PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

PSTCL

TARIFF ORDER FORFY 2022-23

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

CONTENTS

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

PETITION No. 67 OF 2021 FILED BY PUNJAB STATE TRANSMISSION CORPORATION LIMITED FOR TRUE UP OF FY 2020-21, ANNUAL PERFORMANCE REVIEW FOR FY 2021-22 AND APPROVAL OF ANNUAL REVENUE REQUIREMENT AND DETERMINATION OF TARIFF FOR FY 2022-23 FOR ITS TRANSMISSION AND SLDC BUSINESS.

PRESENT: Sh. Viswajeet Khanna, Chairperson
Ms. Anjuli Chandra, Member
Sh. Paramjeet Singh, Member

Date of Order: 31st March, 2022

ORDER

The Punjab State Electricity Regulatory Commission (Commission), in exercise of the powers vested in it under the Electricity Act, 2003 (Act), passes this order for the True-Up of FY 2020-21, Annual Performance Review (APR) for FY 2021-22 and Approval of Annual Revenue Requirement and Tariff for FY 2022-23 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 hearings held at Ludhiana, Amritsar, Bathinda and Chandigarh 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 2021-22. 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) and 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 (hereinafter referred to as "PSERC MYT Regulations, 2019") vide notification No. PSERC/Secy/Regu. 140 dated 29.05.2019 which have come into force from 1.04.2020 to 31.03.2023. The relevant regulations have been followed for the respective years while passing the present Tariff Order.

1.2 True Up for FY 2020-21, Annual Performance Review for FY 2021-22 and Annual Revenue Requirement for FY 2022-23.

PSTCL has filed the present Petition for True up of FY 2020-21, APR for FY 2021-22 and Annual Revenue Requirement for FY 2022-23. The petitioner has prayed:

a) To admit the Petition seeking approval of True-up of FY 2020-21 in accordance with the PSERC MYT Regulations, 2019, as amended from time to time and approval of Annual Performance Review for FY 2021-22 and revised Aggregate Revenue Requirement and Tariff for FY 2022-23 for Transmission Business and SLDC in accordance with the PSERC MYT Regulations, 2019;

b) To approve Revenue Gap arising on account of True-up of FY 2020-21 and Annual Performance Review for FY 2021-22 along with their carrying cost and allow their recovery through Tariff of FY 2022-23, as computed in the Petition;

c) To approve the ARR forecast and Tariff for FY 2022-23 for Transmission Business and SLDC Business;

d) To invoke its power under Regulation 64 in order to allow the deviations from PSERC MYT Regulations, 2019, wherever sought in the 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 opportunity to rectify the same;

The petition was admitted vide Order dated 07.12.2021 and the deficiencies observed in the petition were conveyed to PSTCL vide Order dated 13.12.2021. PSTCL submitted its reply to the deficiencies vide letter no. 3166 dated 20.12.2021. PSTCL was further directed by the Commission vide order dated 06.01.2022, letter No. 296 PSERC/Tariff-T dated 04.02.2012 letter No. 408/PSERC/Tariff/T dated 25.02.2012 to provide additional information. PSTCL submitted its reply to the additional information vide email dated 11.02.2022, memo no. 119, dated 12.02.2022 and memo No. 184 dated 02.03.2022. Various meetings were held with PSTCL on the data submitted in the ARR and 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 Tribune (English), Hindustan Times (English), Punjabi Tribune, Punjabi Jagran (Punjabi) & Dainik Jagran (Hindi) on 16.12.2021 inviting objections from the general public and stake holders on the said petition filed by PSTCL. Copies of the Petition including deficiencies pointed out by the Commission and the reply of PSTCL to the deficiencies were made available in the offices of the CAO (Finance & Audit), PSTCL 3rd Floor Shakti Sadan, Opposite Kali Mata Mandir, the Mall Patiala. Liaison Officer, PSTCL Guest House, near Yadvindra Public School, Phase-8, Mohali, Chief Engineer/P&M, PSTCL, Ludhiana and offices of Superintending Engineers, P&M Circles, Ludhiana, Patiala, Jalandhar, Amritsar and Bhatinda. The information was made available on the website of PSTCL i.e. www.pstcl.org and The Commission’s website i.e. www.pserc.gov.in. The relevant correspondence with PSTCL was also uploaded on the website of The Commission. In the said public notice dated 16.12.2021, objectors were advised to file their objections with the Secretary of the Commission within 30 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. In view of the sudden surge in COVID-19 cases in the State of Punjab the Commission decided to postpone the public hearing and revised schedule for holding the public hearing was given. The public hearings were held at Ludhiana, Amritsar, Bhatinda & Chandigarh, as per details here under:

Venue	Proposed Date & time of public hearing	Category of consumers to be heard
LUDHIANA Multi Purpose Hall, Power Colony, PSPCL, Opp. PAU Ferozepur Road, Ludhiana	**February 08, 2022 (Tuesday)** 11:30 AM onwards	All consumers/organizations of the area
AMRITSAR VIP Guest House, PSPCL, Batala Road, Verka at Amritsar	**February 10, 2022 (Thursday)** 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	**February 15, 2022 (Tuesday)** 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.	**February 17, 2022 (Thursday)** 11.30 AM onwards	All consumers/ organizations
	3.00 PM onwards	Officers'/ Staff Associations of PSPCL and PSTCL

A public notice to this effect was uploaded on the website of the Commission as well as published in various newspapers on 08.01.2022. The period for submitting the objections/suggestions was extended upto 31.01.2022 and public notice in this regard was published in various newspapers. 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 08.02.2022 to 17.02.2022 at Ludhiana, Amritsar, Bathinda & Chandigarh. The views of PSTCL on the objections/comments received from public and other stakeholders were heard by the Commission on 28.02.2022.

1.5 The Government of Punjab was approached by the Commission vide DO letter No. 316-317 dated 09.02.2022, and D.O No. 384 dated 21.02.2022 seeking its views on Petition no. 67 of 2021 filed by Punjab State Transmission Corporation Limited. No comments have been received from Government of Punjab.

1.6 The Commission received 5 written objections including the comments of Government of Punjab. PSTCL was directed to send its response to the objections raised by the respective objectors. The Commission considered all these objections. The number of objections/comments received from consumer groups, organizations and others are detailed below:

Sr. No.	Category	No. of Objections
1.	PSEB Engineer's Association/ Electric Power Transmission Association.	1
2.	Industries	4
3.	**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 22.02.2022 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-4** of this Tariff Order.

Chapter 2
True up for FY 2020-21

2.1 Background

The Commission had approved the Annual Revenue Requirement (ARR) of PSTCL for FY 2020-21 in its Order dated 01.06.2020 which was based on expenditure and revenue estimates of PSTCL for its Transmission and SLDC Businesses. Subsequently, the Commission, in the Tariff Order dated 28.05.2021 of FY 2021-22, reviewed the estimates and revised the ARR for FY 2020-21 based on the revised data made available by PSTCL.

This Chapter contains the true-up of FY 2020-21, based on the prudence check conducted by the Commission of the data submitted by PSTCL in Petition No. 67 of 2021.

2.2 Transmission System Availability

PSTCL has submitted its month-wise Transmission System (TS) Availability for FY 2020-21 as under:

Table 1 : Transmission System (TS) Availability of PSTCL for FY 2020-21

Sr. No.	Month	TS Availability (%)
1.	April-20	99.8843%
2.	May-20	99.4672%
3.	June-20	99.8743%
4.	July-20	99.8284%
5.	August-20	99.9342%
6.	September-20	99.9568%
7.	October-20	99.9546%
8.	November-20	99.7799%
9.	December-20	99.7814%
10.	January-21	99.9212%
11.	February-21	99.8569%
12.	March-21	99.7396%
	Average Availability	**99.8324%**

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

2.3 Transmission Loss

2.3.1 In the Business Plan Order including the Capital Investment Plan dated 03.12.2019, the Commission has approved the Transmission loss trajectory of reduction of 0.02% every year for 2nd MYT Control Period. The Commission further stated that the Transmission losses for the 2nd Control Period shall be reviewed on the basis the actual losses for FY 2019-20.

2.3.2 The Commission, in the MYT Order for 2nd Control Period dated 01.06.2020, had provisionally approved the transmission loss of 2.48% for FY 2021-22 as per the approved losses of 2.50% for FY 2019-20.

2.3.3 Further, during the APR of FY 2020-21 in Tariff Order of FY 2021-22, the Commission observed that PSTCL has changed the methodology of calculating the percentage transmission losses. The Commission further observed that the actual Transmission loss reported by PSTCL till December of FY 2020-21 was 2.47%. Since the losses in lean months (Jan-March) were observed to be comparatively higher, the Commission had decided to provisionally retain the transmission loss level at 2.48% for FY 2020-21 as approved in the Tariff Order dated 01.06.2020 of FY 2020-21.

PSTCL's Submission:

2.3.4 PSTCL has requested the Commission to approve the actual transmission loss of 2.50% for FY 2020-21. The details of energy input and energy output wheeled through the transmission system of PSTCL during FY 2020-21 are as under:

Table 2: Actual Transmission Loss submitted by PSTCL

Sr. No.	Particulars	FY 2020-21
1	Energy Input (MU)	53200.01
2	Energy Output (MU)	51870.78
3	Transmission Loss (MU)	1329.22
4	Transmission Loss (%)	2.50%

2.3.5 PSTCL has considered the input energy by adding the netting of energy at Interstate-PSTCL & Generation-PSTCL boundaries and import energy between PSTCL-PSPCL boundary points for calculation of Transmission Losses instead of taking the gross input energy to PSTCL and submitted the Transmission Losses as under:

Table 3: Transmission losses as submitted by PSTCL for FY 2020-21

Sr. No.	Month	Total import at PSTCL Substations	Total export at PSTCL Substations	Transmission Losses	
		MWh	MWh	MWh	%
1	April,2020	2060528.426	2013439.980	47088.446	2.29
2	May,2020	3645819.449	3557271.919	88547.530	2.43
3	June,2020	6154286.923	6007971.788	146315.135	2.38
4	July,2020	6832506.897	6663203.593	169303.304	2.48
5	August,2020	6909645.885	6740066.682	169579.203	2.45
6	September,2020	6730555.815	6557362.794	173193.021	2.57
7	October,2020	4269557.081	4165479.421	104077.660	2.44
8	November,2020	2805741.910	2733357.997	72383.913	2.58
9	December,2020	3459071.414	3372117.821	86953.593	2.51
10	January,2021	3455874.185	3362398.248	93475.937	2.70
11	February,2021	3241284.667	3151254.517	90030.150	2.78
12	March,2021	3635133.585	3546856.774	88276.811	2.43
	Total Losses for FY 2020-21	**53200006.237**	**51870781.534**	**1329224.703**	**2.50**

Commission's Analysis:

2.3.6 The Commission observed that the Actual Transmission loss submitted by PSTCL is 2.50% (1329.22 MkWh) whereas the Commission has approved the Transmission loss of 2.48% for FY 2020-21.

2.3.7 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 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 overachievement / under-achievement of the Transmission Loss trajectory specified by the Commission, shall be capped to the Return on Equity earned by the Transmission Licensee for the respective year.”

2.3.8 Accordingly, the Commission has calculated the loss to be borne by PSTCL as under:

Table 4: Loss to be borne by PSTCL on account of under-achievement of Transmission Loss

Sr. No.	Particulars	Formulae	
1	Actual Transmission Loss (in MU)	A	1329.22
2	Target Transmission Loss (in MU)	B = 2.48% x 53200*	1319.36
3	Transmission Loss Disallowed (in MU)	C= A-B	9.86
4	Short-term power purchase rate (Rs./kWh)	D	2.82
5	Deduction on account of under-achievement of Transmission Loss (in Rs. Crore)	E= C*D/10	2.78

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

2.3.9 Thus, the Commission disallows an amount of Rs. 2.78 Crore as loss sharing by PSTCL on account of under-achievement of Transmission Loss trajectory specified by the Commission. Since the amount disallowed is less than the RoE earned by PSTCL in FY 2020-21, the entire amount of Rs. 2.78 Crore is disallowed.

2.3.10 For True-up of FY 2020-21, the Commission approves the transmission loss of 1319.36 MkWh which is 2.48%.

2.4 Capital Expenditure

2.4.1 The Commission vide Order dated 03.12.2019 for 2nd Capital Investment Plan (CIP) in Petition No. 19 of 2019 had approved the Capital Investment Plan of Rs. 638.00 Crore including IDC and IEDC for FY 2020-21. The Commission had approved the following list of works for PSTCL in the Capital Investment Plan dated 03.12.2019:

1) Capital Investment for Schemes approved in 1st Control Period
2) Capital Investment for Schemes approved by Board in FY 2020-21 outside 1st Control Period
3) Capital Investment for Schemes already planned for FY 2020-23
4) Capital Investment for New Schemes planned for FY 2020-23
5) Capital Investment for P&M Works for 2nd Control Period
6) Capital Investment for SLDC for 2nd Control Period

2.4.2 In the Tariff Order for FY 2020-21 dated 01.06.2020, the Commission capped the Capital Expenditure (inclusive of IEDC and IDC) of PSTCL to Rs. 400.00 Crore during FY 2021-22. Considering the situations due to Covid-19, the Commission vide Tariff Order dated 28.05.2021 for FY 2021-22 provisionally approved the Capital Expenditure (inclusive of IEDC and IDC) of Rs. 200.00 Crore for FY 2020-21. PSTCL was given the liberty to prioritize the approved schemes within the approved limit. The details of the Capital Expenditure approved vide Tariff Order dated 28.05.2021 are as under:

Table 5: Details of the Capital Expenditure approved vide Tariff Order dated 28.05.2021

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1	**Transmission**	**187.39**
a	Spill over Schemes	123.00
b	New Schemes	64.39
2	**SLDC**	**12.61**
a	Spill over Schemes	1.10
b	New Schemes	11.52
3	**PSTCL**	**200.00**

PSTCL's Submission:

2.4.3 PSTCL has submitted that they have incurred capital expenditure amounting to Rs. 218.76 Crore for Transmission Business and SLDC Business during FY 2020-21.

2.4.4 PSTCL has further submitted that they have incurred capital expenditure of Rs. 4.00 Crore which have been directly transferred to GFA and do not form part of CWIP account. The detail break-up of these assets is as under:

Table 6: Detailed break-up of assets directly transferred to GFA during FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1	Buildings	0.73
2	Plant and Machinery	1.85
3	Vehicles	0.70
4	Furniture and fixture	0.63
5	Office Equipment	0.09
6	**Total Assets directly transferred to GFA**	**4.00**

2.4.5 The details of Capital Expenditure as submitted by PSTCL for FY 2020-21 is as under:

Table 7: Details of Capital Expenditure submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capital Expenditure on Spillover schemes during FY 2020-21			
1a	Contributory works	89.80	0.00	89.80
1b	Works under PSDF Scheme	6.48	0.00	6.48
1c	Others	100.40	0.95	101.35
1	**Total Capital Expenditure on Spillover schemes**	196.68	0.95	197.63
2	**Total Capital Expenditure on New schemes**	21.13	0.00	21.13
3	**Total Capital Expenditure during FY 2020-21 as per Accounts (1+2)**	**217.81**	**0.95**	**218.76**
4	Add: Assets directly purchased and transferred to GFA	3.96	0.04	4.00
5	**Total Capital Expenditure (3+4)**	**221.78**	**0.99**	**222.77**

Commission's Analysis:

2.4.6 The Commission observes that Capital Investment for FY 2020-21 approved vide Capital Investment Plan (CIP) Order dated 03.12.2019, 2nd MYT Order, revised in the APR and capital expenditure submitted by PSTCL for true up of FY 2020-21 is as under:

Table 8: Capital Expenditure for FY 2020-21

(Rs. Crore)

Sr. No.	Description	Approved in 2nd CIP Order	Revised Capital Expenditure in Tariff Order for FY 2020-21	Revised Capital Expenditure in APR in Tariff Order for FY 2021-22	Capital Expenditure Submitted by PSTCL for true-up
1.	Transmission Business	612.78	374.78	187.39	221.78
2.	SLDC Business	25.22	25.22	12.61	0.99
3.	**PSTCL**	**638.00**	**400.00**	**200.00**	**222.77**

2.4.7 As per the details of Assets directly purchased and transferred to GFA, the Commission has observed that the total assets directly purchased for FY 2020-21 amounts to Rs. 4.00 Crore which includes an asset of Rs. 0.04 Crore which was transferred to SLDC Business.

2.4.8 The Commission observed that the Petitioner had submitted "Any Other" Works of Rs. 49.61 Crore as part of capital expenditure for Transmission Business of FY 2020-21. In response to Commission's query regarding the details of "Any Other" Works, the Petitioner submitted that PSTCL has inadvertently included contributory works, work already approved in 2nd MYT Control Period, etc in "Any Other" Works. Further, PSTCL vide reply dated 12.02.2022 submitted the revised format T-15 providing the details of revised capital expenditure. In replies to queries asked by the Commission during the meeting with PSERC conducted on 11.02.2022 and 28.02.2022, PSTCL, vide email dated 14.02.2021 and 02.03.2022, has submitted the actual Capital Expenditure incurred in FY 2020-21 as under:

Table 9: Revised Capital expenditure as submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capital Expenditure on Spillover schemes during FY 2020-21			
1a	Contributory works	89.80	0.00	89.80
1b	Works under PSDF Scheme	6.48	0.00	6.48
1c	Others	99.48	0.95	100.43
1	**Total Capital Expenditure on Spillover schemes**	195.75	0.95	196.71
2	**Total Capital Expenditure on New**	22.06	0.00	22.06

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	schemes*			
3	**Total Capital Expenditure during FY 2020-21 (1+2)**	**217.81**	**0.95**	**218.76**
4	Add: Assets directly purchased and transferred to GFA	3.96	0.04	4.00
5	**Total Capital Expenditure (3+4)**	**221.77**	**0.99**	**222.76**

**includes the adjustment of Rs. 0.66 Crore*

2.4.9 The Commission observes that PSTCL has claimed capital expenditure of Rs. 0.66 Crore towards HR, IT, S&D and miscellaneous works for FY 2020-21. Since, these expenditures are not part of the approved capital investment plan, the Commission disallows the same.

2.4.10 PSTCL vide reply dated 04.02.2022 has further submitted that "Any Other" works includes R&M works of Rs. 0.79 Crore which are not capital works. The Commission has disallowed the same. Accordingly, the Capital Expenditure as approved by the Commission for FY 2020-21 is as under:

Table 10: Capital expenditure as provisionally approved by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capital Expenditure on Spillover schemes during FY 2020-21			
1a	Contributory works	89.80	0.00	89.80
1b	Works under PSDF Scheme	6.48	0.00	6.48
1c	Others	98.69	0.95	99.64
1	**Total Capital Expenditure on Spillover schemes**	**194.97**	**0.95**	**195.92**
2	**Total Capital Expenditure on New schemes***	**22.06**	**0.00**	**22.06**
3	**Total Capital Expenditure during FY 2020-21 (**1+2)	**217.03**	**0.95**	**217.98**
4	Add: Assets directly purchased and transferred to GFA	3.96	0.04	4.00
5	**Total Capital Expenditure (3+4)**	**220.99**	**0.99**	**221.98**

**includes the adjustment of Rs. 0.66 Crore*

2.4.11 The Commission has observed that the total Capital Expenditure for FY 2020-21 is Rs. 121.70 Crore (excluding Capital Expenditure due to Contributory Works and

Works under PSDF Scheme) against the approved Capital Expenditure of Rs. 200 Crore in Tariff Order for FY 2021-22 dated 28.05.2021.

2.4.12 Thus, the Capital Expenditure provisionally approved by the Commission is Rs. 220.99 Crore for Transmission Business and Rs. 0.99 Crore for SLDC Business i.e. Rs. 221.98 Crore for PSTCL for FY 2020-21. The Capital Expenditure shall be trued-up as per actuals at the end of the Control Period.

2.5 Capitalization and Capital Works in Progress

PSTCL's Submission:

2.5.1 PSTCL has submitted that the Capital Expenditure on account of directly purchased assets was amounting to Rs. 25.86 Crore, Rs. 2.55 Crore and Rs. 13.45 Crore for FY 2017-18, 2018-19 and FY 2019-20, respectively. PSTCL has further submitted that the Commission has considered the amount of Rs. 25.86 Crore as Capital Expenditure for FY 2017-18. However, while calculating the Capital Works in Progress (CWIP) as on 31.03.2018, the Commission has not deducted the same on account of Capitalization (Table 14 of the Tariff Order for FY 2021-22 dated 28.05.2021). Although the Commission has allowed the directly purchased assets of Rs. 2.55 Crore and Rs. 13.45 Crore for FY 2018-19 and FY 2019-20 respectively, however the Commission has not considered the same while calculating closing CWIP for the respective years (Table 14 of Tariff Order dated 28.05.2021). Hence, there is difference in the closing balance of CWIP as on 31.03.2020. Accordingly, PSTCL has considered the opening balance of Rs. 282.70 Crore as per Financial Accounts as on 01.04.2020.

2.5.2 The details of Capitalization as submitted by PSTCL for FY 2020-21 is as under:

Table 11: Details of Capitalization submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capitalization on Spillover schemes during FY 2020-21			
1a	Contributory works	0.98	0.00	0.98
1b	Works under PSDF Scheme	6.04	0.00	6.04
1c	Others	176.23	4.82	181.05
1	**Total Capitalization on Spillover schemes**	183.25	4.82	188.07
2	**Total Capitalization on New schemes**	10.44	0.00	10.44
3	**Total Capitalization during FY 2020-21 as per Accounts (1+2)**	**193.69**	**4.82**	**198.51**
4	Add: Assets directly purchased and transferred to	3.96	0.04	4.00

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	GFA			
5	**Total Capitalization (3+4)**	**197.65**	**4.86**	**202.51**

2.5.3 PSTCL has submitted that Opening Capital Work in Progress for FY 2020-21 as per audited accounts is Rs. 282.70 Crore. PSTCL had incurred capital expenditure of Rs. 222.77 Crore during FY 2020-21. An amount of Rs. 202.51 Crore has been capitalized and transferred to Fixed Assets during FY 2020-21. The remaining capital expenditure was carried over as Capital Work in Progress to the next year.

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

Table 12: Capital Works in Progress submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital Work in Progress	277.36	5.34	282.70
2	Add: Addition of Capital Expenditure during the year	221.78	0.99	222.77
3	Less: Transferred to GFA during the Year	197.65	4.86	202.51
4	Closing Capital Work in Progress	301.48	1.46	302.95

Commission's Analysis:

2.5.4 The Commission has observed that the Commission has not deducted Rs. 25.86 Crore during the year while calculating CWIP for FY 2017-18. The Commission has already considered Rs. 2.55 Crore and Rs.13.45 Crore for FY 2018-19 and FY 2019-20 while calculating CWIP for the respective years.

2.5.5 Accordingly, for Transmission and SLDC Business, the Opening CWIP for True Up of FY 2020-21 is considered as under:

Table 13: Opening CWIP of FY 2020-21 as determined by the Commission

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Closing CWIP of FY 2019-20 as approved in Tariff Order for FY 2021-22	305.16	5.31	310.47
2	Add: Asset directly transferred to GFA during FY 2017-18	25.86	-	25.86
3	**Opening CWIP of FY 2020-21**	**331.02**	**5.31**	**336.33**

2.5.6 The Commission notes that the Capital expenditure for Transmission Business for FY 2020-21 is Rs. 217.03 Crore (excluding capital expenditure of Rs. 3.96 Crore of assets directly capitalized).

2.5.7 Similarly, for SLDC Business, the Closing CWIP for True Up of FY 2019-20 of Rs 5.31 Crore as approved in of Tariff Order dated 28.05.2021 is considered as the Opening CWIP for FY 2020-21. The Commission notes that the Capital expenditure for FY 2020-21 is Rs. 0.95 Crore (excluding capital expenditure of Rs. 0.04 Crore of assets directly capitalized).

2.5.8 The Capitalization as per audited accounts of PSTCL is Rs. 198.51 Crore for FY 2020-21 excluding assets directly capitalized. PSTCL has directly capitalized the assets of Rs. 4.00 Crore. Therefore, Capitalization of Rs. 202.51 (198.51 + 4.00) Crore has been considered for PSTCL. For SLDC Business, PSTCL has submitted addition of GFA during the year as Rs. 4.86 Crore. After verifying the Trial Balance of SLDC submitted by PSTCL, the Commission has considered the addition of GFA during the year as Rs. 4.82 Crore for SLDC Business (excluding capital expenditure of Rs. 0.02 Crore of assets directly capitalized). Therefore, Capitalization of Rs. 4.86 (4.82 + 0.04) Crore has been considered for SLDC Business. Accordingly, the net transfer to GFA during FY 2020-21 is as under:

Table 14: Transfer to GFA considered by the Commission for CWIP of FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Transferred to GFA during the Year as per audited accounts (excluding assets directly transferred to GFA)	193.69	4.82	198.51
2	Add: Capitalization of Assets directly transferred to GFA	3.96	0.04	4.00
3	**Net Transferred to GFA during the Year**	**197.65**	**4.86**	**202.51**

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

Table 15: Capital Works in Progress approved by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital Work in Progress	331.02	5.31	336.33
2	Add: Capital Expenditure during the year	220.99	0.99	221.98
3	Less: Transferred to GFA during the Year	197.65	4.86	202.51
4	Closing Capital Work in Progress	354.36	1.44	355.80

2.6 Funding of Capital Expenditure

PSTCL's Submission:

2.6.1 PSTCL has submitted the funding requirement for Capital Investment (Considering Capital Expenditure of Spill over Schemes and Capitalization of New Schemes as directed by the Commission vide order dated 01.06.2020) during FY 2020-21 for Transmission Business as Rs. 211.09 Crore (Rs. 196.68 Crore for Capital Expenditure of Spill over schemes, Rs. 10.44 Crore for Capitalization of New Schemes and Rs. 3.96 Crore for Directly Capitalized Asset). Funding requirement for Capital Investment for SLDC Business is Rs. 0.99 Crore (Rs. 0.95 Crore for Spill over schemes and Rs. 0.04 Crore for Directly Capitalised Assets). Thus, the total funding for Capital Investment for PSTCL as a whole is Rs. 212.08 Crore during FY 2020-21.

2.6.2 PSTCL has considered the Capital Investment of Rs. 115.80 Crore for the purpose of funding from Loan and Equity which includes Rs. 114.81 Crore for Transmission Business and Rs. 0.99 Crore in SLDC Business. During FY 2020-21, PSTCL has booked a profit of Rs. 20.66 Crore and the same has been considered to be reinvested into the Transmission Business as Equity and the balance Rs. 95.14 Crore is funded through Loans.

2.6.3 The Capital Investment claimed by PSTCL for funding through Loans and Equity for Transmission Business and SLDC Business for FY 2020-21 is as under:

Table 16: Funding Requirement for Capital Investment for FY 2020-21 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
A	**Transmission**	
1	Capital Expenditure of Spill over Schemes	196.68
2	Capitalization of New Schemes	10.44
3	Directly Capitalised	3.96
4	Total funding for Capital Expenditure	211.09
5	Less: Funding through Grant and Contribution	96.28
a	**Funding through Equity**	**20.66**
b	**Funding through Loan**	**94.14**
B	**SLDC**	
1	Capital Expenditure of Spill over Schemes	0.95
2	Capitalization of New Schemes	-
3	Directly Capitalised	0.04
4	Total funding for Capital Expenditure	0.99
5	**Funding through Loan**	**0.99**

Commission's Analysis:

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

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

2.6.5 The Commission has considered the funding of Assets directed transferred to GFA as per capitalization.

2.6.6 Accordingly, the Funding requirement is as under:

Table 17: Funding Requirement for Capital Investment for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Capital Expenditure of Spill over Schemes	194.96	0.95	195.92
2	Less: Funding through Grant and Contribution	96.28	-	96.28
3	**Total Funding Required for Capital Expenditure (1-2)**	**98.69**	**0.95**	**99.64**
4	Funding required for Capitalization of New Schemes	10.44	-	10.44
5	Assets Directly Capitalised	3.96	0.04	4.00
6	**Total Funding Required for Capitalization (4+5)**	**14.40**	**0.04**	**14.44**
7	**Total funding required (6+3)**	**113.09**	**0.99**	**114.08**

2.6.7 Since PSTCL has booked a profit of Rs. 20.66 Crore in FY 2020-21, the Commission has considered the addition of equity of Rs. 20.66 Crore for Transmission Business of PSTCL.

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

" 19. DEBT EQUITY RATIO

….

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

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

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

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

(d) The premium, if any raised by the Applicant while issuing share capital and investment of internal accruals created out of free reserve, shall also be reckoned as paid up capital for the purpose of computing return on equity subject to the normative debt-equity ratio of 70:30,

provided such premium amount and internal accruals are actually utilized for meeting capital expenditure of the Applicant's business."

2.6.9 Accordingly, for new schemes, since the funding required is for Capitalization of Rs. 14.44 Crore, Rs. 4.32 Crore (30% of 14.44) is funded through equity and the rest i.e. Rs. 10.08 Crore is funded through loan. The remaining equity of Rs. 16.34

Crore is considered for funding of Spillover schemes of Transmission Business of FY 2020-21. The details of funding through loan and equity allowed by the Commission for FY 2020-21 are as under:

Table 18: Funding for Capital Investment allowed by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars		Transmission	SLDC	PSTCL
1	Spillover Schemes	Funding through Loan	82.35	0.95	83.30
2		Funding through Equity	16.34	0	16.34
3		**Total funding required (1+2)**	**98.69**	**0.95**	**99.64**
4	New Schemes	Funding through Loan	10.08	0.04	10.12
5		Funding through Equity	4.32	0.00	4.32
6		**Total funding required (4+5)**	**14.40**	**0.04**	**14.44**
7	Total	Funding through Loan	92.43	0.99	93.42
8		Funding through Equity	20.66	0.00	20.66
9		**Total funding required (7+8)**	**113.09**	**0.99**	**114.08**

2.7 Operation and Maintenance Expenses

A. Employee Expenses

2.7.1 In the ARR Petition for FY 2020-21, PSTCL had projected employee expenses of Rs. 538.51 Crore for its Transmission Business and Rs. 7.32 Crore for its SLDC Business for FY 2020-21. The Commission had approved employee cost of Rs. 510.04 Crore for Transmission Business and Rs. 6.73 Crore for SLDC Business to PSTCL for FY 2020-21.

2.7.2 In the ARR Petition for FY 2021-22, PSTCL had projected employee expenses of Rs. 525.40 Crore for its Transmission Business and Rs. 7.16 Crore for its SLDC Business for FY 2020-21. The Commission had approved employee cost of Rs. 519.01 Crore for Transmission Business and Rs. 7.71 Crore for SLDC Business to PSTCL for FY 2020-21.

PSTCL's Submission:

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

2.7.4 PSTCL has considered the actual expenses of Rs. 190.44 Crore approved by the Commission as Other Employee Cost for Transmission Business and the normative expenses of Rs. 7.00 Crore approved by the Commission for SLDC Business for FY 2019-20 since the normative employee cost of SLDC was lower than the actual employee cost of Rs. 7.48 Crore.

2.7.5 PSTCL has submitted that with effect from September 2019, Communication Wing, which was earlier a part of Transmission Business, was transferred to SLDC Business. The employee cost of this Wing was coming out to be Rs. 1.58 Crore for FY 2019-20. Since the employee cost of Communication Wing was not covered in the base normative SLDC expenses, this has led to disallowance of actual cost of inter-units transfers such as the Communication Wing. Therefore, PSTCL in its Review Petition on Tariff Order dated 28.05.2021 has requested the Commission to allow Rs. 1.58 Crore as an additional employee cost of SLDC over and above the normative employee cost approved.

2.7.6 PSTCL has further submitted that the Communication Wing was again transferred back to Transmission Business on 16.03.2021. Accordingly, the base employee expenses of Rs. 190.44 Crore of FY 2019-20 for Transmission Business have been revised to Rs. 192.02 Crore (adding the cost of employees of the Communication Wing of Rs. 1.58 Crore) and has been considered as a base for FY 2020-21. Accordingly, the base employee expenses for FY 2020-21 have been revised from Rs. 7.48 Crore to Rs. 5.90 Crore for SLDC Business.

2.7.7 PSTCL has thereafter applied the weighted average escalation of CPI and WPI indices escalation of 3.16% for FY 2020-21. The calculation for INDEX as submitted by PSTCL is as under:

Table 19: Calculation of Index of FY 2020-21

Sr. No.	Particulars	FY 2019-20	FY 2020-21	Increase (%)
1	CPI	322.50	338.69	5.02%
2	WPI	121.80	123.38	1.29%

INDEX n/INDEX n-1 = (0.5*5.02) + (0.5*1.29) = 3.16%

2.7.8 Further, the Petitioner has considered the Terminal Liabilities on the basis of actuals. PSTCL has also claimed Rs. 2.57 Crore on account of Terminal Benefits relating to FY 2020-21 intimated by PSPCL as 11.36% share of PSTCL in Terminal Benefits after finalization of accounts. The amount stands paid to PSPCL.

2.7.9 The following table shows the actual amount of Terminal Benefits as submitted by PSTCL for FY 2020-21.

Table 20: Terminal Benefits submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Share of Pension Gratuity and Medical	296.58	-	296.58
2	Share of Leave Encashment	19.85	-	19.85
3	NPS, CPF, PF, LWF	5.88	0.35	6.23
4	Miscellaneous - P.F inspection fees, solatium, Memento etc.	0.29	0.01	0.30
5	Prior Period Adjustment related to Terminal Benefits	2.57	-	2.57
6	**Total Terminal Liabilities**	**325.17**	**0.36**	**325.53**

2.7.10 PSTCL has computed the Normative Employee Costs for FY 2020-21 as shown in the following table:

Table 21: Normative Employee Costs for FY 2020-21 as submitted by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Other Employee Cost for FY 2019-20	192.02	5.90	197.92
2	Escalation Factor (CPI: WPI: 50:50)	3.16%	3.16%	
3	Net Other Employee Cost for FY 2020-21	198.08	6.09	204.17
4	Terminal Benefits	325.17	0.36	325.53
5	**Normative Employee Cost**	**523.25**	**6.45**	**529.70**

Commission's Analysis:

A. 1) Terminal Benefits

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

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

…

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

2.7.12 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. 296.58 Crore is allowed.

2.7.13 In addition to the above, an amount of Rs. 19.85 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. 6.23 Crore of terminal benefits towards NPS, CPF, PL and LWF are also allowed for FY 2020-21.

2.7.14 PSTCL has not claimed 'Provision for Gratuity & leave encashment for employees recruited by PSTCL amounting to Rs. 5.90 Crore as per Annual Audited Accounts. The Commission shall allow this expenditure on "Pay as you go" basis when it is actually paid out.

2.7.15 The Terminal benefits allowed by the Commission are as under:

Table 22: Terminal Benefits approved by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Share of Pension Gratuity and Medical	296.58	-	296.58
2	Share of Leave Encashment	19.85	-	19.85
3	NPS, CPF, PF, LWF	5.88	0.35	6.23
4	Miscellaneous - P.F inspection fees, solatium, Memento etc.	0.29	0.01	0.30
5	Prior Period Adjustment related to Terminal Benefits	2.57	-	2.57
6	**Total Terminal Liabilities**	**325.17**	**0.36**	**325.53**

Therefore, the Commission allows terminal benefits of Rs. 325.17 Crore for Transmission Business and Rs. 0.36 Crore for SLDC Business for FY 2020-21 i.e. a total of Rs. 325.53 Crore for PSTCL.

A. 2) Other Employee Cost

2.7.16 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 formula shown below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1-Xn)

Where,

- *R&Mn –Repair and Maintenance Costs of the Applicant for the nth year;*
- *EMPn –Employee Cost of the Applicant for the nth year;*
- *A&Gn –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) EMPn = EMPn+ A&Gn= (EMPn-1 + A&Gn-1)*(INDEX n/INDEX n-1)

INDEXn - 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:-

*INDEXn = 0.50*CPIn + 0.50*WPIn*

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

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

2.7.17 The Commission vide order dated 28.05.2021 had considered the actual employee cost of Rs. 190.44 Crore for Transmission Business and Rs. 7.48 Crore for SLDC Business i.e. a total of Rs. 197.92 Crore for PSTCL. Further, the Commission vide order dated 10.12.2021 in Review Petition No. 3 of 2021 has accepted that the employee expenses of Communication Wing of Rs.1.58 Crore is to be considered in Transmission Business for FY 2019-20 and not in SLDC Business and had allowed the employee cost of Rs. 0.48 Crore. Accordingly, the Commission has now considered the actual Other employee cost of Rs. 189.34 Crore (Rs.190.44 Crore + Rs. 0.48 Crore - Rs. 1.58 Crore) for Transmission Business and Rs. 8.58 Crore (Rs.7.48 Crore - Rs. 0.48 Crore + Rs. 1.58 Crore) for SLDC Business of FY 2019-20.

