	0.52	0	0.52
10	Normative A&G Expenses	35.35	1.31	36.67

Commission's Analysis:

3.7.27 PSTCL replied vide letter dated 28.12.2022 in response to deficiencies pointed out by the commission that there is no change in the methodology and "K Factor" is only the %age of expenses to be applied on asset addition during FY 2021-22 as per regulation.

3.7.28 The A&G expenses are to be determined as per Regulation 26.1 of PSERC MYT Regulations, 2019. The relevant sections are as given in para 2.7.17

wherein no formula has been prescribed for determination of baseline A&G expenses on the basis of K factor.

- 3.7.29** The Commission has determined the A&G expenses considering the baseline A&G expenses approved in the True-up of FY 2021-22 and index as per Table.87. Audit fee and License/ARR fee has been considered as per true up of FY 2021-22 provisionally.

Table 90: A&G expenses as approved by the Commission FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	Amount
	Transmission Business	
1.	Opening A&G	29.01
2.	Inflation Factor	8.7909%
3.	A&G Expenses	31.56
4.	Audit Fee	0.05
5.	Add: Licence/ARR Fee	0.52
6	Total A&G Expenses	32.13
	SLDC Business	
1.	Opening A&G	0.88
2.	Inflation Factor	8.7909%
3.	A&G expenses	0.95

- 3.7.30** Therefore, the Commission allows A&G expenses of Rs. 32.13 Crore for Transmission Business and Rs. 0.95 Crore for SLDC Business i.e. A&G expenses of Rs. 33.08 Crore for FY 2022-23 for PSTCL.

C. Repair & Maintenance (R&M)

- 3.7.31** In the MYT Petition for FY 2022-23, PSTCL projected R&M Expenses of Rs. 40.04 Crore for its Transmission Business and Rs. 1.30 Crore for its SLDC Business for FY 2022-23. The Commission approved Rs. 44.55 Crore and Rs. 1.52 Crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

- 3.7.32** In the ARR Petition for FY 2022-23, PSTCL projected R&M Expenses of Rs. 38.10 Crore for its Transmission Business and Rs. 2.22 Crore for its SLDC Business for FY 2022-23. The Commission approved Rs. 43.18 Crore and Rs. 1.39 Crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

PSTCL's Submission:

3.7.33 PSTCL has claimed R&M expenses in line with the submission of Capital Expenditure and Capitalization claimed in this Petition. K-factor, calculated on basis of Actual figures for FY 2020-21, has been considered same as considered in the True up of FY 2021-22 as the first year of Control Period as specified in PSERC MYT Regulations, 2019. As specified in the above Regulations, WPI is to be considered for computation of R&M Expenses. Hence, PSTCL has considered 14.21% increase for computation of R&M Expenses for FY 2022-23.

3.7.34 PSTCL has claimed R&M expenses for Transmission Business and SLDC for FY 2022-23 as under:

Table 91: Normative R & M Expenses as claimed by PSTCL for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA as on 01.04.2022	10655.50	28.89	10684.39
2	Add: Addition during the year	414.25	8.37	422.62
3	Less: Retirement during the year	0.00	0.00	0.00
4	Closing GFA as on 31.03.2023	11069.75	37.26	11107.01
5	Average GFA for FY 2022-23	10862.62	33.08	10895.70
6	K - Factor (Based on FY 2020-21)	0.309%	1.420%	
7	Escalation Factor (WPI Index)	14.21%	14.21%	
8	Normative R & M Expenses for FY 2022-23	38.33	0.54	38.87

Commission's Analysis:

3.7.35 As per Regulation 26.1 of PSERC MYT Regulations 2019, the R&M expenses are to be determined as under:

$$\text{“ (i) } R\&M_n = K * GFA * WPI_n / WPI_{n-1}$$

Where,

'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) for the *n*th year. The value of *'K'* will be specified by The Commission in the MYT order.

'GFA' is the average value of the gross fixed assets of the *n*th year.

WPI_n means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the *n*th year.”

3.7.36 The 'K' factor as determined in the MYT order is used for determining normative R&M expenses of FY 2022-23. The opening GFA is considered as per the

Closing GFA approved during True-Up of FY 2022-23. The Commission has calculated the WPI increase in FY 2022-23 as per table No.87. Accordingly, Inflation factor= 1+ 0.11523 = 1.11523

3.7.37 After considering the k-factor, increase in WPI and projected capitalization (Table No.80) during FY 2022-23, the Commission has calculated the R&M Expenses for FY 2022-23 as under:

Table 92: R&M Expenses for the FY 2022-23 as approved by the Commission

(Rs. Crore)		
Sr. No.	Particulars	FY 2022-23
	Transmission Business	
1	Opening GFA	10652.12
2	Addition during the year	318.07
3	Closing GFA	10970.19
4	Average GFA	10811.16
5	k-factor	0.303%
8	Inflation factor for FY 2022-23	1.11523
9	R&M Expenses	36.56
	SLDC	
1	Opening GFA	28.89
2	Addition during the year	8.37
3	Closing GFA	37.26
4	Average GFA	33.08
5	k-factor	2.323%
8	Inflation factor for FY 2022-23	1.11523
9	R&M Expenses	0.86
	Total R&M Expenses for PSTCL	37.42

Thus, the Commission approves O&M expenses for the FY 2022-23 as under:

Table 93: O&M Expenses for Transmission Business of FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	FY 2022-23
1.	Employee Expenses	751.04
2.	A&G Expenses	32.13
3.	R&M Expenses	36.56
4.	O&M Expenses	819.73

Table 94: O&M Expenses for SLDC Business of FY 2021-22 and FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	FY 2022-23
1.	Employee Expenses	12.33
2.	A&G Expenses	0.95
3.	R&M Expenses	0.86
4.	O&M Expenses	14.14

Table 95: O&M Expenses for PSTCL of FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	FY 2022-23
1.	Employee Expenses	763.37
2.	A&G Expenses	33.08
3.	R&M Expenses	37.42
4.	O&M Expenses	833.87

3.8 Depreciation Charges

3.8.1 In the MYT Petition of FY 2022-23, PSTCL had claimed depreciation charges of Rs. 350.43 Crore for Transmission Business and Rs. 1.61 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 313.80 Crore for Spillover Schemes and Rs. 14.15 Crore for New Schemes of Transmission Business and Rs. 0.73 Crore for Spillover schemes and Rs. 0.93 Crore for New Schemes of SLDC Business.

3.8.2 In the ARR Petition of FY 2022-23, PSTCL had claimed depreciation charges of Rs 327.00 crores for transmission business and Rs 2.46 crores for SLDC business against which the Commission had approved depreciation charges of Rs. 327.40 Crore for Transmission Business and Rs. 2.46 Crore for SLDC Business.

PSTCL's Submission:

3.8.3 PSTCL has considered the closing GFA (Net of land and land rights) as on March 31, 2022 as claimed in this Petition for True-up for FY 2021-22, as the opening GFA of FY 2022-23. PSTCL has considered addition to GFA equivalent to net Capitalisation transferred from CWIP account as stated in Capital Expenditure and Capitalisation section of this Chapter for FY 2022-23. PSTCL has not considered any retirement of asset during the year for FY 2022-23. Retirement of assets during the year, if any, shall be claimed at actuals at the time of truing up for the respective years.

3.8.4 PSTCL has applied the weighted average Depreciation rate of 4.10% for Transmission Business and 7.21% for SLDC on the basis of Audited Accounts of FY 2021-22 on average GFA of FY 2022-23. Accordingly, PSTCL claimed the Depreciation for FY 2022-23 as shown in the Table below:

Table 96: Depreciation for Total Assets claimed by PSTCL for FY 2022-23
(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works) as on 01.04.2022	7475.82	24.14	7499.96
2	Add: Addition to GFA during FY 2022-23 (Excluding Contributory & PSDF)	413.66	8.37	422.03
3	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works) as on 31.03.2023	7889.48	32.51	7921.99
4	Average GFA for FY 2022-23	7682.65	28.32	7710.98
5	Depreciation (%) (as of FY 2021-22)	4.10%	7.21%	
6	Depreciation for FY 2022-23	315.24	2.04	317.28

Table 97: Depreciation for New Assets claimed by PSTCL for FY 2022-23
(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works) as on 01.04.2022	134.80	0.26	135.05
2	Add: Addition to GFA during FY 2022-23 (Excluding Contributory & PSDF)	355.44	6.54	361.98
3	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works) as on 31.03.2023	490.24	6.80	497.04
4	Average GFA for FY 2022-23	312.52	3.53	316.05
5	Depreciation (%) (as of FY 2021-22)	4.10%	7.21%	
6	Depreciation for FY 2022-23	12.82	0.25	13.08

Table 98: Depreciation for Spill Over Assets claimed by PSTCL for FY 2022-23

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works) as on 01.04.2022	7341.02	23.88	7364.90
2	Add: Addition to GFA during FY 2022-23 (Excluding Contributory & PSDF)	58.22	1.83	60.05
3	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works) as on 31.03.2023	7399.24	25.71	7424.95
4	Average GFA for FY 2022-23	7370.13	24.80	7394.92
5	Depreciation (%) (as of FY 2021-22)	4.10%	7.21%	
6	Depreciation for FY 2022-23	302.41	1.79	304.20
7	Depreciation for FY 2022-23 on assets Commissioned on or before FY 2009-10	13.14	0.03	13.17
8	Depreciation for FY 2022-23 on assets Commissioned on or after FY 2010-11	289.28	1.75	291.03

Commission's Analysis:

3.8.5 Regulation 21 of the PSERC MYT Regulations, 2019 specifies as under:

"21.1. The value base for the purpose of depreciation shall be the capital cost of the assets admitted by The Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided that the land, other than the land held under lease and land for reservoir in case of hydro generating station, shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets:

Provided further that Government. grants and consumer contribution shall also be recognized as defined under Indian Accounting Standard 20 (IND AS 20) notified by the Ministry of Corporate Affairs.

21.2. The residual/salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of historical capital cost of the asset:

Provided that I.T. Equipment and Software shall be depreciated 100% with zero salvage value.

21.3. The Cost of the asset shall include additional capitalization.

21.4. The Generating Company, Transmission and Distribution Licensee shall provide the list of assets added during each Year of the Control Period and the list of assets completing 90% of depreciation in the Year along with Petition for Annual Performance Review, true-up and tariff determination for ensuing Year.

21.5. Depreciation for Distribution, generation and transmission assets shall be calculated annually as per straight line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation/ put in use of the asset shall be spread over the balance useful life of the assets:

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the asset.

21.6. Depreciation shall be chargeable from the first year of commercial operation/asset is put in use. In case of commercial operation of the asset/put in use of asset for part of the year, depreciation shall be charged on pro rata basis.”

3.8.6 The Commission determines the depreciation for FY 2022-23 as per the Regulation 21 stated above. The Opening GFA for the Spillover schemes and New schemes is considered as per the Closing GFA of Spillover schemes and New schemes respectively approved by the Commission in the True-Up of FY 2021-22. Based on the actual rate of depreciation of 4.10% for Transmission Business and 7.21% for SLDC Business as determined during True-Up of FY 2021-22 of PSTCL in this Tariff Order, the depreciation for Spillover and New Schemes for Transmission and SLDC Business is as under:

Table 99: Depreciation approved by the Commission for FY 2022-23 for Transmission Business

		(Rs. Crore)
Sr. No	Particulars	FY 2022-23
(I)	Spillover Schemes	7341.02
1.	Opening GFA (excluding land and land rights & contributory and PSDF works)	7341.02
2.	Add: Additions to GFA during the year	58.22
4.	Closing GFA	7399.24
5.	Average GFA	7310.13
6.	Depreciation @4.10% of average GFA	302.42
(II)	New schemes	
7.	Opening GFA (excluding land and land rights)	131.43

Sr. No	Particulars	FY 2022-23
8.	Add: Additions to GFA during the year	259.26
9.	Closing GFA	390.69
10.	Average GFA	261.06
11.	Depreciation @4.10% of average GFA	10.71
12.	Total Depreciation	313.13

Table 100: Depreciation approved by the Commission for FY 2022-23 for SLDC Business (Rs. Crore)

Sr. No	Particulars	FY 2022-23
(I)	Spillover schemes	
1.	Opening GFA (excluding land and land rights)	23.88
2.	Add: Additions to GFA during the year	1.83
3.	Closing GFA	25.71
4.	Average GFA	24.80
5.	Depreciation @7.21% of average GFA	1.79
(II)	New schemes	
6.	Opening GFA (excluding land and land rights)	0.26
7.	Add: Additions to GFA during the year	6.54
8.	Closing GFA	6.80
9.	Average GFA	3.53
10.	Depreciation @7.21% of average GFA	0.25
11.	Total Depreciation	2.04

Table 101: Depreciation approved by the Commission for FY 2022-23 for PSTCL (Rs. Crore)

Sr. No	Particulars	FY 2022-23
(I)	Transmission	
1.	Opening GFA (excluding land and land rights)	7472.45
2.	Add: Additions to GFA during the year	317.48
3.	Closing GFA	7789.93
4.	Average GFA	7631.19
5.	Depreciation @4.10% of average GFA	313.13
(II)	SLDC	
6.	Opening GFA (excluding land and land rights)	24.14
7.	Add: Additions to GFA during the year	8.37
8.	Closing GFA	32.51
9.	Average GFA	28.33
10.	Depreciation @7.21% of average GFA	2.04
11.	Total Depreciation	315.17

The Commission approves depreciation of Rs. 313.13 Crore and Rs. 2.04 Crore for Transmission and SLDC business respectively for FY 2022-23.

3.9 Interest and Finance Charges

3.9.1 In the MYT Petition of FY 2022-23, PSTCL had claimed Interest and Finance charges of Rs. 340.62 Crore (net of capitalization of Rs. 66.19 Crore of interest charges) for its Transmission Business and Rs. 3.65 Crore for SLDC Business for FY 2022-23. The Commission approved interest charges of Rs. 351.56 Crore for Transmission Business (including Spillover and new schemes) and Rs. 4.29 Crore for SLDC Business for FY 2021-22.

3.9.2 In the ARR Petition of FY 2022-23, PSTCL had claimed Interest and Finance charges of Rs. 342.58 Crore (net of capitalization of Rs. 11.30 Crore of interest charges) for its Transmission Business and Rs. 2.54 Crore for SLDC Business for FY 2022-23. The Commission approved interest charges of Rs. 339.97 Crore for Transmission Business (including Spillover and new schemes) and Rs. 2.58 Crore for SLDC Business for FY 2022-23.

PSTCL's Submission:

3.9.3 PSTCL has considered the closing balance of loans for FY 2021-22 as in the True-up Chapter, as the opening loan as on April 1, 2022.

3.9.4 The outstanding existing loans include loans from REC, Commercial Banks, Loan from PSPCL and GPF Liability. The loan addition considered during FY 2022-23 is as per the addition of loan computed in the section on Funding of Capital Investment. PSTCL has proposed new loans for the proposed investments for FY 2022-23 from Banks/Financial Institutions and Equity.

3.9.5 PSTCL has considered the loan repayment in line with the Depreciation computed for FY 2022-23 excluding the depreciation charged on assets Commissioned before 16.04.2010.

3.9.6 PSTCL has considered the weighted average interest rate applicable on loans of FY 2021-22 taken from respective Banks/Financial Institutions for computation of interest for FY 2022-23. Also, PSTCL has considered interest charges capitalised for FY 2022-23 in proportion to ratio of the actual interest charges capitalised and average amount of Loan on Spill over Schemes in FY 2021-22. Accordingly, interest on loan capital for FY 2022-23 for PSTCL has been submitted as under:

Table 102: Interest on Loan claimed by PSTCL for all Schemes for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Balance 01.04.2022	3199.23	11.19	21.96	3232.38
2	Add: Addition during year	367.64	7.92	0.00	375.56
3	Less: Repayment during year	302.10	2.01	21.96	326.07
4	Closing Balance as on 31.03.2023	3264.77	17.10	0.00	3281.88
5	Average Loan for the year	3232.00	14.15	10.98	3257.13
6	Interest Rate	9.12%	9.11%		
7	Interest Charges for the year	294.72	1.29	2.40	298.41
8	Less: Interest Capitalized	7.11	0.00	0.00	7.11
9	Add: Misc & Finance Charges	0.14	0.00	0.00	0.14
10	Normative Interest & Finance Charges	287.75	1.29	2.40	291.44

Table 103: Interest on Loan for New Schemes claimed by PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Balance 01.04.2022	50.51	0.24	0.00	50.76
2	Add: Addition during the year	194.49	6.54	0.00	201.03
3	Less: Repayment during the year	12.82	0.25	0.00	13.08
4	Closing Balance as on 31.03.2023	232.18	6.53	0.00	238.71
5	Average Loan for the year	141.35	3.39	0.00	144.73
6	Interest Rate	9.12%	9.11%		
7	Interest Charges for the year	12.89	0.31	0.00	13.20
8	Less: Interest Capitalized	0.00	0.00	0.00	0.00
9	Add: Misc & Finance Charges	0.00	0.00	0.00	0.00
10	Normative Interest & Finance Charges	12.89	0.31	0.00	13.20

Table 104: Interest on Loan for Spill Overs Schemes claimed by PSTCL for FY 2022-23

(Rs. Crore)					
Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Balance 01.04.2022	3148.72	10.95	21.96	3181.63
2	Add: Addition during year	173.15	1.38	0.00	174.53
3	Less: Repayment during year	289.28	1.75	21.96	312.99
4	Closing Balance as on 31.03.2023	3032.59	10.57	0.00	3043.17
5	Average Loan for the year	3090.66	10.76	10.98	3112.40
6	Interest Rate	9.12%	9.11%		
7	Interest Charges for the year	281.83	0.98	2.40	285.22
8	Less: Interest Capitalized	7.11	0.00	0.00	7.11
9	Add: Misc & Finance Charges	0.14	0.00	0.00	0.14
10	Normative Interest & Finance Charges	274.86	0.98	2.40	278.25

Commission's Analysis:

3.9.7 The Commission determines the Interest on loan capital for the 2nd MYT Control Period as per Regulation 24 of the PSERC MYT Regulations, 2019. which is reproduced as under:

"24.1. For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the Licensee.

24.2. Interest and finance charges on the future loan capital for new investments shall be computed on the loans, based on one (1) year State Bank of India (SBI) MCLR/ any replacement there of as notified by RBI as may be applicable as on 1st April of the relevant year, plus a margin determined on the basis of current actual rate of interest of the capital expenditure loan taken by the Generating Company, Licensee or SLDC and prevailing SBIMCLR.

24.3. The repayment for each year of the tariff period shall be deemed to be equal to the depreciation allowed for the corresponding year. In case

of de-capitalisation of assets, the repayment shall be adjusted by taking into account cumulative depreciation made to the extent of de-capitalisation.

24.4. The Commission shall allow obligatory taxes on interest, finance charges (including guarantee fee payable to the Government) and any exchange rate difference arising from foreign currency borrowings, as finance cost.

24.5. The interest on excess equity treated as loan shall be serviced at the weighted average interest rate of actual loan taken from the lenders.

Provided also 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 for the actual loan shall be considered.”

- 3.9.8** The Opening loan for Spillover schemes and New schemes is considered as per the Closing loan approved by the Commission for Spillover schemes and New schemes respectively in the true up of FY 2021-22 in this Tariff Order.
- 3.9.9** The Commission has considered the approved addition of loan as explained in para 3.6.4 (Table No.83).
- 3.9.10** As per regulation 24.3 of PSERC MYT Regulation 2019, the repayment of loan is considered equal to depreciation allowed for the corresponding year and not as claimed by PSTCL. The Commission. observed that PSTCL has changed its methodology of considering repayment of loan by segregating depreciation on assets commissioned on or before 2009-10 and after FY 2009-10 and claiming repayment equal to depreciation only on assets commissioned after 2009-10.
- 3.9.11** The Commission did not consider the submission of PSTCL for not considering repayment equal to depreciation and has considered repayment as per Regulation 24.3.
- 3.9.12** For the Spillover schemes i.e., for existing loans, the rate of interest on loan capital is as per Regulation 24.1 and is considered as 9.12% for Transmission business and 9.11% for SLDC business as approved during the True-up of FY 2021-22 in this Tariff Order.
- 3.9.13** The Commission determines Interest on long term loans for Transmission Business and SLDC Business by considering the closing of FY 2021-22 as the opening for FY 2022-23 and funding as approved in para 3.6.4 as under:

Table 105: Interest on loan for Spill over schemes of Transmission Business for

FY 2022-23		(Rs. Crore)
Sr. No.	Particulars	Amount
1.	Opening balance of loan	3089.58
2.	Add: Receipt of loan during the year	121.21
3.	Less: Repayment of loan during the year	302.42
4.	Closing balance of loan	2908.37
5.	Average Loan	2998.97
6.	Interest Charges @ 9.12%	273.48

Table 106: Interest on loan for New schemes of Transmission Business for

FY 2022-23		(Rs. Crore)
Sr. No.	Particulars	Amount
1.	Opening balance of loan	89.14
2.	Add: Receipt of loan during the year	179.11
3.	Less: Repayment of loan during the year	10.71
4.	Closing balance of loan	257.53
5.	Average Loan	173.34
6.	Interest Charges @ 9.12%	15.81

Table 107: Interest on loan for Spillover schemes of SLDC Business

FY 2022-23		(Rs. Crores)
Sr. No.	Particulars	Amount
1.	Opening balance of loan	10.91
2.	Add: Receipt of loan during the year	1.38
3.	Less: Repayment of loan during the year	1.79
4.	Closing balance of loan	10.50
5.	Average Loan	10.71
6.	Interest Charges @ 9.11%	0.98

Table 108: Interest on loan for New schemes of SLDC Business

FY 2022-23		(Rs. Crores)
Sr. No.	Particulars	Amount
1.	Opening balance of loan	0.25
2.	Add: Receipt of loan during the year	6.54
3.	Less: Repayment of loan during the year	0.25
4.	Closing balance of loan	6.54
5.	Average Loan	3.39
6.	Interest Charges @ 9.11%	0.31

3.9.14 The Commission approves Interest on long term loans of Rs. 289.29(273.48+15.81) Crore for Transmission Business and Rs. 1.29 (0.98+0.31) Crore for SLDC Business for FY 2022-23.

Interest on GPF Fund:

3.9.15 The Commission has observed that PSTCL has submitted a claim of provisional GPF liability as Rs. 2.40 Crore for FY 2022-23. The Interest on GPF being a statutory payment is provisionally allowed as submitted by PSTCL.

Finance and Guarantee charges:

3.9.16 PSTCL has claimed finance charges and guarantee fee of Rs. 0.14 Crore for FY 2022-23. **The Commission has considered the submissions of PSTCL and has provisionally approved the finance charges and guarantee fees as Rs. 0.14 Crore for FY 2022-23, as submitted by PSTCL.**

Capitalization of Interest Charges

3.9.17 Capitalization of interest and finance charges of Rs. 7.11 Crore for FY 2022-23 is claimed by PSTCL. The Commission has considered the same.

3.9.18 Accordingly, the Commission determines Interest and Finance Charges for Transmission Business and SLDC Business as under:

Table 109: Interest and Finance charges approved by the Commission for Transmission Business FY 2022-23 (Rs. Crores)

Sr. No	Particulars	Amount
1.	Interest charges for Spillover schemes of Transmission Business	273.48
2.	Interest charges for New schemes of Transmission Business	15.81
3.	Interest on GP Fund	2.40
4.	Add Finance/Guarantee charges	0.14
5.	Less: Interest capitalized	7.11
6.	Net Interest charges	284.72

Table 110: Interest and Finance charges approved by the Commission for SLDC

Business FY 2022-23		(Rs. Crores)
Sr. No	Particulars	Amount
1.	Interest charges	1.29

3.9.19 Thus, the Commission approves Net Interest and Finance Charges of Rs. 286.01(284.72+1.29) Crore for PSTCL for FY 2022-23.

3.10 Interest on Working Capital

3.10.1 In the MYT Petition for FY 2022-23, PSTCL had claimed interest on working capital of Rs. 45.34 Crore and Rs. 0.72 Crore for Transmission business and SLDC business respectively against which the Commission had approved Rs. 37.45 Crore and Rs. 0.63 Crore for Transmission business and SLDC business respectively.

3.10.2 In the ARR Petition for FY 2022-23, PSTCL had claimed interest on working capital of Rs. 41.15 Crore and Rs. 0.84 Crore for Transmission business and SLDC business respectively against which the Commission had approved Rs. 38.40 Crore and Rs. 0.70 Crore for Transmission Business and SLDC Business respectively.

PSTCL's Submission:

3.10.3 PSTCL has computed IoWC for FY 2022-23 in line with the provisions of Regulation 51.1 and Regulation 25.1 of the PSERC MYT Regulations, 2019. PSTCL submitted that the actual weighted average rate of IoWC loans for FY 2021-22 is coming out to be lower than SBI MCLR plus 350 basis points, it has considered the actual weighted average rate of interest on working capital loans of FY 2021-22, for computation of IoWC for FY 2022-23 i.e. 7.99%. The computation of IoWC for FY 2022-23 is as shown in the following Table:

**Table 111: Normative Interest on Working Capital claimed by PSTCL for FY 2022-23
(Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Receivables equivalent to two (2) months of fixed cost calculated on normative target availability	264.17	4.81	268.98
2	Maintenance Spares @ 15% of O&M expenses	123.98	2.44	126.42
3	Operation & Maintenance expenses for 1 (One) Month	68.88	1.35	70.23
4	Total Working Capital (Normative)	457.03	8.60	465.63
5	Rate of Interest applied (As per Norms)	7.99%	7.99%	
6	Normative Interest on Working Capital	36.54	0.69	37.23

Commission's Analysis:

3.10.4 The Commission has computed the interest on working capital as per Regulation 51 of the PSERC MYT Regulations, 2019 specifies as under:

"51.1. Components of Working Capital

The Working Capital shall cover the following:

(a) O&M Expenses for 1month;

(b) Maintenance spares @ 15% of the O&M expenses;

(c) Receivables equivalent to two (2) months of fixed cost calculated on normative target availability.

51.2. Rate of Interest

The rate of interest on working capital shall be as per Regulation 25.1."

3.10.5 Considering the rate of interest as approved in the True-Up of FY 2021-22 i.e., 7.99% for Transmission Business and 7.99% for SLDC Business, the Commission observes that the actual rate of interest is lower than State Bank of India 1 yr. MCLR plus 350 basis points for the relevant year (10.50% for FY 2022-23) and therefore determines and approves the Interest on working capital as follows:

**Table 112: Interest on Working Capital as approved by the Commission for
FY 2022-23 (Rs Crore)**

Sr. No.	Particulars	Amount
	Transmission Business	
1.	Receivables for two months	258.06
2.	Maintenance spares @15% of O&M	122.96
3.	O&M Expenses for one month	68.31
4..	Total Working Capital	449.33
5.	Rate of Interest (%)	7.99%
6.	Interest on Working Capital	35.90
	SLDC	
7.	Receivables for two months	4.44
8.	Maintenance spares @15% of O&M	2.12
9.	O&M Expenses for one month	1.18
10.	Total Working Capital	7.74
11.	Rate of Interest (%)	7.99%
12.	Interest on Working Capital	0.62

3.10.6 The Commission approves working capital requirements of Rs. 449.33 Crore and interest thereon of Rs. 35.90 Crore for Transmission Business and working capital of Rs 7.74 Crores and interest thereon of Rs 0.62 Crores for SLDC Business for FY 2022-23 for PSTCL.

