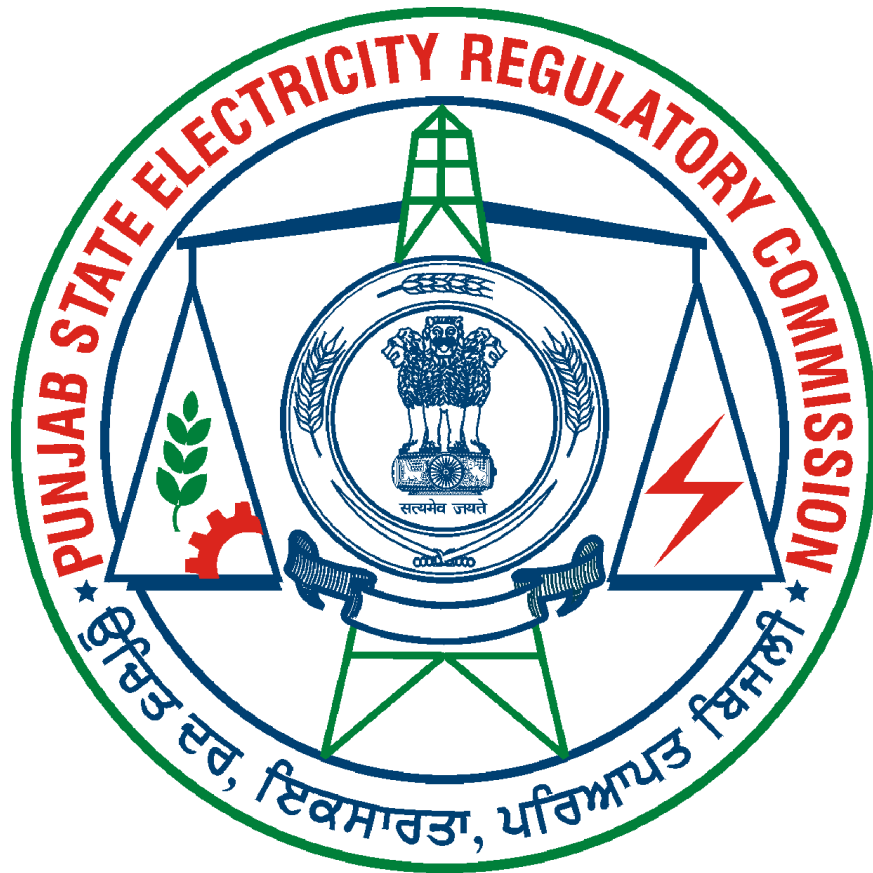


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PUNJAB STATE ELECTRICITY REGULATORY COMMISSION



PSTCL

TARIFF ORDER FOR FY 2024-25

**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. 63 OF 2023 FILED BY PUNJAB STATE TRANSMISSION CORPORATION LIMITED FOR TRUE UP OF CAPITAL EXPENDITURE FOR 2nd MYT CONTROL PERIOD (FROM FY 2020-21 TO FY 2022-23), TRUE UP OF FY 2022-23 AND ARR & DETERMINATION OF TARIFF FOR FY 2024-25 FOR ITS TRANSMISSION BUSINESS AND SLDC BUSINESS.

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

Date of Order: 14th June, 2024

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 Capital Expenditure of 2nd MYT Control Period (from FY 2020-21 to FY 2022-23), True up of ARR for FY 2022-23, and approval of revised forecast of ARR and Determination of Tariff for FY 2024-25 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, Amritsar, Bathinda 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 2023-24. 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 for the 2nd Control Period. 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 for the 3rd MYT Control Period. These regulations have been followed while passing the present Tariff Order, for the relevant years.

1.2 True Up of Capital Expenditure for 2nd Control Period, True up of FY 2022-23, Revised ARR for FY 2024-25 & Determination of Tariff for FY 2024-25.

The Petition filed by PSTCL was received on 29.11.2023. PSTCL has filed the present Petition for True Up of Capital Expenditure for the 2nd Control Period (from FY 2020-21 to FY 2022-23), True up of ARR for FY 2022-23, Revised ARR forecast for FY 2024-25 and determination of tariff for FY 2024-25 for its Transmission Business and SLDC Business.

The petitioner has prayed:

- a) To admit the Petition seeking approval of True up of Capital Expenditure for 2nd Control Period i.e. from FY 2020-21 to FY 2022-23 and True-up of ARR for FY 2022-23 in accordance with PSERC MYT Regulations, 2019 as amended from time to time; for Transmission Business and SLDC Business.
- b) To approve the Revised ARR forecast for FY 2024-25 and determination of proposed Tariff for FY 2024-25 for Transmission Business and SLDC in accordance with PSERC MYT Regulations 2022, as amended from time to time;
- c) To approve the Impact on ARR of FY 2020-21 & 2021-22 on account of True up of CAPEX for 2nd Control Period and Revenue Gap/(Surplus) arising on account of True-up of FY 2022-23 along with carrying cost through Tariff in FY 2024-25, as worked out in this Petition;
- d) 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;
- e) To allow additions/alterations/modifications/changes to the Petition at a future date;

- f) To allow any other relief, order or direction, which the Commission deems fit to be issued;
- g) To condone any error/omission and to give an opportunity to rectify the same;

The petition was admitted vide Order dated 07.12.2023. The deficiencies observed in the petition by the Commission were conveyed to PSTCL vide Orders dated 07.12.2023, 02.01.2024, 05.02.2024, 13.02.2024. The reply to the deficiencies was furnished by PSTCL vide memo No. 877 dated 15.12.2023, memo no. 11 dated 08.01.2024, memo No. 30 dated 15.01.2024, memo no. 113 dated 09.02.2024, memo no. 118 dated 13.02.2024. Various meetings were taken with PSTCL on the data submitted in the ARR. The relevant correspondence between the Commission and PSTCL was placed on the website of the Commission.

1.3 Objections & Public Hearing:

A public notice was published by PSTCL in The Times of India (English), The Tribune (English), Punjabi Tribune (Punjabi), Dainik Jagran (Hindi) & Rozana Spokesman (Punjabi) on 16.12.2023 inviting objections from the general public and stake holders in the said petition filed by PSTCL. PSTCL submitted that 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 16.12.2023, 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, Amritsar, Bathinda & Chandigarh, as per details hereunder:-

Venue	Date & time of public hearing	Category of consumers heard
LUDHIANA Multi Purpose Hall, Power Colony, PSPCL, Opp. PAU Ferozepur Road, Ludhiana	January 04, 2024 (Monday) 11:30 AM onwards	All consumers/organizations of the area

Venue	Date & time of public hearing	Category of consumers heard
AMRITSAR VIP Guest House, PSPCL, Batala Road, Verka at Amritsar.	January 05, 2024 (Friday) 11:30 AM onwards	All consumers/organizations of the area including consumers/organizations of Jalandhar area
BATHINDA Conference Room, Guest House, Thermal Colony, PSPCL, Bathinda.	January 08, 2024 (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 09, 2024 (Thursday) 12.00 Noon onwards	All consumers/ organizations
	01.00 PM onwards	Officers'/ Staff Associations of PSPCL and PSTCL

A public notice to this effect was published in various newspapers on 28.12.2023 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 04.01.2024 to 09.01.2024 at Ludhiana, Amritsar, Bathinda & Chandigarh. The views of PSTCL on the objections/comments received from the public and other stakeholders were heard by the Commission on 14.03.2024.
- 1.5** The Government of Punjab was approached by the Commission vide DO letter No. 1013 dated 29.12.2023 and DO No. 1204 dated 07.03.2024 seeking its views in Petition No. 63 of 2023 filed by Punjab State Transmission Corporation Limited. No reply has been received from the Govt. in this regard.
- 1.6** The Commission received 05 written objections. 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	4
	Total	5

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 25.01.2024 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 of Capital Expenditure for 2nd MYT Control Period (FY 2020-21 to FY 2022-23)

2.1 Background

2.1.1 The Commission approved PSTCL's Capital Investment Plan for 2nd MYT Control Period (FY 2020-21 to FY 2022-23) in its Order dated 03.12.2019 in Petition No. 19 of 2019 as under:

Table 2.1: Capital Investment Plan approved by the Commission for 2nd Control Period vide Order dated 03.12.2019. (Rs. Crore)

Sr. No	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	Total
1	Transmission Business	612.78	618.35	550.20	1781.33
2	SLDC Business	25.22	17.79	13.42	56.43
3	TOTAL	638.00	636.14	563.62	1837.76

2.1.2 In the Tariff Order for FY 2020-21, PSTCL revised the projected plan of spillover schemes from Rs. 535.73 Crore to Rs. 595.57 Crore. Accordingly, the Commission worked out the projected CIP for 2nd MYT control period in the Tariff Order for FY 2020-21 as under:-

Table 2.2: Capital Investment approved by the Commission for 2nd Control Period vide Order dated 01.06.2020 in Tariff Order for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	Total
1	Transmission Business	661.97	644.91	534.30	1841.18
2	SLDC Business	25.22	17.79	13.42	56.43
3	TOTAL	687.19	662.70	547.72	1897.61

2.1.3 However, keeping in view the trend of PSTCL's CAPEX during the 1st MYT Control Period, and as discussed with PSTCL during the meeting dated 24.02.2020, the Commission capped the Capital Investment of PSTCL to **Rs. 400 Crore during each year for the 2nd MYT control period i.e. from FY 2020-21 to FY 2022-23** with liberty to PSTCL to prioritize the approved schemes within the capped limit in the Tariff Order for FY 2020-21.

2.1.4 In the Tariff Order for FY 2021-22, the Commission provisionally approved the Capital Expenditure of Rs. 200 Crore for FY 2020-21 considering the situation due to Covid-19 and provisionally retained the Capital Expenditure of Rs. 400 Crore for FY 2021-22 as approved in the Tariff Order for FY 2020-21.

2.1.5 In the Tariff Order for FY 2022-23, the Commission had provisionally considered the capital expenditure of Rs. 449.14 Crore for FY 2021-22 and Rs. 628.16 Crore for FY 2022-23.

2.1.6 In the Tariff Order for FY 2023-24, the Commission provisionally considered the capital expenditure of Rs. 347.02 Crore for FY 2021-22 and Rs. 549.23 Crore for FY 2022-23.

2.2 True-up of Capital Expenditure

PSTCL's Submission:

2.2.1 PSTCL has now submitted the Capital Expenditure incurred during 2nd MYT Control Period (FY 2020-21 to FY 2022-23) for true-up by the Commission vide format T-14 & T-15 in Petition No. 63 of 2023 as under:-

Table 2.3: Capital Expenditure submitted by PSTCL in the petition.

(Rs. Crore)					
Sr. No	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	Total
1.	Capital Expenditure	122.44	278.27	352.31	753.02

2.2.2 PSTCL vide email dated 28.02.2024 submitted the details of the works amounting to Rs. 753.02 Crore and PSDF (Own Funding) works amounting to Rs. 28.34 Crore. PSTCL has further submitted that the total claim of Capital Expenditure is Rs. 781.36 Crore including Other Works and PSDF Schemes but excluding claim for directly added assets as under:-

Table 2.4: Capital expenditure submitted by PSTCL for true up.

(Rs. Crore)					
Sr. No.	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	Total
1.	Capital Expenditure	122.44	278.27	352.31	753.02
2.	PSDF Schemes (own funding)	1.97	9.06	17.31	28.34
3.	Total	124.41	287.33	369.62	781.36

Commission's Analysis:

2.2.3 In format T14 and T15 of the petition, PSTCL had not submitted the description of works carried out against each scheme. Further, from perusal of works, it was gathered that the list includes the works which are not even approved by the Commission during 2nd MYT Control period. Further, in some columns expenditure was shown without mentioning any name of the work. PSTCL was directed to submit the scheme wise detailed list of approved works citing capital investment approved vis-à-vis actual capital expenditure against each scheme/work vide Order dated 07.12.2023.

2.2.4 PSTCL vide letter dated 15.01.2024 submitted the actual capital expenditure viz-a-viz CIP approved by the Commission. The Commission observed that scheme No. 52, 63 to 70 of the new works have not been approved by the Commission. Further scheme Nos. 47 to 172 of spill over works were the schemes approved by the Commission for the 1st MYT control period (FY 2017-18 to 2019-20).

2.2.5 To the above query of the Commission, PSTCL submitted its reply vide letter dated 15.02.2024 as under:-

Table 2.5: Scheme No. 52, 63 to 70 of new works not approved by the Commission

Sr. No.	Reason/Justification/Status	Amount
52	Minor amount of Work (Work is done with the approval of BOD)	0.21
63	Works is related with MYT (1st) Sr. no. 137	0.38
64	Minor amount of Work (Work is done with the approval of BOD)	0.13
65	No Expenditure	0
66	Contributory Works	1.00
67	No Expenditure	0
68	Survey Works as work is already exist in 3rd MYT (Preponement of work approved in 3 rd MYT)	0.04
69	Works is related with MYT (2nd) Table 15 Sr. no. 1	0.90
70	No Expenditure	0

- 2.2.6** PSTCL further stated that Scheme Nos. 47 to 172 of spill over works are the schemes shown as the schemes of the 1st MYT control period (FY 2017-18 to 2019-20). These Works were approved in the 1st CIP Plan by the Commission. Works were not reported in the 2nd MYT Plan as spill over works due to the reason that these works were likely to be completed by 31.03.2020. However, due to COVID-19 and various other reasons, these works were not completed by 31.03.2020 & were carried forward in the 2nd MYT and are now being reported to the Commission in True up of the CAPEX of the 2nd MYT Control Period. These works have been completed in the 2nd MYT and are not being carried forward to the 3rd MYT.
- 2.2.7** In view of the above, the Commission disallows only the expenditure of Rs. 1.39 Crore against the schemes not approved by the Commission.
- 2.2.8** The Commission allows an expenditure of Rs. 77.07 Crore against the schemes of the 1st MYT control period which had been spilled over to the 2nd MYT period due to COVID-19 as submitted by PSTCL. Also, PSTCL's Capital Expenditure during the 2nd MYT control period (FY 2020-21 to 2022-23 is considerably lesser than that approved by the Commission.

Accordingly, the Commission approves the capital expenditure of Rs. 779.97 Crore for the 2nd MYT control period (FY 2020-21 to FY 2021-22) as under: -

Table 2.6: Capital expenditure approved by the Commission for true up.**(Rs. Crore)**

Sr. No.	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	Total
1.	Capital Expenditure	124.41	287.33	369.62	781.36
2.	Less:- Capital Expenditure against schemes not approved by the Commission	0.03	0.34	1.02	1.39
3.	Total CAPEX (Sr. No. 1-2)	124.38	286.99	368.60	779.97

2.3 Funding of Capital Expenditure

Commission's Analysis:

The Commission, in its Previous Tariff Orders, approved the funding on provisional basis subject to True up of Capital Expenditure for the 2nd Control Period. While truing up the Commission has considered the funding of Capital Expenditure of Spill over Schemes and Capitalization of New Schemes through Loan and Equity in the ratio of 70:30.

The details of Capital Expenditure and Capitalisation as approved earlier and in this tariff order for Transmission and SLDC Business for the 2nd MYT Control Period are as under:

Table 2.7: Capital expenditure and Capitalisation as approved by the Commission in earlier orders and now in this order for 2nd MYT period (Rs. Crores)

Sr. No	Particulars	FY 2020-21			FY 2021-22			FY 2022-23		
		Approved in tariff order 2022-23	Approved in this order	Difference	Approved in tariff order 2023-24	Approved in this order	Difference	Approved in tariff order 2023-24	Approved in this order	Difference
	Transmission									
1	Opening CWIP	331.02	279.30		302.64	303.95		247.94	248.80	
2	Capital Expenditure	220.99	222.29	1.30	340.92	343.23	2.31	527.64	461.42	-66.22
	Contributory works	89.80	89.80	0.00	31.63	31.63	0.00	0.00	27.02	27.02
	PSDF scheme	6.48	6.48	0.00	2.45	2.45	0.00	0.00	54.11	54.11
	Spill over Schemes	98.69	94.26	-4.43	135.72	134.45	-1.27	190.10	107.53	-82.57
	PSDF(own funding)spill over		1.97	1.97		6.08	6.08		1.15	1.15
	New Schemes	22.06	25.82	3.76	145.54	137.24	-8.30	337.54	243.04	-94.50
	PSDF(own funding) new	0.00	0.00	0.00	0.00	2.98	2.98	0.00	15.62	15.62
	Assets directly purchased	3.96	3.96	0.00	28.40	28.40	0.00	0.00	12.95	12.95
	Less: R&M	0.00	0.00	0.00	-0.03	0.00	0.03	0.00	0.00	0.00
	Less: Works not approved	0.00	0.00	0.00	2.85	0.00	-2.85	0.00	0.00	0.00
3	Capitalisation	197.65	197.64	-0.01	395.33	398.38	3.05	318.07	259.53	-58.54
	contributory works	0.98	0.98	0.00	149.71	149.71	0.00	0.00	31.82	31.82
	PSDF scheme	6.04	6.04	0.00	6.90	6.90	0.00	0.00	3.20	3.20
	Spill over Schemes	176.23	168.87	-7.36	120.98	129.08	8.10	58.81	62.73	3.92
	PSDF(own funding)spill over	0.00	0.67	0.67	0.00	7.36	7.36	0.00	0.17	0.17

Sr. No	Particulars	FY 2020-21			FY 2021-22			FY 2022-23		
		Approved in tariff order 2022-23	Approved in this order	Difference	Approved in tariff order 2023-24	Approved in this order	Difference	Approved in tariff order 2023-24	Approved in this order	Difference
	New Schemes	10.44	17.12	6.68	89.34	76.92	-12.42	259.26	148.44	-110.82
	PSDF(own funding) new	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.22	0.22
	Assets directly purchased	3.96	3.96	0.00	28.40	28.40	0.00	0.00	12.95	12.95
	Less :Capitalisation written off	0.00	0.00	0.00	0.29	0.00	-0.29	0.00	0.00	0.00
4	Closing CWIP	354.36	303.95		247.94	248.80		457.51	450.69	
	SLDC									
1	Opening CWIP	5.31	5.31		1.44	2.82		7.24	8.77	
2	Capital Expenditure	0.99	2.37	1.38	6.10	6.25	0.15	21.59	1.27	-20.32
	Spill over Schemes	0.95	2.33	1.38	0.66	0.81	0.15	1.38	0.38	-1.00
	New Schemes	0.00	0.00	0.00	5.44	5.44	0.00	20.21	0.34	-19.87
	Assets directly purchased	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	PSDF(own funding) new	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.54
3	Capitalisation	4.86	4.86	0.00	0.30	0.30	0.00	8.37	4.89	-3.48
	Spill over Schemes	4.82	4.82	0.00	0.08	0.08	0.00	1.83	0.00	-1.83
	New Schemes	0.00	0.00	0.00	0.22	0.22	0.00	6.54	4.88	-1.66
	Assets directly purchased	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.01	0.01
4	Closing CWIP	1.44	2.82		7.24	8.77		20.46	5.15	

(*Opening CWIP for FY 2020-21 has been corrected as stated in tariff order for FY 2023-24)

Accordingly, the funding requirement is as under:

Table 2.8: Funding for 2nd MYT Control Period as approved by the Commission (Rs. Crore)

Sr. No	Particulars	FY 2020-21			FY 2021-22			FY 2022-23		
		Transmission	SL DC	PSTCL	Transmission	SL DC	PSTCL	Transmission	SL DC	PSTCL
1	Capex of spill over schemes	94.26	2.33	96.59	134.45	0.81	135.26	107.53	0.38	107.91
2	*Add: PSDF Schemes (Own Funding)	1.97	0.00	1.97	6.08	0.00	6.08	1.15	0.00	1.15
3	Total Funding Required	96.23	2.33	98.56	140.53	0.81	141.34	108.68	0.38	109.06
4	Funding through Equity	14.34	-	14.34	40.58	0.00	40.58	32.37	0.00	32.37
5	Funding through Loan	81.89	2.33	84.22	99.95	0.81	100.76	76.31	0.38	76.69

Sr. No	Particulars	FY 2020-21			FY 2021-22			FY 2022-23		
		Transmission	SL DC	PSTCL	Transmission	SL DC	PSTCL	Transmission	SL DC	PSTCL
6	Capitalization of New Works	17.12	-	17.12	76.92	0.22	77.14	148.44	4.88	153.32
7	Add: Directly Added Assets	3.96	0.04	4.01	28.40	0.00	28.40	12.95	0.01	12.96
8	*Add: PSDF Schemes (Own Funding)	0.00	0.00	0.00	0.01	0.00	0.01	0.22	0.00	0.22
9	Total Funding Required	21.08	0.04	21.12	105.33	0.22	105.55	161.61	4.89	166.50
10	Funding through Equity	6.32	-	6.32	31.66	0.00	31.66	49.88	0.00	49.88
11	Funding through Loan	14.76	0.04	14.80	73.67	0.22	73.89	111.73	4.89	116.62
12	Total Funding Required	117.31	2.37	119.68	245.86	1.03	246.89	270.29	5.27	275.56
13	Funding through Equity	20.66	-	20.66	72.24	0.00	72.24	82.26	0.00	82.26
14	Funding through Loan	96.65	2.37	99.02	173.62	1.03	174.65	188.02	5.27	193.29

“*” 100% Funding has been taken for PSDF scheme (own funding).

2.4 Impact of True-up of Capital Expenditure

Based on the True-Up of Capital Expenditure and Capitalization as approved in table 2.7, the revised GFA for the purpose of determining Repair & Maintenance and Depreciation along with revised Long Term Loans for FY 2020-21 and FY 2021-22 is as under:

Table 2.9: Revised Gross fixed Assets (GFA) for the determination of R&M expenses for FY 2020-21 (Rs. Crore)

Sr. No	Particulars	Approved in TU of FY 2020-21 (TO FY 2022-23)			Revised for TU of FY 2020-21		
		Transmission	SLDC	Total	Transmission	SLDC	Total
1	Opening GFA for R&M	10104.44	23.77	10128.21	10104.44	23.77	10128.21
2	Addition during the year	197.65	4.86	202.51	197.64	4.86	202.50
3	Less: Assets not in use	14.49	0.00	14.49	14.49	0.00	14.49
4	Closing Balance	10287.60	28.63	10316.23	10287.59	28.63	10316.22

Table 2.10: Revised Gross fixed Assets (GFA) for the determination of R&M expenses for FY 2021-22 (Rs. Crore)

Sr. No	Particulars	Approved in TU of FY 2021-22 (TO FY 2023-24)			Revised for TU of FY 2021-22		
		Transmission	SLDC	Total	Transmission	SLDC	Total
1	Opening GFA for R&M	10287.60	28.63	10316.23	10287.59	28.63	10316.22
2	Addition during the year	395.33	0.30	395.63	398.38	0.30	398.68
3	Less: Assets not in use	30.81	0.04	30.85	30.81	0.04	30.85
4	Closing Balance	10652.12	28.89	10681.01	10655.16	28.89	10684.05

Table 2.11: Revised Gross fixed Assets (GFA) for determination for Depreciation for FY 2020-21 (Rs. Crore)

Sr No	Particulars	Approved in TU of FY 2020-21 (TO FY 2022-23)			Revised for TU of FY 2020-21		
		Transmission	SLDC	Total	Transmission	SLDC	Total
	Spill Over schemes						
1	Opening GFA (Net of Land & land rights)	7089.11	19.02	7108.13	7089.11	19.02	7108.13
2	Addition during the year	183.25	4.82	188.07	169.54	4.82	174.36
3	Less: Assets not in use	14.49	0.00	14.49	14.49	0.00	14.49
4	Less: Contributory & PSDF schemes	7.02	0.00	7.02	0.00	0.00	0.00
5	Closing Balance	7250.85	23.84	7274.69	7244.66	23.84	7268.00
6	Average Balance	7169.98	21.43	7191.41	7166.66	21.43	7188.07
7	Rate of Depreciation	4.189%	5.879%		4.189%	5.879%	
8	Depreciation	299.64	1.26	300.90	299.50	1.26	300.76
	New schemes						
1	Opening GFA (Net of Land & land rights)	0.00	0.00	0.00	0.00	0.00	0.00
2	Addition during the year	14.40	0.04	14.44	21.08	0.04	21.12
3	Less: Assets not in use	0.00	0.00	0.00	0.00	0.00	0.00
4	Less: Contributory & PSDF schemes	0.00	0.00	0.00	0.00	0.00	0.00
5	Closing Balance	14.40	0.04	14.44	21.08	0.04	21.12
6	Average Balance	7.20	0.02	7.22	10.54	0.02	10.56
7	Rate of Depreciation	4.18%	5.88%		4.18%	5.88%	
8	Depreciation	0.30	0.00	0.30	0.44	0.00	0.44
	Total Depreciation	299.94	1.26	301.20	299.94	1.26	301.20

Table 2.12: Revised Gross fixed Assets(GFA) for determination of Depreciation for FY 2021-22 (Rs. Crore)

Sr No	Particulars	Approved in TU of FY 2021-22 (TO FY 2023-24)			Revised for TU of FY 2021-22		
		Transmission	SLDC	Total	Transmission	SLDC	Total
	Spill Over schemes						
1	Opening GFA (Net of Land & land rights)	7250.85	23.84	7274.69	7244.16	23.84	7268.00
2	Addition during the year	120.98	0.08	121.06	136.44	0.08	136.52
3	Less: Assets not in use	30.81	0.04	30.85	30.81	0.04	30.85
4	Less: Contributory & PSDF schemes	0.00	0.00	0.00	0.00	0.00	0.00
5	Closing Balance	7341.02	23.88	7364.90	7349.79	23.88	7373.67
6	Average Balance	7295.94	23.86	7319.80	7296.97	23.86	7320.67
7	Rate of Depreciation	4.10%	7.20%		4.10%	7.20%	
8	Depreciation@	299.37	1.72	301.09	299.41	1.72	301.13
	New schemes						
1	Opening GFA (Net of Land & land rights)	14.40	0.04	14.44	21.08	0.04	21.12
2	Addition during the year	117.74	0.22	117.96	105.33	0.22	105.55
3	Less: Assets not in use	0.71	0.00	0.71	0.71	0.00	0.71
4	Less: Contributory &	0.00	0.00	0.00	0.00	0.00	0.00

Sr No	Particulars	Approved in TU of FY 2021-22 (TO FY 2023-24)			Revised for TU of FY 2021-22		
		Transmission	SLDC	Total	Transmission	SLDC	Total
	Spill Over schemes						
	PSDF schemes						
5	Closing Balance	131.43	0.26	131.69	125.70	0.26	125.96
6	Average Balance	72.92	0.15	73.07	73.39	0.15	73.54
7	Rate of Depreciation	4.10%	7.20%		4.10%	7.20%	
8	Depreciation	2.99	0.01	3.00	3.01	0.01	3.02
	Total Depreciation	302.37	1.73	304.09	302.42	1.73	304.15

Table No 2.13: Revised Long Term Loans for FY 2020-21

(Rs. Crore)

Sr No	Particulars	Approved in TU of FY 2020-21 (TO FY 2022-23)			Revised for TU of FY 2020-21		
		Transmission	SLDC	Total	Transmission	SLDC	Total
	Spill Over schemes						
1	Opening balance of loans	3511.42	12.28	3523.70	3511.42	12.28	3523.7
2	Addition during the year	82.35	0.95	83.30	81.89	2.33	84.22
3	Less: Repayments of loan	299.63	1.26	300.89	299.50	1.26	300.76
4	Closing Balance	3294.14	11.97	3306.11	3293.80	13.35	3307.15
5	Average Balance	3402.78	12.13	3414.90	3402.61	12.81	3415.43
6	Rate of interest	10.180%	10.44%		10.180%	10.44%	
7	Interest	346.42	1.27	347.68	346.40	1.34	347.74
	New schemes						
1	Opening balance of loans	0.00	0.00	0.00	0.00	0.00	0.00
2	Addition during the year	10.08	0.04	10.12	14.76	0.04	14.80
3	Less: Repayments of loan	0.30	0.00	0.30	0.44	0.00	0.44
4	Closing Balance	9.78	0.04	9.82	14.32	0.04	14.36
5	Average Balance	4.89	0.02	4.91	7.16	0.02	7.18
6	Rate of interest	10.18%	10.44%		10.18%	10.44%	
7	Interest	0.50	0.002	0.50	0.73	0.002	0.73
8	Interest on GP fund	4.36	0.00	4.36	4.36	0.00	4.36
9	Guarantee Charges	3.30	0.00	3.30	3.30	0.00	3.30
10	Finance Charges	0.03	0.01	0.04	0.03	0.01	0.04
11	Less: Interest capitalised	12.06	0.00	12.06	12.06	0.00	12.06
12	Total Intt. & finance charges	342.55	1.28	343.83	342.76	1.35	344.11

Table 2.14: Revised Long Term Loans for FY 2021-22

(Rs. Crore)

Sr No	Particulars	Approved in TU of FY 2021-22 (TO FY 2023-24)			Revised for TU of FY 2021-22		
		Transmission	SLDC	Total	Transmission	SLDC	Total
	Spill Over schemes						
1	Opening balance of loans	3294.14	11.97	3306.11	3293.80	13.35	3307.15
2	Addition during the year	94.81	0.66	95.47	99.95	0.81	100.76
3	Less: Repayments of loan	299.37	1.72	301.09	299.41	1.72	301.13
4	Closing Balance	3089.58	10.91	3100.49	3094.34	12.44	3106.78
5	Average Balance	3191.86	11.44	3203.30	3194.07	12.89	3206.97

Sr No	Particulars	Approved in TU of FY 2021-22 (TO FY 2023-24)			Revised for TU of FY 2021-22		
		Transmission	SLDC	Total	Transmission	SLDC	Total
	Spill Over schemes						
6	Rate of interest	9.12%	9.11%		9.12%	9.11%	
7	Interest	291.10	1.04	292.14	291.30	1.17	292.47
	New schemes						
1	Opening balance of loans	9.78	0.04	9.82	14.32	0.04	14.35
2	Addition during the year	82.35	0.22	82.57	73.67	0.22	73.89
3	Less: Repayments of loan	2.99	0.01	3.00	3.01	0.01	3.02
4	Closing Balance	89.14	0.25	89.39	84.97	0.25	85.22
5	Average Balance	49.46	0.14	49.60	49.64	0.14	49.79
6	Rate of interest	9.12%	9.11%		9.12%	9.11%	
7	Interest	4.51	0.01	4.52	4.53	0.01	4.54
8	Interest on GP fund	2.40	0.00	2.40	2.40	0.00	2.40
9	Finance Charges	1.84	0.00	1.84	1.84	0.00	1.84
10	Less: Interest capitalised	5.55	0.00	5.55	5.55	0.00	5.55
11	Total Intt. & finance charges	294.30	1.05	295.35	294.51	1.19	295.70

Table 2.15: Revised balances of Equity for FY 2020-21

(Rs. Crore)

Sr No	Particulars	Approved in TU of FY 2020-21 (TO FY 2022-23)			Revised for TU of FY 2020-21		
		Transmission	SLDC	Total	Transmission	SLDC	Total
1	Opening balance of Equity	705.70	0.00	705.70	705.70	0.00	705.70
2	Addition during the year	20.66	0.00	20.66	20.66	0.00	20.66
3	Closing Balance	726.36	0.00	726.36	726.36	0.00	726.36
4	Average Equity	716.03	0.00	716.03	716.03	0.00	716.03
5	Return on Equity@15.50%	110.98	0.00	110.98	110.98	0.00	110.98

Table 2.16: Revised balances of Equity for FY 2021-22

(Rs. Crore)

Sr No	Particulars	Approved in TU of FY 2021-22 (TO FY 2023-24)			Revised for TU of FY 2021-22		
		Transmission	SLDC	Total	Transmission	SLDC	Total
1	Opening balance of Equity	726.36	0.00	726.36	726.364	0.00	726.364
2	Addition during the year	76.30	0.00	76.30	72.24	0.00	72.24
3	Closing Balance	802.66	0.00	802.66	798.60	0.00	798.60
4	Average Equity	764.51	0.00	764.51	762.48	0.00	762.48
5	Return on Equity @15.50%	118.50	0.00	118.50	118.19	0.00	118.19

The Commission has calculated the Impact for FY 2020-21 and FY 2021-22 on the ARR components. The details of the Impact are as under:-

Table 2.17: Impact of True-Up of Capital Expenditure for FY 2020-21 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Approved earlier in TO FY 2022-23			Actuals (allowed now)			Deviation		
		Transmission	SLDC	Total	Transmission	SLDC	Total	Transmission	SLDC	Total
1 a	Total Employee Cost	520.49	9.21	529.70	520.49	9.21	529.70	0.00	0.00	0.00
b	R&M Expenses	31.31	0.62	31.93	31.31	0.62	31.93	0.00	0.00	0.00
c	A&G Expenses	27.07	0.80	27.87	27.07	0.80	27.87	0.00	0.00	0.00
1.	O&M Expenses	578.87	10.63	589.50	578.87	10.63	589.50	0.00	0.00	0.00
2.	Interest Charges	342.55	1.28	343.83	342.76	1.35	344.11	0.21	0.07	0.28
3.	Return on Equity	110.98	0.00	110.98	110.98	0.00	110.98	0.00	0.00	0.00
4.	ULDC Charges	0.00	9.80	9.80	0.00	9.80	9.80	0.00	0.00	0.00
5.	Depreciation	299.93	1.26	301.19	299.94	1.26	301.20	0.01	0.00	0.01
6.	Interest on Working Capital	34.56	0.62	35.18	34.56	0.62	35.18	0.00	0.00	0.00
7.	Other Expenses	11.22	0.02	11.24	11.22	0.02	11.24	0.00	0.00	0.00
8.	Annual Revenue Requirement (ARR)	1378.11	23.61	1401.72	1378.34	23.68	1402.02	0.22	0.07	0.29
9.	Less: Non-Tariff Income	35.58	0.35	35.93	35.58	0.35	35.93	0.00	0.00	0.00
10.	Less: Revenue from Open Access	4.00	0.28	4.28	4.00	0.28	4.28	0.00	0.00	0.00
11.	Net Aggregate Revenue Requirement	1338.53	22.98	1361.51	1338.76	23.05	1361.81	0.22	0.07	0.29
12.	Add: Incentive due to Availability	9.80	0.00	9.80	9.80	0.00	9.80	0.00	0.00	0.00
13.	Add: Sharing of gain on account of O&M expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	Less: Loss sharing on account of under-achievement of the Transmission Loss	2.78	0.00	2.78	2.78	0.00	2.78	0.00	0.00	0.00
15.	ARR	1345.55	22.98	1368.53	1345.78	23.05	1368.83	0.22	0.07	0.29
16.	Less: Past revenue gap/surplus	1.01	0.00	1.01	1.01	0.00	1.01	0.00	0.00	0.00
17.	Net Aggregate Revenue Requirement	1344.54	22.98	1367.52	1344.77	23.05	1367.82	0.22	0.07	0.29
18.	Carrying Cost (@9.65% for transmission and SLDC for six months) for FY 2020-21							0.011	0.003	0.014
19.	Carrying Cost (@7.99% for transmission and SLDC for one year) for FY 2021-22							0.018	0.006	0.024
20.	Carrying Cost (@8.01% for transmission and SLDC for one year) for FY 2022-23							0.018	0.006	0.026
21.	Carrying Cost (@8.01% for transmission and SLDC for one year) for FY 2023-24							0.018	0.006	0.029
22.	Carrying Cost (@8.01% for transmission and SLDC for six months) for FY 2024-25							0.009	0.003	0.030
23.	Total Carrying cost							0.072	0.023	0.099
24.	Total impact							0.292	0.093	0.385

Table 2.18: Impact of True-Up of Capital Expenditure for FY 2021-22 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Approved earlier			Actuals (allowed now)			Deviation		
		Transmission	SLDC	Total	Transmission	SLDC	Total	Transmission	SLDC	Total
1 a	Total Employee Cost	584.42	9.13	593.55	584.42	9.13	593.55	0.00	0.00	0.00
1b	R&M Expenses	35.87	0.75	36.62	35.87	0.75	36.62	0.00	0.00	0.00
1c	A&G Expenses	29.58	0.88	30.46	29.58	0.88	30.46	0.00	0.00	0.00
1.	O&M Expenses	649.87	10.76	660.63	649.87	10.76	660.63	0.00	0.00	0.00
2.	Interest Charges	294.30	1.05	295.35	294.52	1.19	295.71	0.22	0.14	0.36
3.	Return of equity	118.50	0.00	118.50	118.19	0.00	118.19	-0.31	0.00	-0.31
4.	ULDC Charges	0.00	8.88	8.88	0.00	8.88	8.88	0.00	0.00	0.00
5.	Depreciation	302.36	1.73	304.09	302.42	1.73	304.15	0.06	0.00	0.06
6.	Interest on Working Capital	30.19	0.50	30.69	30.19	0.50	30.69	0.00	0.00	0.00
7.	Other Debits	1.02	0.00	1.02	1.02	0.00	1.02	0.00	0.00	0.00
8.	Annual Revenue Requirement (ARR)	1396.24	22.92	1419.16	1396.21	23.06	1419.27	-0.03	0.14	0.11
9.	Less: Non-Tariff Income	35.57	0.23	35.80	35.57	0.23	35.80	0.00	0.00	0.00
10.	Less: Revenue from Open Access	3.66	0.09	3.75	3.66	0.09	3.75	0.00	0.00	0.00
11.	Net Aggregate Revenue Requirement	1357.01	22.60	1379.61	1356.98	22.74	1379.72	-0.03	0.14	0.11
12.	Add: Incentive due to Availability	10.06	0.00	10.06	10.06	0.00	10.06	0.00	0.00	0.00
13.	Add: Sharing of gain on account of O&M expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	add incentive of over achievement of TS loss target	16.39	0.00	16.39	16.39	0.00	16.39	0.00	0.00	0.00
15.	ARR	1383.46	22.60	1406.06	1383.43	22.74	1406.17	-0.03	0.14	0.11
16.	add carrying cost pre year	0.75	0.00	0.75	0.75	0.00	0.75	0.00	0.00	0.00
17.	Net Aggregate Revenue Requirement	1384.21	22.60	1406.81	1384.18	22.74	1406.92	-0.03	0.14	0.11
18.	Carrying Cost (@7.99% for transmission and SLDC for six months) for FY 2021-22							-0.001	0.006	0.005
19.	Carrying Cost (@8.01% for transmission and SLDC for one year) for FY 2022-23							-0.002	0.011	0.009
20.	Carrying Cost (@8.01% for transmission and SLDC for one year) for FY 2023-24							-0.002	0.011	0.009
21.	Carrying Cost (@8.01% for transmission and SLDC for six months) for FY 2023-24							-0.001	0.006	0.005
22.	Total Carrying cost							-0.007	0.034	0.027
23.	Total impact							-0.037	0.174	0.137

The impact of capital expenditure for FY 2022-23 is discussed in Chapter 3.