2.7.18 Further, the Commission has calculated the ***INDEX*** as under:

Table 23: Calculation of INDEX

Sr. No.	Particulars	FY 2019-20	FY 2020-21	Increase (%)
1	CPI	322.50	338.69	5.02
2	WPI	121.80	123.38	1.29

INDEX n/INDEX n-1 = (0.5*5.02) +(0.5*1.29) = **3.16%**

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

Table 24: Normative Other Employee Cost calculations

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Other Employee Cost for FY 2019-20	189.34	8.58	197.92
2.	Escalation Factor *(CPI:WPI::50:50)*	3.16%	3.16%	3.16%
3.	**Other Employee Cost for FY 2020-21**	**195.32**	**8.85**	**204.17**

2.7.20 **Accordingly, the Commission approves "Other employee cost" of Rs. 195.32 Crore for Transmission Business and Rs. 8.85 Crore for SLDC Business i.e. R. 204.17 Crore for PSTCL for FY 2020-21.**

2.7.21 The total employee cost of PSTCL approved by the Commission is as under:

Table 25: Employee Cost allowed by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Other Employee Cost	195.32	8.85	204.17
2	Terminal Benefits	325.17	0.36	325.53
3	**Total Employee Cost**	**520.49**	**9.21**	**529.70**

2.7.22 **Accordingly, the Commission allows Employee Cost of Rs. 520.49 (195.32 + 325.17) Crore for Transmission Business and Rs. 9.21 (8.85 + 0.36) Crore for SLDC Business for FY 2020-21 i.e. Employee Cost of Rs. 529.70 Crore for PSTCL.**

B. A&G Expenses

2.7.23 In the ARR Petition for FY 2020-21, PSTCL had projected A&G expenses of Rs. 27.97 Crore for its Transmission Business and Rs. 0.80 Crore for its SLDC Business for FY 2020-21. The Commission had approved A&G expenses of Rs. 27.37 Crore for Transmission Business and Rs. 1.02 Crore for SLDC Business to PSTCL for FY 2020-21.

2.7.24 In the ARR Petition for FY 2021-22, PSTCL had projected A&G expenses of Rs. 26.68 Crore for its Transmission Business and Rs. 0.80 Crore for its SLDC Business for FY 2020-21. The Commission had approved A&G expenses of Rs.

26.32 Crore for Transmission Business and Rs. 0.80 Crore for SLDC Business to PSTCL for FY 2020-21.

PSTCL's Submission:

2.7.25 PSTCL has submitted that the Commission in its Tariff Order dated 28.05.2021, approved A&G Expenses of Rs. 27.12 Crore for FY 2020-21. PSTCL in its Petition for True-up of FY 2019-20 had claimed Rs. 0.81 Crore of Lease charges in interest charges. However, the Commission in its Tariff Order dated 28.05.2021 specified that as per Regulations these are a part of A&G expenses. Accordingly, the Commission had approved Rs 0.81 Crore of Lease charges as part of A&G Expenses for FY 2019-20. Further, PSTCL observed that the Commission has inadvertently not considered Rs. 0.81 Crore in A&G expenses for FY 2019-20 in computation of A&G expenses of APR for FY 2020-21. Therefore, PSTCL has considered A&G Expense of FY 2019-20 including Interest on Lease liabilities of Rs. 0.81 Crore for calculating the Normative A&G expenses for FY 2020-21.

2.7.26 PSTCL has applied the weighted average escalation of CPI and WPI indices of 3.16% and claimed the Normative A&G Expenses for FY 2020-21 as follows:

Table 26: Normative A&G Expenses as claimed by PSTCL for FY 2020-21

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	A&G Expenses – Baseline (FY 2019-20)	25.78	0.78	26.56
2	Escalation Factor	3.16%	3.16%	
3	**A&G Expenses**	**26.59**	**0.80**	**27.39**
4	Add: License and Tariff Determination Fee	0.41	-	0.41
5	Add: Audit Fee	0.06	-	0.06
6	**Total**	**27.06**	**0.80**	**27.86**

Commission's Analysis:

2.7.27 The A&G expenses are to be determined as per Regulation 26.1 of PSERC MYT Regulations, 2019. The relevant sections are as given in para 2.7.16.

2.7.28 The Commission vide order dated 10.12.2021 in Review Petition No. 3 of 2021 has approved as under:

"Commission's Analysis
The Commission while determining the baseline values of A&G expenses for FY 2020-21 to 2022-23 had inadvertently not considered interest on lease assets of Rs. 0.81 Crore incurred during FY 2019-20 in the base value of A&G expenses for 2nd Control Period i.e. FY 2020-21 to FY 2022-23. The Commission allows Rs. 0.81 Crore as interest on lease assets in the baseline values of A&G expenses for FY 2020-21. The norms for A&G expenses will be revised in the subsequent tariff order and its impact along with carrying cost will also be considered."

2.7.29 Accordingly, the Commission has considered the baseline value for A&G expenses as Rs. 25.78 Crore (Rs. 24.97 Crore of actual A&G expenses in FY 2019-20 and Rs. 0.81 Crore of interest on lease assets).

2.7.30 Further, the Commission has calculated the INDEX as 3.16% as given in para 2.7.18.

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

Table 27: Calculation for Normative A&G expenses for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	A&G expenses for FY 2019-20	25.78	0.78	26.56
2.	Escalation Factor *(CPI:WPI::50:50)*	3.16%	3.16%	3.16%
3.	**Normative A&G expenses for FY 2020-21**	**26.60**	**0.80**	**27.40**

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

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

2.7.33 Accordingly, the Commission approves the A&G expenses for the FY 2020-21 as under:

Table 28: Normative A&G expenses as approved by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Normative A&G expenses for FY 2020-21	26.60	0.80	27.40
2.	Add: Audit fee	0.06	-	0.06
3.	Add: License fee	0.41	-	0.41
8.	**Total A&G Expenses**	**27.07**	**0.80**	**27.87**

2.7.34 Thus, the Commission approves A&G expenses as Rs. 27.07 Crore for Transmission Business and Rs. 0.80 Crore for SLDC Business i.e. Rs. 27.87 Crore for PSTCL for FY 2020-21.

C. Repair & Maintenance (R&M) Expenses

2.7.35 In the ARR Petition for FY 2020-21, PSTCL projected R&M Expenses of Rs. 36.45 Crore for its Transmission Business and Rs. 0.53 Crore for its SLDC Business for FY 2020-21. The Commission approved Rs. 38.33 Crore and Rs. 0.56 Crore as

R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

2.7.36 In the ARR Petition for FY 2021-22, PSTCL projected R&M Expenses of Rs. 34.97 Crore for its Transmission Business and Rs. 0.64 Crore for its SLDC Business for FY 2020-21. The Commission approved Rs. 31.11 Crore and Rs. 0.63 Crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

PSTCL's Submission:

2.7.37 PSTCL has computed the K-factor by dividing actual R&M Expense as baseline value of R&M Expense with average GFA of FY 2020-21 for Transmission Business and SLDC Business for computing the normative R&M Expenses of FY 2020-21. The details of K-factor calculation as submitted by PSTCL are as follows:

Table 29: Computation of K-factor for FY 2020-21 as submitted by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC
1	Opening GFA	10104.44	23.77
2	Additions to GFA	197.65	4.86
3	Retirements to GFA	14.49	0.00
4	Closing GFA	10287.61	28.63
5	Average GFA	10196.02	26.20
6	Actual and baseline value of R&M Expense of FY 2020-21	31.50	0.37
7	**K- factor**	**0.309%**	**1.420%**

2.7.38 PSTCL has further submitted that it has considered the impact of assets worth Rs. 0.98 Crore funded through Contributory Works and Rs. 6.04 Crore of assets funded through Government Grant under PSDF Scheme. PSTCL has added the same in Fixed Assets of FY 2020-21 for the purpose of computing normative R&M expenses.

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

Table 30: Normative R&M Expenses for FY 2020-21 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Average GFA	10196.02	26.20	10222.22
2	Escalation Factor (*Increase in WPI Index)*	1.29%	1.29%	1.29%
3	K-factor	0.309%	1.420%	0.312%
4	**R&M Expenses**	**31.91**	**0.38**	**32.28**

Commission's Analysis:

2.7.40 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&Mn = (R&Mn + EMPn + A&Gn) x (1-Xn)

Where,

- *R&Mn –Repair and Maintenance Costs of the Applicant for the nth year;*
- *EMPn –Employee Cost of the Applicant for the nth year;*
- *A&Gn –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&Mn= K*GFA*WPIn/WPIn-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.*
- ***WPIn** means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year."*

2.7.41 The value of "K" is recalculated based on the GFA of FY 2019-20 as approved in order dated 10.12.2021 in Review Petition No. 3 of 2021 and considered as 0.303% for Transmission business & 2.323% for SLDC business as under:

Table 31: K factor determined by the Commission for FY 2020-21

			(Rs. Crore)
Sr. No.	**Particulars**	**Transmission**	**SLDC**
1.	Opening GFA of FY 2019-20 for the purpose of R&M expenses	9777.77	18.36
2.	Net Addition during FY 2019-20	325.61	6.33
3.	Closing GFA of FY 2019-20 for the purpose of R&M expenses	10103.34	24.69
4.	Average GFA for the purpose of R&M expenses	9940.56	21.53
5.	Actual R&M expenses	30.14	0.50
6.	K factor (5/4)	0.303%	2.323%

2.7.42 The Commission agrees that R&M expenses for the assets funded through Contributory Works and assets funded through Government Grant under PSDF Scheme shall be borne by PSTCL since these assets are operated and maintained by the Petitioner.

2.7.43 The Opening GFA for Transmission Business for the purpose of calculating R&M expenses is considered as Rs 10104.44 Crore as per the reconciliation submitted by PSTCL vide email dated 21.12.2021.

2.7.44 The addition of GFA during the year is considered based on the addition of GFA as mentioned in Table 14.

2.7.45 The increase in WPI Index is considered as 1.29% as per Table 23.

2.7.46 Accordingly, the R&M expenses for FY 2020-21 are determined by the Commission as under:

Table 32: R&M expenses determined by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	**Particulars**	**Transmission**	**SLDC**	**PSTCL**
1.	Opening GFA for the purpose of R&M expenses	10104.44	23.77	10128.21
2.	Addition during the year	197.65	4.86	202.51
3.	(-) Net transfer from Asset not in use	14.49	-	14.49
4.	Closing GFA for the purpose of R&M expenses	10287.60	28.63	10316.23
5.	Average GFA for the purpose of R&M expenses	10196.02	26.20	10222.22
6.	K factor	0.303%	2.323%	
7.	Escalation Factor (*Increase in WPI Index)*	1.29%	1.29%	
8.	**R&M Expenses**	**31.31**	**0.62**	**31.93**

2.7.47 Thus, the Commission approves Rs. 31.93 Crore (Rs. 31.31 Crore for Transmission Business + Rs. 0.62 Crore for SLDC Business) of R&M expense for FY 2020-21.

2.7.48 The O&M expenses as approved by the Commission for FY 2020-21 are as under:

Table 33: O&M Expenses for FY 2020-21 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Total Employee Cost	520.49	9.21	529.70
2	Total A&G Expenses	27.07	0.80	27.87
3	Total R&M Expenses	31.31	0.62	31.93
4	**Total O&M Expenses**	**578.87**	**10.63**	**589.50**

2.8 Depreciation Charges

2.8.1 In the ARR Petition of FY 2020-21, PSTCL had claimed depreciation charges of Rs. 308.28 Crore for Transmission Business and Rs. 0.56 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 300 Crore for Spillover Schemes and Rs. 0.29 Crore for New Schemes of Transmission Business and Rs.0.56 Crore for Spillover scheme of SLDC Business for FY 2020-21. No depreciation was approved for new schemes of SLDC Business as there was no addition of GFA during the year.

2.8.2 In the ARR Petition of FY 2021-22, PSTCL had claimed revised estimates of depreciation charges of Rs. 299.57 Crore for Transmission Business and Rs. 1.80 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 296.77 Crore for Spillover Schemes and Rs. 0.15 Crore for New Schemes of Transmission Business and Rs.1.65 Crore for Spillover scheme of SLDC Business for FY 2020-21. No depreciation was approved for new schemes of SLDC Business as there was no addition of GFA during the year.

PSTCL's Submission:

2.8.3 PSTCL has been charging depreciation in audited accounts of FY 2020-21 in line with the methodology specified in Regulation 21 of the PSERC MYT Regulations, 2019, as amended from time to time. PSTCL has not considered depreciation on the amount of Rs. 7.02 Crore on asset capitalized during FY 2020-21, as these assets were funded through Contributory Work and works under PSDF scheme. PSTCL has also excluded impairment loss reflected in Audited Accounts of FY 2020-21.

2.8.4 PSTCL has revised opening GFA for FY 2020-21 after excluding GFA due to Contributory Works and PSDF grants in FY 2017-18, FY 2018-19 and FY 2019-20 as under:

Table 34: Revised Opening GFA for FY 2020-21 as considered by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (net of land and land rights including Intangible Assets) (According to Audited Accounts)	7,164.84	19.02	7,183.86
2	Less: GFA due to Contributory Works and PSDF grants (90%) in FY 2017-18	45.55	-	45.55
3	Less: GFA due to Contributory Works and PSDF grants (90%) in FY 2018-19	23.64	-	23.64
4	Less: GFA due to Contributory Works and PSDF grants (90%) in FY 2019-20	6.54	-	6.54
5	Revised Opening GFA (net of land and land rights including Intangible Assets) (excluding Contributory and PSDF Grant Assets (90%))	7,089.11	19.02	7,108.13

2.8.5 PSTCL has claimed Depreciation for Spill over Schemes for FY 2020-21 considering addition to GFA of Rs. 188.07 Crore, retirement of GFA Rs. 14.49 Crore and lessened the GFA towards Contributory Works and PSDF Grants which translates closing and average GFA to Rs. 7,274.69 Crore and 7,191.41 Crore, respectively.

2.8.6 PSTCL has further claimed that the GFA for New Works has increased by Rs. 14.45 Crore and there has been no asset created out of Contributory and PSDF Funds on New Works in FY 2020-21. Thus, the closing GFA and average GFA on New Works has been claimed as Rs. 14.45 Crore and Rs. 7.22 Crore, respectively. Thus, PSTCL has considered Rs. 299.64 Crore and Rs. 1.26 Crore as Depreciation for Spill over Works and New Works, respectively. The total Depreciation of PSTCL has been computed as shown below:

Table 35: Depreciation for Total Assets for FY 2020-21 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Revised Opening GFA (net of land and land rights) (excluding Contributory and PSDF Grant Assets)	7,089.11	19.02	7,108.13
2	Addition of GFA	197.65	4.86	202.52
3	Retirement of GFA	14.49	-	14.49
4	Less: GFA due to Contributory Works and PSDF grants	7.02	-	7.02
5	Closing GFA	7,265.25	23.88	7,289.13
6	**Depreciation**	**299.94**	**1.26**	**301.21**
7	Depreciation as percentage of Opening and Closing GFA	4.18%	5.88%	4.18%

Table 36: Depreciation for Spillover Assets for FY 2020-21 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Revised Opening GFA (net of land and land rights) (excluding Contributory and PSDF Grant Assets)	7,089.11	19.02	7,108.13
2	Addition of GFA	183.25	4.82	188.07
3	Retirement of GFA	14.49	-	14.49
4	Less: GFA due to Contributory Works and PSDF grants	7.02	-	7.02
5	Closing GFA	7,250.85	23.84	7,274.69
6	**Depreciation**	**299.64**	**1.26**	**300.90**
7	Depreciation as percentage of Opening and Closing GFA	4.18%	5.88%	4.18%

Table 37: Depreciation for New Assets for FY 2020-21 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Revised Opening GFA (net of land and land rights) (excluding Contributory and PSDF Grant Assets)	-	-	-
2	Addition of GFA	14.40	0.04	14.45
3	Retirement of GFA	-	-	-
4	Less: GFA due to Contributory Works and PSDF grants	-	-	-
5	Closing GFA	14.40	0.04	14.45
6	**Depreciation**	**0.30**	**0.001**	**0.30**
7	Depreciation as percentage of Opening and Closing GFA	4.18%	5.88%	4.18%

2.8.7 Thus, PSTCL has requested the Commission to approve the Depreciation of Rs. 299.94 Crore for Transmission Business and Rs. 1.26 Crore for SLDC, based on the Audited Accounts of FY 2020-21.

Commission's Analysis:

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

"21.1. The value base for the purpose of depreciation shall be the capital cost of the assets admitted by the Commission:
Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:
Provided that the land, other than the land held under lease and land for reservoir in case of hydro generating station, shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets:
Provided further that Government. grants and consumer contribution shall also be recognized as defined under Indian Accounting Standard 20 (IND AS 20) notified by the Ministry of Corporate Affairs.
21.2. The residual/salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of historical capital cost of the asset:
Provided that I.T. Equipment and Software shall be depreciated 100% with zero salvage value.
21.3. The Cost of the asset shall include additional capitalization.
21.4. The Generating Company, Transmission and Distribution Licensee shall provide the list of assets added during each Year of the Control Period and the list

of assets completing 90% of depreciation in the Year along with Petition for Annual Performance Review, true-up and tariff determination for ensuing Year.

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

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

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

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

2.8.9 The Commission determines the depreciation for FY 2020-21 as per the Regulation 21 stated above. The Opening GFA for the Spillover schemes is considered as per the reconciliation of GFA submitted by the Petitioner vide email dated 21.12.2021 and the same is net of land and land rights and consumer contribution and grants.

2.8.10 The Commission has considered the addition of GFA as approved by the Commission and has not considered the addition of assets funded through Contributory Work and works under PSDF scheme as given in Table 11.

2.8.11 The Commission has considered the Fixed Asset Register submitted by PSTCL and further determined weighted average rate of depreciation based on Fixed Asset Register of FY 2020-21 as under:

Table 38: Computation of weighted average rate of depreciation for FY 2020-21 as considered by the Commission

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC
1	Opening GFA (net of land and land rights and consumer contribution and grant)	7089.11	19.02
2	Add: Additions during the year ((net of land and land rights and consumer contribution and grant))	190.63	4.86
3	Less: Net transfer from Asset not in use	(14.49)	-
4	Closing GFA (net of land and land rights)	7265.25	23.88
5	Average Gross Fixed Assets	7177.18	21.45
6	Depreciation	299.94	1.26
7	**Average rate of depreciation**	**4.18%**	**5.88%**

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

Table 39: Depreciation approved by the Commission for FY 2020-21 for Transmission Business

(Rs. Crore)

Particulars		**FY 2020-21**
(I)	**Spillover Schemes**	
1.	Opening GFA (excluding land and land rights)	7089.11
2.	Add: Additions to GFA during the year	183.25
3.	Less: Retirement of GFA	14.49
4.	Less: GFA due to Contributory Works and PSDF grants	7.02
5.	Closing GFA	7250.85
6.	Average GFA	7169.98
7.	**Depreciation @4.18% of average GFA**	**299.63**
(II)	**New Schemes**	
6.	Opening GFA (excluding land and land rights)	0.00
7.	Add: Additions to GFA during the year	14.40
8.	Closing GFA	14.40
9.	Average GFA	7.20
10.	**Depreciation @4.18% of average GFA**	**0.30**
11.	**Total Depreciation**	**299.93**

Table 40: Depreciation approved by the Commission for FY 2020-21 for SLDC Business

(Rs. Crore)

Particulars		**FY 2020-21**
(I)	**Spillover Schemes**	
1.	Opening GFA (excluding land and land rights)	19.02
2.	Add: Additions to GFA during the year	4.82
3.	Closing GFA	23.84
4.	Average GFA	21.43
5.	**Depreciation @5.88% of average GFA**	**1.26**
(II)	**New Schemes**	
6.	Opening GFA (excluding land and land rights)	-
7.	Add: Additions to GFA during the year	-
8.	Closing GFA	-
9.	Average GFA	-
10.	**Depreciation @5.88% of average GFA**	**-**
11.	**Total Depreciation**	**1.26**

Table 41:Depreciation approved by the Commission for FY 2020-21 for PSTCL

(Rs. Crore)

Particulars		FY 2020-21
(I)	**Transmission**	
1.	Opening GFA (excluding land and land rights)	7089.11
2.	Add: Additions to GFA during the year	197.65
3.	Less: Retirement of GFA	14.49
4.	Less: GFA due to Contributory Works and PSDF grants	7.02
5.	Closing GFA	7265.25
6.	Average GFA	7177.18
7.	**Depreciation @4.18% of average GFA**	**299.93**
(II)	**SLDC**	
1.	Opening GFA (excluding land and land rights)	19.02
2.	Add: Additions to GFA during the year	4.86
3.	Closing GFA	23.88
4.	Average GFA	21.45
5.	**Depreciation @5.88% of average GFA**	**1.26**
6.	**Total Depreciation**	**301.19**

2.8.13 The Commission approves depreciation of Rs. 299.93 Crore for Transmission Business and Rs. 1.26 Crore for SLDC Business for FY 2020-21.

2.9 Interest and Finance Charges

2.9.1 In the ARR Petition of FY 2020-21, PSTCL had claimed Interest and Finance charges of Rs. 363.01 Crore (net of capitalization of Rs. 33.89 Crore of interest charges) for its Transmission Business and Rs.1.69 Crore for SLDC Business for FY 2020-21. The Commission approved interest charges of Rs. 332.58 Crore for Transmission Business (including Spillover and new schemes) and Rs. 1.53 Crore for SLDC Business for FY 2020-21.

2.9.2 In the ARR Petition of FY 2021-22, PSTCL had claimed revised estimates of Interest and Finance charges of Rs. 329.33 Crore (net of capitalization of Rs. 34.32 Crore of interest charges) for its Transmission Business and Rs. 1.27 Crore for SLDC Business for FY 2020-21. The Commission approved interest charges of Rs. 320.04 Crore for Transmission Business (including Spillover and new schemes) and Rs. 1.23 Crore for SLDC Business for FY 2020-21.

PSTCL's Submission:

2.9.3 PSTCL has submitted that the Commission has been disallowing loans with respect to approved Capital Expenditure since True-up of FY 2014-15. PSTCL has submitted that the opening loan as on 1.4.2020 stands at Rs. 3,488.64 Crore as approved in APR of

FY 2020-21 for Transmission Business and at Rs. 12.28 Crore for SLDC Business.

2.9.4 PSTCL, in view of the pending appeal before the APTEL, has claimed Opening balance of Loans for FY 2020-21 in line with the Closing balance of loans approved by the Commission in True-up of FY 2019-20. However, for the purpose of True-up for FY 2020-21, PSTCL has increased the opening balance by Rs. 22.78 Crore as claimed in its Review Petition No. 3 of 2021, without prejudice to the outcome of appeals filed before the APTEL.

2.9.5 Further, the source-wise actual long-term loans outstanding, and interest charges borne by Transmission Business and SLDC Business for FY 2020-21 are shown as under:

Table 42: Actual Loan and Interest of Transmission Business for FY 2020-21

(Rs. Crore)

Sr. No.	Name of Source	Opening Balance as on April 1, 2020	Loan Received	Loan Repaid	Closing Balance as on March 31, 2021	Interest Charges
1	REC	2531.33	31.07	258.58	2,303.82	250.65
2	State Bank of India	165.13	-	21.66	143.47	13.18
3	NABARD	187.93	-	14.11	173.82	18.07
4	PSPCL	7.59	-	1.90	5.69	-
5	PFC-2	495.57	-		495.57	49.15
6	Total	3387.55	31.07	296.25	3,122.37	331.05
	Weighted Average Interest Rate					**10.17%**

Table 43: Actual Loan and Interest of SLDC Business for FY 2020-21

(Rs. Crore)

Sr. No.	Name of Source	Opening Balance as on April 1, 2020	Loan Received	Loan Repaid	Closing Balance as on March 31, 2021	Interest Charges
1	REC	7.27	0.00	0.69	6.58	0.73
	Weighted Average Interest Rate					**10.54%**

2.9.6 Further, PSTCL has considered addition of loans of Rs. 95.14 Crore. The whole Rs. 95.14 Crore addition is on account of Spill over Schemes. PSTCL has considered capitalisation of interest charges of Rs. 12.06 Crore, only for the Spill over capital expenditure up to FY 2020-21, instead of 12.73 Crore.

2.9.7 In addition to the loans for Transmission Business, PSTCL has considered GPF liability outstanding during FY 2020-21. The interest amount considered on GPF is the actual interest paid during the year.

2.9.8 Accordingly, the computation of Normative Interest and Finance Charges for FY 2020-21 as claimed by PSTCL is as under:

Table 44: Interest on Loan for all Schemes of PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3511.43	12.28	73.18	3596.89
2	Addition of loan during year	94.14	0.99	-	95.14
3	Repayment of loan during year	270.98	1.26	29.27	301.21
4	Closing loan balance for year	3334.90	12.01	43.91	3390.82
5	Average Loan Balance for year	3423.16	12.15	58.55	3493.85
6	Interest Charges	348.16	1.25	4.36	353.78
7	Less: Interest charges capitalised	12.06	0.00	0.00	12.06
8	Add: Guarantee Fee	3.30	0.00	0.00	3.30
9	Add: Miscellaneous Interest and Finance Charges	0.03	0.01	0.00	0.04
10	**Interest and Finance Charges**	**339.43**	**1.26**	**4.36**	**345.06**

2.9.9 Thus, the Petitioner has prayed to the Commission to approve the Interest Charges of Rs. 343.80 Crore for Transmission Business including interest amount considered on GPF and Rs. 1.27 Crore for SLDC for True-up of FY 2020-21.

Commission's Analysis:

A. Interest and Finance Charges for Transmission

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

> *"24.1. For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the Licensee.*
>
> *24.2. Interest and finance charges on the future loan capital for new investments shall be computed on the loans, based on one (1) year State Bank of India (SBI) MCLR/ any replacement there of as notified by RBI as may be applicable as on 1st April of the relevant year, plus a margin determined on the basis of current actual rate of interest of the capital expenditure loan taken by the Generating Company, Licensee or SLDC and prevailing SBIMCLR.*
>
> *24.3. The repayment for each year of the tariff period shall be deemed to be equal to the depreciation allowed for the corresponding year. In case of*

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

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

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

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered."

2.9.11 The Commission vide order dated 10.12.2021 in Review Petition No. 3 of 2021 has approved as under:

"…

After considering the revised submission of PSTCL, the Commission re-determines opening balance of loans for Transmission Business as Rs. 3739.97 Crore (by adding Rs.22.78 Crore earlier reduced from the opening balance of long-term loans in true up of FY 2017-18) on 01.04.2017 instead of Rs. 3717.19 Crore. The Commission in Para 4 of this order has already allowed addition of Rs.0.04 Crore in Gross Fixed Assets (GFA) during FY 2019-20. However, the impact of Rs. 22.78 Crore along with carrying cost will be considered in the subsequent Tariff Order."

2.9.12 Accordingly, the Commission has considered the opening balance of loans for Spillover schemes of Transmission Business for FY 2020-21 as Rs. 3739.93 Crore while the opening of loan for new schemes is considered as zero.

2.9.13 The Commission has considered the approved addition of loan as explained in Table 18.

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

2.9.15 The Commission has considered the following as long-term loans as submitted by PSTCL vide reply dated 12.02.2022 for determination of interest rate for Transmission business and calculated the rate of interest on loan capital as per Regulation 24.1 as under:

Table 45: Loans for Transmission Business for FY 2020-21

(Rs. Crore)

Sr. No.	Name of Source	Opening Balance as on April 1, 2020	Loan Repaid	Loan Received	Closing Balance as on March 31, 2021	Interest Charges
1	REC	2531.33	258.58	31.07	2303.82	250.65
2	PFC (new)	0.00	0.00	10.24	10.24	0.84
3	SBI	165.13	21.66	0.00	143.47	13.18
4	NABARD	187.93	14.11	0.00	173.82	18.07
5	PFC-2	495.57	0.00	0.00	495.57	49.15
6	PSPCL	7.59	1.90	0.00	5.69	0.00
7	**Total loan for Transmission Business**	3387.55	296.25	41.31	3132.61	331.89
Weighted Average Interest Rate (Transmission)						**10.18%**

2.9.16 Accordingly, the Commission has calculated the interest on loan for Transmission Business for FY 2020-21 as under:

Table 46: Interest on loan for Spill over schemes of Transmission Business as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1.	Opening balance of loan	3511.42
2.	Add: Receipt of loan during the year	82.35
3.	Less: Repayment of loan during the year	299.63
4.	Closing balance of loan	3294.14
5.	Average Loan	3402.78
6.	**Interest Charges @ 10.18%**	**346.42**

Table 47: Interest on loan for New schemes of Transmission Business as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1.	Opening balance of loan	0.00
2.	Add: Receipt of loan during the year	10.08
3.	Less: Repayment of loan during the year	0.30
4.	Closing balance of loan	9.78
5.	Average Loan	4.89
6.	**Interest Charges @ 10.18%**	**0.50**

Interest on GP Fund

2.9.17 PSTCL has claimed an interest on GP fund of Rs. 4.36 Crore during FY 2020-21.

2.9.18 **The Commission approves interest of Rs. 4.36 Crore on GP Fund as per the**

Audited Accounts, being statutory payment, submitted by PSTCL for FY 2020-21.

Capitalization of Interest Charges

2.9.19 In the True up Petition for FY 2020-21, PSTCL has considered capitalisation of interest charges of Rs. 12.06 Crore, only for the Spill over capital expenditure up to FY 2020-21, instead of Rs. 12.73 Crore as given in the Audited Accounts.

2.9.20 **The Commission, as per past practice, approves capitalization of interest of Rs. 12.06 Crore for FY 2020-21 for capital expenditure due to spillover schemes**.

Finance Charges and Guarantee Charges

2.9.21 PSTCL has claimed Miscellaneous Interest and Finance charges of Rs. 0.03 Crore and Guarantee charges of Rs. 3.30 Crore for Transmission Business based on Audited Annual Accounts for FY 2020-21.

2.9.22 The Commission approves the Finance charges of Rs. 0.03 Crore and Guarantee charges of Rs. 3.30 Crore for Transmission Business as per Regulation 24.4 of PSERC MYT Regulations 2019.

2.9.23 The Commission approves interest and finance charges for Transmission Business of PSTCL for FY 2020-21 as under:

Table 48: Interest & Finance Charges for Transmission Business for FY 2020-21 as approved by the Commission

Sr. No.	Particulars	Allowed by the Commission
1.	Interest on Loans due to Spillover schemes	346.42
2.	Interest on Loans due to New schemes	0.50
3.	Interest on GP Fund	4.36
4.	Finance Charges	0.03
5.	Guarantee Charges	3.30
6.	**Gross Interest on Long Term Loans (1+2+3+4+5)**	**354.61**
7.	Less: Capitalization	12.06
8.	**Net Interest and finance Charges on Long Term Loans (6-7)**	**342.55**

2.9.24 **Thus, the Commission approves Net Interest and Finance Charges of Rs. 342.55 Crore for Transmission Business for FY 2020-21.**

B. Interest and Finance charges for SLDC Business

2.9.25 The Commission has considered the closing balance of loans for SLDC Business of Rs. 12.28 Crore for FY 2019-20 as the opening balance of loans for Spillover schemes of SLDC Business for FY 2020-21, while the opening of loan for new schemes is considered as zero.

2.9.26 The Commission has considered the approved addition of loan as explained in Table 18.

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

2.9.28 PSTCL vide reply dated 12.2.2022 has revised the submission of actual loans for SLDC Business and PSTCL's claim for Interest on Loan for FY 2020-21.

2.9.29 The Commission has considered the following as long-term loans as submitted by PSTCL vide reply dated 12.02.2022 for determination of interest rate for SLDC business and calculated the rate of interest on loan capital as per Regulation 24.1 as under:

Table 49: Loans for SLDC Business for FY 2020-21

(Rs. Crore)

Sr. No.	Name of Source	Opening Balance as on April 1, 2020	Loan Repaid	Loan Received	Closing Balance as on March 31, 2021	Interest Charges
1	REC (SLDC)	7.34	0.69	0	6.65	0.73
Weighted Average Interest Rate (SLDC)						**10.44%**

2.9.30 The Commission has calculated the interest on loan for SLDC Business for FY 2020-21 as under:

Table 50: Interest on loan for Spill over schemes of SLDC Business

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1.	Opening balance of loan	12.28
2.	Add: Receipt of loan during the year	0.95
3.	Less: Repayment of loan during the year	1.26
4.	Closing balance of loan	11.97
5.	Average Loan	12.13
6.	**Interest Charges @ 10.44%**	**1.27**

Table 51: Interest on loan for New schemes of SLDC Business

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1.	Opening balance of loan	0.00
2.	Add: Receipt of loan during the year	0.04
3.	Less: Repayment of loan during the year	0.00
4.	Closing balance of loan	0.04
5.	Average Loan	0.02
6.	**Interest Charges @ 10.44%**	**0.002**

Miscellaneous Interest and Finance Charges and Guarantee Charges

2.9.31 PSTCL has claimed Finance Charges of Rs. 0.01 for SLDC Business based on Audited Annual Accounts for FY 2020-21.

2.9.32 As per Regulation 24.4 of PSERC MYT Regulations 2019, the Commission approves the Finance Charges of Rs. 0.01 Crore for SLDC Business as given in the trial balance of SLDC.

2.9.33 The Commission approves interest and finance charges for SLDC Business of PSTCL for FY 2020-21 as under:

Table 52: Interest & Finance Charges for SLDC Business for FY 2020-21 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Allowed by the Commission
1.	Interest on Loans due to Spillover schemes	1.27
2.	Interest on Loans due to New schemes	0.002
3.	Finance Charges	0.01
4.	**Gross Interest on Long Term Loans (1+2+3)**	**1.28**

2.9.34 **Thus, the Commission approves Net Interest and Finance Charges of Rs. 1.28 Crore for SLDC Business for FY 2020-21.**

2.9.35 **Total Interest on loan approved by the Commission for PSTCL for FY 2020-21 is as under:**

Table 53: Interest on loan approved by the Commission for PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Interest on loan	342.55	1.28	343.83

2.10 Interest on Working Capital for Transmission Business

2.10.1 In the ARR Petition for FY 2020-21, PSTCL had claimed interest on working capital for Transmission Business of Rs. 41.67 Crore for FY 2020-21, on a total working capital of Rs. 387.29 Crore against which the Commission approved interest on working Capital of Rs.35.44 Crore for FY 2021-22 on total working capital of Rs. 355.91 Crore.

2.10.2 In the ARR Petition for FY 2021-22, PSTCL had claimed revised estimated of interest on working capital of Rs. 36.39 Crore on the total working capital of Rs. 357.28 Crore for Transmission Business against which the Commission approved interest on working Capital of Rs. 35.66 Crore for FY 2021-22 on total working capital of Rs. 353.25 Crore.