3.11 Return on Equity

3.11.1 In the MYT Petition for FY 2022-23, PSTCL had claimed Return on equity of Rs. 109.27 Crore against which the Commission had approved Return on equity of Rs. 109.38 Crore.

3.11.2 In the ARR Petition for FY 2022-23, PSTCL had claimed Return on equity of Rs. 112.59 Crore against which the Commission had approved Return on equity of Rs. 112.59 Crore.

PSTCL's Submission:

3.11.3 PSTCL submits that it has considered the funding of capital expenditure through 70% loan and 30% of Equity addition as explained in the previous section of Funding of Capital Expenditure. The approach adopted by PSTCL for consideration of opening Equity and addition of Equity in FY 2022-23 is without prejudice to the appeal pending before Hon'ble APTEL. PSTCL submitted to the Commission to pass on the effect in opening balance of Return on Equity of FY

2022-23 and for additions during the year in case the matter is ruled in favour of PSTCL.

- 3.11.4** PSTCL has considered rate of RoE for FY 2022-23 in accordance with Regulation 20 of the PSERC MYT Regulations, 2019. The RoE computed FY 2022-23 is as shown in the Table below:

Table 113: Return on Equity claimed by PSTCL for FY 2022-23 (Rs Crore)

Sr. No.	Particulars	Amount
1	Equity at the opening of Current Year	803.67
2	Addition During the Year	160.95
3	Equity at the Closing of Current Year	964.62
4	Average Equity during the Year	884.15
5	Rate for Return on Equity	15.50%
6	Return on Equity	137.04

Commission’s Analysis:

- 3.11.5** The Commission determines the Return on Equity for the Control Period in accordance with Regulation 20 of PSERC MYT Regulations, 2019 which is reproduced as under:

“20. Return on equity

Return on equity shall be computed at the base rate of 15.5% for thermal generating stations, Transmission Licensee, SLDC and run of the river hydro generating stations and at the base rate of 16.5% for the storage type hydro generating stations and run of river generating stations with pondage and 16% for Distribution Licensee on the paid up equity capital determined in accordance with Regulation 19:

Provided that Equity invested in foreign currency shall be converted to rupee currency based on the exchange rate prevailing on the date(s) it is subscribed:

Provided further that asset funded by consumer contributions, capital subsidies/Government grants shall not form part of the capital base for the purpose of calculation of Return on Equity.”

- 3.11.6** The Commission has considered the opening equity for FY 2022-23 from the closing equity approved in the True-Up of FY 2021-22. Addition of equity is considered as explained in para 3.6.4 ibid. The Commission determines Return on Equity @15.50% on the average equity for the year and is calculated as follows:

Table 114: Return on Equity for FY 2022-23 for Transmission as allowed by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2022-23
1.	Opening Equity	802.66
2.	Addition of equity during the year	132.10
3.	Closing Equity	934.76
4.	Average Equity	868.71
5.	Rate of Return on Equity (%)	15.50%
6.	Return on Equity	134.65

3.11.7 Thus, the Commission approves Return on Equity of Rs. 134.65 Crore to PSTCL for FY 2022-23.

3.12 Unified Load Dispatch & Communication (ULDC) Charges

3.12.1 PSTCL has claimed ULDC Charges of Rs. 8.88 Crore as per ULDC charges of FY 2021-22 for its SLDC Business.

3.12.2 Accordingly, the Commission approves ULDC charges of Rs. 8.88 Crore to PSTCL for its SLDC Business for FY 2022-23 which will be reviewed on the basis of actuals during true up of FY 2022-23.

3.13 Non-Tariff Income

PSTCL's Submission:

3.13.1 PSTCL has estimated the total Non-Tariff Income of Rs. 16.29 Crore for Transmission Business and Rs. 0.19 for SLDC Business for FY 2022-23.

Commission's Analysis:

3.13.2 Non-Tariff Income is to be determined as per Regulation 28 of PSERC MYT Regulations 2019.

3.13.3 The Commission considers the Non-tariff Income for FY 2022-23 as Rs. 35.57 Crore for Transmission Business and Rs. 0.23 Crore for SLDC Business based on Audited Annual Accounts of FY 2021-22 which will be reviewed during true up of FY 2022-23.

Table 115: Non-Tariff Income for FY 2022-23 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Non-Tariff Income	35.57	0.23	35.80

3.14 Income from Open Access Customers

3.14.1 PSTCL has claimed Income from Open Access Consumers of Rs. 4.21 Crore for Transmission Business and Rs. 0.09 Crore for SLDC charges for FY 2022-23. Accordingly, the Commission has considered the same for FY 2022-23 which will be reviewed during true up of FY 2022-23.

3.15 Annual Revenue Requirement

3.15.1 The summary of the Annual Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2022-23 is shown in the following tables:

Table 116: Annual Revenue Requirement for Transmission Business for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the tariff order FY 2022-23	Claimed by PSTCL in FY 2022-23	Approved by the Commission
1a	Employee costs	594.45	752.85	751.04
1b	A&G expenses	32.02	35.35	32.13
1c	R&M expenses	43.18	38.33	36.56
1.	Total O&M Expenses	669.65	826.53	819.73
2.	Interest charges	341.58	290.15	284.72
3.	Return on Equity	112.59	137.04	134.65
4.	Depreciation	327.40	315.24	313.13
5.	Interest on Working Capital	38.40	36.54	35.90
6.	Total Revenue Requirement	1489.62	1605.50	1588.13
7.	Less: Non-tariff Income	35.58	16.29	35.57
8.	Less: Revenue from Open Access	3.69	4.21	4.21
9.	Total Revenue Requirement	450.35	1585.00	1548.35

Table 117: Annual Revenue Requirement for SLDC for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the tariff order FY 2022-23	Claimed by PSTCL in the Revised Estimates of FY 2022-23	Approved by the Commission
1a	Employee costs	9.64	14.40	12.33
1b	A&G expenses	0.96	1.31	0.95
1c	R&M expenses	1.39	0.54	0.86
1.	Total O&M Expenses	11.99	16.25	14.14

Sr. No.	Particulars	Approved by the Commission in the tariff order FY 2022-23	Claimed by PSTCL in the Revised Estimates of FY 2022-23	Approved by the Commission
2.	Interest charges	2.58	1.29	1.29
3.	Return on Equity	0.00	0.00	0.00
4.	ULDC Charges	9.80	8.88	8.88
5.	Depreciation	2.46	2.04	2.04
6.	Interest on Working Capital	0.70	0.69	0.62
7.	Total Revenue Requirement	27.53	29.15	26.97
8.	Less: Non-tariff Income	0.35	0.19	0.23
9.	Less: Revenue from Open Access	0.06	0.09	0.09
10.	Total Revenue Requirement	27.12	28.87	26.65

3.15.2 The summary of the Annual Revenue Requirement of PSTCL as a whole for FY 2022-23 is as under:

Table 118: Annual Revenue Requirement for PSTCL for FY 2022-23

(Rs. Crore)				
Sr. No.	Particulars	Approved by the Commission in the tariff order FY 2022-23	Claimed by PSTCL in the Revised Estimates of FY 2022-23	Approved by the Commission
1a	Employee costs	604.09	767.25	763.37
1b	A&G expenses	32.98	36.66	33.08
1c	R&M expenses	44.57	38.87	37.42
1.	Total O&M Expenses	681.65	842.78	833.87
2.	Interest charges	344.16	291.44	286.01
3.	Return on Equity	112.59	137.04	134.65
4.	ULDC Charges	9.80	8.88	8.88
5.	Depreciation	329.86	317.28	315.17
6.	Interest on Working Capital	39.10	37.23	36.52
7.	Total Revenue Requirement	1517.15	1634.65	1615.10
8.	Less: Non-tariff Income	35.93	16.48	35.80
9.	Less: Revenue from Open Access	3.75	4.30	4.30
10.	Total Revenue Requirement	1477.47	1613.87	1575.00
11.	Carrying cost of Previous years (for Revenue Gap for FY 2020-21 and impact of Review Petition No.03 of 2021)	15.09		15.09
12.	Net Revenue Requirement	1492.56	1613.87	1590.09

Chapter 4

Annual Revenue Requirement for MYT Control Period from FY 2023-24 to FY 2025-26

4.1 Background

4.1.1 The Commission has issued the PSERC MYT Regulations, 2022. In accordance with the provisions of these Regulations, PSTCL has projected the Annual Revenue Requirement Review (ARR) for FY 2023-24 to FY 2025-26 for its Transmission business and SLDC business separately. The Commission has analysed the same in this chapter.

4.1.2 Regulation 15.1 of PSERC MYT Regulations, 2019 specifies the Components of ARR for Transmission and SLDC Businesses as below:

“15.1. The ARR of the Transmission business and SLDC business shall comprise of the following components:

- (a) Return on Equity;*
- (b) Interest and Finance Charges on Loan Capital;*
- (c) Interest Charges on Working Capital;*
- (d) Depreciation;*
- (e) Operation and Maintenance Expenses;*
- (f) ULDC Charges;*
- (g) Statutory levies and taxes, if any.*

Less:

- (h) Non-Tariff income*
- (i) Income from other business”*

4.2 Transmission System Availability

PSTCL’s Submission:

4.2.1 PSTCL has submitted that as per historical trends, the Transmission System Availability of transmission network of PSTCL has always remained higher than target Availability of 99%. PSTCL has further submitted that the availability of the network will be aligned to the normative limits set as per Regulation 51.1 of PSERC MYT Regulations, 2022 as mentioned above.

Commission's Analysis:

The Commission has taken note of PSTCL's submission.

4.3 Transmission Loss

PSTCL's Submission:

- 4.3.1 PSTCL has submitted that it has projected the trajectory for Transmission Losses for 3rd MYT Control Period from FY 2023-24 to FY 2025-26 in its Petition No 50 of 2022 for Capital Investment Plan and Business Plan as 2.50% during each year of the 3rd MYT Control period.
- 4.3.2 PSTCL has further submitted a comparison of the prevalent transmission losses with other State Transmission Utilities as under:

Table119: Comparison of Transmission Losses for FY 2020-21 and 2021-22

Sr. No.	State	Transmission Loss approved in Tariff Order (%)	
		FY 2020-21	FY 2021-22
1	Andhra Pradesh	3.17	3.06
2	Gujrat	3.50	3.60
3	Haryana	2.15	2.10
4	Maharashtra	3.18	3.18
5	Rajasthan	3.33	3.31
6	Telangana	2.71	2.64
7.	Punjab	2.50	2.31

- 4.3.3 PSTCL has submitted that the transmission losses in the states are in a varying range and are higher than the actual transmission losses in the state of Punjab (2.50% for 2020-21 and 2.31% in FY 2021-22). PSTCL has further submitted that meter data is being received through emails from the grid/substations. The transmission losses are being calculated based upon manual/downloaded data. SLDC is in the process of implementing the SAMAST project. In the SAMAST project, all the existing energy meters are to be replaced with new energy meters. The meter data will be transmitted from all grid/substations through the AMR system. Further, this data will be integrated in the software being developed by the firm. The Transmission system is being developed for n-1 compliance in accordance with the CEA standards. Accordingly, some lines will remain underutilized which may lead to increase in no load losses thereby increasing Transmission losses. Given the different schemes envisaged under the Capital Expenditure Plan, PSTCL has proposed a constant loss level of 2.50% over the 3rd MYT Control Period as under:

Table 120: Transmission loss submitted by PSTCL for the 3rd Control Period

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Transmission Loss trajectory (%)	2.50%	2.50%	2.50%

Commission's Analysis:

4.3.4 In the Business Plan Order including the Capital Investment Plan Order dated 21st December 2022, the Commission has approved the Transmission loss trajectory with reduction of 0.02% every year for the 3rd Control Period from the approved losses for FY 2022-23. Transmission losses for the Control Period shall be specified accordingly on the basis of the actual transmission losses for FY 2022-23 but will not be considered if found higher than the approved trajectory. Accordingly, the Commission decides to provisionally set the trajectory as given below:

Table 121: Transmission loss trajectory approved for the 3rd Control Period*

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1	Transmission Loss trajectory (%)	2.42%	2.40%	2.38%
*The opening targeted losses shall be reviewed as per the actual losses of FY 2022-23 but will not be considered if higher than the approved trajectory.				

4.4 Capital Expenditure and Capitalization**PSTCL's Submission:**

4.4.1 PSTCL has considered the capital expenditure for its Transmission and SLDC Business in line with the Capital Investment Plan submitted before the Commission and subsequent submissions made thereafter in Petition No. 50 of 2022. The capital expenditure for the Control Period is summarized as under:

Table 122: Capital Expenditure for FY 2023-24 to FY 2025-26 submitted by PSTCL (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
I	II	III	IV	V	VI
1.	Capital Expenditure for Transmission Business	1274.26	1140.61	850.47	3265.34
2.	Capital Expenditure for SLDC Business	8.28	2.13	0.93	11.33
3.	Total for PSTCL	1282.54	1142.74	851.40	3276.67

4.4.2 PSTCL has also clarified that the above capital expenditure does not include the capital expenditure towards Contributory works and works under PSDF Scheme. The asset addition on account of such schemes/works have been considered separately.

4.4.3 PSTCL in this petition has submitted that the Capital Investment Plan for the Control Period from FY 2023-24 to FY 2025-26 is proposed in accordance with Regulation 9 of the PSERC MYT Regulations, 2022. PSTCL has not included PSDF works and Contributory works during the Control Period and in its Opening Balances. Considering various 400 kV, 220 kV, and 132 kV transmission works, total capital investment for the transmission business, including IDC and IEDC proposed for the Control Period, is as under:

Table 123: CIP proposed for 3rd Control Period for Transmission (Total Schemes)

(Rs. Crore)					
Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	Transmission				
1	Opening CWIP	474.82	491.21	780.23	
2	Capital Expenditure	1274.26	1140.61	850.47	3265.34
3	Capitalisation	1257.87	851.59	1039.79	3149.25
4	Closing CWIP	491.21	780.23	590.91	

4.4.4 PSTCL has further submitted that out of the Total Capital Investment Plan for its Transmission Business, Capital Investment and Capitalization for New Schemes i.e. Schemes that will be started from 01.04.2023 and Capital Investment and Capitalization on Spill over Schemes of the 1st Control period and 2nd Control Period are as follows:-

Table 124: CIP proposed for New Works for 3rd Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	Transmission				
1	Opening CWIP	0.00	145.19	487.39	
2	Capital Expenditure	308.29	580.57	681.41	1570.27
3	Capitalisation	163.10	238.37	641.46	1042.93
4	Closing CWIP	145.19	487.39	527.34	

Table 125: CIP proposed for Schemes Spill over from 2nd MYT (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	Transmission				
1	Opening CWIP	227.51	299.01	211.28	
2	Capital Expenditure	769.66	479.08	107.49	1356.23
3	Capitalisation	698.16	566.81	255.35	1520.32
4	Closing CWIP	299.01	211.28	63.42	

Table 126: CIP proposed for Schemes Spill over from 1st MYT (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	Transmission				
1	Opening CWIP	247.31	47.01	81.56	
2	Capital Expenditure	196.31	80.96	61.57	338.84
3	Capitalisation	396.61	46.41	142.98	586.00
4	Closing CWIP	47.01	81.56	0.15	

Capital Investment Plan & Capitalization for SLDC:

4.4.5 PSTCL has included the schemes to be implemented by SLDC under the present Capital Investment Plan of transmission works. PSTCL humbly requests the Hon'ble Commission to approve the Capital Investment Plan for SLDC as submitted in the present Petition.

4.4.6 The summary of proposed capital investment and capitalization schedule including IDC and IEDC for SLDC works is as under:

Table 127: CIP proposed for 3rd Control Period for SLDC(Total Schemes) (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	SLDC				
1	Opening CWIP	20.38	3.86	0.00	
2	Capital Expenditure	8.28	2.13	0.93	11.33
3	Capitalisation	24.79	5.99	0.93	31.71
4	Closing CWIP	3.86	0.00	0.00	

4.4.7 As above, out of the Total Capital Investment Plan for SLDC Business, Break up of Capital Investment and Capitalization for New Schemes and Spill over Schemes is as follows:-

Table 128: CIP proposed for New Works for 3rd Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	SLDC				
1	Opening CWIP	0.00	0.50	0.00	
2	Capital Expenditure	0.50	0.50	0.50	1.50
3	Capitalisation	0.00	1.00	0.50	1.50
4	Closing CWIP	0.50	0.00	0.00	

Table 129: CIP proposed for Schemes Spill over from 2nd MYT (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	SLDC				
1	Opening CWIP	18.88	3.36	0.00	
2	Capital Expenditure	7.00	1.23	0.43	8.66
3	Capitalisation	22.52	4.59	0.43	27.54
4	Closing CWIP	3.36	0.00	0.00	

Table 130: CIP proposed for Schemes Spill over from 1st MYT (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	SLDC				
1	Opening CWIP	1.50	0.00	0.00	
2	Capital Expenditure	0.78	0.40	0.00	1.18
3	Capitalisation	2.27	0.40	0.00	2.67
4	Closing CWIP	0.00	0.00	0.00	

Overall Capital Investment Plan & Capitalization for PSTCL:

4.4.8 Based on the above proposed capital investment for transmission works and SLDC, PSTCL proposes the following Capital Investment Plan (including IDC and IEDC) for spill over works and new development work during the Control Period.

Table 131: CIP proposed for 3rd Control Period for PSTCL (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total
	Transmission				
1	Opening CWIP	474.82	491.21	780.23	
2	Capital Expenditure	1274.26	1140.61	850.47	3265.34
3	Capitalisation	1257.87	851.59	1039.79	3149.25
4	Closing CWIP	491.21	780.23	590.91	
	SLDC				
5	Opening CWIP	20.38	3.86	0.00	
6	Capital Expenditure	8.28	2.13	0.93	11.33
7	Capitalisation	24.79	5.99	0.93	31.71
8	Closing CWIP	3.86	0.00	0.00	
	PSTCL				
9	Opening CWIP	495.20	495.07	780.23	
10	Capital Expenditure	1282.54	1142.74	851.40	3276.67
11	Capitalisation	1282.66	857.58	1040.72	3180.96
12	Closing CWIP	495.07	780.23	590.91	

Commission's Analysis

4.4.9 The Commission has considered the Capital Investment Plan for the 3rd MYT Control Period in the Order dated 21st December 2022 in petition No. 50 of 2022 as below:

Table 132: Capital Investment plan of PSTCL considered by the Commission (Rs. Crore)

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	Total MYT
1.	Transmission Business	1034.07	627.54	393.12	2054.73
2.	SLDC Business	8.28	2.13	0.93	11.34
	Total (1+2)	1042.35	629.67	394.05	2066.07
3.	Cost of Schemes to be developed under TBCB mode	233.84	506.74	457.35	1197.93
	Total	1276.19	1136.41	851.40	3264.00

4.4.10 The Commission vide notification dated 06th March 2023 added a new clause 9.20 under Regulation 9 of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff, Regulations, 2022 as under:

“9.20 All new intra-state transmission projects costing more than Rs. 250 Crore, approved by the Commission after notification of these Regulations, shall be developed by State Govt./STU through tariff based competitive bidding under section 63 of the Act.

Provided that in case of critical projects connected with security of the State or to avoid any delay in commissioning of critical State project or any other compelling circumstance, STU may seek prior approval of the Commission to execute that specific project costing above Rs. 250 Crore under Section 62.

Provided further that the above Regulation shall also apply to all those new intra-state transmission projects wherein the Commission has already accorded its approval, however, whose execution is yet to begin”

Accordingly, PSTCL shall reassess the schemes to be developed under TBCB mode. The schemes so get reduced from the schemes falling under TBCB mode as decided earlier, shall be included in the Capital investment of Transmission/SLDC Business, as the case may be.

4.4.11 Further, keeping in view PSTCL's past ability to undertake capital works to the tune of Rs. 351 Crore maximum in a year during the last 5 years, the Commission approved for PSTCL a CIP of Rs. 500 Crore during each year of the 3rd MYT Control period in its Order dated 21.12.2022. The Commission retains the same CIP and guidelines in this tariff Order. However, PSTCL is

allowed to prioritize the works out of the schemes considered by the Commission in Petition No. 50 of 2022 at its level so as to complete them within the optimum time with specified completion targets. PSTCL shall also be at liberty to approach the Commission to enhance the capping limit if its actual capital expenditure approaches the annual capped limit of Rs.500 Crore in any of the financial years of the 3rd Control Period. Further, the Commission will also review the annual capped limit at the end of each year of the 3rd Control Period vis-a-vis the actual capital expenditure during the respective years.

The Commission also directs PSTCL to strictly comply with the Capital Investment Plan of the 3rd MYT Control Period and undertake no work outside the CIP except the capital expenditure required for works duly endorsed and certified by its Board as emergency works as per Regulation 9 of the PSERC 3rd MYT Regulation.

4.4.12 The Commission considers that with the quantum of Capital Investment being allowed, PSTCL shall be able to increase its inter-state power drawl limit (ATC/TTC) to 12000MW at end of the 3rd MYT Control period as per its own submission in the petition. The Commission directs PSTCL to intimate the transmission capacity and inter-state power drawl limit (ATC/TTC) achieved by it at end of each year of the 3rd MYT Control period.

4.4.13 The Commission in its CIP order dated 21.12.2022 in Petition no.50 of 2022 provisionally considers the capital expenditure and capitalization for 3rd Control Period i.e. from FY 2023-24 to FY 2025-26 as under:

Table 133: Capital expenditure and Capitalization provisionally approved by the Commission (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	TOTAL
1	Transmission				
1a	Capital Expenditure				
	Capex of 1 st MYT	196.31	80.96	61.57	338.84
	Capex of 2 nd MYT	147.71	208.46	107.49	463.66
	Capex New Schemes	147.70	208.45	330.01	686.16
	Total Capital expenditure	491.72	497.87	499.07	1488.66
1b	Capitalization				
	Capitalization of 1 st MYT	396.61	46.41	142.98	586.00
	Capitalization of 2 nd MYT	39.30	223.80	178.05	441.15
	Capitalization of New Schemes	39.30	223.80	178.04	441.15

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26	TOTAL
	Total Capitalization	475.21	494.01	499.07	1468.29
2	SLDC				
	Capital Expenditure				
2a	Capex of 1 st MYT	0.78	0.40	0.00	1.18
	Capex of 2 nd MYT	7.00	1.23	0.43	8.66
	Capex New Schemes	0.50	0.50	0.50	1.50
	Total Capital expenditure	8.28	2.13	0.93	11.34
	Capitalization				
2b	Capitalization of 1 st MYT	2.27	0.40	0.00	2.67
	Capitalization of 2 nd MYT	20.52	3.09	0.43	24.04
	Capitalization of New Schemes	2.00	2.50	0.50	5.00
	Total Capitalization	24.79	5.99	0.93	31.71
3	Total PSTCL				
3a	Capital Expenditure	500.00	500.00	500.00	1500.00
3b	Capitalization	500.00	500.00	500.00	1500.00

The provisional capital expenditure and capitalization will be reviewed during true up of respective years

4.5 Capital Works and its Funding

PSTCL's Submission:

4.5.1 PSTCL has considered the Regulation 19 of PSERC MYT Regulations, 2022 that provides a normative debt: equity ratio as 70:30. PSTCL has been borrowing funds from SBI, PFC, REC, Bank of India and Indian Overseas Bank. The appropriate tie-ups will be made with these banks/Financial institutions along with others to make good the investments required for the capital investment plan. Accordingly, the funding of capital expenditure for 3rd MYT Control Period for Transmission and SLDC Business is shown in the following Table:

Table 134: Funding Requirement submitted by PSTCL for 3rd MYT (Rs. Crore)

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
A	Transmission			
1	CAPEX of Spill over Schemes from 1st Control Period (Excluding Contributory & PSDF) (Table 126)	196.31	80.96	61.57

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
2	Capitalization of New Schemes from 2nd Control Period and New Works for 3rd Control Period (Excluding Contributory &PSDF) (Table 124,125)	861.26	805.18	896.81
3	Directly Capitalised	0.00	0.00	0.00
4	Total funding for CAPEX (1+2+3)	1057.57	886.14	958.38
5	Less: Funding through Grant and Contribution	0.00	0.00	0.00
6	Funding Requirement from Debt: Equity (4-5)	1057.57	886.14	958.38
A	Funding through Equity (New Schemes) (30% of sr.no.6)	317.27	265.84	287.51
B	Funding through Loan (70% of sr.no.6)	740.30	620.30	670.87
b(i)	Funding through Loan (Spill Over Schemes) (Sr.No.1)	196.31	80.96	61.57
b(ii)	Funding through Loan (New Schemes) (B-b(i))	543.99	539.34	609.30
B	SLDC			
1	CAPEX of Spill over Schemes from 1st Control Period (Excluding Contributory & PSDF) (Table No.130)	0.78	0.40	0.00
2	Capitalization of New Schemes from 2nd Control Period and New Works for 3rd Control Period (Excluding Contributory & PSDF) (Table no 128 & 129)	22.52	5.59	0.93
3	Directly Capitalised	0.00	0.00	0.00
4	Total funding for CAPEX (1+2+3)	23.30	5.99	0.93
a	Funding through Equity	0.00	0.00	0.00
b	Funding through Loan (100% of sr.no.4)	23.30	5.99	0.93
b(i)	Funding through Loan (Spill Over Schemes)	0.78	0.40	0.00
b(ii)	Funding through Loan (New Schemes) (b-b(i))	22.52	5.59	0.93

Commission's Analysis:

4.5.2 The Opening Capital Work in Progress is considered from the Closing Capital Work in Progress approved in the APR of FY 2022-23 in this Order.