Capital work in progress:

2.5 Considering the closing CWIP of FY 2019-20 as approved in the tariff order dated 28.05.2021 as the opening CWIP for FY 2020-21, the capital expenditure and the capitalisation approved in table no 2.7, the details of Capital Works in Progress for Transmission and SLDC Businesses are as follows:

Table 2.19: Capital Works in Progress approved by the Commission for FY 2020-21 and FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
FY 2020-21				
1	Closing Capital Work in Progress as approved in tariff order for FY 2021-22	305.16	5.31	310.47
	Less assets directly transferred to GFA during FY 2017-18	25.86	0.00	25.86
	Opening CWIP for FY 2020-21	279.30	5.31	284.61
2	ADD: Addition of Capital Expenditure	222.29	2.37	224.66
3	Less: Transferred to GFA during the Year	197.64	4.86	202.50
4	Closing Capital Work in Progress	303.95	2.82	306.77
FY 2021-22				
1	Opening CWIP for FY 2020-21	303.95	2.82	306.77
2	ADD: Addition of Capital Expenditure	343.23	6.25	349.48
3	Less: Transferred to GFA during the Year	398.38	0.30	398.68
4	Closing Capital Work in Progress	248.80	8.77	257.57

Chapter 3

True up for FY 2022-23

3.1 Background

The Commission had approved the Annual Revenue Requirement (ARR) of PSTCL for FY 2022-23 in its Order dated 01.06.2020 for the 2nd MYT Control Period of FY 2020-21 to FY 2022-23, 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 2022-23 and FY 2023-24, reviewed the estimates and revised the ARR for FY 2022-23 based on the revised data made available by PSTCL.

This Chapter contains the true-up of FY 2022-23, based on the prudence check conducted by the Commission of the data submitted by PSTCL in Petition No. 63 of 2023.

3.2 Transmission System Availability

PSTCL has submitted its month-wise Transmission System (TS) Availability for FY 2022-23 as under:

Table 3.1: Transmission System (TS) Availability of PSTCL for FY 2022-23

Sr. No.	Month	TS Availability (%)
1.	April-22	99.7129%
2.	May-22	99.6484%
3.	June-22	99.9316%
4.	July-22	99.8926%
5.	August-22	99.9056%
6.	September-22	99.8820%
7.	October-22	99.8711%
8.	November-22	99.9609%
9.	December-22	99.4982%
10.	January-23	99.8582%
11.	February-23	99.8854%
12.	March-23	99.9074%
	Average Availability	99.8349%

This is further discussed in **para 3.18**.

3.3 Transmission Loss

In the Tariff Order for PSTCL for FY 2020-21, the Commission had provisionally approved the transmission loss level at 2.44% for FY 2022-23. The Commission retained provisionally approved transmission loss level of 2.44% for FY 2022-23 in the tariff Order for FY 2022-23 dated 31.03.2022 and tariff Order for FY 2023-24 dated 15.05.2023.

PSTCL's Submission:

Actual transmission loss submitted by PSTCL is as under:

Table 3.2: Transmission Losses as submitted by PSTCL for FY 2022-23

Sr. No.	Month	Energy injected in PSTCL Substations (A)	Energy exported from PSTCL Substations (B)	Transmission Losses (A-B)	
		MWh	MWh	MWh	%
1.	April,2022	4440605.17	4345355.33	95249.84	2.14
2.	May,2022	5857162.05	5736513.33	120648.73	2.06
3.	June,2022	7021609.85	6879223.99	142385.86	2.03
4.	July,2022	7610210.28	7448134.50	162075.78	2.13
5.	August,2022	8405188.76	8232192.46	172996.30	2.06
6.	September,2022	7151922.88	6992071.32	159851.57	2.24
7.	October,2022	4605083.41	4497852.15	107231.26	2.33
8.	November-2022	3441077.51	3353341.39	87736.13	2.55
9.	December-2022	3960959.92	3847826.24	113133.68	2.86
10.	January-2023	4234234.33	4119703.14	114531.19	2.70
11.	February-2023	3838649.40	3742970.82	95678.58	2.49
12.	March-2023	3930685.46	3840773.18	89912.28	2.29
13.	Total Losses for FY 2022-23	64497389.03	63035957.84	1461431.19	2.27

PSTCL submitted that:

- Actual Transmission Losses of PSTCL for FY 2022-23 are 2.27% against the Targeted Transmission losses of 2.44%.
- 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. The calculations of gain on over achievement of Transmission loss target are based on the Short Term Power Purchase rate provided by the office of CE/PPR, PSPCL, as per table below :-

Table 3.3: Calculation of Short Term Power Purchase Rate for FY 2022-23

Sr. No.	Particulars	FY 2022-23
1	Short Term Power Purchase including through exchange (Rs. Crore)	4088
2	Energy Purchase in units (MU)	7,472
3	Short Term Power Purchase Rate Per unit (Rs./Unit)	5.47

Table 3.4: Gain on Account of Over Achievement of Transmission loss Target

Sr. No.	Particulars	Working	Amount (in Crores)/Unit
1	Energy Inflow (in MU)		64,497.39
2	Actual Transmission Loss (in MU) (A)		1,461.43
3	Transmission Loss Trajectory for FY 2022-23		2.44%
4	Target Transmission Loss (MU) (B)	$64497.39 \times 2.44\%$	1573.74
5	Over-Achievement (in MU) (B-A)		112.31
6	Short-term power purchase rate (Rs./kwh)		5.47
7	Gain on account of Over-achievement of Target (Rs. In crore)	$5.47 \times 112.31 \text{ (MU)} \times 10^6$	61.44
8	Share of PSTCL as per Regulation 30 (In Rs. Crore)	50% of 61.44	30.72

PSTCL has requested the Commission to approve the amount of Rs. 30.72 Crore as gain on account of over-achievement of Transmission loss Trajectory specified by the Commission for FY 2022-23.

Commission’s Analysis:

3.3.1. The Commission observes that the Actual Transmission loss submitted by PSTCL is 2.27% (1461.43 MWh) whereas the Commission has approved the Transmission loss of 2.44% for FY 2022-23.

3.3.2. 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.”

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

Table 3.5: Gain on account of over-achievement of Transmission Loss

Sr. No.	Particulars	Formulae	
1.	Actual Transmission Loss (in MU)	A	1461.43
2.	Target Transmission Loss (in MU)	$B = 2.44\% \times 64497.39^*$	1573.74
3.	Over achievement (in MU)	$C = B - A$	112.31
4.	Short-term power purchase rate (Rs./kWh)	D	5.47
5.	Gain on account of over-achievement of Transmission Loss (in Rs. Crore)	$E = C \times D / 10$	61.43
6.	Share of PSTCL in total Gain (Rs. Crore)	$F = E \times 50\%$	30.7155

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

3.3.4. Thus, the Commission allows an amount of Rs. 30.7155 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 2022-23, the entire amount of Rs. 30.7155 Crore is allowed.

3.3.5. For True-up of FY 2022-23, the Commission approves the absolute value of transmission loss of 1461.43 MWh.

3.4 Capital Expenditure

PSTCL’s Submission:

3.4.1 PSTCL has submitted that the Commission had approved the Capital Expenditure in Truing up of FY 2020-21, FY 2021-22 and APR for FY 2022-23 and had ruled in respective Tariff Order that Capital Expenditure shall be finally approved at the end of

the 2nd MYT Control Period. Accordingly, PSTCL has submitted the Capital Expenditure for 2nd MYT Control Period i.e., from FY 2020-21 to FY 2022-23 in line with the Audited Accounts of respective year for FY 2020-21, FY 2021-22 and FY 2022-23 respectively.

- 3.4.2** PSTCL would like to submit that the works as per Capital Investment Plan approved by the Commission during 2nd MYT Control Period also includes works under PSDF Schemes. The Capital Expenditure incurred against these projects is partly funded by Government Grant and partly funded by PSTCL. PSTCL has claimed only part of Capital Expenditure under PSDF Scheme which is not funded through Government Grant.
- 3.4.3** The Capital Expenditure to the extent of Contributory works and PSDF (Govt. Funding) has not been considered for funding through Equity or Loans. Further, assets created through Capitalization of Contributory Works and PSDF (Govt Funding) has also been excluded while claiming depreciation.
- 3.4.4** PSTCL has incurred the Capital Expenditure on Purchase of Assets which have been directly transferred to GFA and do not form the part CWIP account. PSTCL has also considered the amount of directly added assets as Capital Expenditure to be funded through Loan or Equity.
- 3.4.5** The details of Capital Expenditure as submitted by PSTCL for FY 2022-23 is as under:

Table 3.6: Details of Capital Expenditure submitted by PSTCL for FY 2022-23
(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
Capital Expenditure on Spillover schemes during FY 2022-23				
1a	Contributory works	27.02	0.00	31.63
1b	Works under PSDF Scheme	49.28	4.82	2.45
1c	Others	139.98	0.38	136.38
1	Total Capital Expenditure on Spillover schemes	216.28	5.20	221.48
2	Total Capital Expenditure on New schemes	228.52	0.74	229.26
3	Total Capital Expenditure during FY 2022-23 as per Accounts(1+2)	444.80	5.94	450.74
4	Add: Assets directly purchased and transferred to GFA	12.95	0.01	12.96
5	Capital expenditure PSDF (own funding)	17.31	0.00	17.31
6	Total Capital Expenditure (3+4)	475.06	5.95	481.01

Table 3.7: Detailed break-up of assets directly transferred to GFA during FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	FY 2022-23
1	Land and building	3.40
2	Plant and Machinery	1.42
3	Vehicles	7.23
4	Furniture and fixture	0.03
5	Office Equipment	0.88
6	Total Assets directly transferred to GFA	12.96

Commission's Analysis:

3.4.6 The Commission observes that Capital Investment for FY 2022-23 approved vide Order dated 01.06.2020 determining ARR of the 2nd control period, subsequently revised in the APR and capital expenditure submitted by PSTCL for true up of FY 2022-23 is as under:

Table 3.8: Capital Expenditure for FY 2022-23

(Rs. Crore)					
Sr. No.	Description	Approved in ARR of 2 nd control period Order	Revised Capital Expenditure in Tariff Order for FY 2022-23	Revised Capital Expenditure in APR in Tariff Order for FY 2023-24	Capital Expenditure Submitted by PSTCL for true-up
1.	Transmission Business	374.78	608.24	527.64	444.80
2.	SLDC Business	25.22	19.92	21.59	5.94
3.	PSTCL	400.00	628.16	549.23	450.74

3.4.7 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.

3.4.8 PSTCL has also incurred expenditure of Rs.12.96 Crore during FY 2022-23 on procurement of assets directly which is being allowed.

3.4.9 PSTCL later submitted vide email dated 28.02.2024 capital expenditure on PSDF works with own funding of Rs 17.31 Crores, which is being allowed .

Table 3.9: Capital expenditure as approved by the Commission for FY 2022-23

(Rs. Crore)				
Sr. No.	Description	Transmission	SLDC	PSTCL
1	Capital Expenditure on Spillover schemes during FY 2022-23			
1a	Contributory works	27.02	0.00	27.02
1b	Works under PSDF Scheme	54.11	0.00	54.11
1c	Capital expenditure on PSDF Scheme spill over(own funding)	1.15	0.00	1.15
1c	Others	107.53	0.38	107.91
1	Total Capital Expenditure on Spillover schemes	189.81	0.38	190.19
2a	Capital Expenditure on New schemes	243.04	0.34	243.38
2b	Capital expenditure on PSDF new (own funding)	15.62	0.54	16.16
2	Total Capital Expenditure on New schemes	258.66	0.88	259.54
3	Total Capital Expenditure during FY 2022-23 (1+2)	448.47	1.26	449.73
4	Add: Assets directly purchased and transferred to GFA (Table 3.7)	12.95	0.01	12.96
5	Net Capital Expenditure	461.42	1.27	462.69

3.5 Capitalization and Capital Works in Progress

PSTCL's Submission:

3.5.1. The details of Capitalization as submitted in petition for FY 2022-23 is as under:

Table 3.10: Details of Capitalization submitted by PSTCL for FY 2022-23

(Rs. Crore)				
Sr. No.	Description	Transmission	SLDC	PSTCL
	Capitalization on Spillover schemes during FY 2022-23			
1a	Contributory works	31.82	0.00	31.82
1b	Works under PSDF Scheme	3.20	0.00	3.20
1c	Others	90.56	0.00	90.56
1	Total Capitalization on Spill over schemes	125.58	0.00	125.58
2	Total Capitalization on New schemes	121.40	4.88	126.28
3	Total Capitalization during FY 2022-23 (1+2)	246.97	4.88	251.86
4	Less: Assets written off	0.00	0.00	0.00
5	Add: Assets directly purchased and transferred to GFA	12.95	0.01	12.96
6	Total Capitalization (3+4+5)	259.93	4.89	264.82

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

Table 3.11: Capital Works in Progress submitted by PSTCL for FY 2022-23**(Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital Work in Progress	246.21	7.16	253.37
2	Add: Addition of Capital Expenditure during the year	457.75	5.95	463.70
3	Less: Transferred to GFA during the Year	259.93	4.89	264.82
4	Closing Capital Work in Progress	444.03	8.22	452.25

Commission's Analysis:

3.5.3 The Commission has tried up the CIP of 2nd MYT control period in chapter 2 of this order after considering the revised submission of PSTCL vide email dated 28.02. 2024. Capitalisation as under has been approved:

Table 3.12: Details of Capitalization approved by the Commission for FY 2022-23**(Rs. Crore)**

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capitalization on Spillover schemes during FY 2022-23			
1a	Contributory works	31.82	0.00	31.82
1b	Works under PSDF Scheme	3.20	0.00	3.20
1c	Others	62.73	0.00	62.73
1d	PSDF(own funding)spill over schemes	0.17	0.00	0.17
1	Total Capitalization on Spill over schemes	97.92	0.00	97.92
2a	PSDF(own funding) New schemes	0.22	0.00	0.22
2b	Capitalization on New schemes	148.44	4.88	153.32
2	Total Capitalization on New schemes	148.66	4.88	153.54
3	Total Capitalization during FY 2022-23 (1+2)	246.58	4.88	251.46
4	Add: Assets directly purchased and transferred to GFA	12.95	0.01	12.96
5	Total Capitalization (3+4 +5)	259.53	4.89	264.42

3.5.4 As per the capex and capitalization approved, the capital work in progress as approved for FY 2022-23 is as under:

Table 3.13: Capital Works in Progress approved by the Commission for FY 2022-23**(Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital Work in Progress	248.80	8.77	257.57
2	Add: Addition of Capital Expenditure during the year (Table 3.9)	461.42	1.27	462.69

Sr. No.	Particulars	Transmission	SLDC	PSTCL
3	Less: Transferred to GFA during the Year (Table 3.12)	259.53	4.89	264.42
4	Closing Capital Work in Progress	450.69	5.15	455.84

3.6 Funding of Capital Expenditure

PSTCL's Submission:

- 3.6.1** 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.
- 3.6.2** PSTCL has considered the funding of Capital Expenditure of Spill over Schemes and Capitalization of New Schemes through Loan and Equity in 70:30.
- 3.6.3** The Capital Investment claimed by PSTCL for funding through Loans and Equity for Transmission Business and SLDC Business for FY 2022-23 is as under:

Table 3.14: Funding Requirement for Capital Investment for FY 2022-23 as claimed by PSTCL (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
A	Transmission			
1	CAPEX of Spill over Schemes (excluding Contributory & PSDF)	139.98	0.38	140.36
2	Capitalization of New Schemes (excluding Contributory & PSDF)	121.40	4.88	126.28
3	Directly Capitalised	12.95	0.01	12.96
4	Total funding for CAPEX	274.33	5.27	279.60
a	Funding through Equity (Spill over Schemes) (30%)	82.30	0.00	82.30
b	Funding through Loan (70%)	192.03	5.27	197.30
b (i)	Funding through Loan (New Schemes)	94.05	4.89	98.94
b (ii)	Funding through Loan (Spill Over Schemes)	97.98	0.38	98.36

- 3.6.4** PSTCL submits that during FY 2022-23, funding requirement for Transmission Business is Rs. 274.33 Crore (Rs. 139.98 Crore for Capital Expenditure of Spill over schemes, Rs. 121.40 Crore for Capitalization of New Schemes and Rs. 12.95 Crore for Directly Capitalized Asset). Funding requirement for Capital Investment for SLDC Business is Rs. 5.27 Crore (Rs. 0.38 Crore for Capital Expenditure of Spill over schemes, Rs. 4.88 Crore for Capitalization of New Schemes and Rs. 0.01 Crore for Directly Capitalized Asset). Thus, the total funding for Capital Investment for PSTCL as a whole is Rs. 279.60 Crore during FY 2022-23.

Commission's Analysis:

3.6.5 The relevant section of Regulation 19.2 of PSERC MYT Regulation 2022 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.”

3.6.6 As PSTCL has booked a profit of Rs. 100.90 Crore in FY 2022-23 funding requirement has been determined by the Commission accordingly In Chapter 2 Table no 2.7.

3.6.7 PSTCL has not considered funding of SLDC schemes through equity and have considered 100% funding through loan of Rs.5.27 Crore for SLDC business. On a query raised by the Commission, PSTCL replied vide memo no //3/CAO(F&A)/MYT-III/APR-1 dated 09.02.2024 that since inception the equity has been considered as equity of Transmission and no equity was considered for SLDC. Further ,100% funding is considered through loan for PSDF (own funding) schemes.

3.6.8 Therefore the details of funding through loan and equity allowed by the Commission for FY 2022-23 as approved by the Commission in Chapter 2 are as under:-

Table 3.15: Funding as approved by the Commission for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars		FY 2022-23		
			Transmission	SLDC	PSTCL
1	CAPEX of Spill over Schemes	Capex of spill over schemes (Table 3.9)	107.53	0.38	107.91
2		Add: PSDF Schemes (Own Funding) (Table 3.9)	1.15	0.00	1.15
3		Total Funding Required	108.68	0.38	109.06
4		Funding through Equity (Except PSDF own funding)	32.37	0.00	32.37
5		Funding through Loan	76.31	0.38	76.69

Sr. No.	Particulars		FY 2022-23			
			Transmission	SLDC	PSTCL	
6	Capitalization of New Schemes Including Directly Added Assets	Capitalization of New Works (Table 3.12)	148.44	4.88	153.32	
7		Add: Directly Added Assets	12.95	0.01	12.96	
8		Total	161.39	4.89	166.28	
9		Add: PSDF Schemes (Own Funding) (Table 3.12)	0.22	0.00	0.22	
10		Total Funding Required	161.61	4.89	166.50	
11		Funding through Equity (Except PSDF own funding)	49.88	0.00	49.88	
12		Funding through Loan	111.73	4.89	116.62	
13		Total Funding Required for Investment	Total Funding Required	270.29	5.27	275.56
14			Funding Through Equity	82.25	0.00	82.25
15			Funding Through Loan	188.04	5.27	193.31

3.7 Operation and Maintenance Expenses

A. Employee Expenses

3.7.1 In the ARR petition of FY 2022-23, PSTCL had projected employee expenses of Rs. 653.89 Crore for its Transmission Business and Rs. 11.99 Crore for its SLDC Business 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 to PSTCL for FY 2022-23.

3.7.2 In the ARR Petition for FY 2023-24, PSTCL had projected employee expenses of Rs. 752.85 Crore for its Transmission Business and Rs. 14.40 Crore for its SLDC Business for FY 2022-23. The Commission had approved employee cost of Rs. 751.04 Crore Transmission Business and Rs. 12.33 Crore for SLDC Business to PSTCL for FY 2022-23.

PSTCL's Submission:

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

3.7.4 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 2022-23:-

Table 3.16: Terminal Benefits submitted by PSTCL for FY 2022-23 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Share of Pension, Gratuity and Medical	490.19	0.00	490.19
2	Share of Leave Encashment	23.37	0.00	23.37

Sr No.	Particulars	Transmission	SLDC	PSTCL
3	NPS CPF, PF, LWF	14.46	0.45	14.91
4	Miscellaneous - PF inspection fees, solatium, Memento etc.	0.30	0.00	0.30
5	Gratuity & Leave Encashment Paid to Employee's Recruited by PSTCL	0.15	0.00	0.15
6	Total Employee Terminal Benefits Cost	528.46	0.45	528.91
7	Add: Additional Share of Pension etc intimated by PSPCL after finalization of accounts	0.05	0.00	0.05
8	Less: Additional Share of Pension already claimed in True up of FY 2021-22	11.01	0.00	11.01
9	Total Employee Terminal Benefits Cost	517.50	0.45	517.95

3.7.5 PSTCL requested the Commission to allow the following expenditure additionally: -

1. PSTCL submitted that as 220 KV S/s Bathinda was taken over by PSTCL from PSPCL on October 1, 2021, During FY 2021-22, employee cost of 220 KV S/s Bathinda was claimed for six months only i.e., from October 2021 to March 2022 on actual Basis. Therefore, Baseline Values without the impact of employee cost of 220 KV S/s Bathinda has been considered. For FY 2022-23, employee cost of 220 KV S/s Bathinda amounting Rs. 1.03 crore has been claimed separately by PSTCL after considering the revised pay scales.
2. PSTCL has Commissioned 400 KV Substation at Bahaman Jassa Singh in March 2022. Thus, its employee cost was not included in baseline expenditure thus it has been claimed separately by PSTCL during FY 2022-23 amounting to Rs. 2.10 Crores.
3. PSTCL submitted that 400 KV S/s Dhanansu Commissioned in March, 2023. Therefore, PSTCL claims the employee cost of Rs. 0.15 crore for one month i.e. March 2023 only for the sub-station.
4. Huge vacancies are lying in PSTCL. During the FY 2022-23, PSTCL has recruited some new employee's, whose costs also is not included in baseline expenses. Therefore, PSTCL additionally claims the employee cost amounting Rs. 21.85 crore for newly recruited employees.
5. PSTCL has already considered the additional Impact of pay revision in FY 2021-22 for 50% employees from 01.07.2021 to 31.03.2022 (for 9 months only) of Rs. 14.89 Crore. The impact of Pay revision in FY 2022-23 amounting Rs. 42.78 crore has been considered after indexation for 100% employees for full year.
6. In addition, Impact of Pay revision of rest of employee (50% employees) not paid during FY 2021-22 for 9 months amounting Rs. 14.89 crore has also been considered in FY 2022-23.

7. The above figure does 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.
8. The impact of above facts is as per following table: -

**Table 3.17: Additional Employee Cost for Extra-Ordinary items FY 2022-23
(Rs. Crore)**

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Employee Cost for New Recruitment	21.85	0.00	21.85
2	Impact of Pay Revision	54.06	3.61	57.67
3	Indexed Employee Cost for 220 KV S/s Bathinda transferred from PSPCL to PSTCL (Not included in Base Expenses)	1.03	0.00	1.03
4	Employee Cost for 400 KV S/s Bahaman Jassa Singh (New)	2.10	0.00	2.10
5	Employee Cost for 400 KV S/s Dhanansu (For 1 month)	0.18	0.00	0.18
6	Additional Employee Cost for extra-ordinary items	79.22	3.61	82.83

3.7.6 PSTCL has considered the month wise data of Wholesale Price Index (All Commodity) Base year 2011-12 and Consumer Price Index (Industrial Workers) Base year 2016 as disclosed by Government of India on its official websites for calculation of indexation, which is as follows: -

Table 3.18: Calculation of Index of FY 2022-23

Sr No.	Particulars	FY 2021-22	FY 2022-23	Increase (%)
1	CPI (Month Wise Average)	123.63	131.12	6.05%
2	WPI (Month Wise Average)	139.41	152.53	9.41%
3	Index (CPI: WPI: 50:50)	-	-	7.73%

3.7.7 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.

3.7.8 PSTCL has considered the base figures of FY 2021-22 as approved by the Commission in Tariff Order dated 15.05.2023 for calculating other employee expenses of FY 2022-23.

3.7.9 PSTCL has computed the Normative Employee Costs for FY 2022-23 as shown in the following table:-

Table 3.19: Normative Other Employee Cost for FY 2022-23 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Net Other Employee Cost approved for FY 2021-22 (Baseline Expenses)	214.80	7.88	222.68
2	Escalation Factor (CPI: WPI: 50:50)	7.73%	7.73%	
3	Net Other Employee Cost for FY 2022-23	231.41	8.49	239.90
4	Additional Employee Cost for extra-ordinary items	79.22	3.61	82.83
5	Total Other Employee Cost for FY 2022-23	310.63	12.10	322.72
6	Total Employee Terminal Benefits Cost	517.50	0.45	517.95
7	Normative Employee Cost for FY 2022-23	828.13	12.55	840.68

Commission's Analysis:**A. 1) Terminal Benefits**

3.7.10 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.”

3.7.11 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.490.19 Crore is allowed.

3.7.12 In addition to the above, an amount of Rs. 23.37 Crore of terminal benefits towards share of Earned leave encashment, an amount of Rs.0.30 Crore of ‘other terminal benefits’ relating to Miscellaneous-P.F. inspection fees, Solatium, Memento, etc. and an amount of Rs.14.46 Crore of terminal benefits towards NPS, CPF, PL and LWF are also allowed for FY 2022-23.

3.7.13 PSTCL has claimed Gratuity & leave encashment for employees recruited by PSTCL amounting to Rs.0.15 Crore as per Annual Audited Accounts. PSTCL has also claimed additional share of Pension after finalization of accounts amounting to Rs 0.05 Crores. The same has been considered as reflected in the balance sheet.

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

Table 3.20: Terminal Benefits approved by the Commission for FY 2022-23

(Rs. Crore)				
Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Share of Pension, Gratuity and Medical	490.19	0.00	490.19
2	Share of Leave Encashment	23.37	0.00	23.37
3	NPS CPF, PF, LWF	14.46	0.45	14.91
4	Miscellaneous - PF inspection fees, solatium, Momento etc.	0.30	0.00	0.30
5	Gratuity & Leave Encashment Paid to Employee's Recruited by PSTCL	0.15	0.00	0.15
6	Total Employee Terminal Benefits Cost	528.46	0.45	528.91
7	Add: Additional Share of Pension etc intimated by PSPCL after finalization of accounts	0.05	0.00	0.05
8	Less: Additional Share of Pension already claimed in True up of FY 2021-22	11.01	0.00	11.01
9	Total Employee Terminal Benefits Cost	517.50	0.45	517.95

Therefore, the Commission allows terminal benefits of Rs. 517.50 Crore for Transmission Business and Rs.0.45 Crore for SLDC Business for FY 2022-23 i.e. a total of Rs. 517.95 Crore for PSTCL.

A. 2) Other Employee Cost

3.7.15 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 expenses being 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 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."

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

Table 3.21: Calculation of INDEX

Sr. No.	Particulars	FY 2021-22	FY 2022-23	Increase (%)
1	CPI	356.064	377.616	6.05284%
2	WPI	139.408	152.525	9.409%

$$INDEX_n / INDEX_{n-1} = (0.5 * 6.05284) + (0.5 * 9.409) = 7.731\%$$

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

Table 3.22: Normative Other Employee Cost calculation (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
Transmission Business				
1.	Other Employee Cost of previous year	214.80	7.88	222.68
2.	Inflation Factor	7.731%	7.731%	
3.	Other Employee Cost	231.40	8.48	239.88
4.	Employee Cost for New Recruitment	21.85	0.00	21.85
5.	Impact of Pay Revision	54.06	3.61	57.67
6.	Indexed Employee Cost for 220 KV S/s Bathinda transferred from PSPCL to PSTCL (Not included in Base Expenses)	1.03	0.00	1.03
7.	Employee Cost for 400 KV S/s Bahaman Jassa Singh (New)	2.10	0.00	2.10
8.	Employee Cost for 400 KV S/s Dhanansu (For 1 month)	0.18	0.00	0.18
9.	Terminal Benefits	517.50	0.45	517.95
10.	Total Employee Cost	828.12	12.54	840.66

3.7.18 Accordingly, the Commission approves “employee cost” of Rs.828.12 Crore for Transmission Business and Rs. 12.54 Crore for SLDC Business i.e. a total of Rs. 840.66 Crore for PSTCL for FY 2022-23.

B. A&G Expenses

3.7.19 In the ARR Petition for FY 2022-23, PSTCL had projected A&G expenses of Rs. 31.86 Crore for its Transmission Business and Rs. 0.94 Crore for its SLDC Business for FY 2022-23. The Commission had approved A&G expenses of Rs. 32.02 Crore for the Transmission Business and Rs. 0.96 Crore for the SLDC Business for FY 2022-23.

3.7.20 In the ARR Petition for FY 2023-24, PSTCL had projected A&G expenses of Rs. 35.35 Crore for its the Transmission Business and Rs. 1.31 Crore for its SLDC Business for FY 2022-23. The Commission had approved A&G expenses of Rs. 32.13 Crore for the Transmission Business and Rs. 0.95 Crore for the SLDC Business for FY 2022-23.

PSTCL’s Submission:

3.7.21 PSTCL stated that it has projected additional A & G expense on account of asset addition during the FY 2022-23 as per MYT Regulations, 2019. For calculation of additional A & G expenses, PSTCL calculates the %age of A&G expenses with GFA for FY 2021-22 for baseline values

Table 3.23: Calculation of %age of A&G expenses with GFA (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	Actual A & G expenditure for 2021-22	24.93	0.59	25.52
7	%age of A&G w.r.t GFA	0.238%	2.046%	

Table 3.24: Normative A & G Expenses for FY 2022-23 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Net Asset added during FY 2022-23	240.12	4.98	245.10
2	%Age of A&G w.r.t GFA	0.238%	2.046%	
3	Base A & G Expenses approved for FY 2021-22	29.01	0.88	29.89
4	Escalation Factor (CPI: WPI: 50:50)	0.08	0.08	
5	Escalated A&G expenses for FY 2022-23	31.25	0.95	32.20
6	Add: Additional A&G expenses on account of asset addition during FY 2022-23.	0.57	0.10	0.67
7	Add: Audit fee (76.122)	0.05	0.00	0.05
8	Add: License & Petition fee (76.129)	0.55	0.00	0.55
9	Normative A&G Expenses	32.43	1.05	33.48

Commission's Analysis:

3.7.22 PSTCL has changed the methodology from its previous submission in ARR petitions .PSTCL has added additional A&G expenses on account of asset addition during 2022-23 for working out the A&G expenses for true up of FY 2022-23 .

3.7.23 The A&G expenses are to be determined as per Regulation 26.1 of PSERC MYT Regulations, 2019 on normative basis. The relevant sections are as given in para 3.7.15 wherein no formula has been prescribed for adding A&G expenses on account of asset addition for the relevant year with respect to GFA.

3.7.24 Accordingly, the Commission has considered the baseline value for A&G expenses as Rs. 29.01 Crore for Transmission Business and Rs.0.88 Crores for SLDC business on the basis of A&G expenses of true-up of FY 2021-22 .

3.7.25 Further, the Commission has calculated the INDEX as 7.731% as given in Table 3.21.

3.7.26 Accordingly, the Commission has calculated the Normative A&G expenses as under:

Table 3.25: Calculation for Normative A&G expenses for FY 2022-23

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	A&G expenses for FY 2021-22	29.01	0.88	29.89
2.	Escalation Factor (CPI:WPI::50:50)	1.0773	1.0773	
3.	Normative A&G expenses for FY 2022-23	31.25	0.95	32.20

3.7.27 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.”