PSTCL's Submission:

2.10.3 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 Transmission 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 2020-21 is as under:

Table 54: Interest on Working Capital for Transmission as submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months of fixed cost	225.87
2.	Maintenance spares @ 15% of O&M expenses	87.33
3.	Operation and Maintenance expenses for one month	48.52
4.	**Total Working Capital (Normative)**	**361.72**
5.	Rate of Interest applied	9.69%
6.	**Interest on Working Capital**	**35.03**

Commission's Analysis:

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

"51.1. Components of Working Capital

The Working Capital shall cover the following:

(a) O&M Expenses for 1month;

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

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

51.2. Rate of Interest

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

2.10.5 The Commission has considered the following short-term loans as submitted by PSTCL vide reply dated 12.02.2022 for determination of interest rate for Transmission business and calculated the rate of interest on loan capital as per Regulation 24.1 as under:

Table 55: Rate of interest for Working Capital Loans for Transmission Business for FY 2020-21 as determined by the Commission

(Rs. Crore)

Sr. No.	Name of Source	Opening Balance as on April 1, 2020	Loan Repaid	Loan Received	Closing Balance as on March 31, 2021	Interest Charges
1	SBI - 1	128.26	16.82	0.00	111.44	10.24
2	SBI - 2 CC Limit	77.70	42.91	0.00	34.79	5.34
3	SBI -3	0.00	5.56	20.00	14.44	1.22
4	SBI -4	0.00	0.00	47.17	47.17	1.88
5	SBI	0.00	0.00	52.83	52.83	2.10
6	BOI	228.09	120.43	0.00	107.66	20.42
7	PFC	485.71	64.29	0.00	421.42	45.83
8	IOB	65.00	65.00	0.00	0.00	4.93
9	REC	185.71	185.71	0.00	0.00	24.62
10	UCO-1	29.15	29.15	0.00	0.00	1.08
11	UCO-2	0.00	0.00	165.00	165.00	0.50
12	IREDA	0.00	0.00	300.00	300.00	0.24
13	**Total working capital loan for Transmission Business**	**1199.62**	**529.87**	**585.00**	**1254.74**	**118.40**
Weighted Average Interest Rate (Transmission)						**9.65%**

2.10.6 Accordingly, the Commission considers the interest at the weighted average rate of approved loans which works out to 9.65% for Transmission Business and approves the Interest on Working Capital as under:

Table 56: Interest on Working Capital for Transmission Business of PSTCL for FY 2020-21 approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months i.e. 2 x (ARR/12)	223.09
2.	Maintenance spares @ 15% of Operation and Maintenance expenses	86.83
3.	Operation and Maintenance expenses for one month as approved by the Commission	48.24
4.	Working Capital requirement	358.16
5.	**Interest on Working Capital (@9.65% for FY 2020-21)**	**34.56**

2.10.7 The Commission approves working capital requirements of Rs. 358.16 Crore and interest thereon of Rs. 34.56 Crore for Transmission Business of PSTCL for FY 2020-21.

2.11 Interest on Working Capital for SLDC Business

2.11.1 In the ARR Petition for FY 2020-21, PSTCL had claimed interest on working capital of Rs. 0.59 Crore on the total working capital of Rs. 5.51 Crore for SLDC Business. The Commission approved the interest on working capital of Rs. 0.49 Crore on total working capital of Rs. 4.76 Crore for FY 2020-21.

2.11.2 In the ARR Petition for FY 2021-22, PSTCL had claimed interest on working capital of Rs. 0.56 Crore on the total working capital of Rs. 5.50 Crore for SLDC Business. The Commission approved the interest on working capital of Rs. 0.59 Crore on total working capital Rs. 5.73 Crore for FY 2020-21.

PSTCL's Submission:

2.11.3 As per Regulation 25.1 of the PSERC MYT Regulations, 2019, the Petitioner has considered the actual weighted average rate of interest for Working Capital loans for SLDC Business, as the actual interest rate is lower than the one-year MCLR rate of State Bank of India plus 350 basis points, as on 1st April of the year. The computation of Interest on Working Capital as submitted by PSTCL for FY 2020-21 is as under:

Table 57: Interest on Working Capital for SLDC as submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months of fixed cost	3.30
2.	Maintenance spares @ 15% of O&M expenses	1.14
3.	Operation and Maintenance expenses for one month	0.64
4.	**Total Working Capital (Normative)**	**5.08**
5.	Rate of Interest applied	9.69%
6.	**Interest on Working Capital**	**0.49**

Commission's Analysis:

2.11.4 As PSPCL has submitted that there are no short-term loans for SLDC Business, the Commission considers the interest at the weighted average rate of Transmission Business at 9.65% for SLDC Business and approves the Interest on Working Capital as under:

Table 58: Interest on Working Capital for SLDC Business of PSTCL for FY 2020-21 approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Receivables equivalent to two months i.e. 2 x (ARR/12)	3.90
2.	Maintenance spares @ 15% of Operation and Maintenance expenses	1.59
3.	Operation and Maintenance expenses for one month as approved by the Commission	0.89
4.	Working Capital requirement	6.38
5.	**Interest on Working Capital (@9.65% for FY 2020-21)**	**0.62**

2.11.5 **The Commission approves working capital requirements of Rs. 6.38 Crore and interest thereon of Rs. 0.62 Crore for SLDC Business of PSTCL for FY 2020-21.**

2.11.6 The Total Interest on Working Capital approved by the Commission for PSTCL for FY 2020-21 is as under:

Table 59: Interest on Working Capital approved by the Commission for PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Interest on Working Capital	34.56	0.62	35.18

2.11.7 **The Commission approves total Interest on Working Capital as Rs. 35.18 Crore for PSTCL for FY 2020-21.**

2.12 Return on Equity

2.12.1 In the ARR Petition for FY 2020-21, PSTCL had claimed Return on equity of Rs. 154.40 Crore on opening equity of Rs. 887.35 Crore and on addition of Rs. 218.85 Crore during FY 2020-21. The Commission had approved Return on equity of Rs. 108.93 Crore on opening equity of Rs. 702.80 Crore and no addition during the year.

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

PSTCL's Submission:

2.12.3 In the True up Petition for FY 2020-21, PSTCL has considered the opening balance of Equity of FY 2020-21 equal to the closing balance of Equity of FY 2019-20 as approved in Truing-up of FY 2019-20.

2.12.4 PSTCL has reinvested its profit of Rs. 20.66 Crore into the Transmission Business. PSTCL submits that it has considered the funding of Capital Expenditure through equity of Rs. 20.66 Crore in Transmission Business. PSTCL has further submitted that the approach adopted by PSTCL for consideration of opening equity and addition of equity in FY 2020-21 is without prejudice to the appeal pending before the APTEL.

2.12.5 For the purpose of calculating Return on Equity for FY 2020-21 on normative basis, PSTCL has considered the ROE at the rate of 15.50% in accordance with the PSERC MYT Regulations, 2019, as under:

Table 60: Return on Equity for FY 2020-21 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Amount
1.	Opening Balance of Equity	705.71
2.	Addition of equity during the year	20.66
3.	Closing Balance of Equity	726.38
4.	Rate of Return (%)	15.50%
5.	**Return on Equity**	**110.99**

2.12.6 Therefore, PSTCL has prayed to the Commission to approve the RoE of Rs. 110.99 Crore for FY 2020-21.

Commission's Analysis:

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

*"**20. Return on equity***

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

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

Provided further that 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."

2.12.8 The Commission has considered the opening of equity for FY 2020-21 from the closing of equity approved in the True-Up of FY 2019-20.

2.12.9 As explained in para 2.6.7, since PSTCL has booked profit of Rs. 20.66 Crore, the Commission has considered addition of equity of Rs. 20.66 Crore.

2.12.10 In response to Commission's query regarding the allocation of addition of equity of Rs. 20.66 Crore between Transmission Business and SLDC Business, the Petitioner responded that the same shall be done when SLDC Business is segregated from Transmission Business. Currently, the Petitioner has considered the total addition of equity for Transmission Business.

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

Table 61: Return on Equity for FY 2020-21 for Transmission as allowed by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21
1.	Opening Equity	705.70
2.	Addition of equity during the year	20.66
3.	Closing Equity	726.36
4.	Average Equity	716.03
5.	Rate of Return on Equity (%)	15.50%
6.	**Return on Equity**	**110.98**

2.12.12 Thus, the Commission approves ROE of Rs.110.98 Crore to PSTCL for FY 2020-21 as under:

Table 62: Return on Equity approved by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	**Return on Equity**	**110.98**	**-**	**110.98**

2.13 Unified Load Dispatch &Communication (ULDC) Charges

2.13.1 In the ARR Petition for FY 2020-21, PSTCL had claimed ULDC Charges of Rs. 9.67 Crore each for FY 2020-21 for its SLDC Business and the Commission approved Rs. 7.68 Crore each based on Audited Annual Accounts of FY 2018-19.

2.13.2 In the ARR Petition for FY 2021-22, PSTCL has claimed revised estimates for ULDC Charges of Rs. 9.53 Crore as per Audited Annual Accounts of FY 2019-20 for its SLDC Business and the Commission has approved the same.

2.13.3 In the True up Petition for FY 2020-21, PSTCL has claimed ULDC of Rs.9.80 Crore for FY 2020-21 as per Audited Annual Accounts for its SLDC Business and the details are as under:

Table 63: ULDC Charges submitted by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	ULDC Charges - SLDC own share	-	6.18	6.18
2.	ULDC Charges - BBMB share	-	1.36	1.36
3.	ULDC Charges - Central Sector share	-	0.00	0.00
4.	NRLDC fees and Charges	-	2.26	2.26
5.	**Total**	-	9.80	9.80

2.13.4 Accordingly, the Commission approves ULDC charges of Rs. 9.80 Crore for the SLDC Business of PSTCL for FY 2020-21.

2.14 Non-Tariff Income

2.14.1 In the ARR Petition for FY 2020-21, PSTCL had projected Rs. 17.75 Crore of Non-Tariff Income for its Transmission Business and Rs. 0.76 Crore for SLDC Business against which the Commission approved the Non-Tariff Income of Rs. 23.59 Crore for Transmission Business and Rs. 1.67 Crore for its SLDC Business based on Audited Annual Accounts of FY 2018-19.

2.14.2 In the ARR Petition for FY 2021-22, PSTCL had projected revised estimates of Rs. 39.81 Crore of Non-Tariff Income for its Transmission Business and Rs. 0.78 Crore for SLDC Business for FY 2020-21 against which the Commission approved the Non-Tariff Income of Rs. 25.94 Crore for Transmission Business and Rs. 0.58 Crore for its SLDC Business for FY 2020-21 based on Audited Annual Accounts of FY 2019-20.

PSTCL's Submission:

2.14.3 In the True-up Petition for FY 2020-21, PSTCL has claimed Rs. 26.46 Crore (Rs.25.94 Crore for Transmission Business and Rs.0.52 Crore for SLDC Business) on account of Non-Tariff Income based on Audited Annual Accounts for FY 2020-21.

2.14.4 PSTCL has submitted that it has considered the Non-Tariff income as indicated in Note 30 of the audited accounts. PSTCL has not considered the income towards certain heads wherein expenses were not allowed by the Commission in previous Tariff Orders as under:

(a) Income of Rs. 0.79 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. 0.80 Crore towards reversal of excess provision of impairment loss has not been considered, as impairment loss was not allowed in previous year.

(c) PSTCL has considered Late payment Surcharge of Rs. 2.52 Crore for Transmission Business and Rs. 0.02 Crore for SLDC Business. PSTCL also considered the adjustment of financing cost on Late Payment Surcharge of Rs. 2.22 Crore for Transmission Business and Rs. 0.02 Crore for SLDC from the DPS of FY 2020-21. Thus, Net income from Late payment Surcharge is Rs. 0.32 Crore from Transmission Business and nil for SLDC.

(d) PSTCL has not considered the amount of Rs. 0.01 Crore for SLDC Business because the cost of financing is more than the Interest earned on Fixed Deposits reflected in the Audited Accounts under Non-Tariff Income. PSTCL would like to submit that the income from 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 the cost of funds is more than the interest earned.

2.14.5 In view of the above, the Petitioner has submitted Non-Tariff Income for FY 2020-21 as shown in the following table:

Table 64: Non-Tariff Income claimed by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
1	Gain on Sale of Fixed Assets	1.26	-	1.26
2	Income/Fee/Collection against Staff Welfare Activities	0.01	-	0.01
3	Rental for staff quarters	0.28	0.05	0.32
4	NOC charges from open access customers	0.07	0.07	0.14
5	Credit balance written back:			
a	- Sundry creditors	0.06	-	0.06
b	- Other sundry credit balance	4.96	0.02	4.98
c	- Security Deposits/EMD	0.15	-	0.15
6	Rebate on early payment to NRLDC	-	0.12	0.12
7	Income from O&M of bays of PGCIL	7.51	-	7.51
8	Miscellaneous income	13.75	-	13.75
9	Delayed Payment Charges from Consumers	0.32	-	0.32
10	Penalty imposed on suppliers/contractors	5.52	0.16	5.68
11	Income from Other Business - Sale of Scrap	1.64	-	1.64
	Total	**35.52**	**0.41**	**35.93**

2.14.6 **Accordingly, the Petitioner has prayed to the Commission to approve the Non-Tariff Income of Rs. 35.52 Crore for Transmission Business and Rs. 0.41 Crore for SLDC in FY 2020-21 for True-up.**

Commission's Analysis:

2.14.7 The Commission determines the Non-Tariff Income for FY 2020-21 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."

2.14.8 In response to Commission's query regarding the mismatch of Non-Tariff Income as submitted by PSTCL and as given in the Audited Accounts, the Petitioner vide reply dated 12.02.2022 submitted the revised Non-Tariff Income as under:

Table 65: Revised Non-Tariff Income claimed by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
1	Gain on Sale of Fixed Assets	2.07	-	2.07
2	Income/Fee/Collection against Staff Welfare Activities	0.01	-	0.01
3	Rental for staff quarters	0.28	0.05	0.32
4	NOC charges from open access customers	0.07	0.07	0.14
5	Credit balance written back:			
a	- Sundry creditors	0.06	-	0.06
b	- Other sundry credit balance	4.96	0.02	4.98
c	- Security Deposits/EMD	0.15	-	0.15
6	Rebate on early payment to NRLDC	-	0.12	0.12
7	Income from O&M of bays of PGCIL	7.51	-	7.51
8	Miscellaneous income	13.75	-	13.75
9	Transmission Charges from Open Access Consumers	3.73	0.27	4.00
10	Operating Charges from Open Access Consumers	-	0.28	0.28

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
11	Delayed Payment Charges from Consumers	2.52	0.02	2.54
12	Penalty imposed on suppliers/contractors	5.52	0.16	5.68
13	Income from Other Business - Sale of Scrap	1.64	-	1.64
14	Less Financing Cost of Late Payment Surcharge (Applicable on Principal Amount of Delayed Payment)	2.20	0.02	2.22

2.14.9 The Commission determines the Non-Tariff Income in accordance with Regulation 28 of PSERC MYT Regulations, 2019 and as per the Audited Accounts as under:

Table 66: Non-Tariff Income for FY 2020-21 approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
1	Gain on Sale of Fixed Assets	1.26	-	1.26
2	Income/Fee/Collection against Staff Welfare Activities	0.01	-	0.01
3	Rental for staff quarters	0.28	0.05	0.32
4	NOC charges from open access customers	0.07	0.07	0.14
5	Credit balance written back:			
a	- Sundry creditors	0.06	-	0.06
b	- Other sundry credit balance	4.96	0.02	4.98
c	- Security Deposits/EMD	0.15	-	0.15
6	Rebate on early payment to NRLDC	-	0.12	0.12
7	Income from O&M of bays of PGCIL	7.51	-	7.51
8	Miscellaneous income	13.75	-	13.75
9	Delayed Payment Charges from Consumers	2.52	0.02	2.54
10	Penalty imposed on suppliers/contractors	5.52	0.16	5.68
11	Income from Other Business - Sale of Scrap	1.64	-	1.64
12	Less Financing Cost of Late Payment Surcharge (Applicable on Principal Amount of Delayed Payment)	2.20	0.02	2.22
13	**Total**	**35.58**	**0.35**	**35.93**

2.14.10 **Accordingly, the Commission approves Rs. 35.58 Crore for Transmission Business and Rs. 0.35 Crore for SLDC Business as Non-Tariff Income for FY 2020-21.**

2.15 Other Expenses

PSTCL's Submission:

2.15.1 PSTCL has claimed the bad and doubtful debts in line with the methodology specified in Regulation 47.1 of PSERC MYT Regulation, 2019. Accordingly, PSTCL has also claimed infructuous capital expenditure written off worth Rs. 1.64 Crore under the head other debits as reflecting in Audited Accounts of FY 2020-21. PSTCL has also considered the following in the bad and doubtful debts:

(i) PSTCL has written off Rs. 0.1970 Crore and Rs. 0.0244 Crore related to theft incidence occurred at P&M Sahnewal store on 3.10.2017, 6.7.2018 and 7.7.2018. Further, amount of Rs. 6.45 Crore has been written off related to destruction of material due to fire accident on 3.4.2017 at Grid Store, Jalandhar which was decided by the Board of Directors in meeting dated 18.01.2021. Therefore, PSTCL has claimed Rs. 6.68 Crore (Rs. 6.45 Crore + Rs. 0.1970 Crore + Rs. 0.0244 Crore) in the true up of FY 2020-21.

(ii) During FY 2020-21, PSTCL has written off Rs. 0.30 Crore outstanding balance of sundry debtors as on 16.4.2010. In view of the above methodology adopted by the Commission, PSTCL has requested the Commission to allow the above said amount during True-up of FY 2020-21.

(iii) Net Delayed Payment Surcharge of Rs. 4.27 Crore (Rs. 4.25 Crore for Transmission Business and 0.02 Crore for SLDC Business) was considered as non-tariff income in FY 2019-20, in the Tariff Order of FY 2021-22. This DPS of Rs. 4.27 Crore has been reversed and has been written off in FY 2020-21 in view of the meeting held on 16.4.2021 between PSTCL and PSPCL. PSTCL has considered the same as part of its Bad and doubtful debts.

Table 67: Other Expenses as claimed by PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
1	Written off assets due to theft	6.68	-	6.68
2	Sundry Creditors written off	0.30	-	0.30
3	Infructuous capital expenditure written off	1.64	-	1.64
4	Delayed Payment Charges income written off	4.25	0.02	4.27
5	**Total**	**12.86**	**0.02**	**12.88**

2.15.2 **PSTCL has therefore claimed Rs. 12.88 Crore as Other Expenses for True-up of FY 2020-21 which includes Rs. 12.86 Crore for Transmission Business and Rs. 0.02 Crore for SLDC Business.**

Commission's Analysis:

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

> ***"47. BAD AND DOUBTFUL DEBTS AND OTHER DEBITS***
>
> *47.1. Bad and doubtful debts shall be allowed to the extent the Distribution Licensee has identified/actually written off bad debts, subject to a maximum of 1% of annual sales revenue excluding subsidy, and according to a transparent policy approved by the Commission. In case, there is any recovery of bad debts already written off, the recovered bad debts will be treated as Other Income.*
>
> *47.2. Other debits including miscellaneous losses and write offs, sundry debts, material cost variance, losses on account of flood, cyclone, fire etc. shall be considered by the Commission."*

2.15.4 The Commission notes that the above Regulation is only applicable for the Distribution Business. However, the Commission is of the opinion that, although the provision for Bad and Doubtful debts (Regulation 47.1) is not applicable for Transmission and SLDC Businesses, the provision for other debits (Regulation 47.2) should be applicable for Transmission and SLDC Businesses.

2.15.5 The Commission observes that PSTCL has proposed to write off capital expenditure of Rs. 1.64 Crore contending that the expenditure has become infructuous as the line due to various constraints could not be constructed. It is felt that this expenditure was being claimed as capital expenditure and loan was being allowed on it. Therefore, it is felt that it would be appropriate to reduce it from CWIP before it can be written off. PSTCL may submit detailed proposal in this regard. Therefore, it is not being considered at this point.

2.15.6 Accordingly, the Commission approves other debits Rs. 11.24 Crore as under:

Table 68: Other Expenses as allowed by the Commission for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
1	Written off assets due to theft	6.68	-	6.68
2	Sundry Creditors written off	0.30	-	0.30
3	Delayed Payment Charges income written off	4.25	0.02	4.27
4	**Total**	**11.22**	**0.02**	**11.24**

2.16 Income from Open Access Customers

2.16.1 PSTCL has claimed a receipt of Transmission charges of Rs. 4.00 Crore and SLDC charges of Rs. 0.28 Crore from Open Access Consumers based on the Audited Accounts of FY 2020-21. The amount of revenue from open access consumers is over and above the transmission charges approved by the Commission. Accordingly, PSTCL has claimed adjustment of Revenue from Open Access Consumers for True-up of FY 2020-21.

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

Table 69: Income from Open Access Customers for FY 2020-21

(Rs Crore)

Sr. No.	Particulars	Amount
1.	Transmission Charges from Open Access Customers	
i)	Long term open access customers - Railways	3.86
ii)	Short term open access customers - Others	0.14
	Total Transmission Charges from Open Access Customers (A)	**4.00**
	Operating charges from open access customers	
i)	Long term open access customers - Railways	0.05
ii)	Short term open access customers - Others	0.23
	Total Operating Charges from Open Access Customers (B)	**0.28**
	Total Income from Open Access Customers (A+B)	**4.28**

2.17 Annual Revenue Requirement

2.17.1 The summary of the Annual Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2020-21 is shown in the following tables:

Table 70: Annual Revenue Requirement for Transmission Business for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2020-21	Approved by the Commission in the Review of FY 2020-21	Claimed by PSTCL in the true up of FY 2020-21	Approved by the Commission
1a	Total Employee Expenses	510.04	519.01	523.25	520.49
1b	R&M Expenses	38.33	31.11	31.91	31.31
1c	A&G Expenses	27.37	26.32	27.06	27.07
1	O&M Expenses	575.74	576.44	582.23	578.87
2	Interest Charges	332.58	320.04	343.80	342.55
3	Return on Equity	108.93	109.38	110.99	110.98
4	Depreciation	300.29	296.92	299.94	299.93

(Rs. Crore)

Sr. No .	Particulars	Approved in Tariff Order for FY 2020-21	Approved by the Commission in the Review of FY 2020-21	Claimed by PSTCL in the true up of FY 2020-21	Approved by the Commission
5	Interest on Working Capital	35.44	35.66	35.03	34.56
6	Other Expenses	-	-	12.86	11.22
7	**Annual Revenue Requirement (ARR)**	**1352.98**	**1338.44**	**1384.84**	**1378.11**
8	Less: Non-Tariff Income	23.59	25.94	35.52	35.58
9	Less: Income from Open Access Customers	-	-	4.00	4.00
10	**Net ARR**	**1329.39**	**1312.50**	**1345.32**	**1338.53**

Table 71: Annual Revenue Requirement for SLDC for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2020-21	Approved by the Commission in the Review of FY 2020-21	Claimed by PSTCL in the true up of FY 2020-21	Approved by the Commission
1a	Total Employee Expenses	6.73	7.71	6.45	9.21
1b	R&M Expenses	0.56	0.63	0.38	0.62
1c	A&G Expenses	1.02	0.80	0.80	0.80
1.	O&M Expenses	8.32	9.14	7.63	10.63
2.	Interest Charges	1.53	1.23	1.27	1.28
3.	ULDC Charges	7.68	9.53	9.80	9.80
4.	Depreciation	0.56	1.65	1.26	1.26
5.	Interest on Working Capital	0.49	0.59	0.49	0.62
6.	Other Expenses	-	-	0.02	0.02
7.	**Annual Revenue Requirement (ARR)**	**18.57**	**22.14**	**20.48**	**23.61**
8.	Less: Non-Tariff Income	1.67	0.58	0.41	0.35
9.	Less: Income from Open Access Customers	-	-	0.28	0.28
10.	**Net ARR**	**16.90**	**21.56**	**19.79**	**22.98**

2.17.2 The summary of the Annual Revenue Requirement of PSTCL for FY 2020-21 is as under:

Table 72: Annual Revenue Requirement for PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2020-21	Approved by the Commission in the Review of FY 2020-21	Claimed by PSTCL in the true up of FY 2020-21	Approved by the Commission
1a	Total Employee Expenses	516.78	526.73	529.70	529.70
1b	R&M Expenses	38.89	31.73	32.28	31.93
1c	A&G Expenses	28.39	27.12	27.86	27.87
1	O&M Expenses	584.05	585.58	589.84	589.50
2	Interest Charges	334.10	321.27	345.07	343.83
3	Return on Equity	108.93	109.38	110.99	110.98
4	ULDC Charges	7.68	9.53	9.80	9.80
5	Depreciation	300.85	298.57	301.21	301.19
6	Interest on Working Capital	35.93	36.25	35.52	35.18
7	Other Expenses	-	-	12.88	11.24
8	**Annual Revenue Requirement (ARR)**	**1371.55**	**1360.58**	**1405.32**	**1401.72**
9	Less: Non-Tariff Income	25.26	26.52	35.93	35.93
10	Less: Revenue from Open Access	-	-	4.28	4.28
11	**Net Aggregate Revenue Requirement**	**1346.29**	**1334.06**	**1365.11**	**1361.51**

2.18 Availability and Incentive on Transmission System Availability

PSTCL's Submission:

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

Table 73: Incentive on Transmission System (TS) Availability for FY 2020-21 submitted by PSTCL

(Rs. Crore)

Sr. No.	Month	TS Availability (%)	Monthly Transmission Charges	Transmission Charges including Incentive	Incentive
1.	Apr-20	99.8843%	110.90	111.74	0.84
2.	May-20	99.4672%	114.60	115.14	0.54
3.	Jun-20	99.8743%	110.90	111.74	0.84
4.	Jul-20	99.8284%	114.60	115.47	0.87
5.	Aug-20	99.9342%	114.60	115.47	0.87
6.	Sep-20	99.9568%	110.90	111.74	0.84
7.	Oct-20	99.9546%	114.60	115.47	0.87
8.	Nov-20	99.7799%	110.90	111.74	0.84
9.	Dec-20	99.7814%	114.60	115.47	0.87
10.	Jan-21	99.9212%	114.60	115.47	0.87
11.	Feb-21	99.8569%	103.51	104.29	0.78
12.	Mar-21	99.7396%	114.60	115.46	0.86
	Total	**99.8324%**	**1349.32**	**1359.21**	**9.88**

Commission's Analysis:

2.18.2 The Commission determines the Incentive on Transmission System Availability for FY 2020-21 in accordance with Regulation 52 of PSERC MYT Regulations, 2019 which is reproduced as under:

" Normative Annual Transmission System Availability Factor (NATAF)

(a) For recovery of Annual Fixed Cost, NATAF shall be as 98.5% for AC system:

(b) For Incentive, NATAF shall be more than 99% for AC system:

Provided that no Incentive shall be payable for availability beyond 99.75%:"

2.18.3 The Commission observes that the transmission system availability of PSTCL has been verified by SLDC. Accordingly, the Commission determines the incentive for over achievement of transmission system availability by PSTCL, on the basis of the ARR of Transmission Business approved in Table 70 of this Tariff Order, as under:

Table 74: Incentive on Transmission System (TS) Availability for FY 2020-21 determined by the Commission

(Rs. Crore)

Sr. No.	Month	TS Availability (%)	Transmission Charges inclusive of Incentive	Monthly Transmission Charges	Incentive
1.	Apr-20	99.8843%	110.85	110.02	0.83
2.	May-20	99.4672%	114.22	113.68	0.54
3.	Jun-20	99.8743%	110.85	110.02	0.83
4.	Jul-20	99.8284%	114.54	113.68	0.86
5.	Aug-20	99.9342%	114.54	113.68	0.86
6.	Sep-20	99.9568%	110.85	110.02	0.83
7.	Oct-20	99.9546%	114.54	113.68	0.86
8.	Nov-20	99.7799%	110.85	110.02	0.83
9.	Dec-20	99.7814%	114.54	113.68	0.86
10.	Jan-21	99.9212%	114.54	113.68	0.86
11.	Feb-21	99.8569%	103.46	102.68	0.78
12.	Mar-21	99.7396%	114.53	113.68	0.85
	Total	**99.8324%**	**1348.33**	**1338.53**	**9.80**

2.18.4 **Thus, the Commission allows the incentive of Rs. 9.80 Crore for FY 2020-21 to PSTCL for achieving higher transmission system availability than the Normative Annual Transmission System Availability Factor (NATAF) specified in the PSERC MYT Regulations, 2019.**

2.19 Carrying Cost of Previous Years

2.19.1 The Commission allowed carrying cost of Rs 1.01 Crore in para 4.14 of Tariff Order for FY 2020-21. The same amount is being considered for the ARR of FY 2020-21.

2.20 Net Revenue Requirement

2.20.1 Considering the Incentive on Transmission System Availability, Penalty on under-achievement of transmission loss target and Carrying cost on Previous years, the summary of the Net Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2020-21 is shown in the following tables:

Table 75: Annual Revenue Requirement for Transmission Business for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2020-21	Approved by the Commission in the Review of FY 2020-21	Claimed by PSTCL in the true up of FY 2020-21	Approved by the Commission
1.	**Total ARR**	**1329.39**	**1312.50**	**1345.32**	**1338.53**
2.	Add: Incentive on Transmission System Availability	-	-	9.88	9.80
3.	Less: Penalty on under-achievement of Transmission Loss target	-	-	-	2.78
4.	Less: Carrying Cost of Previous Years	1.01	1.01	1.01	1.01
5.	**Net ARR**	**1328.38**	**1311.49**	**1354.20**	**1344.54**

Table 76: Annual Revenue Requirement for SLDC Business for FY 2020-21

(Rs. Crore)

Sr. No	Particulars	Approved in Tariff Order for FY 2020-21	Approved by the Commission in the Review of FY 2020-21	Claimed by PSTCL in the true up of FY 2020-21	Approved by the Commission
1.	**Net ARR**	**16.90**	**21.56**	**19.79**	**22.98**

2.20.2 The summary of the Annual Revenue Requirement of PSTCL for FY 2020-21 is as under:

Table 77: Annual Revenue Requirement for PSTCL for FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Approved in Tariff Order for FY 2020-21	Approved by the Commission in the Review of FY 2020-21	Claimed by PSTCL in the true up of FY 2020-21	Approved by the Commission
1	**Total ARR**	**1346.29**	**1334.06**	**1365.11**	**1361.51**
2	Add: Incentive		0.00	9.88	9.80
3	Less: Penalty on under-achievement of Transmission Loss target	-	-	-	2.78
4	Less: Carrying Cost of Previous Years	1.01	1.01	1.01	1.01
5	**Net ARR**	**1345.28**	**1333.05**	**1373.99**	**1367.52**

Chapter 3

Annual Performance Review of FY 2021-22 and Revised Estimates for FY 2022-23

3.1 Background

In accordance with the provisions of PSERC MYT Regulations, 2019, the Commission had approved the Annual Revenue Requirement (ARR) of PSTCL for FY 2021-22 and FY 2022-23 in its Tariff Order dated 01.06.2020, which was based on expenditure and revenue estimates of PSTCL for its Transmission and SLDC Businesses. The Commission further determined the revised estimates of ARR for FY 2021-22 in Tariff Order dated 28.05.2021. In the current Petition, PSTCL has projected the Annual Performance Review (APR) for FY 2021-22 and Revised Estimates for FY 2022-23, separately for its Transmission business and SLDC business. The Commission has analyzed the same in this chapter.

3.2 Transmission System Availability

PSTCL's Submission:

3.2.1 PSTCL has submitted its average transmission system availability from April to September 2021 (H1), calculated based on month-wise system availability up to September 2021, as under:

Table 78: Transmission System (TS) Availability of PSTCL for FY 2021-22

Sr. No.	Month	TS Availability (%)
1.	April-21	99.6328%
2.	May-21	99.6729%
3.	June-21	99.8274%
4.	July-21	99.9070%
5.	August-21	99.9360%
6.	September-21	99.8874%

3.2.2 PSTCL has further submitted that it has maintained the Transmission System Availability well above the normative Annual Transmission Availability Factor of 98.5% up to September 2021, as mandated by PSERC Tariff Regulations, 2019.

Commission's Analysis:

3.2.3 The Commission has taken note of the submission of PSTCL and shall consider its actual Transmission System Availability for FY 2021-22 and FY 2022-23 for incentive, if permissible as per PSERC MYT Regulations, 2019 at the time of true up for the respective years.

3.3 Transmission Loss

3.3.1 The Commission, in the MYT Order for 2nd Control Period, had provisionally projected the transmission loss of 2.46% for FY 2021-22 and 2.44% for FY 2022-23.

PSTCL's Submission:

3.3.2 PSTCL has submitted the transmission loss for the period from April 2021 to September 2021 in the ARR Petition as under:

Table 79: Transmission Loss submitted by PSTCL

Sr. No.	Month	Transmission Loss (%)
1	Apr-21	2.45%
2	May-21	2.15%
3	Jun-21	2.06%
4	Jul-21	2.02%
5	Aug-21	2.21%
6	Sep-21	2.35%
7	**Cumulative Loss of H1**	**2.18%**

3.3.3 PSTCL has submitted that the actual transmission loss of H1 of FY 2021-22 is lower than the transmission loss approved by the Commission for FY 2021-22. PSTCL has therefore requested the Commission to retain the loss level of 2.46% for FY 2021-22 as approved in the MYT Order. Similarly, PSTCL has requested the Commission to approve transmission loss of 2.44% for FY 2022-23 as approved in the MYT Order dated 01.06.2020.

Commission's Analysis:

3.3.4 The Commission observes that the actual Transmission loss reported by PSTCL till September of FY 2021-22 is coming to 2.18%. Since losses in the lean months (Jan-March) are observed to be comparatively higher, the Commission **decides to retain the transmission loss level at 2.46% and 2.44% for FY 2021-22 and FY 2022-23** respectively as approved in the MYT Order. The transmission losses for FY 2021-22 shall be revisited based on the data of actual losses for the full year during the True Up of the year.

3.4 Capital Expenditure and Capital Works in Progress

PSTCL's Submission:

3.4.1 PSTCL has submitted that it has revised the projections of the Capital Expenditure and Capitalization for FY 2021-22 and FY 2022-23 according to actual planned expenditure in these years. Accordingly, PSTCL has revised capital expenditure for FY 2021-22 and FY 2022-23 as below:

Table 80: Revised Capital Expenditure submitted by PSTCL for FY 2021-22 and FY 2022-23

(Rs. Crore)

Particulars	Projected by PSTCL	
	FY 2021-22	FY 2022-23
Transmission Business	437.56	608.89
SLDC Business	12.24	19.92
Total Capital Investment	449.79	628.81

3.4.2 PSTCL has further submitted that the Board of Directors of PSPCL in its 88th meeting held on 26.01.2021 accorded approval to transfer 220/132 KV substation of GNDTP Bathinda to PSTCL. The depreciated value of all items for transfer comes out to be Rs. 26.27 Crore including GST at 18%. In view of the above transfer of substation, PSPTCL has added a total of Rs. 26.27 Crore to GFA addition during FY 2021-22. The CWIP, Capital Expenditure and Capitalisation proposed by PSTCL for FY 2021-22 and FY 2022-23 are shown in the following tables:

Table 81: Details of CWIP, Capital Expenditure and Capitalization submitted by PSTCL for FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
	Transmission		
1	**Opening WIP**	**301.48**	**281.12**
a	Spill over Schemes	290.79	185.85
b	New Schemes	10.69	95.27
2	**Capital Expenditure**	**437.56**	**608.89**
a	Spill over Schemes	279.91	288.81
b	New Schemes	157.65	320.08
3	**Capitalisation**	**457.92**	**620.80**
a	Spill over Schemes	384.84	386.23
b	New Schemes	73.07	234.58
4	**Closing WIP**	**281.12**	**269.20**
a	Spill over Schemes	185.85	88.43
b	New Schemes	95.27	180.77
	SLDC		
5	**Opening WIP**	**1.46**	**10.41**
a	Spill over Schemes	1.46	0.09
b	New Schemes	-	10.32
6	**Capital Expenditure**	**12.24**	**19.92**
a	Spill over Schemes	0.45	0.25
b	New Schemes	11.79	19.67
7	**Capitalisation**	**3.29**	**29.24**
a	Spill over Schemes	1.82	0.25
b	New Schemes	1.47	28.99
8	**Closing WIP**	**10.41**	**1.09**
a	Spill over Schemes	0.09	0.09
b	New Schemes	10.32	1.00

Commission's Analysis:

3.4.3 The Commission ***vide Order dated 3.12.2019 for 2nd Capital Investment Plan (CIP) in Petition No. 19 of 2019 had approved the Capital Investment Plan of Rs.*** 636.14 ***Crore and Rs. 563.62 Crore including IDC and IEDC for FY 2021-22 and FY 2022-23 respectively.*** The Commission had approved the following list of works for PSTCL in the Capital Investment Plan dated 3.12.2019:

1) Capital Investment for Schemes approved in 1st Control Period
2) Capital Investment for Schemes approved by Board in FY 2019-20 outside 1st Control Period
3) Capital Investment for Schemes already planned for FY 2020-23
4) Capital Investment for New Schemes planned for FY 2020-23
5) Capital Investment for P&M Works for 2nd Control Period
6) Capital Investment for SLDC for 2nd Control Period

3.4.4 In the Tariff Order for FY 2020-21 dated 1.6.2020, the Commission capped the Capital Expenditure (inclusive of IEDC and IDC) of PSTCL to Rs. 400 Crore each during FY 2021-22 and FY 2022-23. In the Tariff Order for FY 2021-22 dated 28.5.2021, the Commission provisionally retained the Capital Expenditure (inclusive of IEDC and IDC) of Rs. 400 Crore for FY 2021-22. PSTCL was given the liberty to prioritize the approved schemes within the approved limit.

