PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO No. 220-221, SECTOR 34 A, CHANDIGARH

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PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH

PETITION NO. 03 OF 2019 FILED BY PSTCL FOR TRUE-UP OF FY 2017-18, ANNUAL PERFORMANCE REVIEW FOR FY 2018-19 AND APPROVAL OF REVISED ARR AND DETERMINATION OF TARIFF FOR FY 2019-20

PRESENT: Ms. Kusumjit Sidhu, Chairperson
Sh. S.S. Sarna, Member
Ms. Anjuli Chandra, Member

Date of Order: 27th May, 2019

ORDER

The Punjab State Electricity Regulatory Commission (Commission), in exercise of powers vested in it under the Electricity Act, 2003 (Act), passes this order for determining the True-Up of FY 2017-18, Annual Performance Review (APR) for FY 2018-19, approval of Revised Annual Revenue Requirement (ARR) and determination of Tariff for FY 2019-20 for Transmission and State Load Despatch Centre (SLDC) businesses 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 hearings held at Ludhiana, Amritsar, Patiala and Chandigarh, the responses of PSTCL to the objections and observations of the Government of Punjab (GoP) in this respect, 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 PSTCL for FY 2011-12 to FY 2018-19. The Tariff Order for FY 2007-08 had been passed by the Commission in suo-motu proceedings.

PSTCL has submitted that it is one of the ‘Successor Companies’ of the erstwhile

Punjab State Electricity Board (PSEB), duly constituted under the Companies Act, 1956 on 16.04.2010 after restructuring of the Board by Government of Punjab vide notification no.1/9/08-EB(PR)/196 dated 16.04.2010, under the “Punjab Power Sector Reforms Transfer Scheme” (Transfer Scheme). As per the Transfer Scheme, the erstwhile Punjab State Electricity Board (the predecessor) has been unbundled into two entities i.e. Punjab State Power Corporation Limited (PSPCL) and Punjab State Transmission Corporation Limited (PSTCL). PSPCL is assigned with the Generation, Distribution and allied activities of the erstwhile PSEB and PSTCL is assigned transmission of electricity along with operation of State Load Despatch Centre (SLDC) functions. Further, in terms of Section 39 of the Act, the Government 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, 2014 (PSERC MYT Regulations, 2014) and vide notification dated May 28, 2015, the effective date of enforcement of these Regulations was April 1, 2017.

1.2 True Up for FY 2017-18, Annual Performance Review (APR) for FY 2018-19 and Revised Annual Revenue Requirement (ARR) for FY 2019-20

PSTCL has filed the Petition for True up of FY 2017-18, APR for FY 2018-19, Revised ARR and Determination of Tariff for FY 2019-20.

The petitioner has prayed to:

a) admit the petition seeking approval of True up for FY 2017-18, Annual Performance Review (APR) for FY 2018-19, revised ARR for FY 2019-20 and determination of Tariff for FY 2019-20 in accordance with PSERC MYT Regulations, 2014, as amended from time to time;

b) approve the Revenue Gap arising on account of True up for FY 2017-18 and Annual Performance Review (APR) for FY 2018-19 along with carrying cost and its recovery through Tariff in FY 2019-20, as worked out in this petition;

c) approve the revised capital expenditure for FY 2018-19 and FY 2019-20 submitted in the Petition;

d) approve the ARR forecast and Tariff for FY 2019-20 for Transmission Business and SLDC;

e) invoke its power under Regulations 66 and 67 in order to allow the deviations from PSERC MYT Regulations, 2014, wherever sought in this petition;

f) allow additions/alterations/modifications/changes to the petition at a future date;

g) allow any other relief, order or direction, which the Commission deems fit to be issued;

h) condone any error/omission and to give opportunity to rectify the same.

On scrutiny of the petition, it was noticed that the petition was deficient in some respects. The deficiencies were conveyed to PSTCL vide letter no. PSERC/M&F/2248 dated 11.12.2018 and memo no. 2427/PSERC/M&F dated 02.01.2019. The reply to deficiencies were furnished by PSTCL vide its Memo. No. 2996/FA/APR-2A/2018-19 dated 18.12.2018 and memo no. 63 dated 07.01.2019. Accordingly, after taking into consideration the reply of PSTCL, the petition was taken on record on 10.01.2019 as Petition No. 03 of 2019. Various meetings were taken with PSTCL on the data submitted in the ARR. The correspondence continued till end of April, 2019 and relevant correspondence between the Commission and PSTCL was placed on the website of the Commission.

1.3 Objections and Public Hearings

A public notice was published by PSTCL in The Indian Express (English), Hindustan Times (English), Punjabi Tribune (Punjabi), Jagran (Punjabi) and Dainik Jagran (Hindi) on 15.01.2019; inviting objections from the general public and stake holders on the petition filed by PSTCL. Copies of the Petition including deficiencies pointed out by the Commission and 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. Soft Copies of the same were made available on the website of PSTCL i.e. www.pstcl.org and the Commission website i.e. www.pserc.gov.in also. The relevant correspondence with PSTCL was also uploaded on the website of the Commission. In the said public notice dated 15.01.2019, 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.

The Commission decided to hold public hearings at Ludhiana, Amritsar, Patiala and Chandigarh, as per details hereunder:

Venue	Date & time of public hearing	Category of consumers to be heard
LUDHIANA Multi Purpose Hall, Power Colony, PSPCL, Opp. PAU, Ferozepur Road, Ludhiana	**February 20th, 2019** 2.30 PM to 4.30 PM	All consumers/ organizations of the area.
AMRITSAR VIP Guest House, PSPCL, Batala Road, Verka at Amritsar	**February 25th, 2019** 02.30 PM to 4.30 PM	All consumers/organizations of the area.
PATIALA Technical Training Institute (TTI), PSPCL Auditorium, Shakti Vihar, Badungar (near 23 No. Railway Crossing), Patiala.	**February 27th, 2019** 11.30 AM to 1.30 PM	All consumers/organizations of the area.
CHANDIGARH Commission's Office i.e. SCO 220-221, Sector 34-A, Chandigarh.	**February 28th, 2019** 11.30 AM to 1.00 PM	Industrial consumers/ organizations
	3.00 PM to 4.30 PM	Officers'/Staff Associations of PSPCL and PSTCL
	March 1st, 2019 11.30 AM to 1.00 PM	All consumers and their unions except Industry.

A public notice to this effect was uploaded on the website of the Commission as well as published in various news papers i.e. The Tribune (English), Hindustan Times (English), Ajit (Punjabi) and Punjab Kesari (Hindi) on 01.02.2019. Through this public notice, it was intimated that the Commission will also hear the comments of the Punjab State Power Corporation Limited and Punjab State Transmission Corporation Limited on the objections raised by the public besides Corporations' own point of view at Commission's office i.e. SCO 220-221, Sector 34-A, Chandigarh on 07.03.2019 from 11.00 AM to 1.00 PM (to be continued in the afternoon, if necessary).

1.4 The Commission held public hearings as per schedule from 20th February, 2019 to 1st March, 2019 at Ludhiana, Amritsar, Patiala and Chandigarh. The views of PSTCL on the objections/comments received from public and other stakeholders were heard by the Commission on 07.03.2019.

1.5 The Government of Punjab was approached by the Commission vide DO letter No. 2723-2724 dated 28.01.2019 seeking its views on the Petition No. 03 of 2019. In response, Government of Punjab, vide Memo. No. 1/2/2019-EB (PR)/472 dated 21.05.2019 submitted its comments/observations on the same.

1.6 The Commission received 4 written objections including the comments of

Government of Punjab. All objections were received after the due date. The Commission decided to take these objections into consideration.

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	1
2.	Industries	2
3.	Government of Punjab	1
	Total	**4**

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. 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 12.02.2019 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 also put 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 directives of the Commission in these petitions is given in **Chapter - 4** of this Tariff Order.

Chapter 2
True up for FY 2017-18

2.1 Background

The Commission had approved the ARR and Tariff for FY 2017-18 in its MYT Order dated 23.10.2017 for the first Control Period of FY 2017-18 to FY 2019-20, which was based on expenditure and revenue, estimated by the Punjab State Transmission Corporation Limited (PSTCL) for its Transmission and SLDC Businesses. PSTCL furnished revised estimates for FY 2017-18 during the determination of ARR for FY 2018-19. The Commission, in the Tariff Order of FY 2018-19, reviewed its earlier approvals and re-determined the same based on the revised estimates made available by PSTCL. Now, PSTCL has submitted true up of FY 2017-18 with the submission that same is based on Audited Annual Accounts.

This Chapter contains a true up of FY 2017-18, based on the prudence check of figures submitted by PSTCL in Petition No. 03 of 2019.

2.2 Transmission System Availability

PSTCL has submitted its month-wise average Transmission System Availability for FY 2017-18 as under:

Table 2.1: Transmission System (TS) Availability of PSTCL for FY 2017-18

Sr. No.	Month	TS Availability (%)
I	**II**	**III**
1.	April, 2017	99.97
2.	May, 2017	99.94
3.	June, 2017	99.97
4.	July, 2017	99.99
5.	August, 2017	99.98
6.	September, 2017	99.99
7.	October, 2017	99.99
8.	November, 2017	99.96
9.	December, 2017	99.99
10.	January, 2018	99.94
11.	February, 2018	99.98
12.	March, 2018	99.99
	Average Availability	**99.97**

This is further discussed in para 2.13.

2.3 Transmission Loss

The Commission in the MYT Order dated 23.10.2017 for MYT Control period of FY 2017-18 to 2019-20 had noted that PSPCL has completed the intra-State boundary metering-cum- transmission level energy scheme, but the data from it is yet to be stabilized. The Commission had therefore approved transmission losses at 2.50% for FY 2017-18 with the observation that it would re-visit the transmission losses on the basis of stabilized transmission loss data for the full year during the true up for FY 2017-18.

PSTCL's Submissions:

PSTCL has requested the Commission to approve the transmission loss of 3.12% for FY 2017-18 with the claim that stabilized data for transmission loss is available from April, 2017 to March, 2018 as under:

Table 2.2: Transmission Loss as claimed by PSTCL

Sr. No.	Month	Energy Input (MWH)	Energy Output (MWH)	Transmission Loss (%)
I	II	III	IV	V
1.	April, 2017	3178328	3072798	3.32%
2.	May, 2017	4582304	4448238	2.93%
3.	June, 2017	4981671	4851319	2.62%
4.	July, 2017	6603951	6471100	2.01%
5.	August, 2017	6178639	5966840	3.43%
6.	September, 2017	5336484	5127861	3.91%
7.	October, 2017	3959420	3872626	2.19%
8.	November, 2017	2660262	2527512	4.99%
9.	December, 2017	2918229	2800907	4.02%
10.	January, 2018	2928285	2832306	3.28%
11.	February, 2018	2695787	2627711	2.53%
12.	March, 2018	3331106	3216383	3.44%
	Total	**49354466**	**47815601**	**3.12%**

Commission's Analysis:

The Commission noted that PSTCL has also submitted the transmission loss data for FY 2018-19 (April to August, 2018 in the APR of 2018-19 and from September to December 2018 in its reply to the directives of Tariff order for FY 2018-19). The Commission compared it with the corresponding months of FY 2017-18 as under:

Table 2.3: PSTCL Transmission Losses from April to December for FY 2017-18 & FY 2018-19

	FY 2018-19		FY 2017-18	
Sr. No.	**Month**	**Transmission Loss (%)**	**Month**	**Transmission Loss (%)**
I	**II**	**III**	**IV**	**V**
1.	April, 2018	4.67%	April, 2017	3.32%
2.	May, 2018	3.78%	May, 2017	2.93%
3.	June, 2018	3.36%	June, 2017	2.62%
4.	July, 2018	2.57%	July, 2017	2.01%
5.	August, 2018	2.66%	August, 2017	3.43%
6.	September, 2018	2.83%	September, 2017	3.91%
7.	October, 2018	2.09%	October, 2017	2.19%
8.	November, 2018	2.27%	November, 2017	4.99%
9.	December, 2018	2.38%	December, 2017	4.02%

The Commission observes that there is a huge variation in losses during same months of the FY 2017-18 and FY 2018-19 and also over the full year month wise even during the months which have comparable energy inputs. This indicates that there is still no stabilization of data.

The Commission also noticed from the letters of PSTCL that Transmission Losses are being computed based on manual readings of energy meters installed at boundary interface points. The possibility of inadvertent error in assessment of transmission losses based on manual readings cannot be ruled out.

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 order for FY 2017-18.

2.4 Capital Investment Plan (CIP) and Capital Expenditure (CAPEX):

PSTCL's Capital Investment Plan for MYT control period of FY 2017-18 to FY 2019-20 was approved by the Commission vide Order dated 13.12.2017 in Petition No. 44 of 2016. The approved Capital investment Plan (CIP) and the Capital expenditure submitted by PSTCL in its ARR for FY 2017-18 is as under:

Table 2.4: PSTCL Capital Investment Plan and Capital Expenditure for FY 2017-18

(Rs. Crore)

Sr. No.	Description	Approved CIP	Submitted by PSTCL
1.	Transmission Business	328.29	352.51
2.	SLDC Business	10.00	1.59

The Commission notes that the Capital expenditure of Transmission Business for FY 2017-18 against the approved schemes is Rs. 321.48 Crore (including Expenditure of Rs. 2.64 Crore on emergency works) against the total expenditure of Rs. 352.51 Crore shown by PSTCL.

Accordingly, the Commission decides to provisionally approve the CAPEX of Rs. 321.48 Crore for Transmission Business of PSTCL for FY 2017-18.

Further, the Commission notes that capital expenditure of SLDC business for FY 2017-18 is Rs.1.59 Crore against the approved plan of Rs.10 Crore (less by 84%), **accordingly the Commission approves the CAPEX of Rs. 1.59 Crore for SLDC business for FY 2017-18.**

2.5 Capital Works and its Funding

PSTCL's Submission

2.5.1 PSTCL submitted addition of Gross Fixed Assets during 2017-18 and closing Work -in -Progress ending March, 2018 as under:

Table 2.5: Capital Investment for FY 2017-18 claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
I	II	III	IV	V
1.	Opening Capital Work- in- Progress	660.78	4.42	665.20
2.	Add: Addition of Capital Expenditure during the year	352.51	1.59	354.10
3.	Less: Transferred to fixed assets during the year	564.33	0.08	564.41
4.	**Closing Capital Works-in- Progress**	**448.96**	**5.93**	**454.89**

2.5.2 PSTCL has stated that it has considered funding of capital expenditure through equity at 30% of capital expenditure i.e. Rs.106.23 Crore and 70% of the capital expenditure i.e. Rs. 247.87 Crore through loan.

Commission's Analysis:

2.5.3 The Commission observes that there is an addition of Gross Fixed Assets of Rs.578.31 Crore and assets disposed off/sold of Rs.0.62 Crore during FY 2017-18 as per the Audited Annual Accounts of FY 2017-18. Addition of Gross Fixed Assets of Rs. 578.31 Crore includes Assets-not-in-use of Rs.15.44 Crore and deletion of Assets not-in-use of Rs.0.26 Crore. The Commission disagrees with the addition/deletion of Assets not-in-use. The Commission determines the net addition of Gross Fixed Assets during the year as under:

Table 2.6: Determination of net addition of Gross Fixed Assets during FY 2017-18 by the Commission

(Rs. Crore)

Sr. No.	Particulars	Amount
I	II	III
1.	Addition of Assets as per Audited Annual Accounts of FY 2017-18	578.31
2.	Less: Disposal of the Assets as per Audited Annual Accounts	0.62
3.	Net addition of Gross Fixed Assets as per Audited Annual Accounts	577.69
4.	Less: Net addition of Assets not in use (Rs.15.44 Crore-Rs.0.26 Crore)	15.18
5.	**Net allowable Addition of Gross Fixed Assets**	**562.51**

2.5.4 The Commission considers the addition of Gross Fixed Assets of Rs.562.43 Crore for Transmission Business and Rs.0.08 Crore for SLDC business of FY 2017-18. Based on provisionally approved capital expenditure, the Commission determines closing Work -in- Progress as under:

Table 2.7: Capital Work- in- Progress determined by the Commission for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Claimed by PSTCL			Approved by the Commission		
		Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL
I	II	III	IV	V	VI	VII	VIII
1.	Opening Capital WIP	660.78	4.42	665.20	660.78	4.42	665.20
2.	Add: Capital Exp. during Year	352.51	1.59	354.10	321.48	1.59	323.07
3.	**Total**	**1013.29**	**6.01**	**1019.30**	**982.26**	**6.01**	**988.27**
4.	Less: Transferred to Fixed Assets	564.33	0.08	564.41	562.43	0.08	562.51
5.	**Closing Capital WIP**	**448.96**	**5.93**	**454.89**	**419.83**	**5.93**	**425.76**

Further, the Commission determines funding requirement of PSTCL for FY 2017-18 as under:

Table 2.8: Loan and equity requirement approved by the Commission for FY 2017-18

(Rs. Crore)

Particulars	Amount
Provisionally approved Capital Expenditure for FY 2017-18	323.07
Equity requirement i.e.30 % of capital expenditure	96.92
Loan requirement i.e. 70% of capital expenditure	226.15

Out of Rs. 226.15 Crore of loan requirements, Rs. 225.04 Crore are considered for Transmission Business and Rs. 1.11 Crore considered for SLDC Business.

2.6 Employee Cost

2.6.1 In the MYT Petition for FY 2017-18 to FY 2019-20, PSTCL had projected employee expenses of Rs. 530.43 Crore for its Transmission Business and Rs. 7.59 Crore for its SLDC Business for FY 2017-18. The Commission had approved employee cost of Rs. 430.58 Crore for Transmission Business and Rs. 6.75 Crore for SLDC Business to PSTCL for FY 2017-18.

2.6.2 In the APR for FY 2017-18, PSTCL had submitted revised estimates for employee cost of Rs. 497.91 Crore for Transmission Business and had claimed Rs.7.57 Crore for SLDC Business. The Commission approved the revised employee cost of Rs.430.58 Crore for Transmission Business and Rs.6.75 Crore for SLDC Business of PSTCL at the time of APR of FY 2017-18.