3.7.28 Accordingly, the Commission approves the A&G expenses for the FY 2022-23 as under:

Table 3.26: Normative A&G expenses as approved by the Commission for FY 2022-23

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Normative A&G expenses for FY 2022-23	31.25	0.95	32.20
2.	Add: Audit fee	0.05	0.00	0.05
3.	Add: License & ARR fee	0.55	0.00	0.55
4.	Total A&G Expenses	31.85	0.95	32.80

3.7.29 Thus, the Commission approves A&G expenses as Rs. 31.85 Crore for Transmission Business and Rs. 0.95 Crore for SLDC Business i.e. Rs. 32.80 Crore for PSTCL for FY 2022-23.

C. Repair & Maintenance (R&M) Expenses

3.7.30 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.

3.7.31 In the ARR Petition for FY 2023-24, PSTCL projected R&M Expenses of Rs. 38.33 Crore for its Transmission Business and Rs.0.54 Crore for its SLDC Business for FY 2022-23. The Commission approved Rs. 36.56 Crore and Rs. 0.86 Crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

PSTCL's Submission:

3.7.32 PSTCL has considered the "K" Factor as determined by the Commission and which is constant for 2nd Control Period as per PSERC MYT Regulations, 2019.

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

Table 3.27: Normative R & M Expenses for FY 2022-23 as claimed by PSTCL
(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 to GFA during FY 2022-23	259.83	4.99	264.82
3	Less: Retirement to GFA during FY 2022-23	19.70	0.00	19.71
4	Closing GFA (Including Land) as on 31.03.2023	10895.62	33.87	10929.50
5	Average GFA for FY 2022-23	10775.56	31.38	10806.94
6	K - Factor (Determined by PSERC)	0.303%	2.323%	
7	Escalation Factor (WPI Index)	9.41%	9.41%	
8	Normative R & M Expenses for FY 2022-23	35.72	0.80	36.52

3.7.34 PSTCL submits the normative O&M Expenses for FY 2022-23 are as per table below:

Table 3.28: Total Normative O & M Expenses as claimed by PSTCL for FY 2022-23
(Rs Crore)

Sr. No	Particulars	Transmission	SLDC	PSTCL
1	Employee Expenses	828.13	12.55	840.68
2	A&G Expenses	32.43	1.05	33.48
3	R&M Expenses	35.72	0.80	36.52
4	Total Normative O & M Expenses	896.28	14.40	910.68

PSTCL further request the Commission to approve the Normative O&M expenses of Rs. 896.28 Crore for Transmission business and Rs 14.39 Crores for SLDC business for FY 2022-23 according to the PSERC MYT Regulations, 2019.

Commission's Analysis:

3.7.35 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."*

3.7.36 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.

3.7.37 The Opening GFA for Transmission Business and SLDC for the purpose of calculating R&M expenses is considered as Rs 10655.16 Crore and Rs 28.89 Crores respectively as per closing of true up of FY 2021-22 in this tariff order after factoring in the impact due to finalization of CIP of the 2nd MYT control period as determined in Chapter 2 of this order.

3.7.38 The addition of GFA during the year is considered based on the addition of GFA as determined in Table 3.12. Retirement of assets of Rs 19.71 Crores for Transmission Business and nil for SLDC Business have been considered.

3.7.39 The increase in WPI Index is considered as 9.409% as per Table no 3.21.

3.7.40 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 2022-23 are determined by the Commission as under:

Table 3.29: R&M expenses determined by the Commission for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Opening GFA for the purpose of R&M expenses (as per closing of FY 2021-22)	10655.16	28.89	10684.05
2.	Addition during the year(Table 3.12)	259.53	4.89	264.42
3.	(-) Retirement of assets	19.71	0.00	19.71
4.	Closing GFA for the purpose of R&M expenses	10894.98	33.78	10928.76
5.	Average GFA for the purpose of R&M expenses	10775.07	31.34	10806.41
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 3.21)	1.09409	1.09409	
8.	R&M Expenses	35.72	0.80	36.52

3.7.41 Thus, the Commission approves Rs. 36.52 Crore (Rs. 35.72 Crore for Transmission Business + Rs. 0.80 Crore for SLDC Business) of R&M expense for FY 2022-23.

3.7.42 The O&M expenses as approved by the Commission for FY 2022-23 are as under:

Table 3.30: O&M Expenses for FY 2022-23 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Total Employee Cost	828.12	12.54	840.66
2	Total A&G Expenses	31.85	0.95	32.80
3	Total R&M Expenses	35.72	0.80	36.52
4	Total O&M Expenses	895.69	14.29	909.98

3.8 Depreciation Charges

3.8.1 In the ARR Petition of FY 2022-23, PSTCL had claimed depreciation charges of Rs. 318.44 Crore for Transmission Business and Rs. 1.52 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 327.40 Crore for Transmission Schemes and Rs. 2.46 Crore for SLDC Business for FY 2022-23.

3.8.2 In the ARR Petition of FY 2023-24, PSTCL had claimed revised estimates of depreciation charges of Rs. 315.24 Crore for Transmission Business and Rs. 2.04 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 313.13 Crore for Transmission Schemes and Rs. 2.04 Crore for SLDC Business for FY 2022-23.

PSTCL's Submission:

- 3.8.3** PSTCL submitted that 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. 327.40 Crore for Transmission Business and Rs. 2.46 Crore for SLDC in ARR for FY 2022-23.
- 3.8.4** In APR for FY 2022-23, the Commission has revised the Depreciation charges of Rs. 313.13 Crore for Transmission Business and Rs. 2.04 Crore for SLDC.
- 3.8.5** PSTCL has been charging Depreciation in Audited Accounts of FY 2022-23 in line with the methodology specified in Regulation 21 of the PSERC MYT Regulations, 2019, as amended from time to time.
- 3.8.6** Accordingly, for the purpose of True-up of FY 2022-23, the Petitioner submits the details of depreciation as per the annual audited accounts for FY 2022-23, 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 2022-23.

Table 3.31: Calculation of Rate of Depreciation for FY 2022-23**(Rs. Crore)**

Sr. No.	Particulars	2022-23		
		Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	7476.11	24.14	7500.25
2	Add: Addition to GFA (Excluding Contributory & PSDF)	224.91	4.89	229.80
3	Less: Retirement to GFA	19.71	0.00	19.71
4	Less: Addition of Land during the Year	3.39	0.00	3.39
5	Closing GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	7677.93	29.03	7706.96
6	Average GFA	7577.02	26.59	7603.61
7	Depreciation during the year (Audited Figure)	312.11	2.16	314.27
8	Depreciation (% of Average)	4.12%	8.12%	

- 3.8.7** PSTCL has segregated the depreciation on assets created from Spill over schemes and New Schemes for the purpose of segregating repayments of loan for different schemes using the average rate of depreciation calculated as above.
- 3.8.8** Average GFA for Spill over Schemes and New Schemes has been considered on the basis of Capitalization of different schemes as discussed earlier in Capital Expenditure and Capitalization for 2nd Control period. Following tables shows the segregated depreciation of spill over schemes and New Schemes: -

Table 3.32: Depreciation for Spill over Schemes for FY 2022-23 (Rs. crore)

Sr. No.	Particulars	2022-23		
		Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	7353.13	23.89	7377.02
2	Add: Addition to GFA	90.56	0.00	90.56
3	Less: Retirement to GFA	19.71	0.00	19.71
4	Less: Addition of Land during the Year	0.00	0.00	0.00
5	Closing GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	7423.98	23.89	7447.87
6	Average GFA	7388.56	23.89	7412.44
7	Depreciation (% of Average)	4.12%	8.12%	
8	Depreciation during the year	304.35	1.94	306.29

Table 3.33: Depreciation for New Schemes for FY 2022-23 (Rs. crore)

Sr. No.	Particulars	2022-23		
		Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	122.98	0.26	123.24
2	Add: Addition to GFA	134.35	4.89	139.24
3	Less: Retirement to GFA	0.00	0.00	0.00
4	Less: Addition of Land during the Year	3.39	0.00	3.39
5	Closing GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	253.94	5.15	259.09
6	Average GFA	188.46	2.70	191.16
7	Depreciation (% of Average)	4.12%	8.12%	
8	Depreciation during the year	7.76	0.22	7.98

3.8.9. PSTCL requests the Commission to approve the Depreciation of Rs. 312.11 Crore for transmission and Rs. 2.16 crore SLDC for FY 2022-23 as PSERC MYT Regulations, 2019 based on the audited accounts for FY 2022-23.

Commission's Analysis:

3.8.10. 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.”

3.8.11 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 for FY 2021-22 after taking into consideration the impact of finalisation of CIP of the 2nd control period and the same is net of land and land rights and consumer contribution and grants.

3.8.12 The Commission has considered the addition of GFA for depreciation as approved by the Commission and has not considered the addition of assets funded through Contributory Work and works under PSDF scheme (for which grants will be received) as given below:-

Table 3.34: Net capitalisation for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	Total
1	Transferred to GFA (Table no 3.12)	259.53	4.89	264.42
2	Less Contributory works(Table no 3.12)	31.82	0.00	31.82
3	Less: PSDF works(Table no 3.12)	3.20	0,00	3.20
4	Net capitalization	224.51	4.89	229.40
5	Capitalization of spillover schemes (Table no 3.12)	62.90	0.00	62.90
6	Capitalization of new schemes (Table no 3.12)	161.61	4.89	166.50

3.8.13 The Commission has considered the Fixed Asset Register submitted by PSTCL vide reply dated 15.12.2023 and further determined weighted average rate of depreciation based on Fixed Asset Register of FY 2022-23 as under:

Table 3.35: Weighted average rate of depreciation for FY 2022-23 as considered by the Commission (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC
1	Opening GFA as on 01.04.2022	10655.16	28.89
2	Less Land as on 31.03.2022	2940.31	4.75
3	Less Consumer contributions and grants	239.36	0.00
4	Opening GFA (net of land and land rights and consumer contribution and grant)	7475.49	24.14
5	Add: Additions during the year (net of land and land rights and consumer contribution and grant) (Table 3.34)	224.51	4.89
6	Less: Retirement of assets (Table 3.32)	19.71	0.00
7	Less addition of land during the year (Table 3.33)	3.39	0.00
8	Closing GFA (net of land and land rights)	7676.90	29.03
9	Average Gross Fixed Assets ((4+8)/2)	7576.19	26.59
10	Depreciation as per audited accounts	312.11	2.16
11	Average rate of depreciation	4.12%	8.12%

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

Table 3.36: Depreciation approved by the Commission for FY 2022-23 for Transmission Business (Rs. Crore)

Sr. No	Particulars	Amount
(I)	Spillover Schemes	
1.	Opening GFA (excluding land and land rights as per closing of FY 2021-22 in chapter 2)	7349.79
2.	Add: Additions to GFA during the year (Table 3.34)	62.90
3.	Less: Retirement of GFA	19.71
4.	Closing GFA	7392.98
5.	Average GFA	7371.38
6.	Depreciation @4.12% of average GFA	303.65
(II)	New Schemes	
7.	Opening GFA (excluding land and land rights as per closing of FY 2021-22 in chapter 2)	125.70
8.	Add: Additions to GFA during the year (Table 3.34)	161.61
9.	Less: Addition of land during the year	3.39
10.	Closing GFA	283.92
11.	Average GFA	204.81
12.	Depreciation @4.12% of average GFA	8.44
13.	Total Depreciation (6+12)	312.09

Table 3.37: Depreciation approved by the Commission for FY 2022-23 for SLDC Business

Sr. No	Particulars	Amount
(I)	Spill Over Schemes	
1.	Opening GFA (excluding land and land rights as per closing of FY 2021-22)	23.88
2.	Add. Additions to GFA during the year (Table 3.34)	0.00
3.	Less Retirement of assets	0.00
4.	Closing GFA	23.88
5.	Average GFA	23.88
6.	Depreciation @ 8.12% of average GFA	1.94
(II)	New Schemes	
7.	Opening GFA (excluding land and land rights as per closing of FY 2021-22)	0.26
8.	Add: Additions to GFA during the year (Table 3.34)	4.89
9.	Closing GFA	5.15
10.	Average GFA	2.70
11.	Depreciation @ 8.12% of average GFA	0.22
12.	Total Depreciations (6+12)	2.16

Table 3.38: Depreciation approved by the Commission for FY 2022-23 for PSTCL (Rs. Crore)

Sr. No	Particulars	Amount
(I)	Transmission	
1.	Opening GFA (excluding land and land rights)	7475.49
2.	Add: Additions to GFA during the year	224.51
3.	Less: Retirement of GFA	19.71
4.	Less: Addition of land during the year	3.39
5.	Closing GFA	7676.90
6.	Average GFA	7576.19
7.	Depreciation @4.12% of average GFA	312.09
(II)	SLDC	
1.	Opening GFA (excluding land and land rights)	24.14
2.	Add: Additions to GFA during the year	4.89
3.	Less: Retirement to GFA	0.00
4.	Closing GFA	29.03
5.	Average GFA	26.58
6.	Depreciation @8.12% of average GFA	2.16
7.	Total Depreciation	314.25

3.8.15 The Commission approves depreciation of Rs.312.09 Crore for Transmission Business and Rs.2.16 Crore for SLDC Business for FY 2022-23.

3.9 Interest and Finance Charges

3.9.1 In the ARR Petition of FY 2022-23, PSTCL had claimed Interest and Finance charges of Rs. 344.19 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. 341.58 Crore for Transmission Business (including Spillover and new schemes) and Rs. 2.58 Crore for SLDC Business for FY 2022-23.

- 3.9.2** In the ARR Petition of FY 2023-24, PSTCL had claimed revised estimates of Interest and Finance charges of Rs. 290.15 Crore (net of capitalization of Rs. 7.11 Crore of interest charges) for its Transmission Business and Rs. 1.29 Crore for SLDC Business for FY 2022-23. The Commission approved interest charges of Rs. 284.72 Crore for Transmission Business (including Spillover and new schemes) and Rs. 1.29 Crore for SLDC Business for FY 2021-22.

PSTCL’s Submission:

- 3.9.3** PSTCL submitted that Commission in Tariff Order for FY 2022-23 had approved the Interest Charges of Rs. 341.58 Crore for Transmission business and Rs. 2.58 Crore for SLDC for FY 2022-23.
- 3.9.4** Further, in APR of FY 2023-24, the Commission approved the Interest Charges of Rs. 284.72 Crore for Transmission business and Rs. 1.29 Crore for SLDC.
- 3.9.5** For the purpose of the true-up for FY 2022-23, PSTCL has considered the opening balance of loan equal to the closing balance of loans for FY 2021-22 as discussed in previous chapter of this petition with revised funding position as per MYT Regulations, 2019.
- 3.9.6** Calculation of weighted average rate of interest on long-term loans of Transmission Business and SLDC Business for FY 2022-23 are shown in the following table.

Table 3.39: Calculation of ROI Capital Loans for FY 2022-23

Sr No.	Source	Avg. ROI (%)
1	REC	8.69
2	PFC	8.93
3	NABARD	9.13
4	PFC-495.57	8.67
5	Weighted Average for Transmission	8.71
6	REC SLDC	8.38

- 3.9.7** PSTCL has considered addition of loans of Rs. 192.03 Crore for STU and Rs. 5.27 crore for SLDC as discussed previously in True up of Capital Expenditure. Out of Rs. 192.03 Crore of STU Rs. 94.05 Crore additions is on account of New Schemes and Rs. 97.98 Crore is on account of Spill over Schemes. Loan Addition of Rs. 5.27 Crore of SLDC includes 4.89 Crore on account of New Schemes and Rs. 0.38 Crore is on account of Spill over Schemes.

3.9.8 The Petitioner has considered the repayment of loan equivalent to depreciation claimed above as per Audited Accounts for FY 2022-23 without subtracting the depreciation on assets commissioned before 16.04.2010 in line with the approach adopted by the Commission without prejudice to the outcome of appeals filed by PSTCL with the Hon'ble APTEL. The effect of the same may be considered by the Commission if the matter is ruled in favour of PSTCL.

3.9.9 PSTCL has considered the loan segregation for Spill over Schemes and New Schemes as per the funding requirement of PSTCL discussed previously. Following tables shows the calculation of Interest Charges for Spill over Schemes and New Schemes.

Table 3.40: Interest on Loan for Spill Over Schemes (Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Opening Balance	3,117.09	12.18	3,129.27
2	Add: Addition during the year	97.98	0.38	98.36
3	Less: Repayment during the year	304.35	1.94	306.29
4	Closing Balance	2,910.72	10.62	2,921.34
5	Average Loan for the year	3,013.91	11.40	3,025.31
6	Interest Rate	8.71%	8.38%	-
7	Interest Charges for the year	262.51	0.96	263.47

Table 3.41: Interest on Loan for New Schemes (Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Opening Balance	83.17	0.25	83.41
2	Add: Addition during the year	94.05	4.89	98.93
3	Less: Repayment during the year	7.76	0.22	7.98
4	Closing Balance	169.45	4.91	174.36
5	Average Loan for the year	126.31	2.58	128.89
6	Interest Rate	8.71%	8.38%	-
7	Interest Charges for the year	11.00	0.22	11.22

3.9.10 In addition to the above loans for Transmission Business, PSTCL has considered GPF liability outstanding during FY 2022-23. The interest amount considered on GPF is the actual interest paid during the year.

3.9.11 PSTCL has considered capitalisation of interest charges of Rs. 7.03 Crore instead of Rs. 19.17 crore only for the Spill over CAPEX of Rs. 140.36 crore during FY 2022-23 rather than total Capital Expenditure incurred Rs. 382.58 crore during FY 2022-23.

3.9.12 PSTCL has also paid Miscellaneous Finance Charges during the FY 2022-23. PSTCL has also capitalize the interest paid during the year.

Calculation of Interest Charges for all schemes for FY 2022-23 is as follows: -

Table 3.42: Interest on Loan for All Schemes (Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Opening Balance	3,200.26	12.42	3,212.68
2	Add: Addition during the year	192.03	5.27	197.30
3	Less: Repayment during the year	312.11	2.16	314.27
4	Closing Balance	3,080.17	15.53	3,095.71
5	Average Loan for the year	3,140.21	13.98	3,154.19
6	Interest Rate	8.71%	8.38%	-
7	Interest Charges for the year (Table no. 29 + 30)	273.51	1.17	274.68
8	Add: Interest on GP Fund	0.97	-	0.97
9	Add: Misc & Finance Charges	0.28	-	0.28
10	Less: Interest Capitalized	7.03	-	7.03
11	Normative Interest & Finance Charges	267.73	1.17	268.90

3.9.13 PSTCL requests the Commission to approve the Interest Charges of Rs. 267.73 Crore for Transmission and Rs. 1.17 crore SLDC for FY 2022-23 as PSERC MYT Regulations, 2019.

Commission's Analysis:

A. Interest and Finance Charges for Transmission

3.9.14 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.”

3.9.15 The Commission has considered the opening balance of loans for Spillover schemes of Transmission Business for FY 2022-23 as Rs.3094.34 Crore while the opening of loan for new schemes is considered as Rs. 84.97 Crores after taking into consideration the impact of finalization of CIP of 2nd control period in Chapter 2 of this order.

3.9.16 The Commission has considered the approved addition of loan as explained in Table 3.15.

3.9.17 PSTCL has not provided actual interest cost to determine the rate of interest but only provided the weighted average rate of interest during the year. PSTCL while replying to the deficiencies dated 09.02.2024 again did not supply the required information. Therefore, the Commission is constrained to take 8.71% ,the rate as given by PSTCL.

3.9.18 The Commission considers the repayment of loan equal to depreciation allowed for the corresponding year as per regulation 24.3 of PSERC MYT Regulation 2019.

3.9.19 Accordingly, the Commission has calculated the interest on loan for Transmission Business for FY 2022-23 as under:

Table 3.43: Interest on loan for Spill over schemes of Transmission Business Business as approved by the Commission for FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Opening balance of loan	3094.34
2.	Add: Receipt of loan during the year(Table 3.15)	76.31
3.	Less: Repayment of loan during the year(Table 3.36)	303.65
4.	Closing balance of loan	2867.00
5.	Average Loan	2980.67
6.	Interest Charges @ 8.71%	259.61

Table 3.44: Interest on loan for New schemes of Transmission Business as approved by the Commission for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	84.97
2.	Add: Receipt of loan during the year (Table 3.15)	111.73
3.	Less: Repayment of loan during the year (Table 3.36)	8.44
4.	Closing balance of loan	188.26
5.	Average Loan	136.62
6.	Interest Charges @ 8.71%	11.90

Interest on GP Fund

3.9.20 PSTCL has claimed an interest on GP fund of Rs.0.97 Crore during FY 2022-23.

The Commission approves interest of Rs.0.97 Crore on GP Fund as per the Audited Accounts, being statutory payment, submitted by PSTCL for FY 2022-23.

Capitalization of Interest Charges

3.9.21 In the True up Petition for FY 2022-23, PSTCL has considered capitalization of interest charges of Rs.7.03 Crore, only for the Spill over capital expenditure up to FY 2022-23, instead of Rs.19.17 Crore as given in the Audited Accounts.

The Commission, as per past practice, approves capitalization of interest of Rs.7.03 Crore for FY 2022-23 for capital expenditure due to spillover schemes.

Finance Charges and Guarantee Charges

3.9.22 PSTCL has claimed Miscellaneous Interest and Finance charges of Rs.0.28 Crore for Transmission Business based on Audited Annual Accounts for FY 2022-23.

3.9.23 The Commission approves the Finance charges of Rs. 0.28 Crore for Transmission Business as per Regulation 24.4 of PSERC MYT Regulations 2019.

3.9.24 The Commission approves interest and finance charges for Transmission Business of PSTCL for FY 2022-23 as under:

Table 3.45: Interest & Finance Charges for Transmission Business for FY 2022-23 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Interest on Loans due to Spillover schemes	259.61
2.	Interest on Loans due to New schemes	11.90
3.	Interest on GP Fund	0.97
4.	Finance Charges	0.28

Sr. No.	Particulars	Amount
5.	Gross Interest on Long Term Loans (1+2+3+4+5)	272.76
6.	Less: Capitalization	7.03
7.	Net Interest and finance Charges on Long Term Loans (6-7)	265.73

Thus, the Commission approves Net Interest and Finance Charges of Rs. 265.73 Crore for Transmission Business for FY 2022-23.

B. Interest and Finance charges for SLDC Business

3.9.25 The Commission has considered the closing balance of loans for SLDC Business of Rs. 12.44 Crore for FY 2021-22 after taking into consideration the impact due to finalization of CIP for the 2nd MYT period as the opening balance of loans for Spillover schemes of SLDC Business for FY 2022-23, while the opening of loan for new schemes is considered as Rs.0.25 Crores.

3.9.26 The Commission has considered the approved addition of loan as explained in Table No. 3.15.

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

3.9.28 PSTCL has not submitted loan master, therefore the Commission is constraint to considered the rate of interest of 8.38 % on long-term loans as submitted by PSTCL for determination of interest for SLDC business.

3.9.29 The Commission has calculated the interest on loan for SLDC Business for FY 2022-23 as under:

Table 3.46: Interest on loan for Spill over schemes of SLDC Business for FY 2022-23
(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	12.44
2.	Add: Receipt of loan during the year(table 3.15)	0.38
3.	Less: Repayment of loan during the year(Table 3.36)	1.94
4.	Closing balance of loan	10.88
5.	Average Loan	11.66
6.	Interest Charges @ 8.38%	0.98

Table 3.47: Interest on loan for New schemes of SLDC Business for FY 2022-23
(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	0.25
2.	Add: Receipt of loan during the year(table 3.15)	4.89
3.	Less: Repayment of loan during the year(Table 3.36)	0.22
4.	Closing balance of loan	4.92
5.	Average Loan	2.58
6.	Interest Charges @ 8.38%	0.21

3.9.30 PSTCL has not claimed Finance Charges for SLDC Business.

3.9.31 The Commission approves interest and finance charges for SLDC Business of PSTCL for FY 2022-23 as under:

Table 3.48: Interest & Finance Charges for SLDC Business for FY 2022-23 as approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Interest on Loans due to Spillover schemes	0.98
2.	Interest on Loans due to New schemes	0.21
3.	Gross Interest on Long Term Loans (1+2+3)	1.19

Thus, the Commission approves Interest and Finance Charges of Rs. 1.19 Crore for SLDC Business for FY 2022-23.

3.9.32 Total Interest on loan approved by the Commission for PSTCL for FY 2022-23 is as under:

Table 3.49: Interest on loan approved by the Commission for PSTCL for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Interest on loan	265.73	1.19	266.92

3.10 Interest on Working Capital for Transmission Business

3.10.1 In the ARR Petition for FY 2022-23, PSTCL had claimed interest on working capital for Transmission Business of Rs. 41.15 Crore for FY 2022-23, on a total working capital of Rs. 424.88 Crore against which the Commission approved interest on working Capital of Rs.38.40 Crore for FY 2022-23 on total working capital of Rs 3397.98 Crore.

In the ARR Petition for FY 2023-24, PSTCL had claimed revised estimated of interest on working capital of Rs. 36.54 Crore on the total working capital of Rs. 457.03 Crore for Transmission Business against which the Commission approved interest on working Capital of Rs. 35.90 Crore for FY 2022-23 on total working capital of Rs. 449.33 Crore.

PSTCL's Submission:

3.10.2 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 3.50: Calculation of Working capital loan ROI for FY 2022-23 (Rs. Crore)

Sr No.	Source of Loan	Opening Balance	Repayment	Addition	Closing Balance	Interest Cost
1	SBI-300	179.59	75.41	-	104.18	11.01
2	BOI-100	9.27	9.27	-	-	0.25
3	BOI-250	54.37	34.15	-	20.22	3.44

Sr No.	Source of Loan	Opening Balance	Repayment	Addition	Closing Balance	Interest Cost
4	SBI-20	1.1	1.1	-	-	0.01
5	SBI CC	156.39	0	109.09	265.48	15.62
6	PFC-500	349.99	71.43	-	278.56	27.04
7	UCO-250	250	62.52	-	187.48	16.1
8	IREDA 300	230	120	-	110	15.13
9	REC-450	-	-	190	190	8.96
10	PFC-100	-	-	100	100	2.25
11	REC-100	100	100	0	0	3.22
12	PFC-100	100	100	0	0	4.63
13	Total	1430.71	573.88	399.09	1255.92	107.66
14	Average Loan					1343.315
15	Rate of Interest					8.01%

3.10.3 The one (1) Year State Bank of India (SBI) MCLR rate plus 350 basis point as on 1st April, 2022 is 10.5% (7% + 3.5%). PSTCL has applied the lower of above two i.e., 8.01%. The calculation of Interest on Working Capital is as follows:-

Table 3.51: Normative Interest on Working Capital for FY 2022-23 (Rs. Crore)

Sr. No	Particulars	Transmission
1	Receivables equivalent to two (2) months of fixed cost calculated on normative target availability	268.95
2.	Maintenance Spares @ 15% of O&M Expenses	134.44
3.	Operation and Maintenance expenses for 1 (one) Month	74.69
4.	Total working capital (Normative)	478.08
5.	Rate of Interest applied (As per Norms)	8.01%
6.	Normative Interest on Working Capital	38.29

3.10.4 PSTCL requests the Commission to approve the Normative Interest on Working Capital of Rs. 38.29 Crore for Transmission and Rs. 0.68 crore SLDC for FY 2022-23 as PSERC MYT Regulations, 2019.

Commission's Analysis:

3.10.5 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.”

3.10.6 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.

3.10.7 Accordingly, the Commission considers the interest at the weighted average rate of approved loans which works out to 8.01 % for Transmission Business and approves the Interest on Working Capital as under:

Table 3.52: Interest on Working Capital for Transmission Business of PSTCL for FY 2022-23 approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months (Table 3.62/6)	268.28
2.	Maintenance spares @ 15% of Operation and Maintenance expenses (Table 3.30*0.15)	134.35
3.	Operation and Maintenance expenses for one month as approved by the Commission (Table 30/12)	74.64
4.	Working Capital requirement	477.27
5.	Interest on Working Capital (@ 8.01%	38.22

3.10.8 The Commission approves working capital requirements of Rs.477.28 Crore and interest thereon of Rs. 38.22 Crore for Transmission Business of PSTCL for FY 2022-23.

3.11 Interest on Working Capital for SLDC Business

3.11.1 In the ARR Petition for FY 2022-23, PSTCL had claimed interest on working capital of Rs. 0.84 Crore on the total working capital of Rs. 8.63Crore for SLDC Business. The Commission approved the interest on working capital of Rs. 0.70 Crore on total working capital of Rs. 7.32 Crore for FY 2022-23.

3.11.2 In the ARR Petition for FY 2023-24, PSTCL had claimed interest on working capital of Rs. 0.69 Crore on the total working capital of Rs. 8.60 Crore for SLDC Business. The Commission approved the interest on working capital of Rs. 0.62 Crore on total working capital Rs. 7.74 Crore for FY 2022-23.

PSTCL's Submission:

3.11.3 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 2022-23 is as under:

Table 3.53: Interest on Working Capital for SLDC as submitted by PSTCL for FY 2022-23

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months of fixed cost	5.09
2.	Maintenance spares @ 15% of O&M expenses	2.16
3.	Operation and Maintenance expenses for one month	1.20
4.	Total Working Capital (Normative)	8.45
5.	Rate of Interest applied	8.01%
6.	Interest on Working Capital	0.68

Commission's Analysis:

3.11.4 The commission considers the interest on working capital as 8.01% for SLDC Business and approves the Interest on Working Capital as under:

Table 3.54: Interest on Working Capital for SLDC Business of PSTCL for FY 2022-23 approved by the Commission

(Rs. Crore)		
Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months (Table 3.63/6)	5.08
2.	Maintenance spares @ 15% of Operation and Maintenance expenses (Table 3.30*0.15)	2.14
3.	Operation and Maintenance expenses for one month as approved by the Commission (Table 3.30/12)	1.19
4.	Working Capital requirement	8.41
5.	Interest on Working Capital @8.01%	0.67

3.11.5 The Commission approves working capital requirements of Rs. 8.41 Crore and interest thereon of Rs. 0.67 Crore for SLDC Business of PSTCL for FY 2022-23.

3.11.6 The Total Interest on Working Capital approved by the Commission for PSTCL for FY 2022-23 is as under:

Table 3.55: Interest on Working Capital approved by the Commission for PSTCL for FY 2022-23

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Interest on Working Capital	38.22	0.67	38.89

The Commission approves total Interest on Working Capital as Rs.38.89 Crore for PSTCL for FY 2022-23.

3.12 Return on Equity

3.12.1 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 of during FY 2022-23. 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.

3.12.2 In the ARR Petition for FY 2023-24, PSTCL had claimed Return on equity of Rs. 137.04 Crore on opening equity of Rs. 803.67 Crore and addition of Rs 160.95 crores during FY 2022-23. The Commission had approved Return on equity of Rs. 134.65 Crore on opening equity of Rs. 802.66 Crore and addition of 132.10 crores during the year.

PSTCL's Submission:

3.12.3 PSTCL has booked the profit of Rs. 100.90 crore as per Audited Accounts for FY 2022-23. Further, PSTCL submits that it has partly funded the Capital Expenditure (30% for Capital Expenditure) through equity infusion in FY 2022-23, by reinvesting Rs. 82.30 crore in FY 2022-23. Thus, equity addition has been considered as Rs. 82.30 crore as discussed in earlier Section of this Chapter.

3.12.4 For the purpose of calculating Return on Equity for FY 2022-23, Opening Balance of ROE has been considered on the basis of Revised funding for 2nd Control Period as already discussed in Previous Chapter – True up of Capital Expenditure for 2nd Control Period.

3.12.5 The computation of normative ROE for FY 2022-23 is submitted in the following table:

Table 3.56: Return on Equity for PSTCL for FY 2022-23

(Rs. Crore)		
Sr No.	Particulars	Amount
1	Equity at the opening of Year	807.19
2	Addition During the Year	82.30
3	Equity at the Closing of Year	889.49
4	Average Equity during the Year	848.34
5	Rate for Return on Equity	15.50%
6	Return on Equity	131.49

Commission’s Analysis:

3.12.6 The Commission determines the Return on Equity 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 assets 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.”

3.12.7 The Commission has considered the opening of equity for FY 2022-23 after taking into consideration impact of finalization of CIP for 2nd MYT control period .

3.12.8 Since PSTCL has booked profit of Rs. 100.90 Crore in audited accounts for FY 2022-23 and funding requirement is of Rs 274.56 Crores, therefore equity addition of Rs 82.25 crores (30% of the requirement) has been considered through equity infusion by reinvesting. The Commission has considered addition of equity of Rs. 82.25 Crore.

3.12.9 PSTCL replied vide memo no //3/CAO(F&A)/MYT-III/APR-1 dated 09.02.2024 that since inception the equity has been considered as equity of Transmission and no equity was considered for SLDC. Moreover, excess/short of revenue of SLDC is being adjusted. Since PSTCL is not claiming funding of SLDC schemes through equity as there is no separate balance sheet of SLDC, so equity has been attributed to Transmission Business only. The same has been considered.

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

Table 3.57: 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	798.60
2.	Addition of equity during the year(Table 3.15)	82.25
3.	Closing Equity	880.85
4.	Average Equity	839.72
5.	Rate of Return on Equity (%)	15.50%
6.	Return on Equity	130.16

3.12.11 Thus, the Commission approves ROE of Rs.130.16 Crore to PSTCL for FY 2022-23 as under:

Table 3.58: Return on Equity approved by the Commission for FY 2022-23
(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Return on Equity	130.16	0	130.16

3.13 Unified Load Dispatch & Communication (ULDC) Charges

3.13.1 In the ARR Petition for FY 2022-23, PSTCL had claimed ULDC Charges of Rs. 9.80 Crore for FY 2022-23 for its SLDC Business. The Commission approved the same.

3.13.2 In the ARR Petition for FY 2023-24, PSTCL had revised its estimates for ULDC Charges to Rs. 8.88 Crore as per the Audited Annual Accounts of FY 2021-22 for its SLDC Business and the Commission had approved the same.

3.13.3 In the True up Petition for FY 2022-23, PSTCL has claimed ULDC of Rs.12.52 Crore for FY 2022-23 as per the Audited Annual Accounts for its SLDC Business. The details are as under:

Table 3.59: ULDC Charges submitted by PSTCL for FY 2022-23

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	ULDC Charges - SLDC own share	-	5.68	5.68
2.	ULDC Charges - BBMB share	-	2.12	2.12
3.	NRLDC fees and Charges	-	4.72	4.72
4.	Total	-	12.52	12.52

Accordingly, the Commission approves ULDC charges of Rs. 12.52 Crore for the SLDC Business of PSTCL for FY 2022-23.

3.14 Non-Tariff Income

3.14.1 In the ARR Petition for FY 2022-23, PSTCL had projected Rs. 12.33 Crore of Non-Tariff Income for its Transmission Business and Rs. 0.21 Crore for SLDC Business against which the Commission approved the Non-Tariff Income of Rs. 35.58 Crore for Transmission Business and Rs. 0.35 Crore for its SLDC Business .