3.4.5 The Commission directed PSTCL to submit the details of any other works submitted in the petition. PSTCL vide letter No. 112/CAO(F&A)/APR-1 dated 09.02.2022 submitted that PSTCL has inadvertently included contributory works, works already approved in 2nd MYT Control Period, etc. In replies to queries asked by the Commission during the meeting with PSERC conducted on 11.2.2022 and 28.02.2022, PSTCL, vide email dated 15.02.2021 and 02.03.2022, has submitted the revised Capital Expenditure incurred in FY 2021-22 and FY 2022-23 as under:

Table 82: Revised Capital expenditure as submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capital Expenditure on Spillover schemes during FY 2020-21			
1a	Contributory works and Works under PSDF Scheme	59.23	0.00	59.23
1b	Others	214.39	0.45	214.84
1	**Total Capital Expenditure on Spillover schemes**	**273.62**	**0.45**	**274.07**
2	**Total Capital Expenditure on New schemes**	**163.28**	**11.79**	**175.07**
3	**Total Capital Expenditure during FY 2020-21 (1+2)**	**436.90**	**12.24**	**449.14**
4	Add: Capital Expenditure towards HR, IT, S&D and miscellaneous works	0.65	0.00	0.65
5	**Total Capital Expenditure (3+4)**	**437.55**	**12.24**	**449.79**

Table 83: Revised Capital expenditure as submitted by PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Description	Transmission	SLDC	PSTCL
	Capital Expenditure on Spillover schemes during FY 2020-21			
1a	Contributory works and Works under PSDF Scheme	32.09	0.00	32.09
1b	Others	249.23	0.25	249.48
1	**Total Capital Expenditure on Spillover schemes**	**281.32**	**0.25**	**281.57**
2	**Total Capital Expenditure on New schemes**	**326.92**	**19.67**	**346.59**
3	**Total Capital Expenditure during FY 2020-21 (1+2)**	**608.24**	**19.92**	**628.16**
4	Add: Capital Expenditure towards HR, IT, S&D and miscellaneous works	0.65	0.00	0.65
5	**Total Capital Expenditure (3+4)**	**608.89**	**19.92**	**628.81**

3.4.6 The Commission observes that PSTCL has claimed capital expenditure of Rs. 0.65 Crore towards HR, IT, S&D and miscellaneous works for FY 2021-22 and FY 2022-23. Since, these expenditures are not part of the approved capital investment plan, the Commission disallows the same.

3.4.7 The details of the Capital Expenditure approved are as under:

Table 84: Capital Expenditure approved by the Commission for FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1	**Transmission**	**436.90**	**608.24**
a	Spill over Schemes	273.62	281.32
b	New Schemes	163.28	326.92
2	**SLDC**	**12.24**	**19.92**
a	Spill over Schemes	0.45	0.25
b	New Schemes	11.79	19.67
3	**PSTCL**	**449.14**	**628.16**

3.4.8 The Opening CWIP for FY 2021-22 is considered as Rs. 354.36 Crore for Transmission Business and Rs. 1.44 Crore for SLDC Business from the Closing CWIP for True Up of FY 2020-21 as approved in para 2.5.9 of this Tariff Order. The Commission notes that the Capital expenditure for FY 2021-22 and FY 2022-

23 against the approved schemes is Rs. 449.14 Crore and Rs. 628.16 Crore respectively.

3.4.9 The Commission has approved capitalization of Rs. 460.55 Crore for FY 2021-22 after disallowing the capitalization of Rs. 0.65 Crore claimed towards HR, IT, S&D and miscellaneous works and Rs. 679.29 Crore for and FY 2022-23 respectively as submitted by PSTCL vide reply dated 12.02.2022. The details are as under:

Table 85: Capitalization approved by the Commission for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission for FY 2021-22		Approved by the Commission for FY 2022-23	
		Capital Expenditure	Capitalization	Capital Expenditure	Capitalization
1	**Transmission**	**436.90**	**457.26**	**608.24**	**650.05**
a	Spill over Schemes	273.62	358.17	281.32	384.11
b	New Schemes	163.28	99.09	326.92	265.94
2	**SLDC**	**12.24**	**3.29**	19.92	**29.24**
a	Spill over Schemes	0.45	1.82	0.25	0.25
b	New Schemes	11.79	1.47	19.67	28.99
3	**PSTCL**	**449.14**	**460.55**	**628.81**	**679.29**

3.4.10 The details for Capital Works in Progress approved by the Commission for Transmission and SLDC Business for FY 2021-22 and FY 2022-23 are as under:

Table 86: Capital Works in Progress approved by the Commission for FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
	Transmission		
1	**Opening CWIP**	**354.36**	**334.00**
2	**Capital Expenditure**	**436.90**	**608.24**
a	Spill over Schemes	273.62	281.32
b	New Schemes	163.28	326.92
3	**Capitalisation**	**457.26**	**650.05**
a	Spill over Schemes	358.17	384.11
b	New Schemes	99.09	265.94

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
4	**Closing WIP**	**334.00**	**292.19**
	SLDC		
5	**Opening WIP**	**1.44**	**10.39**
6	**Capital Expenditure**	**12.24**	**19.92**
a	Spill over Schemes	0.45	0.25
b	New Schemes	11.79	19.67
7	**Capitalisation**	**3.29**	**29.24**
a	Spill over Schemes	1.82	0.25
b	New Schemes	1.47	28.99
8	**Closing WIP**	**10.39**	**1.07**

3.5 Funding of Capital Expenditure

PSTCL's Submission:

3.5.1 PSTCL has submitted its funding plan for spillover and new schemes for FY 2021-22 and FY 2022-23 as follows:

Table 87: Funding of Capital Expenditure and Capitalization for FY 2021-22 and FY 2022-23 as submitted by PSTCL

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
A	**Transmission**		
1	CAPEX of Spill over Schemes	279.91	288.81
2	Capitalization of New Schemes	73.07	234.58
3	Total CAPEX for Funding	352.98	523.38
4	Funding through Grant	57.57	27.79
5	Funding through Loan	295.41	495.59
B	**SLDC**		
1	CAPEX of Spill over Schemes	0.45	0.25
2	Capitalization of New Schemes	1.47	28.99
3	Total CAPEX for Funding	1.92	29.24
4	Funding through Loan	1.92	29.24

Commission's Analysis:

3.5.2 PSTCL has not proposed any equity funding for FY 2021-22 and FY 2022-23. The same shall be considered again based on actual funding during the time of True-up of the respective years. Accordingly, the Commission allows the funding as under:

Table 88: Funding for FY 2021-22 and FY 2022-23 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
A	**Transmission**		
1	CAPEX of Spill over Schemes	273.62	281.32
2	Capitalization of New Schemes	99.09	265.94
3	Total CAPEX for Funding	372.71	547.25
4	Funding through Grant	59.23	32.09
5	**Funding through Loan**	**313.48**	**515.17**
B	**SLDC**		
1	CAPEX of Spill over Schemes	0.45	0.25
2	Capitalization of New Schemes	1.47	28.99
3	Total CAPEX for Funding	1.92	29.24
4	**Funding through Loan**	**1.92**	**29.24**

3.6 Operation and Maintenance Expenses

3.6.1 In the ARR Petition for FY 2021-22, PSTCL had projected employee expenses and A&G expenses of Rs. 536.37 Crore and Rs. 27.40 Crore for its Transmission Business respectively. For SLDC business, PSTCL had projected employee expenses and A&G expenses of Rs. 7.32 Crore and Rs. 0.81 Crore respectively for FY 2021-22. The Commission had approved employee cost of Rs. 531.43 Crore for Transmission Business and Rs. 7.95 Crore for SLDC Business to PSTCL for FY 2021-22. Further, the Commission had approved A&G expenses of Rs. 27.12 Crore for Transmission Business and Rs. 0.83 Crore for SLDC Business to PSTCL for FY 2021-22.

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

Crore for Transmission Business and Rs. 7.40 Crore for SLDC Business to PSTCL for FY 2022-23. Further, the Commission had approved A&G expenses of Rs. 30.03 Crore for Transmission Business and Rs. 1.12 Crore for SLDC Business to PSTCL for FY 2022-23.

A. Employee Costs and A&G Expenses

PSTCL's Submission:

3.6.3 The Other Employee Cost (controllable portion of Employee Cost) has been determined as per the PSERC MYT Regulations, 2019. The Other Employee Cost worked out in truing up of FY 2020-21 has been taken as the base for computing normative Other Employee Cost for FY 2021-22. Further, the base value of FY 2021-22 is considered for computation of Other Employee Cost for FY 2022-23. PSTCL has not considered any employee expenses capitalised for FY 2021-22 and FY 2022-23.

Transfer of Bathinda Substation from PSPCL to PSTCL

3.6.4 Due to transfer of 220 kV GNDTP Bathinda substation to PSTCL from October 1, 2021, the estimated employee cost for six months, i.e., October 2021 to March 2022 has been considered as employee cost of Rs. 0.60 Crore in normative employee cost computed for FY 2021-22. The remaining employee cost of Rs. 0.60 Crore has been considered in normative employee cost computed for FY 2022-23.

Manpower requirement for New Substations at Bahaman Jassa Singh and Dhanansu

3.6.5 Due to commissioning of 400 KV substations at Bahaman Jassa Singh and Dhanansu of PSTCL in January 2022 and January 2023, respectively, PSTCL has considered the Employee Cost of the additional Manpower for Bahaman Jassa Singh Substation for 3 months of FY 2021-22 and 9 months in FY 2022-23. For Dhanansu Substation, PSTCL is required to consider Employee Cost of 3 Months in FY 2022-23. Therefore, PSTCL has estimated the employee cost at Rs. 0.44 Crore for FY 2021-22 and Rs. 1.76 Crore for FY 2022-23 considering the average employee salary and added the same in normative employee cost computed for FY 2021-22 and FY 2022-23.

Manpower requirement for SAMAST scheme

3.6.6 For achieving full functionality as proposed under SAMAST project, additional manpower will be required as soon as the project is commissioned. PSTCL has worked out the requirement of additional manpower under strengthening of SLDC by posting manpower as per the directives of Hon'ble Commission and recommendations of CABIL report. PSTCL has estimated tentative additional manpower requirement of 31 no. of staff for SLDC for SAMAST project. Further, the total annual expenses of additional staff to be incurred by SLDC (without taking into account effect of pay revision) has been estimated at Rs. 2.39 Crore.

3.6.7 Since the commissioning of SAMAST project has been anticipated in mid of the FY 2022-23, PSTCL has considered Rs. 1.19 Crore which is half of annual expenses of additional staff of Rs. 2.39 Crore over and above the normative employee cost computed for FY 2022-23.

Impact of Pay Revision in 6th Pay Commission

3.6.8 PSTCL would also like to submit that the Government of Punjab through its Notification No. 09/01/2021- 5FP1/1228 dated September 20, 2021 announced an increment in the basic pay of its Employees under 6th Pay Commission. Following this, PSPCL through its Finance Circular No. 12/2021 has notified PSPCL (Revised Pay) Regulations, 2021. PSTCL is also expecting a revision in salary structure of its Employees due to implementation of 6th Pay Commission in FY 2021-22 and 2022-23 in line with the aforementioned Regulation notified by the PSPCL. Therefore, PSTCL has computed the additional impact on employee cost for FY 2021-22 & 2022-23 and considered the same in this present petition. Also, impact of this pay revision on terminal benefit would be claimed at later date either by an additional submission or it would be claimed at the time of true up of FY 2021-22. 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.

Terminal Benefits

3.6.9 Regulation 26 of the PSERC MYT Regulations, 2019 specifies that Terminal Benefits 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 pensioners, etc., shall be allowed as per actual paid by PSTCL. In this regard, PSTCL submits that the actual pay-out on account of Terminal Benefits in respect of pensioners shall be as per Punjab Power Sector Reforms Transfer Scheme approved by the Government of Punjab. PSTCL shall submit the Terminal Benefits actually paid for FY 2021-22 and FY 2022-23 in additional submission to the Commission. For the purpose of the present Petition, PSTCL has considered the Terminal Benefits of Rs. 328.96 Crore for FY 2021-22 and Rs. 335.91 Crore for FY 2022-23, as approved by the Commission vide Tariff Order dated 28.05.2021 and MYT Order dated 01.06.2020.

3.6.10 Accordingly, PSTCL has submitted the employee cost for FY 2021-22 and FY 2022-23 as follows:

Table 89: Total Employee Cost submitted by PSTCL for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
1	Other Employee Cost – Baseline (FY 2020-21)	198.08	6.09	204.17
2	Inflation Factor	8.31%	8.31%	
3	**Gross Other Employee Cost**	**214.54**	**6.59**	**221.13**
4	Employee Cost for 220 kV Bathinda S/s transferred from PSPCL to PSTCL	0.60	-	0.60
5	Employee Cost for 400 kV New substation at Bahaman Jassa Singh in FY 2021-22	0.44		0.44
6	Pay Revision impact according to PSTCL Computation	53.34	2.38	55.72
7	**Net Other Employee Cost**	**268.93**	**8.97**	**277.90**
8	Terminal Benefits approved in MYT Order	328.96	-	328.96
9	**Total Employee Cost**	**597.89**	**8.97**	**606.86**

Table 90: Total Employee Cost submitted by PSTCL for FY 2022-23 (Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Other Employee Cost – Baseline (FY 2021-22)	268.93	8.97	277.90
2	Inflation Factor	8.31%	8.31%	
3	**Gross Other Employee Cost**	**291.27**	**9.72**	**300.99**
4	Employee Cost for 220 kV Bathinda S/s transferred from PSPCL to PSTCL	0.60		0.60
5	Employee Cost for 400 kV New substation at Bahaman Jassa Singh and Dhanansu FY 2022-23 respectively	1.76		1.76
6	Employee Cost for SAMAST project		1.19	1.19
7	**Pay Revision impact according to PSTCL Computation**	24.34	1.08	25.43
8	**Net Other Employee Cost**	**317.98**	**11.99**	**329.97**
9	Terminal Benefits approved in MYT Order	335.91	-	335.91
10	**Total Employee Cost**	**653.89**	**11.99**	**665.88**

3.6.11 In respect of A&G expenses, in addition to the escalation of baseline A&G expenses determined by PSTCL, Licence Fee and Audit Fee have also been claimed in line with the amounts approved by the Commission for FY 2021-22 and FY 2022-23 in the MYT Order dated 01.06.2020. The normative A&G expenses for FY 2021-22 and FY 2022-23 claimed by PSTCL are as shown in the following tables:

Table 91: Total A&G Expenses submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	**SLDC**	**PSTCL**
1	A&G Expenses – Baseline (FY 2020-21)	26.59	0.80	27.39
2	Escalation Factor	8.31%	8.31%	
3	**A&G Expenses**	**28.80**	**0.87**	**29.67**
4	Add: License and Tariff Determination Fee	0.50	-	0.50
5	Add: Audit Fee	0.17	-	0.17
6	**Total**	**29.47**	**0.87**	**30.34**

Table 92: Total A&G Expenses submitted by PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	**SLDC**	**PSTCL**
1	A&G Expenses – Baseline (FY 2021-22)	28.80	0.87	29.67
2	Escalation Factor	8.31%	8.31%	
3	**A&G Expenses**	**31.19**	**0.94**	**32.14**
4	Add: License and Tariff determination fee	0.50	-	0.50
5	Add: Audit Fee	0.17	-	0.17
6	**Total**	**31.86**	**0.94**	**32.81**

Commission's Analysis:

3.6.12 The relevant regulation to determine the Employee and A&G expenses is reproduced as under:

"(ii) EMPn+ A&Gn= (EMPn-1 + A&Gn-1)*(INDEX n/INDEX n-1)

INDEXn - 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:-

*INDEXn = 0.50*CPIn + 0.50*WPIn*

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

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

… Note 7: *Any expenditure on account of license fee, initial or renewal, fee for determination of tariff*

and audit fee shall be allowed on actual basis, over and above the A&G expenses approved by the Commission.”

A. 1) Terminal Benefits

3.6.13 PSTCL has submitted that the actual pay-out on account of Terminal Benefits in respect of pensioners shall be as per Punjab Power Sector Reforms Transfer Scheme approved by the Government of Punjab and PSTCL shall submit the Terminal Benefits actually paid for FY 2021-22 and FY 2022-23 at the time of True-up of respective years.

3.6.14 The Commission retains the Terminal Benefits of Rs. 328.96 Crore for FY 2021-22 and Rs. 335.91 Crore for FY 2022-23, as approved vide MYT Order dated 01.06.2020.

A. 2) Other Employee Cost

3.6.15 PSTCL has submitted that the Communication Wing was again transferred back to Transmission Business on 16.03.2021. Accordingly, in order to determine the Other employee cost for FY 2021-22, the Commission has considered the employee cost of the Communication Wing of Rs. 1.63 Crore (Rs. 1.58*1.0316) as part of Transmission Business and removed the same from SLDC Business. Therefore, the Other employee cost of Previous year for Transmission Business is Rs. 196.95 Crore (195.32 + 1.63) and for SLDC Business is Rs. 7.22 Crore (8.85 – 1.63).

3.6.16 The Commission has calculated the ***INDEXn*** as under:

Table 93: Calculation of INDEX for APR of FY 2021-22

Sr. No.	Particulars	FY 2020-21 (Apr '20-Jan '21)	FY 2021-22 (Apr '21-Jan '22)	Increase (%)
1.	CPI	337.72	354.99	5.11%
2.	WPI	122.25	137.78	12.70%

INDEX n/INDEX n-1 = (0.5*5.11) +(0.5*12.70) = **8.91%**

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

3.6.18 The costs pertaining to transfer of Bathinda Substation from PSPCL to PSTCL, the impact of pay revision in 6th Pay Commission as submitted by PSTCL vide memo dated 184/CAO(F&A)/MYT-II/APR-II dated 02.03.2022 and vide email dated 09.03.2022 have been allowed by the Commission. The impact of pay revision for FY 2021-22 has been considered based on actuals paid up to February 2022.

3.6.19 PSTCL during the meeting with PSERC conducted on 28.02.2022 submitted that the 400 kV substation at Bahaman Jassa Singh and Dhanansu is not commissioned yet. Accordingly, the Commission has disallowed the employee cost of Rs. 0.44 Crore and Rs. 1.76 Crore for FY 2021-22 and FY 2022-23 as claimed by PSTCL.

3.6.20 Further, the Commission has disallowed the Employee expenses of Rs. 1.19 Crore in FY 2022-23 claimed on account of SAMAST project and shall be considered when the Project is Commissioned.

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

Table 94: Normative Employee Cost as approved by the Commission for FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
Transmission Business			
1.	Other Employee Cost of previous year	196.95	214.49
2.	Inflation Factor	8.91%	8.91%
3.	**Other Employee Cost**	**214.49**	**233.60**
4.	Employee Cost for 220 kV Bathinda S/s transferred from PSPCL to PSTCL	0.60	0.60
5.	Employee Cost for 400 kV New substation at Bahaman Jassa Singh in FY 2021-22	0.00	0.00
6.	Pay Revision impact according to PSTCL Computation	49.56	24.34
7.	Terminal Benefits	328.96	335.91
8.	**Total Employee Cost**	**593.61**	**594.45**
SLDC Business			
1.	Other Employee Cost of previous year	7.22	7.86
2.	Inflation Factor	8.91%	8.91%
3.	**Other Employee Cost**	**7.86**	**8.56**
4.	Pay Revision impact according to PSTCL Computation	0.44	1.08
5.	Employee Cost for SAMAST project	0.00	0.00
6.	Terminal Benefits	0.00	0.00
7.	**Total Employee Cost**	**8.30**	**9.64**

3.6.22 Therefore, the Commission allows Employee Cost of Rs. 593.61 Crore for Transmission Business and Rs. 8.30 Crore for SLDC Business i.e., Employee Cost of Rs. 601.92 Crore for FY 2021-22 for PSTCL and Employee Cost of Rs. 594.45 Crore for Transmission Business and Rs. 9.64 Crore for SLDC Business i.e., Employee Cost of Rs. 604.10 Crore for FY 2022-23 for PSTCL.

B. Administration & General (A&G) Expenses

3.6.23 The Commission has determined the A&G expenses considering the baseline A&G expenses approved in the True-up of FY 2020-21 and index as per Table 93. Audit fee and License/ARR fee has been considered as per true up of FY 2020-21 provisionally.

Table 95: A&G expenses as approved by the Commission for transmission business FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
	Transmission Business		
1.	Opening A&G	26.60	28.97
2.	Inflation Factor	8.91%	8.91%
3.	**A&G Expenses**	**28.97**	**31.55**
4.	Audit Fee	0.06	0.06
5.	Add: Licence/ARR Fee	0.41	0.41
6	**Total A&G Expenses**	**29.44**	**32.02**
	SLDC Business		
1.	Opening A&G	0.80	0.88
2.	Inflation Factor	8.91%	8.91%
3.	**A&G expenses**	**0.88**	**0.96**

C. Repair & Maintenance (R&M)

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

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

PSTCL's Submission:

3.6.26 R&M expenses have been claimed in line with the submission of Capital Expenditure and Capitalization claimed in this Petition. K-factor has been considered same as considered in the True up of FY 2020-21 as the first year of Control Period for FY 2021-22 and FY 2022-23, as specified in PSERC MYT Regulations, 2019. WPI has been considered for computation of R&M Expenses. Hence, PSTCL has considered 11.55% increase for computation of R&M Expenses for FY 2021-22 and FY 2022-23.

SAMAST project

3.6.27 PSTCL has submitted that as per actual L-1 prices received the total cost of the project was ascertained as Rs. 37.27 Crore (all inclusive) which comprises of about Rs. 21.66 Crore as initial cost to be paid up to commissioning of the project, Rs. 15.18 Crore as comprehensive warranty-cum-AMC cost of 6 years and Rs. 0.43 Crore as recurring charges for communication network for 1st year of AMC. Thus, R&M cost on account of AMC and recurring Telecom Usage Charges comes out to be Rs. 2.96 Crore per year for 6 years after commissioning.

3.6.28 The commissioning of SAMAST project has been anticipated in the middle of FY 2022-23. Therefore, PSTCL has considered cost of Rs. 1.48 Crore, i.e., half of Rs. 2.96 Crore for SAMAST project on account of AMC and recurring Telecom Usage Charges over and above base year figures for calculating normative R&M cost for FY 2022-23. Accordingly, PSTCL has claimed R&M expenses for Transmission Business and SLDC for FY 2021-22 and FY 2022-23 as follows:

Table 96: Normative R&M Expenses as submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
1	Opening GFA	10287.61	28.63	10316.24
2	Addition to GFA	457.92	3.29	461.20
3	Retirement during the year	0.00	0.00	0.00
4	Closing GFA	10745.52	31.92	10777.44
5	K-factor	0.309%	1.420%	
6	Inflation factor	11.55%	11.55%	
7	**R&M Expenses**	**36.24**	**0.48**	**36.72**

Table 97: Normative R&M Expenses as submitted by PSTCL for FY 2022-23

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Opening GFA	10745.52	31.92	10777.44
2	Addition to GFA	620.80	29.24	650.04
3	Retirement during the year	0.00	0.00	0.00
4	Closing GFA	11366.33	61.16	11427.48
5	K-factor	0.309%	1.420%	
6	Inflation factor	11.55%	11.55%	
7	**R&M Expenses**	**38.10**	**0.74**	**38.84**
8	AMC impact on R&M due to SAMAST		1.48	1.48
9	**Total R&M Expenses**	**38.10**	**2.22**	**40.32**

Commission's Analysis:

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

" (i) R&Mn= K*GFA*WPIn/WPIn-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.*

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

3.6.30 The 'K' factor as determined in the True-up of FY 2020-21 is also used for determining normative R&M expenses of FY 2021-22 and FY 2022-23. The opening GFA is considered as per the Closing GFA approved during True-Up of FY 2020-21. The Commission has calculated the WPI increase in FY 2021-22 as follows:

Table 98: Calculation of WPI Increase for FY 2021-22

Sr. No.	Particulars	FY 2020-21 (Apr '20-Jan '21)	FY 2021-22 (Apr '21-Jan '22)	Increase (%)
1.	WPI	122.25	137.78	12.70%

Accordingly, Inflation factor= 1+ 0.1270 = 1.1270

3.6.31 The inflation factor determined for FY 2021-22 has also been considered as inflation factor for FY 2022-23. After considering the k-factor, increase in WPI and projected capitalization during FY 2021-22 and FY 2022-23, the Commission has calculated the R&M Expenses for the FY 2021-22 and FY 2022-23 as under:

Table 99: R&M Expenses for the FY 2021-22 and FY 2022-23 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
	Transmission Business		
1	Opening GFA	10287.60	10744.86
2	Addition during the year	457.26	650.05
3	Closing GFA	10744.86	11394.91
4	Average GFA	10516.23	11069.89
5	k-factor	0.303%	0.303%

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
6	Inflation factor for FY 2020-21	1.0129	1.0129
7	Inflation factor for FY 2021-22	1.1270	1.1270
8	Inflation factor for FY 2022-23	-	1.1270
9	**R&M Expenses**	**36.40**	**43.18**
	SLDC		
1	Opening GFA	28.63	31.92
2	Addition during the year	3.29	29.24
3	Closing GFA	31.92	61.16
4	Average GFA	30.28	46.54
5	k-factor	2.323%	2.323%
6	Inflation factor for FY 2020-21	1.0129	1.0129
7	Inflation factor for FY 2021-22	1.1270	1.1270
8	Inflation factor for FY 2022-23	-	1.1270
9	**R&M Expenses**	**0.80**	**1.39**
	Total R&M Expenses for PSTCL	**37.20**	**44.57**

3.6.32 The Commission has disallowed the R&M expenses of Rs. 1.48 Crore in FY 2022-23 claimed on account of AMC impact of R&M due to SAMAST and shall be considered when the Project is commissioned.

3.6.33 Thus, the Commission approves O&M expenses for the FY 2021-22 and FY 2022-23 as under:

Table 100: O&M Expenses for Transmission Business of FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Employee Expenses	593.61	594.45
2.	A&G Expenses	29.44	32.02
3.	R&M Expenses	36.40	43.18
4.	**O&M Expenses**	**659.45**	**669.65**

Table 101:O&M Expenses for SLDC Business of FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Employee Expenses	8.30	9.64
2.	A&G Expenses	0.88	0.96
3.	R&M Expenses	0.80	1.39
4.	**O&M Expenses**	**9.98**	**11.99**

Table 102: O&M Expenses for PSTCL of FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Employee Expenses	601.92	604.10
2.	A&G Expenses	30.32	32.98
3.	R&M Expenses	37.20	44.57
4.	**O&M Expenses**	**669.44**	**681.65**

3.7 Depreciation Charges

3.7.1 In the ARR Petition of FY 2021-22, PSTCL had claimed depreciation charges of Rs. 305.92 Crore for Transmission Business and Rs. 2.18 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs. 300.33 Crore for Spillover Schemes and Rs. 1.51 Crore for New Schemes of Transmission Business and Rs. 1.80 Crore for Spillover schemes of SLDC Business and Rs. 0.08 Crore for New schemes of SLDC Business.

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

PSTCL's Submission:

3.7.3 PSTCL has claimed the depreciation for FY 2021-22 and FY 2022-23 are as follows:

Table 103: Depreciation claimed by PSTCL for Spillover Schemes of FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	**SLDC**	**PSTCL**
1	Opening GFA (Net of Land and Land Rights)	7,250.85	23.84	7,274.69
2	Asset addition during the Year	384.84	1.82	386.66
3	Asset replacement/retirement	-	-	-
	Less: GFA due to Contributory Works and PSDF grants	193.37	-	193.37
4	Closing GFA	7,442.32	25.66	7,467.98
5	Weighted Average Rate of Depreciation	4.18%	5.88%	
6	**Depreciation**	**307.02**	**1.46**	**308.48**

Table 104: Depreciation claimed by PSTCL for New Schemes of FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
1	Opening GFA (Net of Land and Land Rights)	14.45	-	14.45
2	Asset addition during the Year	73.07	1.47	74.54
3	Asset replacement/retirement	-	-	-
4	Closing GFA	87.52	1.47	88.98
5	Weighted Average Rate of Depreciation	4.18%	5.88%	
6	**Depreciation**	**2.13**	**0.04**	**2.17**

Table 105:Total Depreciation claimed by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
1	Opening GFA (Net of Land and Land Rights)	7,265.29	23.84	7,289.13
2	Asset addition during the Year	457.92	3.29	461.20
3	Asset replacement/retirement	-	-	-
	Less: GFA due to Contributory Works and PSDF grants	193.37		193.37
4	Closing GFA	7,529.84	27.13	7,556.96
5	Weighted Average Rate of Depreciation	4.18%	5.88%	
6	**Depreciation**	**309.16**	**1.50**	**310.65**

Table 106: Depreciation claimed by PSTCL for Spillover Schemes of FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Opening GFA (Net of Land and Land Rights)	7,442.32	25.66	7,467.98
2	Asset addition during the Year	386.23	0.25	386.48
3	Asset replacement/retirement	-	-	-
	Less: GFA due to Contributory Works and PSDF grants	31.40		31.40
4	Closing GFA	7,797.15	25.91	7,823.06
5	Weighted Average Rate of Depreciation	4.18%	5.88%	
6	**Depreciation**	**318.44**	**1.52**	**319.96**

Table 107: Depreciation claimed by PSTCL for New Schemes of FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Opening GFA (Net of Land and Land Rights)	87.52	1.47	88.98
2	Asset addition during the Year	234.58	28.99	263.57
3	Asset replacement/retirement	-	-	-
4	Closing GFA	322.10	30.46	352.55
5	Weighted Average Rate of Depreciation	4.18%	5.88%	
6	**Depreciation**	**8.56**	**0.94**	**9.50**

Table 108:Total Depreciation claimed by PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2022-23		
		Transmission	**SLDC**	**PSTCL**
1	Opening GFA (Net of Land and Land Rights)	7,529.84	27.13	7,556.96
2	Asset addition during the Year	620.80	29.24	650.04
3	Asset replacement/retirement	-	-	-
	Less: GFA due to Contributory Works and PSDF grants	31.40		31.40
4	Closing GFA	8,119.24	56.37	8,175.61
5	Weighted Average Rate of Depreciation	4.18%	5.88%	
6	**Depreciation**	**327.00**	**2.46**	**329.46**

Commission's Analysis:

3.7.4 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."

3.7.5 The Commission determines the depreciation for FY 2021-22 and FY 2022-23 as per the Regulation 21 stated above. The Opening GFA for the Spillover schemes and New schemes is considered as per the Closing GFA of Spillover schemes and New schemes respectively approved by the Commission in the True-Up of FY 2020-21. Based on the actual rate of depreciation of 4.18% for Transmission Business and 5.88% for SLDC Business as determined during True-Up of FY 2020-21 of PSTCL in this Tariff Order, the depreciation for Spillover and New Schemes for Transmission and SLDC Business is as under:

Table 109: Depreciation approved by the Commission for FY 2021-22 and FY 2022-23 for Transmission Business

(Rs. Crore)

	Particulars	FY 2021-22	FY 2022-23
(I)	**Spillover Schemes**		
1.	Opening GFA (excluding land and land rights)	7250.85	7413.98
2.	Add: Additions to GFA during the year	358.17	384.11
3.	Less: Addition of GFA towards PSDF schemes	195.03	35.70
4.	Closing GFA	7413.98	7762.39
5.	Average GFA	7332.42	7588.19
6.	**Depreciation @4.18% of average GFA**	**306.42**	**317.10**
(II)	**New Schemes**		
6.	Opening GFA (excluding land and land rights)	14.40	113.49
7.	Add: Additions to GFA during the year	99.09	265.94
8.	Closing GFA	113.49	379.43
9.	Average GFA	63.95	246.46
10.	**Depreciation @4.18% of average GFA**	**2.67**	**10.30**
11.	**Total Depreciation**	**309.09**	**327.40**

Table 110: Depreciation approved by the Commission for FY 2021-22 and FY 2022-23 for SLDC Business

(Rs. Crore)

	Particulars	**FY 2021-22**	**FY 2022-23**
(I)	**Spillover Schemes**		
1.	Opening GFA (excluding land and land rights)	23.84	25.66
2.	Add: Additions to GFA during the year	1.82	0.25
3.	Closing GFA	25.66	25.91
4.	Average GFA	24.75	25.79
5.	**Depreciation @5.88% of average GFA**	**1.46**	**1.52**
(II)	**New Schemes**		
6.	Opening GFA (excluding land and land rights)	0.04	1.51
7.	Add: Additions to GFA during the year	1.47	28.99
8.	Closing GFA	1.51	30.50
9.	Average GFA	0.78	16.01
10.	**Depreciation @5.88% of average GFA**	**0.05**	**0.94**
11.	**Total Depreciation**	**1.50**	**2.46**

Table 111:Depreciation approved by the Commission for FY 2021-22 and FY 2022-23 for PSTCL

(Rs. Crore)

	Particulars	**FY 2021-22**	**FY 2022-23**
(I)	**Transmission**		
1.	Opening GFA (excluding land and land rights)	7265.25	7527.48
2.	Add: Additions to GFA during the year	457.26	650.05
3.	Less: Addition of GFA towards PSDF schemes	195.03	35.70
4.	Closing GFA	7527.48	8141.83
5.	Average GFA	7396.36	7834.65
6.	**Depreciation @4.18% of average GFA**	**309.09**	**327.40**
(II)	**SLDC**		
7.	Opening GFA (excluding land and land rights)	23.88	27.17
8.	Add: Additions to GFA during the year	3.29	29.24
9.	Closing GFA	27.17	56.41
10.	Average GFA	25.53	41.79
11.	**Depreciation @5.88% of average GFA**	**1.50**	**2.46**
12.	**Total Depreciation**	**310.59**	**329.86**

The Commission approves depreciation of Rs. 310.59 Crore and Rs. 329.86 Crore for FY 2021-22 and FY 2022-23 respectively.

3.8 Interest and Finance Charges

3.8.1 In the ARR Petition of FY 2021-22, PSTCL had claimed Interest and Finance charges of Rs. 313.47 Crore (net of capitalization of Rs. 41.14 Crore of interest charges) for its Transmission Business and Rs. 1.28 Crore for SLDC Business for

FY 2021-22. The Commission approved interest charges of Rs. 330.97 Crore for Transmission Business (including Spillover and new schemes) and Rs. 1.20 Crore for SLDC Business for FY 2021-22.