4.5.3 Since the Capital Investment approved is capped to Rs.500 Crore for each year of the 3rd MYT Control Period and assuming that the Spillover schemes shall be prioritized, the Commission has proportionately considered the Capitalization for the 3rd MYT Control Period. The Commission has considered the same in this Order for determining depreciation, loan and R&M Expenses. The Capital Work in Progress works out as under:

Table 135: Capital Work in Progress approved by the Commission for the 3rdMYT Control (Rs. Crore)

Sr. No.	Particulars		FY 2023-24	FY 2024-25	FY 2025-26
Transmission					
1.	Opening Capital Work in Progress		457.51	474.02	474.02
2.	Capital Expenditure (Table No.133)	Spillover Schemes from 1 st MYT	196.31	80.96	61.57
		Spillover Schemes from 2 nd MYT	147.71	208.46	107.49
		New Schemes	147.70	208.45	330.01
		Total	491.72	497.87	499.07
3.	Capitalisation (Table No.133)	Spillover Schemes from 1 st MYT	396.61	46.41	142.98
		Spillover Schemes from 2 nd MYT	39.30	223.80	178.05
		New Schemes	39.30	223.80	178.04
		Total	475.21	494.01	499.07
4.	Closing Capital Work in Progress		474.02	474.02	474.02
SLDC					
1.	Opening Capital Work in Progress		20.46	3.95	0.09
2.	Capital Expenditure (Table No.133)	Spillover Schemes from 1 st MYT	0.78	0.40	0.00
		Spill over Schemes from 2 nd MYT	7.00	1.23	0.43
		New Schemes	0.50	0.50	0.50
		Total	8.28	2.13	0.93
3.	Capitalisation (Table No.133)	Spillover Scheme from 1 st MYT	2.27	0.40	0.00
		Spillover Schemes from 2 nd MYT	20.52	3.09	0.43
		New Schemes	2.00	2.50	0.50
		Total	24.79	5.99	0.93
4.	Closing Capital Work in Progress		3.95	0.09	0.09
PSTCL					
1.	Opening Capital Work in Progress		477.97	477.97	477.97
2.	Capital Expenditure	Spillover Scheme from 1 st MYT	197.09	81.36	61.57
		Spill over Schemes from 2 nd MYT	154.71	209.69	107.92
		New Schemes	148.20	208.95	330.51
		Total	500.00	500.00	500.00
3.	Capitalisation	Spillover Scheme from 1 st MYT	398.88	46.81	142.98
		Spillover Schemes from 2 nd MYT	59.82	226.89	178.48
		New Schemes	39.30	226.30	178.55
		Total	500.00	500.00	500.00
4.	Closing Capital Work in Progress		477.97	477.97	477.97

4.5.4 PSTCL has submitted that it has not included PSDF works and contributory works during the control period and in opening balances.

4.5.5 However, the Commission allows the funding through loan as explained below:

During the 3rd Capital Investment Plan, the Financing Plan was given as per the Capital expenditure approved by the Commission. Since, the funding of assets is to be approved for PSTCL only after the assets are put to use. The Commission as decided in order dated 01.06.2020 in tariff order of FY 2020-21, decided to fund the new schemes of 2nd and 3rd control period on Capitalization and in order to avoid funding of the Spillover schemes twice, considers to fund the Spillover Schemes as per capital expenditure of 1st MYT control period incurred in FY 2023-24 to FY 2025-26.

The Commission shall retain separate methodology for spillover and new schemes till all spillover schemes as on 01.04.2020 are capitalized. After the capitalization of all such spillover schemes, the closing value of loans, equity and depreciation for spillover schemes shall be added to the opening value of loans, equity and depreciation respectively for new schemes in the subsequent years.

Based on approved amount of capital expenditure, capitalization as mentioned in table no.135 above, the Commission determines funding for the 3rd MYT Control Period as under:

Table 136: Funding of schemes for Transmission Business

(Rs. Crore)				
Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
	Fund requirement			
1	Capital expenditure of Spillover Schemes of 1 st Control Period	196.31	80.96	61.57
2	Capitalization of Spillover Schemes of 2 nd Control Period	39.30	223.80	178.05
3	Capitalization of New Schemes of 3 rd Control Period	39.30	223.80	178.04
4	Total Fund Requirement	274.91	528.56	417.66
5	Funding through Loan(70% of sr.no.4)	192.44	369.99	292.36
6	Funding through Equity(30% of sr.no.4)	82.47	158.57	125.30
7	Funding through Loan (Spillover Schemes 1 st control Period)	137.42	56.67	43.10
8	Funding through Loan (Spillover schemes 2 nd Control Period & New Schemes)	55.02	313.32	249.26

Table 137: Funding of SLDC Business

(Rs.Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
	Fund requirement			
1	Capital expenditure of Spillover Schemes of 1 st Control Period	0.78	0.40	0.00
2	Capitalization of Spillover Schemes	20.52	3.09	0.43

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
	of 2 nd Control Period			
3	Capitalization of New Schemes of 3 rd Control Period	2.00	2.50	0.50
4	Total Fund Requirement	23.30	5.99	0.93
5	Funding through Loan (100%)	23.30	5.99	0.93
6	Funding through Loan (Spillover Schemes)	0.78	0.40	0.00
7	Funding through Loan (Spillover Schemes of 2 nd Control Period & New Schemes)	22.52	5.59	0.93

4.6 Operation and Maintenance Expenses

PSTCL's Submission:

Employee Expenses and Administrative & General Expenses

PSTCL's Submission:

1) Employee Expenses

PSTCL has considered employee expenses in the following manner:

- 4.6.1** PSTCL has claimed the Terminal benefits which includes elements such as Pension and Gratuity, leave encashment, Medical Reimbursement, etc. for the Control Period by considering the impact of Pay/Pension Revision as per the 6th Pay Commission of GOP. PSTCL has also considered 5% increase on yearly basis. However, during the Control Period the same will be claimed/allowed on actual basis.
- 4.6.2** Since, WPI and CPI index are available till September, 2022 the escalation index has been computed as per previous Chapter of this Petition "ÄPR – 2022-23" for the computation of O&M expenses for control period from FY 2023-24 to FY 2025-26.
- 4.6.3** PSTCL submits that it has not considered the impact of arrears of 6th Pay revision of Punjab Govt. (w.e.f 01.01.2016 to 30.06.2021) in the 3rd MYT Control Period from FY 2023-24 to FY 2025-26 .These will be claimed as and when actually paid.

Manpower requirement for SAMAST scheme

- 4.6.4** PSTCL submits that for achieving full functionality as proposed under the SAMAST project, additional manpower will be required as soon as the project is commissioned. PSTCL has worked out the requirement of additional manpower under strengthening of SLDC by posting manpower as per the directives of the

Commission and recommendations of CABIL report. PSTCL has estimated tentative additional manpower requirement of 31 no. of staff for SLDC for the SAMAST project. Further, the total annual expenses of additional staff to be incurred by SLDC (taking into account effect of pay revision) have been estimated at Rs. 3.00 Crore. Since the commissioning of SAMAST project has been anticipated in mid of the FY 2023-24, PSTCL has considered Rs. 1.50 crore over and above the normative employee cost computed for six months of FY 2023-24.

- 4.6.5** Due to commissioning of SAMAST project in mid of the FY 2023-24, the employee cost for six months has already been considered in base employee cost for FY 2023-24 amounting to Rs. 1.50 crore. The rest six months employee cost has been considered amounting to Rs. 1.50 Crore in normative employee cost computed for FY 2024-25.

Manpower requirement for New 400 KV Substations at Dhanansu

- 4.6.6** PSTCL submits that due to commissioning of 400 KV substations at Dhanansu in March 2024, PSTCL has considered the Employee Cost of the additional Manpower for Dhanansu Substation for FY 2024-25. Therefore Rs. 1.76 Crore as additional employee cost has been added for FY 2024-25.

**Table 138: Projection for Employee Expenses for the Control Period
(Rs. Crore)**

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission				
1	Other Employee Costs (Base)	289.08	340.51	382.48
2	Indexation	10.24%	10.24%	10.24%
3	Other Employee Costs	318.67	375.36	421.62
4	Employee Cost of Newly Recruitment	21.84		
5	Employee Cost of New Sub-Stations	0.00	7.12	4.80
6	Total Other Employee Costs	340.51	382.48	426.42
7	Terminal Benefits	486.95	511.30	536.86
8	Total Employee Costs	827.46	893.78	963.29
SLDC				
1	Other Employee Costs (Base)	14.06	17.00	20.24
2	Indexation	10.24%	10.24%	10.24%
3	Other Employee Costs	15.50	18.74	22.31
4	Employee Cost for SAMAST Project	1.50	1.50	
5	Total Other Employee Costs	17.00	20.24	22.31
6	Terminal Benefits	0.36	0.37	0.39
7	Total Employee Costs	17.35	20.61	22.70

2) A&G Expenses

4.6.7 PSTCL submits that the A&G expenses have been considered in the following manner:

- The A&G expenses have been escalated with an escalation factor of 10.24% as per PSERC Regulations, 2022.
- PSTCL has also considered additional A& G expense on account of asset addition during the FY 2021-22 as per MYT Regulations, 2022. Accordingly, A&G Expenses for the Control Period are projected as follows:

Table: 139 Projection of A&G Expenses for the Control Period (Rs Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission				
1	Net Asset added during year	1257.87	851.59	1039.79
2	K-Factor for A&G expenses	0.250%	0.250%	0.250%
3	Add: Additional A&G expenses on account of asset addition during the year	3.14	2.13	2.60
4	Base A&G Expenses	34.79	41.82	48.45
5	Total A&G expenses before escalation	37.94	43.95	51.05
6	Escalation (CPI : WPI)	10.24%	10.24%	10.24%
7	Escalated A&G Expenses	41.82	48.45	56.27
8	Add: License and Tariff Fee	0.52	0.52	0.52
9	Add: Audit Fee	0.05	0.05	0.05
10	Total A&G Expenses	42.39	49.02	56.84
SLDC				
1	Net Asset added during year	24.79	5.99	0.93
2	K-Factor for A&G expenses	2.224%	2.224%	2.224%
3	Add: Additional A&G expenses on account of asset addition during the year	0.55	0.13	0.02
4	Base A&G Expenses	1.32	2.06	2.42
5	Total A&G expenses before escalation	1.87	2.19	2.44
6	Escalation (CPI : WPI)	10.24%	10.24%	10.24%
7	Escalated A&G Expenses	2.06	2.42	2.69

Commission's Analysis:

4.6.8 The O&M expenses for the 3rd MYT Control Period have been projected as per the Regulation 26 of the PSERC MYT Regulations, 2022. The Regulation has been reproduced as under:

“ii) $EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDEX_n / INDEX_{n-1})$

$INDEX_n$ - Inflation Factor to be used for indexing the Employee Cost and Administrative and General Costs for n th year. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) of n th year and shall be calculated as under: -

$$INDEX_n = 0.50 * CPI_n + 0.50 * WPI_n$$

‘WPI_n’ means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the n th year.

‘CPI_n’ means the average rate (on monthly basis) of Consumer Price Index (Industrial workers) over the year for the n th year.

... **Note 7:** Any expenditure on account of license fee, initial or renewal, fee for determination of tariff and audit fee shall be allowed on actual basis, over and above the A&G expenses approved by the Commission.”

Baseline Values

Regulation 8.1 of PSERC MYT Regulations, 2022 specifies that baseline values for the Control Period shall be determined by the Commission and the projections for the Control Period shall be based on these figures. The relevant regulations are reproduced below:

8.1. Baseline Values

“..... (b) The baseline values shall be inter-alia based on figures approved by the Commission in the past, last three years’ Audited/Provisional Accounts, estimate of the expected figures for the relevant year, industry benchmarks/norms and other factors considered appropriate by the Commission:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for the Control Period, considering the actual figures from audited accounts.”

The actual other employee expenses and A&G expenses in the past three years are as under:

Table 140: PSTCL’s Actual expenses for FY 2019-20 to FY2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1.	Other Employee expenses	197.93	204.79	201.79
2.	A&G Expenses	30.64	26.03	24.95

4.6.9 On observing the figures above, the Commission decided to consider the audited accounts of FY 2021-22 to calculate the baseline values. The ARR shall be revised by taking into consideration the actual expenses of FY 2022-23 and other norms/benchmarks in subsequently tariff orders.

4.6.10 The inflation factor used for indexing the employee, A&G and R&M expenses is calculated as under for the 3rd MYT Control Period based on WPI and CPI index available for 9 months i.e upto 31.01.2023 which will be reviewed during true up of the respective years.

Table No.141: Calculation of INDEX for 3rd MYT Control Period

Sr. No.	Particulars	FY 2021-22 (Apr '21-Dec '21)	FY 2022-23 (Apr '22-Dec '22)	Increase (%)
1.	CPI	354.400	375.872	6.059%
2.	WPI	137.211	153.022	11.523%

$$\text{INDEX } n/\text{INDEX } n-1 = (0.5*6.059) + (0.5*11.523) = 8.7909\%$$

4.6.11 Considering the actual other employee expenses for FY 2021-22 and the escalation factor as calculated above, the Commission has determined the Base Other employee expenses as under:

Table 142: Calculation of Base Other employee expenses (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Actual other employee expenses of FY 2021-22	195.01	6.78	201.79
2.	Escalation factor	8.7909%	8.7909%	8.7909%
3.	Employee expenses of FY 2022-23	212.15	7.38	219.53
4	Escalation Factor	8.7909%	8.7909%	8.7909%
5.	Base other employee Expenses for FY 2023-24	230.80	8.02	238.82

4.6.12 The Commission considers the net A&G expenses as indicated in the latest Audited Annual Accounts of FY 2021-22 for baseline value for FY 2023-24 and subsequent years. PSTCL claimed an amount, Rs.0.05 Crore as Audit Fee and Rs.0.52 Crore as License fee during FY 2021-22. The Commission has not considered these expenses for baseline value as these are allowed separately as per actual expenses incurred. As such, the Commission determines base line value of A&G expenses for Transmission Business and SLDC Business for the 3rdMYT Control Period as under:

Table 143: Calculation of Base A&G expenses for 3rdMYT Control Period
(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Actual A&G expenses of FY 2021-22	24.93	0.59	25.52
2	Less: Audit fees	0.05	0.00	0.05
3	Less: License fees	0.52	0.00	0.52
4	A&G Expenses	24.36	0.59	24.95
5	Escalation factor	8.7909%	8.7909%	8.7909%
6	A&G Expenses for FY 2022-23	26.50	0.64	27.14
7	Escalation factor	8.7909%	8.7909%	8.7909%
8	Base A&G Expenses for FY 2023-24	28.83	0.70	29.53

Employee Cost

Terminal Benefits

4.6.13 PSTCL's share of @11.36% of terminal benefits of employee of erstwhile PSEB has been ascertained for Transmission Business as per the Audited Annual Accounts of FY 2021-22 for PSTCL.

4.6.14 PSTCL has claimed the Terminal benefits of Rs. 486.95 Crore, Rs.511.30 Crore and Rs.536.86 Crore for Transmission business and Rs. 0.36 Crores, Rs. 0.37 Crores and Rs.0.39 Crores for SLDC business for the 3rd MYT Control Period. Thus, the Commission has allowed the Terminal Benefits as under:

Table 144: Terminal Benefits allowed by the Commission for the 3rd MYT Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Transmission Business	486.95	511.30	536.86
2.	SLDC Business	0.36	0.37	0.39

Other Employee Cost

4.6.15 The Other employee cost has been considered as per the audited accounts of FY 2021-22 i.e. Rs.201.79 Crore for PSTCL (Rs.195.01 Crore for Transmission Business and Rs.6.78 Crore for SLDC Business) for determining the base line value for the 3rd MYT Control Period (table no 142). The inflation factor used for indexing the other employee cost and A&G expenses is considered as explained in para 4.6.10 above.

4.6.16 The Normative Employee Costs for Transmission and SLDC Business is calculated as under:

Table No. 145: Employee Expenses of PSTCL as approved by the Commission for Transmission and SLDC Business for 3rd MYT Control Period

(Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1.	Other Employee Cost of previous year(Table no.142)	212.15	230.80	251.09
2.	Escalation Factor	8.7909%	8.7909%	8.7909%
3.	Other Employee Cost	230.80	251.09	273.16
4.	Employee Cost for Newly Recruitment(as Projected by PSTCL in Table no.138)	21.84	0.00	0.00
5.	Employee Cost for New substation(As projected by PSTCL in Table no.138)	0.00	7.12	4.80
6.	Total Other employee Cost	252.64	258.21	277.96
7.	Terminal Benefits(Table no.144)	486.95	511.30	536.86
8.	Total Employee Cost	739.59	769.51	814.82
SLDC Business				
1.	Other Employee Cost of previous year(Table No.142)	7.38	8.02	8.73
2.	Escalation Factor	1.087909	1.087909	1.087909
3.	Other Employee Cost	8.02	8.73	9.50
4.	Employee Cost for SAMAST project(as projected by PSTCL in Table No.138)	1.50	1.50	0.00
5.	Total other employee cost	9.52	10.23	9.50
6.	Terminal Benefits(Table no.144)	0.36	0.37	0.39
7.	Total Employee Cost	9.88	10.60	9.89

4.6.17 Thus, the Total Employee Expenses approved by the Commission is as under:

Table 146: Employee Expenses of PSTCL as approved by the Commission for 3rd MYT Control Period

(Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Other Employee Cost (Sr.no.6(Transmission)+Sr.no.5(SLDC))	262.16	268.44	287.46
2.	Terminal Benefits (Sr.no.7(Transmission)+Sr.no.6(SLDC))	487.31	511.67	537.25
3.	Total Employee Cost	749.47	780.11	824.71

Administrative and General (A&G) Expenses

4.6.18 The Inflation factor is the same as considered for calculating Normative Employee Expenses i.e.8.7909%.Audit fee and License fee for 3rd control Period has been considered as Rs.0.05 Crore and Rs.0.52 Crore respectively as approved in true up of FY 2021-22. The A&G expenses for Transmission and SLDC Business approved by the Commission is as under:

Table 147: A&G Expenses approved by the Commission for the 3rd MYT Control Period for Transmission and SLDC Business (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1.	A&G Expenses (n-1) (Table no.143)	26.50	28.83	31.37
2.	Escalation Factor	8.7909%	8.7909%	8.7909%
3.	A&G Expenses	28.83	31.37	34.12
4.	Audit fees	0.05	0.05	0.05
5.	License fees	0.52	0.52	0.52
6.	Total A&G Expenses	29.40	31.94	34.69
SLDC Business				
1.	A&G Expenses (n-1) (Table no.143)	0.64	0.70	0.76
2.	Escalation Factor	8.7909%	8.7909%	8.7909%
3.	A&G Expenses	0.70	0.76	0.83

The A&G Expenses for the 3rdMYT Control Period are as under:

Table 148: A&G Expenses approved by the Commission for the 3rd MYT Period for PSTCL (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	A&G Expenses (Sr.no.3 (Transmission)+Sr.no.3(SLDC))	29.53	32.13	34.95
2.	Audit fees	0.05	0.05	0.05
3.	License fees	0.52	0.52	0.52
4.	Total A&G Expenses	30.10	32.70	35.52

Repair & Maintenance (R&M) Expenses

PSTCL's Submission:

4.6.19 The escalation factors have been assumed in a manner similar to what is described in the previous sections. The R&M expenses are accordingly calculated in a manner consistent with the regulations.

4.6.20 Total Cost of the SAMAST Project comprises of its initial cost to be paid up to Commissioning of the project and warranty-cum-AMC cost of 6 years. Thus R & M cost on account of AMC and recurring Telecom usage charges comes out to be Rs. 2.96 crore per year for 6 years after commissioning of SAMAST Project in FY 2023-24.

4.6.21 The k-factor has been computed based on actual R&M Expenses of FY 2021-22 as Rs. 31.39 Crore for Transmission and Rs. 0.40 Crore for SLDC as shown in the following Table:

Table 149: Computation of K - Factor for Control Period (Based on FY 2021-22)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA as on 01.04.2021	10287.61	28.63	10316.24
2	Add: Addition to GFA during FY 2021-22	398.71	0.30	399.01
3	Less: Retirement to GFA during FY 2021-22	30.81	0.04	30.86
4	Closing GFA (Including Land) as on 31.03.2022	10655.50	28.89	10684.39
5	Average GFA for FY 2021-22	10471.55	28.76	10500.31
6	Actual R & M expenditure for 2021-22	31.39	0.40	31.79
7	K - Factor (Based on Actual Figures for FY 2020-21)	0.300%	1.389%	

4.6.22 After considering the k-factor determined above and projected capitalisation during the Control period, R&M Expenses for the Control period are submitted as under:

Table 150: Projection of R&M Expenses for Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1	Opening GFA	11069.75	12327.62	13179.21
2	Addition	1257.87	851.59	1039.79
3	Closing GFA	12327.62	13179.21	14219.00
4	Average GFA	11698.68	12753.41	13699.10
5	K factor	0.300%	0.300%	0.300%
6	Escalation factor	14.21%	14.21%	14.21%
7	R&M Expenses	40.05	43.66	46.90
SLDC				
1	Opening GFA	37.26	62.05	68.04
2	Addition	24.79	5.99	0.93
3	Closing GFA	62.05	68.04	68.97
4	Average GFA	49.66	65.05	68.50
5	K factor	1.389%	1.389%	1.389%
6	Escalation factor	14.21%	14.21%	14.21%
7	R&M Expenses	0.79	1.03	1.09
8	AMC impact due to SAMAST	2.96	2.96	2.96
9	R&M Expenses	3.75	3.99	4.05

4.6.23 PSTCL has computed the O&M Expenses for the Control period on normative basis. Summary of O&M expenses is as under:

Table 151: Normative O & M Expenses for Control Period as claimed by PSTCL (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1	Employee Expenses	827.46	893.78	963.29
2	A&G Expenses	42.39	49.02	56.84
3	R&M Expenses	40.05	43.66	46.90
4	Total Normative O & M Expenses	909.89	986.45	1067.02
SLDC				
1	Employee Expenses	17.35	20.61	22.70
2	A&G Expenses	2.06	2.42	2.69
3	R&M Expenses	3.75	3.99	4.05
4	Total Normative O & M Expenses	23.16	27.02	29.44

Commission’s Analysis:

4.6.24 As per Regulation 26.1 of PSERC MYT Regulations 2022, the R&M expenses are to be determined as under:

$$“(i) R\&M_n = K * GFA * WPI_n / WPI_{n-1}”$$

Where,

- ‘K’ is a constant (expressed in %) governing the relationship between R&M costs and Gross
- Fixed Assets (GFA) for the nth year. The value of ‘K’ will be specified by the Commission in the MYT order.
- ‘GFA’ is the average value of the gross fixed assets of the nth year.
- WPI_n means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year.”

4.6.25 ‘k’ has been determined using the actual R&M expenses from the latest available audited accounts of FY 2021-22. The opening GFA is considered as per the Closing GFA approved during True-Up of FY 2021-22 and the Net addition of GFA is considered as approved in the True-up of FY 2021-22 in this Order. The “k” factor for the 3rdMYT Control Period is calculated as under:

Table 152: Calculation of k factor for 3rdMYT Control Period(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC
1.	Opening GFA (as on 01.04.2021) (Table no.32)	10287.60	28.63
2.	Closing GFA (as on 31.03.2022) (Table no.32)	10652.12	28.89
3.	Average GFA	10469.86	28.76
4.	Actual R&M Expenses for FY 2021-22	31.3861	0.40
5	'K' = R&M Expenses/Average GFA	0.29977%	1.30907%

4.6.26 The K factor is allowed as per above table which shall be revisited during the True-Up of FY 2023-24.

4.6.27 After considering the k-factor determined above and projected capitalisation during the Control period, Commission has calculated the R&M Expenses for the 3rdMYT Control period as under:

Table 153: R&M Expenses approved by the Commission for Transmission and SLDC Business (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1	Opening GFA	10970.19	11445.40	11939.41
2	Addition of GFA	475.21	494.01	499.07
3	Closing GFA	11445.40	11939.41	12438.48
4	Average GFA	11207.80	11692.41	12188.95
5	k-factor	0.29977%	0.29977%	0.29977%
6	Inflation Factor*	(1.115232) ²	(1.115232) ³	(1.115232) ⁴
7	R&M Expenses	41.79	48.62	56.53
SLDC				
1	Opening GFA	37.26	62.05	68.04
2	Addition of GFA	24.79	5.99	0.93
3	Closing GFA	62.05	68.04	68.97
4	Average GFA	49.66	65.05	68.51
5	k-factor	1.3907%	1.3907%	1.3907%
6	Inflation Factor*	(1.115232) ²	(1.115232) ³	(1.115232) ⁴
7	R &M Expenses	0.86	1.25	1.47
8	AMC impact on R&M due to SAMAST	2.96	2.96	2.96
9	R&M Expenses	3.82	4.21	4.43
10	PSTCL R&M (Transmission+SLDC)	45.61	52.83	60.96

**Inflation factor is assumed to be the same for every year and hence multiplies twice for FY 2023-24, thrice for FY 2024-25 and four times for FY 2025-26*

4.6.28 Thus, the Commission approves O&M expenses for the 3rd MYT Control Period as under:

Table 154: O&M Expenses for Transmission Business of 3rdMYT Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Employee Expenses (Table No.145)	739.59	769.51	814.82
2.	A&G Expenses (Table no.147)	29.40	31.94	34.69
3.	R&M Expenses (Table No.153)	41.79	48.62	56.53
4.	O&M Expenses	810.78	850.07	906.04

Table 155: O&M Expenses for SLDC Business of 3rd MYT Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Employee Expenses (Table No.145)	9.88	10.60	9.89
2.	A&G Expenses (Table No.147)	0.70	0.76	0.83
3.	R&M Expenses (Table No.153)	3.82	4.21	4.43
4.	O&M Expenses	14.40	15.57	15.15

Table 156: O&M Expenses for PSTCL of 3rd MYT Control Period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Employee Expenses (Table no.146)	749.47	780.11	824.71
2.	A&G Expenses (Table no.148)	30.10	32.70	35.52
3.	R&M Expenses (Table no.153)	45.61	52.83	60.96
4.	O&M Expenses	825.18	865.64	921.19

4.7 Depreciation

PSTCL's Submission:

4.7.1 PSTCL has computed the depreciation in accordance with the Regulation 21 of the PSERC MYT Regulations 2022. PSTCL has considered closing GFA of FY 2022-23 as opening GFA for FY 2023-24 and addition of GFA equal to projected capitalisation during each year of the Control period, as submitted in the earlier Section of this Chapter.