3.14.2 In the ARR Petition for FY 2023-24, PSTCL had projected revised estimates of Rs.16.29 Crore for Non-Tariff Income for its Transmission Business and Rs. 0.19 Crore for SLDC Business for FY 2022-23 against which the Commission approved Non-Tariff Income of Rs.35.57 Crore for Transmission Business and Rs. 0.23 Crore for its SLDC Business for FY 2022-23.

PSTCL's Submission:

3.14.3 For the purpose of True-up for FY 2022-23, the Petitioner has considered the non-tariff income as indicated in Note 33 of audited accounts. The Petitioner has not

considered the income towards the certain heads wherein expenses were not allowed by the Commission in previous Tariff Orders.

- a) Income of Rs. 2.44 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. 0.84 Crore towards provision withdrawn on unserviceable / obsolete items and losses under investigation.
- c) PSTCL has earned DPS of Rs. 3.10 Crore for late Payment Charges. PSTCL also considered the adjustment of Rs. 2.05 Crore of financing cost on Late Payment. Thus, Net Income from Late Payment Surcharges is Rs. 1.05 Crore.
- d) PSTCL has earned rebate on early payment of NRLDC Charges of Rs. 0.19 Crore. PSTCL also considered the adjustment of Rs. 0.11 Crore of financing cost borne due to early payment. Thus, Net Income from Rebate on early payment is Rs. 0.08 Crore.
- e) PSTCL has not considered the amount of Rs. 0.04 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.

3.14.4 In view of above, Petitioner submits NTI for FY 2022-23 as shown in following table: -

Table 3.60: Details of Non-Tariff Income for FY 2022-23 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Income from sale of scrap	3.01	0.00	3.01
2	Gain on account of sale of fixed assets	5.34	0.00	5.34
3	Income from staff welfare activities	0.02	0.00	0.02
4	Rental for staff quarters	0.59	0.05	0.65
5	Penalty imposed on suppliers/contractors	8.83	0.06	8.89
6	NOC charges from Open access customers	0.07	0.06	0.13
7	Credit balances written back :			
7a	- Sundry creditors	0.08	0.00	0.08
7b	- EMD/Security Deposit	0.06	0.00	0.06
8	Departmental Charges on Contribution/Deposit Works	4.19	0.00	4.19
9	Oil Testing fees	0.50	0.00	0.50
10	Salary deposit - short period notice of resignation/retirement/surety bonds	0.35	0.00	0.35
11	Lease Rental fiber optic- PGCIL	0.35	0.00	0.35
12	Work appraisal fee	0.17	0.00	0.17
13	Net Late Payment Surcharge - PSPCL	1.05	0.00	1.05
13a	Late Payment Surcharge - PSPCL	3.09	0.01	

Sr No.	Particulars	Transmission	SLDC	PSTCL
13b	Less: Finance cost due to Late Payment of Transmission Charges	2.04	0.01	
14	Net Rebate on early payment to NRLDC	0.00	0.08	0.08
14a	<i>Rebate on early payment to NRLDC</i>	0.00	0.19	
14b	Less: Finance cost due to Late Payment of Transmission Charges	0.00	0.11	
15	Income from O & M of bays of PGCIL	3.67	0.00	3.67
16	Miscellaneous Income *	0.94	0.00	0.94
17	Total	29.22	0.25	29.47

3.14.5 PSTCL requests the Commission to approve the Non-Tariff Income of Rs. 29.22 Crore for Transmission and Rs. 0.25 crore SLDC for FY 2022-23 as per PSERC MYT Regulations, 2019.

Commission’s Analysis:

3.14.6 The Commission determines the Non-Tariff Income 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) Serviceline 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."

3.14.7 Accordingly, the Commission approves Rs. 29.22 Crore for Transmission Business and Rs. 0.25 Crore for SLDC Business as Non-Tariff Income for FY 2022-23.

3.15 Other Expenses

3.15.1 PSTCL has considered other debits of Rs. 1.23 Crore for FY 2022-23 on account of Sundry debits written off as per Note 40 of Audited accounts of FY 2022-23.

3.15.2 Other Provisions for losses and doubtful debts has not been considered.

3.15.3 Accordingly, the Commission approves other debits Rs. 1.23 Crore for FY 2022-23.

3.16 Income from Open Access Customers

3.16.1 PSTCL has claimed a receipt of Transmission Charges of Rs. 4.22 Crore and SLDC Charges of Rs. 0.12 Crore from Open Access Customers based on Audited Accounts of PSTCL for FY 2022-23.

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

Table 3.61: Revenue from Open Access Customer during FY 2022-23 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Transmission Charges from Railways - LTA	4.19	0.08	4.27
2	Transmission Charges from PSPCL (M/s Winsome Yarns Ltd - MTOA)	0.01	0.04	0.05
3	Transmission Charges from PSPCL (M/s Nahar Sugar - STOA)	0.01	0.00	0.01
4	Transmission Charges from Others	0.01	0.00	0.01
5	Total	4.22	0.12	4.34

3.17 Annual Revenue Requirement

3.17.1 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 3.62: Annual Revenue Requirement for Transmission Business for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2022-23	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2022-23	Approved by the Commission
1a	Employee Expenses (Table 3.30)	594.45	751.04	828.13	828.12
1b	A&G Expenses (Table 3.30)	32.02	32.13	32.43	31.85
1c	R&M Expenses (Table 3.30)	43.18	36.56	35.72	35.72
1	O&M Expenses (Table 3.30)	669.65	819.73	896.28	895.69
2	Interest Charges (Table 3.45)	341.58	284.72	267.73	265.73
3	Return on Equity (Table 3.57)	112.59	134.65	131.49	130.16
4	Depreciation (Table 3.36)	327.40	313.13	312.11	312.09
5	Interest on Working Capital (Table 3.52)	38.40	35.90	38.29	38.22
6	Other Expenses	0.00	0.00	1.23	1.23
7	Annual Revenue Requirement (ARR)	1489.62	1588.13	1647.14	1643.12
8	Less: Non-Tariff Income	35.58	35.57	29.22	29.22
9	Less: Income from Open Access Customers	3.69	4.21	4.22	4.22
10	Net ARR	1450.35	1548.35	1613.70	1609.68

Table 3.63: Annual Revenue Requirement for SLDC for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2022-23	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2022-23	Approved by the Commission
1a	Employee Expenses (Table 3.30)	9.64	12.33	12.55	12.54
1b	A&G Expenses (Table 3.30)	0.96	0.95	1.05	0.95
1c	R&M Expenses (Table 3.30)	1.39	0.86	0.80	0.80
1.	O&M Expenses (Table 3.30)	11.99	14.14	14.39	14.29
2.	Interest Charges (Table 3.48)	2.58	1.29	1.17	1.19
3.	ULDC Charges	9.80	8.88	12.52	12.52
4.	Depreciation (Table 3.37)	2.46	2.04	2.16	2.16
5.	Interest on Working Capital (Table 3.54)	0.70	0.62	0.68	0.67
6.	Other Expenses	0.00	0.00	0.00	0.00
7.	Annual Revenue Requirement (ARR)	27.53	26.97	30.93	30.83
8.	Less: Non-Tariff Income	0.35	0.23	0.25	0.25
9.	Less: Income from Open Access Customers	0.06	0.09	0.12	0.12
10.	Total ARR	27.12	26.65	30.56	30.46

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

Table 3.64: Annual Revenue Requirement for PSTCL for FY 2022-23

(Rs. Crore)					
Sr. No.	Particulars	Approved in Tariff Order for FY 2022-23	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2022-23	Approved by the Commission
1a	Employee Expenses	604.09	763.37	840.68	840.66
1b	A&G Expenses	32.98	33.08	33.48	32.80
1c	R&M Expenses	44.57	37.42	36.52	36.52
1	O&M Expenses	681.64	833.87	910.67	909.98
2	Interest Charges	344.16	286.01	268.90	266.92
3	Return on Equity	112.59	134.65	131.49	130.16
4	ULDC Charges	9.80	8.88	12.52	12.52
5	Depreciation	329.86	315.17	314.27	314.25
6	Interest on Working Capital	39.10	36.52	38.97	38.90
7	Other Expenses			1.23	1.23
8	Annual Revenue Requirement (ARR)	1517.15	1615.10	1678.06	1673.95
9	Less: Non-Tariff Income	35.93	35.80	29.47	29.47
10	Less: Revenue from Open Access	3.75	4.30	4.34	4.34
11	Net Aggregate Revenue Requirement	1477.47	1575.00	1644.25	1640.14

3.18 Availability and Incentive on Transmission System Availability

PSTCL's Submission:

3.18.1 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% provided that no Incentive shall be payable for availability beyond 99.75%. 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 3.65: Incentive on account of TS Availability submitted by PSTCL for FY 2022-23
(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-22	99.7129%	99.7129%	132.63	133.59	0.96
2	May-22	99.6484%	99.6484%	137.05	137.95	0.90
3	Jun-22	99.9316%	99.7500%	132.63	133.64	1.00

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)
4	Jul-22	99.8926%	99.7500%	137.05	138.09	1.04
5	Aug-22	99.9056%	99.7500%	137.05	138.09	1.04
6	Sep-22	99.8820%	99.7500%	132.63	133.64	1.00
7	Oct-22	99.8711%	99.7500%	137.05	138.09	1.04
8	Nov-22	99.9609%	99.7500%	132.63	133.64	1.00
9	Dec-22	99.4982%	99.4982%	137.05	137.74	0.69
10	Jan-23	99.8582%	99.7500%	137.05	138.09	1.04
11	Feb-23	99.8854%	99.7500%	123.79	124.73	0.94
12	Mar-23	99.9074%	99.7500%	137.05	138.09	1.04
				1613.70	1625.38	11.69

Commission's Analysis:

3.18.2 The Commission determines the Incentive on Transmission System Availability for FY 2022-23 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%.”

3.18.3 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 3.62 of this Tariff Order, as under:-

Table 3.66: Incentive on Transmission System (TS) Availability for FY 2022-23 determined by the Commission

(Rs. Crore)					
Sr. No.	Month	TS Availability (%)	Monthly Transmission Charges	Transmission Charges inclusive of Incentive	Incentive
1.	Apr-22	99.7129%	132.31	133.25	0.94
2.	May-22	99.6484%	136.71	137.61	0.90
3.	Jun-22	99.9316%	132.31	133.31	1.00
4.	Jul-22	99.8926%	136.71	137.75	1.04
5.	Aug-22	99.9056%	136.71	137.75	1.04
6.	Sep-22	99.8820%	132.31	133.31	1.00
7.	Oct-22	99.8711%	136.71	137.75	1.04
8.	Nov-22	99.9609%	132.31	133.31	1.00
9.	Dec-22	99.4982%	136.71	137.40	0.69
10.	Jan-23	99.8582%	136.71	137.75	1.04
11.	Feb-23	99.8854%	123.48	124.41	0.93
12.	Mar-23	99.9074%	136.71	137.75	1.04
13.	Total		1609.69	1621.35	11.66

3.18.4 Thus, the Commission allows the incentive of Rs. 11.66 Crore for FY 2022-23 to PSTCL for achieving higher transmission system availability than the Normative Annual Transmission System Availability Factor (NATAF) specified in the PSERC MYT Regulations, 2019.

3.19 Net Revenue Requirement

3.19.1 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 2022-23 is shown in the following tables:

Table 3.67: Annual Revenue Requirement for Transmission Business for FY 2022-23 (Rs. Crore)

Sr. No	Particulars	Approved in Tariff Order for FY 2022-23	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2022-23	Approved by the Commission
1.	Net Aggregate Revenue Requirement (Table 3.62)	1450.35	1548.35	1613.70	1609.68
2.	Add: Incentive on Transmission System Availability	-	-	11.69	11.66
3.	Add: Gain sharing on overachievement of Transmission Loss target	-	-	30.72	30.72
4.	Net ARR	1450.35	1548.35	1656.10	1652.06

Table 3.68: Annual Revenue Requirement for SLDC Business for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2022-23	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2022-23	Approved by the Commission
1.	Net ARR (Table 3.63)	27.12	26.65	30.56	30.46

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

Table 3.69: Annual Revenue Requirement for PSTCL for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2022-23	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2022-23	Approved by the Commission
1	Total ARR (Table 3.67+3.68)	1477.47	1575.00	1686.66	1682.52

Table 3.69: Annual Revenue Requirement for PSTCL for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2022-23	Approved by the Commission in the Review of FY 2022-23	Claimed by PSTCL in the true up of FY 2022-23	Approved by the Commission
2	Add: Carrying Cost of Previous Years				-
3	Net ARR	1477.47	1575.00	1686.66	1682.52

3.20 Thus, the Commission Trues up an annual revenue requirement of Rs. 1682.52 Crores for PSTCL for FY 2022-23.

Chapter 4

Annual Revenue Requirement for FY 2024-25

4.1 Background

4.1.1 In accordance with the provisions of PSERC MYT Regulations, 2022, for FY 2024-25, the Commission in its Tariff Order dated 15.05.2023 had approved the Annual Revenue Requirement (ARR) of PSTCL, which was based on expenditure and revenue estimates of PSTCL for its Transmission and SLDC Businesses. In the current Petition, PSTCL has projected the Annual Revenue Requirement for FY 2024-25, separately for its Transmission business and SLDC business. The Commission has analyzed the same in this chapter.

4.1.2 Regulation 15.1 of PSERC MYT Regulations, 2022 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 As per historical trends, the Transmission System Availability of transmission network of PSTCL has always remained higher than the target Availability of 99%.

4.2.2 PSTCL submits that the availability of the network will be aligned to the normative limits set as per Regulation 51.1 of PSERC MYT Regulations, 2022.

Commission’s Analysis:

4.2.3 The Commission has taken note of the submission of PSTCL and shall consider its actual Transmission System Availability for FY 2024-25 for incentive, if permissible as per PSERC MYT Regulations, 2022 at the time of true up for the respective year.

4.3 Transmission Loss

4.3.1 The Commission, in the MYT Order for 3rd Control Period, had provisionally set the transmission loss trajectory as under:-

Table 4.1: 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				

PSTCL's Submission:

4.3.2 The impact of Transmission Losses will be claimed at the time of True up.

Commission's Analysis:

4.3.3 The Commission observes that the actual Transmission loss reported by PSTCL for FY 2022-23 is 2.27%. Further, PSTCL vide letter dated 15.12.2023 has submitted that the transmission loss for FY 2023-24 (H1) is 2.16%.

4.3.4 In the Tariff Order for FY 2023-24 the Commission had set the provisional transmission loss trajectory with its review as per the actual losses of FY 2022-23. Since the actual loss for FY 2022-23 is 2.27%, accordingly the Commission decides to set the transmission loss trajectory based upon the actual achievement of PSTCL during FY 2022-23 with a reduction of 0.02% for each subsequent year as under:-

Table 4.2: 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 (%)	2.25%	2.23%	2.21%

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

4.4.1 PSTCL has considered the capital expenditure and capitalisation for its Transmission and SLDC Business in line with the Capital Investment Plan as approved by the Commission for the 3rd MYT Control Period in Petition No. 50 of 2022 and subsequently capped by the Commission up to Rs. 500 crores in Tariff Order for FY 2023-24. The capital expenditure and capitalisation for the FY 2024-25 is as under: -

Table 4.3: Capital Investment for FY 2024-25**(Rs. Crore)**

Sr No.	Particulars	Approved in MYT	Revised ARR
Transmission			
I	Capital Expenditure	497.87	497.87
II	Capitalization	494.01	494.01
SLDC			
I	Capital Expenditure	2.13	2.13
II	Capitalization	5.99	5.99

4.4.2 PSTCL has further submitted that the above Capital Expenditure does not include the CAPEX towards Contributory works and works under Govt. Grants. The assets additions on account of such schemes/works shall be considered separately.

Commission’s Analysis:

4.4.3 The Commission provisionally considers the capital expenditure and capitalization for FY 2024-25 as already approved in the CIP order dated 21.12.2022 in Petition No.50 of 2022 and considered in the Tariff Order for FY 2023-24 as under:

Table 4.4: Capital expenditure and Capitalization provisionally approved by the Commission. (Rs. Crore)

Sr. No.	Particulars	FY 2024-25
1	Transmission	
	Capital Expenditure	
1a	Capex of 1 st MYT	80.96
	Capex of 2 nd MYT	208.46
	Capex New Schemes	208.45
	Total Capital Expenditure	497.87
	Capitalization	
1b	Capitalization of 1 st MYT	46.41
	Capitalization of 2 nd MYT	223.80
	Capitalization of New Schemes	223.80
	Total Capitalization	494.01
2	SLDC	
	Capital Expenditure	
2a	Capex of 1 st MYT	0.40
	Capex of 2 nd MYT	1.23
	Capex New Schemes	0.50
	Total Capital Expenditure	2.13
	Capitalization	
2b	Capitalization of 1 st MYT	0.40
	Capitalization of 2 nd MYT	3.09
	Capitalization of New Schemes	2.50
	Total Capitalization	5.99
3	Total PSTCL	
3a	Capital Expenditure	500.00
3b	Capitalization	500.00

4.4.4 The provisional capital expenditure and capitalization will be reviewed during true up of capital expenditure of the 3rd MYT control period (FY 2023-24 to FY 2025-26) at the end of the 3rd MYT control period.

4.5 Funding of Capital Expenditure

PSTCL's Submission:

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

4.5.2 The following Table shows the Capital Investment claimed by PSTCL for funding through loans and equity for Transmission and SLDC for FY 2024-25: -

Table 4.5: Funding Requirement for Capital Investment for FY 2024-25 (Rs. crore)

Sr. No.	Particulars		FY 2024-25		
			Transmission	SLDC	PSTCL
1	CAPEX of Spill over Schemes of 1st Control Period	Total Funding Required	80.96	0.40	81.36
2		Funding through Equity	24.29	-	24.29
3		Funding through Loan	56.67	0.40	57.07
4	Capitalization of Schemes of 2nd and 3rd Control Period	Total Funding Required	447.60	5.59	453.19
5		Funding through Equity	134.28	-	134.28
6		Funding through Loan	313.32	5.59	318.91
7	Total Funding Required for Investment	Total Funding Required	528.56	5.99	534.55
8		Funding through Equity	158.57	-	158.57
9		Funding through Loan	369.99	5.99	375.98

Commission's Analysis:

4.5.3 PSTCL has proposed equity funding for FY 2024-25 for Transmission only stating that equity is considered as equity of Transmission. Therefore, the Commission has considered funding of Transmission as per Regulation 19.2 of PSERC Regulation 2022 (para 3.6.5) in the debt-equity ratio of 70:30 and 100% funding of SLDC through loans, which will be reviewed again based on actual funding during the time of True-up of FY 2024-25. Accordingly, the Commission allows the funding as under:

Table 4.6: Funding for FY 2024-25 as approved by the Commission

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	CAPEX of Spill over Schemes for 1st control Period	80.96	0.40	81.36
2	Capitalisation of Schemes for 2 nd control period	223.80	3.09	226.89
3	Capitalization of New Schemes for 3 rd control period	223.80	2.50	226.30
4	Total funding for CAPEX	528.56	5.99	534.55
5	Funding through Equity(30% of 4)	158.57	0.00	158.57

Sr. No.	Particulars	Transmission	SLDC	PSTCL
6	Funding through Loan (70% of 4)	369.99	5.99	375.98
7	Funding through Loan (Spillover schemes for 2 nd control period & New Schemes of 3 rd control period)	313.32	5.59	318.91
8	Funding through Loan (Spill Over Schemes for 1 st Control period)	56.67	0.40	57.07

4.6 Operation and Maintenance Expenses

A. Employee Costs

PSTCL's Submission:

4.6.1 As per Regulation 25 of PSERC MYT Regulations, 2022, PSTCL makes its submission for Employee Costs, R&M and A&G Expenses as under

Employee Cost

4.6.2 PSTCL has submitted that in the MYT Petition for the 3rd Control Period dated 15.05.2023, the Commission had approved employee costs of Rs. 769.51 Crore for Transmission and Rs. 10.60 Crore for SLDC for FY 2024-25.

4.6.3 PSTCL has claimed Terminal benefits which includes elements such as Pension and Gratuity, leave encashment, Medical Reimbursement, etc. for the FY 2024-25 based on actual Terminal Benefits paid during FY 2022-23 by estimating 5% increase on yearly basis. However, Actual Terminal Benefits will be claimed during True up of FY 2024-25.

4.6.4 PSTCL submits that it has not considered the impact of arrears of the 6th Pay Commission revision of Punjab Govt. (w.e.f 01.01.2016 to 30.06.2021). The same will be claimed as and when it is actually paid.

Table 4.7: Employee Terminal Benefits for FY 2024-25 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Terminal Benefits for FY 2023-24 (Notionally calculated @5% increase on FY 2022-23)	543.38	0.47	543.85
2	Add: Increase @ 5%	27.17	0.02	27.19
3	Terminal Benefits for FY 2024-25	570.55	0.49	571.04

Other Employee Cost

4.6.5 The Petitioner 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 Hon'ble APTEL. The effect of the same may be considered by the Commission if the matter is ruled in favour of PSTCL

(a) Manpower requirement for SAMAST scheme

Due to commissioning of SAMAST project in mid of the FY 2023-24, the employee cost for six months has notionally been considered in base employee cost for FY 2023-24 amounting to Rs. 1.53 crore. The remaining six months employee cost has been considered after indexation amounting to Rs. 1.65 Crore in the normative employee cost computed for FY 2024-25.

(b) Manpower requirement for New Substations

PSTCL has commissioned New Sub-Stations in FY 2023-24 and FY 2024-25. Considering the Notional Employee Cost added during FY 2023-24, PSTCL has added the Indexed Employee Cost of the additional Manpower for Newly added Substations during FY2024-25.

4.6.6 Since, WPI and CPI index are as calculated in the previous Chapter of this Petition "True up for FY 2022-23" these are also considered for the computation of O&M expenses for FY 2024-25.

Table 4.8: Normative Other Employee Cost for FY 2024-25 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Other Employee Cost for FY 2023-24 (Notionally Calculated on the basis of FY 2022-23)	343.42	14.57	357.99
2	Escalation Factor (CPI: WPI: 50:50)	7.73%	7.73%	
3	Indexed Employee Cost	369.97	15.69	385.66
4	Add: Employee Cost for New Recruitment	-	1.65	1.65
5	Add: Employee Cost for New Sub Stations	5.98	0.00	5.98
6	Net Other Employee Cost for FY 2024-25	375.95	17.34	393.29
7	Terminal Benefits	570.55	0.50	571.04
8	Normative Employee Cost for FY 2024-25	946.50	17.84	964.34

Commission's Analysis:

4.6.7 The employee cost are determined as per Regulation 25 and 8.2 of PSERC MYT Regulation, 2022 as reproduced as under:

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

25.1. 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, 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 Petitioner.

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 29. The amount approved by the Commission shall be tried up.

Note 6: Exceptional increase in employee cost on account of Pay Commission based revision for 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.

....”

As per Regulation 8.2 of MYT Regulation,2022

“

**Employee cost, A&G costs and R&M costs are considered normative as per the formula specified in Regulation 25 individually. The changes on account of Inflation Index and/or statutory levies shall be adjusted during the True-up. However, if the actual expenditure is less than normative, than the allowable expenditure shall be limited to actual expenditure incurred by the petitioner.”*

A. 1) Terminal Benefits

4.6.8 In this petition PSTCL has submitted terminal benefits with 5% increase on yearly basis. PSTCL has not considered the impact of arrears of the 6th pay Commission revision. The Commission considers terminal benefits as submitted by PSTCL amounting to Rs. 571.04 Crores. The same will be reviewed in the true up of the year on actual paid basis.

2) Other Employee Cost

4.6.9 The Commission has calculated the Price **INDEX** as under, taking 9 months of data available up to 31.12.2023 which shall be reviewed during the true up of the year:

Table 4.9: Calculation of INDEX

Sr. No.	Particulars	2022-23 (APR 2022 -Dec 2023)	2023-24 (APR 2022 -Dec 2023)	Increase (%)
1	CPI	375.872	396.160	5.3976%
2	WPI	153.0778	151.444	-1.0670%

$$INDEX\ n/INDEX\ n-1 = (0.5*5.3976) + (0.5*(-)1.067) = 2.165286\%$$

4.6.10 PSTCL has submitted that due to commissioning of the SAMAST project in mid of the FY 2023-24, the employee cost for six months has notionally been considered in the base employee cost for FY 2023-24 amounting to Rs. 1.53 crore. The remaining six months employee cost has been considered after indexation amounting to Rs. 1.65 Crore in normative employee cost computed for FY 2024-25. Accordingly, the Commission has allowed the employee cost of Rs. 1.65 Crore for FY 2024-25 as claimed by PSTCL.

4.6.11 PSTCL has commissioned New Sub-Stations in FY 2023-24 and FY 2024-25. Considering the Notional Employee Cost added during FY 2023-24, PSTCL has added the Indexed Employee Cost of the additional Manpower for Newly added Substations

during FY2024-25. Accordingly, the Commission has allowed the employee cost of Rs. 5.98 Crores for FY 2024-25 as claimed by PSTCL.

4.6.12 The aforesaid expenses shall be considered based on actual figures during the time of truing up of the year. The Commission has considered the actual other employee cost amounting to Rs 244.89 Crores and Rs.7.45 Crores for Transmission and SLDC respectively as per the annual audited accounts for FY 2022-23 as the opening base employee cost for FY 2023-24 to determine the other employee cost. The same will be reviewed by taking into consideration the actual expenses of FY 2023-24 and other norms/benchmarks in subsequent tariff orders. Accordingly, the Commission has calculated the Normative Employee Cost for FY 2023-24 to arrive at the base employee cost to be considered for FY 2024-25 as under:

Table 4.10: Calculation of Base other employee cost for FY 2023-24

(Rs. Crores)				
Sr. No.	Particulars	Transmission	SLDC	Total
1.	Other Employee Cost of the previous year	244.89	7.45	252.34
2.	Terminal benefits	528.46	0.45	528.91
3.	Total Employee Cost	773.35	7.90	781.25
4	Escalation factor	1.02165	1.02165	
5	Base Other Employee Cost	244.89	7.45	252.34
6	Other Employee Cost for FY 2023-24	250.19	7.61	257.80

Table 4.11: Normative Employee Cost as approved by the Commission for FY 2024-25

(Rs. Crores)		
Sr. No.	Particulars	Amount
Transmission Business		
1.	Other Employee Cost of previous year	250.19
2.	Escalation Factor	1.021653
3.	Other Employee Cost	255.61
4.	Terminal Benefits	570.55
5.	Total Employee Cost	826.16
SLDC Business		
1.	Other Employee Cost of previous year	7.61
2.	Escalation Factor	1.021653
3.	Other Employee Cost	7.78
4.	Terminal Benefits	0.50
5.	Total Employee Cost	8.28

4.6.13 Therefore, the Commission provisionally allows Employee Cost of Rs. 826.16 Crore for Transmission Business and Rs.8.28 Crore for SLDC Business i.e., Employee Cost of Rs. 834.44 Crore for FY 2024-25 to PSTCL.

A. Administration & General (A&G) Expenses

PSTCL’s Submission:

4.6.14 PSTCL has submitted that in the MYT Order for the 3rd Control Period dated 15.05.2023, the Commission had approved A & G Expenses of Rs. 31.94 Crore for Transmission and Rs. 0.76 Crore for SLDC for FY 2024-25.

4.6.15 PSTCL has further submitted that for computation of Normative A& G expense for FY 2024-25, the Petitioner has considered the baseline values of FY 2023-24 notionally calculated on the basis of FY 2022-23.

4.6.16 PSTCL has also considered the additional A & G Expenses on account of asset addition in line with the Note – 10 of Regulations 25 of PSERC MYT Regulations, 2022.

4.6.17 The A&G expenses have been escalated with an escalation factor of 7.73% as per True up.

Table 4.12: Normative A & G Expenses for FY 2024-25 (Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Net Asset added during FY 2024-25	494.01	5.99	500.00
2	%age of A&G w.r.t GFA	0.238%	2.046%	
3	Base A & G Expenses for FY 2023-24 (Notionally Calculated)	35.41	1.64	37.05
4	Escalation Factor (CPI: WPI: 50:50)	7.73%	7.73%	
5	Escalated A&G expenses for FY 2022-23	38.15	1.76	39.91
6	Add: Additional A&G expenses on account of asset addition during FY 2024-25.	1.18	0.12	1.30
7	Add: Audit fee (76.122)	0.05	0.00	0.05
8	Add: License & Petition fee (76.129)	0.55	0.00	0.55
9	Normative A&G Expenses	39.93	1.89	41.81

Commission’s Analysis:

4.6.18 In the MYT Petition for FY 2023-24, PSTCL projected A&G Expenses of Rs. 49.02 Crore for its Transmission Business and Rs. 2.42 Crore for its SLDC Business for FY 2024-25. The Commission approved Rs. 31.94 Crore and Rs. 0.76 Crore as A&G expenses for Transmission Business and SLDC Business of PSTCL respectively.

4.6.19 PSTCL replied to the deficiencies vide letter dated 09.02.2023 that in case of commissioning of new sub-stations, PSTCL is supposed to incur additional A&G expenses over and above its current level to maintain the activity level up to its

standard. Asset addition has been claimed as per Note 10 of MYT Regulation 26 of 2019.

4.6.20 The A&G expenses are to be determined as per Regulation 25.1 of PSERC MYT Regulations, 2022. 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 asset addition.

4.6.21 The Commission has determined the A&G expenses for FY 2023-24 considering the actual A&G expenses as per audited accounts of FY 2022-23 and index as per Table no 4.9 for determining normative A&G expenses for FY 2024-25 . Audit fee and License/ARR fee have been considered as per true up of FY 2022-23 provisionally. Accordingly, Baseline values of A&G expenses has been determined as under which will be reviewed at the time of true up of FY 2023-24.

Table 4.13: Base A&G expenses as provisionally determined by the Commission FY 2023-24

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	Total
1.	Opening A&G as per audited accounts FY 2022-23	26.86	0.73	27.60
2.	Less Audit fee	0.05	0.00	0.05
3.	Less ARR and Licence fee	0.55	0.00	0.55
4.	Base A&G expenses	26.26	0.73	26.99
5.	Escalation Factor	1.02165	1.02165	
6.	A&G Expenses for FY 2023-24	26.83	0.75	27.58

Table 4.14: A&G expenses as approved by the Commission FY 2024-25

(Rs. Crore)		
Sr. No.	Particulars	Amount
	Transmission Business	
1.	Opening A&G	26.83
2.	Escalation Factor	1.02165
3.	A&G Expenses	27.41
4.	Audit Fee	0.05
5.	Add: Licence/ARR Fee	0.55
6.	A&G Expenses	28.01
	SLDC Business	
1.	Opening A&G	0.75
2.	Escalation Factor	1.021653
3.	A&G expenses	0.76

4.6.22 Therefore, the Commission provisionally allows A&G expenses of Rs. 28.01 Crore for Transmission Business and Rs. 0.76 Crore for SLDC Business i.e. A&G expenses of Rs. 28.77 Crore for FY 2024-25 for PSTCL.

Repair & Maintenance (R&M)

4.6.23 In the MYT Petition for FY 2023-24, PSTCL projected R&M Expenses of Rs. 43.66 Crore for its Transmission Business and Rs. 3.99 Crore for its SLDC Business for FY 2024-25. The Commission approved Rs. 48.62 Crore and Rs. 4.21 Crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

PSTCL’s Submission:

4.6.24 The Petitioner has considered the notionally calculated baseline values of FY 2023-24 for Computation of Normative R & M expense of FY 2024-25.

4.6.25 In this Petition, for computation of Normative R&M expenses, PSTCL has considered the “K” Factor as determined by the Commission and which is constant for the 3rdControl Period as per PSERC MYT Regulations, 2022.

4.6.26 The R&M expenses have been escalated with an escalation factor of 9.41% increase in WPI as in the True up of FY 2022-23.

Accordingly, the R&M expenses for FY 2024-25 are submitted as under: -

Table 4.15: Normative R & M Expenses for FY 2024-25

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA as on 01.04.2024	11370.83	58.66	11429.50
2	Add: Addition to GFA during FY 2024-25	494.01	5.99	500.00
3	Less: Retirement to GFA during FY 2024-25	0.00	0.00	0.00
4	Closing GFA (Including Land) as on 31.03.2025	11864.84	64.65	11929.50
5	Average GFA for FY 2024-25	11617.84	61.66	11679.50
6	K - Factor (Determined by PSERC)	0.29977%	1.30907%	
7	Escalation Factor (WPI Index)	9.41%	9.41%	
8	Total Normative R & M Expenses	38.10	0.88	38.99

4.6.27 The Petitioner submits the normative O&M Expenses for FY 2024-25 are as per table below:

Table 4.16: Normative O & M Expenses for FY 2024-25

(Rs. Crore)

Sr No.	Particulars	Transmission	SLDC	PSTCL
1	Employee Expenses	946.50	17.84	964.34
2	A&G Expenses	39.93	1.89	41.81
3	R&M Expenses	38.10	0.88	38.99
4	Normative O & M Expenses	1024.53	20.61	1045.14

4.6.28 PSTCL requests the Commission to approve the Normative O&M expenses of Rs. 1024.53 Crore for Transmission and Rs. 20.61 Crore SLDC for FY 2024-25 as per PSERC's MYT Regulations, 2022.

Commission's Analysis:

4.6.29 As per Regulation 25.1 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."

4.6.30 The 'K' factor as determined in the MYT order dated 15.05.2023 as per Table no 149 in chapter 4 has been revised on the basis of audited figures of FY 2022-23. The opening GFA is considered as per the Closing GFA approved during True-Up of FY 2022-23.