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

PSTCL's Submission:

3.8.3 PSTCL has submitted the revised interest on loan capital for FY 2021-22 and FY 2022-23 vide memo 184/CAO(F&A)/MYT-II/APR-II dated 02.03.2022 as follows:

Table 112: Interest on Loan capital for Spillover Schemes as submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3,334.90	12.01	43.91	3390.82
2	Addition of loan during year	222.33	0.45	0	222.78
3	Repayment of loan during year	285.07	1.46	21.95	308.48
4	Closing loan balance for year	3,272.16	11.00	21.96	3305.12
5	Average Loan Balance for year	3303.53	11.51	21.96	3347.97
6	**Interest Charges**	**335.99**	**1.20**	**2.41**	**339.60**
7	Less: Interest charges capitalised	11.55	0.00	0.00	11.55
8	Add: Guarantee Fee	4.46	0.00	0.00	4.46
9	Add: Miscellaneous Interest and Finance Charges		0.00	0.00	
10	**Interest and Finance Charges**	**328.89**	**1.20**	**2.41**	**332.50**

Table 113: Interest on Loan capital for New Schemes as submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Loan balance for the year	0.00	0.00	0.00
2	Addition of loan during year	73.07	1.47	74.54
3	Repayment of loan during year	2.13	0.04	2.17
4	Closing loan balance for year	70.94	1.42	72.37
5	**Interest Charges**	**3.34**	**0.07**	**3.41**
6	Less: Interest charges capitalised	-	-	-
7	Add: Guarantee Fee	0.00	-	0.00
8	Add: Miscellaneous Interest and Finance Charges	-	-	-
9	**Interest and Finance Charges**	**3.34**	**0.07**	**3.41**

Table 114: Total Interest on Loan capital as submitted by PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3334.90	12.01	43.91	3390.82
2	Addition of loan during year	295.41	1.92	-	297.32
3	Repayment of loan during year	287.21	1.50	21.95	310.66
4	Closing loan balance for year	3343.10	12.43	21.96	3377.49
5	Average Loan Balance for year	3339.00	12.22	32.94	3384.15
6	**Interest Charges**	**339.33**	**1.27**	**2.41**	**343.01**
7	Less: Interest charges capitalised	11.55	-	0.00	11.55
8	Add: Guarantee Fee	4.46	0.00	0.00	4.46
9	Add: Miscellaneous Interest and Finance Charges	-	0.00	0.00	-
10	**Interest and Finance Charges**	**332.24**	**1.27**	**2.41**	**335.91**

Table 115: Interest on Loan capital for Spillover Schemes as submitted by PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3,272.16	11.00	21.96	3,305.12
2	Addition of loan during year	261.02	0.25	-	261.27
3	Repayment of loan during year	318.44	1.52	-	319.96
4	Closing loan balance for year	3,214.73	9.74	21.96	3246.43
5	Average Loan Balance for year	3243.45	10.37	21.96	3275.78
6	**Interest Charges**	**329.88**	**1.08**	**1.61**	**332.57**
7	Less: Interest charges capitalised	11.30	0.00	0.00	11.30
8	Add: Guarantee Fee	5.23	0.00	0.00	5.23
9	Add: Miscellaneous Interest and Finance Charges		0.00	0.00	
10	**Interest and Finance Charges**	**323.80**	**1.08**	**1.61**	**326.49**

Table 116: Interest on Loan capital for New Schemes as submitted by PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Loan balance for the year	70.94	1.42	72.37
2	Addition of loan during year	234.58	28.99	263.57
3	Repayment of loan during year	8.56	0.94	9.50
4	Closing loan balance for year	296.96	29.47	326.43
5	**Interest Charges**	**17.33**	**1.46**	**18.79**
6	Less: Interest charges capitalised		-	
7	Add: Guarantee Fee	1.45	-	1.45
8	Add: Miscellaneous Interest and Finance Charges		-	
9	**Interest and Finance Charges**	**18.78**	**1.46**	**20.23**

Table 117: Total Interest on Loan capital as submitted by PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3343.10	12.43	21.96	3377.49
2	Addition of loan during year	495.59	29.24	-	524.83
3	Repayment of loan during year	327.00	2.46	-	329.46
4	Closing loan balance for year	3577.70	39.21	21.96	3572.87
5	Average Loan Balance for year	3427.40	25.82	21.96	3475.18
6	**Interest Charges**	**347.21**	**2.54**	**1.61**	**351.36**
7	Less: Interest charges capitalised	11.30	-	-	11.30
8	Add: Guarantee Fee	6.67	-	-	6.67
9	Add: Miscellaneous Interest and Finance Charges	-	-	-	-
10	**Interest and Finance Charges**	**342.58**	**2.54**	**1.61**	**346.72**

Commission's Analysis:

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

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

24.2. Interest and finance charges on the future loan capital for new investments shall be computed on the loans, based on one (1) year State Bank of India (SBI) MCLR/ any replacement 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."

3.8.5 The Opening loan for Spillover schemes and New schemes is considered as per the Closing loan approved by the Commission for Spillover schemes and New schemes respectively in the true up of FY 2020-21 in this Tariff Order.

3.8.6 The Commission has considered the approved addition of loan as explained in para 3.5.2.

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

3.8.8 For the Spillover schemes i.e., for existing loans, the rate of interest on loan capital is as per Regulation 24.1 and is considered as 10.18% for Transmission and 10.44% for SLDC as approved during the True-up of FY 2020-21 in this Tariff Order.

3.8.9 The rate of interest on loan capital for new investments is as per Regulation 24.2 and is calculated as under:

Table 118: Calculation for rate of interest on loan for new investments for FY 2021-22

Sr. No.	Particulars	Transmission	SLDC
1.	SBI 1 yr MCLR (as on 1st April 2021)	7.00%	7.00%
2.	Actual Interest rate (True Up of FY 2020-21)	10.18%	10.44%
3.	SBI 1 yr MCLR (as on 1st April 2020)	7.75%	7.75%
4.	Margin (4=2-3)	2.43%	2.69%
5.	**Interest on loan Capital**	**9.43%**	**9.69%**

Table 119: Calculation for rate of interest on loan for new investments for FY 2022-23

Sr. No.	Particulars	Transmission	SLDC
1.	SBI 1 yr MCLR (as on 15.01.2022)	7.00%	7.00%
2.	Actual Interest rate (True Up of FY 2020-21)	10.18%	10.44%
3.	SBI 1 yr MCLR (as on 1st April 2020)	7.75%	7.75%
4.	Margin (4=2-3)	2.43%	2.69%
5.	**Interest on loan Capital**	**9.43%**	**9.69%**

3.8.10 The Commission determines Interest on long term loans for Transmission Business and SLDC Business by considering the closing of FY 2020-21 as the opening for FY 2021-22 and funding as approved in para 3.5.2 as under:

Table 120: Interest on loan for Spill over schemes of Transmission Business

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Opening balance of loan	3294.14	3202.11
2.	Add: Receipt of loan during the year	214.39	249.23
3.	Less: Repayment of loan during the year	306.42	317.11
4.	Closing balance of loan	3202.11	3134.23
5.	Average Loan	3248.12	3168.17
6.	**Interest Charges @ 10.18%**	**330.67**	**322.53**

Table 121: Interest on loan for New schemes of Transmission Business

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Opening balance of loan	9.78	106.20
2.	Add: Receipt of loan during the year	99.09	265.94
3.	Less: Repayment of loan during the year	2.67	10.30
4.	Closing balance of loan	106.20	361.84
5.	Average Loan	57.99	234.02
6.	**Interest Charges @ 9.43%**	**5.47**	**22.07**

Table 122: Interest on loan for Spillover schemes of SLDC Business

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Opening balance of loan	11.97	10.96
2.	Add: Receipt of loan during the year	0.45	0.25
3.	Less: Repayment of loan during the year	1.46	1.52
4.	Closing balance of loan	10.96	9.70
5.	Average Loan	11.47	10.33
6.	**Interest Charges @ 10.44%**	**1.20**	**1.08**

Table 123: Interest on loan for New schemes of SLDC Business

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Opening balance of loan	0.04	1.46
2.	Add: Receipt of loan during the year	1.47	28.99
3.	Less: Repayment of loan during the year	0.05	0.94
4.	Closing balance of loan	1.46	29.51
5.	Average Loan	0.75	15.49
6.	**Interest Charges @ 9.69%**	**0.07**	**1.50**

3.8.11 The Commission approves Interest on long term loans of Rs. 336.14 Crore for Transmission Business and Rs. 1.27 Crore for SLDC Business for FY 2021-22. Similarly, the Commission approved Interest on long term loans of

Rs. 344.60 Crore for Transmission Business and Rs. 2.58 Crore for SLDC Business for FY 2022-23.

Interest on GPF Fund:

3.8.12 The Commission has observed that PSTCL has submitted a revised claim of provisional GPF liability as Rs. 2.41 Crore for FY 2021-22 and Rs. 1.61 Crore for FY 2022-23. The Interest on GPF being a statutory payment is provisionally allowed as submitted by PSTCL.

Finance and Guarantee charges:

3.8.13 PSTCL has claimed finance charges and guarantee fee of Rs. 4.46 Crore for FY 2021-22 and Rs. 6.67 Crore for FY 2022-23. T**he Commission has considered the submissions of PSTCL and has provisionally approved the finance charges and guarantee fees as Rs. 4.46 Crore for FY 2021-22 and Rs. 6.67 Crore for FY 2022-23, as submitted by PSTCL.**

Capitalization of Interest Charges

3.8.14 Capitalization of interest and finance charges of Rs. 11.55 Crore for FY 2021-22 and Rs. 11.30 Crore for FY 2022-23 is claimed by PSTCL. The Commission has considered the same.

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

Table 124: Interest and Finance charges approved by the Commission for Transmission Business

(Rs. Crore)

Sr. No	Particulars	FY 2021-22	FY 2022-23
1.	Interest charges for Spillover schemes of Transmission Business	330.67	322.53
2.	Interest charges for New schemes of Transmission Business	5.47	22.07
3.	Interest on GP Fund	2.41	1.61
4.	Add Finance/Guarantee charges	4.46	6.67
5.	Less: Interest capitalized	11.55	11.30
6.	**Net Interest charges**	**331.46**	**341.58**

Table 125: Interest and Finance charges approved by the Commission for SLDC Business

(Rs. Crore)

Sr. No	Particulars	FY 2021-22	FY 2022-23
1.	**Interest charges**	1.27	2.58

3.8.16 Thus, the Commission approves Net Interest and Finance Charges of Rs. 332.73 Crore for FY 2021-22 and Rs. 344.16 Crore FY 2022-23.

3.9 Interest on Working Capital

3.9.1 In the ARR Petition for FY 2021-22, PSTCL had claimed interest on working capital of Rs. 36.85 Crore and Rs. 0.58 Crore for Transmission business and SLDC business respectively against which the Commission had approved Rs. 35.93 Crore and Rs. 0.60 Crore for Transmission business and SLDC business respectively.

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

PSTCL's Submission:

3.9.3 The computation of interest for FY 2021-22 and FY 2022-23 submitted by PSTCL is as shown in the following Table:

Table 126: Interest on Working Capital for FY 2021-22 as submitted by PSTCL

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
1	Receivables equivalent to two months of fixed cost	240.96	3.88	244.84
2	Maintenance spares @ 15% of O&M expenses	99.54	1.55	101.09
3	Operation and Maintenance expenses for one month	55.30	0.86	56.16
4	**Total Working Capital Requirement**	**395.80**	**6.29**	**402.09**
5	Rate of Interest	9.69%	9.69%	
6	**Interest on Working Capital**	**38.33**	**0.61**	**38.94**

Table 127: Interest on Working Capital for FY 2022-23 as submitted by PSTCL

(Rs. Crore)

Sr. No.	**Particulars**	**FY 2022-23**		
		Transmission	**SLDC**	**PSTCL**
1	Receivables equivalent to two months of fixed cost	255.98	5.10	261.08
2	Maintenance spares @ 15% of O&M expenses	108.58	2.27	110.85
3	Operation and Maintenance expenses for one month	60.32	1.26	61.58
4	**Total Working Capital Requirement**	**424.88**	**8.63**	**433.51**
5	Rate of Interest	9.69%	9.69%	
6	**Interest on Working Capital**	**41.15**	**0.84**	**41.99**

Commission's Analysis:

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

"51.1. Components of Working Capital

The Working Capital shall cover the following:

(a) O&M Expenses for 1month;

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

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

51.2. Rate of Interest

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

3.9.5 Considering the rate of interest as approved in the True-Up of FY 2020-21 i.e., 9.65% for Transmission Business and 9.65% for SLDC Business, the Commission observes that the actual rate of interest is lower than State Bank of India 1 yr. MCLR plus 350 basis points for the relevant year (10.50% for FY 2021-22 and FY 2022-23) and therefore determines and approves the Interest on working capital as follows**:**

Table 128: Interest on Working Capital as approved by the Commission for FY 2021-22 and FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
	Transmission Business		
1.	Receivables for two months	235.14	241.73
2.	Maintenance spares @15% of O&M	98.92	100.45
3.	O&M Expenses for one month	54.95	55.80
4.	Total Working Capital	389.02	397.98
5.	Rate of Interest (%)	9.65%	9.65%
6.	**Interest on Working Capital**	**37.53**	**38.40**
	SLDC		
7.	Receivables for two months	3.79	4.52
8.	Maintenance spares @15% of O&M	1.50	1.80
9.	O&M Expenses for one month	0.83	1.00
10.	Total Working Capital	6.12	7.32
11.	Rate of Interest (%)	9.65%	9.65%
12.	**Interest on Working Capital**	**0.59**	**0.70**

3.9.6 The Commission approves working capital requirements of Rs. 395.14 Crore and interest thereon of Rs. 38.12 Crore for FY 2021-22 for PSTCL and working capital requirements of Rs. 405.30 Crore and interest thereon of Rs. 39.10 Crore for FY 2022-23 for PSTCL.

3.10 Return on Equity

3.10.1 In the ARR Petition for FY 2021-22, PSTCL had claimed Return on equity of Rs. 109.27 Crore against which the Commission had approved Return on equity of Rs. 109.38 Crore.

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

PSTCL's Submission:

3.10.3 The Return on Equity as submitted by PSTCL for FY 2021-22 and FY 2022-23 are as follows:

Table 129: Return on Equity for FY 2021-22 and FY 2022-23 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Opening Balance-Equity Capital	726.38	726.38
2.	Equity addition during the year	-	-
3.	Closing balance-Equity Capital	726.38	726.38
4.	Rate of Return (%) RoE	15.50%	15.50%
5.	**Return on Equity**	**112.59**	**112.59**

Commission's Analysis:

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

*"**20. Return on equity***

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

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

Provided further that 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."

3.10.5 The Commission has considered the opening equity for FY 2021-22 from the closing equity approved in the True-Up of FY 2020-21. As explained in para 2.12, no addition of equity is considered. The Commission determines Return on Equity @15.50% on the average equity for the year and is calculated as follows:

Table 130: Return on Equity for FY 2021-22 and FY 2022-23 for Transmission as allowed by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2021-22	FY 2022-23
1.	Opening Equity	726.36	726.36
2.	Addition of equity during the year	0.00	0.00
3.	Closing Equity	726.36	726.36
4.	Average Equity	726.36	726.36
5.	Rate of Return on Equity (%)	15.50%	15.50%
6.	**Return on Equity**	**112.59**	**112.59**

3.10.6 Thus, the Commission approves Return on Equity of Rs. 112.59 Crore to PSTCL for both FY 2021-22 and FY 2022-23.

3.11 Unified Load Dispatch & Communication (ULDC) Charges

3.11.1 PSTCL has claimed ULDC Charges of Rs. 9.80 Crore as per Audited Annual Accounts of FY 2020-21 for its SLDC Business.

3.11.2 Accordingly, the Commission approves ULDC charges of Rs. 9.80 Crore to PSTCL for its SLDC Business for FY 2021-22 and FY 2022-23.

3.12 Non-Tariff Income

PSTCL's Submission:

3.12.1 PSTCL has estimated the total Non-Tariff Income of Rs. 12.54 Crore for FY 2021-22 which includes Rs. 12.33 Crore for Transmission Business and Rs. 0.21 for SLDC Business. PSTCL has considered the same for FY 2022-23.

Commission's Analysis:

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

3.12.3 The Commission considers the Non-tariff Income for FY 2021-22 and FY 2022-23 as Rs. 35.52 Crore for Transmission Business and Rs. 0.35 Crore for SLDC Business based on Audited Annual Accounts of FY 2020-21.

Table 131: Non-Tariff Income FY 2021-22 and FY 2022-23 as approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Non-Tariff Income	35.58	0.35	35.93

3.13 Income from Open Access Customers

3.13.1 PSTCL has claimed Income from Open Access Consumers of Rs. 3.69 Crore for Transmission Business and Rs. 0.06 Crore for SLDC charges for FY 2021-22 and FY 2022-23. Accordingly, the Commission has considered the same for FY 2021-22 and FY 2022-23.

3.14 Annual Revenue Requirement

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

Table 132: Annual Revenue Requirement for Transmission Business for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the Tariff Order of FY 2021-22	Claimed by PSTCL in the APR of FY 2021-22	Approved by the Commission
1a	Employee costs	531.43	597.89	593.61
1b	A&G expenses	27.12	29.47	29.44
1c	R&M expenses	31.85	36.24	36.40
1.	Total O&M Expenses	590.40	663.60	659.45
2.	Interest charges	297.24	334.39	331.46
3.	Return on Equity	109.38	112.59	112.59
4.	Depreciation	301.84	309.16	309.09
5.	Interest on Working Capital	35.93	38.33	37.53
6.	**Total Revenue Requirement**	**1334.79**	**1458.07**	**1450.13**
7.	Less: Non-tariff Income	25.94	12.33	35.58
8.	Less: Revenue from Open Access	-	3.69	3.69
9.	**Total Revenue Requirement**	**1308.85**	**1442.04**	**1410.86**

Table 133: Annual Revenue Requirement for SLDC for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the Tariff Order of FY 2021-22	Claimed by PSTCL in the APR of FY 2021-22	Approved by the Commission
1a	Employee costs	7.95	8.97	8.30
1b	A&G expenses	0.83	0.87	0.88
1c	R&M expenses	0.70	0.48	0.80
1.	Total O&M Expenses	9.48	10.33	9.98
2.	Interest charges	1.20	1.28	1.27
3.	Return on Equity	0.00	0.00	0.00
4.	ULDC Charges	9.53	9.80	9.80
5.	Depreciation	1.88	1.50	1.50
6.	Interest on Working Capital	0.60	0.61	0.59
7.	**Total Revenue Requirement**	**22.69**	**23.51**	**23.15**

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the Tariff Order of FY 2021-22	Claimed by PSTCL in the APR of FY 2021-22	Approved by the Commission
8.	Less: Non-tariff Income	0.58	0.21	0.35
9.	Less: Revenue from Open Access	-	0.06	0.06
10.	**Total Revenue Requirement**	**22.11**	**23.24**	**22.74**

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

Table 134: Annual Revenue Requirement for PSTCL for FY 2021-22

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the Tariff Order of FY 2021-22	Claimed by PSTCL in the APR of FY 2021-22	Approved by the Commission
1a	Employee costs	539.38	606.86	601.92
1b	A&G expenses	27.95	30.35	30.32
1c	R&M expenses	32.55	36.72	37.20
1.	Total O&M Expenses	599.88	673.93	669.44
2.	Interest charges	298.44	335.67	332.73
3.	Return on Equity	109.38	112.59	112.59
4.	ULDC Charges	9.53	9.80	9.80
5.	Depreciation	303.72	310.66	310.59
6.	Interest on Working Capital	36.53	38.94	38.12
7.	**Total Revenue Requirement**	**1357.48**	**1481.58**	**1473.28**
8.	Less: Non-tariff Income	26.52	12.54	35.93
9.	Less: Revenue from Open Access	0.00	3.75	3.75
10.	**Total Revenue Requirement**	**1330.96**	**1465.28**	**1433.60**

3.14.3 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 135: Annual Revenue Requirement for Transmission Business for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the MYT Order	Claimed by PSTCL in the Revised Estimates of FY 2022-23	Approved by the Commission
1a	Employee costs	541.98	653.89	594.45
1b	A&G expenses	30.03	31.86	32.02
1c	R&M expenses	44.55	38.10	43.18
1.	Total O&M Expenses	616.56	723.85	669.65
2.	Interest charges	326.01	343.62	341.58
3.	Return on Equity	108.93	112.59	112.59
4.	Depreciation	327.95	327.00	327.40
5.	Interest on Working Capital	37.45	41.15	38.40
6.	**Total Revenue Requirement**	**1416.90**	**1548.21**	**1489.62**
7.	Less: Non-tariff Income	23.59	12.33	35.58
8.	Less: Revenue from Open Access	-	3.69	3.69
9.	**Total Revenue Requirement**	**1393.31**	**1532.18**	**1450.35**

Table 136: Annual Revenue Requirement for SLDC for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the MYT Order	Claimed by PSTCL in the Revised Estimates of FY 2022-23	Approved by the Commission
1a	Employee costs	7.40	11.99	9.64
1b	A&G expenses	1.12	0.94	0.96
1c	R&M expenses	1.52	2.22	1.39
1.	Total O&M Expenses	10.04	15.16	11.99
2.	Interest charges	4.29	2.55	2.58
3.	Return on Equity	0.00	0.00	0.00
4.	ULDC Charges	7.68	9.80	9.80
5.	Depreciation	1.66	2.46	2.46
6.	Interest on Working Capital	0.63	0.84	0.70
7.	**Total Revenue Requirement**	**24.30**	**30.80**	**27.53**
8.	Less: Non-tariff Income	1.67	0.21	0.35
9.	Less: Revenue from Open Access	-	0.06	0.06
10.	**Total Revenue Requirement**	**22.63**	**30.53**	**27.12**

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

Table 137: Annual Revenue Requirement for PSTCL for FY 2022-23

(Rs. Crore)

Sr. No.	Particulars	Approved by the Commission in the MYT Order	Claimed by PSTCL in the Revised Estimates of FY 2022-23	Approved by the Commission
1a	Employee costs	549.38	665.88	604.10
1b	A&G expenses	31.15	32.81	32.98
1c	R&M expenses	46.07	40.32	44.57
1.	Total O&M Expenses	626.60	739.00	681.65
2.	Interest charges	330.30	346.17	344.16
3.	Return on Equity	108.93	112.59	112.59
4.	ULDC Charges	7.68	9.80	9.80
5.	Depreciation	329.61	329.46	329.86
6.	Interest on Working Capital	38.08	41.99	39.10
7.	**Total Revenue Requirement**	**1441.20**	**1579.01**	**1517.15**
8.	Less: Non-tariff Income	25.26	12.54	35.93
9.	Less: Revenue from Open Access	-	3.75	3.75
10.	**Total Revenue Requirement**	**1415.94**	**1562.71**	**1477.47**

3.15 Carrying Cost on Revenue Gap

3.15.1 True up of FY 2020-21

The Commission vide its Order dated 28.05.2021 had approved the Net Revenue Requirement (NRR) of Rs.1333.05 Crore for FY 2020-21. Now after truing up exercise for FY 2020-21, the Net ARR has been re-determined as Rs. 1367.52 Crore which was payable by PSPCL as Transmission Charges of FY 2020-21. Thus, the Commission determines a Revenue Gap of Rs. 34.47 (1367.52 -1333.05) Crore. Accordingly, the Commission allows carrying cost of (-) Rs. 3.33 Crore on the Revenue gap of Rs. 34.47 Crore as under:

Table 138: Carrying Cost on Revenue Gap for APR of FY 2020-21

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	ARR approved for FY 2021-22 vide Order dated 28.05.2021 (A)	1311.49	21.56	1333.05
2	Net ARR approved for True-Up of FY 2020-21 (B)	1344.54	22.98	1367.52
3	**Revenue Gap / (Surplus) (C= B-A)**	**33.05**	**1.42**	**34.47**
4	Carrying Cost (@9.65% for Transmission and @9.65% for SLDC for 6 months) for FY 2021-22 (E)	1.594	0.07	1.664
5	Carrying Cost (@9.65% for Transmission and @9.65% for SLDC for 6 months) for FY 2022-23 (F)	1.594	0.07	1.664
6	**Total recoverable Carrying Cost (G = D+E+F)**	**3.19**	**0.14**	**3.33**

The Carrying cost for FY 2021-22 shall be considered during True-Up.

3.15.2 Impact of Review Petition No. 3 of 2021

The Commission vide order dated 10.12.2021 in Review Petition No. 3 of 2021 had made the following revisions:

1. The Commission had allowed Rs.0.48 Crore as other employee cost of SLDC business for FY 2019-20.
2. The Commission had considered the reconciled figures including addition to GFA of Rs. 279.73 Crore during FY 2019-20 in place of Rs.279.69 Crore considered earlier.
3. The Commission had re-determined opening balance of loans for Transmission Business as Rs. 3739.97 Crore (by adding Rs.22.78 Crore earlier reduced from the opening balance of long-term loans in true up of FY 2017-18) on 01.04.2017 instead of Rs.3717.19 Crore.
4. The Commission had allowed Rs.0.81 Crore as interest on lease assets in the baseline values of A&G expenses for FY 2020-21

Accordingly, the Commission has considered the impact of Review Petition No. 3 of 2021 as under:

Table 139: Impact of Review Petition for FY 2017-18

(Rs. Crore)

Particulars	As per actuals submitted during True-Up of Capital Expenditure			As per Review Petition			Deviation/Impact		
	Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL
ARR	**1154.14**	**19.43**	**1173.57**	**1156.58**	**19.43**	**1176.01**	**2.44**	**0.00**	**2.44**
Carrying Cost (@10.59% for Transmission for 6 months) for FY 2017-18							0.13	0.00	0.13
Carrying Cost (@9.96% for Transmission (1 year) for FY 2018-19							0.24	0.00	0.24
Carrying Cost (@10.09% for Transmission for 1 year) for FY 2019-20							0.25	0.00	0.25
Carrying Cost (@9.65% for Transmission for 1 year) for FY 2020-21							0.24	0.00	0.24
Carrying Cost (@9.65% for Transmission for 1 year) for FY 2021-22							0.24	0.00	0.24
Carrying Cost (@9.65% for Transmission for 6 months) for FY 2022-23							0.12	0.00	0.12
Total cost							**1.21**	**0.00**	**1.21**
Total Impact including Carrying Cost							**3.65**	**0.00**	**3.65**

The details of the Impact for 2018-19 are as under:

Table 140: Impact of Review Petition for FY 2018-19

(Rs. Crore)

Particulars	Approved by Commission during True-Up of 2018-19			As per actuals submitted during True-Up of Capital Expenditure			Deviation/Impact		
	Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL
ARR	1271.93	15.48	1287.41	1274.25	15.48	1289.73	2.32	0.00	2.32
Carrying Cost (@9.96% for Transmission for 6 months) for FY 2018-19							0.12	0.00	0.12
Carrying Cost (@10.09% for Transmission for 1 year) for FY 2019-20							0.23	0.00	0.23
Carrying Cost (@9.65% for Transmission for 1 year) for FY 2020-21							0.00	0.00	0.00
Carrying Cost (@9.65% for Transmission for 1 year) for FY 2021-22							0.01	0.00	0.01
Carrying Cost (@9.65% for Transmission for 6 months) for FY 2022-23							0.11	0.00	0.11
Total carrying cost							0.47	0.00	0.47
Total Impact including Carrying Cost							**2.79**	**0.00**	**2.79**

The details of the Impact for FY 2019-20 are as under:

Table 141: Impact of Review Petition for FY 2019-20

(Rs. Crore)

Particulars	Approved by Commission during True-Up of 2018-19			As per actuals submitted during True-Up of Capital Expenditure			Deviation/Impact		
	Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL
ARR	1316.42	20.23	1336.66	1320.04	20.74	1340.78	3.62	0.50	4.12
Carrying Cost (@10.09% for Transmission and @10.25% for SLDC for 6 months) for FY 2019-20							0.18	0.03	0.21
Carrying Cost (@9.65% for Transmission and SLDC for 1 year) for FY 2020-21							0.35	0.05	0.40
Carrying Cost (@9.65% for Transmission and SLDC for 1 year) for FY 2021-22							0.35	0.05	0.40
Carrying Cost (@9.65% for Transmission and SLDC for 6 months) for FY 2022-23							0.17	0.02	0.20
Total carrying cost							1.06	0.15	1.20
Total Impact including Carrying Cost							**4.68**	**0.65**	**5.32**

Accordingly, the total impact of Review Petition is as under:

Sr. No.	Particulars	Impact		
		Trans.	SLDC	PSTCL
1	Impact of Review Petition for FY 2017-18	3.65	0.00	3.65
2	Impact of Review Petition for FY 2018-19	2.79	0.00	2.79
3	Impact of Review Petition for FY 2019-20	4.68	0.65	5.32
4	**Total Impact**	**11.12**	**0.65**	**11.76**

3.16 Net Annual Revenue Requirement

Considering the impact True up of FY 2020-21 and order dated 10.12.2021 in Review Petition No. 3 of 2021 as approved by the Commission, the summary of the ARR for Transmission Business, SLDC Business and PSTCL for the FY 2022-23 is as under:

Table 142: Net ARR as approved by the Commission for Transmission Business for FY 2022-23

Sr. No.	Particulars	Approved by the Commission
1.	**Total ARR**	**1450.35**
2.	**Add: Carrying Cost on revenue gap/ (surplus) for FY 2020-21 as per para 3.15**	3.19
3.	**Add: Impact of Review Petition Order as per para 3.15.2**	11.11
4.	**Net ARR**	**1464.65**

Table 143: Net ARR as approved by the Commission for SLDC Business for FY 2022-23

Sr. No.	Particulars	Approved by the Commission
1.	**Total ARR**	**27.12**
2.	**Add: Carrying Cost on revenue gap/ (surplus) for FY 2020-21 as per para 3.15**	0.14
3.	**Add: Impact of Review Petition Order as per para 3.15.2**	0.65
4.	**Net ARR**	**27.91**

Table 144: Net ARR as approved by the Commission for PSTCL for FY 2022-23

Sr. No.	Particulars	Approved by the Commission
5.	**Total ARR**	**1477.47**
6.	**Add: Carrying Cost on revenue gap/ (surplus) for FY 2020-21 as per para 3.15**	3.33
7.	**Add: Impact of Review Petition Order as per para 3.15.2**	11.76
8.	**Net ARR**	**1492.56**

Chapter 4
Directives

Compliance of Commission's Directives

The Commission has a statutory function under the Electricity Act, 2003 to guide the State Transmission Utility for the overall development of an efficient, coordinated and economical system of Intrastate Transmission lines and substations for smooth flow of electricity to the Load Centers. The Commission issues various directives to PSTCL through its Tariff Order each year to facilitate the transmission licensee/STU to achieve these milestones. The status of compliance of directives issued in the Tariff Order for FY 2021-22 and PSERC comments along with further directives for compliance by PSTCL during FY 2022-23 is summarized as under:

Directive No. 4.1: Boundary metering, Energy Audit and Reduction in Transmission Losses.

PSERC Comments & Directive for FY 2021-22:

PSTCL has provided the monthly transmission losses from April 2020 to December 2020. However, PSTCL has not provided the details of monthly input and output energy to analyse and determine the cumulative losses of FY 2020-21 (up to December 2020). PSTCL is directed to provide the requisite data within one month of the issue of this Tariff Order.

Reply of PSTCL:

As per the direction of the Commission, tender enquiry for implementation of SAMAST scheme in Punjab was floated by PSTCL through which voltage wise transmission losses of Punjab transmission network could be calculated. As per the decision of WTDs taken in its 86th meeting held on 24.09.2021, the Letter of Intent (LOI) dated 14.10.2021 has been issued to the L-1 firm and also petition has been filed with the Commission on 26.10.2021 for approval so that PO/WO could be placed upon the L-1 firm.

PSTCL Transmission losses for FY 2021-22 (April- to Sept 2021) with input & output energy are as under.

Sr. No.	Month	Energy inflow into PSTCL system (in MWh) (A)	Energy outflow from PSTCL system (in MWh) (B)	PSTCL Transmission Losses=A-B	Transmission Loss
1	April-2021	3340249.62	3258429.96	81819.66	2.45%
2	May-2021	4232518.39	4141629.84	90888.55	2.15%
3	June-2021	6469406.39	6336021.40	133384.99	2.06%
4	July-2021	7644340.76	7490203.59	154137.17	2.02%
5	August-2021	7746231.97	7574879.16	171352.81	2.21%
6	September-2021	6020346.15	5878788.02	141558.14	2.35%
	Cumulative Loss of H1	**35453093.29**	**34679951.97**	**773141.32**	**2.18%**

PSERC Comments & Directive

The Commission directs PSTCL to implement SAMAST scheme in Punjab at the earliest.

Directive No. 4.2: Loading Status of PSTCL Transmission lines and Substations:

PSERC Comments & Directive for FY 2021-22:

PSTCL is directed to intimate the progress of creation of 220 kV grid sub-station at Jhoke-Harihar to tackle the overloading of 220kV substation Ferozepur.

Reply of PSTCL:

Amendment for upgradation of Jhoke Harihar has been approved by BoDs. The expenditure for the same is proposed in the years 2021 to 2023 approval of the urgent work.

Loading Status of PSTCL Transmission lines and Substations has been supplied to the Commission.

PSERC Comments & Directive

While noting the position intimated by PSTCL, the Commission directs PSTCL to intimate, within three months of issue of this Tariff Order, the measures taken to prevent overloading on the transmission lines like the 220kV Sahnewal-PGCIL line.

Directive No. 4.3: Maintenance of voltage wise and category wise details of fixed assets:

PSERC Comments & Directive for FY 2021-22:

The status of maintenance of voltage wise/category wise details of fixed assets be shared with the Commission within six months of issuance of this Tariff Order and updating the same on yearly basis.

Reply of PSTCL:

Haryana Vidyut Prasaran Nigam Limited (HVPNL) has implemented the software for preparation of fixed assets register, but software is not stabilized due to some security audit/ codification of the same. As soon as the HVPNL's software is stabilized it will be studied thoroughly after that Tenders will be called from IT Firms and PSTCL will get it customized according to its requirement at the earliest because development of software afresh will consume lot of time.

PSERC Comments & Directive

PSTCL has still not given any time frame to ensure compliance of the Directive. As such, the reply given by PSTCL is not satisfactory. The Commission observes that calling of tenders is not dependent on HVPNL software issues and directs that speedy compliance of the Directive be ensured and status report be furnished within three months of issue of Tariff Order.

Directive No. 4.4: Reactive Compensation.

PSERC Comments & Directive for FY 2021-22:

The final recommendations of CPRI on reactive compensation along with status of its implementation should be intimated to the Commission within one month of issuance of the Tariff Order.

Reply of PSTCL:

The detailed report is still awaited from CPRI. PSTCL is in the process of installing Reactors at 220/400kV level at 400kV S/Stn. Dhuri and Nakodar as per the report of CPRI. Subsequent to the reply already submitted, Order for installation of reactor was placed on 19.07.2021 and 17.08.2021 for 220kV (25 MVAr each at 400kV Dhuri and Nakodar) and 400kV (125 MVAr at 400kV Dhuri) reactors respectively. The Commission shall be intimated as and when these reactors are installed.

PSERC Comments & Directive

The final recommendations/detailed report of CPRI, along with the action points emanating therefrom, be shared with the Commission within one month of issuance of this Tariff Order. Further, status report of installation of reactors be sent to the Commission every quarter, beginning the quarter ending June, 2022.

Directive No. 4.5: Preventive maintenance of transmission lines.

PSERC Comments & Directive for FY 2021-22:

During the 1st quarter**,** 260 tripping/ interruptions on transmission lines have been reported. In many cases,4 to 5 hours interruption due to transient fault has been reported. Reportedly, the 132kV Moga-Jamalpur line remained shut for 65 hours due to transient fault. The 220 kV Moga-Bagapurana line remained shut for 75 hours due to damage of Y-phase wave trap and 132 Tarn-Taran-Patti line remained shut for over 10 days due to breaker damage.

During the 2nd quarter, 265 tripping/ interruptions on transmission lines have been reported. Outage due to transient fault for a period of 4.07 hrs and 5.27 hrs have been reported on 132 kV Sarainaga-Moga line.

During 3rd quarter, 100 tripping/interruptions on transmission lines have been reported. The 220kV Jhunir-Sunam Line remained under fault for over 105 hours due to conductor breakdown. The 220kV Bhari— Ganguwal remained under fault due to disc insulator string damaged for over 68 hours. This does not speak highly of PSTCL's reaction time and the health of the transmission system. The restoration time for faults on transmission lines needs to be brought down. PSTCL should submit the steps being taken to reduce the restoration time.

Reply of PSTCL:

The following measures are being taken for preventive maintenance of Transmission lines like Regular patrolling, jumper checking and tightening of Tension towers, regular checking of healthiness of earth wires of all transmission lines especially over railway crossing/ National highways/Road crossings and river/canal crossings, Washing/Cleaning of porcelain disc insulators of critical 400 kV lines in polluted areas. Apart from this thermo vision scanning of 400/220/132kV transmission elements to check hot points and attending them online/offline as per the availability of shutdown and fault locators are being used to find out the location of faults. Also, online scanning of disc insulators that are already weak/defective but are in service and may cause breakdown/flashover in foggy environment is also being done.

1. **132kV Mogajamalpur line:-** This line is being utilized as link between 132kV Moga and Jamalpur and is kept idle/charged Due to ongoing Covid-19 pandemic, only 50% strength of the staff was called for duties. Further, due to the restrictions imposed due to Lockdown, hurdles were faced in the movement of Manpower and machinery resulting in increased response time for attending the fault.
2. **220kV Moga Bagapurana ckt-2:-** The delay in attending the fault of this line is more due to collapse of towers of 132kV Gholian Kalan line which is the only single source supply to 132kV Gholian Kalan, and Smad Bhai, TL gang was engaged to restore the supply of two Grids i.e 132kV Gholian kalan and Smad Bhai by installing the ERS towers. After energising the circuit through ERS tower the breakdown of 220KV Moga Baghapurana was attended as no supply was affected due to this outage. Further, due to the restrictions imposed due to Lockdown, hurdles were faced in the movement of Manpower and machinery resulting in increased response time for attending the fault.
3. **132kV Taran Tarn-Patti line, In the 2nd quarter the delay in attending the fault of 132kV Sarainaga-Moga, In the 3rd quarter the delay in attending the fault of 220KV**

Sunam-Jhunir line:- Due to ongoing Covid-19 pandemic, only 50% strength of the staff was called for duties. Further due to the restrictions imposed due to Lockdown, hurdles were faced in the movement of Manpower and machinery resulting in increased response time for attending the fault. Further, no supply was affected due to this outage.