4.7.2 The weighted average rate of depreciation has been computed as 4.10% for Transmission Business and 7.21% for SLDC based on audited accounts for FY2021-

22. The depreciation has been computed by applying weighted average rate of depreciation on average GFA during the year. Accordingly, PSTCL submits the depreciation for the Control Period as under:

Table 157: Depreciation on Total Assets

(Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission				
1	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	7889.48	9147.35	9998.94
2	Add: Addition to GFA	1257.87	851.59	1039.79
3	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	9147.35	9998.94	11038.73
4	Average GFA	8518.42	9573.15	10518.84
5	Depreciation (% of Average)	4.10%	4.10%	4.10%
6	Depreciation for the year	349.53	392.81	431.61
SLDC				
7	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	32.51	57.30	63.28
8	Add: Addition to GFA	24.79	5.99	0.93
9	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	57.30	63.28	64.21
10	Average GFA	44.90	60.29	63.75
11	Depreciation (% of Average)	7.21%	7.21%	7.21%
12	Depreciation for the year	3.24	4.35	4.60

Table 158: Depreciation on Spill Over Assets

(Rs. crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission				
1	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	7399.24	7795.85	7842.26
2	Add: Addition to GFA	396.61	46.41	142.98
3	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	7795.85	7842.26	7985.24

4	Average GFA	7597.54	7819.05	7913.75
5	Depreciation (% of Average)	4.10%	4.10%	4.10%
6	Depreciation for the year	311.74	320.83	324.72
SLDC				
7	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	25.71	27.98	28.38
8	Add: Addition to GFA	2.27	0.40	0.00
9	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	27.98	28.38	28.38
10	Average GFA	26.84	28.18	28.38
11	Depreciation (% of Average)	7.21%	7.21%	7.21%
12	Depreciation for the year	1.94	2.03	2.05

Table 159: Depreciation on New Assets

(Rs. crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission				
1	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	490.24	1351.50	2156.68
2	Add: Addition to GFA	861.26	805.18	896.81
3	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	1351.50	2156.68	3053.49
4	Average GFA	920.87	1754.09	2605.09
5	Depreciation (% of Average)	4.10%	4.10%	4.10%
6	Depreciation for the year	37.79	71.97	106.89
SLDC				
1	Opening GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	6.80	29.32	34.91
2	Add: Addition to GFA	22.52	5.59	0.93
3	Closing GFA (Excluding Land and Land Rights) (Excluding Contributory & PSDF Works)	29.32	34.91	35.84
4	Average GFA	18.06	32.11	35.37
5	Depreciation (% of Average)	7.21%	7.21%	7.21%
6	Depreciation for the year	1.30	2.32	2.55

Commission's Analysis:

4.7.3 Regulation 21 of the PSERC MYT Regulations, 2022 specifies as under:

"21.1. The value base for the purpose of depreciation shall be the capital cost of the assets admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided that the land, other than the land held under lease and land for reservoir in case of hydro generating station, shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets:

Provided further that Government. grants and consumer contribution shall also be recognized as defined under Indian Accounting Standard 20 (IND AS 20) notified by the Ministry of Corporate Affairs.

21.2. The residual/salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of historical capital cost of the asset:

Provided that I.T. Equipment and Software shall be depreciated 100% with zero salvage value.

21.3. The Cost of the asset shall include additional capitalization.

21.4. The Generating Company, Transmission and Distribution Licensee shall provide the list of assets added during each Year of the Control Period and the list of assets completing 90% of depreciation in the Year along with Petition for true-up and tariff determination for ensuing Year.

21.5. Depreciation for Distribution, generation and transmission assets shall be calculated annually as per straight line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation/ put in use of the asset shall be spread over the balance useful life of the assets:

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the asset.

21.6. Depreciation shall be chargeable from the first year of commercial

operation/asset is put in use. In case of commercial operation of the asset/put in use of asset for part of the year, depreciation shall be charged on pro rata basis.”

4.7.4 The Commission determines the depreciation for the 3rdMYT Control period as per the Regulation 21 stated above. The Opening GFA for the Spillover schemes is considered as per the Closing GFA approved by the Commission in the APR of FY 2022-23 while the opening GFA for new schemes is considered as zero.

4.7.5 The Commission has considered the addition of GFA as approved by the Commission and has not considered the addition of assets due to PSDF Schemes. Based on the actual rate of depreciation of 4.10% for Transmission Business and 7.21% for SLDC Business as determined during True-Up of FY 2021-22 of PSTCL in this Order, the depreciation for Spillover and New Schemes for Transmission and SLDC Business is as under:

Table 160: Depreciation approved by the Commission for the 3rd MYT Control period for Transmission Business

(Rs. Crore)

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
(I)	Spillover Schemes			
1.	Opening GFA (excluding land and land rights)	7399.24	7795.85	7842.26
2.	Add: Additions to GFA during the year	396.61	46.41	142.98
3.	Less: Addition of GFA towards PSDF schemes	0.00	0.00	0.00
4.	Closing GFA	7795.85	7842.26	7985.24
5.	Average GFA	7597.54	7819.05	7913.75
6.	Depreciation @4.10% of average GFA	311.74	320.83	324.72
(II)	New Schemes			
7.	Opening GFA (excluding land and land rights)	390.69	469.29	916.89
8.	Add: Additions to GFA during the year	78.60	447.60	356.09
9.	Closing GFA	469.29	916.89	1272.98
10.	Average GFA	429.99	693.09	1094.94
11.	Depreciation @4.10% of average GFA	17.64	28.44	44.93
12	Total Depreciation	329.39	349.27	369.64

Table 161: Depreciation approved by the Commission for the 3rd MYT Control period for SLDC Business

(Rs. Crore)

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
(I)	Spillover Schemes			
1.	Opening GFA (excluding land and land rights)	25.71	27.98	28.38
2.	Add: Additions to GFA during the year	2.27	0.40	0.00
3.	Closing GFA	27.98	28.38	28.38
4.	Average GFA	26.85	28.18	28.38
5.	Depreciation @3.34% of average GFA	1.94	2.03	2.05
(II)	New Schemes			
6.	Opening GFA (excluding land and land rights)	6.80	29.32	34.91
7.	Add: Additions to GFA during the year	22.52	5.59	0.93
8.	Closing GFA	29.32	34.91	35.84
9.	Average GFA	18.06	32.12	35.38
10.	Depreciation @7.21% of average GFA	1.30	2.32	2.55
11.	Total Depreciation	3.24	4.35	4.60

Thus, the depreciation approved for Transmission and SLDC Business is as under:

Table 162: Depreciation approved by the Commission for the 3rd MYT Control period

(Rs. Crore)

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
(I)	Transmission			
1.	Opening GFA (excluding land and land rights)	7789.93	8265.14	8759.15
2.	Add: Additions to GFA during the year	475.21	494.01	499.07
3.	Less: Addition of GFA towards PSDF schemes	0.00	0.00	0.00
4.	Closing GFA	8265.14	8759.15	9258.22
5.	Average GFA	8027.53	8512.14	9008.68
6.	Depreciation @4.10% of average GFA	329.39	349.27	369.64
(II)	SLDC			
7.	Opening GFA (excluding land and land rights)	32.51	57.30	63.29
8.	Add: Additions to GFA during the year	24.79	5.99	0.93
9.	Closing GFA	0.00	0.00	0.00
10.	Average GFA	57.30	63.29	64.22
11.	Depreciation @7.21% of average GFA	3.24	4.35	4.60
12.	Total Depreciation	332.63	353.62	374.24

4.8 Interest and Finance charges

PSTCL's Submission:

4.8.1 For the purpose of projecting the interest and finance charges, PSTCL has currently considered the closing loan balances for 2022-23 as opening loan balances for FY 2023-24. The outstanding existing loans include loans from REC, LIC, Commercial banks, Loan from PSPCL. The repayment of these existing loans and interest expenses has been considered as per PSERC MYT Regulations, 2022. The addition of loan has been considered equivalent to debt amount as submitted in the present Petition. PSTCL has proposed new loans for the proposed investments from Banks/Financial Institution. Accordingly, interest on loan capital for Control Period for PSTCL has been submitted as under:

Table 163: Interest on Loan & Finance Charges for all schemes (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1	Opening Balance	3264.78	3655.55	3883.04
2	Add: Addition	740.30	620.30	670.87
3	Less: Repayment	349.53	392.81	431.61
4	Closing Balance	3655.55	3883.04	4122.30
5	Average Loan	3460.16	3769.29	4002.67
6	Interest Rate	9.12%	9.12%	9.12%
7	Interest Charge	315.53	343.72	365.00
8	Less: Interest Capitalized	8.02	3.31	2.51
9	Add: Misc& Finance Charges	0.13	0.13	0.13
10	Normative Interest & Finance Charges	307.63	340.54	362.62
SLDC				
1	Opening Balance	17.10	37.15	38.79
2	Add: Addition	23.30	5.99	0.93
3	Less: Repayment	3.24	4.35	4.60
4	Closing Balance	37.15	38.79	35.13
5	Average Loan	27.13	37.97	36.96
6	Interest Rate	9.11%	9.11%	9.11%
7	Interest Charge	2.47	3.46	3.37

Table 164: Interest on Loan & Finance Charges for spillover schemes (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1	Opening Balance	3032.60	2917.17	2677.29
2	Add: Addition	196.31	80.96	61.57
3	Less: Repayment	311.74	320.83	324.72

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
4	Closing Balance	2917.17	2677.29	2414.15
5	Average Loan	2974.88	2797.23	2545.72
6	Interest Rate	9.12%	9.12%	9.12%
7	Interest Charge	271.28	255.08	232.14
8	Less: Interest Capitalized	8.02	3.31	2.51
9	Add: Misc& Finance Charges	0.13	0.13	0.13
10	Normative Interest & Finance Charges	263.38	251.89	229.77
SLDC				
1	Opening Balance	10.56	9.40	7.77
2	Add: Addition	0.78	0.40	0.00
3	Less: Repayment	1.94	2.03	2.05
4	Closing Balance	9.40	7.77	5.72
5	Average Loan	9.98	8.59	6.75
6	Interest Rate	9.11%	9.11%	9.11%
7	Interest Charge	0.91	0.78	0.61

Table 165: Interest on Loan & Finance Charges for new schemes (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1	Opening Balance	232.18	738.38	1205.74
2	Add: Addition	543.99	539.34	609.30
3	Less: Repayment	37.79	71.97	106.89
4	Closing Balance	738.38	1205.74	1708.15
5	Average Loan	485.28	972.06	1456.95
6	Interest Rate	9.12%	9.12%	9.12%
7	Interest Charge	44.25	88.64	132.86
8	Normative Interest & Finance Charges	44.25	88.64	132.86
SLDC				
9	Opening Balance	6.53	27.75	31.02
10	Add: Addition	22.52	5.59	0.93
11	Less: Repayment	1.30	2.32	2.55
12	Closing Balance	27.75	31.02	29.40
13	Average Loan	17.14	29.39	30.21
14	Interest Rate	9.11%	9.11%	9.11%
15	Interest Charge	1.56	2.68	2.75
16	Normative Interest & Finance Charges	1.56	2.68	2.75

Commission's Analysis:

4.8.2 The Commission determines the Interest on loan capital for the 3rdMYT Control Period as per Regulation 24 of the PSERC MYT Regulations, 2022. It is reproduced as under:

“24.1. For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the Licensee.

24.2. Interest and finance charges on the future loan capital for new investments shall be computed on the loans, based on one (1) year State Bank of India (SBI) MCLR/any replacement thereof as notified by RBI as maybe applicable as on 1st April of the relevant year, plus a margin determined on the basis of current actual rate of interest of the capital expenditure loan taken by the Generating Company, Licensee or SLDC and prevailing SBIMCLR.

24.3. The repayment for each year of the tariff period shall be deemed to be equal to the depreciation allowed for the corresponding year. In case of de-capitalisation of assets, the repayment shall be adjusted by taking into account cumulative depreciation made to the extent of de-capitalisation.

24.4. The Commission shall allow obligatory taxes on interest, finance charges (including guarantee fee payable to the Government) and any exchange rate difference arising from foreign currency borrowings, as finance cost.

24.5. The interest on excess equity treated as loan shall be serviced at the weighted average interest rate of actual loan taken from the lenders.

Provided also 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 for the actual loan shall be considered.”

- 4.8.3** The Opening of loan for the Spillover schemes is considered as per the Closing approved by the Commission in the APR of FY 2022-23 in this Order while the opening of loan for new schemes is considered as zero.
- 4.8.4** As explained in para 4.5.6, the Commission has considered the approved addition of loan.
- 4.8.5** As per regulation 24.3 of PSERC MYT Regulation 2022, the repayment of loan is considered equal to depreciation allowed for the corresponding year.
- 4.8.6** For the Spillover schemes i.e. for existing loans, the rate of interest on loan capital is considered as 9.12% for Transmission and 9.11% for SLDC as approved during the True-up of FY 2021-22 in this Order.
- 4.8.7** The Commission determines Interest on long term loans for Transmission Business and SLDC Business as under:

**Table 166: Interest on loan for Spillover schemes of Transmission Business
(Rs. Crore)**

Sr. No	Particulars	FY2023-24	FY 2024-25	FY 2025-26
1.	Opening balance of loan	2908.37	2734.04	2469.88
2.	Add: Receipt of loan during the year(Table No.136)	137.42	56.67	43.10
3.	Less: Repayment of loan during the year(Table No.160)	311.74	320.83	324.72
4.	Closing balance of loan	2734.04	2469.88	2188.26
5.	Average Loan	2821.20	2601.96	2329.07
6.	Interest Charges @ 9.12%	257.26	237.27	212.39

**Table 167: Interest on loan for New schemes of Transmission Business
(Rs. Crore)**

Sr No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Opening balance of loan	257.53	294.91	579.79
2.	Add: Receipt of loan during the year(Table No.136)	55.02	313.32	249.26
3.	Less: Repayment of loan during the year(Table no.160)	17.64	28.44	44.93
4.	Closing balance of loan	294.91	579.79	784.13
5.	Average Loan	276.22	437.35	681.96
6.	Interest Charges @ 9.12%	25.19	39.88	62.19

**Table 168: Interest on loan for Spillover schemes of SLDC Business
(Rs. Crore)**

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Opening balance of loan	10.50	9.35	7.72
2.	Add: Receipt of loan during the year(Table No.137)	0.78	0.40	0.00
3.	Less: Repayment of loan during the year(Table No.161)	1.94	2.03	2.05
4.	Closing balance of loan	9.35	7.72	5.67
5.	Average Loan	9.92	8.53	6.69
6.	Interest Charges @ 9.11%	0.90	0.78	0.61

**Table 169: Interest on loan for New schemes of SLDC Business
(Rs. Crore)**

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Opening balance of loan	6.53	27.75	31.03
2.	Add: Receipt of loan during the year(Table No. 137)	22.52	5.59	0.93
3.	Less: Repayment of loan during the year(Table No.161)	1.30	2.32	2.55
4.	Closing balance of loan	27.75	31.03	29.41
5.	Average Loan	17.14	29.39	30.22
6.	Interest Charges @ 9.11%	1.56	2.67	2.75

Finance and Guarantee charges

- 4.8.8** PSTCL has claimed finance charges and guarantee fee of Rs.0.13 Crore for each year of 3rd MYT years. **The Commission allows finance charges and guarantee**

fee of Rs.0.13 Crore each for FY2023-24, FY 2024-25 and FY 2025-26 as claimed by PSTCL for the Transmission Business.

Capitalization of Interest Charges

4.8.9 Capitalization of interest and finance charges of Rs. 8.02 Crore for FY 2023-24, Rs.3.31 Crore for FY 2024-25 and Rs.2.51 Crore for FY 2022-23 is claimed by PSTCL. The Commission has considered the capitalization of interest & finance charges as claimed by PSTCL.

4.8.10 Accordingly, the Commission determines Interest and Finance Charges for Transmission Business and SLDC Business as under:

Table 170: Interest and Finance charges approved by the Commission for Transmission Business (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Interest charges for Spillover schemes of Transmission Business	257.26	237.27	212.39
2.	Interest charges for New schemes of Transmission Business	25.19	39.88	62.19
3.	Add Finance/Guarantee charges	0.13	0.13	0.13
4.	Total Interest charges	282.58	277.28	274.71
5.	Less: Interest capitalized	8.02	3.31	2.51
6.	Net Interest charges	274.56	273.97	272.20

Table 171: Interest and Finance charges approved by the Commission for SLDC Business (Rs. Crore)

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1	Interest charges for Spillover schemes of Transmission Business	0.90	0.78	0.61
2	Interest charges for New schemes of Transmission Business	1.56	2.67	2.75
3	Interest charges	2.46	3.45	3.36

4.9 Interest on Working Capital

PSTCL's Submission:

4.9.1 PSTCL has computed Interest on Working Capital (IoWC) as per Regulation 50.1 of PSERC MYT Regulation 2022.

"50.1 The rate of interest on working capital shall be as per Regulation 25.1."

Table 172: Normative Interest on Working Capital submitted by PSTCL for the 3rdMYT Control Period

(Rs. Crore)

Sr. No	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1	Receivables equivalent to two (2) months of fixed cost calculated on normative target availability	292.89	326.56	357.95
2	Maintenance Spares @ 15% of O&M expenses	136.48	147.97	160.05
3	Operation & Maintenance expenses for 1 (One) Month	75.82	82.20	88.92
4	Total Working Capital (Normative)	505.20	556.73	606.92
5	Rate of Interest applied (As per Norms)	7.99%	7.99%	7.99%
6	Normative Interest on Working Capital	40.37	44.48	48.49
SLDC				
1	Receivables equivalent to two (2) months of fixed cost calculated on normative target availability	5.50	6.51	6.96
2	Maintenance Spares @ 15% of O&M expenses	3.47	4.05	4.42
3	Operation & Maintenance expenses for 1 (One) Month	1.93	2.25	2.45
4	Total Working Capital (Normative)	10.90	12.82	13.82
5	Rate of Interest applied (As per Norms)	7.99%	7.99%	7.99%
6	Normative Interest on Working Capital	0.87	1.02	1.10

Commission Analysis

4.9.2 The Commission has computed the interest on working capital as per Regulation 50 of the PSERC MYT Regulations, 2022 which specifies as under:

“50.1. Components of Working Capital

The Working Capital shall cover the following:

- (a) O&M Expenses for 1month;*
- (b) Maintenance spares @ 15% of the O&M expenses;*
- (c) Receivables equivalent to two(2) months of fixed cost calculated on normative target availability.*

.....

50.2. Rate of Interest

The rate of interest on working capital shall be as per Regulation 25.1.”

4.9.3 Considering the rate of interest as approved in the True-Up of FY 2021-22i.e.7.99% for Transmission Business and 7.99% for SLDC Business, the Commission determines and approves the Interest on working capital as under:

Table 173: Interest on Working Capital approved by the Commission for the 3rd MYT Control Period

(Rs. Crore)				
Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
Transmission Business				
1.	Receivables for two months (Table no.179, Sr.no.10)	260.45	273.63	290.11
2.	Maintenance spares @15% of O&M (Table no.154, Sr. No. 4)	121.62	127.51	135.91
3.	O&M Expenses for one month (Table no.154)	67.57	70.84	75.50
4.	Total Working Capital	449.63	471.98	501.52
5.	Rate of Interest (%)	7.99%	7.99%	7.99%
6.	Interest on Working Capital	35.93	37.71	40.07
SLDC				
7.	Receivables for two months (Table no.180, Sr.no.9)	4.89	5.44	5.40
8.	Maintenance spares @15% of O&M (Table No.155)	2.16	2.34	2.27
9.	O&M Expenses for one month (Table no.155)	1.20	1.30	1.26
10.	Total Working Capital	8.25	9.08	8.93
11.	Rate of Interest (%)	7.99%	7.99%	7.99%
12	Interest on Working Capital	0.66	0.73	0.71

4.10 Return on Equity (RoE)

PSTCL's Submission:

4.10.1 PSTCL has considered the opening equity for FY 2023-24 as equal to closing equity considered in APR for FY 2022-23. PSTCL has computed Return on Equity for the Control Period in view of Regulation 20 of PSERC MYT Regulations 2022 and is as given in the following table:

Table 174: Projection of Return on Equity for 3rd Control Period submitted by PSTCL (Rs Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1	Opening Equity for the year	964.62	1281.90	1547.74
2	Addition of Equity during the year	317.27	265.84	287.51
3	Closing Equity for the year	1281.90	1547.74	1835.25
4	Rate of return on Equity (%)	15.50%	15.50%	15.50%
5	Return on Equity	174.11	219.30	262.18

Commission's Analysis:

4.10.2 The Commission determines the Return on Equity for the Control Period in accordance with Regulation 20 of PSERC MYT Regulations, 2022 which is reproduced as under:

“20. Return on equity

Return on equity shall be computed at the base rate of 15.5% for thermal generating stations, Transmission Licensee, SLDC and run of the river hydro generating stations and at the base rate of 16.5% for the storage type hydro generating stations and run of river generating stations with pondage and 16% for Distribution Licensee on the paid up equity capital determined in accordance with Regulation 19:

Provided that Equity invested in foreign currency shall be converted to rupee currency based on the exchange rate prevailing on the date(s) it is subscribed:

Provided further that asset funded by consumer contributions, capital subsidies/Government. grants shall not form part of the capital base for the purpose of calculation of Return on Equity.”

4.10.3 The Commission has considered the opening of equity for FY 2023-24 as the approved closing of equity from the APR of FY 2022-23. As explained in para 4.5.6 equity has been considered @ 30% of fund requirement. The Commission determines Return on Equity @15.50% on the average equity for the year which is calculated as under:

Table 175: Return on Equity approved by the Commission (Rs Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1.	Opening Equity	934.76	1017.23	1175.80
2.	Add: Addition to equity during the year	82.47	158.57	125.30
3.	Closing Equity	1017.23	1175.80	1301.10

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
4.	Average Equity	976.00	1096.52	1238.45
5.	Rate of RoE	15.50%	15.50%	15.50%
6.	Return on Equity	151.28	169.96	191.96

4.10.4 The Commission, thus, approves RoE of Rs.151.28, Rs.169.96, Rs.191.96 crores for each year of the 3rdMYT Control Period i.e from FY 2023-24 to FY 2025-26 respectively.

4.11 Unified Load Dispatch & Communication (ULDC) Charges

PSTCL's Submission:

4.11.1 The actual ULDC charges as per books of accounts for FY 2021-22 are Rs 8.88 Crore. The said charges are approved by the CERC and are payable by SLDC. For the purpose of projection, ULDC Charges for the control period are shown in the table below:

Table 176: Projection of ULDC charges for the Control period (Rs. Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1	ULDC-II	1.5	1.5	1.5
2	ULDC-III	3.5	3.5	3.5
3	FOCS Charges	3.5	3.5	3.5
4	NRLDC Charges	3.5	3.5	3.5
5	Total	12	12	12

4.11.2 Accordingly, PSTCL submits the ULDC Charges of Rs. 12.00 Crore for each year of the Control period.

Commission's Analysis:

4.11.3 Since ULDC Charges are decided by CERC from time to time, the Commission finds it appropriate to allow ULDC charges based on Audited Annual Accounts of FY 2021-22 for the time being. Thus, the Commission allows ULDC Charges of Rs.8.88 Crore for each year of the 3rdMYT Control Period. However, it will be revisited during the True-up of respective years based on the actual expenditure as per Audited Annual Accounts.

4.12 Non-Tariff Income

PSTCL's Submission:

4.12.1 For the purpose of projection for Control Period, PSTCL has considered Non-tariff Income as submitted in APR for FY 2022-23.

Table 177: Non-Tariff Income for the Control Period (Rs Crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1	Transmission Business	20	20	20
2	SLDC	0.18	0.18	0.18

Commission's Analysis:

4.12.2 Non-Tariff Income is to be determined as per Regulation 27 of PSERC MYT Regulations 2022.

4.12.3 The Commission considers the Non-tariff Income as Rs.35.57Crore for each year for Transmission Business and Non-Tariff Income of Rs.0.23 Crore for each year for SLDC Business based on Audited Annual Accounts of FY 2021-22. However, it will be revisited during the True-up of respective years based on the Audited Annual Accounts.

4.13 Revenue from Open Access Consumers

4.13.1 PSTCL has projected a receipt from Open Access Consumers for the control period based on receipts of FY 2022-23 in the previous chapter.

Table 178: Income from Open Access for the Control Period (Rs crore)

Sr. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
1	Transmission Business	4.21	4.21	4.21
2	SLDC	0.09	0.09	0.09

Commission's Analysis:

4.13.2 The Commission considers the Income from open Access consumers as Rs.3.66 Crore for each year for Transmission Business and Rs.0.09 Crore for each year for SLDC Business based on Audited Annual Accounts of FY 2021-22. However, it will be revisited during the True-up of respective years based on the Audited Annual Accounts.

4.14 Aggregate Revenue Requirement (ARR)

4.14.1 The summary of the ARR for Transmission Business, SLDC Business and for overall PSTCL for the 3rdMYT Control Period is in the following tables:

Table 179: Summary of ARR for Transmission Business for the 3rd MYT Control Period

(Rs. Crore)

Sr. No.	Particulars	Submitted by PSTCL			Approved by the Commission		
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2023-24	FY 2024-25	FY 2024-25
1	O&M Expenses	909.89	986.45	1067.02	810.78	850.07	906.04
2	Depreciation	349.53	392.81	431.61	329.39	349.27	369.64
3	Interest charges	307.63	340.54	362.62	274.56	273.97	272.20
4	Return on Equity	174.11	219.30	262.18	151.28	169.96	191.96
5	Interest on Working Capital	40.37	44.48	48.49	35.93	37.71	40.07
6	ULDC Charges	0.0	0.00	0.00	0.0	0.00	0.00
7	Aggregate Revenue Requirement	1781.53	1983.57	2171.93	1601.94	1680.98	1779.91
8	Less: Non-Tariff Income	20.00	20.00	20.00	35.57	35.57	35.57
9	Less: Revenue from open Access	4.21	4.21	4.21	3.66	3.66	3.66
10	Net Aggregate Revenue Requirement	1757.32	1959.36	2147.72	1562.71	1641.75	1740.68

Table 180: Summary of ARR for SLDC Business for the 3rd MYT Control Period

(Rs. Crore)

Sr. No.	Particulars	Submitted by PSTCL			Approved by the Commission		
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2023-24	FY 2024-25	FY 2025-26
1.	O&M Expenses	23.16	27.02	29.44	14.40	15.57	15.15
2.	Depreciation	3.24	4.35	4.60	3.24	4.35	4.60
3.	Interest charges	2.47	3.46	3.37	2.47	3.46	3.36
4.	Interest on Working Capital	0.87	1.02	1.10	0.66	0.73	0.71
5.	ULDC Charges	3.50	3.50	3.50	8.88	8.88	8.88
6.	Aggregate Revenue Requirement	33.24	39.35	42.00	29.64	32.99	32.70
7.	Less: Non-Tariff Income	0.18	0.18	0.18	0.23	0.23	0.23
8.	Less: Revenue from open Access	0.09	0.09	0.09	0.09	0.09	0.09
9.	Net Revenue Requirement	32.97	39.08	41.73	29.32	32.67	32.38

Table 181: Summary of ARR for PSTCL for the 3rdMYT Control Period

(Rs. Crore)

Sr. No.	Particulars	Submitted by PSTCL			Approved by the Commission		
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2023-24	FY 2024-25	FY 2025-26
1.	O&M Expenses	933.06	1013.48	1096.46	825.18	865.64	921.19
2.	Depreciation	352.77	397.15	436.21	332.63	353.62	374.24
3.	Interest charges	310.11	344.00	365.99	277.03	277.43	275.56
4.	Return on Equity	174.11	219.30	262.18	151.28	169.96	191.96
5.	Interest on Working Capital	41.24	45.51	49.59	36.58	38.44	40.78
6.	ULDC Charges	3.50	3.50	3.50	8.88	8.88	8.88
7.	Aggregate Revenue Requirement	1814.79	2022.94	2213.93	1631.58	1713.97	1812.61
8.	Less: Non-Tariff Income	20.18	20.18	20.18	35.80	35.80	35.80
9.	Less: Revenue from open Access	4.30	4.30	4.30	3.75	3.75	3.75
10.	Net Aggregate Revenue Requirement	1790.29	1998.44	2189.45	1592.03	1674.42	1773.06

4.14.2 Written off capital expenditure during FY 2020-21 -- Rs 1.64 crores.

PSTCL Submission

4.14.3 PSTCL submitted that an amount of Rs. 1.64 crore was claimed in True up of FY 2020-21 on account of written off capital expenditure. It was contended that the expenditure had become infructuous as the line on which it was incurred could not be constructed due to various constraints. The Commission had disallowed the expenditure at that time due to lack of details. However, a detailed proposal was submitted to the Commission vide PSTCL's office memo no. 415/CAO/APR-2021-22 dated 04.05.2022 later. In view of the above, it is now requested that Rs. 1.64 Crore claimed as written off in true up of FY 2020-21 may be allowed please.