Table 4.17: Revised K factor for 3rd MYT period (Based on FY 2022-23)

Sr. No	Particulars	Transmission	SLDC
1	Opening GFA 1.4.2022	10655.16	28.89
2	Closing GFA 31.3.2023	10894.96	33.78
3	Average GFA	10775.06	31.33
4	R&M Expenses	34.88	0.85
5	K factor	0.323710%	2.71243%

4.6.31 After considering the k-factor, increase in WPI as per table no 4.9 and projected capitalization (Table No 4.4) as approved in the Tariff order for FY 2023-24 for FY 2023-24 and FY 2024-25, the Commission has calculated the R&M Expenses for FY 2023-24 in order to determine R&M expenses for FY 2024-25 as under:-

Table 4.18: GFA for R&M Expenses for FY 2023-24 as provisionally approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Amount
	Transmission Business	
1	Opening GFA for FY 2023-24	10894.98
2	Addition during the year	475.21
3	Closing GFA	11370.19
	SLDC	
1	Opening GFA	33.78
2	Addition during the year	24.79
3	Closing GFA	58.57

Table 4.19: R&M Expenses for the FY 2024-25 as provisionally approved by the Commission (Rs. Crore)

Sr. No.	Particulars	Amount
	Transmission Business	
1	Opening GFA	11370.19
2	Addition during the year(table 4.4)	494.01
3	Closing GFA	11864.20
4	Average GFA	11617.20
5	k-factor	0.3237%
6	Escalation factor	(0.98933) ²
7	R&M Expenses	36.81
	SLDC	
1	Opening GFA	58.57
2	Addition during the year(Table 4.4)	5.99
3	Closing GFA	64.56
4	Average GFA	61.57
5	k-factor	2.7124%
6	Escalation factor	(0.98933) ²
7	R&M Expenses	1.63
8	Total R&M Expenses for PSTCL	38.44

4.6.32 Thus, the Commission approves O&M expenses for the FY 2024-25 as under:

Table 4.20: O&M Expenses for Transmission Business of FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Amount
1.	Employee Expenses(Table 4.11)	826.16
2.	A&G Expenses(Table 4.14)	28.01
3.	R&M Expenses(Table 4.19)	36.81
4.	O&M Expenses	890.98

Table 4.21: O&M Expenses for SLDC Business of FY 2024-25 (Rs. Crores)

Sr. No.	Particulars	Amount
1.	Employee Expenses(Table 4.11)	8.28
2.	A&G Expenses(Table 4.14)	0.76
3.	R&M Expenses(Table 4.19)	1.63
4.	O&M Expenses	10.67

**Table 4.22: O&M Expenses for PSTCL of FY 2024-25
(Rs. Crores)**

Sr. No.	Particulars	Amount
1.	Employee Expenses	834.44
2.	A&G Expenses	28.77
3.	R&M Expenses	38.44
4.	O&M Expenses	901.65

4.7 Depreciation Charges

4.7.1 In the MYT Petition of FY 2023-24, PSTCL had claimed depreciation charges of Rs. 392.80 Crore for Transmission Business and Rs. 4.35 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 320.83 Crore for Spillover Schemes and Rs. 28.44 Crore for New Schemes of Transmission Business and Rs. 2.03 Crore for Spillover schemes and Rs. 2.32 Crore for New Schemes of SLDC Business.

PSTCL's Submission:

4.7.2 Regulation 21 of the PSERC MYT Regulations, 2022, provides for computation of Depreciation for each year of the Control Period.

4.7.3 In the MYT Order for 3rd Control Period dated 15.05.2023, this Commission had approved Depreciation Charges of Rs. 349.27 Crore for Transmission and Rs. 4.35 Crore for SLDC for FY 2024-25.

4.7.4 PSTCL has considered the opening GFA for FY 2024-25 equal to closing GFA of FY 2023-24 and notionally calculated as per capitalization already approved by this Commission in CIP Plan for 3rd Control Period. Addition of GFA during FY 2024-25 has been considered equal to the projected capitalization approved by Commission in the CIP Plan.

4.7.5 PSTCL has also not considered any Depreciation on account of assets funded through Contributory Works and works under PSDF Scheme in FY 2023-24 & FY 2024-25.

4.7.6 The Petitioner has considered the weighted average rate of depreciation computed as 4.12% for Transmission Business and 8.12% for SLDC based on audited accounts for FY 2022-23. The depreciation has been computed by applying weighted average rate of depreciation on average GFA during the year. Accordingly, PSTCL submits the depreciation for FY 2024-25 as under: -

Table 4.23: Calculation of Rate of Depreciation for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2024-25		
		Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	8153.14	53.82	8206.96
2	Add: Addition to GFA (Excluding Contributory & PSDF)	494.01	5.99	500.00

Sr. No.	Particulars	FY 2024-25		
		Transmission	SLDC	PSTCL
3	Closing GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	8647.15	59.81	8706.96
4	Average GFA	8400.15	56.82	8456.96
5	Depreciation (% of Average)	4.12%	8.12%	
6	Depreciation during the year	346.03	4.61	350.64

4.7.7 PSTCL has segregated the depreciation on assets created from Spill over schemes (Works Started before 01.04.2020) and New Schemes (Works started after 01.04.2020) using the average rate of depreciation calculated as above.

4.7.8 Following tables shows the segregated depreciation of spill over schemes and New Schemes: -

Table 4.24: Depreciation on Spill Over Schemes during FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2024-25		
		Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	7820.59	26.16	7846.75
2	Add: Addition to GFA (Excluding Contributory & PSDF)	46.41	0.40	46.81
3	Closing GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	7867.00	26.56	7893.56
4	Average GFA	7843.80	26.36	7870.15
5	Depreciation (% of Average)	4.12%	8.12%	
6	Depreciation during the year	323.11	2.14	325.25

Table 4.25: Depreciation on New Schemes during FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2024-25		
		Transmission	SLDC	PSTCL
1	Opening GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	332.55	27.67	360.21
2	Add: Addition to GFA (Excluding Contributory & PSDF)	447.60	5.59	453.19
3	Closing GFA (Excluding Land and Land Rights) & (Excluding Contribution & Govt. Grant)	780.15	33.26	813.40
4	Average GFA	556.35	30.46	586.81
5	Depreciation (% of Average)	4.12%	8.12%	
6	Depreciation during the year	22.92	2.47	25.39

4.7.9 PSTCL requests the Commission to approve the Depreciation of Rs. 346.03 Crore for Transmission and Rs. 4.61 crore SLDC for FY 2024-25.

Commission's Analysis:

4.7.10 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."

4.7.11 The Commission determines the depreciation 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 2022-23. Based on the actual rate of depreciation of 4.12% for Transmission Business and 8.12% for SLDC Business as determined during True-Up of FY 2022-23 in this Tariff Order. The addition to GFA has been considered as approved in the MYT order of the third control period in the tariff order

of FY 2023-24. The depreciation for FY 2023-24 for Spillover and New Schemes for Transmission and SLDC Business is determined provisionally to work out the Depreciation of FY 2024-25 as under:

Table 4.26: Depreciation provisionally approved by the Commission for FY 2023-24 for Transmission Business (Rs. Crore)

Sr. No	Particulars	Amount
(I)	Spillover schemes	
1.	Opening GFA (excluding land and land rights & contributory and PSDF works)	7392.98
2.	Add: Additions to GFA during the year	396.61
3.	Closing GFA	7789.59
4.	Average GFA	7591.28
5.	Depreciation @4.12% of average GFA	312.71
(II)	New schemes	
6.	Opening GFA (excluding land and land rights)	283.92
7.	Add: Additions to GFA during the year (Table 4.4)	78.60
8.	Closing GFA	362.52
9.	Average GFA	323.22
10.	Depreciation @4.12% of average GFA	13.32
11.	Total Depreciation	326.03

Table 4.27: Depreciation approved by the Commission for FY 2023-24 for SLDC Business (Rs. Crore)

Sr. No	Particulars	Amount
(I)	Spillover schemes	
1.	Opening GFA (excluding land and land rights)	23.88
2.	Add: Additions to GFA during the year (Table 4.4)	2.27
3.	Closing GFA	26.15
4.	Average GFA	25.02
5.	Depreciation @8.12% of average GFA	2.03
(II)	New schemes	
6.	Opening GFA (excluding land and land rights)	5.15
7.	Add: Additions to GFA during the year (Table 4.4)	22.52
8.	Closing GFA	27.67
9.	Average GFA	16.41
10.	Depreciation @8.12% of average GFA	1.33
11.	Total Depreciation	3.36

Table 4.28: Depreciation provisionally approved by the Commission for FY 2024-25 for Transmission Business (Rs. Crore)

Sr. No	Particulars	Amount
(I)	Spillover schemes	
1.	Opening GFA (excluding land and land rights & contributory and PSDF works)	7789.59
2.	Add: Additions to GFA during the year (Table 4.4)	46.41
3.	Closing GFA	7836.00
4.	Average GFA	7812.79
5.	Depreciation @4.12% of average GFA	321.83
(II)	New schemes	
6.	Opening GFA (excluding land and land rights)	362.52
7.	Add: Additions to GFA during the year (table 4.4)	447.60
8.	Closing GFA	810.12
9.	Average GFA	586.32
10.	Depreciation @4.12% of average GFA	24.15
11.	Total Depreciation (5+11)	345.98

Table 4.29: Depreciation approved by the Commission for FY 2024-25 for SLDC Business (Rs. Crore)

Sr. No	Particulars	Amount
(I)	Spillover schemes	
1.	Opening GFA (excluding land and land rights)	26.15
2.	Add: Additions to GFA during the year (Table 4.4)	0.40
3.	Closing GFA	26.55
4.	Average GFA	26.35
5.	Depreciation @8.12% of average GFA	2.15
(II)	New schemes	
6.	Opening GFA (excluding land and land rights)	27.67
7.	Add: Additions to GFA during the year (Table 4.4)	5.59
8.	Closing GFA	33.26
9.	Average GFA	30.46
10.	Depreciation @8.12% of average GFA	2.47
11.	Total Depreciation (5+11)	4.61

Table 4.30: Depreciation approved by the Commission for FY 2024-25 for PSTCL (Rs. Crore)

Sr. No	Particulars	Amount
(I)	Transmission	
1.	Opening GFA (excluding land and land rights)	8152.11
2.	Add: Additions to GFA during the year (Table 4.4)	494.01
3.	Closing GFA	8646.12
4.	Average GFA	8399.11
5.	Depreciation @4.12% of average GFA	345.98

Sr. No	Particulars	Amount
(II)	SLDC	
6.	Opening GFA (excluding land and land rights)	53.82
7.	Add: Additions to GFA during the year(Table 4.4)	5.99
8.	Closing GFA	59.81
9.	Average GFA	56.82
10.	Depreciation @7.21% of average GFA	4.61
11.	Total Depreciation	350.59

The Commission provisionally approves depreciation of Rs. 345.98 Crore and Rs. 4.61 Crore for Transmission and SLDC business respectively for FY 2024-25.

4.8 Interest and Finance Charges

4.8.1 In the MYT Petition of FY 2023-24, PSTCL had claimed Interest and Finance charges of Rs. 340.54 Crore (net of capitalization of Rs. 3.31 Crore of interest charges) for its Transmission Business and Rs. 3.46 Crore for SLDC Business for FY 2024-25. The Commission approved interest charges of Rs. 273.97 Crore for Transmission Business (including Spillover and new schemes) and Rs. 3.45 Crore for SLDC Business for FY 2024-25.

PSTCL's Submission:

- 4.8.2 PSTCL has considered notionally calculated closing balance of Loans of FY 2023-24 as opening GFA for FY 2024-25 and addition as per funding plan.
- 4.8.3 PSTCL has considered the repayment equal to the depreciation of corresponding year as per PSERC MYT Regulations, 2022.
- 4.8.4 The Petitioner has considered the weighted average rate of interest on long term loans as 8.71% for Transmission Business and 8.38% for SLDC as computed in True up of FY 2022-23 based on Audited Figures.
- 4.8.5 PSTCL has considered the loan segregation for Spill over Schemes and New Schemes as per the funding requirement of PSTCL discussed previously.

Table 4.31: Interest on Loan for Spill Over Schemes for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2024-25		
		Transmission	SLDC	PSTCL
1	Opening Balance	2,734.14	9.37	2,743.51
2	Add: Addition during the year	56.67	0.40	57.07
3	Less: Repayment during the year	323.11	2.14	325.25
4	Closing Balance	2,467.70	7.63	2,475.33
5	Average Loan for the year	2,600.92	8.50	2,609.42
6	Interest Rate	8.71%	8.38%	-
7	Interest Charges for the year	226.54	0.71	227.25

Table 4.32: Interest on Loan for New Schemes for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2024-25		
		Transmission	SLDC	PSTCL
1	Opening Balance	212.39	26.10	238.49
2	Add: Addition during the year	313.32	5.59	318.91
3	Less: Repayment during the year	22.92	2.47	25.39
4	Closing Balance	502.79	29.22	532.01
5	Average Loan for the year	357.59	27.66	385.25
6	Interest Rate	8.71%	8.38%	-
7	Interest Charges for the year	31.15	2.32	33.46

4.8.6 PSTCL has also projected the Miscellaneous Finance Charges amounting Rs. 0.28 crore based on Audited Accounts of FY 2022-23.

4.8.7 Calculation of Interest Charges for all schemes for FY 2022-23 is as under: -

Table 4.33: Interest on Loan for All Schemes for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	FY 2024-25		
		STU	SLDC	PSTCL
1	Opening Balance	2,946.53	35.47	2,982.00
2	Add: Addition during the year	369.99	5.99	375.98
3	Less: Repayment during the year	346.03	4.61	350.64
4	Closing Balance	2,970.49	36.85	3,007.34
5	Average Loan for the year	2,958.51	36.16	2,994.67
6	Interest Rate	8.71%	8.38%	-
7	Interest Charges for the year	257.69	3.03	260.72
8	Add: Misc & Finance Charges	0.28	-	0.28
9	Less: Interest Capitalized	7.03	-	7.03
10	Normative Interest & Finance Charges	250.94	3.03	253.97

4.8.8 PSTCL requests the Commission to approve the Interest Charges of Rs. 250.94 Crore for Transmission and Rs. 3.03 crore SLDC for FY 2024-25.

Commission's Analysis:

4.8.9 The Commission determines the Interest on loan capital as per Regulation 23 of the PSERC MYT Regulations, 2022 which is reproduced as under:-

"23.1. 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.

23.2. 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.

23.3. 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.

23.4. 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.

23.5. 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.”

- 4.8.10** To determine the opening loan for FY 2024-25 the Commission first determines the closing loan for FY 2023-24. For this it considers the Opening loan for Spillover schemes and New schemes as per the Closing loan approved by the Commission for Spillover schemes and New schemes respectively in the true up of FY 2022-23 in this Tariff Order.
- 4.8.11** The Commission has considered the approved addition of loan as explained in Table No.4.6.
- 4.8.12** As per regulation 23.3 of PSERC MYT Regulation 2022, the repayment of loan is considered equal to depreciation allowed in Table 4.26 and 4.27.
- 4.8.13** For the Spillover schemes i.e., for existing loans, the rate of interest on loan capital is as per Regulation 23.1 and is considered as 8.71% for Transmission business and 8.38% for SLDC business as approved during the True-up of FY 2022-23 in this Tariff Order.
- 4.8.14** The Commission determines closing balance of long term loans provisionally for Transmission Business and SLDC Business for FY 2023-24, by considering the closing of FY 2022-23 as the opening for FY 2023-24 and funding as approved in MYT order dated 15.5.2023 in table no 166 and 167 as under:-

Table 4.34: Closing Balance of loan for Spill over schemes of Transmission Business for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	FY 2023-24
1.	Opening balance of loan	2867.00
2.	Add: Receipt of loan during the year	137.42
3.	Less: Repayment of loan during the year (Table 4.26)	312.71
4.	Closing balance of loan	2691.71

Table 4.35: Closing Balance of loan for New schemes of Transmission Business for FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	188.26
2.	Add: Receipt of loan during the year	55.02
3.	Less: Repayment of loan during the year (Table 4.26)	13.32
4.	Closing balance of loan	229.96

Table 4.36: Closing Balance of loan for Spillover schemes of SLDC Business FY 2023-24 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	10.88
2.	Add: Receipt of loan during the year	0.78
3.	Less: Repayment of loan during the year (Table 4.27)	2.03
4.	Closing balance of loan	9.63

Table 4.37: Closing Balance of loan for New schemes of SLDC Business FY 2023-24 (Rs. Crores)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	4.92
2.	Add: Receipt of loan during the year	22.52
3.	Less: Repayment of loan during the year (Table 4.27)	1.33
4.	Closing balance of loan	26.11

4.8.15 The Commission determines Interest on long term loans for Transmission Business and SLDC Business by considering the closing of FY 2023-24 as determined above as the opening for FY 2024-25 and funding as provisionally approved in Table 4.6 as under:

Table 4.38: Interest on loan for Spill over schemes of Transmission Business for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	2691.71
2.	Add: Receipt of loan during the year	56.67
3.	Less: Repayment of loan during the year	321.83
4.	Closing balance of loan	2426.55
5.	Average Loan	2559.13
6.	Interest Charges @ 8.71%	222.90

Table 4.39: Interest on loan for New schemes of Transmission Business for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	229.96
2.	Add: Receipt of loan during the year	313.32
3.	Less: Repayment of loan during the year	24.15
4.	Closing balance of loan	519.13
5.	Average Loan	374.55
6.	Interest Charges @ 8.71%	32.62

Table 4.40: Interest on loan for Spillover schemes of SLDC Business FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	9.63
2.	Add: Receipt of loan during the year	0.40
3.	Less: Repayment of loan during the year	2.14
4.	Closing balance of loan	7.89
5.	Average Loan	8.76
6.	Interest Charges @ 8.38%	0.73

Table 4.41: Interest on loan for New schemes of SLDC Business FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening balance of loan	26.11
2.	Add: Receipt of loan during the year	5.59
3.	Less: Repayment of loan during the year	2.47
4.	Closing balance of loan	29.22
5.	Average Loan	27.66
6.	Interest Charges @ 8.38%	2.32

4.8.16 The Commission approves Interest on long term loans of Rs.255.52 (222.90+32.62) Crore for Transmission Business and Rs. 3.05 (0.73+2.32) Crore for SLDC Business for FY 2024-25.

Finance and Guarantee charges:

4.8.17 PSTCL has claimed finance charges and guarantee fee of Rs. 0.28 Crore for FY 2024-25. The Commission has considered the submissions of PSTCL and has provisionally approved the finance charges and guarantee fees as Rs. 0.28 Crore for FY 2024-25, as submitted by PSTCL.

Capitalization of Interest Charges

4.8.18 Capitalization of interest and finance charges of Rs. 7.03 Crore for FY 2024-25 is claimed by PSTCL. The Commission has considered the same.

4.8.19 Accordingly, The Commission determines Interest and Finance Charges for Transmission Business and SLDC Business as under:

Table 4.42: Interest and Finance charges approved by the Commission for Transmission Business FY 2024-25 (Rs. Crore)

Sr. No	Particulars	Amount
1.	Interest charges for Spillover schemes of Transmission Business	222.90
2.	Interest charges for New schemes of Transmission Business	32.62
3.	Add Finance/Guarantee charges	0.28
4.	Less: Interest capitalized	7.03
5.	Net Interest charges	248.77

Table 4.43: Interest and Finance charges approved by the Commission for SLDC Business FY 2024-25 (Rs. Crores)

Sr. No	Particulars	Amount
1.	Interest charges	3.05

4.8.20 Thus, the Commission approves Net Interest and Finance Charges of Rs. 251.82(248.77+3.05) Crore for PSTCL for FY 2024-25.

4.9 Interest on Working Capital

4.9.1 In the MYT Petition for FY 2023-24, PSTCL had claimed interest on working capital of Rs. 44.48 Crore and Rs. 1.02 Crore for Transmission business and SLDC business respectively against which the Commission had approved Rs. 37.71 Crore and Rs. 0.73 Crore for Transmission business and SLDC business respectively.

PSTCL's Submission:

4.9.2 The Petitioner has computed the Interest on Working Capital as per the provisions of PSERC MYT Regulations, 2022. The Petitioner has applied the rate of interest for Working Capital loans for Transmission business and SLDC business @ 8.01%. based on True up of FY 2022-23 calculated as actual weighted average.

4.9.3 The calculation of Interest on Working Capital is as follows:

Table 4.44: Normative Interest on Working Capital for FY 2024-25

Sr. No.	Particulars	(Rs. Crore)		
		Transmission	SLDC	PSTCL
1	Receivables equivalent to two (2) months of fixed cost calculated on normative target availability	299.02	6.89	305.91
2	Maintenance Spares @ 15% of O&M expenses	153.68	3.09	156.77
3	Operation & Maintenance expenses for 1 (One) Month	85.38	1.72	87.09
4	Total Working Capital (Normative)	538.07	11.70	549.78
5	Rate of Interest applied (As per Norms)	8.01%	8.01%	
6	Normative Interest on Working Capital	43.10	0.94	44.04

4.9.4 PSTCL requests the Commission to approve the Normative Interest on Working Capital of Rs. 43.10 crore for Transmission and Rs. 0.94 crore SLDC for FY 2024-25 as PSERC MYT Regulations, 2022.

Commission’s Analysis:

4.9.5 The Commission has computed the interest on working capital as per Regulation 50 of the PSERC MYT Regulations, 2022 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 24.1.”

“24.1 The rate of interest on working capital shall be equal to the actual rate of interest paid on working capital loans by the Licensee/Generating Company/SLDC or the one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI as may be applicable as on 1st April of the relevant year plus 250 basis points, whichever is lower. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee/Generating Company/SLDC has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures. “

4.9.6 Considering the rate of interest as approved in the True-Up of FY 2022-23 i.e., 8.01% for Transmission Business and 8.01 % for SLDC Business, the Commission observes that the actual rate of interest is lower than State Bank of India 1 yr. MCLR plus 250 basis points for the relevant year (10.50% for FY 2023-24) and therefore determines and approves the Interest on working capital as follows:

Table 4.45 Interest on Working Capital as approved by the Commission for FY 2024-25 (Rs Crore)

Sr. No.	Particulars	Amount
	Transmission Business	
1.	Receivables for two months (Table 4.50)	275.43
2.	Maintenance spares @15% of O&M	133.65
3.	O&M Expenses for one month	74.25
4.	Total Working Capital	483.33

Sr. No.	Particulars	Amount
5.	Rate of Interest (%)	8.01%
6.	Interest on Working Capital	38.71
	SLDC	
7.	Receivables for two months (table 4.51)	5.18
8.	Maintenance spares @15% of O&M	1.60
9.	O&M Expenses for one month	0.89
10.	Total Working Capital	7.67
11.	Rate of Interest (%)	8.01%
12.	Interest on Working Capital	0.61

4.9.7 The Commission approves working capital requirements of Rs. 483.33 Crore and interest thereon of Rs. 38.71 Crore for Transmission Business and working capital of Rs 7.67 Crores and interest thereon of Rs 0.61 Crores for SLDC Business for FY 2024-25 for PSTCL.

4.10 Return on Equity

4.10.1 In the MYT Petition for FY 2023-24, PSTCL had claimed Return on equity of Rs. 219.30 Crore against which the Commission had approved Return on equity of Rs. 169.96 Crore.

PSTCL's Submission:

4.10.2 PSTCL submits that it has PSTCL has revised the claim of Return on Equity for FY 2024-25, considering revised Opening Balance of ROE on the basis of Revised funding for 2nd Control Period as already discussed in Previous Chapters.

4.10.3 The computation of normative ROE for FY 2024-25 is submitted in the following table:-

Table 4.46: Revised Return on Equity for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Amount
1	Equity at the opening of Year	971.96
2	Addition During the Year	158.57
3	Equity at the Closing of Year	1130.53
4	Average Equity during the Year	1051.25
5	Rate for Return on Equity	15.50%
6	Return on Equity	162.94

4.10.4 PSTCL requests the Commission to approve the Return on Equity of Rs. 162.94 Crore for FY 2024-25.

Commission's Analysis:

4.10.5 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 assets funded by consumer contributions, capital subsidies/Govt. grants shall not form part of the capital base for the purpose of calculation of Return on Equity..”

4.10.6 The Commission has considered the opening equity for FY 2022-23 from the closing equity approved in the True-Up of FY 2022-23. Addition of equity is considered as approved in MYT order dated 15.05.2023 for FY 2023-24 in Table no 136. The Commission determines Equity for the year FY 2023-24 in order to determine opening equity for FY 2024-25 and is calculated as follows:

Table 4.47: Equity for FY 2023-24 for Transmission as allowed by the Commission

Sr. No.	Particulars	Amount
1.	Opening Equity as per closing of FY 2022-23 (Table 3.57)	880.85
2.	Addition of equity during the year	82.47
3.	Closing Equity	963.33

Table 4.48: Return on Equity for FY 2024-25 for Transmission as allowed by the Commission

Sr. No.	Particulars	Amount
1.	Opening Equity	963.33
2.	Addition of equity during the year (Table 4.6)	158.57
3.	Closing Equity	1121.90
4.	Average Equity	1042.61
5.	Rate of Return on Equity (%)	15.50%
6.	Return on Equity	161.60

4.10.7 Thus, the Commission provisionally approves Return on Equity of Rs. 161.60 Crore to PSTCL for FY 2024-25.

4.11 Unified Load Dispatch & Communication (ULDC) Charges

4.11.1 PSTCL has claimed ULDC Charges of Rs. 12.52 Crore as per ULDC charges of FY 2024-25 for its SLDC Business.

4.11.2 Accordingly, the Commission approves ULDC charges of Rs. 12.52 Crore to PSTCL for its SLDC Business for FY 2024-25 which will be reviewed on the basis of actuals during true up.

4.12 Non-Tariff Income

PSTCL's Submission:

- 4.12.1** In the MYT Order for 3rd Control Period dated 15.05.2023, the Commission had approved Non-Tariff Income of Rs. 35.57 Crore for Transmission and Rs. 0.23 Crore for SLDC for FY 2024-25 based on latest Audited Accounts of FY 2021-22 available.
- 4.12.2** PSTCL has Revised the Non-Tariff Income of Rs. 29.22 Crore for Transmission and Rs. 0.25 Crore for SLDC for FY 2024-25 based on Audited Accounts of FY 2022-23.
- 4.12.3** **PSTCL requests the Commission to approve the Non-Tariff Income of Rs. 29.22 Crore for Transmission and Rs. 0.25 Crore SLDC for FY 2024-25.**

Commission's Analysis:

- 4.12.4** Non-Tariff Income is to be determined as per Regulation 27 of PSERC MYT Regulations 2022.
- 4.12.5** **The Commission considers the Non-tariff Income for FY 2024-25 as Rs. 29.22 Crore for Transmission Business and Rs. 0.25 Crore for SLDC Business based on Audited Annual Accounts of FY 2022-23 which will be reviewed during true up of FY 2024-25.**

Table 4.49: Non-Tariff Income for FY 2024-25 as provisionally approved by the Commission

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Non-Tariff Income	29.22	0.25	29.47

4.13 Income from Open Access Customers

- 4.13.1** The Commission in its order dated 15.05.2023, had approved Revenue from Open Access Customer of Rs. 3.66 Crore for Transmission Charges and Rs. 0.09 Crore for SLDC Operating Charges for FY 2024-25 based on latest Audited Accounts of FY 2021-22 available.
- 4.13.2** PSTCL has claimed a receipt of Transmission Charges of Rs. 4.22 Crore and SLDC Operating Charges of Rs. 0.12 Crore from Open Access Customers based on Audited Accounts of PSTCL for FY 2022-23.
- 4.13.3** **PSTCL requests the Commission to approve the Open Access Charges of Rs. 4.22 Crore for Transmission and Rs. 0.12 Crore SLDC for FY 2024-25. Accordingly, the Commission has considered the same for FY 2024-25 which will be reviewed during true up of FY 2024-25.**

4.14 Annual Revenue Requirement

The summary of the Annual Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2024-25 is shown in the following tables:

Table 4.50: Annual Revenue Requirement for Transmission Business for FY 2024-25

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the tariff order FY 2023-24	Claimed by PSTCL in FY 2024-25	Approved by the Commission
1a	Employee costs	769.51	946.50	826.16
1b	A&G expenses	31.94	39.93	28.01
1c	R&M expenses	48.62	38.10	36.81
1.	Total O&M Expenses	850.07	1024.53	890.98
2.	Interest charges	273.97	250.94	248.77
3.	Return on Equity	169.96	162.94	161.60
4.	Depreciation	349.27	346.03	345.98
5.	Interest on Working Capital	37.71	43.10	38.71
6.	Total Revenue Requirement	1680.98	1827.54	1686.04
7.	Less: Non-tariff Income	35.57	29.22	29.22
8.	Less: Revenue from Open Access	3.66	4.22	4.22
9.	Total Revenue Requirement	1641.75	1794.10	1652.60

Table 4.51: Annual Revenue Requirement for SLDC for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the tariff order FY 2023-24	Claimed by PSTCL in the Revised Estimates of FY 2024-25	Approved by the Commission
1a	Employee costs	10.60	17.84	8.28
1b	A&G expenses	0.76	1.89	0.76
1c	R&M expenses	4.21	0.88	1.63
1.	Total O&M Expenses	15.57	20.61	10.67
2.	Interest charges	3.46	3.03	3.05
3.	Return on Equity	0.00	0.00	0.00
4.	ULDC Charges	8.88	12.52	12.52
5.	Depreciation	4.35	4.61	4.61
6.	Interest on Working Capital	0.73	0.94	0.61
7.	Total Revenue Requirement	32.99	41.71	31.46
8.	Less: Non-tariff Income	0.23	0.25	0.25
9.	Less: Revenue from Open Access	0.09	0.12	0.12
10.	Total Revenue Requirement	32.67	41.35	31.09

The summary of the Annual Revenue Requirement of PSTCL as a whole for FY 2024-25 is as under:

Table 4.52: Annual Revenue Requirement for PSTCL for FY 2024-25 (Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the tariff order FY 2024-25	Claimed by PSTCL in the Revised Estimates of FY 2024-25	Approved by the Commission
1a	Employee costs	780.11	964.34	834.44
1b	A&G expenses	32.70	41.81	28.77
1c	R&M expenses	52.83	38.99	38.44
1.	Total O&M Expenses	865.64	1045.14	901.65
2.	Interest charges	277.43	253.97	251.82
3.	Return on Equity	169.96	162.94	161.60
4.	ULDC Charges	8.88	12.52	12.52
5.	Depreciation	353.62	350.64	350.59
6.	Interest on Working Capital	38.44	44.04	39.32
7.	Total Revenue Requirement	1713.97	1869.25	1717.50
8.	Less: Non-tariff Income	35.80	29.47	29.47
9.	Less: Revenue from Open Access	3.75	4.34	4.34
10.	Total Revenue Requirement	1674.42	1835.44	1683.69

4.15 Carrying cost on Revenue Gap

The Commission in Tariff Order for FY 2022-23 has approved Net ARR of Rs. 1450.35 Crore for Transmission Business and Rs. 27.12 Crore for SLDC Business for FY 2022-23. Further, the Commission in Tariff Order for FY 2023-24, while reviewing the APR for FY 2022-23, revised the net ARR approved for FY 2022-23 as Rs. 1548.35 Crore for Transmission Business and Rs. 26.65 Crore for SLDC Business.