4. **220kV BhariGanguwal line:-** This line was tripped on 28-12-2020 at 23:40 hr due to breakage of isolator assembly along with post insulators of B-phase of Bus Bar-2 at 220kV Ganguwal S/S which is under control of BBMB. Actually, there was no line fault and it was charged on 31-12-2020 at 19:56 hr after clearance from Ganguwal S/S (BBMB Sub-station).

The above delay in attending the breakdown was due to priority given to attending the breakdown of important circuits/single source supply Sub-station and further it is ensured to the Commission that the efforts will be made to bring down the restoration time of faults on transmission lines.

PSERC Comments & Directive

The Commission notes the reply given by PSTCL and observes that the steps intimated by PSTCL are only routine measures taken for preventive maintenance of lines. The Commission, however, observes that strict adherence to a duly prescribed schedule of such steps/activities is of paramount importance. Accordingly, the Commission directs as under:

a) Duly prescribed maintenance schedule of transmission lines along with a certificate from Director/Technical that such prescribed schedules are being strictly adhered to be furnished within three months from issuance of Tariff Order.
b) The maintenance practices/schedules/technologies being used in other organisations in the country with high transmission availability be studied immediately by constituting a task force for the same and accordingly an action plan to adopt the same in PSTCL be shared with the Commission within six months from issuance of Tariff Order.

The quarterly status report of trippings/breakdowns along with respective summarized investigation report be shared with the Commission.

Directive No. 4.6: Strengthening of the State Load Despatch Centre (SLDC):

PSERC Comments & Directive for FY 2021-22:

The Commission has notified the Forecasting, Scheduling and Deviations Settlement Mechanism for Wind and Solar generators dated 7th January, 2019. The detailed procedure was also approved by the Commission on 23.09.2019. The forecasting and scheduling was to come into force six months from the date of notification but keeping in view the difficulties, the date was extended firstly to 01.01.2020, then to 01.01.2021 and now to 01.01.2022. The Intra-state DSM Regulations have also been notified on 10.09.2020 and the Detailed Operating Procedure for Energy Accounting and Deviation Settlement of State Entities also stands approved by the Commission on 25.02.2021. However, the commercial mechanism has not yet come into effect due to non-implementation of SAMSAT. The Commission directs PSTCL to submit a monthly status report in respect of the implementation of SAMSAT scheme and also to start scheduling of RE generators connected to the Intra-State Transmission System.

Reply of PSTCL:

As per the decision taken in 66th meeting of BoDs, a committee has been formed to study the CABIL report implemented by other state utilities and the report/ decision of the committee is awaited.

The monthly status report in respect of implementation of SAMAST scheme in Punjab has been supplied to the Commission.

PSERC Comments & Directive

The Commission directs that the action points emanating from the study of CABIL Report by the Committee and the action plan to implement such points and other proposals to strengthen the SLDC be shared with the Commission within three months from the issuance of Tariff Order.

Further, while taking note of the monthly status reports of implementation of the SAMAST, the Commission observes that the process of floating tender enquiry and opening of tenders has taken inordinately long time. The Commission directs that all out efforts be made to expeditiously implement the SAMAST and to keep sending monthly status report on the same.

Directive No. 4.7: Capital Expenditure and Capitalisation

PSERC Comments & Directive for FY 2021-22:

PSTCL is directed to submit six monthly details of Capital Expenditure and Capitalization with clear break up between Spill Over Schemes and New Schemes approved for the 2ndMYTPeriod (FY2020-21 to FY2022-23).

Reply of PSTCL:

The information has been furnished by PSTCL.

PSERC Comments & Directive

The commission directs PSTCL to keep submitting the six-monthly details of Capital Expenditure and Capitalization with clear break up between Spill Over Schemes and New Schemes approved for the 2nd MYT Period (FY2020-21 to FY2022-23).

Chapter 5

Determination of Transmission Charges and SLDC Charges

5.1 Annual Revenue Requirement

5.1.1 The Commission has determined the ARR for PSTCL for FY 2022-23 as Rs. 1492.56 Crore, comprising of Rs. 1464.65 Crore for Transmission business and Rs. 27.91 Crore for SLDC business. 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 2022-23.

5.2 Transmission System Capacity

5.2.1 The Commission has determined the Transmission capacity (net) of PSTCL system from the data submitted by PSTCL as 12220.21 MW for FY 2022-23 after excluding the Renewable Generations at 66kV or below.

5.3 Determination of Transmission Tariff

PSERC MYT Regulations, 2019 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

5.4 SLDC Charges or System Operation Charge:

5.4.1 The Commission has approved the ARR of SLDC business for FY 2022-23 at Rs. 27.91 Crore in this Tariff Order. Accordingly, the Commission determines the SLDC Charges or System Operation Charge as under:

Table 145: Monthly SLDC Charges or System Operation Charge

(Rs. Crore/month)

Sr. No.	Particular	New charges w.e.f. 01.04.2022 to 31.03.2023
I	II	III
1.	**SLDC Charges or System Operation Charge**	(27.91/12)= 2.33

5.5 Reactive energy charges:

5.5.1 The reactive energy charges, if any, raised by NRLDC on PSTCL will be recoverable from PSPCL directly by PSTCL.

5.6 Transmission Charges or Network Usage Charges:

5.6.1 The ARR for the Transmission Business of PSTCL has been determined at Rs. 1464.65 Crore for FY 2022-23 in this Tariff Order. Accordingly, the Commission determines the Transmission Charges as under:

Table 146: Transmission Charges

(Rs. Crore/month)

Sr. No.	Particular	New charges w.e.f. 01.04.2022 to 31.03.2023
I	II	III
1.	Transmission Charges	(1464.65/12) = 122.05

5.7 Determination of Open Access Transmission and SLDC Charges

5.7.1 SLDC Operation Charges and Transmission Charges for Open Access customers are determined as per the provisions of Open Access Regulations notified by the Commission.

5.7.2 On the basis of the approved ARR for SLDC business of PSTCL, the SLDC Operation Charges for Open Access customers during FY 2022-23 are determined as under:

Table 147: SLDC Operation Charges for Open Access Customers for FY2022-23

Sr. No.	Particulars	Unit	Quantum
I	II	III	IV
1.	Revenue Requirement (ARR) of SLDC business for FY 2022-23	Rs. Crore	27.91
2.	Transmission System Capacity (net)	MW	12220.21
3.	SLDC Operation Charges for Long Term and Medium Term Open Access customers	Rs./MW/Month	1903.27
4.	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

5.7.3 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 2022-23 are determined as under:

Table 148: Open Access Transmission Charges for FY 2022-23

Sr. No.	Particulars	Unit	Quantum
1.	Revenue Requirement (ARR) of Transmission Business for FY 2022-23	Rs. Crore	1464.65
2.	Transmission System Capacity (net)	MW	12220.21
3.	Transmission Charges for Long Term and Medium Term Open Access customers	Rs./MW/Month	99878.94
4.	Transmission Charges for Short Term Open Access Customers (based on 62459 MkWh of energy input at transmission boundary for sale in the State for FY 2022-23, as approved in Chapter 4 of PSPCL Order for FY 2022-23)	Rs./MWh	234.50

5.8 Date of Effect

The Commission decides to make the revised Transmission Charges and SLDC Charges determined above applicable w.e.f. 1st April, 2022 and these shall remain operative till 31st March, 2023.

This Order is signed and issued by the Punjab State Electricity Regulatory Commission on this day, the 31st March, 2022.

Date: 31st March, 2022

Place: CHANDIGARH

Sd/-	**Sd/-**	**Sd/-**
(Paramjeet Singh)	**(Anjuli Chandra)**	**(Viswajeet Khanna)**
MEMBER	**MEMBER**	**CHAIRPERSON**

Certified

Sd/-
Secretary
Punjab State Electricity Regulatory Commission,
Chandigarh.

ANNEXURE-I

LIST OF OBJECTORS

Objection No.	Name & Address of Objector
1.	Focal Point Industries Association (Regd.50), #35, Focal Point, Mehta Road, Amritsar – 143006
2.	Mandi Gobindgarh Induction Furnace Association (Regd.), Grain Market, Mandi Gobindgarh – 147301 (Punjab)
3.	Cycle Trade Union (Regd), Airi Cycles, 110-111, New Cycle Market, Gill Road, Miller Ganj, Ludhiana- 141003
4.	PSEB Engineers' Association, #45, Ranjit Bhag, Near Mandir, Passey Road, Patiala.
5.	Steel City Furnace Association

ANNEXURE-II

PSTCL - OBJECTIONS

Objection No.1: Focal Point Industries Association

Issue No.2:

PSTCL & PSPCL every year file petition before the Commission to increase electricity tariff. Increasing tariff is not a permanent solution to the problem. Electricity Tariff in Punjab is already very much higher as compared to the adjoining states i.e. HP, Jammu & Kashmir etc. etc. it is suggested that PSTCL & PSPCL should reduce its Transmission losses, Breakdown expenses, improve working by blocking loop holes etc. etc. To take care of these, Corporation should appoint Advisors & auditors of international / national repute without any delay.

Reply of PSTCL:

No comments.

Commission's view:

The Commission decides the Tariff in line with the provisions of the Electricity Act, 2003 and PSERC MYT Regulations.

Issue No.7:

Presently PSPCL is having monopoly for distribution & transmission of electricity. To make ¡t competitive and efficient, at least one more distribution /transmission Company should be allowed to operate in power sector.

Reply of PSTCL: No comments as this point relates to PSPCL.

Commission's view:

The objector may note the response of PSTCL. However, it is clarified that in the State of Punjab the transmission of electricity is done by PSTCL and not PSPCL.

Issue No.1, issue No.3 to 6, Issue No.8 to 15 relates to PSPCL.

Objection No. 2 & 2A: Mandi Gobindgarh Induction Furnace Association

Issue No.1:

PSTCL was constituted in 4/2010 as successor company to the then PSEB to look after transmission assets and since then Transmission losses for PSTCL system were being assumed as 2.5% on notional basis as boundary metering scheme was under implementation. In the ARR of FY 2017-18 for MYT period of FY 2017-18 to FY 2019-20, PSTCL stated that the transmission losses during the period July 16 to March 16 varied between 2.76% to 7.09%. Keeping in view the large scale variations and data being yet to be firmed up, the Commission ordered as under:-

> *"2017-18 to 2019-20*
>
> *As such, the Commission approves the Transmission losses at 2.5%, 2.40% and 2.30% for FY 2017-18, FY 2018-19 and FY 2019-20 respectively. The Commission would revisit the Transmission losses during review/true up for FY 2017-18, FY 2018-19 and FY 2019-20, on the basis of stabilized transmission loss data for full year."*

In the ARR for FY 2018-19, PSTCL submitted the Transmission Loss of 2.80% for FY 2017-18 and 2.60% for FY 2018-19 for approval. In the Tariff Order for FY 2018-19, the Commission decided as under:-

> *2017-18 (RE) 2018-19 (Proj)*
>
> *The Commission observes that although PSTCL has completed Intra-State Boundary metering cum Transmission Level Energy Scheme, the data is yet to be stabilized. The Commission observes that it is allowing the Capital Investment Plan as projected /asked for by PSTCL since last many years and in Petition No. 44 of 2016 for approval of Capital Investment Plan of PSTCL for MYT Control Period has allowed ₹338.29 crore and ₹258.01 crore for FY 2017-18 and FY 2018-19 respectively, which is almost as per the projections made by PSTCL. Thus, there is no reason to deviate from its earlier targets for transmission loss. As such, the Commission provisionally retains the*

transmission loss level at 2.50% for FY 2017-18 and 2.40% for FY 2018-19, as approved in the Tariff Order for FY 2017-18.

In the ARR for FY 2019-20, Transmission loss of 3.12% (actual), 2.80% (RE) and 2.70% (Proj) for FY 2017-18, FY 2018-19 and FY 2019-20 respectively were submitted for approval of the Commission. After analysing the data the Commission decided as under:-

<u>True Up 2017-18</u>

Therefore, the Commission is of the view that the actual transmission loss could not be assessed in the absence of truly stabilised data. As such, the Commission retains the transmission loss at 2.50% as approved in Tariff orderfor FY 2017-18.

<u>RE 2018-19 and Projections 2019-20</u>

As the baseline figure of transmission loss of PSTCL is yet to be ascertained, the Commission is of the view that it would not be fair to fix the trajectory for reduction of transmission loss. As such, the Commission approves the transmission loss level of 2.50% for FY 2018-19 and for FY 2019-20 and it would re-visit the transmission losses on the basis of stabilized transmission loss data for the full year during true up for these years.

Continuing with its earlier approach and in its ARR for the last year i.e. FY 2018-19 (True up), FY 2019-20 (RE and Projections for MYT Control Period FY 2021 to FY 2023 submitted Transmission Loss as 2.86% as per Actuals for FY 2018-19 and 3% for FY 2019-20 to FY 2022-23 for approval. The Commission decided in TO for FY 2020-21 as under:-

<u>True up of 2018-19</u>

"…PSTCL has changed the methodology of calculating the transmission losses from net input/output of energy to gross input/output of energy after the first quarter of FY 2018-19. Therefore the above losses in different months are based on different methodologies. As the true picture of losses for the whole year is not yet available, the Commission decides to consider the transmission loss level of 2.50% for true-up of FY 2018-19, as approved in the Tariff Order for FY 2019-20."

<u>RE for 2019-20</u>

The Commission observes that the actual Transmission loss reported by PSTCL till December of FY 2019-20 is coming to 2.22%. Since losses in the lean months (Jan-March) are observed to be comparatively higher, the Commission decides to provisionally retain the transmission loss level at 2.50% as approved in the Tariff Order of FY 2019-20. The transmission losses for FY 2019-20 shall be revisited based on the data of actual losses for the full year during the True Up of the year.

<u>Projections for MYT period FY 2020-21, 2021-22 and 2022-23</u>

In the Business Plan Order including the Capital Investment Plan dated 03rd December 2019, the Commission has approved the Transmission loss trajectory of reduction of 0.02% every year for 2nd MYT Control Period. The Commission stated that the Transmission losses for the Control Period shall be specified accordingly on the basis the actual losses for FY 2019-20.

The actual losses of FY 2019-20 were not available and accordingly, based on the transmission loss level of 2.50% approved for FY 2019-20 in this Tariff Order, the Commission decided to provisionally set the trajectory in Table 83 for 2nd MYT periosd as 2.48%, 2.46% and 2.44% for FY 2020-21, FY 2021-22 and FY 2022-23 respectively.

In the ARR for FY 2021-22, PSTCL submitted the actual Transmission Loss as 2.217% for FY 2019-20 and 2.143% for first 6 months of FY 2020-21. However, in-spite of actuals being available PSTCL still proposed to retain the trajectory levels of 2.48% and 2.46% for FY 2020-21 and FY 2021-22 respectively. The Commission decided in the Tariff order as under:-

<u>True up for 2019-20</u>

3.3.5 The Commission has observed that PSTCL has revised the methodology of calculating the percentage of transmission losses from gross input/output of energy to net input/output of energy. The absolute value of transmission loss is 1385 MkWH though the percentage has gone to 2.69%.

3.3.6 For true up of FY 2019-20, the Commission approves transmission loss of 1385 MkWH and 2.69% of transmission loss.

RE for 2020-21 and Projections for 2020-21 and 2021-22

4.3.7 The Commission observes that the actual Transmission loss reported by PSTCL till December of FY 2020-21 amounts to 2.47%. Since losses in the lean months (Jan-March) are observed to be comparatively higher, the Commission decides to provisionally retain the transmission loss level at 2.48% and 2.46% for FY 2020-21 and FY 2021-22 respectively as approved in the Tariff Order of FY 2020-21. The transmission losses for FY 2020-21 shall be revisited based on the data of actual losses for the full year during the True Up of the year.

Now in the current ARR, PSTCL has worked out actual transmoossion loss of 2.50% for FY 2020-21 against approved loss target of 2.48%, actual loss of 2.16% for H1 of FY 2021-22 and projected loss levels of 2.46% and 2.44% for FY 2021-22 and FY 2022-23 respectively as per trajectory.

As is evident from the above discussions, there is wide variation in the projections and actuals since the commissioining of Boundary Metering. In fact the trajectory set in FY 2017-18 had to be revised and since then, there is no visibility of any pattern/firmness in the Transmission loss levels and its reduction despite the requiiste capital investments. It is evident that there are some areas where the PSTCL needs to focus.

PSTCL has not offered any reasons for such wide variations in the ARR text but in the reply to Directive No 5.1 has stated that the L-1 bidder has been finalised under SAMASAT scheme and petition is pending for approval of the Commission. Thus the uncertainity will go on now till SAMASAT scheme is implemnted in PSTCL. This needs to be critically reveiwed as PSTCL has failed to show credible results since its formation in April 2010. Consumers can not be loaded with revenue requirments repeatedly for such laxity of the Transco.

The Commission is requested that keeping in view the poor performance of PSTCL, transmission loss level as per trajectory or actuals whichever is lower be approved for PSTCL for these years under consideration since this is a Controlable element of tariff as per PSERC MYT Regulations and boundaty metering has already been commissioned in FY 2017-18 though after 8 long years since PSTCL's formation and 4 years have passed since meters are in place and further, capital expenditure is being approved as required by PSTCL.

It is also requested to revisit provisional loss levels approved by the Commission since FY 2010-11 and grant relief to consumers.Consumers were made liable for coal washing charges of PSPCL alongwith interest for previous period and on the same principles, they are entitled to relief on this count.

Reply of PSTCL:

PSTCL network (400kV/22OkV/132kV) Transmission losses are evaluated as per the energy data, of various ABT/CEM meters installed at different locations of Grid/Substations of PSTCL. The data of meters is being downloaded through CMRI. The IT section of PSTCL has developed online portal for uploading of CMRI data and monthly PSTCL Transmission losses are being calculated by software to minimize any error in data. PSTCL transmission losses have improved from 4.239% in FY 2016-17 to 2.50% in FY 2020-21 as below:-

Year	**PSTCL Transmission Loses (in %)**
2016-17	4.239
2017-18	3.118
2018-19	2.86
2019-20	2.694
2020-21	2.50
2021-22	2.30 (up to Dec 21)

Further, SLDC calculates transmission loss figure based upon actual meter data. During filing of the True up Petition, the actual calculated transmission loss figure of the relative financial year is taken.

Commission's view:

The objector may note the response of PSTCL. However, it is further clarified that the Commission approves the loss trajectory keeping in view the relevant provisions of the MYT Regulations.

Issue No. 2 to 5: Equity and Return on Equity

A) The equity of GOP in the then PSEB was Rs 2806.11 Crore as per first Tariff Order issued by the Commission as under:-

> *6.10. EQUITY AND RETURN ON EQUITY*
> *The Government of Punjab has declared the PSEB as a body corporate with a Capital of Rs. 5 crores with effect from 10th Mach 1987 under Section 12A of Electricity (Supply) Act 1948 and converted Rs. 1612 crores representing Government loans granted upto 3/90 into equity during 1991-92 and Rs.1189.11 crores representing 50% of loans granted during 1990-91 to 1994-95 in 1996-97. The total State Government Equity in PSEB is Rs.2806.11 Crores.*

This equity was only and only by conversion of GOP Loans. However no ROE was provided on the same in Tariff Order for FY 2002-03 and after till FY 2005-06 by the Commission under Electricity Regulatory Commissions Act, 1998 and Electricity (Supply) Act 1948 and only 3% Return on Net Fixed Assets were allowed. The GOP loans given to the then PSEB got converted into equity on different occasions by the then PSEB management(s) to reduce loan liability in its Books and to escape liability of payment of Interest on such loans and loan installments to insulate consumers from increase in tariff prior to setting up of Regulatory regime. Return on Equity of Rs 412.46 Crore per year was allowed only from FY 2006-07 onwards as per Para 4.15 of TO.

On formation of PSPCL and PSTCL on 16.4.2010, provisional FRP and transfer scheme was issued by GOP as per which the then existing equity of Rs. 2946.11 Crore was divided into two successor entities as Rs. 2617.61 Crore for PSPCL and Rs. 328.50 Crore for PSTCL and ROE was allowed separately as Rs. 366.47 Crore and Rs 45.99 Crore for PSPCL and PSTCL respectively.

GOP finalised FRP and Transfer scheme and notified the same on 24.12.2012 as per which an amount of of Rs. 3132.35 Crore standing in the books of PSEB on 15.4.2010 under the head "Consumer Contributions & Govt Grants" and some other amounts were converted into equity of GOP and the same was admitted by the Commission as well. Thus, the equity of PSPCL was enhanced from Rs. 2617.61 Crore to Rs. 6081.43 Crore (Para 3.16 of TO 2013-14) and of PSTCL from Rs. 328.50 Crore to Rs. 605.83 Crore (Para 3.10 of TO 2013-14). Thus the total equity of PSTCL was increased from Rs. 328.50 Crore to Rs. 605.83 Crore.

PSTCL has been proposing funding of Capital Expenditure with normative 30% equity and 70% funding in the ARRs starting from FY 2017-18 by manipulating MYT Regulations though ARR figures clearly show that PSTCL is funding this equity contribution through loans or alleged reinvestment/redeployment of "Return on Equity" (read "Profit")vof the previous period. It is being pointed out that this ROE belongs to the GOP to which this equity belongs. Further, the issued and subscribed share capital as on 31.03.2018, 31.03.2019, 31.03.2020 and 31.03.2021 remained same i.e. Rs. 605.88 Crore in the Audited Annual Financial Statements of the respective years attached with ARRs. Thus neither there was any investment in equity nor equity shares were issued to GOP.The Profit and Loss statement for these years supplied with the ARRs indicated that PSTCL incurred net profit of Rs. 4.03 Crore during FY 2017-18, net loss of Rs. 8.23 Crore during FY 2018-19, net loss of Rs. 34.96 Crore during FY 2019-20 and Profit of Rs 20.66 Crore during FY 2020-21 respectively. There are no free reserves as per Annual Financial Statements. No liability of Income tax is shown since cumulatively PSTCL is still under loss.

Tariff order for FY 2019-20 revealed that the Commission allowed addition in equity of Rs. 96.92 Crore (30% of capex) in True up of FY 2017-18 raising the equity of GOP from Rs. 605.88 Crore to Rs. 702.80 Crore without any cash flow. The amount was further revised to Rs 705.71 Crore subsequently. This is clearly wrong as the amount was not invested in cash by GOP and funding was through redeployment of profit of Rs 4.03 Crore earned during the year and balance through loan based on the trued up capex. In fact the entity was in loss cumulatively and it can not redeploy even this Rs 4.03 Crore and loans can not be redeployed as equity. The system is being mis-utilised by the Licensee to earn about 7% of difference of interest rate of loan (8% to 9%) and ROE rate of 15.5%. ROE could be retained by a company to meet losses, if in loss or to pay dividends, if in profit. In True up of FY 2018-19 PSTCL's demand seeking equity addition of Rs. 73.58 Crore was rejected by the Commission and ROE of Rs 109.38 Crore was allowed in TO for FY 2021-22 for all the three years of FY 2019-20 (TU), FY 2020-21 (RE) and FY 2021-22.

In the true up of FY 2020-21, PSTCL has again raised demand for addition in the equity based on the redeployment of profit of Rs. 20.68 Crore and increased equity from Rs. 705.70 Crore to Rs. 726.38 Crore. The Commission is requested to reject the argument of PSTCL and allow this amount in the capex loan of PSTCL.

Total equity of PSTCL be withdrawn since there is no cash flow from GOP and all the amounts shown are infact loans taken at 7% to 12% while consumers are being made to pay 15.5% to 16.5% ROE on the same. The case of consumer contribution and GOP grants converted into equity through FRP/Transfer scheme is even more worse for consumers since these amounts were not bearing any interest but after conversion into equity, PSPCL and PSTCL have started earning ROE of around 16% on the same since 16.04.2010 which is nothing but fleecing of the consumers by wrongly interpreting the Regulations. Electricty Act, 2003 casts a duty on the the Commission to protect the interest of consumers as well.

B) PSPCL has itself admitted that gross fixed assets (Capital funding) 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."*

Thus, equity shown in TO for FY 2002-03 is conversion of loans only through paper transanctions and it can not be counted for ROE.

C) The Commission lowered the Interest on Security (Consumption) of consumers from SBI rate plus 2% to RBI rate to lower the ARR of PSPCL though the interest was ultimately paid upfront by consumers in tariff and received back at the close of year. However, the Commission has allowed PSTCL to earn ROE merely by relocating the figures from Loan to equity and this amount is just being retained by PSTCL for meeting unapproved expenditure without regulatory scrutiny. Moreover, the practice which was illegal beyond and after MYT period can not become legal for one year.

D) ROE on Consumer Contribution and GOP Grants etc was challenged before the Hon'ble APTEL by some consumers which has decided interalia that GOP can hold any amount of equity in the Licensee' capital funding but ROE can be given only on the amount duly subscribed (in Cash) and for which shares are duly issued. The Order has been challenged by PSPCL and GOP in Supreme Court and Stay has been granted but the final decision on the same is yet to come. The conversion is also objected by CAG in their audit reports holding that the conversion is against the financial principles.

3. Forum of Regulators constituted a sub group for study of ways to reduce retail tariff and a report was prepared on "ANALYSIS OF FACTORS IMPACTING RETAIL TARIFF AND MEASURES TO ADDRESS THEM" (2020) which 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 istribution revealed that the post-tax RoE has been in the range of 14% - 16%. An analysis was also made regarding the prevailing cost of debt and it was found that the lending rate has been on the lower side for quite some time. While the RoE has an element of risk premium, the data analysis revealed the need for reconsidering the RoE keeping in view the prevailing prime lending rate and 10 - year G-Sec rate.*

Further, on Return on Equity, the sub group has stated on page 22 of the report in para 4.1.1, which is reproduced below:

4.1.1. *Return on equity allowed to Generation/ Transmission and distribution companies needs to be made more realistic and at par with interest rates.*

- *RoE for generation and transmission should be linked to the 10 year G Sec rate (average rate for the previous 5 years) plus risk premium subject to a cap as may be decided by appropriate Commission.*
- *For a discom, the RoE could be fixed based on the risk premium assessed by the State Commission. Income tax reimbursement should be limited to the RoE component only.*
- *Performance of Distribution licensees has a significant impact on retail tariff for the consumers. Therefore, there is a need to link recovery of RoE with the performance of the utilities, based on the indicators such as supply availability, network availability, AT&C loss reduction".*

The Commission is requested to implement the above recommendation at the earliest and reduce the rate of ROE to prevailing interest rate only as there is no risk factor involved and the Commission is allowing the justified revenue as per MYT Regulations. Further, all equity shown in the books is either loan or consumer contribution etc.

4. On Regulation 19.2 of MYT Regulations 2019 reproduced in Para 4.7 of ARR is very clear that Sub Reg (d) is subject to Sub Reg (b) and (c) and Paid up capital will include investment from share premium and free reserves for the purpose of equity subject to normative debt equity i.e. only paid up equity will be considered and if it will be 30% or actuals whichever is lower.

PSTCL has to realise that the ROE is being retained by it and not being paid to GOP which has invested the equity. It should result in profit equivalent to ROE amount in the balance sheet of PSTCL whereas it has incurred losses indicating that it is over expanding or working inefficiently and investments are not giving returns as projected. Instead of controlling its expenditure and operating efficiently, it is trying to manipulate the loop holes of the system to earn extra money through ROE which is ultimately going to raise the Tariff for consumers and also the subsidy of GOP. The tariff in Punjab including ED+IDF is already among the highest in the country and still higher tariff will force the consumers to consume less and industry will close down resulting in lower revenue and more increase in tariff.

The Commission is therefore requested to implement the provisions in true letter and spirit and do not allow conversion of loan into equity under these Regulations.

5. As per Balance Sheet for FY 2020-21, PSTCL has Other Equity (Reserves and Surpluses) of Rs. 2232.89 Crore and Equity of Rs 605.88 Crore which works out to 3.69 times the equity amount. Consumers are being made to pay 15.5% ROE on the equity amount whereas Reserves and surplus are not earning any revenue for PSTCL or the consumers. Therefore, PSTCL should explore liquidation of some portion of equity back to GOP so that the burden of ROE is reduced and Tariffs could be lowered,

Reply of PSTCL: PSTCL has claimed the ROE as per MYT Regulations, 2019. During FY 2020-21 additional ROE has been claimed on the profit invested during the year.

Commission's view
The Commission allows ROE in line with the relevant provisions of the MYT Regulations

Issue No. 6:
The input energy at Punjab Periphery for FY 2019-20 (Table T23) has been indicated as 51422 MU. However, PSPCL in its ARR (Table 11) has worked out the energy input at state periphery as 56391 MU. PSPCL has claimed actual Transmission&Distribution Loss of 12.99% and 2.30% for FY 2020-21 though PSTCL has sought loss level of 2.50%. Distribution loss level has been projected as 12.99% against approved level of 12.94%. This needs to be looked into and Energy availability need to reconciled and counted as per actual or approved trajectory separately for Transmission and distribution system.
Reply of PSTCL:
Transmission losses have been calculated taking into account the energy received at interstate-PSTCL Boundary (I-T) and Generating-PSTCL (G-T. Boundary points. However, the energy at state periphery includes energy received at all boundary points of Punjab i.e. Interstate-PSTCL Boundary (I-T), Interstate-PSPCL Boundary (I-D) and Boundary (I-G) points and Generating plants Boundary (Generating-PSTCL (G-T), generating-PSPCL (G-D) points. The difference of Input energy figures in ARR is due to energy considered at additional boundary points by PSPCL.
Commission's view:
The objector may note the response of PSTCL

Issue No.7:
Total Transmission Capacity calculated is 13152 MW, 13955 MW and 13540 MW in Table T22 of ARR for FY 2020-21, FY 2021-22 and FY 2022-23 respectively. As against this the peak demand recorded in FY 2020-21 and FY 2022-23 was 13148 and 13556 respectively. However, the capacity in Punjab SLDC web site under Availability Tab is 13845 MW as on 30.04.2021. Thus with projected demand of around 14000 MW and transmission capacity of 13540 MW, the state is headed for power cut in FY 2022-23. Moreover the new capacity addition of around 1500 MW in FY 2021-22 and FY 2022-23 is of solar and wind power which is infirm power.
Reply of PSTCL:
The State's installed capacity of 13845 MW under availability tab on Punjab SLDC comprises of State's own generation along with the State's share in central sector plants. However, apart from these sources, the state is entitled to procure power from other sources as well including Short Term Open Access (STOA), Indian Energy Exchange (IEX), real Time Market (RTM), Banking, etc. Accordingly, the State is well prepared to meet the upcoming summer demand.
Commission's view:
The objector may note the response of PSTCL. The Commission determines the transmission capacity after excluding the Renewable Generations at 66kV or below.

Issue No.8:
The total contracted capacity of PSPCL in FY 2022-23 is given as 13540 MW in Table T 22. However, transformation capacity of PSTCL on 31.3.2022 is 38922.67 MVA which is 2.874 times the peak demand of 13556 MW met so far / 13540 MW of the contracted capacity.The capital investment plan of PSTCL need to be reviewed and it should be commensurate with the reduction trajectory of Transmission loss to give relief to consumers.PSTCL/SLDC may also be directed to carry out TTC and ATC studies for the state system to determine the safe transfer capacity and publish it on website.
Reply of PSTCL: The transformation capacity of PSTCL, which is 38922.67 MVA is basically the sum total of all transformers installed in PSTCL network. The same includes transformers at 400/220 kV, 220/132 kV, 220/66 kV, 132/66kV, 132/11 kV voltage levels etc. The same is not to be compared with the load catering capacity of the State. Most of the 132 kV & below level transformers form a part of the underlying transmission system for the existing 220kV

transmission system. Similarly, some of 220kV & below level transformers form a part of the underlying transmission system for existing 400 kV transmission system. Subsequently, the same are already included in the 400kV & 220kV transformation capacities. Further, the load catering capacity of the state is sum of state's own generation and the ATC (outside drawl) values of the state power system. Furthermore, it is submitted that the ATC limits are evaluated judiciously by Punjab SLDC and the same are being verified/ validated by NRLDC after carrying out thorough load flow studies for the sake of safe & secure operation of the grid.

Commission's view:

The objector may note the response of PSTCL

Issue no.9:

As brought out on Page 19-21 and 51-55 of current ARR, PSTCL has some reservation on net or gross employee cost for calculation of Employee cost. PSTCL has worked out the Employee Cost as per practice adopted by the Commission. However, PSPCL has not raised any such issue in its Generation, Distribution and Retail Supply ARR. This issue was raised by PSTCL last year also but was not agreed to by the Commisison and as submitted by PSPCL in these paras of ARR. Now PSTCL is reserving its right to claim difference on the outcome of Appeal filed in Hon'ble APTEL. The Commission is requested to implement MYT Regulations as these have attained finality since no Appeal has been filed on MYT regulations by PSTCL in High Court.Matter needs to be perused vigorously in the Hon'ble APTEL.

The Commission should also file SLP's in Hon'ble Supreme Court in cases where its orders are reversed by the Hon'ble APTEL as is being done by PSPCL/PSTCL who are approaching the Hon'ble Supreme Court against the Commission.

Reply of PSTCL:

PSTCL has worked out the normative O&M expenses (including employee expenses) for FY 2020-21, FY 2021-22 and FY 2022-23 on the basis of MYT Regulations, 2019. PSTCL has claimed the normative O&M expenses (including employee expenses) in Truing-up of FY 2020-21. The approach is in accordance with the methodology adopted by the Commission in previous Truing-up Orders.

Commission's view:

The Employee Expenses are approved in line with the relevant provisions of the MYT Regulations.

Issue No.10:

Year wise Non-Tariff income figures in Format T28 for all years, T-1 for FY 2021-22 and FY 2022-23 and figures in tables of Para 2.13 and 3.13 of ARR are not tallying. Further, Non-Tariff Income for FY 2022-23 need to be increased on normative basis.

Licensee has to understand that the exercise of ARR and determination of tariff is not an exercise to recover each and every expenditure from the consumers but only legitimate and justified revenue requirement as permissible under MYT regulations. PSTCL has to realise that the ultimate tariff payable by consumers cannot be increased infinitely and it has to be competitive with regard to neighbouring states. The Commission is requested to allow only prudent costs and revenue requirement strictly in accordance with MYT Regulations.

Reply of PSTCL:

PSTCL has claimed Non-tariff income as per PSERC MYT Regulations, 2019 and as per approach adopted by the Commission in previous years. The details of Non-Tariff Income are as per Table no. 24 of Petition.

Commission's view:

The Non-tariff income along with other components of ARR is allowed in line with the relevant provisions of the MYT Regulations

Objection No.3: Cycle Trade Union

Issue:
PSPCL lists of Rs. 125 Crore deficit before the Commission seems to be inflated, enhanced, created as well as fabricated figures shown in the petition without the production of original Audited Certified balance sheets of PSPCL & PSTCL to check their in depth truth of Deficits & irregularities. Moreover, the tariff as well as fixed charges of Punjab are already unbearable. If PSPCL & PSTCL can't control their inventories and losses as desired the same should be handed over to the private players as is done by the Central Government.

Reply of PSTCL
The issues raised by Cycle Trade Union mostly relates to PSPCL. However, PSTCL would like to submit that PSTCL has filed True up of FY 2020-21 based on the numbers reflecting in the audited accounts. Further it had also controlled its Transmission losses from previous years.

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

OBJECTION No 4 - (PSEB Engineers' Association)

1. Page 12 Para 2.2 Table -1 description

In case of majority of 220 kV substation of PSTCL there is provision for one or more 220/66 kV power transformers, of 100 MVA or 160 MVA which gives supply to 66 kV grid substation of PSPCL in the vicinity the main elements of a typical 220 kV substation are

a) Incoming / outgoing 220 kV lines
b) 220 kV busbars
c) 220/66 kV power transformers
d) 66 kV busbars
e) 66 kV switchgear (circuit breakers) giving supply to outgoing 66 kV lines.

All the equipments elements (a) to (e) above are a part of 220 kV substations, i.e. PSTCL jurisdiction. The interface point or boundary between PSTCL and PSPCL is the substation gantry from where the first span of 66 kV outgoing lines begins. Alternately it can be stated that the jurisdiction of 66 kV line ends at the substation gantry at which the line ends. Thus, 66 kV bus bars and 66 kV switchgears be installed as part of 220 kV jurisdictions.

It is concluded that 66 kV switchgear and 66 kV bays located in premises of 220 kV PSTCL substations become a part of PSTCL jurisdiction while PSPCL jurisdiction begins from the substation gantry from where 66 kV line starts.