PSTCL's Submissions:

2.6.3 In the True Up Petition for FY 2017-18, PSTCL has claimed employee expenses of Rs.464.58 Crore for Transmission Business and Rs.6.51 Crore for SLDC Business based on Audited Annual Accounts for FY 2017-18 (net of capitalization of Rs.39.08 Crore).

Table 2.9: Detailed Employee Cost claimed by PSTCL for FY 2017-18 as per Audited Accounts

(Rs. Crore)

Sr. No	Particulars	Transmission	SLDC	PSTCL
I	II	III	IV	V
1.	Salaries	77.50	2.50	80.00
2.	Interim relief/ Wage Revision	-	-	-
3.	Overtime	4.66	-	4.66
4.	Dearness Allowance	94.81	3.07	97.88
5.	Other Allowances	16.13	0.50	16.63
6.	Bonus	0.06	0.00	0.06
7.	**Total (A)**	**193.16**	**6.07**	**199.23**
8.	Staff Welfare Expenses			
i	Electricity Concession to Employees	1.68	-	1.68
ii	Other Staff Welfare Expenses (Uniforms, etc.)	0.08	0.00	0.08
9.	**Total (B)**	**1.76**	**0.00**	**1.76**
10.	Medical Reimbursement	1.00	0.02	1.03
11.	LTC Expenses	0.14	0.03	0.17
12.	Payment under Workmen Compensation Act	-	-	-
13.	**Total (C)**	**1.14**	**0.05**	**1.19**
14.	**Manpower Outsourcing cost (D)**	**23.71**	**0.25**	**23.96**
15.	Less:			
16.	Employee costs capitalized	39.08	-	39.08
17.	**Total (E)**	**39.08**	**-**	**39.08**
18.	**Net Total (F=A+B+C+D-E)**	**180.68**	**6.38**	**187.06**
19.	**Terminal benefits (G)**	**283.89**	**0.13**	**284.02**
20.	**Grand Total (F+G)**	**464.58**	**6.51**	**471.08**

The detailed employee cost claimed by PSTCL for Transmission and SLDC Business for FY 2017-18 is summarized as under:

Table 2.10: Employee Cost claimed by PSTCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Terminal Benefits	283.89	0.13	284.02
2.	Other Employee Cost	180.68	6.38	187.06
Total Employee Cost		**464.57**	**6.51**	**471.08**

PSTCL claimed the Terminal benefits for the employees of erstwhile PSEB covered under Transfer Scheme as Rs.279.45 Crore being 11.36% of the total amount as intimated by PSPCL and also claimed the terminal liabilities towards NPS based on actual pay-out made. The terminal benefits claimed by PSTCL is as under:

Table 2.11: Terminal Benefits claimed by PSTCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	PSTCL
I	**II**	**III**
1.	Terminal Benefits for the Employees of erstwhile PSEB	279.45
2.	Terminal Benefits towards NPS for new employees recruited by PSTCL	4.15
3.	Terminal Benefits towards Gratuity and Leave encashment for new employees recruited by PSTCL	-*
4.	Miscellaneous -PF Inspection fees, solatium, contribution to CPF, PF, LWF, etc.	0.42
5.	**Grand Total**	**284.02**

**PSTCL has stated that employees recruited by PSTCL are covered under New Pension Scheme (NPS) and are entitled to gratuity under the provisions of Payment of Gratuity Act, 1972. However, PSTCL has not considered the Terminal Benefits of Rs.1.10 Crore on account of the provision for gratuity and leave encashment for employees recruited by PSTCL in the present Petition. PSTCL will claim such expenses on Pay as you go basis, as and when such expenses will occur, as directed by the Commission. PSTCL has not claimed any progressive funding of terminal benefits in view of the pending appeal before Hon'ble Supreme Court.*

2.6.4 PSTCL further, submitted that it is also entitled to the additional employee cost pertaining to new installations/network for the assets added during the year in accordance with Regulation 28 (3) which allows additional employee cost in case of new installations on case to case basis keeping in view the principles and methodologies enunciated in these Regulations.

2.6.5 PSTCL vide its office memo No.2956 /FA / APR-2A / 2018-19 dated 18.12.2018 in a reply to the deficiencies pointed out vide this office memo No. PSERC/M&F/2248 dated11.12.2018 submitted that PSTCL claimed 'Other Employee Cost' for FY 2017-18 based on Gross Employee Cost for FY 2016-17 on following grounds:

(a) The Capital expenditure and capitalization varies from year to year based on the capital works in progress.

(b) The Gross Employee cost includes cost towards the total employees working in projects, maintenance services, support services and head office.

(c) PSTCL further submitted the employee strength in PSTCL as on 31.03.2018 is 3011, out of which 568 Nos. (19% of total strength) of employees are posted for capital works set up i.e. TS Organization.

(d) PSTCL further submitted that PSERC MYT Regulations-2014, (as amended from time to time), do not specify, whether the base expense to be considered should be of gross or of net.

(e) PSTCL argued that normative employee expenses be permitted should be at gross level only, as the expenses capitalization depends on capital projects undertaken and staff or employee of PSTCL dedicated to such project execution.

2.6.6 PSTCL has considered 'Other Employee Cost' of Rs.215.90 Crore for FY 2016-17 for Transmission Business as base expenses after adding capitalised employee costs of Rs.43.43 Crore, as per Audited Annual Accounts. Since, no employee cost has been capitalised for SLDC for FY 2016-17 and it has considered the 'Other Employee Cost' of Rs.6.42 Crore for FY 2016-17 for SLDC as base expenses.

2.6.7 PSTCL computed the 'Gross Other Employee Cost' for FY 2017-18 as under:

Table 2.12: Computation of Gross 'Other Employee Cost' by PSTCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
I	II	III	IV	V
1.	Net Other Employee Cost for FY 2016-17	172.47	6.42	178.89
2.	Add: Employee Costs capitalised in FY 2016-17	43.43	-	43.43
3.	Gross Other Employee Costs allowed for FY 2016-17	215.90	6.42	222.32
4.	CPI:WPI (50:50) Increase of FY 2017-18 over FY 2016-17	3.03%	3.03%	3.03%
5.	**Gross Other Employee Cost for FY 2017-18**	**222.45**	**6.61**	**229.06**

PSTCL requests the Commission to allow actual employee cost on the basis of Audited Annual Accounts.

Commission's Analysis:

Terminal Benefits

2.6.8 The Terminal benefits expenses are to be determined as per Regulation 26.1 of PSERC MYT Regulations, 2014 (as amended from time to time). Relevant notes of Regulation 26 of MYT Regulations, 2014 are reproduced below for reference:

"Note-4: Terminal Liabilities such as death-cum-retirement gratuity, pension, commuted pension, leave encashment, LTC, medical reimbursement including fixed medical allowance in respect of 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."

Total terminal benefits of PSPCL and PSTCL are to be apportioned in the ratio of 88.64% and 11.36% between PSPCL and PSTCL respectively as per Transfer Scheme. PSPCL has its 88.64% share of terminal benefits amounting to Rs.2180.50 Crore. Accordingly, PSTCL's share @11.36% of terminal benefit claimed as Rs.279.45 Crore (Rs.279.32 Crore for Transmission Business Rs.0.13 Crore for SLDC Business) is allowed.

In addition to the above, an amount of Rs.0.42 Crore of 'other terminal benefits' relating to Miscellaneous-P.F. inspection fees, Solatium, contribution to Contributory Provident Fund, Provident Fund, Labour Welfare Fund etc. and an amount of Rs.4.15 Crore of terminal benefits towards National Pension Fund for new employee recruited by PSTCL are also allowed for FY 2017-18.

Thus, the Commission allows terminal benefits of Rs. 283.89 Crore for Transmission Business and Rs. 0.13 Crore for SLDC Business of PSTCL for FY 2017-18.

Other Employee Cost

2.6.9 The baselines values of O&M expenses are to be determined by as per Regulation 8(1) of PSERC MYT Regulations, 2014, which states as:

"8.1 Baseline values

a) The baseline values for the control period shall be determined by Commission and the projections for the control period shall be based on these figures

b) The baseline values shall be inter-alia based on figures approved by the Commission in the past, latest audited accounts, estimates of the expected figures for the relevant year, industry benchmarks/norms and other factors considered appropriate by the Commission."

2.6.10 The Commission, in its MYT Order dated 23.10.2017 has considered actual amount of employee cost of FY 2015-16 as base for deriving the allowable amount for the Control Period due to non-availability of Audited Accounts of last year. The Commission in its order recorded as under:

"5.5; *The Commission has considered actual amount of employee cost of FY 2015-16 from the Audited Annual Accounts of FY 2015-16 as base for deriving the allowable amount of employee cost for the Control Period, however, the employee cost of* ***Control Period will be re-determined after the True up of FY 2016-17, based on the Audited Annual Accounts.*****"**

Further, while considering the petition of PSTCL for APR of FY 2017-18, the Commission in its Order dated 19.04.2018 decided as under:

"3.5.6; The Commission in the MYT Order dated 23.10.2017,approved total employee cost of Rs. 437.33 Crore for FY 2017-18 and Rs. 452.67 Crore for FY 2018-19, ***based on Regulation 26 of PSERC MYT Regulations. PSTCL has not submitted Cost Audit Report for FY 2016-17. Since the financial year is not complete, the Financials of FY 2017-18 are also not available.*** *Accordingly, the Commission allows the employee cost already approved in Order dated 23.10.2017 as reproduced in Table 3.2. The Commission shall review the employee cost on the availability of aforesaid information during True Up for FY 2017-18".* ***(emphasis added)***

2.6.11 The Commission examined the actual 'Gross Other Employee Cost' Vs. 'Net Other Employee Cost' of previous years i.e. from FY 2011-12 to FY 2017-18.

Table 2.13: Other Employee Cost from FY 2011-12 to FY 2017-18

(Rs. Crore)

Sr. No.	Financial Year	Gross other employee cost	Employee cost capitalized	Net other employee cost	Other Employee cost approved by the Commission
I	II	III	IV	V	VI
1.	2011-12	205.84	85.15	120.69	120.69
2.	2012-13	177.77	44.80	132.97	132.99
3.	2013-14	198.34	46.12	152.22	152.22
4.	2014-15	195.04	45.00	150.04	150.02
5.	2015-16	219.17	46.59	172.58	148.82
6.	2016-17	222.47	43.43	179.04	123.30
	2017-18	**226.14**	**39.08**	**187.06**	

The Commission notes that capitalization of employee expenses i.e. Rs. 85.15 Crore in FY 2011-12 was on higher side as compared to subsequent years. The

Commission had considered the actual net employee cost i.e. Rs.120.69 Crore of FY 2011-12 for determining 'Other Employee Cost' for subsequent years as per Regulation 28 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005.

2.6.12 Hon'ble APTEL in its judgment dated 30.03.2015 in Review Petition No 5 of 2015 in Appeal No 174 of 2012 regarding employee cost of PSPCL held that "*actual costs need to be considered"*.

2.6.13 The issue raised by PSTCL regarding Gross Employee cost Vs. Net Employee cost has already been examined by Hon'ble APTEL in an Appeal No. 47 of 2012 in case of Maharashtra State Power Generation Company Limited Vs. Maharashtra State Regulatory Commission. The relevant extract of paragraph of said order is re-produced for reference:

> "*The Annual Revenue Requirement comprises of two expenditures viz., Capital Expenditure and Revenue Expenditure. Capital Expenditure includes Return on Equity, Financing costs and Depreciation of the Capital cost of the asset. Revenue expenditure includes Operation and Maintenance (O&M) expenditure, interest on working capital etc. The O&M expenditure has three components viz., Employees Cost, Administrative and General Expenses and Repair and Maintenance costs. As the nomenclature O&M indicates, employees costs includes the salaries and other allowance payable to employees employed in Operation and Maintenance of the projects. Utilities, like the Appellant herein, have two categories of employees viz., (i) category employed in Construction and Erection of projects and (ii) category employed in Operation and Maintenance of projects. The cost of employees employed in construction activity is capitalised along with capital cost of the asset and the utility earns Return on Equity, Depreciation, financing costs etc for the life time of the project. The cost of employees involved in the O&M activity is added to O&M expenses. O&M expenses are the expenses which have been incurred in operation and maintenance of the project and would not include the expenses which had been incurred in construction of the project. All those expenses, including employees' cost, which have been capitalised and entitles the utility to earn RoE and other benefits for the life time of the project cannot be considered as O&M expenses for that year* ***. Only the expenditure which has been actually incurred in operation and maintenance can form part of O&M expenses. Thus, there is no such term as 'gross O&M' expense or 'net O&M' expenses.*** *The acceptance of the Contention of the Appellant*

would amount to allowing such amounts both as a revenue expense and also form a part of the capital base on which the Appellant could claim RoE, depreciation etc resulting in to double-accounting and, therefore, not permissible.” ***(emphasis added)***

Accordingly, after considering the above facts the Commission considers “Other employee cost” as Rs.180.68 Crore i.e. actual ‘Other Employee Cost’ for FY 2017-18 based on Annual Audited Accounts as baseline value for FY 2017-18 and for subsequent years of Transmission Business. Similarly, the Commission considers Other Employee Cost of SLDC as Rs.6.38 Crore i.e. actual other employee cost for FY 2017-18 based on Annual Audited Accounts as baseline value for FY 2017-18 and for subsequent years for SLDC Business.

Therefore, the Commission allows total Employee Cost of Rs. 464.57 (283.89+180.68) Crore for Transmission Business and Rs. 6.51 (0.13+6.38) Crore for SLDC Business for FY 2017-18.

2.7 Repair and Maintenance (R&M) and A&G Expenses

2.7.1 In the MYT Petition for FY 2017-18 to FY 2019-20, PSTCL projected R&M and A&G Expenses of Rs.58.93 Crore for its Transmission Business and Rs.2.60 Crore for its SLDC Business for FY 2017-18. The Commission approved Rs.57.30 Crore and Rs.1.89 Crore as R&M and A&G expenses for Transmission Business and SLDC Business of PSTCL respectively.

2.7.2 In the APR Petition for FY 2017-18, PSTCL revised its claim of R&M and A&G expenses to Rs.58.83 Crore for its Transmission Business and Rs.1.85 Crore for its SLDC Business. The Commission approved the R&M and A&G expenses of Rs.57.30 Crore for Transmission Business and Rs.1.89 Crore for SLDC Business of PSTCL during the APR of FY 2017-18.

PSTCL’s Submissions:

2.7.3 In the True-up Petition for FY 2017-18, PSTCL has claimed total R&M and A&G expenses of Rs.50.78 Crore (Rs.49.43 Crore for Transmission Business and Rs.1.35 Crore for its SLDC Business) (net of capitalization of Rs.5.24 Crore) based on the Audited Annual Accounts for FY 2017-18.

Table 2.14: PSTCL’s claim of R&M and A&G expenses for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	R&M expenses	22.26	0.55	22.81
2.	A&G expenses	27.17	0.80	27.97
3.	**R&M and A&G expenses**	**49.43**	**1.35**	**50.78**

2.7.4 PSTCL submits that assets funded through Contributory Works of Rs.45.55 Crore were added in fixed assets during FY 2017-18. However, the assets, including the assets funded through Contributory Works, have to be operated and maintained by PSTCL. Therefore, PSTCL has considered the impact of these assets in Gross Fixed Assets for FY 2017-18 for computing R&M and A&G expenses. PSTCL claimed normative R&M and A&G expenses for FY 2017-18 as under:

Table 2.15: Normative R&M and A&G expenses as claimed for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC
	Transmission Business		
1.	Opening GFA	8881.83	18.47
2.	Closing GFA	9444.25	18.57
3.	Average GFA	9163.04	18.52
4.	Escalated K-factor	0.63%	7.52%
5.	**R&M and A&G expenses**	**57.53**	**1.39**
6.	Add: Audit Fee	0.26	-
7.	Add: Licence Fee and ARR Fee	0.50	-
8.	**Grand Total**	**58.29**	**1.39**

2.7.5 PSTCL requested to allow actual R&M and A&G Expenses of Rs.49.43 Crore for Transmission Business and Rs.1.35 Crore for SLDC.

2.7.6 PSTCL vide memo no. 1082/FA/MYT-1/APR-2A dated 12.04.2019 intimated that arrear amounting to Rs.3.00 Crore of electricity charges for FY 2016-17 has been claimed in the Administrative Expenses of FY 2017-18. PSTCL further submitted that Rs.3.00 Crore may be considered as Prior Period expenses.