The revenue gap of Rs. 97.53 (1575.00 – 1477.47) Crore was already considered by the Commission in order dated 15.05.2023 and allowed to recover during FY 2023-24. The rate of interest for working out carrying cost has been considered as 8.01% as approved in true up of FY 2022-23 in para 3.10.8 of chapter 3 of this order. Revenue Gap/(Surplus) for FY 2022-23 after considering various components in True up is as below: -

Table 4.53: Carrying Cost on Revenue Gap/(Surplus) for True up of FY 2022-23**(Rs. Crore)**

Sr.no	Particulars	Transmission	SLDC	TOTAL
1	Net ARR after True up for FY 2022-23	1652.06	30.46	1682.52
2	Net ARR Approved in Tariff Order dated 31.03.2022	1450.35	27.12	1477.47
3	Revenue Gap after True-up of FY 2022-23 (1-2)	201.71	3.34	205.05
4	APR for FY 2022-23 approved in Tariff order dated 15.03.2023	1548.35	26.65	1575.00

Sr.no	Particulars	Transmission	SLDC	TOTAL
5	Revenue Gap already allowed in APR for FY 2022-23 (4-2)	98.00	-0.47	97.53
6	Balance Revenue Gap to be allowed to recover (3-5)	103.71	3.81	107.52
7	Carrying Cost on sr.3 @8.01% for 6 months years FY 2022-23	8.08	0.14	8.22
8	Carrying Cost on sr.3 @8.01% for 1 years for FY 2023-24	16.16	0.28	16.44
9	Carrying Cost on sr.3 @8.01% for 6 months years for FY 2024-25	8.08	0.14	8.22
10	Carrying Cost recoverable on sr.5 @8.01% for 6 months for FY 2022-23	3.92	-0.02	3.90
11	Carrying Cost recoverable on sr.5 @8.01% for 6 months years for FY 2023-24	3.92	-0.02	3.90
12	Net Carrying cost allowable (7+8+9-10-11)	24.48	0.60	25.08

4.16 Net Revenue Requirement

4.16.1 Considering the impact of True up of Capital Expenditure as approved by the Commission in Chapter 2 and the carrying cost of true up of FY 2022-23, the summary of the ARR for Transmission, SLDC Business for FY 2024-25 is as under:

Table 4.54: NET ARR as approved by the Commission for FY 2024-25 (Rs. Crores)

Sr. No	Particulars	Transmission	SLDC	Total
1	Total Revenue Requirement FY 2024-25 (Table 4.50 and 4.51)	1652.60	31.09	1683.69
2	Add: Revenue Gap (Table 4.53)	103.71	3.81	107.52
3	Add: Impact of True up of Capital expenditure of FY 2020-21 (Table 2.17)	0.292	0.093	0.385
4	Add: Impact of True up of Capital expenditure of FY 2021-22 (Table 2.18)	-0.037	0.174	0.137
5	Add: Carrying cost on Revenue Surplus/Gap for FY 2022-23 (Table 4.53)	24.48	0.60	25.08
	NET ARR	1781.04	35.77	1816.81

Chapter 5

Directives for FY 2024-25

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
5.1	Boundary metering, Energy Audit and Reduction in Transmission Losses	<p>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 commencement of forecasting earliest and</p>	<p>As per the reply and the status report dated 06.02.2024 submitted by PSTCL, the survey of all 278 No. stations has been completed including 172 No. PSTCL Substations, 7 No. State Generating Stations, 3 No. IPPS, 56 No. RE Generators, 16 No. OA Customers, 1 No. OA Generator & 16 No. interstate Locations.</p> <p>Further, 1018 out of 1481 energy meters have been installed till date. Data Centre is operational since December, 2022. Installation activity at all RE sites (56), IPPs(3), State Thermal Generating Stations(2), OA Generators(1), State Hydel Stations(4 out of 5), OA Customer (12 out of 15), PSTCL (130 out of 177) and interstate point (4/15) have been completed. Material has been dispatched to sites for installation and the installation of all meters is expected to complete by 31.03.2024. All entities have been registered.</p> <p>Transmission Outage planning module has been deployed by the firm and is under trial run. Meter Data Acquisition System has been deployed and is fully operational. Energy Accounting Module has been developed and suggestions of end users are being incorporated by</p>	<p>PSTCL was directed to make all out effort to expeditiously implement the forecasting and scheduling activities and the SAMAST Scheme. However, as per latest monthly status dated 03.01.2024, 519 nos. energy meters are still to be installed and installations of all meters is expected to be completed by 31.03.2024. SLDC reported that the system is ready for implementation of PSERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019 through SAMAST Software modules after rigorous testing and validation on actual data. Accordingly, the Commission notified that the commercial mechanism regarding deviation settlement of Solar and Wind generators shall come into force w.e.f. 01.02.2024. However, there is inordinate delay in starting the commercial mechanism as per PSERC (Deviation Settlement Mechanism and</p>

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
		<p>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.</p>	<p>the firm. Financial Accounting Modules has also been developed and is under testing by end users. The firm has been asked to expedite the development of softwares. Open Access Management Module, DSM module for conventional entities, MIS & Report Module and Mobile Application is under development.</p> <p>Forecasting, Scheduling, Deviation Settlement and Related matters of Solar and Wind Generation Sources is being implemented through SAMAST software modules from 01.02.2024 as notified by the Commission.</p> <p>System is ready for scheduling of all entities. However, scheduling for non-solar entities could not be started due to categorical denial of PSPCL to provide schedule revisions from 4th blocks per State Grid Code citing reasons like Grid stability, huge DSM cost and interruption in supply to the consumers. However, notice has been served on 31.01.2024 to PSPCL for 4th block revisions in scheduling w.e.f. 01.03.2024 through SAMAST portal. Regarding DSM for conventional entities, it is expected that it may take about 5 to 6 months as energy meters at all interface points are yet to be installed and software is under development.</p>	<p>related matters) Regulation 2020. PSTCL is directed to make all out efforts to ensure expeditious implementation of SAMAST scheme and Intra-State DSM operational. Regular monthly update be sent to the Commission. Further, vide memo dated 26.2.2024, PSPCL has already been directed to ensure compliance with the State Grid Code.</p>
5.2	Loading Status of PSTCL Transmission	PSTCL was directed to intimate, within three	The loading Position of overloaded lines and	PSTCL was directed to identify the

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
	lines and Substations	<p>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</p>	<p>their corresponding remedial measures have been supplied.</p>	<p>transmission lines which were potentially vulnerable to overloading and take proactive steps to prevent the same. Further, the quarterly report on utilisation of the capex fund, for erection of substation and transmission lines to prevent overloading and physical progress was to be furnished. The Commission notes that quarterly report has not been supplied by the PSTCL. Still twenty two transmission lines in Quarter-1 and twenty six transmission lines in Quarter-2 are overloaded. Some lines like 220 kV Mohali Nalagarh circuits and 220 kV Patran Sunam are overloaded upto extent of 120% and 115% respectively. PSTCL is directed to submit quarterly report on utilisation of CAPEX in CIP and physical progress of erection of sub-station and transmission lines to prevent overloading. Further, PSTCL is directed to submit within three months of the tariff order, the timelines of</p>

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
		physical progress be also furnished.		taking remedial measures to mitigate the overloading on already overloaded lines and the report regarding identification of the lines potentially vulnerable to overloading and the measures to pre-empt the same.
5.3	Maintenance of voltage wise and category wise details of fixed assets:	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.	PSTCL has requested for exemption from compliance of the Directive as already been apprised to the Commission through Memo No.621 dt. 21.08.2023 (F/B).	The reply given by PSTCL has been noted. However, the Commission does not see any reason to exempt PSTCL from compliance of the directive. The Commission again directs PSTCL to comply with the directive within the next three months failing which action will be initiated for non-compliance.
5.4	Reactive Compensation	PSTCL is directed to furnish quarterly progress report on installation of reactors.	The requisite progress report is as under: Capacitor Banks: As per the consultancy report of March 2022 issued by CPRI on behalf of NRPC, the assessment of capacitors requirement for Punjab is recommended as 941.3 MVAR. In this respect, the list of sub-stations/locations has been provided by the CPRI. It has however, been gathered that most of the requisite capacitor banks have already been installed at the respective sub-stations. The operative condition of installed capacitor banks is being	PSTCL is directed to furnish within one month of issue of tariff order, report regarding sub-station/location the wise capacitors bank installed vis-a-vis the recommendation of the CPRI alongwith present operative condition of installed capacitor banks. Further, PSTCL is directed to intimate quarterly report regarding installation of capacitor banks (11 kV & 66 kV) having total capacity of 700 MVAR

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
			<p>separately ascertained. The defective capacitor banks shall be replaced upon receipt of supply, as LOA dated 01.11.2023 has already been placed for the procurement of various ratings of Capacitor Banks (11 KV and 66KV) with the total capacity of 700 MVAR approx. Other than replacement of defective banks, new banks shall also be installed as per requirement.</p> <p>Bus-Reactors: PSTCL has commissioned 1 no. 125MVAR, 400kV Bus reactor at 400kV S/S Dhuri and 1 no. each of 25MVAR, 220kV Bus Reactor at 400kV S/S Dhuri and Nakodar</p>	<p>procured vide LOA dated 01.11.2023.</p>
5.5	<p>Preventive maintenance of transmission lines.</p>	<p>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</p>	<p>PSTCL has submitted Tripping and breakdown status of Transmission line. PSTCL submitted that the task force constitute for studying the maintenance practices used in other organisations with high transmission availability so as to adopt the same in PSTCL has submitted its suggestions, which are brought out as here under:</p> <p>1) The transmission availability of 400 kV transmission elements of P&M circle Bathinda and P&M circle Ludhiana is on lower side. The identified major reason is frequent tripping's on 400 kV lines (400 kV</p>	<p>PSTCL was directed to take immediate steps to bring down the restoration time for faults on transmission lines. The Commission notes that the downtime/restoration of transmission lines is still inordinately high. The 220 kV Sadaur Barnala line remained under shutdown for 1099 hrs. The outage due to transient fault is of the order of 29 hrs in case of 220 kV Pong Dasuya line and outages due to lighting and thunderstorm is order of 26 hrs in case of 220 kV Nakian - Nawan shahr line. During 1st and 2nd quarters of 2023-24, PSTCL have reported 656 and 633</p>

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
		<p>15 hrs in case of 132 kV Malout-Aboharline and 132 kV Mana Singh Wala-Ferozepur line respectively.</p> <p>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.</p> <p>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.</p> <p>Further, PSTCL has 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</p>	<p>Mukatsar – Talwandi D/C and 400 kV Makhu – Amritsar D/C) due to failure of porcelain disc insulators installed at these 400 kV lines during investing seasons in months of October/November and April/May due to pollution caused by harvester combines, threshers and subsequent burning. It is proposed to install the polymer strings on one circuit each out of two circuits to strengthen the system initially in a phased manner. Further decision can be taken after studying other aspects of polymer strings i.e. there life, storage issues, damage by birds etc.</p> <p>2) During visits at HVPNL (Haryana Vidyut Prasaran Nigam Limited) office, it was learnt that they are using drone system of Haryana Govt. owned Drone Department to identify the shortcoming of 400 kV Transmission lines. Possibility of using drone system may be explored.</p> <p>3) One and a half CB scheme of 400 kV system is highly complicated in comparison to 220 kV and 132 kV system. So it is suggested that highly skilled</p>	<p>tripping/breakdowns on transmission lines respectively, which are on a very high side.</p> <p>PSTCL is directed to take immediate remedial steps to bring down tripping/breakdowns on the transmission line and restoration time for faults on transmission lines and to sent a status report within three months of the issue of the tariff order.</p> <p>Further:</p> <p>a) As per Directive, PSTCL was asked to submit a certificate from Director (Technical) that prescribed maintenance schedules are being strictly adhered but a certificate signed by Engineer-in-Chief (PSTCL), Ludhiana has been submitted. Certificate of Director/Technical should invariably be submitted.</p> <p>b) The details have been submitted with regard to maintenance practices/ schedules/ technologies being used in other organizations in the country. The task force report gives a view about various suggestions but none of these suggestions have been implemented e.g. for the replacement of existing porcelain disc insulators. The Board has considered the agenda on</p>

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
		<p>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.</p>	<p>manpower on the pattern of PGCIL may be hired for maintenance of 400 kV system and separate circle should handle all 400 kV transmission system.</p> <p>The suggestions brought out in the task force report are being addressed in the following manner:</p> <p>1) An agenda note was put up in the Board's meeting for granting the administrative approval for the replacement of existing porcelain disc insulators with polymer long rod insulators on existing 400 kV Transmission lines for the improvement of transmission availability. Board in its meeting held on 24.06.2023 has considered the agenda. After the receipt of Board's decision, suitable action shall be taken accordingly;</p> <p>2) A presentation was held in the office of Director/Technical on 18.06.2023 by M/s. Garuda UAV Soft Solutions Pvt. Ltd. on drone-based transmission line visual and thermal inspection, asset digitization, asset health monitoring, defect analysis and lien monitoring with</p>	<p>24.06.2023 but no further progress regarding Board's decision and how PSTCL plans to do it has been mentioned. Also, it has been indicated that they have learnt about Haryana Vidyut Prasaran Nigam Limited using drone system to identify the shortcomings of 400 kV transmission line but no details regarding whether PSTCL is going for same or not has been detailed. Similarly, regarding man power i.e. creating separate circle of 400kV system no progress has been indicated. They have mentioned that creation is under consideration of Committee. All the details submitted are dated 27.06.2023 & have not been updated. Accordingly, PSTCL is directed to submit the status report within three months of issue of the tariff order.</p>

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
			<p>cloud-based platform. It was decided that firstly 220 kV Mansa-HMEL D/C transmission line shall be got analysed for defects. HMEL has already requested for the replacement of porcelain disc insulators with polymer long road insulators (PLRI) on the remaining circuit (one circuit already replaced with PLRI) as a deposit work as a deposit work. HMEL is agreeable to get the same done. Based on this pilot study, PSTCL shall consider utilization of the same for implementation on its 400 kV transmission lines. Drone based inspection helps in obtaining high-resolution aligned images and (top on bottom, sidewise & 360 degree) videos for a better understanding of the asset health condition and the defects originating in transmission towers for the betterment of its operation and maintenance activities. UAV will thoroughly scan all four sides or faces of transmission lines towers from stub level to earth peak level by hovering around the tower which will</p>	

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
			<p>identify defects like missing/hanging/bent tower members, loose/missing nut bolts, missing joint plates and conditions of insulators, condition of jumper bolts, conditions of grading rings/corona rings etc. can be assessed.</p> <p>3) The proposal for creating a separate circle for 400 kV system, hiring of highly skilled manpower on the pattern of PGCIL for maintenance of 400 kV system, creation of TL S/D at Moga is under consideration of the committee constituted to revise the staffing norms and overall man power requirement of PSTCL after deliberating with all the HODs.</p>	
5.6	Strengthening of the State Load Despatch Centre (SLDC)	<p>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,</p>	<p>PSTCL has intimated that they have deputed officers/officials who have longer service in their hands and have either undergone training or going to have Basic System Operator training in future to make them well conversant with system.</p> <p>PSTCL has also deputed additional manpower to strengthen the SLDC by fixing the headquarter of 10 No. Officers/Officials (i.e. 5 No. AEs & 5 No. JEs) under SLDC organisation as a stop</p>	<p>PSTCL was directed to submit status report along with the timelines for strengthening of the SLDC. The Commission notes that the required report regarding strengthening of SLDC has not been supplied by PSTCL. As per Electricity Act, 2003, the SLDC shall be responsible for optimum scheduling and despatch of electricity within a State, monitor grid</p>

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
		<p>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, in spite 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.</p>	<p>gap arrangement. Further, after the completion of SAMAST project, the actual requirement of manpower shall be reviewed in line with MoP guidelines.</p>	<p>operation in accordance with State Grid Codes. The Commercial mechanism regarding deviation settlement of solar and wind generation has come in the force w.e.f. 01.02.2024 and the commercial mechanism as per intra-state DSM Regulations shall be made operational in the near future. Moreover, with implementation of GEOA Regulation and issuance of guidelines for Banking, the role of SLDC for implementation of these regulation shall be enormous. Accordingly, PSTCL was directed to deploy adequately trained and motivated manpower with a pre-defined training calendar, minimum tenure and with appropriate incentive/compensation. However, PSTCL has only intimated some cursory measures such as stop gap arrangements to fix headquarters of 10 Nos. officers/officials under SLDC organisation. PSTCL is directed to take concrete steps for strengthening of SLDC in time bound</p>

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
				manner and submit status report of the same as already directed within three months of issue of Tariff Order.
5.7	Capital Expenditure and Capitalisation	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.	The information in respect of Capex & Capitalization has been supplied:	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 for Transmission and SLDC Business separately to enable monitoring and progress of work being done.
New Directive				
5.8	Transmission charges and losses power drawn by other states through PSTCL Transmission system.	The Commission had issued a directive No. 5.15 in tariff order for FY 2023-24. PSPCL to specify whether transmission line of PSTCL/PSPCL has been used to carry out the energy transmission for which transmission charges have not been levied.	PSPCL submitted a list of inter state transmission lines to Chandigarh, Kathua, Pinjore etc. received from PSTCL with remarks that ownership of these lines is lying with the respective states. PSTCL was asked to confirm that it is not transmitting any energy to Chandigarh, Kathua, Pinjore etc. through its transmission lines. PSTCL vide letter No. 113 dated 09.02.2024 submitted that the matter of levying transmission charges to these states is under dispute as the ownership of these lines is with respective states and no such MOUs exist with any state regarding these lines. PSTCL is taking up the matter with respective states to sign the MoUs. Matter of Inter State Transmission lines could only be decided with bilateral contract/MoUs with other states as these lines are	PSTCL is directed to earnestly take up the matter and recover the due transmission charges from the states/utilities for which energy is transmitted through the transmission lines operated and maintained by PSTCL. As reported by PSTCL, if other states are not signing MoUs and not paying due charges, PSTCL is directed to propose further action to be taken in the matter.

Sr. No.	Issues	PSERC Directives for FY 2023-24	Reply of PSTCL	PSERC Comments & Directives for FY 2024-25
			<p>Non ISTS lines. In spite of several efforts and visit of the officials of PSTCL, No States/utilities are coming forward to sign MoUs with PSTCL. Further, it is also worth mentioning here that DO letters had also been forwarded by authorities of PSTCL to concerned states. Due to lack of MoUs, PSTCL cannot decide any charge to be recovered from other states unilaterally.</p>	

Chapter 6

Determination of Transmission Charges and SLDC Charges

6.1 Annual Revenue Requirement

6.1.1 The Commission has determined the ARR for PSTCL for FY 2024-25 as Rs. 1816.81 Crore, comprising of Rs. 1781.07 Crore for Transmission business and Rs. 35.74 Crore for SLDC business.

The Commission vide interim Order dated 28.03.2024 has decided to continue with the existing tariff / charges till the Tariff Order for FY 2024-25 is issued. Now, the Commission decides to implement the new tariff rates w.e.f. 16th June, 2024. Accordingly, the ARR for Transmission Business and SLDC Business required to be recovered in the remaining period of the FY 2024-25 is as under:

Table 6.1: ARR for Transmission Business and SLDC Business

Sr. No.	Particulars	Transmission Business	SLDC Business
1.	ARR approved and recoverable for FY 2024-25	1781.07	35.74
2.	Less revenue recovered from 01.04.2024 to 15.06.2024 with tariff as per Tariff Order for FY 2023-24	322.86 @ Rs. 129.144 Crore/Month	6.12 @ Rs. 2.449 Crore/Month
3.	Net ARR recoverable during remaining period (16.06.2024 to 31.03.2025)	1458.21	29.62

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 2024-25.

6.2 Transmission System Capacity

6.2.1 The Commission has determined the Transmission capacity (net) of PSTCL system from the data submitted by PSTCL as 15019.72 MW for FY 2024-25 after excluding the Renewable Generations at 66kV or below.

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 Energy 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 2024-25 at Rs. 35.74 Crore in this Tariff Order. Accordingly, the Commission determines the SLDC Charges or System Operation Charge as under:

Table 6.2: Monthly SLDC Charges or System Operation Charge**(Rs. Crore/month)**

Sr. No.	Particular	Existing Charges as per T.O. for FY 2023-24 continued from 01.04.2024 to 15.06.2024	New charges w.e.f. 16.06.2024 to 31.03.2025
1.	SLDC Charges or System Operation Charge	2.449	(29.62/9.5)= 3.118

For June 2024, SLDC Charges System Operation Charge shall be Rs. 2.784 Crore (i.e. first half month shall be charged at Rs.1.225 Crore (half of Rs. 2.449 Crore which are existing charges as per T.O. for FY 2023-24) plus second half month at Rs. 1.559 Crore (half of Rs. 3.118 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. 1781.07 Crore for FY 2024-25 in this Tariff Order. Accordingly, the Commission determines the Transmission Charges as under:

Table 6.3: Transmission Charges**(Rs. Crore/month)**

Sr. No.	Particular	Existing Charges as per T.O. for FY 2023-24 continued from 01.04.2024 to 15.06.2024	New charges w.e.f. 16.06.2024 to 31.03.2025
1.	Transmission Charges	129.144	(1458.21/9.5) = 153.496

For June 2024, Transmission Charges shall be Rs. 141.32 Crore (i.e. first half month shall be charged at Rs. 64.572 Crore (half of Rs. 129.144 Crore which are existing charges as per T.O. for FY 2023-24) plus second half month at Rs. 76.748 Crore (half of Rs. 153.496 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 2024-25 are determined as under:-

Table 6.4: SLDC Operation Charges for Open Access Customers for FY 2024-25

Sr. No.	Particulars	Unit	Quantum
1.	Revenue Requirement (ARR) of SLDC business from 16.06.2024 to 31.03.2025	Rs. Crore	29.62
2.	Transmission System Capacity (net)	MW	15019.72
3.	SLDC Operation Charges for Long Term and Medium-Term Open Access customers from 01.04.2024 to 15.06.2024 (As per Tariff Order for FY 2023-24, continued from 01.04.2024 to 15.06.2024)	Rs./MW/ Month	1895.12
4.	SLDC Operation Charges for Long Term and Medium-Term Open Access customers from 16.06.2024 to 31.03.2025	Rs./MW/ Month	2075.87
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 2024-25 are determined as under:

Table 6.5: Open Access Transmission Charges for FY 2024-25

Sr. No.	Particulars	Unit	Quantum
1.	Revenue Requirement (ARR) of Transmission business from 16.06.2024 to 31.03.2025	Rs. Crore	1458.21
2.	Transmission System Capacity (net)	MW	15019.72
3.	Transmission Charges for Long Term and Medium-Term Open Access customers from 01.04.2024 to 15.06.2024 (As per Tariff Order for FY 2023-24, continued from 01.04.2024 to 15.06.2024)	Rs./MW/ Month	99953.34
4.	Transmission Charges for Long Term and Medium-Term Open Access customers from 16.06.2024 to 31.03.2025	Rs./MW/ Month	102196.17
5.	Transmission Charges for Short Term Open Access Customers from 01.04.2024 to 15.06.2024 (As per Tariff Order for FY 2023-24, continued from 01.04.2024 to 15.06.2024)	Rs./MWh	232.45
6.	Transmission Charges for Short Term Open Access Customers from 16.06.2024 to 31.03.2025 (based on 59816 MWh of energy (for period 16.06.2024 to 31.03.2025) calculated from 75557 MWh of energy input at transmission boundary for sale in the State for FY 2024-25, as approved in Chapter 4 of PSPCL Order for FY 2024-25)	Rs./MWh	243.78

6.8 Date of Effect

The Commission decides to make the revised Transmission Charges and SLDC Charges determined above applicable w.e.f. 16th June, 2024 and these shall remain operative till 31st March, 2025. For the period w.e.f 1st April, 2024 to 15th June, 2024, Tariff/Charges shall be applicable as per Tariff Order for FY 2023-24 as specified by the Commission in the Interim Order dated 28.03.2024.

This Order is signed and issued by the Punjab State Electricity Regulatory Commission on this day, the 14th June, 2024.

Date: 14th June, 2024

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.	Anagha Pujari
2.	Chamber of Industrial & Commercial Undertakings (CICU), Office at MC Block No. 2, 2 nd Floor, Gill Road, Ludhiana-141003
3.	Cycle Trade Union (Regd.), AIRI Cycle, 110-111, New Cycle Market, Gill Road, Miller Ganj, Ludhiana-141003
4.	Sukhminder Singh, SDO (Retd.), PSPCL R/o 19-D, BRS Nagar, Ludhiana
5.	Dr. Harish Anand, Steel Furnace Association of India (Punjab Chapter), C/o Upper India Steel Mfg. & Engg. Co. Ltd. Dhandari Industrial Focal Point, Ludhiana-141010

PSTCL-OBJECTIONS**Objection No. 1: Anagha Pujari****Issue1: Introduction of advanced Analytics & AI/ML powered Analytics Technologies**

- a) Anagha Pujari is interested in understanding how PSTCL has been using advanced Analytics in the control period for addressing various challenges faced by them and how they plan to use such technologies going forward. Also interested in understanding the extent to which AI/ML powered Analytics Technologies are being employed to tackle critical issues such as Deviation Pool Optimization through Demand and Generation Forecasting, Load Balancing, Theft Detection, Fraud detection in Procurement, Predictive Asset Analytics, Data Integration across various platforms, Network Data Analytics, KPI monitoring, etc. In light of the increasing complexities in the power sector, leveraging advanced analytics seems imperative for PSTCL to enhance operational efficiency and improve overall performance.
- b) **Current Initiatives:** What AI/ML analytics technologies are currently in use across various departments? Examples include Deviation Pool Optimization, Data Integration at SLDC, Asset Predictive Analytics, etc. Whether these costs are being considered in Opex or any specific Capex Project has been approved.
- c) **Future Plans and Roadmap:** Whether any Capex projects have been approved/proposed in this regard for the years in contention? What is PSTCL's vision for incorporating advanced analytics in the future? Does it have any road map in this regard? Please provide insights into the planned initiatives, technologies, and a roadmap for their implementation.
- d) **Cross-Departmental Implementation:** It would be valuable to know whether analytics technologies are being utilized uniformly across different departments within PSTCL or if there are plans to expand their usage.
- e) **Setting up an Analytics - Center of Excellence (A-CoE):** Considering the breadth and depth of analytics applications, is PSTCL contemplating establishing a Center of Excellence dedicated to analytics? Has PSTCL carried out any feasibility study for setting up such a center for comprehensive Data driven Decision-Making?

Reply of PSTCL:- A few initiatives are being under taken to further improvise the system efficiency adopting modern latest technologies such as :-

(A) "Deviation Pool Optimization",- Implementation of SAMAST software (Scheduling, Accounting, Metering and Settlement of Transactions in Electricity) in SLDC is under process, as per the recommendations of Forum of Regulators (FoR), through which DSM calculations and other activities will be done in future.

(B) "Data Integration at SLDC".- Presently Data of More than 200 RTU/SAS including 400kV, 220kV, 132kV grids, State owned generating stations and independent power plants, is reporting to SCADA at SLDC Patiala. Further, more than 100 Renewable plants (Solar, Biomass, Hydel) are also reporting to SCADA.

(C) ULDC ph-III status:- Tender for ULDC ph-III has been floated by POWERGRID in month of March-2023 and technical bids have opened in August-2023 and under evaluation. Financial bids are to be opened soon.

Commission's view:- The objector may note the reply of PSTCL.

Objection No. 2 : Chamber Of Industrial & Commercial Undertakings Ludhiana

A. CICU Seeks attention of PSERC with below points:

Issue 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 2: It is really a need of the hour to take the rigorous steps to recover all these kinds of pending dues along with interest from the Punjab Govt. and others 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. Adoption of a strong will power and dedicated behavior towards change in policies of PSPCL and Punjab Govt. are required to achieve the desired results. The fixed and the variable costs of PSPCL are higher than the adjoining states like HP, J&K and Haryana etc. the cost analysis should be done to reduce it in comparison to these states.

Issue 3: 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 4: 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. Cases applied by industry under one time settlement scheme (OTS) are largely pending for settlement without any progress and final decision, contributing to higher cost of electricity tariff, which could otherwise be avoided. PSERC should ensure 100% recovery of such amounts in the current year 2023-24 to reduce the revenue requirements.

Issue 5: 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 6: 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.

B. PSPCL should make an effective policy to improve its internal operational system by optimum utilization of resources and adoption of latest technologies which would definitely contribute to increase the revenue of the PSPCL. Further there is a still a big scope in saving of fixed and variable expenditures by managing them in a strategic manner rather than always resorting to increase in tariff, cess and surcharges etc. many times in a year. Details of certain expenditures (on test check) are given below which could be controlled:

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.

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 the 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.
- c) Large number of solar power generation plants should be installed on PPP mode to produce electricity which will overall help to reduce the tariff & make it profit making.

3. Energy Audit and T&D Losses:

As per PSERC Directives for F.Y. 2022-23 (as per petitions), there are over all 2766 no. feeders having losses more than 15% to 90%. Instead of reduction of the feeders with losses more than 50%, it have increased from 406 to 407. 12 feeders have losses even more than 90%. PSPCL needs to focus on these in order to reduce overall T&D losses. It 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. These losses should not be passed on to the consumers. PSERC & PSPCL should take a serious note of this unacceptable situation and plan to achieve substantial reduction of losses to bring it in the acceptable limits immediately. Necessary legal action should be taken against the all concerned parties. PSERC should ensure 100% recovery of such theft amounts in the current year 2023-24 so as to reduce the revenue requirements of PSPCL.

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 guide lines are followed in true spirit there may be no need to increase tariff in coming years.

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 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 on Borrowed Funds on account of non-recovery of Gap Tariff etc. from the Punjab Govt. should be calculated for payment. So that PSPCL may repay all such dues in time, and need not 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-storey 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.
- **Punjab Govt. subsidy to all domestic consumers as reimbursement to PSPCL on account deduction in tariff rates up to Rs. 3.00 per units with sanctioned load up to 7KW and reduction of fixed charges to levied from medium supply consumers by 50% should be reimbursed at the full tariff rate (applicable to these consumers). The gap tariff should not put any burden on the industrial consumers in the form of increase in industrial tariff and additional cess & taxes.**

- C. The major ingredients which are forcing PSPCL to increase the tariff rate / demanding more revenue requirement for the proposed F.Y. 2023-24 are interest paid on borrowed funds and its payback instalments, which can be reduced by recovery of remarkable dues from the Punjab Govt. & defaulted customers, subsidy gap tariff and costly power purchase, besides improving working efficiency and low cost generation of solar power. All these factors are required to be controlled immediately without any further delay, otherwise, it would majorly effect the financial health of the industry directly and subsequently that of the PSPCL and the Punjab Govt.**

Suggestions are given bellow:

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.
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 especially MSME and other industrial consumers.
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 man power. 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, especially MSME and Industry.
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 the industry and It will have no option but to close their units or shift to other states. The competitions have 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.
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 centre. 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.
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 by adaption of digital technology and mobile service/maintenance vehicles. Feeders having prominent/bulk industrial & commercial loads (which are independent of weather) should be robust enough to with stand it, so that surplus power is used and billed in that period.

D. In the end it is submitted that:-

1. On the one hand PSPCL is claiming power surplus scenario, on the other hand it is demanding additional revenue/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 Grids. 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.

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 on PPP mode. 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. It should be rectified immediately.
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.
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.

In view of the facts explained as above, the Chamber of Industrial and Commercial Undertakings - CICU again requests the Hon'ble Commission not to allow any additional revenue requirement, rather it should issue guidelines to PSPCL to reduce the revenue requirements, power tariff, cess and surcharges to consumers especially MSME, which is contributing significantly to the revenue of the PSPCL and GDP of the Nation.

Reply of PSTCL:- Relates to PSPCL

Commission's view:- As the objection relates to PSPCL and same has been considered in PSPCL Tariff order as objection No. 02.

Objection No. 3: Cycle Trade Union (Regd), Ludhiana

In reply, our Association strongly oppose, resent any increase, amendment for previous & next years 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 described. 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 2024-25 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.

Further, 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 2024-25, which will be available later on.

Commission's view:- The objector may note the response of PSTCL and refer to the PSTCL Tariff Order.

Objection No. 4: Mr. Sukhminder Singh, SDO (Retd.), PSPCL

The followings grievances being faced by consumers of PSPCL regarding Unauthorized Use of Electricity (UUE) cases are brought to the kind notice of PSERC:-

Issue:- Request for providing power to Corporate Forum to act as Appellate Authority for deciding appeals against the decision of Assessing Officers in UUE cases:

In partial modification of the Govt. of Punjab, Department of Power, Notification No. 1/13104-EB (PR)/660 dated 09.07.2019, the Punjab Govt. vide Notification No. 1/13/04-EB(PR)/108 dated 26.03.2021 has designated the various officers of PSTCL as Appellate Authority for the purpose of deciding appeals under Section 127 of the Electricity Act-2003 against the orders of Assessing Officers made under Section 126 of the said Act. The Director/Technical PSTCL is Appellate Authority for appeals by all consumers having contact demand above 1 MVA. Similarly, CE/PSTCL, SE/P&M PSTCL and ASE/Sr Xen P&M PSTCL have been designated respectively for appeals by all consumers having contact demand above 500 KVA and for contact demand up to 100 KVA/100 KW. However, the designated officers especially ASE/Sr Xen P&M PSTCL are not serious in deciding the appeal cases filed before them under Section 127 of the Electricity Act. The majority of UUE cases relates load/demand up to 100 KVA/100KW but ASE/Sr Xen P&M PSTCL is not serious in deciding the appeal cases. As per regulation 36.3.3 of Supply Code-2014 it is provided that the *“Appellate Authority shall within ninety (90) days of an appeal being admitted, pass an appropriate order and send copies thereof to the Licensee, the Assessing Officer and the appellant”*. However, it is brought out for the kind consideration of the Hon'ble PSERC that following appeal cases filed/registered before ASE/Sr Xen P&M PSTCL Lalton are still pending for decision:

Name of the Consumer	PSPCL Division	Date of registration
1. Ravinder Kumar	City West Ludhiana	27.12.2022
2. M/s Sanghania Cold Store	Sirhind Division	12.10.2022
3. Sadhu Singh	Dohara Division	24.07.2023
4. Aseem Bhutani	City West Ludhiana	05.06.2023
5. Nitin Verma	City West Ludhiana	19.01.2023

The above-mentioned appeal cases are being represented by the undersigned and there may be numerous other cases which may be pending for more than 1 year or so. The ASE/Sr Xen P&M PSTCL is least interested for deciding the appeal cases within prescribed time. Thus, in view of genuine grievances of the consumers and for expeditious decision on the appeal cases of UUE, it is requested that matter may be taken up at appropriate level to authorize Corporate Forum to act as Appellate Authority for deciding appeals under Section-127 of EA-2003 against the decision of Assessing Officer.

Reply of PSTCL:- It is submitted here that, the objection raised by Sh. Sukhminder Singh SDO/ Retd. PSPCL doesn't relate to the ARR Tariff Petition no. 63/2023 submitted by PSTCL before PSERC. However, the status of the query has been obtained from the concerned office the same is reiterated as follows for your reference:

“ਸੀਨੀ:ਕਾ:ਕਾ:ਇੰਜੀਨੀਅਰ, ਪੀ ਤੇ ਐਮ ਲਲਤੋਂ ਕਲਾਂ ਦੀ ਅਸਾਮੀ ਤੇ ਅਧਿਕਾਰੀਆਂ ਦੀ Frequent ਬਦਲੀ ਹੋਣ ਕਰਕੇ ਅਤੇ ਕਲੈਰੀਕਲ ਤੇ ਟੈਕਨੀਕਲ ਸਟਾਫ਼ ਦੀ ਘਾਟ ਹੋਣ ਕਾਰਣ ਯੂ.ਯੂ.ਈ ਅਪੀਲਾਂ ਦਾ ਸਮੇਂ ਸਿਰ ਨਿਪਟਾਰਾ ਨਾ ਹੋਣਾ ਮੁੱਖ ਕਾਰਨ ਰਿਹਾ ਹੈ।

ਇਸ ਤੋਂ ਇਲਾਵਾ ਲੰਬੇ ਸਮੇਂ ਤੋਂ ਪੈਡਿੰਗ ਚਲ ਰਹੇ ਯੂ.ਯੂ.ਈ. ਕੇਸਾਂ ਨੂੰ ਜਲਦ ਤੋਂ ਜਲਦ ਨਿਪਟਾਉਣ ਅਤੇ ਭਵਿੱਖ ਵਿੱਚ ਇਹਨਾਂ ਕੇਸਾਂ ਦਾ PSERC ਦੀਆਂ ਹਦਾਇਤਾਂ ਮੁਤਾਬਕ ਮਿੱਥੇ ਸਮੇਂ ਅੰਦਰ ਨਿਪਟਾਰਾ ਕਰਨ ਹਿੱਤ ਮੰਡਲ ਅਧਿਕਾਰੀ ਨੂੰ ਹਦਾਇਤ ਵੀ ਕਰ ਦਿੱਤੀ ਗਈ ਹੈ।“

Commission's view:- The objector may note the response of PSTCL.

Objection No. 5: Steel Furnace Association of India

Issue 1: Return on equity.

PSPCL had equity base of Rs 6081.43 Cr on 16.4.2010 as per FRP approved by GOP when PSEB was bifurcated into PSPCL and PSTCL. This comprised of an amount of Consumer Contributions & Govt Grants of Rs.3132.35 crore, which was converted into equity of GOP by PSPCL at the time of finalization of Transfer Scheme and FRP and the same was admitted by PSERC as well. Though the matter regarding conversion of Consumer Contributions and Govt Grants into equity has not been approved by APTEL as well as CAG, still on a SLP filed by PSPCL in Supreme Court, the matter is under litigation and because of Stay granted by The Supreme Court, PSERC is granting ROE on Rs 6081.43 Cr to PSPCL and 605.88 Cr to PSTCL. APTEL had observed 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 needs to be counted as equity for the purpose of ROE.

Subsequently, MOP, GOI introduced UDAY scheme for stressed power sector and PSPCL, GOP and MOP entered into a tripartite agreement as per which PSPCL loans of Rs 15628.26 Cr were to be taken over by GOP through issue of SLR bonds by banks in the name of GOP and loans were to be taken off the books of PSPCL. It is not known whether the SLR bonds were actually issued or not. However, the UDAY scheme was up to 31.3.2020 and PSPCL proposed in previous year's ARR 2020-21 to convert the loan amount of Rs 15628.26 Cr as GOP equity in PSPCL thereby increasing GOP equity from 6081.43 cr to 21709.69 cr. It was also proposed to recover ROE on this loan converted equity amount of Rs 15628.26 @ 15.90% which works out to Rs 2485 Cr in addition to Return on Equity on Rs 6081.42 crore. Thus, by simply maneuvering the entry of loan amount to equity, consumers were to be asked to pay 3423 Cr. This is clearly against the interest of the consumers. However, as per the Tariff order dated 28th May 2021 passed by this Hon'ble Commission, claim of such return on equity was rejected by the Commission and ROE was kept the same at Rs.974.74 crore on equity of Rs. 6081.43 crore for FY 2020-21.

Instead of agreeing to the decision of the Commission and knowing fully well that the equity amount being not a cash flow does not qualify to be equity for ROE purpose, and being aware of the fact that APTEL has already rejected PSPCL's previous similar attempt and an audit para in this regard is already raised by CAG, Now in current ARR for FY 2024-25 dated 30th November 2023, PSPCL has claimed ROE on the earlier amount with a rider that it is subject to the outcome of litigation pending in Supreme Court and APTEL. It is being claimed by PSPCL in APTEL that out of Rs.15628.26 crore, Rs.2246.77 crore was spent on capital expenditure and 13381.49 crore were working capital loan, out of which Rs.2346.19 crore were also diverted towards capital expenditure. As per PSPCL, taking together, Rs.4592 crore should be treated as equity and return on equity should be now allowed on Rs. 10674 crores (Rs.6081.43 crore + Rs.4592 crore). 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. Therefore, there is no case for allowing Return on Equity beyond Rs.6081.43 crore, which in principle is also under litigation, on which APTEL has decided adversely and matter is in Supreme Court. It is also pertinent to mention that all the assets considered for supply of electricity to the consumers of the States as admitted by PSERC are already accounted for and linked with corresponding source of funding through debts. Hence, there is apparently no case for allowing return on equity beyond the admitted amount of equity.