Commission Analysis

4.14.4 The Commission disallows expenditure of Rs 1.64 Crores written off during FY 2020-21 since it relates to erstwhile PSEB period and cannot be passed on to the consumers of the state.

4.14.5 Carrying Cost on Revenue Gap

True up of FY 2021-22

The Commission vide its Order dated 28.05.2021 had approved the Net Revenue Requirement (NRR) of Rs.1331.71 Crore for FY 2021-22. Now, after the truing up exercise for FY 2021-22, the Net ARR has been re-determined as Rs.1406.81 Crore which was payable by PSPCL as Transmission Charges of FY 2021-22. Thus, the Commission determines a Revenue Gap of Rs. 75.10 (1406.81 -1331.71) Crore. Further, the Commission allowed transmission charges of Rs.1434.35 Crore to PSTCL during annual performance review of FY 2021-22 in tariff order of FY 2022-23. Thus, Revenue surplus of Rs.102.64 Crore (1434.35-1331.71) along with carrying cost is to be recovered. The carrying cost has been allowed at working capital rate of interest of 7.99% as approved in the true up for FY 2021-22.

4.14.6 Accordingly, the Commission allows revenue Gap/Surplus along with carrying cost as under:

Table 182: Carrying Cost on Revenue Gap for True up of FY 2021-22

(Rs. Crore)				
Sr. No.	Particulars	TRANSMISSION	SLDC	PSTCL
1	ARR approved for FY 2021-22 vide Order dated 28.05.2021 (A)	1307.98	23.73	1331.71
2	Net ARR approved for True-Up of FY 2021-22(B)	1382.60	24.21	1406.81
3	Revenue Gap / (Surplus) (C= B-A)	74.62	0.48	75.10
4	Carrying Cost (@7.99% for two years)	11.92	0.07	11.99
5	Revenue Gap along with carrying cost(D)	86.54	0.55	87.09
6	APR approved for FY 2021-22 vide order dated 31.03.2022 (E)	1410.00	24.35	1434.35
7	Revenue Surplus (F= E-A)	102.02	0.62	102.64
8	Carrying Cost (@7.99% for one year)	8.15	0.05	8.20
9	Revenue Surplus with carrying cost (G)	110.17	0.67	110.84
10	Net Surplus Recoverable (G-D)	23.63	0.12	23.75

Table 183: Net ARR as approved by the Commission for PSTCL for FY 2023-24

(Rs. Crore)				
Sr. No.	Particulars	TRANSMISSION	SLDC	PSTCL
1	Total ARR	1562.71	29.32	1592.03
2	Impact of True up of FY 2021-22	(23.63)	(0.12)	(23.75)
3	Net ARR	1539.08	29.20	1568.28

Chapter 5

Directives

Compliance of Commission's Directives

The Commission has a statutory function under the Electricity Act, 2003 to guide the State Transmission Utility for the overall development of an efficient, coordinated and economical system of Intrastate Transmission lines and substations for smooth flow of electricity to the load centers. The Commission issues various directives to PSTCL through its Tariff Order each year to facilitate the transmission licensee/STU to achieve these milestones. The status of compliance of directives issued in the Tariff Order for FY 2022-23 and PSERC comments along with further directives for compliance by PSTCL during FY 2023-24 is summarized as under:

Directive No. 5.1: Boundary metering, Energy Audit and Reduction in Transmission Losses.

PSERC Comments & Directive for FY 2022-23:

The Commission directs PSTCL to implement SAMAST scheme in Punjab at the earliest.

Reply of PSTCL:

PSTCL has intimated that all efforts are being made to implement the scheme at the earliest. Project execution has been affected by issues like semiconductor chip shortage in international market, compliance to cyber security guidelines/orders of MoP/Gol for imported equipment for use in power sector, restriction imposed by Govt. of India on procurement from prior reference Countries. The commissioning date of project is expected to be extended by 6 months i.e upto end of August, 2023.

PSERC Comments & Directive

The Commission has been asking PSTCL from time to time to ensure expeditious implementation of the forecasting and scheduling activities and of the SAMAST Scheme. However, it is noted with concern that even after awarding the contract for implementation of the SAMAST Scheme, the commencement/end dates of some activities have been repeatedly postponed and the completion of the project and its handover have been further postponed by

more than five months i.e. from 04.03.2023 to 31.08.2023_as depicted in the latest status report dated 18.01.2023 sent by PSTCL.

The Commission had convened a meeting with PSTCL on 03.11.2022 to review the implementation of SAMAST Scheme. However, the feedback given by PSTCL during the meeting was not satisfactory. There seems to be lack of coordination and serious focus towards the expeditious implementation of the SAMAST Scheme. The concerned officers attending the meeting were directed to take required remedial measures, with regular review to ensure the speedy execution of the SAMAST Scheme and the earliest commencement of forecasting and scheduling of the RE generators, open access entities etc.

PSTCL is directed to make all out efforts to expeditiously implement the SAMAST scheme and to keep on sending regular status updates. In the meantime, the commissioned modules which can be operationalised independently be put to use immediately.

Directive 5.2: Loading Status of PSTCL Transmission lines and Substations

PSERC Comments & Directive for FY 2022-23:

While noting the position intimated by PSTCL, the Commission directs PSTCL to intimate, within three months of issue of this Tariff Order, the measures taken to prevent overloading on the transmission lines like the 220 kV Sahnewal-PGCIL line.

Reply of PSTCL:

PSTCL has intimated the loading status of transmission lines and Substations.

PSERC Comments & Directive

PSTCL was directed to intimate, within three months of issue of tariff order for FY 2022-23, the measures taken to prevent overloading on transmission lines like the 220 kV Sahnewal – PGCIL line. The Commission notes that the required information has not been supplied by PSTCL. Even now, twenty transmission lines are overloaded. Overloading in case of some lines such as 220 kV Badhani-PGCIL Moga Line, Faggan Majra-Bahudargarh and 132kV Feroze Shah-Kotkaror is severe i.e. of the order of 117%. Against most of such cases of overloading, PSTCL has now intimated that either the remedial measures are under study or additional transmission lines and substations have been planned as a remedy. But the timelines have not been intimated.

Accordingly, PSTCL is directed to intimate the timelines of the remedial action to relieve overloading on all such overloaded transmission lines within one month of issue of this Tariff Order. PSTCL is also directed to identify the transmission lines which are potentially vulnerable to overloading and take proactive steps to prevent the same. Further, PSTCL has sought capex in CIP for erection of substations and transmission lines to prevent overloading. The quarterly report on the utilisation of the funds and physical progress be also furnished.

Directive 5.3: Maintenance of voltage wise and category wise details of fixed assets:

PSERC Comments & Directive for FY 2022-23:

PSTCL has still not given any time frame to ensure compliance of the Directive. As such, the reply given by PSTCL is not satisfactory. The Commission observes that calling of tenders is not dependent on HVPNL software issues and directs that speedy compliance of the Directive be ensured and status report be furnished within three months of issue of Tariff Order.

Reply of PSTCL:

Fixed Assets Register assets-wise, accounts head-wise and division-wise upto 31st March 2022 is being prepared on Annual basis. To accomplish the work at the earliest, tender is being floated.

PSERC Comments & Directive

PSTCL has still not given any time frame to ensure compliance of the Directive. As such, the reply given by PSTCL is not satisfactory. The Commission directs that speedy compliance of the directive be ensured and status report be furnished within three months of issue of Tariff Order.

Directive No. 5.4: Reactive Compensation.

PSERC Comments & Directive for FY 2022-23:

The final recommendations/detailed report of CPRI, along with the action points emanating there from, be shared with the Commission within one month of issuance of this Tariff Order. Further, status report of installation of reactors be sent to the Commission every quarter, beginning the quarter ending June, 2022.

Reply of PSTCL:

PSTCL has floated tender for procurement of various rating Capacitor Banks around capacity of 700 MVAR. Also PSTCL has placed order for supply & installation of 1 No. 125 MVAR 400 kV Bus Reactor at 400 kV Dhuri and 2 Nos. 25 MVAR 220 kV Bus Reactor at 400 kV Dhuri and

Nakodar each. The same have been received.1 No. 220kV 25 MVAR reactor at 400 kV substation, Dhuri has been commissioned.1 No. 400 kV 125 MVAR Bus Reactor for 400 kV Dhuri and 1 No.220 kV 25 MVAR bus reactor for 400kV substation Nakodar are expected to be commissioned by end of February 2023.

PSERC Comments & Directive

PSTCL is directed to furnish quarterly progress report on installation of reactors.

Directive No. 5.5: Preventive maintenance of transmission lines.

PSERC Comments & Directive for FY 2022-23:

The Commission notes the reply given by PSTCL and observes that the steps intimated by PSTCL are only routine measures taken for preventive maintenance of lines. The Commission, however, observes that strict adherence to a duly prescribed schedule of such steps/activities is of paramount importance. Accordingly, the Commission directs as under:-

- a) Duly prescribed maintenance schedule of transmission lines along with a certificate from Director/Technical that such prescribed schedules are being strictly adhered to be furnished within three months from issuance of Tariff Order.
- b) The maintenance practices/ schedules/ technologies being used in other organizations in the country with high transmission availability be studied immediately by constituting a task force for the same and accordingly an action plan to adopt the same in PSTCL be shared with the Commission within six months from issuance of Tariff Order.

The quarterly status report of trippings/breakdowns along with respective summarized investigation report be shared with the Commission.

Reply of PSTCL:

PSTCL has submitted the details of tripping/breakdowns of transmission lines for the period ending December, 2022.

PSERC Comments & Directive

PSTCL have sent the details of trippings/ breakdown of the lines for the period ending December, 2022 & remedial measures taken. The Commission notes that the downtime/restoration time in case of transmission lines outages is inordinately long.

During 2nd quarter of FY 2022-23, 431 nos. trippings/interruptions on transmission lines have been reported. The 132 kV Verka-Jandiala line remained under shut down for 747 hours reportedly due to bad weather and flashing of disc string. Even the outages reported due to

transient faults have been of the order of 24 hrs and 15 hrs in case of 132 kV Malout-Abohar line and 132 kV Mana Singh Wala-Ferozepur line respectively.

During 3rd quarter of FY 2022-23, 354 trippings/interruptions have been reported on transmission lines. The outages due to transient faults are of the order of 60 hrs and 38 hrs in case of 220kV Moga-Bajakhana line and 132 kV Ghulal-Jamalpur line. Such instances reflect very poorly on PSTCL's reaction time and the health of its transmission system.

PSTCL is directed to take immediate steps to bring down the restoration time for faults on transmission line and to submit the details of the remedial measures being taken to reduce restoration time.

Further, PSTCL have not submitted the prescribed maintenance schedule of transmission lines along with the Director/Technical's certificate that schedule is being strictly adhered to. Also the feedback regarding study of maintenance practices/ schedules/ technologies being used in other organizations in the country have not been provided. PSTCL is directed to furnish the above details within one month of issue of Tariff Order. Further, submission of the calculations of transmission system availability in the ARR petition be ensured. In case the information as directed above is not submitted, the Commission would review the grant of transmission availability incentive.

Directive No. 5.6: Strengthening of the State Load Despatch Centre (SLDC):

PSERC Comments & Directive for FY 2022-23:

The Commission directs that the action points emanating from the study of CABIL Report by the Committee and the action plan to implement such points and other proposals to strengthen the SLDC be shared with the Commission within three months from the issuance of this Tariff Order.

Reply of PSTCL:

As per the decision taken in 71st meeting of BoDs, revised agenda regarding strengthening of manpower in SLDC as per CABIL report shall be resubmitted again in December 2022.

Regarding SAMAST, PSTCL has intimated that as directed by the Commission, the monthly status report is being sent every month. The monthly status report in respect of implementation of SAMAST scheme upto the month of October has already been sent.

PSERC Comments & Directive

Institutional capacity building for SLDC has to be a key thrust area for PSTCL. The Electricity Act, 2003 mandates the SLDC to be the apex body to ensure integrated operation of the State Power System for optimum scheduling and dispatch, monitoring grid operations, accounting and for carrying out real time operations for grid control. Further, in view of emerging challenges due to large scale integration of Renewables, Distributed Energy Resources, expansion and inter-connection of grids, deviation settlement mechanism etc., it is imperative that adequately trained and motivated manpower with pre-defined training calendar, minimum tenure and with appropriate incentives/compensation, is deployed at SLDC. However, inspite of repeated directions, PSTCL has not intimated the steps taken to strengthen the SLDC.

PSTCL is directed to submit status report along with the timelines for strengthening of the SLDC within one month of issue of this Tariff Order.

Directive No. 5.7: Capital Expenditure and Capitalisation**PSERC Comments & Directive for FY 2021-22:**

The Commission directs PSTCL to keep submitting the six-monthly details of Capital Expenditure and Capitalization with clear break up between Spill Over and New Schemes approved for the 2nd MYT Period (FY 2020-21 to FY 2022-23)

Reply of PSTCL:

The Details of Capital Expenditure and Capitalization have been submitted in the main Petition.

PSERC Comments & Directive

Petition No.50 of Business Plan & C.I.P. for the 3rd Control Period does not indicate details of Capital Expenditure & Capitalization on a 6 months basis. PSTCL is directed to submit six-monthly expenditure details as per the directive to enable monitoring of progress of work being done.

Chapter 6

Determination of Transmission Charges and SLDC Charges

6 Annual Revenue Requirement

6.1 The Commission has determined the ARR for PSTCL for FY 2023-24 as Rs. 1568.28 Crore, comprising of Rs. 1539.08 Crore for Transmission business and Rs. 29.20 Crore for SLDC business.

The Commission vide interim Order dated 31.03.2023 has decided to continue with the existing tariff / charges till the Tariff Order for FY 2023-24 is issued. Now, the Commission decides to implement the new tariff rates w.e.f. 16th May, 2023. Accordingly, the ARR for Transmission Business and SLDC Business required to be recovered in the remaining period of the FY 2023-24 is as under:

Table 184: ARR for Transmission Business and SLDC Business

(Rs. Crore)			
Sr. No.	Particulars	Transmission Business	SLDC Business
I	II	III	IV
1.	ARR approved and recoverable for FY 2023-24	1539.08	29.20
2.	Less revenue recovered from 01.04.2023 to 15.05.2023 with tariff as per Tariff Order for FY 2022-23	183.07 @ Rs. 122.05 Crore/Month	3.49 @ Rs. 2.33 Crore/Month
3.	Net ARR recoverable during remaining period (16.05.2023 to 31.03.2024)	1356.01	25.71

As, there is only one Distribution Licensee (PSPCL) in the State of Punjab, all the SLDC charges and transmission charges will be borne by PSPCL during FY 2023-24.

6.2 Transmission System Capacity

The Commission has determined the Transmission capacity (net) of PSTCL system as 12920.41 MW for FY 2023-24 after excluding the interstate transmission losses.

6.3 Determination of Transmission Tariff

PSERC MYT Regulations, 2022 specify that transmission tariff will have the following components:

- i) SLDC Charges or System Operation Charge
- ii) Reactive Power Charges
- iii) Transmission Charges or Network Usage Charges

6.4 SLDC Charges or System Operation Charge:

6.4.1 The Commission has approved the ARR of SLDC business for FY 2023-24 at Rs. 29.20 Crore in this Tariff Order. Accordingly, the Commission determines the SLDC Charges or System Operation Charge as under:

Table 185: Monthly SLDC Charges or System Operation Charge

(Rs. Crore/month)

Sr. No.	Particular	Existing Charges as per T.O. for FY 2022-23 continued from 01.04.2023 to 15.05.2023	New charges w.e.f. 16.05.2023 to 31.03.2024
1.	SLDC Charges or System Operation Charge	2.33	(25.71/10.5)= 2.449

For May 2023, SLDC Charges System Operation Charge shall be Rs. 2.3895 Crore (i.e. first half month shall be charged at Rs.1.165 Crore (half of Rs. 2.33 Crore which are existing charges as per T.O. for FY 2022-23) plus second half month at Rs. 1.2245 Crore (half of Rs. 2.449 Crore which are new charges))

6.5 Reactive energy charges:

6.5.1 The reactive energy charges, if any, raised by NRLDC on PSTCL will be recoverable from PSPCL directly by PSTCL.

6.6 Transmission Charges or Network Usage Charges:

6.6.1 The ARR for the Transmission Business of PSTCL has been determined at Rs. 1539.08 Crore for FY 2023-24 in this Tariff Order. Accordingly, the Commission determines the Transmission Charges as under:

Table 186: Transmission Charges

(Rs. Crore/month)

Sr. No.	Particular	Existing Charges as per T.O. for FY 2022-23 continued from 01.04.2023 to 15.05.2023	New charges w.e.f. 16.05.2023 to 31.03.2024
1.	Transmission Charges	122.05	(1356.01/10.5) = 129.144

For May 2023, Transmission Charges shall be Rs. 125.597 Crore (i.e. first half month shall be charged at Rs. 61.025 Crore (half of Rs. 122.05 Crore which are existing charges as per T.O. for FY 2022-23) plus second half month at Rs. 64.572 Crore (half of Rs. 129.144 Crore which are new charges))

6.7 Determination of Open Access Transmission and SLDC Charges

6.7.1 SLDC Operation Charges and Transmission Charges for Open Access customers are determined as per the provisions of Open Access Regulations notified by the Commission.

6.7.2 On the basis of the approved ARR for SLDC business of PSTCL, the SLDC Operation Charges for Open Access customers during FY 2023-24 are determined as under:

Table 187: SLDC Operation Charges for Open Access Customers for FY 2023-24

Sr. No.	Particulars	Unit	Quantum
1.	Revenue Requirement (ARR) of SLDC business from 16.05.2023 to 31.03.2024	Rs. Crore	25.71
2.	Transmission System Capacity (net)	MW	12920.41
3.	SLDC Operation Charges for Long Term and Medium-Term Open Access customers from 01.04.2023 to 15.05.2023 (As per Tariff Order for FY 2022-23, continued from 01.04.2023 to 15.05.2023)	Rs ./MW/Month	1903.27
4.	SLDC Operation Charges for Long Term and Medium-Term Open Access customers from 16.05.2023 to 31.03.2024	Rs ./MW/Month	1895.12
5.	Composite SLDC operating charges to be paid by Short Term Open Access Customers for each transaction as per PSERC Open Access Regulations.	Rs. Per day or part of the day	2000

6.7.3 On the basis of the approved ARR for Transmission Business of PSTCL, the Transmission Charges for Open Access customers for use of the transmission system during FY 2023-24 are determined as under:

Table 188: Open Access Transmission Charges for FY 2023-24

Sr. No.	Particulars	Unit	Quantum
1.	Revenue Requirement (ARR) of Transmission Business from 16.05.2023 to 31.03.2024	Rs. Crore	1356.01
2.	Transmission System Capacity (net)	MW	12920.41
3.	Transmission Charges for Long Term and Medium-Term Open Access customers from 01.04.2023 to 15.05.2023 (As per Tariff Order for FY 2022-23, continued from 01.04.2023 to 15.05.2023)	Rs./MW/ Month	99878.94
4.	Transmission Charges for Long Term and Medium-Term Open Access customers from 16.05.2023 to 31.03.2024	Rs./MW/ Month	99953.34
5.	Transmission Charges for Short Term Open Access Customers from 01.04.2023 to 15.05.2023 (As per Tariff Order for FY 2022-23, continued from 01.04.2023 to 15.05.2023)	Rs./MWh	234.50
6.	Transmission Charges for Short Term Open Access Customers from 16.05.2023 to 31.03.2024 (based on 58336 MWh of energy calculated from 66670 MWh of energy input at transmission boundary for sale in the State for FY 2023-24, as approved in Chapter 4 of PSPCL Order for FY 2023-24)	Rs./MWh	232.45

6.8 Date of Effect

The Commission decides to make the revised Transmission Charges and SLDC Charges determined above applicable w.e.f. 16th May, 2023 and these shall remain operative till 31st March, 2024. For the period w.e.f 1st April, 2023 to 15th May, 2023, Tariff/Charges shall be applicable as per Tariff Order for FY 2022-23 as specified by the Commission in the Interim Order dated 31.03.2023.

This Order is signed and issued by the Punjab State Electricity Regulatory Commission on this day, the 15th May, 2023.

Date: 15th May, 2023

Place: CHANDIGARH

Sd/-
(Paramjeet Singh)
MEMBER

Sd/-
(Viswajeet Khanna)
CHAIRPERSON

Certified

Sd/-
Secretary
Punjab State Electricity Regulatory Commission,
Chandigarh.

LIST OF OBJECTORS

Objection No.	Name & Address of Objector
1.	Chamber of Industrial and Commercial, Office Complex, E-648/A, Phase-V, Focal Point, Ludhiana-141010
2.	Er. Sukhminder Singh SDO PSPCL (Retd.), 19-D, BRS Nagar, Ludhiana-141012
3.	Cycle Trade Union (Regd), AIRI Cycle, 110-111, New Cycle Market, Gill Road, Miller Ganj, Ludhiana-141003
4.	Steel City Furnace Association, Old Central Bank Street, Loha Bazar, Mandi Gobindgarh-147301
5.	Hansco Iron & Steels Pvt. Ltd., Jalalpur Chowk, Amloh Road, Mandi Gobindgarh-147301
6.	Mandi Gobindgarh Induction Furnace Association (Regd.) Gran Market, Mandi Gobindgarh-147301
7.	Vimal Alloys Pvt. Ltd. Shop No. 445, Sector 3-C, GT Road, Mandi Gobindgarh-1473018
8.	Comments/Observations of Government of Punjab, Department of Power (Power Reforms Wing), Chandigarh

PSTCL-OBJECTIONS

Objection No. 1 : Chamber of Industrial & Commercial Undertakings

Issue: - A (1). The PSPCL is hardly doing any kind of rigorous and consistent efforts to adopt the latest technology in power transmission & distribution systems. The same old equipment & technology are being used since last many years and no effort has been made to use the latest technologies such as Smart Grids and distribution system automation to reduce outage time /maintenance /man-power cost. It needs to adopt latest cost-effective technology and compact man-less power plants/sub stations to reduce its operation cost and help to reduce revenue requirements.

Issue: - A (2). That no efforts are being made by PSPCL for recovery of hefty dues from the Punjab Govt.-in shape of Subsidies, Excess interest paid by PSPCL to Punjab Govt earlier years and carrying cost of tariff gap of certain years. It is really a need of the hour now to take the rigorous steps to recover all these kinds of pending dues along with interest from the Punjab Govt so that burden of interest cost paid by PSPCL on borrowed funds to financial institutions could be reduced to a certain extent which further leads to reduce the fixed cost of the PSPCL and there would be hardly a need to increase the tariff of electricity as demanded by the PSPCL and reduce revenue requirement

Issue: - A (3). Adoption of a strong willpower and dedicated behavior towards change in policies of PSPCL and Punjab Govt. are really required in the interest of general public.

Issue: -A (4). PSPCL should need to increase efficiency in the generation of power through adoption of latest technology and optimum utilization of scarce resources rather than resorting to power cuts and hike in tariff rates which will never help in the long term to survive and also not good in the public interest. The Punjab Govt. and PSPCL need to do collective efforts to tackle the problems. Repeated tariff revisions to get temporary relief will not serve the purpose.

Issue: - A (5). Revenue loss due to non-recovery of default amount as well as current billing charges towards the Govt. Depts. & Boards/Trust/Corporations/Religious Bodies etc. are increasing at significant rate/amount & PSPCL has failed to take effective steps to recover these losses incurring regularly, causing increasing in tariff and other cess and surcharges, contributing to higher cost of electricity tariff, which could otherwise be avoided. PSERC should ensure 100% recovery of such amounts in the current year 2022-23 to reduce the revenue requirements

Issue: - A (6). Misuse of free & subsidized power and unauthorized load extension particularly by AP consumers must be controlled effectively to avoid heavy revenue losses. Restructuring of demand during paddy season should be planned and executed more efficiently for regular and quality power supply to consumers

Issue: - A (7). The supply of electricity can become profit making business. Quality power supply should be provided for 24 hours. Frequent scheduled/unscheduled power cuts with poor power supply must be controlled at all cost.

Issue: - B (1) Employee Cost: -

Restructuring of manpower in true sense is required to reduce manpower cost regularly. There is a need to employ efficient people and to ensure effective utilization of manpower at the right place and right time

Issue: - B (2) Cost of Power Purchase:

- a) The purchase cost of power from the external sources has been increasing every year which results in escalation in input cost of energy prices resulting in additional revenue requirements. PSPCL should make effective steps to arrange required power from the central pool on pool banking system or from certain other cheaper sources rather than purchasing from the open market at higher rates.
- b) The cost of power in lean periods is less but it is high when purchased in peak summer for rice growing. This extra high-cost energy is purchased solely for subsidized agricultural sector. The amount of subsidy is calculated by taking the average cost of power. In this way additional burden of subsidy is passed on to the industrial consumers. The Govt. should go for alternative crops patterns and must decrease the paddy fields. It will result in saving of costly energy and avoid the depletion of ground water level in the State. The extra cost of energy should not be passed on to industrial consumers. The industrial sector is already becoming sick day by day due to increase in cost of electrical energy, especially after COVID - 19 pandemic. So, PSPCL should take necessary effective steps to provide cheaper power to the industry specially MSME units in the post COVID period to revive the industry

Issue: - B (3) Energy Audit and T&D Losses:

The number of the feeders with losses more than 15% to 90% has increased from 1526 to 3308 feeders and more than 90% increased from 9 to 14 feeders as per Directives for FY 2022-23 as per petitions, which indicates that the ramped theft is being allowed in the areas of these locations, which is not possible without connivance of the PSPCL's officials/officers. Disciplinary action should be taken against delinquent officers/officers for their failure to control power theft with recovery of revenue loss by this theft under intimation to the Commission. Special drive to bring it to less than 8% level should be started dedicatedly and immediately for desired results. PSERC should ensure 100% recovery of such theft amounts in the current year 2022-23 to reduce the revenue requirements.

As per MOP guidelines under APDRP, AT&C losses (Not T&D) are required to be brought to below 8% limit with annual sustained improvement. If these guidelines are followed in true spirit, there may be no need to increase tariff in coming years. It will also reduce the revenue requirements of the PSPCL.