The table -1 (Page 12) gives the data of transmission bays as under as on 01-04-2020

400 kV	72
220 kV	703
132 kV	505
Total	1280

However, the 66 kV bays and switchgear located within the premises/ boundary of 220 kV substation become a part of substation and hence part of PSTCL system. The operation and maintenance of 66 kV switchgear is carried out by PSTCL personnel. The position of transmission bays needs to be corrected to include 66 kV bays located within 220 kV substation premises as under:

400	72
220	703
132	505
66	1205

Reply of PSTCL:
Page 12 para 2.2 Table 1 – 66KV Bays has been cross checked and total no of 66KV (1196) and 33KV(12) bays are 1208 no as on 01/04/2020**.**
Commission's view
Objector may note the reply of PSTCL.

Issue No.2:
O&M charges as per CERC norms.
In case of PSTCL O&M expenses have been worked out for FY 2020-21 on the following principle/ methodology.

a) Employee expenses
b) R&M expenses
c) Administration & General

Total O&M

While this procedure is based on cost-plus approach CERC has adopted normative approach with O&M norms specified for following equipment / assets

a) Substation bays (voltage wise)
b) Transformers MVA
c) Transmission lines with categorization based on
  i) Single or double circuit
  ii) Single or twin conductor as under for 2021

Rs. Lac/km/year

Single Circuit	Single conductor	0.26
Single circuit	Twin conductor	0.521
Double Circuit	Twin conductor	0.977
Double circuit	Single conductor	.419

2.1 O&M as per CERC norms.

Qty.	Description	Norm	Amount
360 km	400 kV Line S/C	0.521	1.88
1442	400 kV Line double	0.912	12.15
38187	S/S MVA	0.312	119
4235	220 kV line S/C	0.260	11.01
3629	220 kV line S/C	0.391	14.19
2494	132 kV line S/C	.260	6.48
599	132 kV line D/C	.391	2.34

Substation Bays

	400 kV	220 kV	132 kV	66 kV
Nos	72	703	505	1205
Norm	33.28	23.30	16.64	16.64
Rs. Crore	23.96	163.8	84.03	200.5

Total O&M of substation
Bays = 472.29 crore
Overall O&M Charges as per CERC = 640.34 crore

Thus, as against Rs. 589.84 crore claimed by PSTCL for O&M (true up FY 2020-21) CERC norms result in O&M of Rs. 640.34 crore.

Reply of PSTCL:
PSTCL appreciates objector's comparison of applicable O&M cost according to CERC norms. Further action has to be taken by the Commission.

Commission's view:
The O&M expenses are allowed by the Commission in line with the relevant provisions of the MYT Regulations after prudence check.

Issue No.3:
Transmission system availability Para 2.3, Table 2
The availability of transmission system during 2020-21 is shown as 99.8324%. Since this availability is much higher than the normative target of 99% (i.e. over achievement), vide table 26 page 37 PSTCL has claimed incentive of Rs. 9.88 crore. In this regard following suggestions are submitted:
Firstly, PSTCL may give a list of 220 kV or 400 kV line outage for FY 2020-21 which are having duration more than 2 days. Only forced outage may be tabulated. The tabulation may be as under

Summary of forced outage of 220 kV or 400 kV lines > 2 days.

Sr. No.	Line under forced outage	Period of forced outage

This tabulation would give a practice and factual summary of outage duration during the year.
Secondly, incentive of Rs. 9.88 Crore may be utilized to procure critical spares for the transmission lines and substations of spillage. There spends could be maintained at any central location in Punjab which could be used for replacements at any substation or line as per requirement.
Reply of PSTCL:
PSTCL will abide the Regulations made on this account.
Commission's view:
The suggestions made by the objectors are noted. PSTCL to provide forced outage details separately.

Issue No.4:
At para 12, table -1 of the petition it is given that 400 kV lines are of 1599.75 circuit km whereas the data of NRLDC does not match.

The NRLDC data is as under

	Single Circuit	**Double Circuit**	**Double circuit km**
Amritsar-Makhu	-	64	128
Muktsar-Makhu	-	96	192
Nakodar-Makhu	-	52	104
Nakodar-Moga	78	-	-
Rajpura-Dhuri	-	86	172
Rajpura-Rajpura Thermal	-	9	18
Rajpura-Nakodar	-	139	278
T.Sabo-Dhuri	-	175	350
T.Sabo-Moga	102	-	-
T.Sabo-Nakodar	180	-	-
T.Sabo-Muktsar	-	100	200
TOTAL	360	721	1442

Total circuit km of PSTCL 400 kV lines as per NRLDC data = 360+1442=1802

Length as per PSTCL = 1599.75
The PSTCL data may be cross checked with NRLDC figures

Reply of PSTCL:

Para 12, table 1 – 400KV line KM has been cross checked and it is 1599.75KM as on 01/04/2020.

Commission's view:

The objector may note the response of PSTCL.

Issue No.5:

Manpower requirement for new 400 kV substation - page 51
The petition states about commissioning schedule of new 400 kV substation Bahaman Jassa Singh and Dhanansu in FY 2021-22 (3 months) & FY 2022-23 (9 months) However, the staff is required to be posted at least 6 months in advance and put through on job training at bay of 400 kV substation of PSTCL and the prior on job training is absolutely necessary.

Reply of PSTCL:

Noted the suggestion.

Commission's view:

The objector may note the response of PSTCL.

Issue No.6:

O&M norms of CERC have been notified for 5 years period FY 2019-24 and the norms, year wise, have an escalating trend as under. The norms of FY 2020-21, FY 2021-22 and FY 2022-23 are compared as under.

	2020-21	**2021-22**	**2022-23**
400 kV bays	33.28	34.45	35.66
220 kV bays	23.30	24.12	24.93
132 kV and below	16.64	17.23	17.83

(figures above in Rs. Lac per bay per year) Transformer MVA (Rs. /MVA/year)

	2020-21	**2021-22**	**2022-23**
400 kV	.371	.384	.398
220 kV	.254	.263	.272
132 kV & Above	.254	.263	.272

Transmission lines (norms of double circuit line, with twin conductor) in Rs. Lac per ckt. Km.

	2020-21	**2021-22**	**2022-23**
Double circuit, twin conductor	.912	.944	.977

The CERC norms have an annual escalation trend of 3.5% per year for Substation bays, Transformer MVA and the Transmission lines. The O&M charges as per PSTCL petition are as under.

	2020-21	**2021-22**	**2022-23**
ARR Figure O&M	589.85 CR	673.92 CR	739 CR

Reply of PSTCL:

PSTCL has worked out the normative O&M expenses (including employee expenses) for FY 2020-21, FY 2021-22 and FY 2022-23 on the basis of MYT Regulations, 2019. PSTCL has claimed the normative O&M expenses (including employee expenses) in Truing-up of FY 2020-21. The approach is in accordance with the methodology adopted by the Commission in MYT Regulation 2019.

Commission's view:

The O&M expenses are allowed by the Commission in line with relevant provisions of the MYT Regulations after prudence check.

Issue No.7:

Income from O&M of PGCIL bays.

At Table 24, page 34-35 of the Petition it has been stated that Rs. 7.51 Crore is the income from PGCIL on account of O&M by PSTCL done for PGCIL bays. The details and particulars of PGCIL bays that are being maintained by PSTCL may be given.

Reply of PSTCL:

The detail of PGCIL bays that are being maintained by PSTCL is as under:-

1. 9 NO. 220KV Bays at Sarna and Dasuya Sub-station
2. 2 No. 400KV Bays at Nakodar Sub-station
3. 2 No. 400KV Bays at Rajpura Sub-station

Commission's view:

The objector may note the response of PSTCL.

Issue No.8:

a) For FY 2020-21 the addition of 185 MVA in substation capacity has been stated for H1 22 and 540 MVA addition during H2. The particulars of these additions may please be stated.
b) For FY 2022-23 table 30 indicates that 1600 MVA capacity will be added. The particulars of 1600 MVA transformers proposed to be added in FY 2022-23 may please be given.

Reply of PSTCL:

Annexure-I

(a) Particulars of the additions during H2 of 570 MVA is as under:

S.No.	Name of S/S	Description	Addition (MVA)
1	220 kV S/S Jadla	Additional 100 MVA 220/66 kV T/F	100
2	220 kV S/S Mohali	Augmentation of 100 MVA 220/66 kV T/F to 160 MVA	60
3	220 kV S/S Pakhowal	Augmentation of 100 MVA 220/66 kV T/F to 160 MVA	60
4	220 kV S/S Tibber	Additional 100 MVA 220/66 kV T/F	100
5	220 kV S/S Bhawanigarh	Additional 100 MVA 220/66 kV T/F	100
6	220 kV S/S Majra	Additional 100 MVA 220/66 kV T/F	100
7	132 kV S/S Panjgrain	Augmentation of 10/12.5 MVA to 20 MVA	7.5
8	132 kV S/S IGC Bathinda	Augmentation of 10/12.5 MVA to 20 MVA	7.5
9	132 kV S/S Phillaur	Augmentation of 10/12.5 MVA to 20 MVA	7.5
10	132 kV S/S Bhikhiwind	Augmentation of 10/12.5 MVA to 20 MVA	7.5
11	132 kV S/S Kapurthala	Additional 20 MVA, 132/11 kV T/F	20
Total			**570 MVA**

(b) The particulars of 1600 MVA transformers proposed to be added in FY 2022-23 is as below:

S.No.	Name of S/S	Description	Addition (MVA)
1	400 kV S/S Rajpura	1 No. Additional 500 MVA, 400/220 kV T/F	500
2	220 kV S/S Nawanpind (New)	2 No. 100 MVA 220/66 kV T/F	200
3	220 kV S/S Gurdaspur (New)	2 No. 100 MVA 220/66 kV T/F	200

4	220 kV S/S Singhawala	1 No. Additional 100 MVA, 220/66 kV T/F	100
5	220 kV S/S Badshahpur	1 No. Additional 100 MVA, 220/66 kV T/F	100
6	220 kV S/S Naraingarh	1 No. Additional 100 MVA, 220/66 kV T/F	100
7	220 kV S/S Banga	1 No. Additional 100 MVA, 220/66 kV T/F	100
8	220 kV S/S BadhniKalan	1 No. Additional 100 MVA, 220/66 kV T/F	100
9	220 kV S/S Civil line Amritsar	1 No. Additional 100 MVA, 220/132 kV T/F	100
10	132 kV S/S Verka	Additional 20 MVA, 132/11 kV T/F	20
11	132 kV S/S Gurdaspur	Additional 20 MVA, 132/11 kV T/F	20
12	132 kV S/S Hargobindpur	Additional 20 MVA, 132/11 kV T/F	20
13	132 kV S/S Tangra	Additional 12.5 MVA, 132/11 kV T/F	12.5
14	132 kV S/S Samadbhai	Additional 12.5 MVA, 132/11 kV T/F	12.5
15	132 kV S/S Faridkot	Augmentation of 12.5 MVA to 20 MVA, 132/11 kV T/F	7.5
16	132 kV S/S Ferozshah	Augmentation of 12.5 MVA to 20 MVA, 132/11 kV T/F	7.5
Total			**1600**

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

Issue No.9:
At page 91, Format T-6 of the Petition the total manpower (actual), and comparison with sanctioned strength has been given as under.

	2020-21	**2021-22**	**2022-23**
Working strength at beginning of year	2731	2523	2646
Sanctioned strength	5130	5159	5159
%age	53%	49%	51%

Reply of PSTCL:
Management is making efforts to fill the vacant posts as per requirement (recruitment/outsourcing).
Commission's view:
The objector may note the response of PSTCL

Issue No.10:
The amount of capital expenditure/ capitalization achieved for various items has been given in format T-15. The details of capital works executed as per list below may please be supplied. For example at Sr. no. 4, page 102 it is shown that at 400 kV substation Makhu there was a capitalization of Rs. 30.77 Crore but the details regarding the expenditure are not given. It is not known whether the amount was on account of switchgear or line or bldg/land.
The particulars of works may please be supplied on which the expenditure (capitalization) has been done as per list below.

Sr.	Substation	Amount (Cr.)	Particulars of capitalization
4	400 kV Makhu	30.77	Capitalization 21-22
5	220 KV Dhandari	3.07	Capitalization 21-22
9	220 kV Sadiq	9.61	Capitalization upto 19-20
10	220 kV Bajakhana	8.86	Capitalized 21-22
12	220 kV Sarai Nagar	12.24	Capitalized 22-23
14	220 kV Sherpur	11.69	Capitalized 22-23
16	220 kVBudhladha	22.58	Capitalized 22-23
18	400 kV Dhanansu	30.89	Capitalized 22-23
19	400 kV Dhanansu	40.0	Capitalized 22-23
20	400 kV Doraha	18.34	Capitalized 22-23
23	220 kV Doraha	24.10	Capitalized 22-23
25	220 kV Ikloha	10.83	Capitalized 22-23
26	440 KV Patran	24.21	Capitalized 22-23
29	220 kV Gaunsgarh	20.03	Capitalized 22-23
35	220 kV BOtianwala	8.41	Capitalized 22-23
36	220 kV Majitha	5.45	Capitalized 22-23
44	220 kV Jalandhar –Kartarpur	5.00	Capitalized 22-23
49	400 kV Nakodar	11.55	Capitalized 22-23
51	220 kV Beas	18.27	Capitalized 22-23
57	220 kV Patti	8.68	Capitalized 21-22
59	220 kV Dhandari	6.06	Capitalized 21-22
		8.08	Capitalized 22-23
62	400 kV Rajpura	17.50	Capitalized 20-21
	400 kV Rajpura	24.57	Capitalized 22-23
77	Banga	5.21	Capitalized 22-23
87	Nawanpind	15.74	Capitalized 22-23
93	Transformer	15.0	Capitalized 22-23
95	220 kV Jhoke-H	16.5	
103	220 kV Singhwal	3.56	Capitalized 22-23
107	220 kV Mohali	8.91	Capitalized 22-23
116	220 kV Pakhowal	7.59	Capitalized 21-22
133	220 kV	8.07	Capitalized 21-22
134	220 kV	7.36	Capitalized 22-23
136	220 kV	13.00	Capitalized 22-23
138	220 kV Rajpura Kohara	25.0	Capitalized 22-23
139	220 kV Addl. TFs	37.14	Capitalized 22-23
140	Kot Kapura-1	3.48	Capitalized 22-23
141	132 kV Bilaspur	2.58	Capitalized 22-23
142	132 kV Nawanshahar	2.91	Capitalized 22-23
143	132 kV Kapurthala	5.35	Capitalized 22-23
147	IGC Bathinda	2.46	Capitalized 22-23
153	GT Road Amritsar	16.87	Capitalized 21-22
	GT Road Amritsar	5.99	Capitalized 22-23

Reply of PSTCL:

The particulars of works on which the expenditure (capitalization) has been done is as per list below:

Sr.	Substation	Amount (Cr.)	Particulars of capitalization	Particulars of work
4	400 kV Makhu	30.77	Capitalization 21-22	Equipment.
5	220 KV Dhandari	3.07	Capitalization 21-22	Equipment.
9	220 kV Sadiq	9.61	Capitalization upto 19-20	Equipment.
10	220 kV Bajakhana	8.86	Capitalized 21-22	Equipment.
12	220 kV Banga (wrongly mentioned as Sarai Nagar in PSEBEA Comments)	12.24	Capitalized 22-23	Equipment.
14	220 kV Sherpur	11.69	Capitalized 22-23	Equipment.
16	220 kVBudhladha	22.58	Capitalized 22-23	Equipment.
18	400 kV Dhanansu	30.89	Capitalized 22-23	Equipment + Land.
19	400 kV Dhanansu	40.0	Capitalized 22-23	Line.
20	400 kV Doraha	18.34	Capitalized 22-23	Equipment.
23	220 kV Doraha	24.10	Capitalized 22-23	Line.
25	220 kV Ikloha	10.83	Capitalized 22-23	Equipment.
26	440 KV Patran	24.21	Capitalized 22-23	Line.
29	220 kV Gaunsgarh	20.03	Capitalized 22-23	Line.
35	220 kV Botianwala	8.41	Capitalized 22-23	Equipment.
36	220 kV Majitha	5.45	Capitalized 22-23	Equipment.
44	220 kV Jalandhar - Kartarpur	5.00	Capitalized 22-23	Line.
49	400 kV Nakodar	11.55	Capitalized 22-23	Equipment.
51	220 kV Beas	18.27	Capitalized 22-23	Line.
57	220 kV Patti	8.68	Capitalized 21-22	Equipment.
59	220 kV Dhandari	6.06	Capitalized 21-22	Equipment.
		8.08	Capitalized 22-23	Equipment.
62	400 kV Rajpura	17.50	Capitalized 20-21	Equipment.
	400 kV Rajpura	24.57	Capitalized 22-23	Equipment.
77	Banga	5.21	Capitalized 22-23	Equipment.
87	Nawanpind	15.74	Capitalized 22-23	Equipment.
93	Transformer	15.0	Capitalized 22-23	Equipment.
95	220 kV Jhoke-H	16.5		Equipment.
103	220 kV Singhwal	3.56	Capitalized 22-23	Equipment.
107	220 kV Mohali	8.91	Capitalized 22-23	Equipment.
116	220 kV Pakhowal	7.59	Capitalized 21-22	Equipment.
133	220 kV	8.07	Capitalized 21-22	Equipment.
134	220 kV	7.36	Capitalized 22-23	Equipment.
136	220 kV	13.00	Capitalized 22-23	Equipment.
138	220 kV RajpuraKohara	25.0	Capitalized 22-23	Line.
139	220 kV Addl. TFs	37.14	Capitalized 22-23	Equipment.
140	Kot Kapura-1	3.48	Capitalized 22-23	Equipment.
141	132 kV Bilaspur	2.58	Capitalized 22-23	Equipment.
142	132 kV Nawanshahar	2.91	Capitalized 22-23	Equipment.
143	132 kV Kapurthala	5.35	Capitalized 22-23	Equipment.
147	IGC Bathinda	2.46	Capitalized 22-23	Equipment.
153	GT Road Amritsar	16.87	Capitalized 21-22	Line.
	GT Road Amritsar	5.99	Capitalized 22-23	Line.

Equipment includes Transformers, Circuit Breaker, PT, and LA, bus bar erection, civil foundation of equipments and construction/extension of building and other electrical accessories.

Commission's view:

The objector may note the response of PSTCL

Issue No.11:

In Format T-20 page 135 At Sr. no. 3 "Number of bays", the number of 66 kV bays (installed within 220 kV or 400 kV substation of PSTCL) has not been included, whereas O&M of these bays is done by PSTCL.

Reply of PSTCL:

66KV Bays has been cross checked and total no of 66KV (1196) and 33KV(12) bays are 1208 no as on 01/04/2020**.**

Commission's view:

The objector may note the response of PSTCL

Issue No.12:

a) Against Mundra UMPP, capacity allocation to Punjab is shown as 475 MW. However, the actual capacity being supplied is not 475 MW but some lower figure on account of commercial dispute. The present position for FY 2022-23 may be obtained and adopted in the column at page 139.

b) In the table given at page 139 (PSTCL petition) the following data may be cross checked/ verified from PSPCL.

Parbati-II NHPL	79.04
Subsnsri NHPC	15.81
SECI Hybrid	800
NTPC Solar	300
SECI Solar	30
SECI Wind	360

Reply of PSTCL:

With effect from March, 2021, CGPL has been declaring less availability and had finally ceased operations of Mundra Power Plant from 18.09.2021 onwards alleging financial distress owing to Indonesia Coal Regulations. Presently, CGPL is not supplying any Power to PSPCL. The present position for FY 2022-23 cannot be ascertained as CGPL has ceased operations of Mundra Power Plant. In this regard, PSPCL is going to file a Petition against CGPL shortly.

Commission's view:

The objector may note the response of PSTCL.

Issue No.13:

At Page 166, from T40 the following power transformers failures have been listed.

220 kV Substation	8 Nos.	2020-21
	3 Nos.	2021-22
132 kV Substation	1 No.	2020-21
	4 Nos.	2021-22

The details / particulars of above power transformers which failed may be supplied by PSTCL.

Reply of PSTCL:

The detail of Failure Transformer is as under:-

FY 2020-21			
Sr. No.	**Name of S/S**	**Detail of T/F**	**Date of Damage**
1	220KV Ferozepur	16/20MVA, 132/11KV	04/05/2020
2	220KV Civil lines Asr	100 MVA, 220/66KV	04/05/2020
3	220KV Mastewal	100 MVA, 220/66KV	25/05/2020
4	132KV Muktsar Sahib	20/25 MVA, 132/66KV	21/07/2020
5	220KV Hoshiarpur	12.5/16 MVA, 132/11KV	15/07/2020
6	220KV Abohar	20 MVA, 132/11KV	05/09/2020
7	220KV Kohara	100 MVA, 220/66KV	15/10/2020
8	220KV Muktsar Sahib	100 MVA, 220/132KV	07/01/2021
9	220KV Devigarh	100 MVA, 220/66KV	Faulty on 15/12/2017 and declared damaged on 29/01/2021
FY 2021-22			
1	132KV Bhikiwind	50MVA, 132/66KV	17/05/2021
2	132KV Nawashehar	16/20 MVA, 132/11KV	17/04/2021
3	220KV Ferozepur Road LDH	16/20 MVA, 66/11KV	02/07/2021
4	220KV Mandi Gobindgarh-2	16/20 MVA, 66/11KV	09/07/2021
5	132KV Ferozshah	10/12.5 MVA, 132/11KV	12/07/2021
6	132KV Smadh Bhai	16/20 MVA, 132/11KV	03/08/2021
7	220KV Jagraon	20 MVA, 66/1KV	22/08/2021

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

Objection No.5: Steel City Furnace Association

Issue No.1:
The then Punjab State Electricity Board (PSEB) was constituted under Electricity (Supply) Act 1948 as per which PSEB was to finance all its Capital works through Loans only and interest on loan and Loan installments were recovered through Tariff. Loans were given by GOP and to escape the interest and installments payable to GOP, PSEB got the loan(s) converted into equity of GOP in PSEB
The Commission issued first Tariff Order for FY 2002-03 which stated in Para 6.10 that PSEB has been declared by GOP as a body corporate with a Capital of Rs. 5 Crore with effect from 10th Mach 1987 under Section 12A of Electricity (Supply) Act 1948 and converted Rs. 1612 Crore representing Government loans granted upto 3/90 into equity during FY 1991-92 and Rs. 1189.11 Crore representing 50% of loans granted during FY 1990-91 to FY 1994-95 in FY 1996-97. The total State Government Equity in PSEB is Rs.2806.11 Crore. Further no ROE was allowed in the tariff Order for FY 2002-03 to FY 2005-06 by the Commission and only 3% Return on Net Fixed Assets were allowed as per Supply Act 1948.
Initial equity was Rs. 2946.11 Crore as on FY 2006-07 onwards on which ROE of Rs 412.46 Crore per year was allowed as per Para 4.15 of TO were loans of GOP camouflaged as Equity to get higher returns thro ROE.
On restructuring of PSEB into PSPCL and PSTCL on 16.4.2010, equity (in fact loans) of Rs. 2946.11 Crore was also distributed as per provisional FRP/Transfer scheme as Rs 2617.61 Crore and Rs. 328.50 Crore and ROE was allowed separately as Rs. 366.47 Crore and Rs. 45.99 Crore for PSPCL and PSTCL respectively.

While there is no objection on such conversion for accounting purpose but for fixing tariff, apparently, there is no differentiation between loans given by Government of Punjab to Board/PSPCL and equity. In fact, all the assets of PSEB/PSPCL/PSTCL were/are created by borrowing/debt and a part of it shown as equity of Board. This evidently was done to help Discom to reduce its interest and repayment burden as ROE/dividend is not payable under Companies Act to GOP till PSEB/PSPCL is running in losses. Thus a methodology devised to keep the tariffs on tower side is now being used to increase income of PSPCL by unduly loading the consumers and to meet the financial losses due to inefficient working of PSPCL/PSTCL. Consequently, the consumers of the State are burdened with the higher tariff in the form of 15% - 16% ROE on such amount, which is in fact a government loan on which not more than 7-8% interest needs to be allowed.

Subsequently, Financial restructuring Plan and Transfer scheme was finalized and notified on 24.12.2012 by GOP. In this notification, an amount of Rs. 3132.35 Crore standing in the books of PSEB on 15.04.2010 under the head “Consumer Contributions & Govt Grants” etc were also converted into equity of GOP and the same was admitted by the Commission as well. Thus, the equity of PSPCL and PSTCL were enhanced from Rs. 2617.61 Crore to Rs. 6081.43 Crore (Para 3.16 of TO 2013-14) and from Rs. 328.50 Crore to Rs. 605.83 Crore (Para 3.10 of TO 2013-14) respectively. Thus, the total equity was increased from Rs. 2946.11 Crore to Rs. 6687.26 Crore.

The conversion of Consumer Contribution and Govt Grants/subsidies was appealed by consumers in the Hon’ble APTEL and accordingly the Commission was directed to reconsider the issue vide judgment Dated 17-12-2014 in Appeal No 16B and 142 of 2013 as under:-

> *“48. ……..We direct the State Commission to adjust the excess amount of ROE in the impugned order from the F-Y 2011-12 on wards in the AR R/ True up for the year to provide relief to the consumers.”*
>
> *50.3 The findings of this Tribunal in Appeal no. 46 of 2014 shall squarely apply to the present case. The State Commission shall re-determine the ROE as per our directions and the excess amount allowed to the distribution licensee with carrying cost shall be adjusted in the next ARR of the respondent no.2*

Hon’ble APTEL observed that the Govt. can hold any amount as equity in PSPCL and PSTCL but ROE needs to be granted on actually subscribed and paid up equity only i.e. cash money infused need to be counted as equity for the purpose of ROE. PSPCL has filed an Appeal against the order in Supreme Court and stay has been granted. Final order of SC is still awaited. However, because of Stay granted by The Supreme Court, the Commission is granting ROE on Rs 6081.43 Crore to PSPCL and on Rs. 605.88 Crore to PSTCL. The CAG also objected to the conversion of non-interest bearing consumer contribution and Govt. grants/subsidies etc into equity.

Subsequently, MOP, GOP and PSPCL entered into an agreement as per which PSPCL loans of Rs. 15628.26 Crore were to be taken over by GOP by issue of SLR bonds by banks and loans were to be ’taken off the books of PSPCL. UDAY scheme ended on 31.03.2020 and PSPCL proposed in ARR of FY 2020-21 to convert the loan amount of Rs. 15628.26 Crore as GOP equity in PSPCL i.e. increasing GOP equity from Rs. 6081.43 Crore to Rs. 21709.69 Crore. PSPCL claimed ROE on Rs. 15628.26 Crore @ 15.90% i.e. Rs. 2485 Crore in addition to ROE of Rs 6081.42 crore. Thus, by simply manoeuvring the entry of loan amount to equity, PSPCL was to load consumers by Rs. 3423 Crore. However, vide Tariff order dated 28th May 2021 the Commission rejected the proposal of PSPCL.

Now in current ARR for FY 2022-23 dated 30th November 2021, PSPCL has come out with an entirely new argument that out of Rs.15628.26 Crore, Rs. 2246.77 Crore were spent on capital expenditure and out of balance Rs. 13381.49 Crore working capital loan, Rs.2346.19 Crore were also diverted towards capital expenditure. Thus, total Rs. 4592 Crore should be treated as equity and ROE should be now allowed on Rs. 10674 Crore (Rs.6081.43 Crore + Rs.4592 Crore) inspite of the fact that the Commission and Hon’ble APTEL have made it clear that only cash flow is to be treated as equity for the purpose of ROE and MYT Regulations provide that equity should be actually infused for creation of useful assets. Therefore, there is no case for allowing ROE beyond Rs.6081.43 Crore, which in principle is also under litigation, on which the Hon'ble APTEL has decided adversely and matter is in the Hon'ble Supreme Court. Since all the assets as admitted by the Commission are already accounted for and linked with corresponding source of debts, there is apparently no case for allowing ROE beyond the admitted amount of equity.

PSPCL vide its letter dated 12.4.2016 in ARR of FY 2016-17 stated that whole of the amount taken over by GOP under UDAY scheme comprises of debt. Further, the tripartite agreement for UDAY scheme provided that 75% of the UDAY loan will be converted into grant of GOP at the close of the scheme, Further, GOP was to compensate the loss of PSPCL in a graded manner during the period FY 2017-18 to FY 2020-21. However so far neither any grant has been given by GOP in terms of UDAY agreement nor any loss compensation has been given/shown in ARR. Thus, PSPCL has failed to get any relief from GOP which would have given relief to the consumers but has acted proactively to make UDAY loan as GOP equity and claim ROE for the same to claim higher tariff.

As per PSPCL's own admission, the assets created by PSPCL as well as erstwhile Electricity Board/Electricity branch of PWD through debt/loan, consumer contributions and Govt. grants etc and not through any infusion of cash equity, there is need to investigate the source of funding of assets created by Discom/ Board. 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 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 as no tangible benefits are given to consumers through equity infusion.

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 ROE @ 15%-16%, which is about 7-8% higher than normal interest loan. While the matter of fact is that all funds invested for capacity creation are borrowed funds on which only normal interest is to be paid. The methodology being adopted by PSPCL has been resulting into higher cost of supply year after year, which needs to be looked into.

REPORT OF THE FORUM OF REGULATORS ON "ANALYSIS OF FACTORS IMPACTING RETAIL TARIFF AND MEASURES TO ADDRESS THEM" (2020) suggests ways to reduce the retail power tariff in states. In para 2.1.3 of the report, which deals with fixed cost related factors, it is mentioned that the post tax RoE of Discom and transco has been in the range of 14% - 16%. whereas 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 ROE, Committee observed in para 4.1.1, that Return on equity allowed to Generation/ Transmission and distribution companies needs to be made more realistic and at par with interest rates and further that:-

RoE for generation and transmission should be linked to 10 year G Sec rate (average rate for previous 5 years) plus risk premium subject to a cap as may be decided by the 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".

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.

Reply of PSTCL:

PSTCL had claimed RoE in accordance with Regulation 20 of Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2019

Commission's view:

The Commission allows ROE in line with the relevant provisions of the MYT Regulations.

Annexure-III

Minutes of the Meeting of PSERC State Advisory Committee, Chandigarh held on 22nd February, 2022.

A meeting of the PSERC, State Advisory Committee was held in the office of the Commission at Chandigarh on **22nd February, 2022.** PSERC had invited comments of the members on the Petitions for True up of FY 2020-21, the Annual performance Review (APR) for FY 2021-22 and the ARR Requirements and Tariff Proposal for FY 2022-23 (2nd control period from FY 2020-21 to FY 2022-23), 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/through video-conferencing in the meeting: -

Sr. No.	Name and Address	Designation
1.	Sh. Viswajeet Khanna Chairman, PSERC, Site No-3, Madhya Marg, 18-A, Chandigarh.	Ex-officio Chairperson
2.	Er. Anjuli Chandra Member, PSERC, Site No-3, Madhya Marg, 18-A, Chandigarh.	Ex-officio Member
3.	Sh. Paramjeet Singh Member, PSERC Site No-3, Madhya Marg, 18-A, Chandigarh.	Ex-officio Member
4.	Principal Secretary, Department of Power, Government of Punjab, Chandigarh.	Member
5.	Principal Secretary, Food & Supplies and Consumer Affairs, Government of Punjab, Chandigarh.	Ex-officio Member
6.	Principal Secretary, New and Renewal sources of Energy (NRSE), Government of Punjab, Chandigarh.	Member
7.	Smt. Parneet Mahal Suri, Secretary, PSERC Site No-3, Madhya Marg,18-A, Chandigarh.	Ex-Officio Secretary
8.	Chairman-cum-Managing Director, PSPCL, The Mall, Patiala.	Member
9.	Chairman-cum-Managing Director, PSTCL, The Mall, Patiala.	Member
10.	S. Bhupinder Singh Mann, Ex-MP (Rajya Sabha) National President (BKU), Chairman National Kisan Coordination Committee, Outside Qazi Mori Gate, Batala, Distt. Gurdaspur.	Member
11.	Chairman Farmers' Commission for the State of Punjab, Punjab Mandi, Plot No.53,Gian Jyoti Road, Phase-2, Sector-54, Mohali (Punjab)	Member
12.	Director, Agriculture, Deptt. of Agriculture, Govt. of Punjab, Chandigarh.	Member
13.	Chairman, CII, Punjab State Council, Sector 31-A, Chandigarh.	Member
14.	Chairman, PHDCCI, Punjab Committee, Sector 31-A, Chandigarh.	Member

Sr. No.	Name and Address	Designation
15.	Sh. Onkar Singh, Chairman-cum Managing Director, Avon Cycles Limited, Ludhiana.	Member
16.	Dr. Harish Anand. House No.59, Sector-39, Chandigarh Road, Ludhiana-141010 (Punjab)	Member
17.	Indian Energy Exchange Limited, Plot No.C-001/A/1, 9th Floor, Max Towers, Sector-16 B, Noida, GautamBuddha Nagar (U.P.201301)	Member
18.	Sh. Raj Kumar Jindal, CMD, Vivek Re-Rolling Mill, Mandi Gobind Garh and Sr. Vice President All India Steel Re-Rolling Association, New Delhi	Member
19.	Sh. Vijay Talwar, State Vice-President-cum-Co Chairman, National Power Committee, Laghu Udyog Bharti (Pb, Chapter), 1051, Dada Colony, Industrial Area, Jalandhar 144004	Member
20.	Sh. Balour Singh, Consultant Solar Projects, # 1110/2, HIG Flats, Sector-39-B, Chandigarh.	Member
21.	Sh. Kamal Dalmia, Chairman Focal Point Industries Association (Regd.) 35, Focal Point, Mehta Road, Amritsar-143006 (Punjab)	**Special Invitee**
22.	Sh. Bhagwan Bansal, President of Punjab Cotton & Ginners Association (Regd), Shop No.109, New Grain Market, Muktsar (Punjab) Gobindgarh.	**Special Invitee**

At the outset, the Chairperson, PSERC welcomed the members to the meeting of the State Advisory Committee. The Chairperson thereafter, requested the members to offer suggestions/comments on the Petitions for True up of FY 2020-21 then Annual performance Reviews (APR) for FY 2021-22 and the ARR Requirements and Tariff Proposal for FY 2022-23 (2nd control period from FY 2020-21 to FY 2022-23), 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. It was also brought to the notice of the members that Govt. of India had issued 'Electricity (Rights of Consumers) Rules, 2020' and suggestions on the same were also invited. Thereafter, the members gave their comments/suggestions/views as under: -

1. S. Bhupinder Singh Mann, Ex-MP suggested that:

Provision for registration of application for new connection should be made online. Various other consumer related services be made on-line to avoid direct consumer-employee contact for day to day work.

2. **Sh. Mohinder Gupta stated as under:-**

i. The then Punjab State Electricity Board was constituted under Electricity (Supply) Act 1948 as per which PSPB was to finance all its Capital works through Loans only and was required to recover the interest payable on loan (Interest and Finance Charges) and installments to repay loan (Depreciation) through Tariff. A major part of finacing was through state government loans and to escape the liability of interest payable to GOP, PSEB got the loan converted into equity of GOP in PSEB as increase in tariff being controlled by GOP was quite inadequate to cover the expenses of PSEB. PSEB never paid any interest on such loan as well as installment of loan converted into equity or Return on such converted equity.

ii. PSERC issued first tariff order for the year FY 2002-03 which provided for equity and return on equity.