It is pertinent to state here that PSPCL submitted the effect of UDAY scheme on the ARR of 2016-17 vide its letter no 481/CC/DTR/Dy CAO/245/Vol 1 dated 12.4.2016 which clearly states that whole of the amount taken over by GOP under UDAY scheme comprises of debt. Further, the

tripartite agreement executed under UDAY scheme provided that 75% of the amount taken over by GOP will be converted into grant of GOP to PSPCL at the close of the scheme. Further, GOP was to compensate the loss of PSPCL in a graded manner. However, so far neither any grant has been given by GOP in terms of UDAY tripartite agreement nor any loss compensation has been given/shown in ARR. Thus, PSPCL has failed to get any relief in the form of Grant of 75% of debt or compensation for the losses which would have given relief to the consumers in the shape of lower tariffs but has acted proactively to convert whole of the loan of GOP into equity and claim ROE for the same to load the consumers through higher tariff. The demand needs to be rejected out rightly.

It is evident that in violation of the UDAY Scheme resolution, the amount of debt of Rs.15628 crore was converted into equity by PSPCL. As such, return on such debts has been artificially increased by showing it as equity and return sought is almost double as Regulations provide for return on equity @15-16% assuming 70:30 ratio of debt and equity. Even in such case, the amount of equity is to be kept at actual or 30% whichever is lower. **Hence, it is the basic tenet that higher return should not be given on equity, when it is not infused in cash and debt should not be proposed by PSPCL / allowed by PSERC to be camouflaged as equity with the sole aim of claiming higher return.**

It is also highlighted here that as per PSPCL's own admission, the assets created by PSPCL as well as erstwhile Electricity Board/Electricity branch of PWD through debt, consumer contributions and Govt grants and not through any infusion of equity, there is need to investigate the source of funding of assets created by Discom/Board. It is pertinent to note that PSPCL has itself admitted that gross fixed assets of GNDTP were created through loans and no infusion of equity was made at any stage. (***Reference para 2.20, page 56-57, Tariff Order dated 28th May 2021***). The relevant part is reproduced below.

"The Commission has considered project-wise RoE based on the RoE approved in True-up of FY 2017-18. As PSPCL did not submit project-wise/ plant-wise equity during the True-up of FY 2017-18, the allocation was done based on GFA. Further, PSPCL had submitted project report of GNDTP in which it is mentioned that there had been no infusion of equity in GFA of GNDTP and the same was financed completely through loans."

In this regard we wish to draw the attention of the Hon'ble Commission to Tariff order 2002-03 which clearly states 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 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 by this Hon'ble Commission under **Electricity Regulatory Commissions Act, 1998 and Electricity (Supply) Act 1948** and only 3% Return on Net Fixed Assets were allowed till 2005-06. ROE was allowed only from 2006-07 on Equity of Rs 2946.11 Cr as per Para 4.15 of TO. Evidently, as stated above, the equity shown then was also loans camouflaged as Equity to get higher returns.

In this regard, it is worth mentioning that

- i. Initial equity of Rs. 2946.11 crore of Punjab State Electricity Board, which became equity of PSPCL is also nothing but government loans, which was 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 to insulate consumers from

increase in tariff prior to setting up of Regulatory regime. 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 and a part of it shown as equity of Board. This evidently has been done to help the then PSEB now PSPCL/PSTCL to reduce its interest burden as no ROE/dividend is payable to Government of Punjab till PSEB/PSPCL/PSTCL incurs losses. Thus, a methodology devised to keep the tariffs on lower side is now being used to increase income of PSPCL by unduly loading the consumers and meeting the losses due to inefficient working of PSPCL. Consequently, the consumers of the State are burdened with the higher tariff and financial loss in the form of 15%-16% Return on Equity on such amount, which is in fact a government loan on which not more than 7-8% interest needs to be allowed.

- ii. The consumer contribution and Govt grants, which have been shown as part of equity (Rs.3135.32 crore) is also not equity in any sense and the same should be reduced from the equity and taken back to consumer contribution or to be written off for ARR purpose and no return on equity to be allowed on the same. In this regard, MYT regulations of PSERC and APTEL decision should be relied upon-when no tangible benefits are given to consumers through equity infusion, the same cannot be burdened with higher interest cost in the garb of return on equity.
- iii. PSPCL has claimed Rs.15628 crore as equity for previous years, out of it Rs.4592 crore is claimed as additional equity over and above of Rs.6081.43 crore and return on equity is claimed on the same for FY 2021-22 and FY 2022-23. Tomorrow, if PSPCL raised loans from some sources, invest and create some assets and show the same as equity instead of loan for ARR purpose, how commission would approach the same?

In the light of above facts, it becomes obvious that PSPCL has been trying to show higher and higher amount of funds raised through loans as equity to claim higher return on the same in the form of return on equity @15%-16%, which is about 7-8% higher than normal interest loan i.e almost double benefit for PSPCL. While the matter of fact is that all funds invested for capacity creation for supply of power are borrowed funds on which only normal interest is to be paid. The methodology being adopted by PSPCL and PSTCL has been resulting into higher cost of supply year after year, which need to be looked into. Such a view becomes quintessential in the light of observations made in the **REPORT OF THE FORUM OF REGULATORS ON “ANALYSIS OF FACTORS IMPACTING RETAIL TARIFF AND MEASURES TO ADDRESS THEM” (2020)**. Incidentally, ex Chairperson, PSERC happened to be chairperson of the Committee which prepared the above said report and Staff of this Hon’ble 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.

On return on equity, following observations have been made 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”.*

Similarly, the tendency of financing of the new capital works through reinvestment of the ROE earned through tariff (as is being resorted to by PSTCL) should not be allowed as such ROE belongs to GOP and should be paid to GOP.

Prayer

- A.** In the light of above observations, it is necessary that return on equity need to be reduced drastically from the present level of 15%-16% to average long term rate of interest on government borrowings (to about 7-8%), linking it with return on government security for 10 years or more. This would result into
- i. Lower cost of supply leading to lower tariff for consumers and lower subsidy burden on Government of Punjab while fully reimbursing all genuine borrowing cost. (Let there be no mistake in accepting the fact that full financial requirements of PSPCL based on actual basis cannot be met as has not been met in last about 20 years and is also not obligatory on the Commission and the principle of inefficiencies not to be rewarded has to be followed.)
 - ii. As all projects are financed by borrowing funds from banks and other financial institutions, as also admitted by PSPCL itself (the fixing of return on equity, which is essentially interest cost on borrowed funds), at par with interest rate given on long term borrowing would water down the intentions of PSPCL to charge higher return on equity to meet unapproved expenditure and discourage such practices in future also.
 - iii. In no case, GOP/PSPCL be permitted to convert Consumer Contributions and Govt grants as equity.

B. Reduction in equity base by difference of accumulated depreciation exceeding debt repayment.

It is not under stood as to how the amount of Equity is constant for the last more than 10 years though Hon'ble Commission is allowing depreciation of 90% of the cost of assets continuously for paying off the debt raised for creation of assets. In this regard, it is imperative that asset wise financing of debt and equity and depreciation earned for that asset be ascertained and placed in Public Domain. Further, excess of depreciation reserve over the loan amount paid back should be worked out and reduced from the equity base, if any. In case, there is no equity for the creation of asset, then such excess of depreciation should be used to reduce the costly loan amount raised for capital creation purpose. This would result into lower fixed cost of supplying power to consumers and also reduce the subsidy burden of the Government of Punjab.

Issue 2: Norms of operation for generating stations

PSPCL has asked for relying on actual figures for generating stations which are quite old and as such could not meet the parameters given in MYT regulations. In this regard, PSPCL has also relied upon CERC regulations. PSPCL has also asked for relaxation in PSERC MYT regulations for this purpose. This matter has been fully dealt with in the earlier tariff order (or example Tariff Order FY 21-22 dated 28th May 2021 on page no 82-90, under para 3.7.) No new information has been put forward by PSPCL. Hence there is no reason to revisit the approved norms set by PSERC and accordingly power generation and norms thereon need to be trued up as per Regulations.

Issue 3: Segregation of Accounts for Distribution, retail supply and generation business of PSPCL.

Electricity Act came into operation in 2003 and erstwhile, PSEB was bifurcated into PSPCL and PSTCL on 16.4.2010 whereby PSPCL was assigned the Generation, Distribution and retail sale components of the business and PSTCL was assigned the Transmission and SLDC business. Since then the accounts of the PSPCL and PSTCL are being prepared on aggregate basis and ARR is allocated on normative basis in the ratio of Fixed Assets of each sub business.

The statutory requirement of maintaining separate accounts is being defied with for the last 12 years and Hon'ble Commission is also accepting the arguments of PSPCL year after year. APTEL has already decided in many cases that accounts should be segregated. In fact, the allocation system facilitates the transfer of profits of the Generation business to Distribution and retail supply business and efficiency gains are lost. There are no incentives in the systems to improve the functioning. It is high time that PSPCL should comply with the requirement otherwise, Hon'ble Commission needs to start penalty recovery from PSPCL.

Issue 4: Subsidized agriculture consumption to be capped

The power supplied to agriculture sector has been growing consistently at very high rate. Providing the power at the subsidized rate, which is far less than the actual cost of power purchase) is leading to serious financial crisis for the Discom and ultimately seriously affects the interest of industrial consumers in the State, which are already reeling under recession. Therefore, it is imperative to cap the maximum amount of power year wise & approved by the commission that can be supplied to agriculture sector at subsidized rate inclusive of additional connection projected in a year.

Issue 5: Diversion fund figure to be updated

The diversion of funds happened in the past need to be continuously updated based on new facts and information. Such exercise is required to ensure that no more funds raised for capital purpose are diverted toward meeting revenue requirement of the Board.

Issue 6: Voltage Rebate for 66 KV consumers:

T&D losses for 66 KV consumers as per open access regulations worked out in TO 2023-24 are 4.27% for 2023-24 against total T&D losses of 14.72%.

In addition to T&D loss, the 66 KV consumer has to be compensated for the investment and operating cost of the 66/11 KV transformer and switchyard. WE are also unable to understand as to how the difference of voltage wise category wise cost of supply for 66 KV industry and 11 KV industry is decreasing every year. In fact the study of cost of supply needs to be revisited by TERI based on updated data for the current ground realities. In the meanwhile, the rebate being given to consumers connected at 66 KV which is only 25 paisa per unit need to be increased immediately and fixed in percentage terms as per pattern of Voltage Surcharge being charged on percentage.

Since Voltage Surcharge for consumers eligible for 66 KV but getting supply at 11 KV have to pay 10% Voltage Surcharge, Similarly, Voltage rebate for 66 KV consumers should also be 10%.

Issue 7: Fix industrial Tariff as per category wise cost of supply

It is prayed to the commission to reduce the cross-subsidy burden on LS consumers and fix the tariff as near to the COS as possible. Based on category wise cost of supply, tariff of the LS consumers may be rationalized and tariff for subsidized class may be increased. It is also submitted that category-wise cost of supply basis have been fixed many years back. It is submitted that the same should be revisited to revise the assumptions for working out the category-wise cost of supply.

Issue 8: T&D losses

While T&D loss for FY 2024-25 has been projected as per PSERC only, however, higher T&D loss level based on actual T&D losses for FY 2022-23 are also prayed by PSPCL. However, the Hon'ble Commission has already fixed the trajectory of loss levels of PSPCL and PSTCL for the MYT control period of 2023-24 to 2025-26 while approving capital investment plan after considering all the factors and should be followed as it is covered under controllable items. In MYT Regulations. These need to be revisited only if there is major variation due to justified reasons.

WE also request to revisit the Transmission loss trajectory as PSTCL is giving varying figures and seeking undue incentive for over achieving the loss level. Therefore, it is prayed to the Commission to approve T&D losses as per Regulations only.

Also pertinent to note that in the current ARR, it is clearly conceded by PSPCL that wide spread theft has been the major bane for higher distribution losses. Major culprit areas were Border, South and West Zones of Punjab. Therefore, it submitted that burden of higher distribution losses were not of technical nature but are of commercial in nature and consumers should not be burdened with them and T&D losses level should continue to be fixed on trajectory adopted by Commission by capping agriculture consumption for true up of FY 2022-23 as well as projections for FY2024-25.

Issue 9: Power purchase cost

The power purchase cost should be subject to approved T&D loss by PSERC. It is submitted that previous years expenses should be dealt separately and no expenses can be allowed in ARR simply due to reason that it is actually incurred. For part of ARR, it should be approved also by PSERC. Therefore, only after taking out of such exaggeration, the power cost should be approved.

Taken together, it is our submission that only such cost of capital expenditure in terms of depreciation, interest and finance charge etc. should be passed on to the consumers of electricity in the State, for which benefits start flowing and remaining should be not be allowed as a part of the ARR.

Issue 10: Employee cost

We have reiterated many times that employee cost is growing consistently and also acknowledge that the same cannot be capped due to manifold reasons. This is our submission that only reasonable cost be passed through ARR and remaining must be taken over by Government as PSPCL employees are government employees and must get their dues as per Government rules and regulation, but the same should not be used as an excuse to increase the ARR and cost of power for consumers.

Issue 11: Overdue receivables

In the ARR chapter 6: Status of directive compliances, page 129 of the current ARR, it is stated that there are outstanding dues of 4580 crore and out of which Rs. 2471 crore is due towards

Government department. We opined that prepaid meters be installed in government offices. However, as far as outstanding from Government office is concerned (Rs.2471 crore), the same should be deducted from the Government loans given to PSPCL or the Government equity be reduced by Rs.2471 crore plus due interest for delayed payments and return on equity be reduced by the same amount. This should be left to the government as how to deal with these outstanding amount of various government offices.

Similarly, it is also humbly suggested that a detailed MIS system be developed to track such accounts where power is regularly supplied but payment is not received. Such account holders may be pursued suitably to pay due bill amount to PSPCL. Honest consumers should not be made to suffer through higher tariff for such lapse of GOP/PSPCL.

Specific comments on True up FY 2022-23

Issue 1: Lower revenue realized shown in true up FY 2022-23 despite of higher sales

The Trued up sales for 2022-23 as shown by PSPCL in its petition (table 2.1 and 2.2) shows that total power consumption is 59392.56 MU (45630+13762.56 MU). The revenue for this sale is shown as Rs.37321.19 (Table 2.23, page 49 of the ARR), which gives per unit sale price as Rs.6.28/unit overall. PSERC had earlier approved overall sales at 56471 MU and revenue at Rs.36924.07 crore with per unit sale price of Rs.6.54. (*Ref. page 132, Table 125, Tariff Order dated 15th May 2023*). Thereafter tariff was increased by 8.64% to cover the revenue gap. However, Sale revenue is much lower and shows lower per unit realization of Paisa-26/unit and total lower revenue realization by about Rs.1544 crore (without considering 8.64% rise) and 1677 Cr with the tariff increase. This need to be studied and excluded from revenue requirement of PSPCL for FY 2022-23.

It may be noted that sales figures as shown approved figure by PSERC in tariff petition for FY2022-23 in table 2.10(58708.60 MU), page 35 is different from PSERC Tariff Order dated 15th may 2023, table 73.(55812 MU). This also need to be examined.

The agriculture consumption is also taken as 13763 MU against approved 12255 MU, which also need to be examined.

Issue 2: Norms of operating thermal station should be fixed as approved by the Hon'ble Commission in its tariff order as no additional information is given for fixing the same based on actuals.

Issue 3: The sale of power with state increased by about 4.5% from 43637 MU as approved by Hon'ble Commission to 45630 MU as given in table 2.1 of the tariff petition and agriculture consumption increased by more than 10%. (13763 MU against 12255 as approved, para 2.3.4, page 24, current ARR). However, power purchase expenses are increased by 17.4% from Rs.24750 crore to Rs.29060 crore. This seems to be beyond logic. Anyway, increase in power cost due to higher agriculture consumption should not be burdened on other category of consumers.

Issue 4: The prior period expenses of Rs.1426.49 crore should be approved only if the same are as per PSERC approved norms otherwise the same should not be accepted.

Issue 5: Higher difference of T&D losses claimed (12.76%) than approved by the Commission (12.04%) should be excluded for ARR purpose and accordingly the power purchase cost need to be reduced.

Issue 6: Higher capex claimed at Rs.2157.22 crore than approved by the Commission (Rs.1401.31 crore) by about Rs.700 crore should not be allowed until or unless the same is as per Hon'ble Commission guidelines and approved norms. Similarly, Rs.452.20 crore spent on the shahpur Kandi project, which is to be accepted after completion of the project should not be allowed.

Issue 7: As per PSERC MYT regulations, the financing of terminal benefits trust etc. to be given, PAY AS YOU GO model on actual basis. Though, PSPCL has claimed the same based on APTEL judgement, the Commission should not accept the same and challenge further. There is no reason to ask the consumer to pay for past liability of the Discom, which it need to be financed from internal sources.

Issue 8: Interest on long term loan and interest on working capital as claimed in para 2.15.1 and 2.17.1 are far more than as approved by the commission and same should not be accepted for ARR purpose.

Issue 9: Return on equity, details arguments are given and same need to be considered for FY 2022-23 true up as well as for 2024-25 also.

Issue 10: Based on above, there is no reason to increase the ARR for FY2022-23 during true up as claimed by PSPCL.

Comments on ARR for FY 2024-25

Issue 1: Our first and foremost comments on the ARR FY2024-25 is that there seems to be very high chances of wrong projections as the preceding year FY 2023-24 information related to ARR, which should be immediate reference for projections for FY2024-25 is not given. In this way, it is very difficult to judge the latest demand, latest power cost and other variables related with generations and distribution/sale of power and project other important information. It is understandable that as per PSERC MYT Regulations, the true up of FY2023-24 is to be based on audited figure but this cannot be an excuse for not sharing the details of the performance for the current year FY2023-24 and refer to the trends. In our view, the discom should be asked to provide the same and only then any meaningful projections can be made.

Issue 2: Further, PSPCL has projected the energy consumption for FY 2024-25 for different categories based on its own best judgment considering CAGR of 2 years for some categories and 5 years for others etc. For domestic the CAGR of the last 2 years is referred with base year 2022-23. This seems to have resulted into over projections of the sale of electricity in the State. It is evident that the metered sales projection are taken as about 15-16% for FY 2024-25 higher than FY 2022-23. The agriculture consumption projection is also taken as 12-13% higher than FY2022-23. The erroneous reason taken is lower sale due to good rain in FY2023-24. It is prayed to the Commission that the sales projection may be downwardly revised to make true estimates of the demand of power for FY 2024-25 and which is not possible without factoring FY2023-24 figures, which are not given.

- First , PSPCL may be asked to share the FY2023-24 figures as working detail and not for true up.
- Secondly, the demand projections should not be more than 5-6% in normal case, accordingly demand projections will be lower by about 6-7% and lower energy sale by 4500-5000 MU lower than projected by PSPCL. **It would result into lower power purchase and lower revenue requirement for FY 2024-25 by about Rs.2200-2300 crore minimum.** (4500 MU @Rs.5/unit, average purchase price of power for FY 2024-25, Format D-3, page 181 of the current ARR).

Issue 3: If the above argument finds merit then there would be lower demand of power in the State and accordingly the surplus power, which is shown as negligible would also surface in revised calculations. The same can be used to continue threshold consumption based incentive for the industry. It is pertinent to note that while outflow in threshold incentive is only for few last days of the year for an eligible unit, which increased consumption over threshold level but PSPCL gain year after year due to higher consumption as it is not possible to keep on increasing the power consumption above threshold level every year, which happens due to investment made by

the industry in any year for many years to come. Moreover, PSPCL also gets additional AACD at nominal rate of interest in the immediate next year. The additional investment also brings development in the area in the shape of increased wages, ED and IDF, Additional GST, increased freight etc. The threshold incentive has worked in the past and has given gain to the Discom and state. Therefore, the same should be continue to incentives higher consumption in the state by industry irrespective of power position since purchase of spot power from exchange is now available.

Issue 4: PSPCL has asked for revising the T&D losses and Power generation parameters for thermal plants based on actuals. However, these issues are raised again and again, and it is also important to note that capex approved by the Commission is also based on such lower T&D losses and higher thermal power plant efficiency norms. The approach of the Commission should be adhered to and continued for true up as well as for projections.

Issue 5: The detailed comments on retune on equity is given in the preamble of the comments on ARR. However, it is stated here that the return on equity should be given on equity actually infused in PSPCL, for which consumer have gained some benefits. Further, as the matter is pending in Supreme Court, the Hon'ble Commission may approve the return on equity on actually infused equity. For keeping in view the Forum of Regulators views, the return on equity shall be allowed at the return on Govt securities rate of about 8%.

Issue 6: GVK Power: It is **learnt** from Media that GVK thermal power plant is purchased by the Government/PSPCL. It would result into optimization of the thermal capacity of the Discom (PSPCL) and should generate some saving for the Discom. As per Media, there would be saving of Rs.1/unit on power generation. Given 3677 MU of power (Format D3), there would be saving of Rs.368 crore in FY 2024-25. The same should be duly factored as the Discom has not given any comments on the same and accordingly ARR should be revised to that extent.

Issue 7: High cost of solar power needs to be examined

- i. The analysis of the power purchase cost given on page 177(FY 2022-23) and page 188 (FY 2024-25) of the current ARR of PSPCL revealed that there is abnormal high power cost of solar power at above Rs.6/unit whereas as per Annexure AE of reply to deficiency dated ==works out as Rs 6.64/unit.. Secondly, the volume of such power has been increasing during FY2022-23 to FY2024-25. This is strange as power cost from solar source is about Rs.2.50-Rs.2.80/unit against about Rs.6 projected in the ARR. It is submitted that these power purchase from solar source need serious examination and the same should not allowed.
- ii. If such purchase is result of long term PPA signed, there is no reason why such power volume is projected to grow significantly over FY2022-23 to FY 2024-25. The details are given below:
- iii. On page no 177 of the ARR, the power purchased from NRSE purchase within Punjab for FY 2022-23, long term, **1292.03 MU solar power is purchased at a Rs.864.63 crore- Rs.6.70/unit**. However, the average purchase price of renew power including wind power is Rs.2.73/unit for the same year from SECI (2638.37 MU at Rs.721.11 crore)-Reference page 177, XII, 74 to 79 row)
- iv. On page 181, long term solar power, NRSE purchase within Punjab, **1709.42 MU projected at a cost of Rs. 578.49 crore- i.e. Rs.5.78/unit**. Now, it is to be examined that why this costly power sourcing is increased by 417.39 MU (1709.42-1292.03) at a price of Rs.5.78/unit while the renew power is available at Rs.2.50-Rs.2.75/unit and even lower?
- v. Even if the long term agreement is binding then why the power sourcing is growing, If it is an old agreement, power availability should come down due to the working of degradation

factor, which generally bring down power generation by about 0.5% minimum every year. There must be some agreement stating year wise availability of power from such source. Accordingly, the power sourcing should come down in FY 2024-25 over FY2022-23 instead of growing as projected in the ARR.

- vi. Further, if new agreements are made, which led to higher number of units then it should not be allowed at a rate above than Rs.2.50-Rs.2.70/unit. Why, PSPCL is signing agreement at such onerous price of solar power? This need serious examination by Hon'ble Commission and we pray to the Hon'ble Commission to kindly look into the matter.

Based on above facts and arguments, it can be safely deduced that the higher ARR claimed for FY2022-23 true-up as well as for FY 2024-25 (projections) are not based on sound facts and based on actuals at most of the places than approved norms by PSERC and as such there would be no requirement of increase in revenue requirement in the current ARR.

Comments on Tariff related issues

Issue 8: It also proposed the extend the duration of days to impose TOD peak charges from 30 September to 15 October of each year. It is prayed that the peak load restriction should be completely done away with if the same does not cause any serious stress on distribution system of the Discom.

Issue 9: A new peak load hours slab from 6 am to 9 am during 1st December to 28th February is also proposed. It should not accepted and PSPCL should strengthen its system to meet the growing demand of the power in the State rather than taking temporary measures of proposing peak load restrictions. Instead of burdening the consumers, PSPCL should plan the operation of Reservoir/pondage based Hydel projects like RSD, Malana, Shanan, Bhakhra, Pong etc to meet the demand during morning hours. It is to be noted that all the induction furnace consumers back down their operation during peak TOD charges period and do not pay the charge thereby reducing the revenue of PSPCL which is not a desirable situation. These are the tools of power shortage regime and in power surplus regime (where power supply can be augmented through putting new capacity), there is no place for such archaic measures in contemporary times. In fact, PSPCL should move to a regime where any kind of power consumption restrictions are not necessary and seam less unrestricted supply is available.

Issue 10: PSPCL has proposed increase in Peak load charges from Rs.2/KVah to Rs.2.5/per KVah. PSPCL also propose to discontinue the TOD rebate of Rs.0.75/KVah during 1st April to 31st May of each year. At most of the places, PSPCL has given reference to the high rate of power in power exchange during contemporary times. However, we strongly object to such proposal as **there are times when the power cost at exchange is very low while PSPCL is charging full tariff from consumers/government (in form of subsidy). Whether the Discom ever proposed to reduce tariff when the power in exchange goes below the PSPCL power Tariff? It is submitted that power tariff in Punjab as fixed by PSERC are based on average cost of supply method and not on opportunity cost basis** as also provided in the PSERC MYT Regulations 2022. In such situation, it is not prudent to refer to the power rates in power exchange which are based on market forces and not on cost of supply basis as being done by PSERC.

Prayer

- 1. There is no case for allowing any increase in ARR as sought by PSPCL for FY 2022-23 and FY 2024-25 in fact tariff should be reduced especially for subsidizing class of consumers.**
- 2. Carry forward the rationalization of Electricity Tariff in the State based on the principle of category wise 'Cost To Serve' principle**

3. **Reduce the electricity tariff of the subsidizing class of consumers particularly EHT category of consumers.**
4. **Ensure tariff rationalization of subsidized class of consumers or ask State Government to compensate the Board through explicit subsidy.**
5. **Voltage wise rebate should be given in commensurate with realistic Category wise cost of supply and be increased to minimum 70 paisa/unit.**
6. **Continue with threshold consumption-based incentive, existing peak TOD charges and night tariff rebate without any change as it happens to flatten the demand curve and also helps in demand side management.**

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.

ANNEXURE-III

Minutes of the Meeting of PSERC State Advisory Committee, Chandigarh held on 25th January, 2024.

A meeting of the PSERC, State Advisory Committee was held in the office of the Commission at Chandigarh on **25th January, 2024**. PSERC had invited comments of the members on the Petitions for True up of FY 2022-23 and the ARR Requirements and Tariff Proposal for FY 2024-25 (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.	Secretary, PSERC, Site No.3 Sector-18-A, Chandigarh.	Ex-officio Secretary
4.	Additional Chief Secretary, Department of Power, Government of Punjab, Chandigarh.	Member
5.	Principal Secretary, New and Renewal sources of Energy (NRSE), Government of Punjab, Chandigarh.	Member
6.	Director, Town & Country Planning, PUDA Bhawan, Sector -62, SAS Nagar- Punjab.	Member
7.	Chairman-cum-Managing Director, PSPCL, The Mall, Patiala.	Member
8.	Chairman-cum-Managing Director, PSTCL, The Mall, Patiala.	Member
9.	Chairman, Farmers' Commission for the State of Punjab, Punjab Mandi Board, Mohali	Member
10.	Director, Local Govt. Deptt., Punjab, Chandigarh.	Member
11.	Director, Agriculture, Deptt. of Agriculture, Govt. of Punjab, Chandigarh.	Member
12.	Chairman, CII, Punjab State Council, Chandigarh	Member
13.	Chairman, PHDCCI, Punjab Committee, Sector 31-A, Chandigarh.	Member
14.	Dr. Harish Anand, House No.59, Sector-39, Chandigarh Road, Ludhiana-141010(Punjab)	Member

15.	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
16.	Sh. Balour Singh, Consultant Solar Projects, Sector-39-B, Chandigarh	Member
17.	Dr. Ranjit Singh Ghuman, Professor of Eminence (Economics), 804, Urban Estate, Phase-I, Patiala-147002, Email: ghumanrs@yahoo.co.uk	Member
18.	Sh. Bhagwan Bansal, President of Punjab Cotton & Ginners Association (Regd.) Muktsar (Punjab)	Special Invitee
19.	Dr, Sat Bhusan Pandhi, Partap Colony, Model Gram, Ludhiana (Punjab)	Special Invitee

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 2022-23 and the ARR Requirements and Tariff Proposal for FY 2024-25 (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. Additional Chief Secretary, Department of Power, GOP

While sharing the concern of the members to reduce the cost of supply, ACS/Power stated that securing low-cost power is the priority of the State/PSPCL and best efforts are being put in to add more competitive RE capacity. It was also informed that RE RTC power procurement is being explored for which SECI has been engaged and the prices shall be known once the bids are concluded. Further, PSPCL is also exploring the possibility of a judicious mix of Green Hydrogen/pumped storage system.

2. Sh. K.K. Singla, PHDCCI stated that:

(A) Before commenting on the revenue requirement filed by the PSPCL for the aforesaid years, we would like to address upon 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. Now with the lifting of ban on release of new connections for agriculture, the consumption is further set to increase due to additional new tubewell connections being released. Providing the power at the subsidized rate of Rs 6.55/Kwh as per TO 2023-24, which is

far less than the average cost of supply (as high as Rs.7.04 per unit as per Av. COS for 2023-24 as TO 2023-24 and projected Voltage wise cost of supply for 2024-25 as Rs 7.25 as per reply to Deficiencies dated 22-12- 2023) is leading to serious financial crisis for the PSPCL. This will ultimately seriously affect the interest of industrial consumers in the State, which are already reeling under recession. Further, Industrial Consumers have to bear fixed charges and ED+IDF in addition to Energy Charge which are not applicable for agriculture consumer.

Therefore, it is imperative to cap the maximum amount of power year wise & approved by the commission that can be supplied to agriculture sector at the subsidized rate inclusive of additional connections projected in a year and the power supplied above that limit should be billed as per Cost of Supply for agriculture power as worked out in ARR.

- ii. PSPCL and PSTCL were constituted in 4/2010 as successor companies to PSEB and since then Transmission losses were being assumed as 2.5% on notional basis.

Trued up Transmission loss for 2022-23 has been worked out as 2.27% in the ARR of PSTCL for 2024-25 against Target loss level of 2.44% as per Trajectory fixed by PSERC. Further, PSTCL has claimed Rs 30.72 Cr as Gain on account of over achievement of Transmission Loss.

For the MYT period 2023-24 to 2025-26, the PSTCL again proposed to take Transmission Loss as 2.50% for all the 3 years of the control period 2023-24 to 2025-26 against which the Commission approved Loss level of 2.42%, 2.40% and 2.38% for the years 2023-24, 2024-25 and 2025-26 respectively.

This is very typical working of PSTCL whereby the consumers of Punjab are being unduly loaded with higher tariff. Firstly, PSTCL get higher transmission loss fixed from PSERC on flimsy grounds, then actually achieves lower loss and then claims incentive/sharing of gains, then gets into profit at the year end, pays Income Tax to the Govt of India.

We accordingly request that the trajectory of Transmission loss be revisited for the last year of the previous control period and for current control period to save the consumers from any tariff hike on this account.

- iii. **Interest on Short Term Loans for Working capital**

The PSPCL has been admitting to raise 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. It is submitted that interest on delayed receipt of subsidy is being loaded to the State Govt. while determining the subsidy amount in the tariff orders. For late payments by consumers, PSPCL is getting Late Payment Surcharge. Therefore, WC 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.

iv. RETURN ON EQUITY

The Commission had 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 Cr to 6081.43 Cr which has led to increase of ROE from 405.73 Cr to 942.62 Cr 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 to reconsider the issue vide judgment Dated 17-12-14 in Appeal No 168 and 142 of 2013.

Accordingly, we request the Commission to redetermine ROE for all the years w.e.f. 2011-12 onwards and adjust the same along with carrying cost to provide relief to the consumers.

- v.** PSPCL is still following the short cut route of Allocation methodology for segregation of ARR between Generation, Distribution and Retail tariff segments though Electricity Act came into force in 2003 and PSEB was split on 16.4.2010. PSPCL is coming out with same set of excuses for following the segregation methodology although every time new regulations are drafted for Determination of tariff during the last 13 years after 16.4.2010. We request the Commission to Direct the PSPCL to start compiling separate accounts for the 3 segments and no exemption be allowed in the new MYT regulations are drafted for next control period for 2026-27 failing which it should use its powers to advise GOP to make separate companies for Generation and Distribution.

(B) True up for FY 2022-2023

- 1) The Total Energy requirement of 65016 MUs were projected by PSPCL in its ARR for the year 2022-23 which were approved by PSERC without any revision. Accordingly, the Revenue requirement of power purchase was approved in the tariff order. However, now PSPCL has submitted the energy requirement for true up of 2022-23 as 694401 MUs i.e. a jump of 4424 MUs. This shows that there is no scientific forecast of requirement of energy and consumers were made to pay excess tariff worked out on the basis of lower sale of energy figures. Further, even after this jump of 6.8% in energy handled, PSPCL has come out with a Revenue gap of Rs. 6837.31 Crore for 2022-23. This needs to be thoroughly studied particularly when the previous year's up to 2021-22 ended with a revenue surplus of 773 Crore.
- 2) It is worth noting that the power purchase cost Rs 23258.16 Crore and Fuel cost for thermal plants Rs 1613.96 Crore which was approved as 24872.12 Crore has been trued up as (Rs.25668.09+3331.48) Crore = Rs.28999.57Crore. Thus, there was increase of Rs.4127.45 Crore whereas the energy requirement increased by

4424 MUs as worked out in above para. This shows that the additional purchase of energy was done by PSPCL @ Rs9.33 per unit (average).

The cost of power purchase is excessively higher and needs to be disallowed to save the consumers from any loading in tariff.

- 3)** The ARR for true up 2022-23 indicates that PSPCL has exceeded all the normative parameters fixed by PSERC for its own thermal plants at Ropar and Lehra. PSPCL has claimed actual figures for these thermal plants instead of normative figures as per MYT regulations without any proper justification. Due to this approach, PSPCL has claimed variable charge for Ropar and Lehra as Rs 5.35 and Rs.4.54 per KWH against approved charge of Rs 3.60 and Rs. 3.68 per KWH respectively. As such, we request that the revenue for these be allowed strictly as per MYT regulations 2019 applicable for 2022-23.
- 4)** PSERC had approved power purchase for 2022-23 @ Rs 4.44 per unit as per TO. However, the True up now submitted for 2022-23 indicate that the average cost of purchase is Rs 5.04/unit where as in Format D3, it is Rs 5.20/unit. Thus, PSPCL has claimed power purchase cost much above the approved rates which needs to be checked.