Issue: - B (4) Interest charges and subsidy

- As evident from the financial of PSPCL, borrowed funds are increasing every year of PSPCL which ultimately effects the overall cost of the PSPCL and increase the per unit cost of power. Effective steps should be made to recover the following dues from various sources which would help to reduce the borrowed funds.
- Further impact of interest paid or borrowed funds on account of non-recovery of subsidies, Gap Tariff etc., from the Punjab Govt. since long, should be calculated and should be pass on to Punjab Govt. as, if they could repay all such dues in time, PSPCL would not need to borrow more funds for survival.
- Interest payment should be worked out" through loan bailout by the Govt. or through asset selling (spare land/ building etc.) and should not be passed on to the customers. There is enough land with PSPCL, which can be spared (and sold to repay the loans) by constructing multi-story buildings & compact power substations.
- Subsidy to scheduled casts/weaker sections of Society and AP consumers should be given in cash/ direct transfer in their bank accounts by the Govt. instead of providing-free electricity through PSPCL. It will lead to stop misuse of energy.

• At present free supply of 300 units should be changed to by charging Rs 1 or 2 per unit so that relief be given to Consumers, but some generation cost be compensated to PSPCL.

Issue: - C. The major ingredients which are forcing PSPCL to increase the tariff rate / demanding more revenue requirement for the proposed F.Y. 2022-23 are interest paid on borrowed funds. Which can be reduced by recovery of remarkable dues from the Punjab Govt., recovery of dues from the defaulted customers Subsidy, costly power purchase. All these factors are required to be controlled immediately without any further delay, otherwise, it would majorly affect the financial health of the industry directly and subsequently that of the PSPCL and the Punjab Govt.

Issue: - C(1). The Quantum of subsidy amount to the AP Consumers should be reduced drastically by conscious planning with long term vision by Punjab Govt. such as reducing the area under paddy fields with alternate suitable cropping pattern implementations and levying some suitable tariff instead of total free electricity.

Issue: - C(2). PSPCL should increase its base of equity rather than resorting to borrowed funds and further the loan bailout plan through waive off/repayment by selling the non-performing assets etc. should be worked out without further delay so that heavy interest expenses on borrowed funds could be avoided in future otherwise Situation would be so pathetic of industrial consumers but also with majority of public. On one hand, free electricity is being given to certain class of customers and on the other hand, the energy bill will become unaffordable by all other categories of consumers specially MSME and other industrial consumers.

Issue: - C(3). PSPCL is a service sector utility, and it should operate at optimum efficiency by utilizing the optimum use of resources, may it be material or manpower. Efficient utilization of all these would help in reducing its overhead charges. It should increase its productivity and reduce its losses by introducing the latest technologies rather than charging extra cost from the consumers, specially MSME and industry.

Issue: - C(4). With the increase in the per unit price of electricity consumed in the way proposed by the PSPCL will lead to exorbitant rise in input cost of industry It will have no option but to close their units or shift to other states. The competition has become global, it may not be able to compete the open market. The closure of industrial units will not only affect the prosperity of the state but will result in un-employment and unrest in the state also.

Issue: - C(5). Upgrading more and more existing power transformers are being added at the existing grid sub stations in the cities instead of erecting new sub stations near the load center. New sub stations are being proposed/erected at technically non-suitable locations under compulsions, which are resulting in more T & D losses and poor quality of power. State Govt. should be impressed upon to provide land to the PSPCL for construction of more substations in the cities to ease the bottlenecks of grid constraints so that the atmosphere is more conducive for growth of the industry. This will reduce the cost of lines, substation structure/line losses.

Issue: - C(6). During the heavy rain/storms, all feeders get tripped. On those days, the demand decreases due to tripping of all the feeders and drastic fall in temperature and the thermal plants of PSPCL run without load. It is felt that it may not be possible to re-energize all feeders in short span of time to ensure continuity of supply under all-weather condition. But few feeders having prominent/bulk industrial & commercial loads (which are independent of weather) should be robust enough to withstand it, so that surplus power is used and billed in that period.

Issue: -D (1). On the one hand PSPCL is claiming power surplus scenario in coming financial year, on the other hand it is demanding the tariff revision from PSERC. What is the

benefit of the power plants being commissioned in the state (by private players) to the PSPCL Customers? PSPCL should purchase cheaper power from the Power Grid as it has surrendered few old Power purchase MOUs. The alternate power shall be at cheaper rates. This benefit shall be passed on to the customers rather than to adjust it as subsidy being given to certain class of PSPCL consumers.

Issue: -D (2). The entire world and the leading states of India are going for green energy, whereas Punjab is still going for the old technology of thermal plants by the Private Suppliers. Therefore, more Green Energy / Solar Power generation capacity should be installed in the state. For existing solar energy producers and giving (exporting) power to PSPCL Grid should be paid the excess exported units (other than imported units/self-consumption) at the commercial rates of their category in the respective financial year (ending 31st Sept.). so that consumers of all categories come forward to install solar system. At present surplus generated solar units are elapsed and PSPCL is charging 10% off generated units. Whereas excess generation is made by solar system are used by PSPCL without incurring extra expenses.

Issue: -D (3). On the one hand, benefits are being given by the State Govt. for investment in Punjab and on the other hand, no relief is being given to the existing units which are getting sick day by day and moving out of State. Therefore, power tariff incentives should be given to the existing and new industry.

Issue: -D (4). PSPCL is going for system up-gradation and network augmenting work in all major cities of Punjab through R-APDRP. On the one hand PSPCL is charging higher tariff from industrial consumers and on the other hand nothing is being done to ensure the quality and reliability of supply of power to the industry.

Reply of PSTCL:- Relates to PSPCL

Commission's view:- The objection relates to PSPCL and has been considered in PSPCL Tariff Order as Objection No. 2

Objection No. 2 :- Er. Sukhinder Singh SDO PSPCL (Retd.)

Only case no. mentioned

Comments/suggestion not mentioned

Reply of PSTCL:- Relates to PSPCL

Commission's view:- The objection relates to PSPCL and has been considered in PSPCL Tariff Order as Objection No. 4

Objection No. 3:- Cycle Trade Union (Regd.)

Issue:- Our Association strongly oppose, resent any increases/amendment for next years and with retrospective effect in Tariff as well as fixed charges for all types of consumers of PSTCL of Punjab. Moreover, The tariff as well as fixed charges of Punjab are already unbearable. If the PSTCL can't control their inventories and losses as desired. Please handover these white elephants of Punjab to the private players as is done by the Central Government.

Reply of PSTCL:- PSTCL has projected the ARR & Tariff for FY 2023-24 in line with the applicable regulations as specified by the Commission. Projections are made on the basis of estimated Capital Expenditure for the infrastructure development projects to be carried out in near future as approved by the Commission. The consumer interest has also been considered by the Commission while approving the future projects of PSTCL. The same is also subject to True-up on the basis of Audited Accounts for FY 2023-24, which will be available later on.

Commission's view:- The objector may note the response of PSTCL and refer to the Tariff Order.

Objection No. 4 :- Steel City Furnace Association

Objection No. 5 :- Hansco Iron & Steels Pvt. Ltd.

Objection No. 7 :- Vimal Alloys Pvt. Ltd.

Issue:- Return on Equity

1. The Then Punjab State Electricity Board (PSEB) was constituted under Electricity (Supply) Act 1948 as per which PSEB was to finance all its Capital work through Loans only and interest on loan installments were recovered through Tariff. Loans were given by GOP and to escape the interest and installments payable to GOP, PSEB got the loan(s) converted into equity of GOP in PSEB.
2. PSERC issued first tariff order for the year 2002-03 which stated in Para 6.10 that PSEB has been declared by GOP as a body corporate with a Capital of Rs.5 crores with effect from 10th March 1987 under section 12A of Electricity (supply) Act 1948 and converted Rs.1612 crores representing Government loans granted up to 3/90 into equity during 1991-92 and Rs.1189.11 crores representing 50% of loans granted during 1990-91 to 1994-95 in 1996-97. The total State Government Equity in PSEB is Rs.2806.11 Crores. Further no ROE was allowed in the tariff Order 2002-03 to 2005-06 by PSERC and only 3% Return on NET Fixed assets were allowed as per Supply Act 1948.
3. As is clear, Initial equity of Rs. 2946.11 crore as on 2006-07 onwards on which ROE of Rs.412.46 Cr per year was allowed as per Para 4.15 of TO were loans of GOP camouflaged as Equity to get higher returns thro ROE.
4. On restructuring of PSEB into PSPCL and PSTCL on 16.04.2010, equity (in fact loans) of Rs.2946.11 Crore was also distributed as per provisional FRP/Transfer scheme as Rs.2617.61 Cr and 328.50 Cr and ROE was allowed separately as Rs.366.47 Cr and Rs.45.99 Cr for PSPCL and PSTCL respectively.
5. While there is no objection on such conversion for accounting purpose but for fixing tariff, apparently, there is no differentiation between loans given by Government of Punjab to Board/PSPCL and equity. In fact, all the assets of PSEB/PSPCL/PSTCL were/are created by borrowing/debt and a part of it shown as equity of Board. This evidently was done to help Discom to reduce its interest and repayment burden as ROE/dividend is not payable under companies Act to GOP till PSEB/PSPCL is running in losses. Thus a methodology devised to keep the tariff on lower side is now being used to increase income of PSPCL by unduly loading the consumers and to meet the financial losses due to inefficient borrowing of PSPCL/PSTCL. Consequently, the consumers of the State are burdened with the higher tariff in the form of 15%-16% ROE on such amount, which is in fact a government loan on which not more than 7-8% interest needs to be allowed.
6. Subsequently, Financial restructuring Plan and Transfer scheme was finalized and notified on 24.12.2012 by GOP. In this notification, an amount of Rs.3132.25 crore standing in the books of PSEB on 15.04.2010 under the head "Consumer Contribution & Govt Grant" etc. were also converted into equity of GOP and the same was admitted by PSERC as well. Thus the equity of PSPCL were enhanced from Rs. 2617.61 Cr to 6081.43 Cr (Para 3.16 of TO 2013-14) and from 328.50 Cr to Rs. 605.83 Cr (Para 3.10 of TO 2013-14) respectively. Thus the total equity was increased from 2946.11 Cr to 6687.26 cr.
7. The conversion of consumer contribution and Govt Grants/subsidies was appealed by consumers in APTEL and APTEL directed PSERC to reconsider the issue vide judgment Dated 17-12-2014 in Appeal No 168 and 142 of 2013 as under:-

"48-----we direct the State Commission to adjust the excess amount of ROE in the impugned order from the FY 2011-12 onwards in the ARR/True up for the year to provide relief to the customers."

50.3 The findings of this Tribunal in Appeal no.46 of 2014 shall squarely apply to the present case. The state commission shall re- determine the ROE as per our directions and the excess amount allowed to the distribution licensee with carrying cost shall be adjusted in the next ARR of the respondent no.2.

8. APTEL observed that the Govt can hold any amount as equity in PSPCL and PSTCL but ROE needs to be granted on actually subscribed and paid up equity only i.e cash money infused needs to be counted as equity for the purpose of ROE. PSPCL has filled the Appeal against the order in Supreme court and stay has been granted. Final order of SC is still awaited. however, because of stay granted by the Supreme court, PSERC is granted ROE on Rs.6081.43 Cr to PSPCL and on 605.88 Cr to PSTCL. The CAG also objected to the conversion of non-interest bearing consumer contribution and Govt grants /subsides etc into equity.
9. Subsequently, MOP,GOP and PSPCL entered into an agreement as per which PSPCL loans of Rs.15628.26 Cr were to be taken over by GOP by issue of SLR bonds by banks and loans were to be taken off the books of PSPCL. UDAY scheme ended on 31.03.2020 and PSPCL proposed in ARR 2020-21 to convert the loan amount of Rs.15628.26 cr as GOP equity in PSPCL i.e increasing GOP equity from 6081.43 cr to 21709.69 cr. PSPCL claimed ROE on Rs. 15628.26 simply @15.90% i.e. Rs 2485 cr in addition to ROE of Rs.6081.42 crore. Thus maneuvering the entry of loan amount to equity, PSPCL was to load consumers by 3423 Cr. However, vide tariff order dated 28th May 2021 PSERC rejected the proposal of PSPCL.
10. In the ARR of FY 2022-23 dated 30th November 2021, PSPCL has come out with an entirely new argument that out of Rs.15626.26 crore, Rs.2246.77 were spent on capital expenditure and out of balance 13381.49 crore working capital loan Rs.2346.19 crore were also divert towards capital expenditure Thus total Rs.4592 crore should be treated as equity and ROE should be now allowed on Rs. 10674 crore (Rs. 6081.43 Crore +Rs. 4592 crore) inspite of the fact that PSERC and APTEL have amply made clear that only cash flow is to be treated as equity for the purpose of ROE MYT regulations provide that equity should be actually infused for creation of useful assets. The claim of PSPCL was rejected the PSERC and in the tariff order for F-Y 2022-23 ROE was allowed on Rs.6081.43 crore only.
Now in the ARR for F.Y 2023-24 dated 29.11.2022 PSPCL has again shown the opening equity at Rs.10674 crore instead of Rs.6081.43 as allowed by the PSERC in previous Tariff order for the year 2022-23. There are no details available in ARR as to why the increased equity has been shown as opening balance of equity while determining return of equity in the tariff order. The equity which qualify for ROE was determined only at Rs. 6081.43 crores only. There was no fresh flow of funds from GOP.
Therefore, this year also ROE should be allowed only at Rs.6081.43 crores only.
It is also worth mentioning that UDAY scheme was accepted by PSPCL, GOP and central Govt. TPA was signed by above three parties and as per para 1.2 (d) of the UDAY agreement in which 25% of the total loans will be converted into equity of GOP and balance 75% will be given to DISCOM as grants. The para 1.2 (d) in reproduced as under:-

"The Borrowings made by the State to takeover DISCOM debit during 2015-16 and 2016-17 shall be utilized by Government of Punjab solely

for the purpose of Discharging the DISCOM debt and transfer to DISCOM as a mix of grant/loan of equity as described in following table:

Year	Total Debt taken Over	Transfer to Punjab DISCOM in the form of grant	Transfer to Punjab DISCOM in the form of Loan	Transfer to Punjab DISCOM in the form of Equity	Rs. In crores Outstanding state loan of Punjab DISCOM
Year 1	50% of the total debt		10418.84		10418.84
Year 2	25% of the total debt		5209.42		15628.26
Year 3					15628.26
Year 4					15628.26
Year 5		11720.26		3900.00	

From the above chart it is quite clear that there is no justification of converting loan of 15628.26 crore into GOP equity as at per Triparte agreement under UDAY scheme. The only 25% loans should have been convert in GOP equity and balance 75% was to be given as grant to PSPCL and PSTCL but converting entire loans into equity of GOP is misconceived and is to load the consumers with higher return on equity and higher tariff and this should not at all be allowed by PSERC.

Reply of PSTCL:- PSTCL has claimed Return on Equity as per Regulation 20 of Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2022 as notified by the Commission.

Commission's view:- The Commission allows ROE in line with the relevant provisions of the MYT Regulations.

Issue:- Interest on loan capital:-

Under the head interest on loan capital at sub head 23.5 it is proposed in the ARR as follows:-

"23.5 The interest on excess equity treated as loan shall be served at the weighted average interest rate of actual loan taken from the lenders."

But there is no justification at all to allow interest on the excess equity which can not be treated as loan as there was no such provision in UDAY scheme which was adopted by PSPCL, GOP and MOP and as per the UDAY scheme 75% of loans were to be given as grant to PSPCL and PSTCL as explained in for para no.10. Therefore the claim of PSPCL should be rejected on this account.

Issue:-Voltage Rebate to 66/220 KV industrial consumer

HT rebate is granted in accordance with the Electricity Act 2003 providing that tariff should be in line with the difference of voltage wise cost of supply for the relevant voltage. Hon'ble APTEL has also upheld this provision and voltage rebate was also granted to Punjab consumers in view of the numerous orders issued by APTEL in this regard. Due to the difficulties in implementing voltage wise cost of supply based tariff, voltage rebate is given to partially compensate such consumers. The difference in cost of supply for the consumers connected at 66 KV vis a vis 11 KV consumers as per previous tariff orders issued by the the Commission is extracted as under:

Tariff order for the year	Cost of supply Rs/Unit for		Difference
	66 KV industrial	11 KV industrial	
2017-18	6.32	5.94	0.38
2018-19	6.12	6.63	0.51
2019-20	6.22	6.86	0.64

As is evident, the difference in cost of supply is increasing over the years and is much more than the HT rebate of Rs 0.25/unit available to 66 KV consumers. Instead of increasing the HT rebate to bring the tariff of HT consumers in line with cost of supply as directed by APTEL, HT rebate should be as shown in the above table in accordance with cost of supply and HT rebate is kept fixed at @0.25/unit whereas it should increase as difference in cost of supply of 66 KV and 11KV consumers increases. Before issuing the tariff order for the F.Y 2021-22 reply from PSPCL was sought on voltage rebate there reply was as under:-

Reply of PSPCL

"PSPCL would like to submit that an increasing voltage rebate will cause reduction in revenue, so it is requested that the while considering to fix the voltage rebate in commensuration with cost of supply or on percentage basis as demanded by the objector, Hon'ble commission may keep in the mind the financial interest of PSPCL and allow PSPCL to recover legitimate cost claimed in the petition. If revenue of PSPCL is reduced due to more HT Rebate, then tariff for any other category will have to be increased to compensate for the said revenue loss which may further lead to disturbance of Cross subsidy levels."

PSPCL reply means that 66 KV consumers should subsidize more to the other category of consumers even to the 11 KV consumers of general industry and power intensive industry fed at 11 KV. It is already well known that the industry is already cross subsidizing the other categories of consumers. Here we want to put an example to substantiate our claim for higher H.T Rebate. **For example:-** Suppose the industrial consumers are subsidizing to the other category of consumers such as agricultural and domestic consumers to the tune of Rs.1 per unit. Then the subsidy level for 66 KV consumers will be

$$\text{Rs. } 1 + 64 \times 25 = 1.39 \text{ per unit.}$$

This difference is as per cost of supply worked out for the year 2019-20. Although it will be much more in the year 2022-23 and 2023-24. 66 KV consumers should not be made to cross subsidize more to other category of consumers and even to general industry and power intensive units fed at 11 KV. If the 66 KV consumers are given full rebate as per their cost supply then it may increase the Tariff for other categories of consumers by mere a fraction of 1 paisa per KWH which will not pinch other categories at all.

Hence giving a mere 25 Paisa/unit rebate to 66 KV consumers is unfair and unjust also.

Issue:- Two Part Tariff:-

Two part tariff was introduced as few year back and it was said at the time of introducing two part tariff that this is revenue neutral. There is no difference of revenue for the DISCOM but it does not suits at all to the consumers. Therefore, it is requested that PSERC should revert back to the single tariff as it is used to be before introduction of two Part Tariff as DISCOM will earn same revenue as by Two Part Tariff.

Issue:- Night Rebate on Tariff

The night rebate was introduced to encourage the consumers to consume more electricity during night as there is less demand during night hours.

It is worth mentioning that rebate as conveyed is @1.25 INR per unit but due to cap imposed on Tariff, the actual effected of this rebate is only 14 to 15 paise per unit which otherwise should be Rs.1.25 per unit.

The refers, it is humbly requested that the cap imposed for Tariff should be removed and the effected rebate should be at least Rs.1.25 per unit.

Issue:- Cost of supply for power intensive units:-

It is prayed that as the cost of supply for power intensive units is less and also the Tariff for power intensive units is different from other categories of consumers, the cost of supply for power intensive units should be separately calculated and the Tariff for these consumers should fixed separately as per cost of supply.

Reply of PSTCL:- Relates to PSPCL.

Commission's view:- The objection relates to PSPCL and has been considered in PSPCL Tariff Order as Objection No. 22, 23 & 29.

Objection No. 6 :- Mandi Gobindgarh Induction Furnace Association (Regd.)

Issue 1. PSTCL was constituted in 4/2010 as successor company to the then PSEB to look after transmission assets and since then Transmission losses for PSTCL system were being assumed as 2.5% on notional basis as boundary metering scheme was under implementation. In the ARR 2017-18 for MYT period of 2017-18 to 2019-20. Keeping in view the large scale variations and data being yet to be firmed up, the Commission ordered that for the MYT period 2017-18 to 2019-20, the Transmission losses shall be 2.5%, 2.40% and 2.30% for FY 2017-18, FY 2018-19 and FY 2019-20 respectively which will be reviewed/trued up for FY 2017-18, FY 2018-19 and FY 2019-20, on the basis of stabilized transmission loss data for full year. In the ARR for 2018-19, PSTCL submitted the Transmission Loss of 2.80% for 2017-18 and 2.60% for 2018-19 for approval. In the Tariff Order for 2018-19, Commission decided in the TO that although PSTCL has completed Intra-State Boundary metering cum Transmission Level Energy Scheme, the data is yet to be stabilized. The Capital Investment Plan as projected/asked for by PSTCL since last many years is being approved almost as per the projections made by PSTCL. As such, the Commission provisionally retained the transmission loss level at 2.50% for FY 2017-18 and 2.40% for FY 2018-19, as approved in the Tariff Order for FY 2017-18.

In the ARR for 2019-20, Transmission loss of 3.12% (actual), 2.80% (RE) and 2.70%(Proj) for 2017-18, 2018-19 and 2019-20 respectively were submitted for approval of PSERC. The Commission after analyzing the data decided that the actual transmission loss could not be assessed in the absence of truly stabilized data. As such, the Commission retained the transmission loss at 2.50% for 2017-18 and increased the transmission loss level to 2.5% for 2018-19 as well as 2019-20 and decided that it would re-visit the transmission losses on the basis of stabilized transmission loss data for the full year during true up for these years. Continuing with its earlier approach to get higher ARR initially and then projecting Profit and increase its equity, in its ARR for the last year i.e. 2018-19 (True up), 2019-20 (RE and Projections for MYT Control Period FY 2020-21 to 2022-23 submitted Transmission Loss as 2.86% as per Actuals for 2018-19 and 3% for 2019-20 to 2022-23 for approval. The Commission ordered in TO 2020-21 that due to change in calculation methodology and the true picture of losses for the whole year being not yet available, transmission loss level of 2.50% is approved for true-up of FY 2018-19, Also for RE of 2019-20, the loss level of 2.5% is provisionally retained which shall be revisited based on the data of actual losses for the full year during the True Up of the year. Regarding Projections for MYT period FY 2020-21, 2021-22 and 2022-23, as per Business Plan Order, Transmission loss trajectory of reduction of 0.02% every year for 2nd MYT Control Period is approved. The Commission stated that the Transmission losses for the Control Period shall be specified accordingly on the basis

the actual losses for FY 2019-20 and since the the actual losses of FY 2019-20 were not available and accordingly, based on the transmission loss level of 2.50% approved for FY 2019-20 in this Tariff Order, the Commission decided to provisionally set the trajectory in Table 83 for 2ndMYT periods as 2.48%, 2.46% and 2.44% for FY 2020-21, 2021-22 and 2022-23 respectively.

In the ARR for 2021-22, PSTCL submitted the actual Transmission Loss as 2.217% for 2019-20 and 2.143% for first 6 months of 2020-21. However, in spite of actuals being available PSTCL still proposed to retain the trajectory levels of 2.48% and 2.46% for 2020-21 and 2021-22 respectively. The Commission decided in the Tariff order as under:-

True up for 2019-20

3.3.5 The Commission has observed that PSTCL has revised the methodology of calculating the percentage of transmission losses from gross input/output of energy toned input/output of energy. The absolute value of transmission loss is 1385 MKWH though the percentage has gone to 2.69%.

3.3.6 For true up of FY 2019-20, the Commission approves transmission loss of 1385 MKWH and 2.69% of transmission loss.

RE for 2020-21 and Projections for 2020-21 and 2021-22

4.3.7 The Commission observes that the actual Transmission loss reported by PSTCL till December of FY 2020-21 amounts to 2.47%. Since losses in the lean months (Jan-March) are observed to be comparatively higher, the Commission decides to provisionally retain the transmission loss level at 2.48% and 2.46% for FY 2020-21 and FY 2021-22 respectively as approved in the Tariff Order of FY 2020-21. The transmission losses for FY 2020-21 shall be revisited based on the data of actual losses for the full year during the True Up of the year.

PSTCL proposed actual transmission loss of 2.50% for 2020-21 against approved Loss of 2.48%, actual loss of 2.16% for H1 of 2021-22 and projected loss levels of 2.46% and 2.44% for 2021-22 and 2022-23 respectively as per trajectory. The Commission approved the Transmission Loss as under:-

True Up of 2020-21

2.3.6 The Commission observed that the Actual Transmission loss submitted by PSTCL is 2.50% (1329.22 MkWh) whereas the Commission has approved the Transmission loss of 2.48% for FY 2020-21.

2.3.9 Thus, the Commission disallows an amount of Rs. 2.78 Crore as loss sharing by PSTCL on account of under-achievement of Transmission Loss trajectory specified by the Commission. Since the amount disallowed is less than the RoE earned by PSTCL in FY 2020-21, the entire amount of Rs. 2.78 Crore is disallowed.

2.3.10 For True-up of FY 2020-21, the Commission approves the transmission loss of 1319.36 MkWh which is 2.48%.

APR for 2021-22 and 2022-23

3.3.1 The Commission, in the MYT Order for 2nd Control Period, had provisionally projected the transmission loss of 2.46% for FY 2021-22 and 2.44% for FY 2022-23

3.3.4 The Commission observes that the actual Transmission loss reported by PSTCL till September of FY 2021-22 is coming to 2.18%. Since losses in the lean months (Jan- March) are observed to be comparatively higher, the Commission decides to retain the transmission loss level at 2.46% and 2.44% for FY 2021-22 and FY 2022-23 respectively as approved in the MYT Order. The transmission losses for FY 2021-22 shall be revisited based on the data of actual losses for the full year during the True Up of the year. for FY 2021-22 shall be revisited based on the data of actual losses for the full year during the True Up of the year.

As is evident from the above discussions, there are wide variations in the projections and actuals since the commissioning of Boundary Metering. In fact the trajectory set in the year 2017-18 had to be revised and since then, there is no visibility of any pattern/firmness in the Transmission loss levels and its reduction despite the requisite capital investments. It is evident that either this is being done intentionally to claim higher ARR and then show profit

or there are some areas where the PSTCL needs to focus PSTCL has never come out with any study/analysis on such irregular pattern. PSTCL in its current ARR has claimed Transmission Loss of 2.31% (True up) against trajectory loss of 2.46% in 2021-22 and 2.11% (Actuals) in H1 of 2022-23. Further, as per the practice being adopted in previous years, PSTCL has projected loss level of 2.50% each for MYT period. Though PSTCL has not offered any reasons for such wide variations in the past since commissioning of Boundary metering but has quickly claimed benefit of Rs 16.39 crore for Lower transmission loss in 2021-22 based on provisional trajectory adopted by the Commission which are required to be revisited as per Commission's own orders.