Commission's Analysis:

2.7.7 The baselines values of O&M expenses for the control period are to be determined as per Regulation 8(1) of PSERC MYT Regulations, 2014 which states as:

"8.1 Baseline values

a) *The baseline values for the control period shall be determined by Commission and the projections for the control period shall be based on these figures.*

b) *The baseline values shall be inter-alia based on figures approved by the Commission in the past, latest audited accounts, estimates of the expected figures for the relevant year, industry benchmarks/nd other factors considered appropriate by the Commission."*

2.7.8 The Commission examined previous years i.e. FY 2011-12 to FY 2017-18 actual expenses of R&M and A&G. The same is tabulated as under:

Table 2.16: R&M and A&G Expenses from FY 2011-12 to FY 2017-18

(Rs. Crore)

Financial Year	Actual R&M & A&G Expenses		Gross R&M and A&G Expenses	Expenses capitalized	Net R&M and A&G Expenses	Net R&M and A&G Expenses approved by the Commission
	Transmission	SLDC				
I	II	III	IV	V	VI	VII
2011-12	45.99	2.49	48.48	9.39	39.07	40.00
2012-13	77.68	3.19	80.87	7.54	65.80	46.00
2013-14	93.18	2.15	95.33	10.36	68.76	53.36
2014-15	73.76	1.92	75.68	10.25	65.43	57.09
2015-16	56.04	0.83	56.87	6.55	50.32	50.35
2016-17	48.71	0.96	49.67	5.63	44.04	44.04
2017-18	54.67	1.35	56.02	5.24	50.78	

2.7.9 The Commission approves the net R&M and A&G expenses as indicated in the latest Audited Annual Accounts of FY 2017-18 for baseline value for FY 2017-18 and subsequent years. PSTCL claimed an amount of Rs.0.22 Crore towards Corporate Social Responsibility (CSR) Fund, Rs.3.00 Crore arrears of electricity charges, Rs.0.26 Crore as Audit Fee and Rs.0.50 Crore as License fee during FY 2017-18. The Commission has not considered these expenses for baseline value of FY 2017-18. However, arrears of Rs.3.00 Crore on account of electricity charges have been considered as prior period expenses. As such, the Commission determines base line value of R&M and A&G expenses for Transmission Business and SLDC Business for FY 2017-18 and subsequent years as under:

Table 2.17: Baseline values of R&M and A&G expenses approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	TOTAL
I	II	III	IV	V
1.	R&M and A&G expenses as claimed	49.43	1.35	50.78
2.	Less: Corporate Social Responsibility	0.22	-	0.22
3.	Less : Arrear of Electricity Charges	3.00	-	3.00
4.	Less: Audit Fees	0.26	-	0.26
5.	Less License fees	0.50	-	0.50
6.	**Baseline value of R&M and A&G expenses**	**45.45**	**1.35**	**46.80**

2.7.10 Based on baseline values of FY 2017-18, the Commission determines K factor, based on provisionally approved capitalization of assets as per the Regulation 26(1)(i) of MYT Regulations, 2014 as under:

Table 2.18: Calculation of K factor for R&M and A&G expenses determined by the Commission

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC
I	II	III	IV
1.	Opening GFA	8881.83	18.47
2.	Addition during the year	562.43	0.08
3.	Closing GFA	9444.26	18.55
4.	Average GFA	9163.04	18.51
5.	Baseline value of R&M and A& G expenses	45.45	1.35
6.	K factor	0.496%	7.293%

2.7.11 In addition to baseline value of Rs.45.45 Crore, Rs.0.26 Crore as Audit Fee and Rs.0.50 Crore as License fee paid during FY 2017-18 are allowed as per note 7 of Regulation 26 of PSERC MYT Regulations, 2014 for Transmission Business. The Commission determines R&M and A&G expenses for FY 2017-18 as under:

Table 2.19: R&M and A&G expenses for FY 2017-18 approved by the Commission

(Rs. Crore)

Particulars	Transmission	SLDC	TOTAL
Baseline value of R&M and A& G expenses	**45.45**	**1.35**	**46.80**
Add: Audit Fees	0.26		0.26
Add: License fess	0.50		0.50
R&M and A&G expenses	**46.21**	**1.35**	**47.56**

Thus, the Commission approves Rs.47.56 (Rs.46.21 Crore for Transmission Business + Rs.1.35 Crore for SLDC Business) Crore of R&M and A&G expense for FY 2017-18.

2.8 Depreciation Charges

In the ARR Petition of MYT period FY 2017-18, PSTCL had claimed depreciation charges of Rs.335.38 Crore for Transmission Business and Rs.2.11 Crore for SLDC Business against which the Commission had approved depreciation charges of Rs.279.94 Crore for Transmission Business and Rs.1.17 Crore for SLDC Business for FY 2017-18**.**

2.8.1 In the Review Petition for FY 2017-18, PSTCL revised its claim of depreciation to Rs.324.45 Crore for Transmission Business and Rs.1.29 Crore for SLDC Business for FY 2017-18. The Commission maintained the depreciation charges as was previously approved in Order No. 23.10.2017 i.e. Rs. 279.94 Crore for Transmission Business and Rs.1.17 Crore for SLDC Business at the time of Review of FY 2017-18.

PSTCL's Submissions:

In the True-up Petition for FY 2017-18, PSTCL has claimed Rs.267.89 Crore as depreciation charges for Transmission Business and Rs.0.94 Crore for SLDC Business as per Audited Annual Accounts for FY 2017-18 (net of capitalization of Rs.0.25 Crore). PSTCL stated that though contributory works of Rs.45.55 Crore were added in assets in FY 2017-18, however, it has not considered any depreciation on account of assets funded through contributory works in FY 2017-18.

Commission's Analysis:

2.8.2 The Depreciation has been determined as per Regulation 21 of PSERC MYT Regulations-2014 (as amended from time to time).

2.8.3 The Commission determines the average Gross Fixed Assets (net of land and land rights of Rs.2926.88 Crore and assets created from Consumer Contribution of Rs.45.35 Crore)) for FY 2017-18 as under:

Table 2.20: Gross Fixed Assets (net of Land & Land rights and Consumer contribution) for FY 2017-18 approved by the Commission.

(Rs. Crore)

Particulars	**Transmission**	**SLDC**	**Total**
Opening GFA	5909.60	18.47	**5928.07**
Add: Net Additions	562.43	0.08	**562.51**
Closing GFA	6472.03	18.55	**6490.58**
Average GFA	6190.82	18.51	**6209.33**

2.8.4 The Commission observes that PSTCL has claimed depreciation of Rs.7.42 Crore on assets-not-in-use & damaged/unrepairable assets and Rs.3.58 Crore on account of impairment loss. The Commission disallows depreciation of Rs.11.00 Crore as the assets have not been used. Accordingly, the Commission determines depreciation amounting to Rs.256.89 Crore for Transmission Business and Rs.0.94 Crore for SLDC Business as under:

Table 2.21: Depreciation charges for FY 2017-18 approved by the Commission

(Rs. Crore)

Particulars	**Transmission**	**SLDC**	**Total**
Depreciation as claimed by PSTCL	267.89	0.94	268.83
Less: Depreciation on Assets-not-in-use	7.42	-	7.42
Less : Impairment Loss	3.58	-	3.58
Depreciation allowed	**256.89**	**0.94**	**257.83**

Depreciation determined above is net of Land & Land Rights and Consumer Contribution.

The Commission further determines weighted average rate of depreciation of FY 2017-18 as under:

Table 2.22: Weighted Average rate of depreciation for FY 2017-18 approved by the Commission

(Rs. Crore)

Particulars	Transmission	SLDC
Average Gross Fixed Assets	6190.82	18.51
Depreciation allowed by the Commission	256.89	0.94
Average rate of depreciation	4.15 %	5.08%

The Commission approves depreciation of Rs.256.89 Crore for Transmission Business and Rs.0.94 Crore for SLDC Business respectively for FY 2017-18.

2.9 Interest and Finance Charges

2.9.1 In the ARR Petition for FY 2017-18, PSTCL had projected Interest and Finance charges on long term loan of Rs.407.51 Crore (net of capitalization Rs.53.50 Crore) for its Transmission Business and Rs.2.89 Crore for SLDC Business. The Commission approved interest charges of Rs.358.80 Crore for Transmission Business and Rs.1.13 Crore for SLDC Business.

2.9.2 In the Review Petition for FY 2017-18, PSTCL had claimed Interest and Finance charges on long term loan of Rs.384.75 Crore (other than interest on Working Capital loans and net of capitalization of Rs.53.50 Crore) for its Transmission Business and Rs.1.10 Crore for SLDC Business. The Commission approved the interest and finance charges of Rs.358.80 Crore for Transmission Business and Rs.1.13 Crore for SLDC Business at the time of Review of FY 2017-18.

PSTCL's Submissions:

2.9.3 In the True Up Petition for FY 2017-18, PSTCL has claimed the Interest & Finance Charges of Rs.392.11 Crore for Transmission Business and Rs.0.82 Crore for SLDC Business based on Audited Annual Accounts for FY 2017-18 (net of capitalization of Rs.39.76 Crore).

2.9.4 PSTCL submitted that it had inadvertently claimed interest on loans for purchase of assets funded through contributory works of Rs.22.78 Crore in the previous years.

2.9.5 PSTCL further stated that it has carried out the refinancing of PSPCL Loan of Rs.495.57 Crore by availing loan from PFC in FY 2017-18 on cheaper interest rate, in view of PSERC letter dated 27th March-2018. PSTCL projected savings of Rs.28.62 Crore as a result of refinancing of loans from PFC.

2.9.6 The capital expenditure of Rs.247.87 Crore in FY 2017-18 was funded by availing loans from Banks/Financial Institutions.

Commission's Analysis:

2.9.7 PSTCL has raised a loan of Rs.246.63 Crore for the Capital Expenditure of Rs.351.01 Crore for Transmission Business and SLDC Business. The Commission provisionally approved capital expenditure Rs. 321.48 Crore for Transmission Business in addition to assets created out of contributory works.

2.9.8 The Commission had determined closing balance of loans of Rs.3739.97 Crore as on 31.3.2017 in para 2.8.3 of Tariff Order dated 19.4.2019 for FY 2018-19. After deducting loans for assets funded through consumer contribution of Rs.22.78 Crore, which has been wrongly claimed as loan by PSTCL during FY 2016-17, the opening balance of loan as on 01.04.2017 works out to Rs. 3717.19 Crore.

The Commission determines the impact of excess interest charged by the PSTCL and allowed by the Commission during FY 2016-17 on loan amount of Rs.22.78 Crore for six months @ 10.59% p.a. as Rs. 1.21 Crore and the same is reduced from the Finance charges in the true up of FY 2017-18 in the Table 2.24.

2.9.9 The Commission determines interest at the weighted average rate of interest of Loans availed on allowable loan of Rs.225.04 Crore as under:

Table 2.23: Approved Long term loan and interest thereon for Transmission Business

(Rs. Crore)

Sr. No.	Particulars	Loan as on April 1, 2017	Receipt of Loan during FY 2017-18	Repayment of Loan during FY 2017-18	Loans as on March 31, 2018	Amount of Interest
I	II	III	IV	V	VI	VII
1.	As per data furnished in ARR Petition (other than WCL & GP Fund)	3955.75	246.63	281.78	3920.60	417.02
2.	**Approved by the Commission (other than WCL and GP Fund)**	**3717.19**	**225.04**	**281.78**	**3660.45**	**390.62**

2.9.10 **Interest on GP Fund**

PSTCL has claimed an interest of Rs.9.46 Crore on average GP fund of Rs.120.76 Crore during FY 2017-18.

The Commission approves interest @7.83% of Rs.9.46 Crore on GP Fund, being statutory payment, as claimed by PSTCL for FY 2017-18.

2.9.11 **Capitalization of Interest Charges**

In the True up Petition for FY 2017-18, PSTCL has capitalized Rs.39.76 Crore interest charges based on Audited Annual Accounts for FY 2017-18.

The Commission, as per past practice, approves capitalization of interest of Rs.39.76 Crore for FY 2017-18 based on the Audited Annual Accounts.

2.9.12 **Finance Charges and Guarantee Charges**

PSTCL has claimed Finance charges of Rs.0.38 Crore and Guarantee charges of Rs.5.00 Crore based on Audited Annual Accounts for FY 2017-18 for Transmission Business. PSTCL claims finance charges and Guarantee Fees as Rs. 5.38 Crore on loan requirement of Rs. 246.63 Crore whereas the Commission determines loan requirement of Rs. 225.04 Crore. Accordingly, the Commission approves proportionately the finance charges and Guarantee charges as Rs. 4.91 (5.38*225.04/246.63) Crore for Transmission Business of PSTCL.

The Commission approves interest and finance charges for Transmission Business of PSTCL for FY 2017-18 as under:

Table 2.24: Approved Interest & Finance Charges for Transmission Business for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Interest as Claimed by PSTCL	Amount allowed by the Commission
I	**II**	**III**	**IV**
1.	Interest on Institutional Loans	417.02	390.62
2.	Interest on GP Fund	9.46	9.46
3.	Guarantee Charges and Finance Charges	5.38	4.91
4.	**Gross Interest on Long Term Loans(1+2+3+4)**	**431.86**	**404.99**
5.	Less Capitalization	39.76	39.76
6.	Less: Impact of excess interest allowed during FY 2016-17	-	1.21
7.	**Net Interest Charges on Long Term Loans (5-6-7)**	**392.10**	**364.02**

Interest on Working Capital

2.9.13 In the ARR Petition for FY 2017-18, PSTCL had claimed interest on working capital for Transmission Business of Rs.46.13 Crore for FY 2017-18, on a total working capital of Rs.386.05 Crore against which the Commission approved interest on working Capital of Rs.37.84 Crore for FY 2017-18 on total working capital of Rs.316.67 Crore.

In the Review Petition for FY 2017-18, PSTCL had revised the claim of interest on working capital to Rs.40.46 Crore against which the Commission approved Rs.37.84

Crore on working capital of Rs.316.67 Crore.

PSTCL's submissions:

2.9.14 In the True-up Petition for FY 2017-18, PSTCL has claimed interest on working capital of Rs.38.23 Crore @11.22% on the working capital loan of Rs.340.85 Crore for Transmission Business. Rate of interest on working capital is required to be calculated as per provisions contained in Regulations of PSERC MYT Regulations - 2014.

Commission's Analysis:

2.9.15 The Commission has determined the working capital requirement in accordance with the Regulation-34 of PSERC MYT Regulations-2014. Rate of interest on working capital is calculated as per provisions contained in Regulations-25.1 of PSERC MYT Regulations - 2014 (Amended vide No. PSERC/Reg./111 dated 03.02.2016). The Commission determines interest on working capital as Rs.32.97 Crore based on the weighted average rate of approved loans @10.59% on working capital requirement of Rs.311.29 Crore for Transmission Business as under:

Table 2.25: Interest on Working Capital for Transmission Business of PSTCL for FY 2017-18 approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	Claimed by PSTCL	Approved by the Commission
I	II	III	IV
1.	Receivables equivalent to two months	220.92	192.10
2.	Maintenance spares @ 15% of Operation and Maintenance expenses	77.10	76.62
3.	Operation and Maintenance expenses for one month	42.83	42.57
4.	Working Capital requirement	340.85	311.29
5.	**Interest on Working Capital (@10.59% for FY 2017-18)**	**38.23**	**32.97**

The Commission approves working capital requirements of Rs.311.29 Crore and interest thereon of Rs. 32.97 Crore for Transmission Business of PSTCL for FY 2017-18.

Interest and Finance charges for SLDC Business

PSTCL's Submissions:

2.9.16 In the True-up Petition for FY 2017-18, PSTCL has submitted that it had incurred capital expenditure of Rs.1.59 Crore in the SLDC Business. Opening balance of loan is Rs.6.70 Crore, loan addition of Rs.1.24 Crore and it has claimed Rs.0.82 Crore as interest charges on long term loan during for FY 2017-18.

Commission's Analysis:

2.9.17 PSTCL has raised a loan of Rs.1.24 Crore for SLDC business. The Commission has provisionally approved capital expenditure of Rs.1.59 Crore for SLDC business. Accordingly, loan requirement of 70% of Rs.1.59 Crore works out to Rs.1.11 Crore. The Commission determines interest on allowable loans at weighted average rate of interest (other than working capital loans) as under:

Table 2.26: Approved Long term loan and interest there on for SLDC Business FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	Loan as on April 01, 2017	Receipt of loan during FY 2017-18	Repayment of loan during FY 2017-18	Loan as on March 31, 2018	Amount of Interest
I	II	III	IV	V	VI	VII
1.	As per data furnished by PSTCL in ARR Petition (other than WCL)	6.70	1.24	0.32	7.62	0.82
2.	**Approved by the Commission (other than WCL)**	**5.95**	**1.11**	**0.32**	**6.74**	**0.73**

Therefore, the Commission approves interest & finance charges of Rs.0.73 Crore to PSTCL during FY 2017-18 for SLDC Business.

Interest on Working Capital for SLDC Business

2.9.18 In the ARR Petition for FY 2017-18, PSTCL had claimed interest on working capital of Rs.0.81 Crore on the total working capital of Rs.6.94 Crore. The Commission approved the working capital of Rs.5.00 Crore and interest on working capital Rs.0.59 Crore for FY 2017-18.

2.9.19 In the Review for FY 2017-18, PSTCL had claimed interest on working capital of Rs.0.56 Crore on the total working capital of Rs.5.01 Crore for its SLDC Business. The Commission determined the working capital of Rs.4.69 Crore and interest thereon of Rs.0.55 Crore for SLDC Business.

PSTCL's Submissions:

2.9.20 In the True up Petition for FY 2017-18, PSTCL has claimed Rs.0.57 Crore as interest @11.22% on Working Capital of Rs.5.08 Crore.

2.9.21 Applying the same principle as stated above for Transmission Business, the Commission works out the total working capital requirement of Rs.5.07 Crore and interest thereon works out to Rs.0.58 Crore as under:

Table 2.27: Approved Interest on Working Capital for SLDC Business for FY 2017-18.

(Rs. Crore)

Sr. No.	Particulars	FY 2017-18	
		Claimed by PSTCL for SLDC	Approved by the Commission
I	II	III	IV
1.	Receivables equivalent to two months fixed cost	3.25	3.24
2.	Maintenance spares @15% of O&M expenses	1.18	1.18
3.	Operation & Maintenance expenses for one month	0.65	0.65
4.	Working capital requirement	5.08	5.07
5.	**Interest on working capital (@ 11.45% for 2017-18)**	**0.57**	**0.58**

The Commission approves working capital requirement of Rs. 5.07 Crore and interest thereon at the weighted average rate of interest approved for loans as Rs.0.58 Crore for SLDC Business of PSTCL for FY 2017-18.

2.10 Return on Equity

2.10.1 In ARR Petition for FY 2017-18, PSTCL had claimed RoE of Rs.101.19 Crore on opening equity of Rs.605.88 Crore and on addition of Rs.93.91 Crore during FY 2017-18. The Commission had approved RoE of Rs.101.19 Crore worked out @15.50% on the opening balance of equity for full year and @15.50% on the addition to equity during the year for half year.

2.10.2 In Review Petition for FY 2017-18, PSTCL has claimed the same Return on Equity of Rs.101.19 Crore based on equity amount of Rs. 699.79 Crore (605.88+93.91) which had been allowed.