The power purchase cost for approval is indicated as Rs.29110 Crore whereas in Format D-3, the cost is indicated as Rs.29060 Crore. This needs to be reconciled.
- 5)** The actual Distribution loss indicated by PSPCL is 12.76% against target trajectory loss of 12.04% approved by PSERC for 2022-23. PSPCL also claims that it has supplied more power than approved in 2022-23 and in this case, the loss level should have rather come down due to better utilization of resources. Moreover, PSPCL is availing loans and grants for system improvement works under Central schemes and capital investment plans being approved by PSERC and projecting that such investment will improve the operational efficiency and reduction in losses.
- 6)** Format D-15 and G-8 titled Fixed Assets and Provision for Depreciation are same showing that no segregation has been done for the GFA, Depreciation and NFA for Distribution and Generation business, whereas, the figures show that this segregation is being done. Further, the closing balance for 31.3.2022 was Rs 53643 Cr as per TO 2023-24 whereas the opening balance on 1.4.2022 of ARR 2024-25 has been taken as Rs 56057 Cr and in the Formats D15 and G8, the opening balance as on 1.4.2022 is shown as Rs 56358 Cr. These figures need to be reconciled.
- 7)** 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.

- 8) Regarding non-tariff income depicted in Claim of PSPCL in respect of (Interest subsidy for REC), (Interest cost on delayed payments of Subsidy), (Financing cost of LPS from consumers) for reduction from Non-Tariff Income needs to be rejected in line with MYT regulations. Further, as per Para 28.1(m) of MYT Regulations 2019, 100% of rebate for timely payments should be considered instead of 50%.
- C) Projections for FY 2024-25**
- 1) The Per Unit Fuel Cost depicted is Rs 4.50 for Ropar and Rs.4.09 for Lehra. However, in Format G24, the per unit fuel cost for Ropar is Rs 4.09 and Rs 3.74 for Lehra. These figures in Para 3.8.32 have been indicated as Rs 4.52 and Rs. 3.965 per unit respectively. The figures need to be reconciled.
- 2) The request of the PSPCL for review of target distribution loss trajectory as per ARR needs to be rejected as the trajectory has been fixed after due consideration of relevant issues.
- 3) The Levelized tariff of Subansisri project as Rs 5.38 per unit whereas in Format D-3, these have been indicated as Rs 2.69 per unit.
- 4) It is also pointed out here that during bidding of jalkheri project, the lowest tariff was determined as Rs 5.74/unit whereas now PSPCL has proposed tariff of Rs 5.84 per unit. This needs to be checked.
- 5) Regarding GVK Plant, it is submitted that this plant has now been purchased by PSPCL. As per press reports, it is being claimed that PSPCL will save minimum Rs 1/- per unit from the generation of this plant. As 3677 MUs of power has been shown in Format D3, as such, PSPCL should save Rs 368 Cr in 2024-25 which needs to be factored in appropriately to give relief to consumers. Similarly, AFC of Rs 548.93 Cr shall not be payable now which needs to be deleted.
- 6) The Cumulative shortfall of RPO ending 2022-23 for true up has been indicated as 2883 Mus and 460 Mus for non-solar and solar respectively (Total shortfall = 3343 Mus). This figure ending 31.3.2025 has been worked out as (-) 377 Mus. The authenticity of carry forward of previous year (2023-24) shortfall, indicated as (-) 1597.88 Mus, cannot be ascertained in the absence of data of 2023-24.
- 7) The Capital Expenditure proposed by PSPCL for the year 2024-25 is Rs.5491.86Cr including Generation and Distribution business. However, Hon'ble Commission has approved an amount of Rs 2008.10 Cr vide table 54 of PSERC order dated 11.1.2023 in Petition No 49 of 2022. In spite of clear instructions of the Commission that the capital Expenditure of Shahpur Kandi Dam shall be considered after the COD, still the capital investment and interest is being claimed by PSPCL for Shahpur Kandi in the ARR just to inflate the ARR and load

the consumers.

8) Interest on Long term Loans

i) Claim of Rs 85.62 Cr towards interest for long term loan for Shahpur Kandi, IDC (interest during construction) and should be capitalized at the time of COD of the project. Therefore, this interest item is not admissible here.

ii) The Long-term loans are being taken against DPRs in which the payback period is also worked put based on the savings through such capital works. However, no such statement of improvement in performance is enclosed with the demand of long-term loans and interest thereupon in ARR.

9) The demand for Rs 10.00 Cr towards DSM Fund is excessive keeping in view the meager Rs.0.01 Crore expenditure in the true up of 2022-23. Therefore, there should be no provision for the DSM fund in the ARR and it should be approved based on actual basis during true up after prudence check.

10) The non-tariff income under true up of 2022-23 is Rs 1144.24 Cr whereas for the 2024-25, it has been reduced to Rs 972.57 Cr. This needs to be checked up as full details are not given.

D) Revenue Realized

It is observed that as per the trued-up figures of 2022-23 the revenue recovered at existing tariff is indicated as Rs. 37000.39 Cr against the approved figure of Rs 36149.60 Crore as per tariff order 2022-23. Accordingly, the increase in revenue is Rs.850.79 Crore. Correspondingly, the actual sales within Punjab are depicted as 58760 MUs against approved sales of 55521 MUs as per ARR. Accordingly, the increase in sale of power is 3187.6 MUs which indicates that additional power has been sold @ Rs 2.67 per unit. Thus, the revenue realization figures are not correct.

E) Late Payment Surcharge

As per press note issued by the Commission with regard to the Tariff Order for the FY 2023-24, it was Highlighted that: -

“Late Payment Surcharge has been dispensed with and only simple interest on the delayed payment @ 1.5%/month shall be leviable on the gross unpaid amount of the bill”.

However, as per General Condition of Tariff for the FY 2023-24) the provision is for treating part of the month as full month for this purpose which is harsh and needs to be looked into.

Submission to the Commission

We request the Honorable Commission to:-

1. Carry forward the rationalization of Electricity Tariff towards reduction of cross

subsidy in a phased manner.

2. Move towards fixing tariffs on the basis of realistic category wise cost of supply principle as early as possible.
3. 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 for at Rs 5.50 per unit.
4. PSPCL should be directed to
 - a) 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.
 - b) Explain as to why it is not able to recover the required revenues during true up in spite of increase in sales over those approved in TO.
5. More reforms and ease of doing business initiatives be introduced for the industrial consumers.

PHD Chamber requests the Commission to check all the data provided by PSPCL and give some relief to industry by **increasing Voltage Rebate on the basis of Category wise Voltage wise cost of supply** and introducing Load Factor Rebate. Which is also necessary so that the industry of Punjab remains competitive viz-a-viz neighboring states, otherwise, it will have no other alternative but continue shifting to other states.

F) Tariff Related Issues

1. Special Night Tariff for Industries

- A) PSERC allowed the industry opting for Special Night Tariff to operate on round the year basis in TO 2020-21 to TO 2023-24 (instead of only 8 months of non-paddy period permitted in 2019-20) which has helped the steel furnace industry to continue operations during the then persisting Covid era and compete with the other states.
- B) PSPCL in ARR has requested for discontinuation of the Special night tariff on the ground that the demand scenario has changed due to which there is no surplus power with PSPCL during night as night consumption is almost equal to day time consumption and MCP of power at power exchange during night is higher than the day power.
- C) We submit that the basis on which discontinuation of this tariff has been sought are selective for paddy period only and does not represent the true facts. PSPCL is still facing huge demand differential during day and night period in non-paddy months but has not submitted the demand curves for the period,
- D) It is also pointed out that PSPCL has contracted huge solar and wind capacity and will require more and more night consumption to flatten the load curve. No proposal has been submitted by PSPCL as to how it proposes to absorb such additional day time power.

E) PSPCL had requested for discontinuation of this facility last year also on which we had commented to continue the same and the Commission had not agreed to the proposal. We again request the Commission that this Special Night Tariff should be continued in the ensuing year 2024-25 as well.

2. Discontinuation of Night Rebate of Rs 0.75/KVAH during April and May

- A) PSPCL has proposed in the ARR that due to high Market clearing rates for night hours prevailing on power exchange and almost same demand during night hours of April and May, TOD night rebate for these two months need to be discontinued.
- B) However, the data pertaining to night consumption for these months of 2022 and 2023 indicates that the night demand worked out as 95% of the demand for day hours during April 2022 has come down to 90% in April 2023, a difference of 5%. Similarly, the night demand worked out for May 2022 and 2023 show a difference of 10% also indicating that the night consumption has reduced in May-2023 compared with 2022. Thus, these are dynamic figures and one-year figures cannot decide the trend.
- C) The basis on which night rebate is granted is the need to make the load curve flat to bring down the extent of backing down of the thermal plants during night hours to achieve their efficient operations. It is evident from ARR that PSPCL's thermal plants are not operating efficiently due to excessive back downs. PSPCL has also not enclosed the load curve for these months for unrestricted demand and unrestricted availability to justify its claim.
- D) It is also stated that the rates of power at exchange during night hours for the period are higher compared with average exchange price during 2022 as well as 2023. Further, existing consumers have first right on depreciated resources created with consumer's revenue.
- E) Therefore, the proposal lacks justification and the night rebate for April & May be continued for 2024-25 also.

3. The TOD peak charge to be extended up to 15th October and night rebate to start from 16th October

PSPCL has proposed that the paddy period be extended from present 30th September to 15th October due to late maturing of paddy and sought extension of TOD peak charge up to 15th Oct and start of TOD night rebate from 16th October

- A) The reason for the above proposal given are that in the past, paddy season is spilling over to about 15th October as many varieties of paddy mature near about 15th October. GOP has also instructed to give power supply for paddy till crop matures. Accordingly, there is demand of 8-hour power supply up to mid-October, TOD peak charge should remain applicable till 15th October and TOD night rebate should start from 16th Oct. PSPCL has also attached the GOP order requiring paddy supply to be given till the

maturing of the crop. PSPCL has also supplied consumption and peak demand data for each day of October 2022 and 2023,

- B) In the first place, we submit that the agriculture load during first two weeks of October is a rare happening may be due to delayed start of paddy power this year resulting in delayed sowing and ripening of paddy and may or may not be repeated every year as farmers have suffered losses and are insisting for start of paddy supply from 10th of June.
- C) Annexure 3 attached with ARR also indicates that state has been divided in 4 groups for Paddy supply. The paddy supply was started in 2022 from 18.6.2022 to 26.6.2022 in a staggered manner as per notification dated 6.5.2022. On the same pattern, Supply was ordered to be given in 2023 from 10th of June to 21st of June in staggered way as per Annexure 3. Thus, it is the delayed sowing of paddy resulting in delayed harvesting of crop. Why Industry is being asked to bear the burden of additional supply up to mid Oct and PSPCL retaining the savings of delayed start of paddy supply in June.
- D) PSPCL also need to be directed to supply data of consumption from 15.9.23 to 30.9.23 also to work out the reduction due to ripening of early varieties of paddy as it is a fact that watering of fields is stopped 3 to 4 days before the harvesting. It is also known that FCI starts paddy procurement from 1st of October every year. Relief to the system is available due to varieties.
- E) It is a fact that majority of Steel industry does not avail peak power during the period of TOD peak charge and instead shuts its operations. Thus, while PSPCL is expecting recovery of sales revenue along with peak charge, in fact it loses even basic revenue also. The traders prefer to bring finished steel from outside the state where the tariff is low and resultant cost of steel is lower than Punjab. In addition, the power is supplied to Agriculture Sector where the recovery is much lower.
- F) In view of the above, the existing system should continue and If PSPCL proposal is to be accepted then equity and justice demands that night TOD rebate be also allowed up to 15th June.

4. Proposal to increase TOD peak charge from Rs 2.00 to Rs 2.50/KVAH

- A) PSPCL has proposed to increase the TOD peak charge from Rs 2.00 to Rs 2.50/KVAH
- B) Here also, PSPCL, has relied up on the spot power prices of Power Exchange which indicates that ACP for the whole day which was Rs 5.41/unit in 2022 has increased to Rs 5.94/unit in 2023 i.e. an increase of 53 paise per unit. However, the data also shows that the rate of power during peak hours has decreased by 43 paise per unit, In our view, the data proves that the while tariff in general needs to be increased by 50 paise, there is full justification for decrease of TOD peak charge by 50 paise i.e. from present Rs 2 to Rs 1.50 per unit.

Thus, the proposal of PSPCL to increase TOD peak charge is based on contradictory facts, lacks justification and should be rejected. Rather, PSPCL data justifies that the rate needs to be fixed as Rs 1.50 per unit.

5. Fresh Proposal to levy Peak TOD charge of Rs 2.50/KAHH for consumption during 6 AM to 9 AM During December to February.

- A) PSPCL has given a new proposal to levy Peak TOD charge of Rs 2.50 for consumption during 6AM to 9 AM during December to February of the year.
- B) Here also PSPCL has taken shelter of higher Average MCP at Power exchange rates during this period to justify the levy. PSPCL has also indicated the monthly average demand and peak demand for Dec 22, Jan 23 and Feb 23 which indicates an increase of about 1300 MW to 1900 MW and Peak demand has increased by 500 to 2400 MW respectively. PSPCL states that there is difficulty in meeting this enhanced demand linking it with high rates at power exchange.
- C) Here also PSPCL is ignoring the status of the consumers who have borne the depreciation and financing of the assets and presuming that whole of the power to industry is to be supplied through spot purchase of power from power exchange. We have already submitted that rates of power discovered at Power exchange are opportunity based depending heavily on demand supply gap scenario and such rates cannot be basis for imposing morning peak surcharge.
- D) We would like to submit here that PSPCL must have purchased cheaper power from exchange but has never submitted any proposal to reduce the tariff or other charges or increase the rebates. It is also not brought out whether any power cut was imposed during the period due to such increase in demand.
- E) It is also submitted that Industry should not be penalized for the increase in the morning demand which is solely due to Geysers and other heating loads of the domestic and NRS sector.

6. Discontinuation of Reduced Energy Charges for consumption above threshold consumption

- A) PSPCL has proposed to discontinue the Reduced Energy Charges for consumption above threshold limit from FY 2024-25 onwards on the plea that there is no surplus power with PSPCL and high average MCP on the power exchange.
- B) It is a fact that the threshold rebate was started to incentivize increase in consumption by high end consumers to reduce surplus power with PSPCL so as to reduce the burden of fixed charges for idle capacity. However, we do not agree with PSPCL that it is not surplus in power as PSPCL seems to have artificially increased the projection of consumption by
 - i) Arbitrary selection of highest CAGR for projecting the consumption of 2024-25.

- ii) Higher Transmission losses of PSTCL in spite of having achieved lower actuals for 2022-23 and higher than targeted distribution losses by PSPCL for 2024-25.
 - iii) Increase of 20% in consumption by Domestic category in 2022-23 cannot sustain on long term basis and future increase shall be lower than 2 year CAGR of 7.8%.
 - iv) CAGR of 6.1% for Agriculture does not seem to be realistic due to steps being taken for making available canal water, diversification of crops and diversion of land for urbanization, industrialization and for solar plants etc.
- C) The projected PLF for Ropar has been indicated as 62.75% and for Lehra as 57.88% against availability of 93.10% and 79.45% respectively for the year 2024-25 in format G24 of ARR but shown as merely 40 Mus in table 6.12
- D) It is also submitted that the benefit of this rebate to consumer is merely 26 paise (+ED & IDF) per unit but after the year, the industry is required to deposit Rs 10.35 per unit of increased consumption (150% of Rs 6.89/unit) in the form of AACD and PSPCL is benefitted every year on the interest charges of Working capital interest minus RBI rate.
- E) We also request the Commission to provide the calculations for working out the reduced energy charge in the tariff order (Rs 5.24/unit in FY 2023-24 and the revised charge for 2024-25 to be determined).

3. **Dr. Harish Anand of CII, Punjab State Council**

He states that:

1. Transparency and active public engagement are two main hallmarks of regulated business-like Power, where general public interest is involved. Therefore, it is important that information related to ARR should be provided in full details. The ARR for FY2024-25 shows that the information related to the PSPCL performance for FY2023-24 is completely taken away from public view. This is not correct even the MYT regulations may not require them as true up is to be based on actual but to forecast sales and other parameters, the information related to intervening year 2023-24 is must. We hope that this practice of not giving information of the intervening financial year (in this case is FY2023-24) will be discontinued and in the next ARR for FY 2025-26, information related to the performance of FY2024-25 shall be given. If this requires amendments in PSERC MYT regulations, the same should be carried out without delay.

The active public engagement also require sufficient time to study, analysis and grasp the critical points in the ARR, which need attention. Therefore, it is also requested that sufficient time be given to Public to study and analysis the ARR and related documents.

It is proposed that

- i. When ARR is submitted to PSERC, the same may be uploaded on PSERC and PSPCL/PSTCL websites along with relevant documents.
- ii. Any short coming or deficiencies/queries/explanation sought from Licensees may also be uploaded on both websites simultaneously

- iii. Any reply to such query/deficiencies be uploaded when submitted.
 - iv. In-fact posting such information on websites should be set as precondition to submit the same to PSERC.
2. Projecting peak demand assuming base of 14000 MW growing at 3% CAGR would take the peak demand to 16200MW -16500 MW, which seems to be a very conservative estimate. With increasing share of renew power, which we also suggest to grow to 50%-60% of total demand from the present level of about 15%, the renew share may grow to about 8000 MW-9000 MW(excluding hydro available with the state). If it happens, it would generate a saving of about Rs.6000-Rs.6500 crore/year to Discom. It is based on difference between the average purchase price approved by Commission in last year tariff order FY 2023-24(Rs.4.83/unit and average cost of solar/wind power at about Rs.2.57/unit as mentioned in the current ARR in annexures given on power purchase or through avoided cost of purchase through captive/roof top solar plants set up by consumers for self-consumption. With half of the 57772 MU power units required (as mentioned above in last tariff order) coming from RE power, a saving potential of Rs.6000-6500 crore/annum exist.
3. The related challenges emanating from such scenario compel us to ask few questions
 - i. Whether our transmission system is sufficiently growing to cater the load as in the past, we have seen situation, where power could not be brought in the state from outside due to transmission constraints? We need to have projections from PSTCL and PSPCL for next 8-10 years and action plan for the same.

In the current ARR also, the discom has projected demand congestion in demand side management (DSM), which will grow further and should not be addressed by imposing cuts or dis- incentivize the consumption during peak hours. Therefore, we look forward to PSPCL for some projections on the same which may be considered in capital expenditure approval.
 - ii. The growing infirm renew power from solar and wind within as well as outside the state in future also need power storage capacity in form of storage/ battery backup. Such power can be stored in storage battery and can be supplied during peak/shortfall in availability hours. This would not only reduce the cost of power during peak hours/loss of revenue due to forced power cuts but also helps greatly in managing the grid discipline, which may become a challenge due to intermittent nature of the RE power.

It is also proposed that PSPCL may plan for 5000-6000 MW storage battery capacity in next 5-6 years i.e. minimum 1000 MW battery storage capacity/year. For this purpose, the fiscal support given by Central Government in form of 40% of capital cost may be taken into consideration. A detailed DPR for the same may be asked from Discom by Hon'ble Commission.

Fully acknowledging the possibility of high battery storage cost of Rs.1.50/unit to Rs.2.50/unit with solar/wind power cost at Rs.2.60/unit, total cost of such power would be about Rs.4.50 to 5/unit, which is lower than thermal power cost of generation. If the factor of RPO associated with thermal power is also considered then battery storage becomes a cost-effective measure.

We proposed to the Commission to kindly seek proposal for setting up storage battery systems from PSPCL duly factoring central government subsidy.

iii. Pump storage system for storage of power and managing peak demand

The discom should explore the pump storage facility for power storage also and share the potential of such storage capacity in Punjab. It is learnt that on completion, the Shahpur kandi dam would be used for pump storage facility in sync with RSD dam. PSPCL may be asked to share the power storage potential through this mechanism to handle the peak load demand in the State.

Also pertinent to note that it may also be asked to PSPCL to complete the project without any further delay, update the progress so far, delay, time and cost overrun so far in completion of Shahpur kandi dam. The same may be shared regularly with consumers on PSERC website.

iv. Green energy open access regulations to be separately framed

There is great amount of confusion related to relevant provisions regarding open access and green energy open access, with in state open access and out of state open access and under CPP green energy mode and non CPP mode also. It is submitted to the Commission to prepare separate green energy regulations to bring clarity and avoid different interpretations of the related regulations.

v. Rice straw-based power plants

Punjab has about 180 lacs tons of rice straw availability each year due to rice cultivation. It is estimated that the same is not likely to change in the current socio-economic situation in Punjab. It is also estimated that even after factoring the different usages of rice straw, there would be abundance supply of rice straw. It is also learnt that rice straw need to be converted into pallets, which cost about Rs.8/kg, which is unviable economically for PSPCL to use as fuel as a replacement/supplement of/to coal. It is submitted the Hon'ble Commission may ask Discom to give study to some good engineering institute like IIT Ropar to look into the ways and means of cost reduction related to conversion of rice straw in pallets to make it viable for thermal plants to use the same with coal.

vi. Electricity ombudsman member may be asked to share their critical observations related to dispute between discom and consumers, which mainly happens due to interpretational issues or lack of clarity of regulations or related provisions once in a year. The same may be shared with public through Commission

website for comments so that required clarifications/amendments in regulations can be done to minimize future disputes.

vii. Power quality regulations related to harmonics control

It is a welcome step of the Commission to make regulations for harmonics control and discom has also taken follow up action by short listing the power quality meters suppliers. As a results, many companies have set up power quality meters. However, it is felt that the processed data related to power quality is not available to consumers. The Hon'ble Commission may direct the Discom to look into the matter and provide processed data for all the Power Quality parameters and extent of violation of TDD after sourcing the same from meter suppliers after checking its accuracy. PSPCL may also be directed to install PQ meters on its feeders for measurement of Voltage harmonics in a time bound manner.

viii. Improving the quality of power/services for domestic consumers

The Commission may prepare some parameters related to measuring the quality of power supplied to domestic consumers. It is general feedback of the residents that the power quality /supply need lot of improvement. Transparency goes a long way in brining improvement in quality of service offered to Public. Ideally, this work of maintaining the transformers should be outsourced to private agencies for better management. Presently only repairing and removing fault is given on contract basis, which is outsourcing at very low level. It must be upgraded to asset management level.

The poor maintenance of electricity lines leads to power cut out for the whole areas while fault is restricted to one small portion of the lines. These need to be looked into. Power cut is not only inconvenience to people but also the revenue loss to discom.

4. Sh. Ranjit Singh Ghuman, Professor of Eminence (Economics)

He states that:

- In case for solarization of AP Motors, some exercise be done to find its viability, considering the higher Horse Power Electric Motors installed in AP sector.
- PSPCL should increase the generation capacity in the State sector so as to increase its generation share in the power portfolio.
- Agro-Industry needs to be promoted to facilitate diversification of crops and employment in rural sector.
- The rules and regulations must be amended to encourage industrial development in the state.
- Further, advocated the addition of power in the public sector.

5. **Sh. Kamal Dalmia, Patron, FOCAL POINT INDUSTRIAL WELFARE ASSOCIATION (REGD.)**

It has suggested as under;

The power rate of PSPCL is already higher as compare to the rate of other states like Jammu & Kashmir & Himachal Pradesh. The industry has to compete with other states, if the cost of production will be more, industry will be unable to sell its product which will ultimately lead to closing of the industry in Punjab & force entrepreneurs to shift their industrial units to other states. As a result of this the number of MS Connections has decreased about 10%. As per statement D25A and 25B number of MS connections decreased from 34316 to 30947.

i. In the True up 2022-23, PSPCL has claimed improvement as under:

- Distribution Loss has been reduced as compared to last year.
- Annual Integrated Rating has improved from B to A.
- Generation of Thermal Power Generation has improved.

If the above improvements have been made than there is no need of increasing the tariff.

ii. Interest on Security Deposits

Interest on consumer security deposit for the financial year 2022-23, the Commission allowed Rs.123.63 Crore as interest to consumers whereas the actual payment incurred is Rs.139.66 Crore. This figure is still not correct as PSPCL has not till date updated the total securities in the consumer account. In AAR for Financial year 2024-25 projected ACD is retained same as was on 31.03.2023. During Financial year 2023-24 ACD of consumers having sanctioned load / demand above 100KW /KVA on review of ACD has been made as per figures updated in system of billing has not been considered.

iii. Prior Period Expenses

In the Prior Period Expenses: The Commission vide its Tariff order dated 31.03.2022 approved amount of Rs.485 crore against Power Purchase Dispute for the year F.Y. 2022-23. Against this, the actual expense made is Rs.1426.49 crore. These expenses should be examined before approval of the same.

iv. Time of day (TOD) Tariff

The PSPCL has proposed the following:

- That the TOD Rebate of Rs.0.75/KVAH during the period April to May from 10PM to 6PM (Next day) to be discontinued.
- Facility of TOD during the month of October should be made applicable from 16th October instead of 1st October.
- TOD Surcharge from 1st June to 15th October from 6PM to 10PM be

increased from Rs.2/KVAh to Rs.2.50/KVAh over Normal Tariff.

- The provision of reduced tariff for industrial consumers who use electricity exclusively during night hours may be discontinued.

The above suggestion of the PSPCL is against the interest of the industry. These steps will lead to increase in the tariff rate for the industry.

v. Power Quality Meter

PSPCL has sent notice to the consumers that the Power Quality Meter be installed as per the Power Quality Regulation 2023. The PSPCL has not till date informed to the consumers what would be the feature & benefit of the quality meter? Further, PSPCL has suggested that consumer should install the quality meter of their own. Those who are unable to install the meter, the PSPCL be permitted to install the same & consumer pay the rent of the quality meter whereas rent of quality meter is very much on the higher side. LS consumer has already paid the security of the meter to PSPCL. The PSPCL should replace the meter with Quality Meter without any charge.

vi. Prepaid Meter

In the supply code 2014, there is a provision for Prepaid Meter. The number of consumers has made request to PSPCL for prepaid meter. The PSPCL has not installed the same.

vii. Hotel Industry

The status of industry has been given to the Hotels but Tariff of Industry has not been made applicable on the Hotels. The Tariff of Industry should be made applicable on the Hotels so that Hotel Industry should flourish in Punjab.

viii. Fixed Charges

The PSPCL is charging Fixed Charges in the electricity bill. These fixed charges further increased in the financial year 2023-24. By increasing the fixed charges, the rate of electricity has increased. In some cases, the fixed charges are more than the electricity consumption. It is suggested that fixed charges should be reduced & recovered on 60% of SL/CD instead of 80%.

ix. Power Theft & Pilferage

The PSPCL has claimed Power theft has reduced but the percentage is very much on the lower side in spite of giving 300 Unit free per month, still the Power Theft is there. The PSPCL should take strict action against theft & pilferage of electricity.

x. Solar Power

The PSPCL & PEDA promote use of Solar Power by installing Solar System. The PSPCL should give incentive for installing Solar Power System. By using the Solar Power, the problem of Electricity Shortage will be solved.

xi. Another Power Supplier

There should be another Power Supplier in Punjab like New Delhi & Maharashtra so that there should be a healthy competition amongst power suppliers which will help in improving the working & services of the PSPCL consumers. Upgradation in Power Distribution Network is required urgently all over Punjab to reduce Power Break Down & Maintain uninterrupted power supplies.

xii. Appointment of Energy Auditor

To improve its working / efficiency / reduce avoidable losses, the PSPCL should appoint Expert / Energy Auditor of international repute for the audit of their working. This will help in improving the working.

xiii. Poor Services due to shortage of work force.

As per the data submitted by the PSPCL, employees' cost has declined drastically. This has happened due to reduction in working force. The bills are not uploaded in time & electricity faults are not attended in time. The work force should be increased suitably to provide proper service to consumers.

The Punjab Government is claiming that the expenses of the PSPCL have reduced and PSPCL is earning crores of rupees. Government has further announced that by winning the case of Coalmine has resulted supply of sufficient & best quality coal to Thermal Power generating station & it will help to produce power at cheaper rate. The Government has cleared the subsidy amount to PSPCL up to 31st December, 2023. On 1st January, 2024 purchase of Thermal Power Plant from private party has been made. By these steps there will not be any increase in the electricity tariff as declared by the Punjab Government.

In view the announcement made by the government, the PSPCL should file the revised data or undertaking may be asked from the Government of Punjab & Commission should fix the tariff without any increase for the survival of existing industry which is already facing tough competitions & growth of New Industry in Punjab.

6. Director - Generation, PSPCL

- PSPCL is making efforts to develop a judicious mix of various energy sources, RE capacity of around 3000 MW has been tied-up recently and tenders for additional 3000 MW RE Power have been floated. Also, PSPCL is exploring the option of procurement of RE-RTC power. Bundled power was also procured by PSPCL. Other RE options is also being explored and viability being checked. However, Biomass power is proving to be a costly proposition in the absence of any VGF.
- Further, PSPCL is likely to meet the RPO compliance after considering the hydel generation in its portfolio as per new MoP guidelines.
- Data regarding Power Quality meters are being emailed to the designated consumers and all efforts are being made to procure Power Quality meters to make it available for the consumers on monthly rental.

7. Director - Commercial, PSPCL

- He informed that the issue of raising the supply voltage for various categories of consumers will be discussed in the Supply Code Review Panel.

8. Director - Technical, PSTCL

He states as under: -

- PSTCL is making efforts to increase the Available Transmission Capacity (ATC) in the State. In FY 2023-24 alone, a transmission capacity of approx. 1000 MW is added which shall enable evacuation of RE power. Also, endeavor is to ensure ATC of 11000/12000 MW by the end of 3rd MYT control period.
- In order to tackle the problem of high voltage reactors are being put in the transmission system. The capacity of the grid stations at Ludhiana and Gobindgarh are being upgraded to meet the growing demand.

9. Sh. Shitij, Indian Energy Exchange

He stated that presently the REC price is low and available at approx. Rs. 400/REC, which can be availed for meeting the RPO compliance.

10. Sh. Balour Singh, Consultant-Solar Projects

He stated that as the solar power is available at a much lower rate now, the procurement of same be increased by PSPCL. It was emphasized that RESCO/PPP model may be adopted to promote solarization of AP pumps.

11. Sh. Surjit Singh, NRSE, GoP

It was suggested that measures may be taken by PSPCL to bridge the RPO shortfall for FY 2024-25.

It was also informed that for the RPO monitoring in accordance with the PSERC (RPO & its compliance) Regulations, 2022, the process of registration of obligated entities has been begun in consultation with PSPCL.

12. Sh. Bhagwan Bansal, President of Punjab Cotton & Ginners Association

He stated as under: -

- That their industry production is seasonal. They wish to install Solar Plants in the industries. The Member also demanded that the settlement period for the Rooftop Solar Plants under net metering may be changed to financial year. The Commission informed that petition in this regard is under the consideration.
- No fixed charges should be recovered from the seasonal industry and only energy charge should be levied. He further suggested that the reconnection period of a permanently disconnected premises may be increased from 1 year to 3 years. He further suggested that the limit of 100 kW for medium supply industry may be raised to 150 kW particularly for agro based industry.

13. Joint Director, Agriculture, Department of Agriculture

It was suggested that solar power can be added at village level through RESCO/PPP mode.

14. Dr. Sat Bhushan Pandhi, Ludhiana

He has given some of the suggestions:

- That full detail of the amount waived off against Zero bills, must have been mentioned in the data provided by PSPCL. Also, the actual amount against so called Zero Bills, might have been transferred by our government into accounts of PSPCL because his free scheme of zero bills for a consumption of 300 or less units in a month, is a part of Punjab Govt. policies and the Govt. is responsible to bear that loss of their own.
- PSPCL might have demanded to increase power tariff as well as Minimum Charges for connected load from its consumer on the basis of apparent losses due to Zero Bills. When the full loss is being compensated by our government, so there is no net loss to PSPCL and hence there is no need to increase the rates.
- Long pending dues from Govt. offices must have been recovered by PSPCL. If not, PSERC must find a way to help PSPCL to recover their huge due amounts from Govt. offices/premises.
- Out of three Thermal plants namely Rajpura, Talwandi Sabo and Govindwal Sahib, Punjab Govt. has recently purchased Govindwal Sahib thermal plant having 250+250MW capacity. Pachwara Coal mine has been allotted to PSPCL. Now cost of production will be less and hence there will be no need to increase the tariff. Rather the extra profit, so gained, be passed on to the consumers by reducing the tariff.
- Giving free electricity to ALL consumers for a consumption of 300 or less units in a month (10 units per day), under the policy of Punjab Government, is not a fool proof method. This has led to some other ways to get zero bills. Consumers check their consumption on last day, and if it is a little more than 300 units, they request the meter readers to mention it 300 only and the extra units are compensated in following months. Also, consumers have started applying for extra connection in the same house to get benefits of 300+300=600 free units.

To solve this issue, Government can give only 200 units FREE and thereafter, should charge for extra consumption beyond 200 units. Also, these 200 free units be given to only those houses whose connected load is up to say 4 or 3 or 2KW.

- It has also been seen that many NRIs whose connected load is very high, but no one is living in those big houses except one Care-taker family. Govt. is also giving FREE electricity to them. This is not needed as all NRIs does not come under poor

and needy class and they can afford to pay minimum charges on the basis of their huge connected load.

- Fixed charges in Chandigarh were increased from Rs15 to 25 for FY 2023-24, which were quite less as compared to Punjab and Haryana claims “No Load Surcharge”, if bill is above minimum charge. Though tariff structure can be different in each state, but All Regulators should have uniform policy and uniform structure in their states, as Electricity Act is same for every state.
- Meters are the property of the PSPCL and are charging meter rent from the consumers. It is the responsibility of PSPCL to take care of their property. When a meter is burnt/damaged, PSPCL should replace the same of their own, immediately after reporting by the meter reader. For replacement of such burnt meters, PSPCL have no right to charge cost of burnt meter from the consumers and this mal-practice be stopped. Also, Regulator should fix some penalty if the meter is replaced after certain number of days because due to that N-Code bills are generated which harass the consumers un-necessarily.
- Monthly electricity bills are issued to consumers on about 4th or 5th of every month. But due to shortage of meter readers, sometimes readings are not noted and then PSPCL issues N-Code bills by mentioning fake readings which creates problems. Under Small Ideas Great Ideas Trust, I hereby submit a simple solution to get rid off this fake N- Code bills by PSPCL:-

While generating N-Code bills, i.e. without noting the actual readings, consumption of a consumer be taken in round figures, say 300 units, or 500 units etc. based on approximate consumption pattern in the recent past. The Column of New Reading be left blank and no fake reading be entered. This column will only be filled with “actual reading” when OK status bill is issued. I am sure, this simple’s mall idea will definitely solve all the issues related to fake N-Code bills.

Chairperson, PSERC thanked all the members for their valuable comments and informed the members that Energy Storage and other options for procuring RE power shall be promoted based on its viability/cost-benefit analysis and directed PSTCL to ensure timely addition of requisite transmission capacity to ensure evacuation of RE power being added in the system. It was also clarified that the issue of settlement period in Solar Plants is already under adjudication by the Commission in a petition filed by PSPCL.

The meeting ended with a vote of thanks to the chair.