   Further no ROE was allowed in the tariff Order of FY 2002-03 and till FY 2005-06 by the Commission under Electricity Regulatory Commissions Act, 1998 and Electricity (Supply) Act 1948 and only 3% Return on Net Fixed Assets were allowed.

iii. Evidently, the equity shown then was also loans camouflaged as Equity to get higher returns Initial equity of Rs. 2946.11 crore of Punjab State Electricity Board, which became equity of PSPCL and PSTCL 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 and loan installments to insulate consumers from increase in tariff prior to setting up of Regulatory regime. Return on Equity of Rs 412.46 Cr per year was allowed only from 2006-07 onwards on Equity of Rs 2946.11 Cr as per Para 4.15 of TO.

iv. 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 Discom to reduce its interest burden as no ROE/dividend is payable to Government of Punjab till PSEB/PSPCL 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 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.

v. PSEB was bifurcated into PSPCL and PSTCL on 16.4.2010 and as per provisional FRP/Transfer scheme, and Equity of PSEB of Rs 2946.11 Cr was also divided between them as Rs 2617.61 Cr and 328.50 Cr and ROE was allowed separately as Rs 366.47 Cr and Rs 45.99 Cr for PSPCL and PSTCL respectively.

vi. Subsequently, FRP and Transfer scheme was finalized and notified on 24.12.2012 by GOP. In this notification, an amount of Rs.3132.35 crore standing in the books of PSEB on 15.4.2010 under the head “Consumer Contributions & Govt. Grants” and some other amounts was also converted into equity of GOP and the same was admitted by PSERC as well. Thus, the equity of PSPCL was enhanced from Rs 2617.61 Cr to 6081.43 Cr (Para 3.16 of TO 2013-14) and of PSTCL from 328.50 Cr to Rs 605.83 Cr. (Para 3.10 of TO 2013-14). Thus, the total equity was increased from 2946.11 Cr to 6687.26 Cr.

vii. The conversion of Consumer Contribution and Govt. Grants was appealed by consumers in APTEL and APTEL directed PSERC to reconsider the issue vide judgment Dated 17-12-2014 in Appeal No 168 and 142 of 2013.

viii. APTEL 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 need to be counted as equity for the purpose of ROE.PSPCL has filed an Appeal against the order in Supreme Court and stay has been granted. Final order of SC is still awaited. However, because of Stay granted by The Supreme Court, PSERC is granting ROE on Rs 6081.43 Cr to PSPCL and 605.88 Cr to PSTCL.

ix. The CAG also objected to the conversion of non-interest bearing consumer contribution and Govt. grants/subsidies etc. into equity.

x. 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. 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 the 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.

xi. 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 2022-23 dated 30th November 2021, PSPCL has come out with an entirely new argument for claiming increased equity and higher amount as Return on Equity. It is claimed that out of Rs.15628.26 crore, Rs.2246.77 crore were 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 Crore (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.

xii. 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 during the period 2017-18 to 2020-21. 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.

xiii. 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.

xiv. 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/loan, consumer contributions and Govt. grants etc. and not through any infusion of cash equity, there is need to investigate the source of funding of assets created by Discom/Board.

xv. 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).

xvi. 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.

xvii. PSPCL has claimed Rs.15628 crore as equity for previous years and this year, 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 capital assets and show the same as equity instead of loan for ARR purpose, how commission would approach the same?

xviii. 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 has been resulting into higher cost of supply year after year, which need to be looked into.

xix. Such a view become 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). 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.

3. Dr. Harish Anand have given the following suggestions:

i. In the last about 20 years of tariff fixation process has given emphasis on recovery of full prudent cost of electricity supply in the State, which also includes components like full payment of stranded capacity by consumers, high O&M expenses, exorbitant return on equity (15-16%), high fixed charges of very old thermal plants, which are not even fully operational and high manpower cost due to underutilization. As a result of these, the cost of supply have been growing continuously over the year.

ii. Forum of Regulators (FOR) came out with a detailed report, “Report of the Forum of Regulators on Analysis of Factors Impacting Retail Tariff and Measures to Address them”. The report is based on extensive study of performance of the discoms of many states of India over the years. Some of the major issues addressed in the report are shared below in the context of Punjab:

iii. The return on equity for Discom should be linked with 10 years G Sec rate plus risk premium. Now, risk premium seems to be negligible for Power generation, transmission and distribution especially in State owned Discoms as full cost of supply is allowed in the ARR and tariff approval by PSERC. IN COVID -19 period, when rest of business were facing lockdown which led to loss of profit and revenue, PSPCL got full cost of supplying power and fixed cost even when the power units sold reduced by half. This gives the impression that there is no risk premium required for Discoms. In other words, the return on equity should be allowed at not more than 7-8% against 15-16% allowed presently.

In this regard, it is also pertinent to note that there seems to be no equity at all in PSPCL and eventually all the assets were created by Government loans before PSPCL came into existence. For any reason, PSPCL may be showing an amount of equity in the books of account but essentially these seems to be old government loans to Discom converted into equity. Therefore, for ARR purpose, these funds should be treated as loan and not more than interest given on long term loan should be allowed on such funds.

iv. Similarly the return on equity in transmission business should also be allowed at par with long term loan only as also mentioned in report of Forum of Regulators.

v. The fixed charges paid for stranded capacity of power plants of Discom or private parties have had an escalated effect on the cost of supply where crores of rupees are paid while power is not purchased at all due to any reason. The Forum of Regulator report also highlighted this fact and suggested that Government should extend help to Discoms to meet the part of the cost and full cost should not be recovered from the consumers.

   The report has also mentioned that stranded transmission capacity charges should also be borne by Central government and matter be taken up with them.

vi. The old plants of GGSTP and GHTP, which have crossed their useful life have not been able to meet the efficiency parameters set by MYT regulations in last many years. This point has been raised by PSPCL and responded to by PSERC in tariff order FY 2021-2022. Besides that, some of these plants are operational only for about 4 months while fixed charges are paid for full year. Even otherwise, on merit order basis, the power has been procured from IPP by keeping such old plants shut down. Further, these plants also need investment for desulfurization purpose and buying RPO also.

   Therefore, it is imperative that such outlived plants should be closed down and power for paddy season may be sourced through imported power. As decision to close down such old thermal plants rests with State Government, the Commission is requested not to allow fixed charges for full year.

   Here it is pertinent to mention that due to transmission capacity (6600 MW) constraint in Punjab, the power through open access could not be procured and power cuts were resorted to last year. Therefore, it is worthwhile to increase the transmission capacity sufficiently. Further, if due to any reason, the transmission capacity remains unutilized, the fixed charges may be shared with center government as also suggested by the Forum of Regulators (FOR) report.

vii. The Forum of Regulators (FOR) has also recommended that renewable solar power projects to be encouraged to increase the solar power share in total power to a reasonable level from the present low level. Therefore, the cross-subsidy surcharge and additional surcharge on such solar power sourced within the State be removed. Also, related condition of reduction in contract demand for 24 hours, if power is sourced through open access, should also be done away with.

viii. In case of higher T&D losses in some regions as identified by PSPCL than normal T&D losses, a special cess may be imposed to compensate Discom leading to higher tariff in such region rather than punishing those regions where T&D losses are within prescribed limit by charging higher average tariff.

ix. For improving competition in the electricity business, more than one distribution companies'- public/private are required. In this regard, reference can be made to NSE/BSE where competition has improved the level of service for the users.

x. PSPCL seems to be challenging every decision/tariff order or part of tariff order, which does not accept PSPCL viewpoint in APTEL and even Supreme Court. This excessive litigation at high cost is cause of concern especially when there seems to be no reason of animosity/ill-will/biasedness in PSERC approach as none has been pointed out. For public, both are arms of the State machinery to run electricity business in the State of Punjab. It is apprehended that such excessive litigation will seriously dent the public confidence in the electricity regulatory affairs. More importantly, it is worry some that there is no organization/mechanism in public to counter such litigation due to paucity of financial and other resources. There is urgent need for capacity building measures through dedicated funding by PSERC in public domain.

4. Vijay Talwar's comments are as under:

A. **CONSUMER GRIEVANCE (FOR TRUE TARIFF DETERMINATION):**

i. The Commission constituted a committee headed by Secretary PSERC to deliberate upon the issues regarding Consumer Grievance viz-a-viz Delay In Release Of New Connections, Delay In Releasing Extension In Load / Demand, Levy Of Various Charges Illegally, Supply Related Complaints, Billing Complaints and Deficiency In Services etc. and constituted Consumer Advocacy Cell. Consumer complaints are increasing day by day because directions given by the Commission in different Orders / Tariff Orders are not honored and PSPCL is issuing Commercial Circulars / Instructions without getting approval from the Commission. PSPCL officers / officials are violating Supply Code Regulations and PSPCL Instructions by issuing wrong bills violating Tariff Orders, not providing Actual Interest on Security Consumption, Security Meter, Not Refunding Excess Security Works, Excess Security Consumption. Hence, it is suggest that Consumer Advocacy Cell should be further strengthened with objective of general awareness, educating the consumers and help them to contest their grievance before Consumer Grievance Redressal Forum and Ombudsman and to bring the matters regarding Violation Of Act, Rules and Regulations By PSPCL Officers / Officials before Hon'ble Commission. Considering the special nature of Electricity Act, it is necessary to educate the consumers and to empower them by way of information to play their role.

ii. There are approximately 5000 (Five Thousand) cases pending against PSPCL in Courts i.e. before Permanent Lok Adalats, Civil Courts, Session Courts, District Consumer Forums, State Consumer Forums, High Courts etc. resulting huge financial loss/ financial blockage to PSPCL funds. These cases are in addition to disputes pending before Consumer Grievance Redressal Forums and Ombudsman. This all is due to deficiency in Services provided by PSPCL Officers / Officials and consumers are forced to take help from legal advocates.

B. **UN-NECESSARY POWER CUTS DURING 2021 – 2022:**

i. During paddy season, one unit of 660 MW Power Plant (Talwandi Sabo) failed in March 2021 resulting in huge purchase of power By PSPCL by Paying Excess Rates, Loss of PSPCL Revenue due to Decrease in Sale Of Power, Loss Of Trade & Industry due to Heavy Power Cuts, Loss Of Employment, Less Collection Of GST due to huge Production Loss, Electricity Duty, Infrastructure Development Funds, Social Security Funds, Municipal Tax, Service Tax etc.

C. **FIXED CHARGES SHOULD BE RATIONALIZED WITH ACTUAL HOURS OF SUPPLY TO CONSUMERS:**

i. Due to shortage of staff in distribution offices in the state, Power Supply is curtailed by imposing illegal Weekly Off Days, taking shutdown to maintain / repair supply lines and feeders by PSPCL staff. This results in harassment to consumers and they are deprived to use electricity during one day in a week. PSPCL should be directed either to supply un-interrupted power supply (24x7) without imposing Weekly Off Days or in alternative Fixed Charges for time period of non-supply of electricity should be proportionately reduced.

D. **DEFAULTING AMOUNT SHOULD BE CORRECTLY DISCLOSED:**

i. There are huge numbers of consumers with defaulting amount for the continuous billing period of more than 3 years. This is complete violation of Supply Code Regulations (2014) Clause 33.1 which mandates that, "In Case Of Continued Default In Payment Of Any Amount Due To The Distribution Licensee By Any Consumer For A Period More Than Six Months, The Distribution Licensee Shall Terminate The Agreement Executed With The Consumer".

ii. As per ESIM (Electricity Supply Instructions Manual) 2018 Instruction No. 91.1 read with Supply Code Regulations (2014) Clause 32, "it is mandatory to issue notice for disconnection on the next day after the due date”. The accumulation of amount shall be direct responsibility of RA / AE / AEE / XEN / ASE (DS).

iii. As per ESIM (Electricity Supply Instructions Manual) 2018 Instruction No. 92.3 “The disconnected consumers who are defaulters of PSPCL may sell their premises /property without any intimation to PSPCL. If this happens, the chances of recovery of defaulting amount become remote. Therefore, it is desirable that the field officers may intimate the revenue authorities like SDM/Tehsildar regarding the amount to be paid by the consumer to the PSPCL so that if any transaction regarding sale or purchase of the property takes place, the revenue authorities may be in a position to recover the outstanding amount due to the PSPCL at the time of such a sale or purchase and pass on to PSPCL. Compliance of these instructions need to be monitored by Sr. field officers and in case it is noticed that the Sub divisional Officers/ Officials have not taken due care in informing the revenue authorities, then in that case, if recovery is not possible due to sale/purchase of the premises/ property, the said amount would be recoverable from the officer/official responsible for not intimating to the revenue authorities”.

iv. Due to non-compliance of instructions mentioned in forgoing Paras, defaulting amount including Pending Court Cases, Permanently Disconnected Connections are said to be approximately of Rs.2000 Crores. This type of violation results in huge losses to PSPCL which are ultimately burdened in Tariff.

E. **HIGHER ACD RATES ARE EFFECTING THE CASH FLOW OF INDUSTRY, PREPAID METERS SHALL BE INSTALLED WHICH WILL BENEFITED TO CONSUMER & UTILITY:**

i. Security equal to 1.5 months was designed for LS Category consumers when billing was to be made within 15 days. Now after installation of AMR (Automatic Meter Reading) devices, the reading is collected same day and bill is also issued on same day. Thus, this is just like Spot Billing. As per policy treating AMR reading at par with Spot Billing, Security Consumption for LS category consumers should be for 1 month consumption instead of 1.5 month consumption, enabling the consumers to utilize this amount in cash flow for smooth running of their units.

F. **BANK GUARANTEE SHOULD BE ADMISSIBLE AS SECURITY CONSUMPTION INSTEAD OF CASH:**

i. In other states of India i.e. Maharashtra and Delhi Hon’ble Commissions has made the Regulation to accept bank guarantee as Security Deposit (Security Consumption) instead of cash deposit with Distribution Licensee. In that case consumers will not be entitled for any interest on Security Deposits. This will be fair for Distribution Licensee and for consumers too.

G. **POWER CONSUMPTION GRAPH IN PUNJAB IS IN BELL SHAPE DURING 12 MONTHS:**

i. Power consumption graph is in bell shape curve during 4 months i.e. Paddy Season and Summer Season. Power consumption could be 15000 MW due to increase in domestic and agriculture connections whereas it could be 6000 MW to 7000 MW during rest of the year. Main challenge for PSPCL is to make arrangements for procuring electricity from outsider Punjab. Increase ATC (Available Transmission Capacity) from 6500 MW to 10000 MW and sell surplus power during winter season.

H. **UTILIZATION OF SURPLUS POWER:**

i. PIU category was created by charging higher tariff rates just to discourage this industry to save electricity when there was period of power shortage. Now in a scenario of surplus power there is need to encourage further new PIU units just to utilize surplus power than to give free. As per ARR Petition FY 2022 – 2023 Chapter 1, Page No. 14 under the heading “Consumers Profile”, LS Category industry has reduced from 9011 units to 8003 units. This clearly shows that due to harassment and higher tariff, new industrialists are not setting up their units in Punjab. There should be only one tariff for LS Category. PSPCL has already got tariff for Mix Industry PIU + General Industry under General Industrial Tariff in the cases wherein with Prorata tariff bill amount is less than General Industry Category. With Separate tariff for General and PIU Industry, consumers are illegally and unnecessarily harassed by PSPCL officers as they are threatening making cases under UUE. Tariff should be simplified. As per technical, harmonics if any created can be suppressed by installing required equipment’s. The Commission has already saved consumers from harassment by removing Peak Load Charges. Accordingly, consumers should be saved from harassment by PSPCL officers by merging tariff of PIU and General Industry. Tariff of merged category may be suitably adjusted. This will encourage for setting up new industry and it will help utilization of surplus electricity.

In the end, he requested the Commission to watch the interest of consumers and pass the orders after prudent check from all angles as per Act and Regulations to utilize the surplus electricity and to fix tariff rates in a fair manner.

5. **CII –comments and suggestions as below represented by Sh. Bhavdeep Sardana, Chairman – CII Punjab State & Sr. Vice President & CEO, The Sukhjit Starch & Chemicals Limited:**

These comments upon the revenue requirement of the PSPCL for the aforesaid years are being offered in the light of principles enunciated in the Electricity Act, 2003, State Electricity Regulatory Commission's regulations, tariff orders passed by the PSERC in the past and decision of Appellate Tribunal for Electricity. It is submitted that true up for FY 2020-21 and revised estimates for FY 2021-22 and projections for FY 2022-23 should be based on MYT regulations only and extra expenses claimed by PSPCL should not be accepted simply because such expenses are actually incurred.

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.

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 need 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 2022-23 dated 30th November 2021, PSPCL has come out with an entirely new argument for claiming increased equity and higher amount as Return on Equity. It is claimed that out of Rs.15628.26 crore, Rs.2246.77 Crore were 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 Crore (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 during the period 2017-18 to 2020-21. 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).

Further no ROE was allowed in the tariff Order 2002-03 by the 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 Discom to reduce its interest burden as no ROE/dividend is payable to Government of Punjab till PSEB/PSPCL 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 and this year, 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?

iv. 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 has been resulting into higher cost of supply year after year, which need to be looked into. Such a view become 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.

Suggestion to the Commission:

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 understood as to how the amount of Equity is constant for the last more than 10 years though the 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.

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 is also insisting that GGSTP and GHTP plants are kept as backup and generally run during Paddy Seasons to supply power to consumers. PSPCL has also asked for relaxation in PSERC MYT regulations for this purpose. This matter was fully dealt with in 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.

There are some issues which are related with working of old thermal generation plants in the State, merit order dispatch of power leading to more drawl of power from IPPs, pollution control measures required calling for fresh investment as also asked by PSPCL in its ARR. In this regard, following submissions are made:

a. The thermal power generating stations are mainly used as backup capacity and not fully operated throughout the year. Accordingly, the performance parameters would remain sub-optimal and could never meet the norms set by MYT regulations of PSERC.

b. At the time of filing ARR, power generation by these thermal plants are projected, which is downwardly revised subsequently and at the time of true up, substantially reduced referring merit order dispatch and other considerations as has been happening in last couple of years.

c. A large amount of working capital is also sought for running these plants and as projections are higher than actual performance, higher working capital is generally allowed, which is trued up subsequently. This can be avoided. Thus working capital for cost of Coal Stock need to be allowed for 50% capacity for full year instead of 100% capacity for full year.

d. Substantial amount of investment is being projected to achieve revised norms of pollution by investing about Rs.40-50 lakh per MW to setup FGD. For illustration, PSPCL has claimed Rs.128 crore for installation of FGD for GGSSTP plants (actual shall be much higher), which are to remain operational only for 3-4 months in a year.

e. Besides that, Clean Energy Cess (Rs.400/quintal on coal) is also incurred to generate power through coal in these thermal power generating stations.

f. Also high transportation charges to bring coal to these thermal plants is incurred. The transportation cost especially railway freight charges have increased drastically in last couple of years. This result into higher delivered cost of coal and higher power generation cost for such plants.

g. A substantial amount has to be spent on purchasing Renewable Energy Certificates for renewable power obligation for generating coal based power. Further this RPO will go on increasing in the coming years.

h. Also, some forced power surrender must have happened to keep such plants running while if power is purchase from market, there would be less chances of power surrender related fixed cost.

i. In actual execution, the power from other sources is shown as cheaper based on Merit Order Dispatch and GGSSTP is kept closed, thus making fixed cost unbearable.

j. Even the MOD being issued by PSPCL/SLDC every month on their web sites also indicate that the real time variable cost of these PSPCL's plants is highest in the merit order for coal based plants. In fact if these real time variable costs are considered, these plants may not qualify for operations in even those 4 months.

k. Taken together, above 8 points, it become quite lucid that these old thermal plants cannot be run on efficiency basis and cost of maintaining these power plants is also very high. Given the surplus situation of power in the country and large-scale integration of renewable specially solar and wind capacity under COP 26 obligations, it would be far more imperative to close down such plants and power be sourced from either IPPs within State or through power purchase from outside States preferably from renewable power sources, without comprising on commercial considerations. This would help in bringing down the cost of power generation and leading to overall reduction in cost of supply.

3. Depreciation charges

i. In this regard it is submitted that full value base is to be considered for the asset on its capitalization, it is to be depreciated for 90% of its value over its useful life and balance 10% is to be reduced from the value base on completion of useful life.

In case of thermal plants, which have completed 25 years of their existence and are still in service for 4 years to 9 years over and above thereon as on 2022, how much is part of the same categorized as 90% depreciated on which no depreciation is to be allowed? Whether such part is being regularly reduced from value base for claiming year wise depreciation? He requested the Commission to ask PSPCL and PSTCL to provide the details of the same for all assets.

90% depreciated assets identification is to be done for generation, distribution and transmission businesses under PSPCL/PSTCL and same should be excluded for calculation of depreciation amount for ARR purpose.

Similar is the case for distribution assets of Discom and transmission assets of Transco on which clarity is required to the stake holders.

ii. What is the excess of accumulated depreciation over corresponding loans duly paid, for which the depreciation reserve is being created? It is submitted that the excess of accumulated depreciation over corresponding debt should be reduced from the equity in line with the recommendations of FOR committee and if there is no equity, the same should be reduced from the high cost debt for interest.

iii. Whether the fixed assets register is created and updated and available for public view. It is submitted that if the same is not available, about 25%-30% depreciation should be disallowed till the compliance is ensured as being done by other regulatory commissions like Uttar Pradesh State Electricity Regulatory Commission.

Segregation of Accounts for Distribution, retail supply and generation business of PSPCL

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 based 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 the Commission is also accepting the arguments of PSPCL year after year. It is high time that PSPCL should comply with the requirement otherwise, the Commission needs to start penalty recovery from PSPCL.

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) will lead to serious financial crisis for the Board 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.

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. For instant, the Commission has been disapproving the excess expenses claimed by the Board in its previous ARRs, which were funded from somewhere by the Board. For illustration, PSPCL in its current ARR in para 3.15.22 mentioned that out of Rs.15628.26 Crore, Rs13381.49 crore were working capital loans out of which Rs. 2346.19 crore were spent on capital expenditure, which is clearly against the norms given in MYT regulations related to interest on working capital and interest on loan for capital purpose. It may also be added here that amount of Rs 15628.26 Cr was identified while signing UDAY tripartite agreement in 2016 and it took 6 years to bring this fact to the notice of stake holders, that too when its request to grant ROE on this amount was not accepted by the Commission. He requested that instead of accepting the argument of PSPCL, contempt proceedings need to be started for not providing the correct information on affidavit. A detailed investigation in this regard is also required to work out the exact amount of diversion of funds to be disallowed for ARR purpose to safeguard the interest of the consumers.

6. **Sale of surplus power**

Sale of surplus power details are not provided

The detailed information of surplus power as being provided in the tariff petitions of previous years and even in earlier tariff orders by the Commission is not being provided to stake holders. Comments on inadequate information of ARR are sought much before the reply to deficiencies is provided by PSPCL on its web site. Such details include quantum of surplus power, plant wise fixed cost surrender, as part of purchase cost, quantity sold out of state at different rates and other details as the Commission may deemed fit. He requested the Commission that the complete information related to surplus power need to be provided by PSPCL before last date of comments/ public hearing and complete Profit and loss account of surrender power may be given in tariff order as well.

7. **Voltage Rebate for 66 KV consumers:**

T&D losses for 66 KV consumers as per open access regulations worked out in TO 2018-19 are 4.28% for 2018-19 against total T&D losses of 14%.

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 switch yard. The voltage wise cost of supply worked out by PSPCL in the Reply to Deficiencies (Page 183) for 2019-20 for 66 KV industry is Rs 5.77 and for 11 KV industry as Rs 6.59 indicating a difference of 82 paisa per unit. However, the rebate being given to consumers connected at 66 KV is only 25 paisa per unit. Voltage rebate need to be enhanced appropriately 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%.

8. **Fix industrial Tariff as per category wise cost of supply**

The Board has submitted the category wise cost of supply. He appreciated the Board on this account to come up category wise cost of supply as well as related cross subsidy earned/given to each segment of consumers. Therefore, it is also 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. He is also submitted that category wise cost of supply basis have been fixed many years back and said the same should be revisited to revise the assumptions for working out the category wise cost of supply.

9. T&D losses

In Tariff order FY2020-21, the commission approved distribution loss target of 11.54% for FY 2019-20 as reported in para 3.3.1, page 78, T.O. dated 28th May 2021. Based on that distribution target were fixed at 11.24% (2020-21), 10.94% (21-22) and 10.64% (2022-23) for subsequent years. However, the actual were found to be quite higher and also keeping in view COVID period, the distribution loss target were kept at 12.94% for FY 2019-20. The PSPCL even could not achieve the same and reported losses at 12.99% for FY 2019-20, based on actual. This was done by inflating the agriculture consumption from 11743 MU as approved by the Commission to 13051 MU Further, for FY 2021-22, the distribution losses approved by PSERC in Tariff order dated 28th May 2021 were considered but only after increasing the agriculture consumption to 11956 MU against PSERC approved agriculture consumption of 11931 MU. This clearly shows that the targeted T&D losses are accepted only by increasing the agriculture consumption than approved by the Commission. Therefore, the Commission is requested to approve only reasonable T&D losses by keeping agriculture consumption well within approved range.

He also pointed out that in chapter 6: Status of Directive Compliance, mentioned on page 97 of 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 of Punjab on page 98 of the ARR, Commission observations are also indicating in this direction that against 11.54% distribution losses, PSPCL has achieved 14.35% distribution losses in 2019-20. 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 2019-20 and projections for FY2020-21 and FY 2021-22.

10. Power purchase cost

The power purchase cost should be subject to approved T&D loss by PSERC for FY 2019-20 onwards. 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.

GOP has already passed the Act to cancel the power purchase agreements of costly power. PSPCL should ensure that no costs relating to such PPAs are passed on to consumers. These IPPs will file civil suits in appropriate courts against the termination. The Commission should ensure that consumers are ring fenced appropriately and damages payable by PSPCL in case the termination is set aside by the courts are not passed on to consumers.

11. Excess capital expenditure incurred than approved

In para 2.10 of current ARR, PSPCL has claimed higher capital expenditure of Rs. 1992.23 crore against 1700 crore approved by the Commission in its tariff order FY2019. This observation in this regard is as under:

i. He submitted that as GGSSTP plant is very old and need to be retired, no further capital expenditure should be sanctioned for it especially for FGD. Similarly, any such expenditure on GHTP should be spent keeping in view its future life as two units of the plant would be reaching 25 years of operation in 2022/2023.
ii. As per audited annual accounts for the period 1/4/20 to 31/3/2021, page 23, consumer contribution has increased from Rs.3438.87 crore in FY2020 to Rs.3558.35, by Rs.145 crore in FY2020-21. It is to be seen that whether the same is reduced from the capital expenditure requirement of PSPCL depicted in ARR for the year FY 2020-21 or not. He submitted that the same should be reduced.
iii. In hydel project construction, 273.09 crore are shown as expenditure for FY21 in para 2.10.3 of the current ARR as payment made to water resource department. It is also mentioned in previous petition that most of the funds are spent on Shahpur kandi project. In our view, Shahpur kandi project is an irrigation cum power project. If it is so, then the total capital expenditure is to be divided between irrigation department of the Punjab Government and PSPCL suitably. As per a news-report, the project is aimed to produce 206 MW power and irrigate 37173 hectare land. The civil work is to be done by irrigation

department of Punjab Govt. and PSPCL has to do only electro and mechanical work of power plant portion only as per Punjab Government notification. Therefore, it is to be ensured that a fair allocation of total expenditure is done between Irrigation department and PSPCL. (ref, Times of India, 9th Sept 2018). Hence, the amount claimed by PSPCL of Rs. 273.09 crore should not be allowed for ARR purpose.

Taken together, he submitted 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. The same approach need to be adopted for FY2021-22 and FY 2022-23.

12. High interest and finance charges

i. **Interest on working capital loans**

The Commission has approved Rs. 128 crore for FY 2020-21 and Rs.138 crore for FY 2021-22 in tariff order dated 28th May 2021. Against this, PSPCL has claimed interest on working capital loan at Rs.686.74 crore for FY2020-21 as per para 2.17 of the current ARR. As per PSPCL higher interest cost is due to higher working capital requirement and higher interest cost of 10.13% against approved rate of interest at 9.43%. Therefore, he submitted that interest on working capital loan should be approved as per MYT regulations for FY 2020-21, FY2021-22 and FY 2022-23.

ii. Interest on loans other than working capital loans

The capital expenditure approved by the Commission for FY was1712.89 crore as per para 2.10.1 of the current ARR. Against it PSPCL has incurred Rs. 1417.60 crore. Therefore, the interest on loan should be less than approved by the commission on this account. He submitted the Commission to look into the details and approve interest on long term loan as per MYT regulations only and on approved part of the total loans taken by PSPCL rather than as appearing in its balance sheet and claimed by PSPCL.

13. Employee cost

Employee cost is growing consistently and the same cannot be capped due to manifold reasons. He submitted 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.

The employee cost as per audited balance sheet is shown as Rs. 4808 crore For FY 2020-21, which has been projected to grow at Rs. 5269 crore and Rs.5552 crore for FY 2021-22 and FY 2022-23, which seems to be quite on higher side. PSPCL projecting new recruitment of 2327 employees in FY 2021-22 and 2632 employee in FY 2022-23. He submitted that the same should be closely scrutinized. Further, also submitted that GGSTP should be closed and manpower of the same should be adjusted. This would also help to some extent to bring down the employee cost.

He also submitted that PSPCL has allowed some pay benefits to its employees due to the agitation started by unions in Nov-Dec 2021 and PSPCL is bound to approach the Commission for its pass through in tariff. Further, huge arrears are payable to the employees due to implementation of Pay Commission Report. There needs to be justification of such increases as these are much above to GOI pay package. He Requested that such demands needs to be thoroughly scrutinized and only justified costs need to be passed on to the consumers.

14. PSPCL has also not informed about the disposal of two units of GGSSTP Ropar

In spite of having retired 2 units, the expenditure is being booked at the same level which needs to be disallowed. Assets of two units be sold immediately and the sale proceeds of 2 units of Ropar be used to repay the capital loans so that consumer get some relief.

15. Overdue receivables

In chapter 6: Status of directive compliances, page 125 of the current ARR, it is stated that there are outstanding dues of 4631.68 crore and out of which Rs. 2181.61 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.2181.61 crore), the same should be deducted from the Government loans given to PSPCL or the Government equity be reduced by Rs.2181.6 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 amounts of various government offices.

Similarly, he 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

16. Security (Consumption)

Presently interest on Security is at RBI rate which is only around 4% whereas we have to take working capital loan at 8-9%. There is provision of pre-paid meter in Supply Code. PSPCL should spell out the road map for introducing Pre Paid meters for industry. If PSPCL is not ready, then consumers be allowed the facility to submit Bank Guarantee for Security (Consumption) and the cash deposited for Security be refunded.

He also submitted that the MOP has also issued directions to install Smart meters with prepaid facility for all industrial consumers by March 2023. As such trajectory to achieve the installation of pre-paid meters on industry be finalized.

17. Aligning steel furnace tariff with general industry post implementation of Harmonics Regulations

The tariff of steel furnace industry should be kept at par with general industry when harmonics standards are implemented in the State of Punjab. It is chiefly due to harmonics disturbance to the system, the tariff of steel industry is kept higher than general industry.

18. Revenue surplus situation exist for PSPCL for FY 2020-21 and FY 2021-22

PSPCL in its Balance sheet has shown net profit of Rs. 1446 crore for FY 2020-21. Keeping in view the fact that balance sheet is based on actual figures, even after removing of return on equity element as MYT regulations of Rs.975 crore, there is still surplus of Rs. 471 Crore, even as per audited balance sheet, which is generally far more than approved expenses. Accordingly, the approved ARR is likely to generate a net profit for PSPCL for FY 2020-21. However, PSPCL has shown a net profit of Rs. 4 Crore for FY 2021-22. Even adding back excess interest and finance charges and interest on working capital claimed (Rs.467 crore) and return on equity by Rs.709 Crore (Rs.1684-975), there is surplus of Rs.1176 crore. Besides that there would be more items excess claimed by PSPCL. Similarly, FY2022-23 would also generate surplus rather than any deficit. In this regard, he submitted that there is a strong case for reduction of tariff for all categories of consumers, within which tariff of those consumers should be reduced more who are subsidizing other categories of consumers.

19. Subsidy to agriculture sectors and other sectors

Subsidy to agriculture and other sectors should be calculated as per approved figure of sale for FY 2020-21, FY2021-22 and FY2022-23. Delay payment of subsidy by Government of Punjab should be worked out accordingly along with interest thereon as a financing cost. He also requested for sample audit of working calculations of the subsidy claimed by PSPCL in the consumer bills being issued by PSPCL to cross verify the claims specially for night period claims for industrial consumers.

20. Continue with threshold consumption rebate

As per PSPCL ARR, table no 1, page 26, there is increase of about 7% in power consumption in FY 2020-21, based on audited figure. Keeping in view the same, he requested that threshold consumption rebate should be continued for FY 2022-23. However, it is pertinent to note that threshold consumption rate is calculated based on surrender power cost and other related variables to make it attractive. However, he stated that PSPCL is proposing threshold rebate at Rs.4.86/unit, in its replies to deficiencies, (refer page 40), which should not be accepted and calculation of the same should be shared with public also as well as provided in Tariff Order also.

21. Time of Day Tariff (TOD)

PSPCL has proposed TOD tariff to be started from 16th October 2022 against 1st October 2022. It is argued by PSPCL in its replies to deficiencies on page 40 that irrigation demand for certain verities of Paddy remain till 15th October. Therefore, TOD date to be postponed till 16th October. He strongly objected to the PSPCL proposal and rationale given for the same. He further stated that that TOD tariff is discontinued from 1st June of each month while the supply to agriculture sector is started from 13th June (since last 2 years). Therefore, the TOD for summer months should continue till 12th June also.

Moreover, the TOD tariff period cannot be micro managed to cover all the varities of the rice sowing period and linked with the majority Paddy season. Keeping in view this fact,

i. The current regime of TOD should continue as it is

ii. If the TOD date is extended from 1st October to 15 October then TOD date should also be extended to 13-15th June against 31st May of each year because of reason explained above.

22. Uninterrupted Power to Industry

PSPCL to ensure Uninterrupted Power to Industry in case of Delayed Monsoon - He requested PSERC to give clear directions to PSPCL that in the event of delayed monsoons in the upcoming months of June- July which coincide with the Paddy sowing season, the Power supply to industry should not be disrupted as had happened last year.

Suggestions to the Commission:

1. There is no case for allowing any increase in ARR as sought by the PSPCL for FY 2020-21 and FY 2021-22 and in fact tariff should be reduced especially for subsidizing class of consumers specially EHT and HT LS consumers.
2. Carry forward the rationalization of Electricity Tariff in the State based on the principle of category wise 'Cost To Serve' principle.
3. Ensure tariff rationalization of subsidized class of consumers or ask State Government to compensate the PSPCL through explicit subsidy.
4. Minimize the power cut on large industrial EHT and HT consumers.
5. Voltage rebate for 66 KV consumers be increased from 25 paise/unit to 50 paise/unit.
6. Continue with threshold consumption rebate.
7. Continue with TOD regime of FY 2021-22 to FY 2022-23 also.
8. As there is no cash flow for equity and only GOP loans/Consumer contributions & Govt. subsidies have been converted into equity, no ROE be allowed and only interest on Loan be allowed.

6. Mr. Onkar Singh from Avon Cycles, Ludhiana requested that:

The limit of load for SP category may be raised from 20kW to 40kW and that of MS category from 100 kW to 200 kW.

7. Kamal Dalmia Chairman Focal point industry Association (Regd. Amritsar):

He made following suggestions:

- Alternate distribution licensee should be brought in to have healthy competition, improved power supply and thereby reduction in tariff.

- Increase interaction of PSPCL officers with public to enable early mitigation of their problems.
- To hire technically sound consultant to have better technical inputs.

8. **Representative of Pharma Commission:**

   - Power supply to AP high technology/high density pharming be increased from present 8 hours supply to 24 hours supply.

9. **Chairman PHDCCI – R.S Sachdeva stated that they had made detailed presentation, observations and suggestions to the Commission during the public hearings and they should be considered, as suggestions from PHDCCI for the purposes of the State Level Committee also. In addition to the following suggestions were also made:**

   - Power supply during paddy season be planned week wise to have regular, uninterrupted supply.
   - to engage a third party for energy auditing. Further, suggested that PSPCL to have their own, in house energy audit cell, to know area wise actual losses and take necessary remedial actions to bring losses within the prescribed limit.
   - The amount accrued on account of plants disposed of be reused for reducing CIP.

10. **Baldev Singh-CMD-PSPCL :**

    While welcoming the feedback and suggestions of the Committee Members CMD-PSPCL stated as under:

    - ATC limit of Punjab is 8500MW and suitable actions are being taken to get this limit extended to 9000MW. For this year paddy season a total power capacity of 15500 MW including internal general of 6500MW power is being arranged to provide uninterrupted quality power supply to all sectors of Punjab.
    - Banking of power PSPLC touched 2500 MW.
    - All arrangements to operationalised Pachhwara coal mine has been made and coal shall be available by May 2022. With the operationalised of coal mine there will be a saving of Rs. 600-700 crore annually.
    - 600MW Shahpur Kandi project shall be commissioned by Year 2024.
    - Tariff of LS category (PIU and General) be made equal as there are repercussions at the field level.

- Telephone 1912 no. (provided for consumer complaint lodging and redressal) has been strengthened by adding sufficient more PNT lines for improving the consumer power related grievances redressal.

The Chairperson thanked all the members for their valuable comments and suggestions.

The meeting ended with a vote of thanks to the chair.