PSTCL's Submissions:

2.10.3 In the True up Petition for FY 2017-18, PSTCL has claimed additional equity of Rs.106.23 Crore for FY 2017-18 as under:

Table 2.28: Return on Equity for FY 2017-18 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	PSTCL
1.	Equity at the opening of FY 2017-18	605.88
2.	Addition of equity during the year	106.23
3.	Equity at the closing of FY 2017-18	712.11
4.	Rate of Return (%) RoE	15.50%
5.	**Return on Equity**	**102.14**

2.10.4 PSTCL further stated that normative RoE as shown in above table is less than the Equity addition of Rs.106.23 Crore for FY 2017-18. However, since funding of Capital Expenditure for FY 2017-18 has to be done through reinvesting the RoE for FY 2017-18, approval of Normative RoE will lead to a shortfall in funding of Capital

Expenditure by Rs.4.09 Crore. Therefore, the Commission may allow the RoE of Rs.106.23 Crore for FY 2017-18 at the same level of addition of Equity during the year.

Commission's Analysis:

2.10.5 In accordance with the Regulation 20 of PSERC MYT Regulations, 2014, Return on equity @15.50% on the opening balance of equity for full year and @15.50% on the addition to equity during the year for half year are to be allowed. 30% of provisionally approved capital expenditure of Rs.321.48 Crore for Transmission and SLDC business works out to Rs.96.92 Crore. Accordingly, Return on Equity works out as under.

Table 2.29: Return on Equity for FY 2017-18 allowed by the Commission

(Rs. Crore)

Sr. No.	Particulars	PSTCL
1.	Equity at the opening of FY 2017-18	605.88
2.	Addition of equity during the year	96.92
3.	Equity at the closing of FY 2017-18	702.80
4.	Average Equity	654.34
5.	Rate of Return (%) RoE	15.50%
6.	**Return on Equity(15.5% of 654.34)**	**101.42**

Thus, the Commission, provisionally approves RoE of Rs.101.42 Crore to PSTCL for FY 2017-18.

2.11 Unified Load Dispatch & Communication (ULDC) Charges

2.11.1 In the ARR Petition for FY 2017-18, PSTCL claimed ULDC Charges of Rs.12.36 Crore for FY 2017-18 for its SLDC Business and the Commission approved Rs.11.76 Crore. In the Review Petition of FY 2017-18, PSTCL claimed Rs.9.93 Crore towards ULDC charges for FY 2017-18. As per Audited Annual Accounts for FY 2016-17 ULDC Charges were Rs.9.93 Crore which were allowed by the Commission at the time of Review.

In the True up Petition for FY 2017-18, PSTCL has claimed ULDC of Rs.10.73 Crore for FY 2017-18 as per Audited Annual Accounts for its SLDC Business and same is allowed.

Accordingly, the Commission approves ULDC charges of Rs.10.73 Crore to PSTCL for its SLDC Business for FY 2017-18.

2.12 Non-Tariff Income

2.12.1 In the ARR Petition for FY 2017-18, PSTCL had projected Rs.10.00 Crore of Non-

Tariff Income for its Transmission Business and Rs.1.00 Crore for SLDC Business for FY 2017-18 against which the Commission approved the Non-Tariff Income of Rs.49.25 Crore for Transmission Business and Rs.5.41Crore for its SLDC Business for FY 2017-18.

2.12.2 In the Review Petition for FY 2017-18, PSTCL claimed Rs.20.77 Crore on account of Non-Tariff Income for Transmission Business and Rs.5.41 Crore for SLDC Business against which the Commission approved Non-Tariff Income of Rs.49.25 Crore for Transmission Business and Rs.5.41 Crore for SLDC Business as was previously approved for MYT Control Period in its Tariff Order dated 23.10.2017.

PSTCL's Submissions:

2.12.3 In the True-up Petition for FY 2017-18, PSTCL has claimed Rs.20.36 Crore (Rs.18.94 Crore for Transmission Business and Rs.1.41 Crore for SLDC Business) on account of Non-Tariff Income based on Audited Annual Accounts for FY 2017-18 including income from Open Access customers as Transmission charges and operating charges.

2.12.4 PSTCL submitted that it has not considered the income towards certain heads wherein expenses were not allowed by the Commission in previous Tariff Orders which are discussed as under:

a) Income of Rs.1.92 Crore towards interest received on refund of income tax for FY 2015-16 has not been considered because the Commission did not allow expenses under the head of Income Tax in True-up for FY 2015-16.

b) Income of Rs.6.58 Crore towards provision withdrawn. On unserviceable/ obsolete items and losses under investigation.

Further, PSTCL has also not considered Non-tariff Income arising out of book adjustment, wherein expenses were not considered in previous Tariff Orders, in respect of the following:

a) Income of Rs.0.11 Crore towards Sundry Credit balances written back.

b) Income of Rs.99.84 Crore towards amount against Deposit/Contributory work written back.

c) Income of Rs.5.86 Crore towards Security deposit/EMD forfeited.

The detail of Non-Tariff Income claimed by PSTCL is as under:

Table 2.30: Non-Tariff Income claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission Business	SLDC Business
I	II	III	IV
1.	Rental charges of staff quarters, water charges, hospital ward, guest house etc.	0.34	0.02
2.	Sale of tender forms	0.13	-
3.	Income from O&M of bays of PGCIL	5.52	-
4.	Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and /or wheeling charges, scheduling charges etc.	1.60	0.64
5.	Sale of scrap	1.01	-
6.	Miscellaneous income - NOC charges from Open Access customers	-	0.25
7.	Other miscellaneous income	10.34	0.50
	Total	**18.94**	**1.41**

Commission's Analysis:

2.12.5 The Non-Tariff Income has been determined as per Regulation-28 of PSERC MYT Regultions-2014 (amended from time to time).

The Commission notes that Audited Annual Accounts of PSTCL has shown 'Credit Balance Written Back' as 'Other Income' but PSTCL has not considered it as Non-Tariff in the petition. 'Credit Balance Written Back' indicate money received as advance from supplier, in previous years on different account heads, but not payable now. The Commission considers 'Credit Balance Written Back' as Non-Tariff Income. Accordingly, the Commission determines the Non-Tariff Income as under:

Table 2.31: Non-Tariff Income for FY 2017-18 approved by the Commission

(Rs. Crore)

Particulars	Transmission Business	SLDC Business
Non –Tariff Income as claimed.	18.94	1.41
Add; Credit Balance written back		-
Sundry Creditors	0.11	-
Amount against Deposit/Contributory works	99.84	
Security Deposits/EMD	5.86	-
Total	**124.75**	**1.41**

Accordingly, the Commission approves Rs. 124.75 Crore for Transmission Business and Rs. 1.41 Crore for SLDC Business as Non-Tariff Income for FY 2017-18.

2.13 Availability and Incentive on Transmission System Availability

PSTCL's Submissions:

PSTCL has submitted that as per PSERC MYT Regulations, 2014, it is eligible for incentive for over achieving the availability targets for transmission system availability and has requested the Commission to approve the incentive of Rs. 12.78 Crore for transmission system availability, for FY 2017-18. PSTCL has also submitted the computation of incentive on the basis of fixed charges for Transmission as given in Table 2.32.

Table 2.32: Incentive on Transmission System (TS) Availability for FY 2017-18 submitted by PSTCL

(Rs. Crore)

Sr. No.	Month	TS Availability (%)	Monthly Transmission Charges	Transmission Charges including Incentive	Incentive
I	II	III	IV	V	VI
1.	April, 2017	99.97	106.81	107.86	1.05
2.	May, 2017	99.94	110.37	111.42	1.05
3.	June, 2017	99.97	106.81	107.86	1.05
4.	July, 2017	99.99	110.37	111.47	1.10
5.	August, 2017	99.98	110.37	111.47	1.10
6.	September, 2017	99.99	106.81	107.88	1.07
7.	October, 2017	99.99	110.37	111.47	1.10
8.	November, 2017	99.96	106.81	107.84	1.03
9.	December, 2017	99.99	110.37	111.47	1.10
10.	January, 2018	99.94	110.37	111.41	1.04
11.	February, 2018	99.98	99.69	100.67	0.98
12.	March, 2018	99.99	110.37	111.47	1.10
	Total		**1299.52**	**1312.30**	**12.78**

Commission's Analysis:

The Commission observe that MYT Regulations, 2014, specifies that Normative Annual Transmission System Availability Factor (NATAF) for the Control Period shall be 99% for incentive consideration. And, the transmission system availability of PSTCL has been verified by SLDC vide its Letter No. 949 dated 06.07.2018, as shown in Column III of Table 2.33. Accordingly, the Commission determines the incentive for over achievement of transmission system availability by PSTCL, on the basis of ARR of Transmission Business approved in Table 2.34 of this Tariff Order, as under:

Table 2.33: Incentive on Transmission System (TS) Availability for FY 2017-18 determined by the Commission

Sr. No.	Month	TS Availability (%)	Monthly Transmission Charges (Rs. Crore)	Transmission Charges inclusive of Incentive (Rs. Crore)	Incentive (Rs. Crore)
I	II	III	IV	V	VI
1.	April, 2017	99.97	93.80	94.72	0.92
2.	May, 2017	99.94	96.94	97.86	0.92
3.	June, 2017	99.97	93.80	94.72	0.92
4.	July, 2017	99.99	96.94	97.91	0.97
5.	August, 2017	99.98	96.94	97.90	0.96
6.	September, 2017	99.99	93.80	94.74	0.94
7.	October, 2017	99.99	96.94	97.91	0.97
8.	November, 2017	99.96	93.80	94.71	0.91
9.	December, 2017	99.99	96.94	97.91	0.97
10.	January, 2018	99.94	96.94	97.86	0.92
11.	February, 2018	99.98	87.55	88.41	0.86
12.	March, 2018	99.99	96.94	97.91	0.97
	Total		**1141.33**	**1152.56**	**11.23**

Thus, the Commission allows the incentive of Rs. 11.23 Crore to PSTCL for achieving transmission system availability higher than the norms laid by the Commission during FY 2017-18.

2.14 Prior Period Expenses

PSTCL vide memo no. 1082/FA/MYT-1/APR-2A dated 12.04.2019 intimated that arrear amounting to Rs.3.00 Crore of electricity charges for FY 2016-17 has been claimed in the Administrative expenses of FY 2017-18. PSTCL further submitted that Rs.3.00 Crore may be considered as Prior Period Expenses**.**

Accordingly, the Commission approves Rs.3.00 Crore for Transmission Business as Prior Period Expenses for FY 2017-18.

2.15 Interest Due to Late Payment by PSPCL

2.15.1 **PSTCL Submission:**

PSTCL claimed as Rs.13.21 Crore on account of late payments (payment after more than 30 days from date of billing) as per Regulations 31 of PSERC MYT Regulations, 2014

Commission's Analysis

2.15.2 Late payment surcharge is payable as per Regulations 31 of PSERC MYT

Regulations, 2014, which states as:

31. BILLING AND PAYMENT OF CHARGES AND LATE PAYMENT SURCHARGE

31.1 All bills for capacity charges, energy charges, transmission charges and other charges shall be raised on monthly basis and payments shall be made by the beneficiaries on monthly basis.

31.2 In case, the payment of any bill for charges payable under these regulations is delayed by a beneficiary beyond a period of 30 days from the date of billing, a late payment surcharge at the rate of 1.25% per month or part thereof on the unpaid amount shall be levied by the generating company or transmission licensee, as the case may be.

2.15.3 The Commission is of the considered view that payment is to be released by PSPCL as per regulations. The Commission has allowed interest on working capital requirement of PSPCL which includes the transmission charges payable to PSTCL.

2.15.4 Late payment surcharge cannot be consider as an item of Revenue Requirement of PSTCL as the same is not a pass through item of expenditure of PSPCL.

2.15.5 **The Commission recognizes the late payment surcharge as per Regulations but the same will be treated as Non-tariff income as and when received.**

2.16 Annual Revenue Requirement

The summary of the Annual Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2017-18 is shown in the following tables:

Table 2.34: Annual Revenue Requirement for Transmission Business for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	For Transmission Business				
		Approved in Tariff Order for FY 2017-18	Revised Estimate by PSTCL for FY 2017-18 (APR)	Approved by the Commission in the review of FY 2017-18	Claimed by PSTCL in the true up of FY 2017-18	Approved by the Commission
I	II	III	IV	V	VI	VII
1.	Employee Cost	430.58	497.91	430.58	464.58	464.57
2.	R&M and A&G expenses	57.30	58.83	57.30	49.43	46.21
3.	Depreciation	279.94	324.45	279.94	267.89	256.89
4.	Interest charges	358.80	384.75	358.80	392.11	364.02
5.	Interest on Working Capital	37.84	40.46	37.84	38.23	32.97
6.	Return on Equity	101.78	101.19	101.78	106.23	101.42

Sr. No.	Particulars	For Transmission Business				
		Approved in Tariff Order for FY 2017-18	Revised Estimate by PSTCL for FY 2017-18 (APR)	Approved by the Commission in the review of FY 2017-18	Claimed by PSTCL in the true up of FY 2017-18	Approved by the Commission
I	II	III	IV	V	VI	VII
7.	**Annual Revenue Requirement**	**1266.24**	**1407.59**	**1266.24**	**1318.46**	**1266.08**
8.	Less: Non tariff Income	49.25	20.77	49.25	18.94	124.75
9.	**Net Revenue Requirement**	**1216.99**	**1386.82**	**1216.99**	**1299.52**	**1141.33**
10.	Incentive				12.78	11.23
11.	Interest due to delayed payments by PSPCL	-	-	-	13.21	-
12.	Prior Period expenses					3.00
13.	**Gross ARR**	**1216.99**	**1386.82**	**1216.99**	**1325.51**	**1155.56**

Table 2.35: Annual Revenue Requirement for SLDC for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	For SLDC Business				
		Approved in Tariff Order for FY 2017-18	Revised Estimate by PSTCL for FY 2017-18 (APR)	Approved by the Commission in the review of FY 2017-18	Claimed by PSTCL in the true up of FY 2017-18	Approved by the Commission
I	II	III	IV	V	VI	VII
1.	Employee Cost	6.75	7.57	6.75	6.51	6.51
2.	R&M and A&G expenses	1.89	1.85	1.89	1.35	1.35
3.	Depreciation	1.17	1.29	1.17	0.94	0.94
4.	Interest charges	1.13	1.10	1.13	0.82	0.73
5.	Interest on Working Capital	0.59	0.56	0.55	0.57	0.58
6.	Return on Equity	0.00	0.00	0.00	0.00	0.00
7.	ULDC Charges	11.76	9.93	9.93	10.73	10.73
8.	**Annual Revenue Requirement**	**23.29**	**22.30**	**21.42**	**20.92**	**20.84**
9.	Less: Non tariff Income	5.41	5.41	5.41	1.41	1.41
10.	**Net Revenue Requirement**	**17.88**	**16.89**	**16.01**	**19.51**	**19.43**

The summary of the Annual Revenue Requirement of PSTCL as a whole for FY 2017-18 is as under:

Table 2.36: Annual Revenue Requirement for PSTCL for FY 2017-18

(Rs. Crore)

Sr. No.	Particulars	For PSTCL				
		Approved in Tariff Order for FY 2017-18	Revised Estimate by PSTCL for FY 2017-18 (APR)	Approved by the Commission in the review of FY 2017-18	Claimed by PSTCL in the true up of FY 2017-18	Approved by the Commission
I	II	III	IV	V	VI	VII
1.	Employee Cost	437.33	505.48	437.33	471.08	471.08
2.	R&M and A&G expenses	59.19	60.68	59.19	50.78	47.56
3.	Depreciation	281.11	325.74	281.11	268.84	257.83
4.	Interest charges	359.93	385.85	359.93	392.93	364.75
5.	Interest on working capital	38.43	41.03	38.39	38.80	33.55
6.	Return on Equity	101.78	101.19	101.78	106.23	101.42
7.	ULDC Charges	11.76	9.93	9.93	10.73	10.73
8.	**Annual Revenue Requirement**	**1289.53**	**1429.90**	**1287.66**	**1339.38**	**1286.92**
9.	Less: Non tariff income	54.66	26.18	54.66	20.36	126.16
10.	**Total Revenue Requirement**	**1234.87**	**1403.72**	**1233.00**	**1319.03**	**1160.76**
11.	Incentive				12.78	11.23
12.	Interest due to delayed payments by PSPCL	-	-	-	13.21	-
13.	Prior Period Expenses					3.00
14.	**Net Revenue Requirement**	**1234.87**	**1403.72**	**1233.00**	**1345.02**	**1174.99**

The Commission vide Order dated 23rd Oct, 2017 had approved the Net Revenue Requirement (NRR) of Rs. 1234.87 Crore for FY 2017-18. Net Revenue Requirement determined during Annual Performance Review by the Commission on its Order dated 19.04.2018 as Rs. 1233.00 Crore for FY 2017-18. Now the Net ARR after truing up exercise for FY 2017-18 is re-determined as Rs.1174.99 Crore which was payable by PSPCL as Transmission & SLDC Charges of FY 2017-18.

Chapter 3

Annual Performance Review of FY 2018-19 and Revised Estimates for FY 2019-20

3.1 Background

PSTCL has projected the Annual Performance Review (APR) for FY 2018-19 and Revised Estimates for FY 2019-20, separately for its Transmission business and SLDC business. The Commission has analyzed the same in this chapter.

3.2 Transmission System Availability

PSTCL has submitted that Regulation, 55 of PSERC MYT Regulations, 2014 specifies the Normative Annual Transmission Availability Factor (NATAF) of 98% for recovery of Annual Fixed Charges and 99% for incentive on account of higher Transmission Availability. The average transmission system availability of PSTCL from April to September 2018 (H1) is as per below table:

Table 3.1: Transmission System (TS) Availability of PSTCL for FY 2018-19(H1)

Sr. No.	Month	TS Availability (%)
I	II	III
1.	April, 2018	99.98
2.	May, 2018	99.96
3.	June, 2018	99.96
4.	July, 2018	99.97
5.	August, 2018	99.98
6.	September, 2018	99.98
	Average Availability	**99.97**

PSTCL has further submitted that it has maintained the transmission availability well above the Normative Annual Transmission Availability Factor as mandated by PSERC MYT Tariff Regulations, 2014.