The implementation of SAMASAT scheme is again delayed and now it is stated to be targeted for commissioning in H2 of 2023-24. There is huge difference of power shown as injected in Distribution system by PSTCL and the figures of power received by PSPCL in its ARR as indicated in deficiency statements. We therefore request that, the provisional trajectory may be revised based on actuals. We request the Commission that keeping in view the poor performance of PSTCL and due to low transmission loss as per actuals, Transmission Loss level be approved as per trajectory or actuals whichever is lower for these years under consideration since this is a Controllable element of tariff as per PSERC MYT Regulations and boundary metering has already been commissioned in 2017-18 though after 8 long years since PSTCL's formation and 5 years have passed since meters are in place and further, capital expenditure is being approved as required by PSTCL. The claim of incentive for true up be rejected and the 2.5% loss projected for MYT period may be reduced drastically.

We also request for revisiting the provisional loss levels approved by the Commission since 2010-11 and grant relief to consumers. Consumers were made liable for coal washing charges of PSPCL along with interest for previous period and on the same principles, they are entitled to relief on this count.

Reply of PSTCL:- PSTCL evaluates the PSTCL network (400kV/220kV/132kV) Transmission losses as per the energy data, of various ABT/CEM meters installed at different locations of Grid/ Substations of PSTCL. The data of meters is being downloaded through CMRI. The IT section of PSTCL has developed online portal for uploading of CMRI data and the monthly PSTCL Transmission losses are being calculated by software to minimize any error in data. The PSTCL transmission losses have improved from 4.239% in FY 2016-17 to 2.31% in FY 2021-22 as detailed below:-

Year	PSTCL transmission Losses (in %)	Target PSTCL transmission Losses approved by PSERC (in %)
2016-17	4.239	2.50
2017-18	3.118	2.50
2018-19	2.86	2.50
2019-20	2.694	2.50
2020-21	2.50	2.48
2021-22	2.31	2.46
2022-23	2.16(Upto Nov. 2022)	2.44

Further, SLDC calculates transmission loss figure based upon actual meter data. PSTCL has installed MVA capacity of 41099.68 MVA, and 3866.951 circuit kms of transmission lines. The power flow of transmission elements vary in each block, day, month and season from one location to another location which also impacts transmission losses. SLDC is in process of implementation of SAMAST project. In SAMAST project, block wise PSTCL

Transmission losses will be available. Detailed analysis, thereafter, may be helpful in predicting trajectory of transmission losses closer to actual transmission losses.

In respect of difference of figures of energy of PSTCL & PSPCL, it is intimated that energy available to PSPCL includes the energy transferred from PSTCL network (400KV/220kV/132kV network) and energy injected by solar plants, sugar mills, bio mass plants and other 66kV & below energy injection. This may be the reason of difference of energy available with PSPCL from that of energy injection by PSTCL in PSPCL network.

Commission's view:- The objector may note the response of PSTCL. However, it is further clarified that the Commission approves the loss trajectory keeping in view the relevant provisions of the MYT Regulations.

2. Equity and Return on Equity

A) The equity of GOP in the then PSEB was Rs 2806.11 Cr as per first tariff order issued by PSERC as under:-

6.10. EQUITY AND RETURN ON EQUITY

The Government of Punjab has declared the PSEB as a body corporate with a Capital of Rs. 5 crores with effect from 10th Mach 1987 under Section 12A of Electricity (Supply) Act 1948 and converted Rs. 1612 crores representing Government loans granted upto 3/90 into equity during 1991-92 and Rs.1189.11 crores representing 50% of loans granted during 1990-91 to 1994-95 in 1996-97.

The total State Government Equity in PSEB is Rs. 2806.11 Crores.

It is evident that this equity (Except of Rs 5 Crore initial capital) was only and only by conversion of GOP Loans. However no ROE was provided on the same in Tariff Order 2002-03 and after till 2005-06 by this Commission under Electricity Regulatory Commissions Act, 1998 and Electricity (Supply) Act 1948 and only 3% Return on Net Fixed Assets were allowed. The GOP loans given to the then PSEB were got converted into equity on different occasions by the then PSEB management(s) to reduce loan liability in its Books and to escape liability of payment of Interest on such loans and loan installments to insulate consumers from increase in tariff prior to setting up of Regulatory regime. Return on Equity of Rs 412.46 Cr per year was allowed only from 2006-07 onwards as per Para 4.15 of TO. On formation of PSPCL and PSTCL on 16.4.2010, provisional FRP and transfer scheme was issued by GOP as per which the then existing equity of 2946.11 Cr was divided into two successor entities as Rs as Rs 2617.61 Cr for PSPCL and 328.50 Cr for PSTCL and ROE was allowed separately as Rs 366.47 Cr and Rs 45.99 Cr for PSPCL and PSTCL respectively.

GOP finalised FRP and Transfer scheme and notified the same on 24.12.2012 as per which an amount of of Rs.3132.35 crore standing in the books of PSEB on 15.4.2010 under the head "Consumer Contributions & Govt Grants" and some other amounts was also converted into equity of GOP and the same was admitted by PSERC as well. Thus the equity of PSPCL was enhanced from Rs 2617.61 Cr to 6081.43 Cr (Para 3.16 of TO 2013-14) and of PSTCL from 328.50 Cr to Rs 605.83 Cr. (Para 3.10 of TO 2013-14). Thus the total equity of PSTCL was increased from 328.50 Cr to 605.83 cr.

PSTCL has been proposing funding of Capital Expenditure with normative 30% equity and 70% funding in the ARRs starting from 2017-18 by manipulating MYT regulations though ARR figures clearly show that PSTCL is funding this equity contribution through loans or alleged reinvestment/redeployment of "Return on Equity" (read "Profit") of the previous period. It is being pointed out that this ROE belongs to the GOP to which this equity belongs. Further, the issued and subscribed share capital as on 31.3.18, 31.3.19, 31.3.20 and 31.3.2021 remained same i.e. Rs. 605.88 Cr in the Audited Annual Financial Statements of

the respective years attached with ARR and the same equity of Rs 605.88 Cr is appearing in the Balance Sheet ending 31.3.2022 enclosed with the current ARR. Thus neither there was any investment in equity nor equity shares were issued to GOP. The Profit and Loss statement and paid up equity for these years as per audited Balance Sheet supplied with the ARRS indicated that PSTCL incurred net profit/loss in Rs Cr since its incorporation are as under:-

(Rs. In crores)

Year	Amount of Equity	Profit/Loss
2017-18	605.88	4.03
2018-19	605.88	(8.23)
2019-20	605.88	(34.96)
2020-21	605.88	20.66
2021-22	605.88	216.47

There are no free reserves as per Annual Financial Statements. No liability of Income tax is shown since cumulatively PSTCL is still under loss. Further, no dividend has been paid back to GOP for holding equity in PSTCL.

In spite of objections of stake holders, tariff order 2019-20 revealed that the Commission allowed addition in equity of 96.92 Cr (30% of capex) in True up of 2017-18 raising the equity of GOP from 605.88 Cr to 702.80 Cr without any cash flow. The amount was further revised to Rs 705.71 Cr subsequently. This was clearly wrong as the amount was not invested in cash by GOP and funding was through redeployment of profit of Rs 4.03 Cr earned during the year and balance thro' loan based on the true up capex. In fact the entity was in loss cumulatively and it cannot redeploy even this Rs4.03 Cr and loans cannot be redeployed as equity. It is evident that the system was being mis-utilized by the Licensee to earn about 7% of difference of interest rate of loan (8 to 9%) and ROE rate of 15.5%. ROE could be retained by a company to meet losses, if in loss or to pay dividends, if in profit. Accepting the sentiments of consumers, similar demand in true up of 2018-19 seeking equity addition of 73.58 Cr was rejected by PSERC and ROE of Rs 109.38 Cr was allowed in TO 2021-22 for all the three years of 2019-20 (TU) and 2020-21 (RE) and 2021-22.

In the true up of 2020-21, PSTCL again raised demand for addition in the equity based on the redeployment of profit of Rs 20.68 Cr and increased equity from 705.70 Cr to 726.38 Cr. This has been allowed in the True up of 2020-21 in the Tariff Order 2022-23 in spite of objections of the stake holders. It is submitted here that the Balance sheet now attached with ARR indicated the profit of Rs 17.43 CR for 2020-21 whereas the Commission has allowed equity addition of Rs 20.68 Cr.

Now in the present ARR, PSTCL has again adopted the same methodology and claimed deployment of Rs 77.31 Cr as equity out of profit of Rs 216.48 Cr for the true up of 2021-22. As is evident, the profit earned is being retained by PSTCL and not being paid back to GOP as dividend, whole of the financing of capital works is through loan with interest rate of 8-9%. It is also worth noting that no equity has been actually allotted to GOP, the owner of PSTCL. In this regard we extract the relevant Regulation 18 and 20 as under:-

20. RETURN ON EQUITY

Return on equity shall be computed at the base rate of 15.5% for thermal generating stations, Transmission Licensee, SLDC and run of the river hydro generating stations and at the base rate of 16.5% for the storage type hydro generating stations and run of river generating stations with pondage and 16% for Distribution Licensee on the paid up equity capital determined in accordance with Regulation 19:

19. DEBT EQUITY RATIO

19.1. Existing Projects - In case of the capital expenditure projects having Commercial Operation Date prior to the effective date, the debt-equity ratio shall be as allowed by the Commission for determination of tariff for the period prior to the effective date:

Provided that the Commission shall not consider the increase in equity as a result of revaluation of assets (including land) for the purpose of computing return on equity.

19.2. New Projects - For capital expenditure projects declared under commercial operation on or after the effective date:

(a) A Normative debt-equity ratio of 70:30 shall be considered for the purpose of determination of Tariff;

(b) In case the actual equity employed is in excess of 30%, the amount of equity for the purpose of tariff determination shall be limited to 30%, and the balance amount shall be considered as normative loan;

(c) In case, the actual equity employed is less than 30%, the actual debt-equity ratio shall be considered;

(d) The premium, if any raised by the Applicant while issuing share capital and investment of internal accruals created out of free reserve, shall also be reckoned as paid up capital for the purpose of computing return on equity subject to the normative debt- equity ratio of 70:30,

provided such premium amount and internal accruals are actually utilized for meeting capital expenditure of the Applicant's business.

Thus the trued up deployment of Profit as equity for the purpose of ROE in spite of above provisions when paid up equity capital remains same is totally unjustified and as long as paid up equity capital remains same, no addition of equity can be allowed as per Regulations.

It is also strange that PSPCL is bearing the total expenditure of PSTCL as it has negligible income of Rs 42 Cr as other income for 2021-22 out of total income of 1514 Cr (<3%). However, the profit shown for 2021-22 as per audited statement is Rs 216.5 Cr on income of Rs 1514 Cr and on paid up equity of Rs. 606 Cr. This profit for 2021-22 works out as 14.3% on revenue earned and as 35.72% on equity basis. It is happening when PSPCL is running in losses and PSTCL's boundary metering has utterly failed and state energy account is still not being issued by SLDC. It is evident that ARRs of the Licensee are inflated and higher expenditure is being claimed initially in ARR whereas actual expenditure at the time of preparing annual financial statements is less.

We also submit that total equity of PSTCL except Rs 5 Cr capital granted initially be withdrawn since there is no cash flow from GOP and all the amounts shown are infact loans taken at 7% to 12% while consumers are being made to pay 15.5% to 16.5% ROE on the same. The case of consumer contribution and GOP grants converted into equity through FRP/Transfer scheme is even more worse for consumers since these amounts were not bearing any interest but after conversion into equity, PSTCL and PSPCL have started earning ROE of around 16% on the same since 16.4.2010 which is nothing but fleecing of the consumers by wrongly interpreting the Regulations. Electricity Act 2003 casts a duty on the SERC to protect the interest of consumers as well.

B) The Commission lowered the Interest on Security (Consumption) of consumers from SBI rate plu 2% to RBI rate to lower the ARR of PSPCL though the interest was ultimately paid upfront by consumers in tariff and received back at the close of year. However, here PSERC has allowed PSTCL to earn ROE merely by relocating the figures from Loan to equity and this amount is not only being retained by PSTCL for meeting unapproved expenditure without regulatory scrutiny but also being redeployed for funding equity.

C) It is also submitted that the ROE on Consumer Contribution and GOP Grants etc was challenged before APTEL by some consumers which has decided *interalia* that GOP can

hold any amount of equity in the Licensee' capital funding but ROE can be given only on the amount duly subscribed (in Cash) and for which shares are duly issued. The order has been challenged by PSPCL and GOP in Supreme Court and Stay has been granted but the final decision on the same is yet to come. The conversion is also objected by CAG in their audit reports holding that the conversion is against the financial principles.

3. It is also added here that Forum of Regulators constituted a sub group for study of ways to reduce retail tariff and a report was prepared on "ANALYSIS OF FACTORS IMPACTING RETAIL TARIFF AND MEASURES TO ADDRESS THEM" (2020). Incidentally, ex Chairperson, PSERC happened to be chairperson of the Sub Group which prepared the above said report and Staff of this Commission may be aware of the same. The report analyzes the mechanism of the tariff fixation in detail and need for bringing modifications to make it more relevant and reduce the power tariff in different states. In para 2.1.3 of the report, which deals with fixed cost related factors, it is mentioned that

"A comparison of the RoE allowed by different States for generation, transmission and distribution revealed that the post-tax RoE has been in the range of 14% - 16%. An analysis was also made regarding the prevailing cost of debt and it was found that the lending rate has been on the lower side for quite some time. While the ROE has an element of risk premium, the data analysis revealed the need for reconsidering the RoE keeping in view the prevailing prime lending rate and 10- year G-Sec rate.

Further, on Return on Equity, The sub group has stated on page 22 of the report in para 4.1.1, which is reproduced below:

4.1.1. Return on equity allowed to Generation/ Transmission and distribution companies needs to be made more realistic and at par with interest rates.

RoE for generation and transmission should be linked to the 10 year G Sec rate (average rate for the previous 5 years) plus risk premium subject to a cap as may be decided by appropriate Commission.

For a discom, the RoE could be fixed based on the risk premium assessed by the State Commission. Income tax reimbursement should be limited to the RoE component only.

Performance of Distribution licensees has a significant impact on retail tariff for the consumers. Therefore, there is a need to link recovery of ROE with the performance of the utilities, based on the indicators such as supply availability, network availability, AT&C loss reduction".

The Commission is requested to implement the above recommendation at the earliest and reduce the rate of ROE to prevailing interest rate only as there is no risk factor involved and Hon'ble Commission is allowing the justified revenue as per MYT regulations. Further, all the equity shown in the books is either loan or consumer contribution etc.

Reply of PSTCL:- PSTCL has claimed Return on Equity as per Regulation 20 of PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply) Tariff Regulation, 2022 as notified by the Commission.

Commission's view:- The Commission allows ROE in line with the relevant provisions of the MYT Regulations

3. Forum of Regulators has carried out a Study on Evolving Principles of Depreciation for Distribution Assets and Operating and Financial norms. One of the recommendations of FOR is as under:-

The SERCS may continue to use RoE based margin determination. This will be dependent on availability of adequate and accurate data from the utilities. Further, the SERCS may carry out detailed diligence of existing performance parameters and fix suitable limits of performance parameters for determination of ROE. As the adoption of smart meters increases, the implementation of Consumer Rights (Rules) becomes easier. To achieve this, the SERCs may develop a roadmap for gradual transition into consumer level performance indices. Simultaneously, SERCs may

phase out RoE based distribution margin and retain only consumer level performance parameters as a mechanism for rewards/penalties

This also equally applies to Transmission segment also and need to be implemented.

Reply of PSTCL:- No Comments.

Commission's view:- The suggestion is noted.

4. As per Balance Sheet for 2021-22, PSTCL has Other Equity (Reserves and Surpluses) of Rs 2444.75 Cr (Previous year 2225.65 Cr as per balance sheet now supplied and Rs 2232.89 Cr as per balance sheet supplied last year) and Equity of Rs 605.88 Cr. which works out to 4.04 times the equity amount Consumers are being made to pay 15.5% ROE on the equity amount whereas Reserves and surplus are not earning any revenue for PSTCL or the consumers. Therefore, PSTCL should explore liquidation of some portion of equity back to GOP so that the burden of ROE is reduced and Tariffs could be lowered,

Reply of PSTCL:- Equity of Rs. 605.88 crore of PSTCL is as per notification dated 24.12.2012 of Government of Punjab.

Commission's view:- The objector may please note reply of PSTCL.

5. Total Transmission Capacity in MW worked out by PSTCL as per format T-22 is tabulated as under

Year	As per ARR 2022-23	As per ARR 2023-24	Max Demand
2020-21	13152		13148
2021-22	13955	13234	13431/15336
2022-23	13540	13456	14311
2023-24		14340	
2024-25		15180	
2025-26		15230	

However, the capacity in Punjab SLDC web site under Availability Tab is 14590 MW as on 30.11.2022. Thus, with projected demand of around 14600 MW and transmission capacity of 14340 MW, the state is headed for power cut in 2023-24. Moreover, the new capacity addition of 900 MW and 600 MW in 2023-24 and 2024-25 respectively will be largely solar and wind power which is infirm power.

Reply of PSTCL:- The state's installed capacity of 14589.81 MW under availability tab on Punjab SLDC comprises of state's own generation along with state's share in central sector plants. However, apart from these sources, the state is entitled to procure power from other sources as well including Short Term Open Access (STOA), Indian Energy Exchange (IEX), real Time Market (RTM), Banking, etc. PSTCL has been making continuous efforts for enhancement of state's ATC/TTC limits through strengthening of ISTS (Inter State Transmission System) transmission elements and intra state transmission network connected with ISTS nodes. PSTCL is well aware of the burgeoning power demand of the state and have been working on strengthening of transmission network in this respect. During summer/paddy season 2022, state's ATC/TTC limits have been enhanced from 7100/7700MW to 8500/9000MW by carrying out numerous transmission strengthening works. Further, efforts are being made to significantly enhance state's ATC/TTC limits to 10000/10500MVY (& beyond) through various transmission projects in coming years.

Commission's view:- The objector may note the response of PSTCL.

6. The total contracted capacity of PSPCL in the year 2023-24 is given as 14340MW. However, transformation capacity of PSTCL on 31.3.2023 is 41500 MVA which is 2.9 times the peak demand of 14311 MW met so far. The capital investment plan of PSTCL needs to be reviewed and it should be commensurate with the reduction trajectory of Transmission loss to give relief to consumers. PSTCL/SLDC may also be directed to carry out TTC and

ATC studies for the state system to determine the safe transfer capacity and publish it on web site.

Reply of PSTCL:- The transformation capacity of PSTCL, which is 41099.67 MVA, is basically the sum total of all transformers installed in PSTCL network. The same includes transformers at 400/220KV, 220/132KV, 220/66KV, 132/66KV, 132/11KV voltage levels etc. The same is not to be compared with the load catering capacity of the state. Most of the 132KV & below level transformers form a part of the underlying transmission system for the existing 220KV transmission system. Similarly, some of the 220KV & below level transformers form a part of the underlying transmission system for the existing 400KV transmission system. Subsequently, the same are already included in the 400KV & 220KV transformation capacities. Further, the load catering capacity of the state is the sum of state's own generation and the ATC (outside drawl) values of the state power system. Furthermore, it is submitted that the ATC limits are evaluated judiciously by Punjab SLDC and the same are being verified/validated by NRLDC after carrying out thorough load flow studies for the sake of safe & secure operation of the grid.

Commission's view:- The objector may note the response of PSTCL.

7. As brought out in Para 2.5.1 and 3.7.2 of current ARR, PSTCL has some reservation on net or gross employee cost for calculation of Employee cost. PSTCL has worked out the Employee Cost on net basis. However, PSPCL has not raised any such issue in its Generation, Distribution and Retail Supply ARR. This issue was also raised by PSTCL during previous years also but was not agreed to by PSERC and as submitted by PSPCL in these paras of ARR.

PSTCL has claimed Employees expenses for 2021-22 as Rs 582.63+10.90= Rs.593.53 Cr as per Format T1 whereas in the Balance sheet, the Employee benefit Expenses have been audited as Rs 556.10 Cr. It is evident that Pay as you Go principle is not being followed by PSTCL. **Moreover whereas MYT regulation 2019 stated that O&M expenses will be worked out on normative basis, the MYT regulations 2022 state in Note 3 below regulation 25 that it will be on normative or actuals whichever is lower.** PSERC is requested to implement MYT regulations Further, matter needs to be perused vigorously in APTEL.

Reply of PSTCL:- PSTCL has claimed Employee expenses for FY 2023-24 as per Regulation 25 of PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff Regulation, 2022 as notified by the Commission.

Commission's view:- The Employee Expenses are approved in line with the relevant provisions of the MYT Regulations.

8. Year wise Non-Tariff income figures for all years and figures/notes in Para 2.14 and Table 56 of para 3.13 of ARR need to be checked critically with regard to Non Tariff Income not considered for the purpose of ARR. Further, Non-Tariff Income for H2 of 2023-24 and MYT period need to be increased on normative basis.

Reply of PSTCL:- PSTCL has claimed Non-Tariff Income as per PSERC, MYT Regulations 2022.

Commission's view:- The Non-tariff income along with other components of ARR is allowed in line with the relevant provisions of the MYT Regulations.

Objection No. 8: Government of Punjab, Department of Power (Power Reforms Wing), Chandigarh.

Issue No. 1: Employee Cost

The Commission has been consistently disallowing the employee cost to the utility, which can in no way be reduced, since the terms and conditions of an employee once recruited cannot be changed to his disadvantage during the course of his service. Further, the employees who are retiring are also contributing to increase in employee cost of PSTCL by way of payment of gratuity, pension etc. The actual employee cost should be allowed as pass through as it is a legitimate historical component of the cost of supply and committed liability of PSTCL.

PSTCL has proposed employees cost for 2023-24 at Rs. 844.81 Crore and is striving hard to reduce employee cost and bring in efficiency, but it will take time for PSTCL to reduce the employee cost and bring it at par with other advanced State Utilities. Till then, the employee cost, which is a genuine cost of utility, must be passed on to the end consumers on an actual basis keeping in view the genuine requirements which are statutory in nature. Therefore, Commission is requested to allow employee cost as projected by PSTCL.

Commission's view :- The Employee costs are approved in line with the relevant provisions of the MYT Regulations.

Issue No. 2: Administration and General (A&G) Expenses and Repair & Maintenance (R&M)

The Administration & General (A&G) expenses and Repair & Maintenance (R&M) expenses projected by PSTCL are increasing gradually. PSTCL must identify and evaluate the reasons for this increase.

The State Government is very much concerned for providing quality, uninterrupted and affordable power to its valuable consumers in the State and the transmission system needs to maintain at its best. Repair & Maintenance of Transmission System with appropriate replacements of equipment and renovation is of great importance so that uninterrupted supply can be maintained and grid failure be avoided. The Commission is requested to allow Administration & General (A&G) expenses and Repair & Maintenance (R&M) Expenses as per the norms.

Commission's view:- The A&G and R&M expenses are approved in line with the relevant provisions of the MYT Regulations.

Issue No. 3: Capital Expenditure/Capacity Addition

The PSTCL has submitted Capital Expenditure of Rs. 1282.54 Crore during FY 2023-24 which includes works related with construction of new Sub-Stations, new lines, addition and augmentation of transmission system to cope up with the growing demand etc., laying of transmission network for evacuation of power from generation projects in the State as well as for evacuation of power share of Punjab from various Central Sector Projects.

Because of the capacity addition in the State generation, appropriate transmission capacity is also required to be created. The Commission is requested to allow these expenses keeping in view the overall expenditure of the utility.

Commission's view :- Refer para 4.4 of the tariff Order regarding Capital investment plan.

Issue No. 4: Transmission Losses

The Commission is requested to approve the Transmission losses taking into consideration the Transmission losses for other State utilities or benchmarking with CERC norms.

Commission's view :- The Commission approves the loss trajectory keeping in view the relevant provisions of the MYT Regulations.

Issue No. 5: SLDC Business

The SLDC is pivotal to the State's power sector. Its financial, operational and technical viability has to be maintained at every cost. PSTCL has submitted the projections for SLDC to the tune of Rs. 32.97 Crore for FY 2023-24. The Commission is requested to approve the expenditure as detailed in the ARR for smooth functioning of SLDC.

Commission's view :- The Commission determines the ARR for SLDC Business of PSTCL separately in accordance with PSERC MYT Regulations..

Issue No. 6: Transmission Charges

The Inter-State Transmission Charges are gradually increasing since last 3-4 years, resulting to hike in tariff for electricity consumers. Therefore, the Commission should raise the issue in Forum of Regulators or at suitable platforms for reduction in Inter-State Transmission Charges for a distance of 500 KM and above.

Commission's view :- Suggestion is noted. However, PSTCL is also directed to take up the issues with Central transmission Utility / CERC.

Issue No. 7:

The Commission is requested to keep in view above aspects, overall expenditure of the utility and various guidelines/instructions issued by Ministry of Power, Government of India and other Courts so that a financial, operational and technical viability of PSTCL is maintained while finalizing the tariff for FY 2023-24.

Commission's view :- Noted, however the same are approved keeping in view MYT Regulations, various MOP guidelines / instructions & public views.

ANNEXURE-III

Minutes of the Meeting of PSERC State Advisory Committee, Chandigarh held on 16th February, 2023.

A meeting of the PSERC, State Advisory Committee was held in the office of the Commission at Chandigarh on **16th February, 2023**. PSERC had invited comments of the members of the said committee on the Petitions for True up of FY 2021-22, Annual performance Reviews (APR) for FY 2022-23 and the ARR Requirements and Tariff Proposal for FY 2023-24 (3rd control period from FY 2023-24 to FY 2025-26), respectively of Punjab State Power Corporation Ltd. (PSPCL), Punjab State Transmission Corporation Ltd. (PSTCL) and on the agenda items as proposed by some of the members of PSERC State Advisory Committee. The following were present/represented in person in the meeting: -

Sr. No.	Name and Address	Designation
1.	Sh. Viswajeet Khanna, Chairperson, PSERC, Site No.3, Sector-18-A, Chandigarh.	Chairperson
2.	Sh. Paramjeet Singh, Member, PSERC, Site No. 3 Sector-18-A, Chandigarh.	Ex-officio Member
3.	Smt. Parneet Mahal Suri, Secretary, PSERC, Site No.3 Sector-18-A, Chandigarh.	Ex-officio Secretary
4.	Principal Secretary, Department of Power, Government of Punjab, Chandigarh.	Member
5.	Principal Secretary, Food & Civil Supplies and Consumer Affairs, Government of Punjab, Chandigarh.	Ex-officio Member
6.	Principal Secretary, New and Renewal sources of Energy (NRSE), Government of Punjab, Chandigarh.	Member
7.	Director, Town & Country Planning, PUDA Bhawan, Sector -62, SAS Nagar- Punjab.	Member
8.	Chairman-cum-Managing Director, PSPCL, The Mall, Patiala.	Member
9.	Chairman-cum-Managing Director, PSTCL, The Mall, Patiala.	Member
10.	Director, Local Govt. Deptt., Punjab, Chandigarh.	Member
11.	Director, Agriculture, Deptt. of Agriculture, Govt. of Punjab, Chandigarh	Member

12.	Chairman, PHDCCI, Punjab Committee, Sector 31-A, Chandigarh.	Member
13.	Dr. Harish Anand, House No.59, Sector-39, Chandigarh Road, Ludhiana-141010(Punjab)	Member
14.	Indian Energy Exchange Limited, Plot No.C-001/A/1, 9 th Floor, Max Towers, Sector-16 B, Noida, Gautam Buddha Nagar-201301(U.P.)	Member
15.	Sh. Raj Kumar Jindal, CMD, Vivek Re-Rolling Mill, Mandi Gobind garh and Sr. Vice President All India Steel Re-Rolling Association, New Delhi.	Member
16.	Dr. Ranjit Singh Ghuman, Professor of Eminence (Economics), 804, Urban Estate, Phase-I, Patiala-147002, Email: ghumanrs@yahoo.co.uk	Member

At the outset, the Chairperson, PSERC welcomed the members to the meeting of the newly constituted State Advisory Committee. The Chairperson thereafter, requested the members to offer suggestions/comments on the Petitions for True up of FY 2021-22 the Annual performance Reviews (APR) for FY 2022-23 and the ARR Requirements and Tariff Proposal for 3rd control period (FY 2023-24 to FY 2025-26), respectively filed by Punjab State Power Corporation Ltd. (PSPCL), Punjab State Transmission Corporation Ltd. (PSTCL) and the agenda items as proposed by some of the members of PSERC State Advisory Committee. Thereafter, the members gave their comments/suggestions/views as under: -

1. Sh. R.S. Sachdeva, Chairman/PHDCCI stated as under:

- i. PSPCL has submitted Net ARR to the tune of Rs. 42753 Crore for 2023-24 and a revenue gap of Rs. 4149 Crore. After including the revenue gap for the previous years along with carrying cost of Rs. 9961 Crore, cumulative gap has been worked out as Rs. 14109 Crore. The revenue gap projected by PSPCL in ARR is much higher (around 37% of projected revenue of Rs. 38604 Crore for the year 2023-24) and thus needs thorough check by the Commission.
- ii. PSPCL has shown revenue gap of Rs. 3156 Cr in True up for the year 2021-22. However, the revenue Gap/surplus for the previous year 2020-21 does not match with the trued-up figures for 2020-21 determined by the

Commission in the previous year tariff order. This needs to be looked into by the Commission.

- iii. PSPCL projections of ARR of the ensuing year and the final figures in ARR True Up for the same year after two years clearly indicates that either the figures are being inflated or extensive exercise taken up by PSERC for determining the revenue requirement and pegging of expenditure by PSERC has no consideration for PSPCL and they are incurring expenditure at their will. It is also an established fact that due to non-receipt of subsidy from GOP, the expenditure is being incurred by PSPCL by drawing interest bearing working capital loans from various sources and incurring finance charges on arranging loans. Perusal of the above figures speaks of the total financial indiscipline.
- (a) Certain issues on principles which have bearing on finalization of ARR by the Commission from year to year.**
- (i) The power supplied to the agriculture sector has been growing consistently at very high rate due to increase in capacity of tube wells due to depletion of water table. Providing the power at subsidized rate of Rs 5.66/Kwh as per Tariff Order of FY 2022-23, which is far less than the actual cost of power (as high as Rs.7.32 per unit as per COS for FY 2022-23) is leading to serious financial crisis for the PSPCL. This will ultimately seriously affect the interest of Industrial Consumers in the State who are already reeling under recession. The provision 8.3.4 of National Tariff Policy states that the extent of subsidy for different categories of consumers can be decided by the State Government keeping in view various relevant aspects. But provision of free electricity is not desirable as it encourages wasteful consumption of electricity. Besides in most cases, lowering of water table in turn creating avoidable problem of water shortage for irrigation and drinking water for later generations. It is also likely to lead to rapid rise in demand of electricity putting severe strain on the distribution network thus adversely affecting the quality of supply of power. Therefore, it is necessary that reasonable level of user charges are levied.
- The policy further states that the subsidized rates of electricity should be permitted only up to a pre- identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers.

If the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.

Therefore, it is imperative to cap the maximum amount of power year wise & to be approved by the Commission that can be supplied to agriculture sector at the subsidized rate inclusive of additional connections projected in a year.

(b) Interest on Short Term Loans for Working capital

- i. PSPCL has been raising short term loans to meet the revenue shortfall arising out of disallowances of ARR components, non-receipt of subsidy from the Government and delayed payments from consumers etc. Interest on delayed receipt of subsidy is being loaded to the State Govt. while determining the subsidy amount in the tariff orders. Further, PSERC is allowing the carrying cost of difference in revenue and ARR amount including delay in recovery of revenue from consumers. For late payments by consumers, PSPCL is getting Late Payment Surcharge. Therefore, Working Capital interest should be allowed on normative basis and after deducting the Advance Consumption Deposit (Security) parked with PSPCL as per Regulations and practice being followed by the Commission so far.
- ii. GPF fund parked with PSPCL by employees is also not being reduced as per agreed trajectory. The Commission should charge this huge interest to PSPCL and not to consumers.
- iii. Further, the GPF loans being used by PSPCL to meet the working capital be also reduced from normative Working Capital and interest on Working Capital be reduced and only thereafter interest on GPF be allowed. Alternatively, PSPCL be asked to bear the interest on GPF amount from its internal accruals and the said claim by PSPCL in ARR needs to be rejected.

(c) RETURN ON EQUITY

- (i) The Commission has approved 15.5% return on equity for 2012-13 to 2015-16 purportedly as per PSERC Regulations. As per the FRP approved by GOP increasing the cost of assets by their revaluation and merging the Consumer

Contribution, Subsidies and Grants with GOP equity leading to increase in the equity share capital of PSPCL from 2617.61 Crore to 6081.43 Cr which has led to increase of ROE from 405.73 Cr to 942.62 Crore i.e. an increase of 232% in both the figures without any fresh investment or infusion of cash by GOP or PSPCL. This matter was challenged in APTEL and it has already directed PSERC, inter alia, to reconsider the issue vide judgment Dated 17.12.2014 in Appeal No. 168 and 142 of 2013 by directing the State Commission to adjust the excess amount of ROE in the impugned order from the FY 2011-12 onwards in the ARR/ True up for the year to provide relief to the consumers. Further on the issue No. (iii) Relating to Return on Equity, Consumers Contributions, Grants, Subsidies etc. It has been held that the findings of this Tribunal in Appeal no. 46 of 2014 shall squarely apply to the present case. The State Commission has been directed to re- determine the ROE as per our directions and the excess amount allowed to the distribution licensee with carrying cost shall be adjusted in the next ARR.

APTEL had observed in its order in Appeal No. 168 and 142 referred to in preceding para that the Govt. can hold any amount as equity in PSPCL (and PSTCL) but ROE needs to be granted only on actually subscribed and paid up equity only i.e. cash money which has been infused need to be counted as equity for the purpose of ROE.

However, since there was no cash flow in actual and it was a clear-cut case of conversion of cheap interest-bearing loan into costly dividend paying equity, PSERC accepted the comments of the stakeholders and rejected the demand of ROE on Rs. 15628 Crore However, PSPCL in the ARR 2022-23 come out with an entirely new argument that out of Rs. 15628 Cr, Rs. 2246.77 Crore was spent for capital works. Further, out of balance loan of Rs. 13381 Crore also, funds to the tune of 2346.19 Crore were diverted for capital expenditure. Accordingly, PSPCL requested to convert these two loan amounts totaling Rs. 4592 Crore into equity and grant ROE on the same. The contentions of PSPCL are strongly objected to

The Commission has not considered the amount of Rs. 4592.96 Crore (Rs. 2346.19 Crore Rs. 2246.77 Crore) in addition to amount of Rs. 6081 Crore to admissible equity for return. Accordingly, no addition of equity has been

considered by the Commission to the opening equity of FY 2020-21 on account of conversion of UDAY loans of Rs. 2246.77 Crore as it is not utilized for meeting the capital expenditure for new Projects. Similarly, Rs. 2346.19 Crore as claimed by PSPCL which was diverted for capital expenditure funding is also not considered for infusion towards equity as these were working capital loans relating to prior period.

This tendency of PSPCL to convert the loans/consumer contribution etc. into equity need to be curbed by the Commission otherwise PSPCL may again come out with the demand of converting Consumer Contribution, Grants and subsidies from GOP of Rs. 4955.28 Crore ending 31.03.2022 accumulated in the books since 01.04.2010 into equity.

(d) Comments on True Up of 2021-22

- (i) PSPCL has been trifurcating the gross expenditure in the sub heads of Generation, Distribution and retail supply based on allocation statement approved by BOD. This practice is going on since formation of PSPCL for the last 12-13 years. It is submitted that this practice has to stop at some defined point of time which need to be fixed by the Commission so that arbitrary transfer of expenditure from one sub head to other is stopped and Cost of Supply, APPC and losses etc. are determined accurately.
- (ii) The actual transmission loss has been worked out by PSTCL as 2.31% whereas PSPCL has considered the same as 2.21% in these tables. This also needs to be reconciled.
- (iii) PSPCL has surrendered 525.76 MUs under UI and has also paid Rs. 4.95 Crore to the UI pool account i.e., we have surrendered the power and also paid the amount, which is indicative of mismanagement and inefficiency. This amount should be disallowed.
- (iv) Form D-2 of the Tariff Petition for 2021-22 indicating Quantum and Fixed Charges liability of the surrendered power indicates that PSPCL has surrendered 8808.72 MUs and has also paid fixed charges of Rs. 963.62 Crore for the same. PSPCL need to take pro-active initiatives to reduce the surrendered power by giving incentives to the industry and bulk consumers.
- (v) Late Payment Surcharge and TDS of Rs. 32.27 Crore have been claimed which needs to be disallowed as PSPCL is retaining Early Payment incentive and TDS is adjustable against overall liability of I Tax.

- (vi) PSPCL has claimed Impairment loss of Rs. 482.62 Crore in ARR. The Petition No. 60 of 2016 seems to be wrong as the GNDTP was retired on 31.12.2017 and thus the petition cannot be of the year prior to 2018-19. Further, though 2 units of GGSTP Ropar were also retired but no details of the same regarding impairment loss are given.

As per press reports appearing at the time of retirement of thermal units, it became known that the GNDTP units had been renovated at huge cost thereby increasing their life by 15 years but these were retired much before the expiry of useful life. This seems to be the reason for such high gross value of assets at the time of retirement and resale value being much below the gross value of assets. The Commission may also check this aspect and pass on only 10% of the capital cost of renovation minus realized value if any to the consumers as per the relevant acts and notifications.

- (vii) PSPCL has claimed interest & Finance charges of Rs. 1449 Cr against Rs. 1062 Crore approved in Tariff Order of FY 2021-22. It is evident that they have claimed interest on actual amount of loans for working capital which is again wrong as consumer is bound to bear interest on Working capital as per Normative and Regulations are clear on the same.

(e) Revised Comments on estimates for FY 2022-2023 and Projections for FY 2023-24

- (i) The surrender of power needs to be reviewed / checked every month in view of projections of FY 2022-23 as a recession year. Further, changing scenario of coal cost due to allotment of coal mines to private parties, operationalization of Pachwara coal mine of PSPCL, variation in imported coal prices and increasing gas prices.
- (ii) The projected sales for Medium Supply category has been reduced drastically from 1308 MUs in H1 to 490 MUs in H2 of 2022-23 where as it should be more than H1 since no peak surcharge is leviable in H2. Further the temporary supply consumption has been drastically reduced from 672 MUs in H1 to 68 MUs in H2. The figures need to be correctly estimated.
- (iii) PSPCL has projected surrender of 188.30 MUs of energy under UI and has also paid 10.98 Crore to UI pool account in H1 of 2022-23. The loss will be much more if the generation cost of energy surrendered and losses

etc are also added to the same. This needs to be disallowed as PSPCL has failed to efficiently operate the system.

- (iv) PSPCL has proposed Rs. 2218.40 Crore towards net banking for 5.16 Mus of net banked energy for 2022-23. Energy Received by Licensee has also been shown as (-) 195.21 MUs. This may be checked and viability of banking needs to be established.
- (v) Interest on Loans be allowed as per MYT Regulations after disallowing the excess loans taken to meet the unapproved expenditure and diversion of loans to working capital.
- (vi) An amount of Rs. 5 Crore has been provided to PSPCL in 2022-23 for DSM fund whereas the actuals in 2021-22 is Rs. 3.87 Cr and RE for 2022-23 is only Rs. 0.03 Crore. The projection for 2023-24 is Rs. 6.07 Crore. The provision may be reviewed and actuals of DSM need to be approved in True up only.
- (vii) Regarding Non-tariff income, PSPCL in ARR has assumed the figures as per the true up figures of 2021-22 which should not be accepted and details may be sought from PSPCL for H1 and H2 separately. Further, comments at para (C) 9 above may be referred also.

(f) Power purchase from Renewable Projects.

- (i) The details show that PSPCL has signed PPAs with SECI for purchase of wind power and hybrid power on RTC basis. It is a fact that wind power is infirm power and it will flow only during night hours of non-paddy period of 8.5 months when PSPCL is heavily surplus of power. Though the sale rate is lower but since the night power is sure to be dumped at zero cost, the ultimate cost will be much higher. PSPCL cannot burden the consumers with such purchases.
- (ii) Setting up Biomass projects in Punjab particularly based on Rice Straw as fuel is the need of the hour. Setting up such projects will bring investments in Punjab, create employment, increase rural income, bring down losses of PSPCL and above all reduce pollution. It is therefore suggested that PSPCL should sign long term PPAs with developers of NRSE power projects under Average Power Procurement Cost (APPC) regime only. This will make available NRSE power to PSPCL at cheaper rates and

allow the developers to get RECs which they can sell in power exchanges. Alternatively, the power purchase can be made on APPC plus Floor price of REC.

- (iii) The procedure for approval of co-located solar roof top CPPs needs to be made simpler so as to promote solar power plants.

(g) Additional Submission/suggestions

It was suggested to:

- (i) Carry forward the rationalization of Electricity Tariff towards reduction of cross subsidy in a phased manner.
- (ii) Move towards fixing tariffs on the basis of realistic voltage wise category wise cost of supply principle as early as possible.
- (iii) Reduce the electricity tariff of the subsidizing class of consumers as per the Act so that the GOP is not unduly burdened for providing power to industry at Rs 5/- per unit.
- (iv) PSPCL should be directed to: -
- Amend its pattern of submitting ARR. Instead of submitting ARR based on actuals with the same bunch of excuses for over expenditure every time, it should limit its expenditure as per approvals.
 - The practice of submitting Accounts duly audited by CAG along with CAG Audit Report for True Up of the previous year be strictly adhered to and for any delay, carrying cost of gap be disallowed to PSPCL.
- (v) The TOD peak charge needs to be abolished as PSPCL is not purchasing any extra costly power during peak period and rather it is selling power during peak period. This will encourage the industry to operate for 24 hours instead of 20 hours presently.
- (vi) More reforms and ease of doing business initiatives be introduced for the industrial consumers.

- (vii) Continue with incentives for increase of consumption by consumers to reduce the idle capacity/surplus power.

The Punjab industry is situated in a land locked area and has to face many hardships. We will also bring to your kind notice that the State Govt. is also charging 15% Electricity Duty in-addition to 5% Infrastructure Development Fee and 2% as Municipal Tax.

2. Dr. Harish Anand of CII, Punjab State Council, stated as under:

This has been a 'Year of Distinction' for the PSERC in initiating major reforms in the electricity ecosystem in Punjab in sync with the national power priorities especially in the field of Green Energy. The draft amendment in Open Access Regulations allowing import and banking of green energy, Harnessing of Captive Power related regulations, Power quality regulations for controlling harmonic injections in the grid by the specified industries and Licensee, are some of the major initiatives which can be referred here. We sincerely record our appreciations for the same to the Commission and PSERC officers. Some of the major specific suggestions/observations made are mentioned below:

(a) Increasing share of renewable power in total power generation in Punjab

- (i) Based on information given in ARR, it can be discerned that fossil fuel-based power's share in total power generation is about 55%-60% over the years. The coal cost is also shown as Rs.5-6/kg, which has been increasing in synchronization with international commodities prices. With blending of imported coal in domestic coal, the price effect is further aggravated and coal cost may grow up further in coming years. As such, the generation cost of coal-based power could rise abnormally leading to high cost of supply, which eventually translate into higher power tariff in the State. This would not only affect the competitiveness of the industry operating in the State of Punjab but would also lead to higher power subsidy burden on the State government. Further, higher fossil fuel-based power would also lead to higher Renew Power Obligation (RPO) and related Renew Energy Certificate (REC) cost adding to the cost of supply of power. Therefore, it is necessary that composition of the power generation in the State of Punjab must be changed in favour of renew power i.e. a mix of solar, hydro and wind power. Given the renew power rate of around Rs.2.75-3/unit at injection point, it would assure cheaper power supply

for next 15-25 years. It would also reduce the Discom' RPO and related paper REC procurement cost. Therefore, PSPCL must be asked to share the power generation trajectory for next 5 years and roadmap to increase the share of renew power to 50-60% of total power consumption and even more subject to technical constraints. It would result in surrender of contracted fossil fuel-based power and cost of such stranded power should also be considered in renew power cost. But after factoring the lower generation cost and reduction in RPO obligation, it looks like a rewarding proposition.

- (ii) While going for renew power, it is also stated that no preference shown for renew power within the state especially for PSPCL's renew power generation along with private players as the land cost economics and solar radiation dynamics favour neighbouring state Rajasthan and others; even after considering the interstate transmission losses as transmission charges for interstate power transfer are waived off by Central Government for solar and wind projects up to 2025.

(b) Announcing Green Tariff for consumers willing to consume Green Energy on demand basis

There is growing aspiration among various industries including manufacturing and services sector for green energy tariff based on demand. PSERC (Renewable Purchase Obligation and Compliance) Regulations 2022 has made provision for green energy tariff by considering the average purchase cost of renewable power, adding cross subsidy if any to it and also adding prudent cost of distribution system to arrive at a green energy tariff. In this regard:

- (i) It is suggested that green energy tariff be announced in the ensuing Tariff Order for FY 2023-24 itself to be issued by PSERC. All the relevant information for this purpose is already with the Hon'ble Commission.
- (ii) Such green tariff should not be less than the average tariff applicable to that class of consumers seeking green tariff and consumer has to pay a premium for the same. It is also clear from the formula given in PSERC Regulation mentioned above that there is scope for the Commission to dovetail the premium by factoring reasonable cross subsidy if any required; as cross subsidy from the consumer is already inbuilt in the average tariff fixed for that class of consumer in the Tariff order and also adding prudent distribution system charges.

- (iii) That with supply of renew power, the Discom will also save on RPO and related REC cost if same are not claimed by the consumer, which should be built into while fixing premium. The present market cost of the REC translates to about Rs. One / unit of electricity (Rs 1000/REC of 1000 Kwh).
- (iv) All consumers may not require the REC as having no Renew Power Obligation and no intent to have carbon trading benefits. Their requirement is only certificate from the Discom that power supplied to them is green power. Therefore, two premium amounts to be worked out –one for those who do not need REC and Second for those who need REC, being obligated entity or whatsoever purpose. The price of 2nd would be higher than the first one.
- (v) Based on average renewable power cost, a reserve premium of 10-20 paisa may be fixed and available renew power may be allocated to those seeking green power certificate without REC benefits on auction basis.

(c) Power Quality Regulations to control harmonics

PSERC has issued draft power quality regulations to control injection of harmonics of designated consumers and also shown its intent to merge the PIU category of consumers in general industrial category of consumers. In this regard, we have following submissions are made:

- (i) Tamil Nadu is the only other state, which has implemented power quality regulations. In the para “h” of the regulation, a table is given clearly showing that maximum penalty is fixed at 10% while PSERC has proposed maximum penalty as 15%. Being a new experiment in the State of Punjab for which sufficient knowledge is not available with the industry/vendors also, it is not appropriate to fix the penalty as highest in the country. Therefore, it is submitted that penalty be fixed even lower than fixed by Tamil Nadu for next 3-4 years, which can be increased to 10% at par with Tamil Nadu later on after gaining experience.
- (ii) It is quite likely that there could be few breakdowns of the Harmonic suppressors etc in a year resulting in unintentional violation of the limit. Therefore, it would be appropriate if some flexibility in controlling harmonics may be allowed in the event of breakdown for two to three occasions in a year basis.

(d) Rate of Return on equity should be based on 10 years government security bonds

- (i) Presently the rate of return on equity is about 15%, which is too high for a business where there is no serious nature of risk and annual revenue requirement is assured/

approved on cost plus basis. Further, the Forum of Regulators (FOR) has also suggested that long term government security bonds' return (of about 8%-10%) may be considered for return on equity.

- (ii) Further, the amount of equity should be strictly as per Appellate Tribunal order, which stated that equity without infusion of cash cannot be considered for grant of ROE and no amount of equity by conversion of UDAY Bonds into equity should be allowed to be part of the ARR.

3. Professor Ranjit Singh Ghuman stated as under:-

(a) Financial Health of PSPCL

- (i) PSPCL submission of True-up for FY 2021-22 and APR for FY 2022-23 and MYT petition for 2023-24 to 2025-26 does not depict a healthy picture of the utility's financial health.' The distribution network suffers from significant under-investment, characterized by a lower proportion of high voltage circuits, overloaded transformers and relatively poor quality of supply'. PSPCL has been under severe financial strain and the actual interest on working capital loans is higher.
- (ii) The increasing year-on-year revenue-gap substantiates the above assertion. The revenue gap is estimated to touch Rs.14109 crore in 2023-24 as compared to Rs.9961 crore in 2022-23. The net addition to loan over the previous years and heavy amount of interest on loan (Rs. 1268.91 crore during FY 2020-21, p.249 of Tariff Petition) and estimated amount of interest expenses for the years 2023-24 to 2025-26 is a serious concern for utility's financial health.

(b) Demand and supply side management

In view of the free supply of electricity to the AP consumers and of late to the domestic consumers and to other subsidized power commercial and industrial consumers, demand-side management of power is becoming a big challenge. In future, if things continue to be on the same track, meeting the demand for power would be even more serious challenge. The per capita power consumption has increased from 1150 kWh in 2016-17 to 1564 kWh in 2021. The utility is mainly left with the option of supply side management which, inter alia, is subject to an ever-increasing cost of generation and distribution. The per unit average cost of supply and average realization from sale of all power was

Rs 6.92 and Rs. 6.33 in FY 2021-22 and there is unmet revenue gap of Rs 0.62 per unit. By multiplying this with the total sales of 53520 million units with Rs. 0.62 per unit comes out to be Rs. 3318 crores. Revenue gap would increase to Rs. 4149 crore in FY 2023-24. The total revenue gap (including unmet gap of previous years and the carrying cost) would be Rs. 14109 crore in FY 2023-24. Given the limited financial capacity of the government (mainly because of unmindful spending on free and subsidized power along with other popular measures and under-potential mobilization of finances by the government), the revenue deficit of the utility is bound to increase further as government will not be in a position to fully compensate the PSPCL.

(c) Cost of power subsidy

- (i) The amount of free and subsidized power increased from Rs. 11278 Crore in FY 2021-22 to Rs.16515 Crore in FY 2022-23. It would increase to Rs. 18104 Crore in FY 2023-24, to Rs. 19090 Crore in FY 2024-25 and further to Rs. 20134 Crore in 2025-26. In the FY 2021-22, the power subsidy alone accounted for 14.43 per cent of the total revenue of the government. This necessitates rationalization of free and subsidized power otherwise it is bound to be unsustainable in future, both for the government and for the PSPCL. In the business-as-usual mode, the very sustainability of public sector power utility would be in danger, in that case we shall have to depend more and more on the private sector and it will be all the more difficult to give free and subsidized power across the board. Moreover, anything available for free is subject to injudicious use and consumption of power is no exception to this rule. Rationality demands that free power should be given only to the vulnerable consumers while all other consumers minimum user cost must be charged may be at differential rates from different set of consumers.
- (ii) In view of the foregoing facts and discussion, my foremost concern is how to keep the PSPCL in good financial health so that this public utility could be sustained. In its absence, we shall be subject to monopoly of private sector which may charge the monopoly prices. All the stakeholders would have to be proactive before it is too late.

4. Sh. Gaurav Maheshwari, Indian Energy Exchange stated as under:

- (i) The benefits of Real Time Market (RTM) and Green Term Ahead Market (GTAM) and were highlighted it was suggested that PSPCL can explore the same for

fulfilling its RPO and Energy storage market.

5. Director, Punjab Energy Development Agency (PEDA), NRSE stated as under:

- (i) It was apprised that PSPCL has recently entered into PPAs with some of the Bio-mass Co-Generation Units. It also explores the market continuously and procure green power from G-DAM whenever it is commercially viable.
- (ii) Further, about 6000 MW of RE power is in pipeline, through installation of solar pumps under Kusum Scheme, Solar roof-top on Government buildings and other consumer's premises. PEDA is also taking up with the Central Government, the issue of providing VGP so as to make generation from bio-mass competitive and feasible in the market.

6. Director, Agriculture, Department of Agriculture states as under:

It was suggested that: -

- i. Green energy needs to be promoted so as to reduce incidents of paddy burning in the fields by the farmers.
- ii. Efficient five-star rating motors be made compulsory for A.P. Pump set energy.
- iii. The water table in Punjab is going down, however, water is being mis-utilized due to free A.P. electric supply.
- iv. The transmission and distribution losses be further improved.

7. Sh. Baldev Singh Sran, CMD/PSPCL stated as under:

While welcoming the feedback and suggestions of the Committee members, CMD/PSPCL highlighted the unprecedented increase in demand during this year with over 9% increase in agriculture consumption.

- i. It was also highlighted that the paddy season spills over till 15th October due to the certain varieties of paddy and he suggested that the TOD Tariff should be fixed accordingly. Also the night demand during winters is on the rise so he suggested that the TOD rebate may be reduced to Rs.1 per kVAh instead of Rs. 1.25 per kAVh. It was also pointed out that along with the evening peak, the morning peak particularly during non-paddy season is equally predominant. The high market rates of power during this period

have resulted in increase in the power purchase cost of the utility. Chairperson, PSERC desired that PSPCL submit daily demand curves with effect from April, 2022 along with the exchange rates prevailing during this period.

- ii. Further, it was stated that PSPCL is constantly endeavouring to increase the share of RE power in its power procurement portfolio. Efforts are also made to procure power from GDAM, whenever it is found to be commercially viable. PSPCL has entered into various PPAs/PSAs with the CODs in FY 2023-24 and onwards. The addition of renewable power to the tune of 825 MW is at the commissioning stages and further 6420MW is in pipeline. Resultantly, PSPCL is expected to be surplus in RPO compliance on consolidated basis upto FY 2029-30.
- iii. PSPCL/CMD advocated that the cross-subsidy levels particularly that for AP Supply may be reduced and the agriculture subsidy may be calculated on average cost of supply. It was also suggested by him that PIU Tariff may be merged with general tariff by introducing penal provisions on the basis of actual harmonic injection by the consumers.

The Chairperson thanked all the members for their valuable comments and suggestions.

The meeting ended with a vote of thanks to the chair.