The Commission has taken note of the submission of PSTCL and shall consider its actual Transmission System Availability for FY 2018-19 and FY 2019-20 for incentive, if permissible as per PSERC MYT Regulations, 2014 at the time of true up for the respective years.

3.3 Transmission Loss

PSTCL, in the ARR for MYT Control Period had projected the transmission loss of 2.60% for FY 2018-19 and 2.50% for FY 2019-20. The Commission in the MYT Order for 1st Control Period and Tariff Order for FY 2018-19 had approved the

Transmission loss of 2.40% for FY 2018-19 and 2.30% for FY 2019-20 respectively.

PSTCL's Submissions:

PSTCL submitted that it has completed the Intra-State Boundary Metering cum Transmission Level Energy Scheme and the actual transmission loss for the period from April 2018 to August 2018 is as under:

Table 3.2: Transmission Loss submitted by PSTCL

Sr. No.	Month	Energy Input (MWH)	Energy Output (MWH)	Transmission Loss (%)
I	II	III	IV	V
1.	April, 2018	3203851	3054345	4.67
2.	May, 2018	4484416	4314916	3.78
3.	June, 2018	5273076	5096183	3.36
4.	July, 2018	6417829	6252985	2.57
5.	August, 2018	7622336	7419277	2.66
	Total	**27001508**	**26137706**	**3.20**

PSTCL further submitted that the losses in the transmission network depend upon various factors such as shift of load centres, energy injection and drawl into the network and the extent of inherent technical losses pertaining to the transmission equipments in use. PSTCL continuously strives to reduce the technical losses in the system. PSTCL is regularly monitoring the loading of transmission lines and power transformers/ICTs and makes all possible efforts to optimize the loading of this equipment to reduce the technical losses in the system.

The trajectory approved by the Commission is very low compared to the actual transmission loss. Further, reduction in transmission losses from such low level of transmission loss would be much more difficult and require significant additional capital investment. PSTCL requested the Commission to approve the Transmission Loss of 2.80% for FY 2018-19 and 2.70% for FY 2019-20.

Commission's Analysis:

The Commission has observed in para 2.3 of this tariff order that although PSTCL has completed the Intra-State Boundary metering cum Transmission Level Energy Scheme but the data is yet to be stabilised.

Further Regulations 8.1 (MYT approach) of the PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 states that

8.1. ***Baseline Values***

(a) *The baseline values for the control period shall be determined by the*

Commission and the projections for the Control Period shall be based on these figures.

(b) *The baseline values shall be inter-alia based on figures approved by the Commission in the past, latest audited accounts, estimate of the expected figures for the relevant year, industry benchmarks/norms and other factors considered appropriate by the Commission.*

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.

3.4 Capital Investment Plan (CIP):

PSTCL's Capital Investment Plan for MYT control period of FY 2017-18 to FY 2019-20 was approved by the Commission vide its Order dated 13.12.2017 in Petition No. 44 of 2016. The approved Capital investment Plan (CIP) and the Capital plan submitted by PSTCL in its ARR for FY 2018-19 & FY 2019-20 is as under:

Table 3.3: PSTCL Capital Investment Plan (CIP) of PSTCL

(Rs. Crore)

Sr. No.	Description	Approved CIP		Capital plan submitted by PSTCL in ARR	
		FY 2018-19	FY 2019-20	FY 2018-19	FY 2019-20
1.	Transmission Business	248.01	202.64	303.93	509.31
2.	SLDC Business	10.00	10.00	6.79	12.21

The above approved plan of PSTCL included works related to "Addition of Bays/System Strengthening", Augmentation/ Strengthening of Bus Bars" and "Unforeseen emergency works" as per details given under:

Table 3.4: Provision of urgent/unforeseen/feasibility related works in CIP

Sr. No. of the approved plan	Description	Provision in MYT CIP (Rs. Crore)	
		FY 2018-19	FY 2019-20
140, 155 & 175	Addition of Bays/System Strengthening	4.00	4.00
137, 152 & 172	Augmentation/Strengthening of Bus Bars	5.00	5.00
182	Unforeseen emergency works	5.00	5.00
Total		**14.00**	**14.00**

PSTCL submitted 2 decisions of Board of Directors of PSTCL in which urgent, unforeseen and feasibility related works chargeable to the head "Addition of

Bays/System Strengthening", Augmentation/Strengthening of Bus Bars" and "Unforeseen emergency works" were segregated as Category 1 and the total amount spent is as under:

Table 3.5: PSTCL projected capital expenditure on urgent/ unforeseen/ feasibility related works

Category No.	Description	Provision in MYT CIP (Rs. Crore)		Projected Capital Expenditure (Rs. Crore)	
		FY 2018-19	FY 2019-20	FY 2018-19	FY 2019-20
Category 1	Urgent/ Unforeseen/ feasibility related works	14.00	14.00	17.393	31.83

The Commission notes that the Capital Investment Plan of Transmission Business for FY 2018-19 including category 1 works, comes out to be Rs. 251.403 Crore (Rs. 248.01 Crore - Rs. 14.0 Crore + Rs. 17.393 Crore and for FY 2019-20, Rs. 220.47 Crore (Rs. 202.64 Crore - Rs. 14.0 Crore + Rs. 31.83 Crore).

Regulations 9.9 (Capital Investment Plan) of the PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 provides that the emergency works can be treated as part of the approved capital expenditure provided that the emergency nature of the scheme has been approved by its Board of Directors.

The Commission further decides that the difference of Rs. 6.81 Crore between the approved CIP (Rs. 328.29 Crore) and actual expenditure (Rs. 321.48 Crore) during FY 2017-18 will be included in the CIP for FY 2019-20. Accordingly, the Commission approves provisionally Capital Investment of FY 2018-19 and FY 2019-20 for Transmission Business as Rs. 251.403 Crores and Rs. 227.28 Crores (Rs. 220.47 Crore + Rs. 6.81 Crore) respectively.

Regulations 9.8 (Capital Investment Plan) of the PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 provides that the Commission shall not revisit the approved capital investment unless capital expenditure incurred is less by 15% of the approved cumulative capital expenditure.

Accordingly, the Commission decides to consider the capital plan of SLDC business for FY 2018-19 as Rs. 6.79 Crore against approved plan of Rs. 10 Crore (less by 32%) and retains the already approved Capital investment Plan of Rs. 10 Crore for FY 2019-20.

3.5 Capital Expenditure and its Funding

PSTCL's Submission

3.5.1 PSTCL submitted addition of Gross Fixed Assets during FY 2018-19 and FY 2019-20 and closing Work- In- Progress as under:

Table 3.6: Capital Work–in- Progress ending FY 2018-19 as claimed

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
I	**II**	**III**	**IV**	**V**
1.	Opening Capital Work –In-Progress	448.96	5.93	454.89
2.	Add: Addition of Capital Expenditure during the year	303.93	6.79	310.72
3.	Less: Transferred to fixed assets during the year	572.91	5.59	578.50
4.	**Closing Capital Works- In- Progress**	**179.98**	**7.13**	**187.11**

Table 3.7: Closing Work-In-Progress ending FY 2019-20 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
I	**II**	**III**	**IV**	**V**
1.	Opening Capital Work In Progress	179.98	7.13	187.11
2.	Add: Addition of Capital Expenditure during the year	509.31	12.21	521.52
3.	Less: Transferred to fixed assets during the year	163.92	19.34	183.26
4.	**Closing Capital Works- In- Progress**	**525.37**	**0.00**	**525.37**

PSTCL stated that it has considered funding of capital expenditure through equity at 30% of capital expenditure i.e. Rs.93.22 Crore for FY 2018-19 and Rs.156.46 Crore for FY 2019-20 and through loan as 70% of the capital expenditure i.e. Rs.217.50 Crore for FY 2018-19 and Rs. 365.07 Crore for FY 2019-20.

Commission's Analysis

3.5.2 PSTCL claimed addition of Gross Fixed Assets of Rs. 572.91 Crore against capital expenditure of Rs.303.93 Crore whereas the Commission approved the capital expenditure of Rs.251.40 Crore for Transmission Business for FY 2018-19. Similarly, PSTCL claimed addition of Gross Fixed Assets of Rs.5.59 Crore against the capital expenditure of Rs.6.79 Crore for SLDC Business. The Commission determines proportionate addition of Gross Fixed Assets and Closing Work-In Progress based on capital expenditure approved by the Commission as under:

Table3.8: Capital expenditure and Capital Work -In- Progress approved Commission for FY 2018-19

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19					
		Claimed by PSTCL			Approved by the Commission		
		Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL
I	II	III	IV	V	VI	VII	VIII
1.	Opening Capital WIP*	448.96	5.93	454.89	419.83	5.93	425.76
2.	Add: Capital Exp. during the year	303.93	6.79	310.72	251.40	6.79	258.19
3.	Total	**752.89**	**12.72**	**765.61**	**671.23**	**12.72**	**683.95**
4.	Less: Transferred to Fixed Assets	572.91	5.59	578.50	510.77	5.59	516.36
5.	**Closing Capital WIP**	**179.98**	**7.13**	**187.11**	**160.46**	**7.13**	**167.59**

PSTCL claimed addition of Gross Fixed Assets of Rs.163.92 Crore against capital expenditure of Rs.509.31 Crore whereas the Commission approved the capital expenditure of Rs.227.28 Crore for Transmission Business for FY 2019-20. Similarly, PSTCL claimed addition of Gross Fixed Assets of Rs.19.34 Crore against the capital expenditure of Rs.12.21 Crore for SLDC Business. The Commission determines proportionate addition of Gross Fixed Assets and Closing Work-In Progress based on capital expenditure approved by the Commission as under:

Table 3.9: Capital expenditure and Capital Work- In- Progress approved by the Commission for FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2019-20					
		Claimed by PSTCL			Approved by the Commission		
		Trans.	SLDC	PSTCL	Trans.	SLDC	PSTCL
I	II	III	IV	V	VI	VII	VIII
1.	Opening Capital WIP	179.98	7.13	187.11	160.46	7.13	167.59
2.	Add: Capital Exp. during the year	509.31	12.21	521.52	227.28	10.00	237.28
3.	**Total**	**689.29**	**19.34**	**708.63**	**387.74**	**17.13**	**404.87**
4.	Less: Transferred to Fixed Assets	163.92	19.34	183.26	92.21	17.13	109.34
5.	**Closing Capital WIP**	**525.37**	**0.00**	**525.37**	**295.53**	**0.00**	**295.53**

Funding of Capital Expenditure

3.5.3 **PSTCL submission:**

PSTCL submitted that it will utilise the profit, being internal accruals, as equity infusion for the capital expenditure during the FY 2018-19 and FY 2019-20. PSTCL has considered the equity amount at 30% of the capital expenditure, in accordance to the methodology followed by the Commission in its MYT Order dated October 23, 2017 and Tariff Order dated April 19, 2018.

The remaining funding i.e. 70% of capital works shall be carried out by taking loans from banks and/or financial institutions. The funding of capital expenditure as proposed for FY 2018-19 and FY 2019-20 claimed as under:

Table 3.10: Funding of Capital Expenditure for FY 2018-19 and FY 2019-20 as claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		MYT Order	APR	MYT Order	Projected
	Transmission				
1.	Equity	74.40	91.18	60.79	152.79
2.	Debt	173.61	212.75	141.85	356.51
3.	**Total**	**248.01**	**303.93**	**202.64**	**509.31**
	SLDC				
4.	Equity	3.00	2.04	3.00	3.66
5.	Debt	7.00	4.75	7.00	8.55
6.	**Total**	**10.00**	**6.79**	**10.00**	**12.21**

3.5.4 **Commission's Analysis**

The Commission considered PSTCL's debt equity ratio of 70:30 to fund its capital expenditure during FY 2018-19 and FY 2019-20. Based on approved amount of capital expenditure of Rs.258.19 Crore for FY 2018-19 and Rs.237.28 Crore for FY 2019-20, the Commission determines funding of capital expenditure for FY 2018-19 and FY 2019-20 as under:

Table 3.11: Debt and Equity approved by the Commission for FY 2018-19 and FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19	FY 2019-20
1.	Capital Expenditure	258.19	237.28
2.	Debt @70% of CAPEX	180.73	166.10
3.	Equity up to 30% of CAPEX	77.46	71.18

The Commission allows loan requirement of Rs.175.98 Crore for Transmission Business & Rs.4.75 Crore for SLDC Business for FY 2018-19 and Rs.159.10 Crore for Transmission Business and Rs.7.00 Crore for SLDC business for FY 2019-20.

3.6 Employee Cost

PSTCL's Submissions:

3.6.1 The Commission approved the Employee Cost of Rs.452.67 Crore for FY 2018-19 and Rs.472.82 Crore for FY 2019-20 against PSTCL's claim of Rs. 564.17 Crore for FY 2018-19 and Rs.595.92 Crore for FY 2019-20 in MYT Order dated 23.10.2017.

3.6.2 In the current Petition, PSTCL has claimed employee cost for Transmission Business and SLDC Business for FY 2018-19 and FY 2019-20 as under:

Table 3.12: Employee Expenses as claimed for FY 2018-19 and FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Transmission	SLDC	Transmission	SLDC
1.	Terminal Benefits	296.00	0.00	311.68	0.00
2.	Other Employee Cost	191.77	6.86	200.48	7.12
3.	Impact of new recruitment	0.89	0.00	12.30	0.00
4.	**Total Employee Cost**	**488.66**	**6.86**	**524.46**	**7.12**

3.6.3 PSTCL submitted that employees recruited by PSTCL are covered under New Pension Scheme (NPS) and are entitled to gratuity under the provisions of the Payment of Gratuity Act, 1972 and the leave salary under the Leave Rules of the Corporation. It has considered the Terminal benefits for employees of erstwhile PSEB as approved by the Commission in its Order dated 23.10.2017. Claim of terminal liabilities of new employees is based on actual payout. PSTCL claimed terminal benefits as under:

Table 3.13: Terminal Benefits for FY 2018-19 and FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19			FY 2019-20	
		MYT Order	Revised ARR	APR	MYT Order	Projected
I	II	III	IV	V	VI	VII
1.	Terminal benefits for employees of erstwhile PSEB	291.65	291.65	291.65	307.10	307.10
2.	Terminal benefit towards NPS for new employees recruited by PSTCL	-	-	4.35	-	4.57
3.	Terminal benefits towards Gratuity and Leave encashment for new employees recruited by PSTCL	-	-	-*		-*
4.	**Total**	**291.65**	**291.65**	**296.00**	**307.10**	**311.68**

** PSTCL stated that it has not considered the Terminal Benefits on account of the provision for gratuity and leave encashment for employees recruited by PSTCL for FY 2018-19 and FY 2019-20 in the present Petition. However, PSTCL will claim such expenses on "Pay as you go" basis, as and when such expenses will occur, as directed by the Commission.*

3.6.4 Since the Commission disallowed the impact of progressive funding and the matter is pending before the Hon'ble Supreme Court, PSTCL has not considered the impact of progressive funding for the Control Period. However, PSTCL reserves the right to claim the impact of progressive funding subject to the decision of the Hon'ble Supreme Court.

3.6.5 PSTCL has requested the Commission that Normative Employee Costs as projected by PSTCL for FY 2018-19 and FY 2019-20 may be approved.,

Commission's Analysis:

Terminal Benefits

3.6.6 PSTCL's share of @11.36% of terminal benefits of employee of erstwhile PSEB cannot be ascertained for Transmission Business as the Audited Annual Accounts of FY 2018-19 for PSTCL are not available at this stage. The Commission allows terminal benefits as claimed Rs.291.65 Crore for FY 2018-19 and Rs.307.10 Crore for FY 2019-20 for Transmission Business. Terminal benefits towards NPS for new employees recruited by PSTCL will be allowed as per actual during True-Up based on Annual Audited Accounts.

Thus, the Commission allows terminal benefits of Rs.291.65 Crore and Rs.307.10 Crore for FY 2018-19 and FY 2019-20 respectively for Transmission Business.

Other Employee Cost

3.6.7 Base of 'Other Employee Cost' for control period has been determined in this order in Chapter 2 in the True-Up of FY 2017-18. Regulation - 26.1 of PSERC MYT Regulations-2014 specifies that increase in 'other employee cost' is to be limited to the average Wholesale Price Index (WPI) and Consumer Price Index.

3.6.8 The average increase of index from FY 2016-17 to FY 2017-18 is considered due to non–availability of index for FY 2018-19. However, actual increase will be considered during True-up of the respective year. The Commission determines the average increase of Consumer Price Index and Wholesale Price Index as under:

Table 3.14: Increase in price index determined by the Commission

(Rs. Crore)

Particulars	**FY 2016-17**	**FY 2017-18**	**Increase in %**
Consumer Price Index	284.41	275.92	3.08
Whole Sale Price Index	111.60	114.90	2.96
Average Increase			3.02

3.6.9 The 'Other Employee Cost' in the true up for FY 2017-18 has been determined as Rs.180.68 Crore for Transmission Business and Rs.6.38 Crore for SLDC Business in this Tariff Order. By applying the increase due to indexation, the Commission determines the 'Other Employee Cost' for Transmission Business and SLDC Business as under:

Table 3.15: Other Employee cost for FY 2018-19 and FY 2019-20 approved by the Commission

(Rs. Crore)

Particulars	Transmission	SLDC
Base Line Values (Rs. Crore)(FY 2017-18)	180.68	6.38
Multiplying factor for FY 2018-19	1.0302	1.0302
Other Employee Cost for FY 2018-19 (Rs. Crore)	186.14	6.57
Multiplying factor for FY 2019-20	1.0302*1.0302	1.0302*1.0302
Other Employee cost for FY 2019-20 (Rs. Crore)	191.76	6.77

Accordingly, the Commission determines Employee Cost of Transmission Business and SLDC Business on normative basis for FY 2018-19 and FY 2019-20 as under:

Table 3.16: Employee Expense approved for FY 2018-19 and FY 2019-20

(Rs.Crore)

Particulars		FY 2018-19	FY 2019-20
(I)	**Transmission**		
1.	Salaries & other employee cost	186.14	191.76
2.	Terminal Benefits	291.65	307.10
	Total	**477.79**	**498.86**
(II)	**SLDC**		
3.	Salaries & other employee cost	6.57	6.77
	Grand Total	**484.36**	**505.63**

Thus, the Commission approves Employee Cost of Rs.477.79 Crore and Rs. 498.86 Crore for Transmission Business and Rs.6.57 Crore and Rs.6.77 Crore for SLDC Business for FY 2018-19 and FY 2019-20 respectively.

3.7 Repair & Maintenance (R&M) and Administrative and General (A&G) expenses

PSTCL's Submissions:

3.7.1 PSTCL submitted that the Commission in its MYT Order dated 23.10.2017, approved R&M and A&G Expenses of Rs.63.59 Crore for FY 2018-19 and Rs.67.71 Crore for FY 2019-20 against its claim of Rs.64.27 Crore for FY 2018-19 and Rs.66.86 Crore for FY 2019-20 respectively.

3.7.2 PSTCL further submitted that the Commission in its Tariff Order dated 19.04.2018 approved R&M and A&G expenses as Rs.63.59 Crore against PSTCL's claim of Rs.66.14 Crore for FY 2018-19 and retained the already approved amount of Rs.67.71 Crore for FY 2019-20.

3.7.3 In the current Petition, PSTCL has claimed R&M and A&G expenses for FY 2018-19 and FY 2019-20 as under:

Table 3.17: R&M and A&G expenses claimed by PSTCL for FY 2018-19 and FY 2019-20

(Rs. Crore)

Particulars		FY 2018-19	FY 2019-20
(I)	**Transmission**		
1.	R&M and A&G expenses	63.39	68.27
2.	Add: Audit Fee	1.00	1.00
3.	Add: License / ARR fee	0.50	0.50
4.	Total	64.89	69.77
(II)	**SLDC**		
5.	R&M and A&G expenses	1.67	2.74
6.	Grand Total	66.56	72.51

3.7.4 PSTCL has submitted that R&M and A&G expenses have been linked to “K” and WPI index, where “K” is constant governing relationship between R&M and A&G expenses and Gross Fixed Assets. PSTCL has considered figures of FY 2017-18 for computing “K”. Further, PSTCL has considered the escalation index of 2.92% based on WPI increase up to September, 2018 for the purpose of projection of R&M and A&G expenses.

Commission’s Analysis:

3.7.5 As per 26.1 Regulation of PSERC MYT Regulations, R&M and A&G expenses are to be determined as under:

(i) R&Mn + A&Gn = K*GFA*(WPIn/WPIn-1)

Where,

- ***‘K’*** *is a constant (expressed in %) governing the relationship between R&M and A&G expenses 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.*

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.”

‘K’ has been determined during True-up of FY 2017-18 in this order. R&M and A&G

expenses for FY 2018-19 and FY 2019-20 are determined by multiplying K factor with their respective values of Average Gross Fixed Assets. The Commission considers WPI increase of 2.96% for FY 2018-19 and 6.00%(102.96%*1.0296%-100.00).The Commission determines R&M and A&G expenses for FY 2018-19 and FY 2019-20 as under:

Table 3.18: R&M and A&G expenses based on K Factor and indexation for FY 2018-19 determined by the Commission

(Rs. Crore)

Particulars	Transmission	SLDC	Total
Opening GFA (1.4.2018)	9444.26	18.55	9462.81
Closing GFA (31.3.2019)	9955.03	24.14	9979.17
Average GFA	9699.65	21.35	9720.99
K factor	**0.496%**	**7.29%**	
Base R&M and A&G expenses	48.11	1.56	
WPI increase	2.96%	2.96%	
R&M after WPI increase	**49.53**	**1.60**	**51.13**

Table 3.19: R&M and A&G expenses for FY 2019-20 based on K factor and indexation determined bythe Commission

(Rs. Crore)

Particulars	Transmission	SLDC	Total
Opening GFA (1.4.2019)	9955.03	24.14	9979.17
Closing GFA (31.3.2020)	10047.24	41.27	10088.51
Average GFA	10001.14	32.71	10033.84
K factor	**0.496%**	**7.29%**	
R&M and A&G	49.60	2.39	
WPI increase	6.00%	6.00%	
R&M and A&G expenses after WPI increase	**52.58**	**2.53**	**55.11**

The Commission determines R&M and A&G expenses after incorporating Audit Fee and license fee as under:

Table 3.20: R&M and A&G expenses approved by the Commission for FY 2018-19 and FY 2019-20

(Rs. Crore)

Particulars	FY 2018-19		FY 2019-20	
	Transmission	SLDC	Transmission	SLDC
R&M and A&G Expenses	49.53	1.60	52.58	2.53
Add: Audit fee	0.26	0.00	0.26	0.00
Add: License fee	0.50	0.00	0.50	0.00
Total R&M and A&G expenses	50.29	1.60	53.34	2.53

The Commission approves R&M and A&G expenses of Rs.50.29 Crore for FY 2018-19 and Rs.53.34 Crore for FY 2019-20 of Transmission Business & Rs.1.60 Crore for FY 2018-19 and Rs. 2.53 Crore for FY 2019-20 of SLDC Business.

3.8 Depreciation

3.8.1 PSTCL's Submissions:

In the current Petition, PSTCL has claimed depreciation charges for its Transmission Business and SLDC Business for FY 2018-19 and FY 2019-20 as under:

Table 3.21: Depreciation claimed by PSTCL for FY 2018-19 and FY 2019-20

(Rs. Crore)

	Particulars	FY 2018-19	FY 2019-20
(I)	**Transmission**		
1.	Opening GFA (net of land and land rights)	6477.62	7050.53
2.	Add: Additions during the year	572.91	163.92
3.	Closing GFA	7050.53	7214.45
4.	**Depreciation @4.31%**	**291.37**	**307.24**
(II)	**SLDC**		
5.	Opening GFA	12.96	18.55
6.	Add: Additions to GFA during the year	5.59	19.34
7.	Closing GFA	18.55	37.89
8.	**Depreciation @7.32%**	**1.15**	**2.07**
9.	**Total Depreciation**	**325.74**	**351.20**

Commission's Analysis:

3.8.2 The Commission determines depreciation for Transmission and SLDC Business, based on actual average rate of depreciation 4.15% for Transmission Business and 5.08% for SLDC Business determined during True-Up of FY 2017-18 of PSTCL, as under.

Table 3.22: Depreciation approved by the Commission for FY 2018-19 and FY 2019-20

(Rs. Crore)

	Particulars	FY 2018-19	FY 2019-20
(I)	**Transmission**		
1.	Opening GFA (excluding land and land rights and Consumer Contribution)	6472.03	6982.80
2.	Add: Additions to GFA during the year	510.77	92.21
3.	Closing GFA	6982.80	7075.01
4.	Average GFA	6727.42	7028.91
5.	**Depreciation @4.15% of average GFA**	**279.16**	**291.67**
(II)	**SLDC**		
6.	Opening GFA	18.55	24.14
7.	Add: Additions to GFA during the year	5.59	17.13
8.	Closing GFA	24.14	41.27
9.	Average GFA	21.35	32.71
10.	**Depreciation @5.08% of average GFA**	**1.08**	**1.66**

Thus, the Commission approves depreciation charges of Rs.279.16 Crore for FY 2018-19 and Rs.291.67 Crore for FY 2019-20 for Transmission Business and Rs.1.08 Crore for FY 2018-19 and Rs.1.66 Crore for FY 2019-20 for SLDC Business.

3.9 Interest and Finance charges

3.9.1 PSTCL's Submissions:

In the MYT Petition for the Control Period, the Commission approved the Interest and Finance charges of Rs.354.63 Crore for FY 2018-19 and Rs.353.51 Crore for FY 2019-20 as against Rs.408.24 Crore for FY 2018-19 and Rs.405.35 Crore for FY 2019-20 claimed by PSTCL.

3.9.2 The Commission in its Tariff Order dated 19.04.2018 approved the Interest and Finance Charges of Rs.354.62 Crore for FY 2018-19 against PSTCL's claim of Rs.386.99 Crore.

3.9.3 In the current Petition, PSTCL has claimed interest charges of Rs.375.18 Crore for FY 2018-19 and Rs.366.07 Crore for FY 2019-20 in the Transmission Business & Rs.0.82 Crore for FY 2018-19 and Rs.1.53 Crore for FY 2019-20 in the SLDC Business.

3.9.4 PSTCL claimed interest on long-term loan for Transmission & SLDC Business as under:

Table 3.23: Interest on loan claimed by PSTCL for Transmission Business for FY 2018-19 and FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19	FY 2019-20
1.	Opening balance of long term loan	3920.60	3815.90
2.	Add: Receipt of loan during the year	212.75	356.51
3.	Less: Repayment of loan during the year	317.45	299.95
4.	Closing balance of loan	3815.90	3872.46
5.	Gross Interest	393.97	390.09
6.	Less: Capitalization	31.94	35.55
7.	Add; GPF interest	7.77	6.15
8.	Add: Finance and Guarantee Charges	5.38	5.38
9.	**Net Interest Charges**	**375.18**	**366.07**

Table 3.24: Interest on loan claimed by PSTCL for SLDC Business for FY 2018-19 and FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19	FY 2019-20
I	II	III	IV
1.	Opening balance of long term loan	7.62	12.02
2.	Add: Receipt of loan during the year	4.75	8.55
3.	Less: Repayment of loan during the year	0.35	2.71
4.	Closing balance of loan	12.02	17.86
5.	**Net Interest Charges**	**0.82**	**1.53**

3.9.5 The outstanding existing loan includes loan from REC, LIC, PFC, Commercial banks, Loan from PSPCL and GPF Liability. The repayment of these existing loans and interest expenses has been considered as per their repayment schedule.

3.9.6 PSTCL has proposed new loans for the proposed investments from Banks/Financial Institution at actual weighted average rate of Interest.

3.9.7 It has also stated that three years moratorium period has been considered for the new loan taken for funding of capital expenditure for FY 2018-19 and FY 2019-20.

Commission's Analysis:

3.9.8 The Commission has approved the receipt of loan during FY 2018-19 and FY 2019-20 of the Control Period by adjusting the approved amount of capital expenditure in the debt-equity ratio(i.e.70:30).

3.9.9 The repayment of loans for the respective years of the Control Period has been considered as per claim for the respective years i.e. FY 2018-19 and FY 2019-20. The weighted average rate of interest considered as claimed by PSTCL. Loan addition for the year has been calculated in accordance with the capital expenditure during FY 2018-19 and FY 2019-20.

3.9.10 The Commission determines Interest on long term loans weighted average rate of interest @ 10.16% for Transmission Business and @ 8.35% for SLDC Business for FY 2018-19. Similarly, the Commission determines Interest on long term loans weighted average rate of interest @ 10.16% for Transmission Business and @ 8.35% for SLDC Business for FY 2019-20 as under:

Table 3.25: Interest on long term loan for Transmission Business approved by the Commission for FY 2018-19 and FY 2019-20

(Rs.Crore)

Particulars		FY 2018-19	FY 2019-20
1.	Opening balance of loan	3660.45	3540.94
2.	Add: Receipt of loan during the year	175.98	159.10
3.	Less: Repayment of loan during the year	295.49	278.00
4.	Closing balance of loan	3540.94	3422.04
5.	Average Loan	3600.69	3481.48
6.	**Interest Charges**	**365.79**	**350.26**

Table 3.26: Interest on long term loan for SLDC Business approved by the Commission for FY 2018-19 and FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19	FY 2019-20
I	II	III	IV
1.	Opening Loan balance	6.74	11.15
2.	Add: Receipt of loan during the year	4.75	7.00
3.	Less: Repayment of loan during the year	0.35	2.71
4.	Closing Loan balance	11.15	15.44
5.	Average Loan	8.94	13.29
6.	**Interest Charges**	**0.75**	**1.36**

Interest on GPF Fund

3.9.11 Interest of Rs.7.77 Crore on @ 7.86% on average amount of GPF Fund of Rs.98.80 Crore for FY 2018-19 and Rs.6.15 Crore @ 8.00% for FY 2019-20 on average amount Rs.76.84 Crore has been claimed for Transmission Business.

The Interest on GPF being statutory payments are allowed for FY 2018-19 and FY 2019-20 as claimed by the PSTCL.

Finance and Guarantee charges

3.9.12 PSTCL claimed finance charges and guarantee fee of Rs.5.38 Crore for FY 2018-19 and the same for FY 2019-20 on loan requirement of Rs.212.75 Crore for FY 2018-19 and Rs.356.51 Crore for FY 2019-20. The Commission has approved Finance charges and guarantee fees of Rs.4.91 Crore on loan requirement of Rs.225.04 Crore for FY 2017-18. Accordingly, the Commission determines proportional Finance and Guarantee Fee as Rs.3.94 Crore for loan requirement of Rs.180.73 Crore for FY 2018-19 and Rs.3.62 Crore for loan requirement of Rs.166.10 Crore for FY 2019-20. **Accordingly, the Commission approves finance charges and guarantee fees as Rs.3.94 Crore for FY 2018-19 and as Rs.3.62 Crore for FY 2019-20.**

Capitalization of Interest Charges

3.9.13 Capitalization of interest and finance charges of Rs. 31.94 Crore for FY 2018-19 and Rs. 35.55 Crore for FY 2019-20 as claimed are approved as per past practice for FY 2018-19 and FY 2019-20.

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

Table 3.27: Interest and Finance charges approved by the Commission

(Rs. Crore)

Sr. No	Particulars	FY 2018-19	FY 2019-20
1.	Interest charges	365.79	350.26
2.	Interest on GP Fund	7.77	6.15
3.	Add Finance/Guarantee charges	3.94	3.62
4.	Total Interest charges	377.50	360.03
5.	Less: Interest capitalized	31.94	35.55
6.	**Net Interest charges**	**345.56**	**324.48**

3.10 Interest on Working Capital

3.10.1 PSTCL's Submissions:

PSTCL has claimed interest on working capital of Rs.35.46 Crore for FY 2018-19 & Rs.36.88 Crore for FY 2019-20 for Transmission Business, on normative basis, on a total working capital of Rs.354.87 Crore for FY 2018-19 & Rs.375.72 Crore for FY 2019-20. The details of claim of working capital requirement and Interest on working capital for FY 2018-19 and FY 2019-20 as under:

Table3.28: Interest on working capital for Transmission Business for FY 2018-19 and FY 2019-20 claimed by PSTCL

(Rs. Crore)

Particulars		FY 2018-19	FY 2019-20
1.	Receivables for two months	225.70	237.07
2.	Maintenance spares @15% of O&M expenses	83.03	89.13
3.	O&M expenses for one month	46.13	49.52
4.	Working capital requirement	354.87	375.72
5.	**Interest on working capital**	**35.46**	**36.88**

3.10.2 Similarly, PSTCL claimed interest on working capital of Rs.0.54 Crore for FY 2018-19 & Rs.0.61 Crore for FY 2019-20 for SLDC Business, on normative basis, on a total working capital of Rs.5.38 Crore for FY 2018-19 & Rs.6.20 Crore for FY 2019-20. The details of claim of working capital requirement and Interest on working capital for FY 2018-19 and FY 2019-20 as under:

Table 3.29: Interest on working capital for SLDC Business for FY 2018-19 and FY 2019-20 claimed by PSTCL

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19	FY 2019-20
1.	Receivables for two months	3.39	3.90
2.	Maintenance spares @15% of O&M expenses	1.28	1.48
3.	O&M expenses for one month	0.71	0.82
4.	Working capital requirement	5.38	6.20
5.	**Interest on working capital**	**0.54**	**0.61**

3.10.3 PSTCL has submitted that it has computed the working capital requirement in accordance with Regulation 54 of PSERC MYT Regulations, 2014 for Transmission and SLDC Business. PSTCL, further stated that as per Regulation 54.2, the rate of interest on working capital shall be as per regulation 25.1 which is as under:

"25.1 The rate of interest on working capital shall be equal to the weighted average rate of interest paid/payable on loans by the licensee/generating company/SLDC or the State Bank of India Advance Rate as on April 1 of the relevant year, whichever is less. The interest on working capital shall be payable on normative basis, notwithstanding that the licensee/generating company/SLDC has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures."

3.10.4 PSTCL has considered the actual weighted average rate of rate of interest based on actual working capital loans.

3.10.5 **Commission's Analysis:**

The Commission has computed the interest on working capital considering the average rate of interest for the respective year for the Transmission Business. The Commission determines Interest on working capital approved as under:

Table 3.30: Interest on working capital for Transmission Business approved by the Commission

(Rs. Crore)

Particulars		FY 2018-19	FY 2019-20
1.	Receivables for two months	213.85	218.52
2.	Maintenance spares @15% of O&M expenses	79.21	82.83
3.	O&M expenses for one month	44.01	46.02
4.	Working capital requirement	337.07	347.37
5.	Rate of Interest (%)	10.18%	10.15%
6.	**Interest on working capital**	**34.31**	**35.26**

The Commission approves Rs. 34.31 Crore for FY 2018-19 & Rs.35.26 Crore for FY 2019-20 on working capital requirement of Rs.337.07 Crore for FY 2018-19 & Rs.347.37 Crore for FY 2019-20 for Transmission Business of PSTCL.

The Commission determines interest on working capital for SLDC business as under:

Table 3.31: Interest on working capital for SLDC Business approved by the Commission

(Rs. Crore)

	Particulars	FY 2018-19	FY 2019-20
1.	Receivables for two months	3.29	3.71
2.	Maintenance spares @15% of O&M expenses	1.23	1.39
3.	O&M expenses for one month	0.68	0.77
4.	Working capital requirement	5.20	5.87
5.	Rate of Interest (%)	8.35%	10.24%
6.	**Interest on working capital (4*5)**	**0.43**	**0.60**

The Commission, thus, approves Rs.0.43 Crore for FY 2018-19 & Rs.0.60 Crore for FY 2019-20 on working capital requirement of Rs.5.20 Crore for FY 2018-19 & Rs.5.87 Crore for FY 2019-20 for SLDC business of PSTCL.

3.11 Return on Equity (RoE)

3.11.1 **PSTCL's Submissions:**

The Commission in its MYT Order dated 23.10.2017, approved Return on Equity of Rs.115.64 Crore for FY 2018-19 and Rs.126.58 Crore for FY 2019- 20 against PSTCL's Claim of Rs.114.34 Crore for FY 2018-19 and Rs.123.83 Crore for FY 2019-20 for Transmission Business.

Further, the Commission in its tariff Order dated 19.04.2018 retained the RoE as Rs.115.64 Crore for FY 2018-19 and Rs. 126.58 Crore for FY 2019-20.

In the current Petition, PSTCL has claimed RoE of Rs.117.60 Crore for FY 2018-19 and Rs.136.95 Crore for FY 2019-20 as under:

Table 3.32: Return on Equity claimed by PSTCL for FY 2018-19 and FY 2019-20

(Rs. Crore)

	Particulars	FY 2018-19	FY 2019-20
Transmission			
1.	Opening Equity	712.11	805.33
2.	Add: Addition of equity during the year	93.22	156.45
3.	Closing Equity	805.33	961.79
4.	Rate of RoE	15.50%	15.50%
5.	**Return on Equity**	**117.60**	**136.95**

3.11.2 PSTCL has considered the addition of equity equivalent to 30% of capital expenditure to the extent for Return of Equity.

Commission's Analysis:

3.11.3 The Commission has to determine the Return on Equity for the Control Period in accordance with Regulation 20 of PSERC MYT Regulations, 2014.

3.11.4 The Commission determines Return on Equity @15.50% on the opening balance of equity for full year and @15.50% on the addition to equity during the year for half year as under:

Table 3.33: Return on Equity approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19	FY 2019-20
	Transmission		
1.	Opening Equity	702.80	780.26
2.	Add: Addition to equity during the year	77.46	71.18
3.	Closing Equity	780.26	851.44
4.	Average Equity	741.53	815.85
5.	Rate of RoE	15.50%	15.50%
6.	**Return on Equity**	**114.94**	**126.46**

The Commission, thus, approves RoE of Rs.114.94 Crore for FY 2018-19 and Rs.126.46 Crore for FY 2019-20.

3.11.5 **Unified Load Dispatch & Communication (ULDC) Charges**

PSTCL has claimed Rs.10.73 Crore each for FY 2018-19 and FY 2019-20 towards ULDC charges based on Audited Annual Accounts of FY 2017-18.

Since ULDC Charges are decided by CERC from time to time, the Commission finds it appropriate to allow ULDC charges as proposed based on Audited Annual Accounts of FY 2017-18 of Rs.10.73 Crore each for FY 2018-19 and FY 2019-20.

3.12 Non-Tariff Income

3.12.1 **PSTCL's Submissions:**

The Commission in its Tariff Order dated 23.10.2017 has approved Non-tariff Income of Rs.49.25 Crore each for Transmission Business and Rs.5.41 Crore for SLDC Business for FY 2018-19 and FY2019-20 as against PSTCL's claim of Non-Tariff Income of Rs.10 Crore each for Transmission Business and Rs.1 Crore each for SLDC Business for FY 2018-19 and FY 2019-20.

Further, the Commission in its Tariff Order dated 19.04.2018 has approved Non-Tariff Income for FY 2018-19 as Rs.54.66 Crore as against PSTCL's claim of Rs.26.18 Crore.

3.12.2 PSTCL has claimed Non-Tariff Income of Rs.18.94 Crore each for FY 2018-19 & FY

2019-20 for Transmission Business and Rs.1.41 Crore each for FY 2018-19 and FY 2019-20 for SLDC Business. PSTCL further submitted that it has claimed Non-Tariff Income at the same level as actual Non-Tariff Income for FY 2017-18 based on the audited accounts.

Commission's Analysis:

3.12.3 Non-Tariff Income is determined as per PSERC Regulation-28 of MYT Regulations-2014. The Commission notes that there is abnormal increase in Non Tariff Income for FY 2017-18 due to adjustment of previous years. The Commission allows the non - tariff income as claimed by PSPCL for FY 2018-19 and FY 2019-20.

Accordingly, the Commission determines and approves Non-tariff Income as Rs.18.94 Crore each for FY 2018-19 and FY 2019-20 for Transmission Business and Non-Tariff Income of Rs.1.41 Crore each for FY 2018-19 and FY 2019-20 for SLDC Business.

3.13 Carrying Cost on Revenue Gap

3.13.1 True up of FY 2017-18

The Commission vide Order dated 23rd Oct, 2017 had approved the Net Revenue Requirement (NRR) of Rs.1234.87 Crore for FY 2017-18 and approved Net Revenue Requirement of Rs.1233.00 Crore during Annual Performance Review for FY 2017-18. Now the Net ARR after truing up exercise for FY 2017-18 has been re-determined as Rs.1174.99 Crore which was payable by PSPCL as Transmission Charges of FY 2017-18. The Commission in its order dated 19th April, 2018 has already allowed Revenue Surplus of Rs.1.87 (1234.87-1233.00) Crore and carrying cost on revenue surplus of Rs. 1.87 Crore.

The Commission determines a Surplus of Rs.58.01 (1233.00-1174.99) Crore in True up of FY 2017-18 between Net Revenue Requirement determined during Annual Performance Review and True-up. Accordingly, the Commission calculates carrying cost on the revenue surplus of Rs.58.01@10.18% (rate of interest of working capital requirement) of FY 2018-19 for six months (i.e.Rs.2.95 Crore) and @10.15% (rate of interest of working capital requirement) for six months of FY 2019-20((i.e.Rs.2.94 Crore) . Thus, the total recoverable carrying cost for FY 2017-18 works out to (-) Rs.5.89 Crore.

3.13.2 Annual Performance Review of FY 2018-19

The Commission vide its Order dated 19th April, 2018 had approved the Net Revenue Requirement (NRR) of Rs.1282.00 Crore for FY 2018-19. The Commission after review re-determined Net Revenue Requirement of Rs.1302.86 Crore for FY 2018-19. Thus, the Commission determines a Revenue Gap of Rs.20.86 (1282.00-1302.86) Crore.

Accordingly, the Commission allows carrying cost of Rs.2.12 Crore on revenue gap of Rs.20.86 Crore @10.18% of FY 2018-19 for six months (i.e. Rs.1.06 Crore) and @10.15% for six months of FY 2019-20(i.e. Rs.1.06 Crore).

3.13.3 Total recoverable carrying cost works out to Rs.3.77 (5.89-2.12) Crore.

3.14 Aggregate Revenue Requirement (ARR)

The summary of the ARR for Transmission Business, SLDC Business and for overall PSTCL for FY 2018-19 and FY 2019-20 is in the following tables

Table 3.34: Aggregate Revenue Requirement of Transmission Business

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Claimed by PSTCL in APR of FY 2018-19	Approved by the Commission for FY 2018-19	Claimed by PSTCL in RE of FY 2019-20	Approved by the Commission for FY 2019-20
I	II	III	IV	V	VI
1.	Employee cost	488.86	477.79	524.46	498.86
2.	R&M and A&G expenses	64.89	50.29	69.77	53.34
3.	Depreciation	291.37	279.16	307.24	291.67
4.	Interest charges	375.18	345.56	366.07	324.48
5.	Interest on working capital	35.46	34.31	36.88	35.26
6.	Return on Equity	117.60	114.94	136.95	126.46
7.	**Total Revenue Requirement**	**1373.36**	**1302.05**	**1441.37**	**1330.07**
8.	Less: Non-Tariff Income	18.94	18.94	18.94	18.94
9.	**Less: Carrying Cost (recoverable)**				3.77
10.	**Net Revenue Requirement**	**1354.42**	**1283.11**	**1422.43**	**1307.36**

Table 3.35: Aggregate Revenue Requirement of SLDC Business for FY 2018-19 and FY 2019-20

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Claimed by PSTCL in APR of FY 2018-19	Approved by the Commission for FY 2018-19	Claimed by PSTCL in RE of FY 2019-20	Approved by the Commission for FY 2019-20
I	II	III	IV	V	VI
1.	Employee cost	6.86	6.57	7.12	6.77
2.	R&M and A&G expenses	1.67	1.60	2.74	2.53
3.	Depreciation	1.15	1.08	2.07	1.66
4.	Interest charges	0.82	0.75	1.53	1.36
5.	Interest on working capital	0.54	0.43	0.61	0.60
6.	ULDC charges	10.73	10.73	10.73	10.73
7.	**Total Revenue Requirement**	**21.77**	**21.16**	**24.80**	**23.65**
8.	Less: Non-Tariff Income	1.41	1.41	1.41	1.41
9.	**Net Revenue Requirement**	**20.36**	**19.75**	**23.39**	**22.24**

Table 3.36: Aggregate Revenue Requirement of PSTCL for FY 2018-19 and FY 2019-20 approved by the Commission

(Rs. Crore)

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Claimed by PSTCL in APR of FY 2018-19	Approved by the Commission for FY 2018-19	Claimed by PSTCL in RE of FY 2019-20	Approved by the Commission for FY 2019-20
I	II	III	IV	V	VI
1.	Employee cost	495.52	484.36	531.58	505.63
2.	R&M and A&G expenses	66.56	51.89	72.51	55.87
3.	Depreciation	292.52	280.24	309.31	293.33
4.	Interest charges	376.00	346.31	367.60	325.84
5.	Interest on working capital	36.00	34.74	37.49	35.86
6.	Return on Equity	117.60	114.94	136.95	126.46
7.	ULDC charges	10.73	10.73	10.73	10.73
8.	**Total expenses**	**1394.93**	**1323.21**	**1466.17**	**1352.72**
9.	Less: Non-Tariff Income	20.35	20.35	20.35	20.35
10.	**Less: Carrying Cost (recoverable)**				3.77
11.	**Revenue Requirement**	**1374.58**	**1302.86**	**1445.82**	**1329.60**

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 to ensure the overall development of an efficient, coordinated and economical system of Intrastate Transmission lines for smooth flow of electricity to the Load Centres. 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 2018-19 and PSERC comments along with further directives for compliance by PSTCL during FY 2019-20 is summarized as under:

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

PSERC Comments & Directive for FY 2018-19:

The Commission notes the reasons explained for high losses during low load conditions during winter period. The audit/analysis of voltage wise transmission losses needs to be done with proper installation of ABT meters on boundaries of different voltage levels. The roadmap to reduce the transmission losses below 2.5% along with the roadmap to complete installation of requisite ABT meters on the boundaries of different voltage levels may be submitted to the Commission within 2 months.

Reply of PSTCL:

Study and efforts are being made to reduce the transmission losses and optimization of the system adopting relevant methodologies. Accordingly, a comparison of the last few months is as depicted in the table below:-

Sr. No.	Month	FY 2017-18	FY 2018-19
1.	Aug	3.42%	2.66%
2.	Sep	3.90%	2.83%
3.	Oct	2.19%	2.09%
4.	Nov	4.99%	2.27%
5.	Dec.	4.02%	2.38%

Monthly transmission losses of PSTCL are being calculated with the data obtained from ABT meters installed at various boundary points.

As per directions of the PSERC, project SAMAST is under process which will also cover voltage levels at all the locations under consideration. The voltage wise transmission losses of Punjab transmission network can be calculated after the completion/implementation of SAMSAT scheme.

PSERC Comments & Directive

The reply of PSTCL is incomplete. PSTCL has neither supplied the roadmap to reduce transmission losses below 2.5% nor the analysis of voltage wise transmission losses with proper installation of ABT meters on all boundary points of different voltage levels. The Commission further observes that there is a huge variation in losses during same months of the FY 2017-18 and FY 2018-19 and also over the full year month wise even during the months which have comparable energy inputs. This indicates that there is still no stabilization of data. The Commission also noticed from the letters of PSTCL that Transmission Losses are being computed based on manual readings of energy meters installed at boundary interface points. The possibility of inadvertent error in assessment of transmission losses read manually cannot be ruled out.

For determination of the trajectory of transmission losses, the stabilised data of one complete year is required as this will become the basis of projections for the succeeding years. The Commission reiterates its directive to PSTCL to analyse voltage wise transmission losses and give a roadmap to reduce to losses below 2.5% within one month of issue of Tariff Order. The Commission directs PSTCL to take utmost care to collect and compile the data from all the energy meters to remove any probable errors so that correct and reliable data is available for calculation of transmission losses.

Directive No.4.2: a) Man power:

PSERC Comments & Directive for FY 2018-19:

Detailed explanation for increase in employee cost despite the reduction in actual employee strength should be submitted to the Commission. A year wise chart of actual employee strength plus additions and minus attrition by way of retirement and employee cost & terminal costs from 2010 onwards, may be supplied to the Commission within a month.

Reply of PSTCL:

Particulars	16.04.2010 to 31.03.2011	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Actual Employee strength at the beginning of the year	3717	4210	3328	3699	3853	3737	3557	3507
Employee added during the year	493		371	154				68
Less: Attrition during the year		882			116	180	50	
Actual Employee strength at the end of the year	4210	3328	3699	3853	3737	3557	3507	3575
Employee Cost (Rs. Crore) excluding terminal benefits	104.54	122.42	134.98	155.89	154.97	174.48	187.65	192.72
Terminal benefit (Rs. Crore) @11.36 X Share	127.78	141.23	165.14	183.55	200.66	229.40	254.31	279.45

PSERC Comments & Directive

The Commission notes the compliance and hence the directive is dropped.

Directive No.4.2: b) Unmanned Sub-stations:

PSERC Comments & Directive for FY 2018-19:

The Commission observes that there is no tangible progress in the execution of work in the last one year. The work of three substations is yet to start. PSTCL is directed to supply timelines for completion/commissioning of all the five Sub Stations.

Reply of PSTCL:

Tender Enquiry STQ-7019 was floated and Work Order No.STW-7001 dated 16.10.2015 was awarded to M/S Siemens Ltd. for Substation Automation System, including video monitoring system, for five 220 kV Substations (220 kV substation Mohali-1, 220 kV substation Mohali-2, 220 kV substation Kharar, 220 kV substation Dera Bassi and 220 kV substation Lalru). The project has been delayed by Siemens. The company has completed Substation Automation System on all the substations. However, implementation of remote control of the substations from Remote Control Centre (RCC) is pending. The company has been asked to finish the project at the earliest.

PSERC Comments & Directive

PSTCL has not provided any timelines for implementation of remote control of the substations from Remote Control Centre (RCC). The Commission directs PSTCL to complete the implementation of Remote Control of all the five Sub-stations from Remote Control Centre and share the progress within two months of the issue of this Tariff Order.

Directive No.4.2: c) Training:

PSERC Comments & Directive for FY 2018-19:

From the scrutiny of the reply of PSTCL, it appears that the licensee does not have any definite roadmap for training of its employees/officers. PSTCL is directed to submit its plan for training of their employees/officers.

Reply of PSTCL:

Regarding Training Calendar for year 2018-19

1. PSTCL does not have any Training Institute of its own. As per decision dated 10.11.2017 of the Committee of WTDs PSTCL, the decision of construction/ establishment of PSTCL's Advanced Training & Research Institute at 220 KV Substation, Ablowal has been scrapped.

2. As desired by CMD, PSTCL, a joint committee of PSPCL and PSTCL Officers was formulated to explore the Common Training Facilities between PSPCL and PSTCL & it was decided that in co-ordination with PSPCL, Induction Training as well as Refresher Courses of PSTCL employees shall be carried out at PSPCL training facilities.

3. In compliance to the above decision, 4 batches of (apprx.25 participants each) of SSA's of PSTCL have been sent for training at Technical Training Institute, PSPCL, Patiala in the year 2018.

4. Also the modules of Training for officers/officials of various other categories are being worked out mutually with PSPCL as per PSTCL's requirements.

5. Modalities for Common batches of PSPCL & PSTCL employees for same training are also under consideration.

6. **Training Calendar for Year 2018-19**

   I. GEO Spatial Awareness Workshop conducted by PEC, Chandigarh on 19th April at Chandigarh.

   II. Five days (7th May to 11th May, 2018) Communication Equipments Training, organized by M/s ECI Telecom India Pvt. Ltd at Gurgaon.

   III. "Renewable Energy Generation-Integration with Grid and Storage Batteries" from 05-08 June, 2018 at ESCI Campus Hyderabad.

   IV. Three Days Training Program on "Fibre Optic Cabling and Splicing of FO Cable during Installation" from 18.06.18 to 20.06.18 at Gurgaon.

   V. 4 weeks Training Program of SSAs of PSTCL(Total 100) has been conducted at Technical Training Institute (TTI), PSPCL, Patiala in year 2018 (Four Batches of 25 participants each).

   VI. One Day Training on EAT Module for PSDF Scheme conducted by Chief Controller of Accounts(CCA), Ministry of Power, on 27.07.18 at Institute of Government Accounts and Finance (INGAF), Block-IV, Old J.N.U. Campus, New Delhi.

   VII. Seminar on Road safety Talk by "SADAK" Patiala Foundation Society at Shakti Sadan, Patiala in July, 2018.

   VIII. One day Training Program on Medium Term Expenditure Framework (MTEF) under the Asian Development, Govt. of Punjab, on 07.09.18 at PEDA-Auditorium, Chandigarh.

IX. Six days Training Program on Power System logistics by National Power Training Institute (NPTI), Faridabad in September,2018.

X. Two weeks Training on Power system Operation by Power System Training Institute (PSTI), Bangalore in October, 2018.

XI. Two weeks Training on Power system Operation by Power System Training Institute (PSTI), Bangalore in December, 2018.

XII. Six days Training Program on Regulatory Framework in Power Sector by National Power Training Institute (NPTI), Faridabad in December, 2018.

XIII. Six days Training on Renewable Energy Sources & grid Integration by Power System Training Institute (PSTI), Bangalore in January, 2019.

XIV. Two weeks Training on Power system Operation by National Power Training Institute (NPTI), Guwahati in February, 2019.

XV. One Day Training Program on "Medium Term Expenditure Framework (MTEF)" under the Asian Development Bank(ADB) supported 'Punjab Development Finance Program' of Finance Department, Govt. of Punjab on 07.09.2018 at PEDA-Auditorium, Solar Passive Complex, Plot No.1-2, Sector-33-D, Chandigarh.

XVI. Three Day Workshop on Electricity Markets" from 8th to 10th October' 2018 at The Energy and Resource Institute (TERI) RETREAT CENTRE, Gwal Pahari, Gurgaon-Faridabad Road, Gurgaon, Haryana being organised by KMPG India.

XVII. One Day Training Programme on "Gender Mainstreaming in Climate Change Adaptation Actions" on 05.10.2018 to be jointly organised by Punjab State Council for Science & Technology(PSCST) & Mahatma Gandhi State Institute of Public Administration(MGSIPA) at MGSIPA, Institutional Area, Sector 26, Chandigarh-160019 .

XVIII. One Day Seminar on "Recent Trends on Condition Monitoring in Power Equipment", being organized by Central Power Research Institute (CPRI) Noida at SCOPE Convention Centre, Core-8, Ground Floor, 7, Lodhi Road, New Delhi-110003, on 12.10.2018.

XIX. "6th Annual Conference on Transmission Lines, Towers and Sub Stations" on 30-31st Oct'2018 at The Leela Ambience, Gurugram.

XX. "Five Days Capacity Building Programme on Contract Management" from 21st to 25th January'2019 at Rajiv Gandhi National University of Law, Patiala.

7. **Proposed Trainings for year 2018-19**

i. One week training program on "Enhancing Managerial Excellence" at Engineering Staff College of India, Hyderabad in batches (20 participants per batch) for Officers of PSTCL. Already 5 batches have undergone training at ESCI, Hyderabad in year 2016-17 & 2017-18.

ii. Training of JEs & SSAs of PSTCL at TTI PSPCL.

8. It is also worth mentioning here that, it is mentioned in the Joint Director/Finance, Punjab Govt. letter dated 16.01.2015 that expenditure on conferences/ seminars/ workshops shall be curtailed and employees shall be sent for extremely essential training programs. In this regard, Requisite agenda has been sent to the office of Company Secretary for consideration and approval with regard to various trainings of PSTCL employees.

Hence, from time to time, PSTCL sends its employees, for training and other mandatory programs to PSPCL training facilities and on essential training programmes to other Institutions of India, as per the approval of higher authorities

PSERC Comments & Directive

The Commission notes the action taken. Training of personnel is an ongoing activity and PSTCL shall ensure regular training of its staff. The directive is dropped.

Directive No.4.2: d) Implementation of ERP:

PSERC Comments & Directive for FY 2018-19:

No tangible progress has been made by PSTCL after scrapping of bids of ERP work in March, 2017. The Commission directs PSTCL to submit the action plan on ERP project within a month of issue of this Tariff Order.

Reply of PSTCL:

The Tender process for selection of implementation partner had to be scrapped due to inadequate number of bids. The Board of Directors was requested to decide on further course of action. "Board decided that proposal for ERP implementation in PSTCL shall be taken up later.

PSERC Comments & Directive

In view of the decision of Board of Directors of PSTCL, the directive is dropped.

Directive No. 4.3: Loading Status of PSTCL Transmission lines and Substations:

PSERC Comments & Directive for FY 2018-19:

The Commission observes that the 220 kV Dhandari-PGCIL, Ludhiana and the 220 kV Lalton-PGCIL, Ludhiana ckt-1 are overloaded by 116.3% and 104.4%, respectively and all other 220 kV and 132 kV transmission lines and Substations of PSTCL remained below 100% loading during paddy 2017. PSTCL should share the timelines to deload the overloaded lines within one month of the issue of this tariff order. PSTCL should regularly upload the quarterly status of loading conditions of Sub-stations and Transmission lines on its website also.

Reply of PSTCL:

The Quarterly status (ending December-2018) of loading conditions of Sub-station & Transmission lines has been uploaded on PSTCL website and is reproduced below:

Sr. No.	P&M Circle	Name of Transmission Lines	%loading as compared with the standard design Parameter of Conductor i.e. 45ºC	Remarks	Remedial Action
1	Ludhiana	220 kV G-1 Rajpura ckt-1	570A (102%) at 15ºC ambient temperature	Due to inadequate generation from GGSSTP end.	Adequate generation to be ensured by PSPCL at GGSSTP.
	2	220 kV G-1 Rajpura ckt-2	570A (105%) at 32ºC ambient temperature	-do-	-do-
	3	220 kV RTP Ghulal	665A (102%) at 17ºC ambient temperature	-do-	-do-
2	Jalandhar	Nil			
3	Patiala	Nil			
4	Amritsar	Nil			
5	Bathinda	Nil			
NOTE: All the 220 kV as well as 132 kV substations of PSTCL remained loaded below 100%.					

Regarding 220 kV Dhandari - PGCIL Ludhiana and 220 kV Lalton PGCIL - Ludhiana (ckt 1), tender were opened in Feb. 2019 but no firm had qualified. Also PSDF grant has not been approved till date. The tenders will be floated again after getting the approval of BoD.

PSERC Comments & Directive

The Commission notes that both 220 kV Ckt 1 & 2 from 220 kV Gobindgarh-1 to Rajpura and 220 kV line from RTP to Ghulal remained overloaded even at ambient temp of 15^{o} C to 17ºC. The generation at GGSSTP depends upon merit order dispatch and cannot be regulated according to loading conditions of the lines. PSTCL is directed to take remedial measures to deload the above mentioned circuits under intimation to the Commission.

Directive No. 4.4: Maintenance of category wise details of fixed assets:

PSERC Comments & Directive for FY 2018-19:

The Commission is not satisfied with the reply and further directs PSTCL to complete the task and submit a status report within one month from the issue of Tariff Order.

Reply of PSTCL:

Copy of the Fixed Assets register (FAR) has already been supplied to the Commission.

PSERC Comments & Directive

The Commission notes the compliance. PSTCL is directed to supply the voltage wise updated information on line, every year.

Directive No. 4.5: Reactive Compensation.

PSERC Comments & Directive for FY 2018-19:

PSTCL is directed to share the timelines for implementing the recommendations of the latest study report of CPRI.

Reply of PSTCL:

1. This office submitted DPR for funding through PSDF in respect of 35 Nos. 66 KV shunt capacitor banks of 10.86 MVAR rating at 17 no. 220 KV sub-stations in the month of June 2015 with a total cost of Rs.8.35 Cr approx. on the basis of Empirical formulae/Mathematical calculations for Capacitor banks. Subsequently, the work of system studies for capacitor requirement was entrusted to CPRI by NRPC.

2. The draft Capacitor study report was submitted by CPRI in the month of April 2017. The draft report was deliberated in the OCC meeting held in April 2017, wherein OCC noted that the capacitors proposed for PSDF funding by Haryana, Punjab and UP were less than that assessed based on the CPRI report. Therefore OCC recommended the proposal of these states for the approval of NRPC. Subsequently, in the 39th NRPC/35th TCC meeting, NRPC approved the proposal of Haryana, Punjab and UP for installation of capacitors for funding through PSDF. The final report was submitted by CPRI in the month of August 2017.

3. In the 41st NRPC/38th TCC meeting held on 27.02.2018, Techno Economic Sub Group (TESG) raised certain queries on the proposal submitted for PSDF funding by Haryana, UP, Punjab and J&K regarding capacitor installation by them wherein TESG asked certain information from the entities including PSTCL as follows:

a) Study report based on which requirement has been projected,

b) Location wise details of existing capacitor banks with age and health report,

c) Present voltage profile at 11 KV/33 KV, projected voltage levels after installation of capacitors,

d) Schematic for automatic power factor correction,

e) SLDC report,

f) STU approval,

g) Basis of Cost estimates,

h) Grant from any other scheme of GOI (IPDS, DDUGVY).

However, the same could not be furnished as the DPR was submitted much in advance by PSTCL i.e. in June 2015 (almost 2 years before the CPRI study report was submitted) based on Empirical formulae/Mathematical calculations for Capacitor banks.

4. It is further added that PSTCL submitted all the data in the given format as required by CPRI for conducting the study of capacitor banks as desired by NLDC but the same was actually not considered in the study report by CPRI.

   The CPRI in its study report issued on August 2017 considered MVAR Compensation at existing Capacitor banks of PSTCL 'network to be 1563.9 MVAR and around 1039.26 MVAR has been additionally recommended to make the voltage profile stable making the total reactive compensation as 1563.9+1039.26=2603.16 MVAR. However, the actual operational MVAR of PSTCL network as submitted to CPRI for carrying out the study was around 3556.69 MVAR.

5. As mentioned in CERC (Indian Electricity Grid Code), Regulation 2010, the reactive compensation i.e. Shunt Capacitors shall be provided by STU & users connected to Inter State Transmission System as far as possible in the low voltage system close to the load points.

6. In compliance to CERC regulations, the reactive Compensation in PSTCL is being provided at low voltage level i.e 11KV & 66 KV). However, CPRI in its study report recommended reactive compensation at high voltage level also i.e.220 KV voltage level as well as 132 KV voltage level (As per the recommendations, 220 KV shunt capacitors were recommended at 220 KV S/S & 132 KV shunt capacitors were recommended at 132 KV S/S.) However, as per the CERC guidelines, it is appropriate to install shunt capacitors at lower voltage level i.e 66 kv capacitor bank at 220 KV S/S with 220/66

KV T/F(s) and 11 KV capacitor banks at 132 KV S/S with 132/11 KV T/F(s).This set up is economical as well as it requires less space.

7. In the 37th TCC/ 40th NRPC meeting held on 11.01.18, it was decided that for obtaining more feasible and practical requirement of capacitors, the study shall be conducted at 220/132 KV level as well as 11/33/66 KV level for the year 2019-20 based on the data to be submitted by N-R utilities.
8. The matter was further discussed in the 42nd NRPC meeting held on 13.08.18, wherein the PSTCL representative stated that even though the requirement in the study conducted by CPRI was far greater than that proposed by PSTCL, still they had not allowed the funding for the same.
9. A letter in this regard has been written to the Member Secretary, Power System Operation Corporation Limited, NLDC, New Delhi vide this office memo no. 1440 dt. 26.10.18, wherein it was requested that the PSDF Funding may be allowed based on the earlier DPR submitted by PSTCL in respect of 35 Nos. 66 KV Shunt capacitors of 10.86 MVAR rating at 17 no. 220 KV sub-stations with a total cost of 8.35 Cr approx. Shortfall, if any projected by M/s CPRI based on their study report for the year 2019-20 as and when submitted shall be duly added subsequently. The reply in this regard is still awaited.
10. The new reactive compensation study for PSTCL/PSPCL at 220/132 KV level as well as 11/33/66 KV level for the year 2019-20 has been initiated by M/s CPRI and the requisite input data is being arranged by the 0/o SLDC PSTCL.

PSERC Comments & Directive

PSTCL is directed to share the new reactive compensation study being conducted by CPRI for PSPCL/PSTCL at 220/132 kV level as well as 11/33/66 kV level for the year 2019-20 as per the decision taken in 37th Technical Coordination Committee (TCC) meeting/40th NRPC meeting. PSTCL may also keep the Commission informed regarding PSDF funding and approval of the project.

Directive No.4.6: Transmission System for evacuation of power from IPPs.

PSERC Comments & Directive for FY 2018-19:

The Commission observes that the target of November, 2016, which was earlier shifted to December, 2017 has now been deferred to 28.02.2018. Only about 61% stringing work has been completed. PSTCL is directed to intimate the progress on commissioning of the above circuit immediately.

Reply of PSTCL:

Name of Work	Total No of Towers	No. of Towers Stubbed	No. of Towers Erected	Stringing & Sagging (in ckt. Km)	Expected Date of Commissioning	Remarks
220 KV Goindwal Sahib (TPS) – 220 KV Bottian Wala DC line = 64.735 Km length=64.735 X 2=129.47 ckt.kms.	203	203	203	129.47	31.01.2019	Line work has been energized on 06.03.2019 from Botiwala end but synchronization of line is pending due to non-installation of communication equipment by Goindwal Plant. Notice has been issued Plant authorities.

PSERC Comments & Directive

The Commission notes the compliance. The directive is dropped.

Directive No.4.7: Replacement of defective energy meters:

PSERC Comments & Directive for FY 2018-19:

The Commission in its order dated 19.04.2017 in Petition No. 42 of 2016 (Suo-moto) read with letter dated 15.10.2015 had issued various directions to PSPCL/PSTCL for accurate recording of pumped energy of AP feeders. PSTCL should ensure its implementation.

Reply of PSTCL:

It is certified that various directions issued by the commission to PSTCL for accurate recording of pumped energy of AP feeders are being implemented at all the Substations under P&M Organization, PSTCL.

PSERC Comments & Directive

The Commission notes the action taken and directive is dropped.

Directive No. 4.8: Preventive maintenance of transmission lines.

PSERC Comments & Directive for FY 2018-19:

PSTCL is directed to clarify the percentage of Disc Insulators replaced with Anti-Fog Disc Insulators in polluted areas and timelines to replace remaining Disc Insulators with Anti-Fog Disc Insulators in polluted areas.

Reply of PSTCL:

Amritsar Circle	100% of Disc Insulators replaced with anti fog Disc insulators in polluted areas in respect of all 220/132 KV Transmission lines.
Bathinda Circle	100% of ordinary porcelain Disc Insulators replaced with Anti fog/Polymer insulator Disc strings in polluted areas in respect of all 400/220/132KV Transmission lines.
Jalandhar Circle	100% of Disc Insulators replaced with anti fog Disc insulators in polluted areas in respect of all 220/132 KV Transmission lines.
Ludhiana Circle	100% of Disc Insulators replaced with anti fog Disc insulators in polluted areas in respect of all 400/220/132 KV Transmission lines.
Patiala Circle.	100% of Disc Insulators replaced with anti fog Disc insulators in polluted areas in respect of all 400/220/132 KV Transmission lines.

PSERC Comments & Directive

During public hearings, number of complaints regarding failure of supply were received by the Commission from the large industrial consumers fed from 132/220 kV lines. In a surplus power scenario, failure to provide uninterrupted power supply to large industrial units not only results in loss of industrial production but loss of revenue to the distribution licensee also. PSTCL is directed to start a special drive for upkeep of all transmission lines and particularly those lines supplying power to industrial units in the State. PSTCL is further directed to supply quarterly information regarding detail of trippings/breakdowns on each 132/220/400 kV line along with duration of interruption and reason for the same.

New Directive:

4.9 Strengthening of State Load Despatch Centre (SLDC):

The State Load Despatch Centers (SLDCs) have been established under Section 31 of the Electricity Act, 2003 to perform functions as directed in Section 32 of the Act. The SLDC has a pivotal role to ensure integrated, secure, reliable and efficient operation of the Power System in the State. With the large scale of integration of RE power, automization and real time operation of the grid system in the near future, SLDC is required to be manned by well trained staff with long term commitment and motivation to work in this field.

PSTCL is directed to ensure achievement of the above referred goals by effectively ring fencing the SLDC and ensuring adequate well trained manpower. Regular training with inbuilt system of incentives/rewards to the personnel manning SLDC should be ensured. PSTCL shall submit a complete plan to ensure compliance of the directive within four months from the date of issue of this Tariff Order.

Chapter 5
Determination of Transmission Charges and SLDC Charges

5.1 Annual Revenue Requirement

The Commission has determined the ARR for PSTCL for FY 2019-20 as Rs. 1329.60 Crore, comprising of Rs. 1307.36 Crore for Transmission business & Rs. 22.24 Crore for SLDC business.

The Commission vide interim Order dated 18.03.2019 had decided to continue with the existing transmission tariff till the Tariff Order for FY 2019-20 is issued. Now, the Commission decides to implement the new tariff rates with prospective effect i.e. w.e.f. 01st June, 2019. Accordingly, the ARR for Transmission Business and SLDC Business required to be recovered in the remaining 10 months of the year is as under:

Table 5.1: ARR for Transmission Business and SLDC Business

(Rs. Crore)

Sr. No.	Particulars	Transmission Business	SLDC Business
1.	ARR approved for FY 2019-20	1307.36	22.24
2.	Less revenue recovered during 2 months (April, 2019 and May, 2019) with transmission tariff as per Tariff Order FY 2018-19	210.60 (105.30 x 2)	3.06 (1.53 x 2)
3.	Net ARR recoverable during remaining 10 months (June, 2019 to March, 2020)	1096.76	19.18

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 2019-20.

5.2 Transmission System Capacity

The Commission has determined the Transmission capacity (net) of PSTCL system from the data submitted by PSTCL as 11956.32 MW for FY 2019-20.

5.3 Determination of Transmission Tariff

PSERC MYT Regulations, 2014 specify that transmission tariff will have the following components:

i) SLDC Operation Charges

ii) Reactive Energy Charges

iii) Charges for use of network

5.3.1 **SLDC Operation Charges:** The Commission has approved the ARR of SLDC business for FY 2019-20 at Rs. 22.24 Crore in Table 3.35 of this Tariff Order. **Accordingly, the Commission determines the SLDC Operation Charges as under:**

Table 5.2: SLDC Operation Charges

(Rs. Crore/Month)

Sr. No.	Particular	Existing Charges as per T.O. for FY 2018-19 continued from 01.04.2019 to 31.05.2019	New charges w.e.f. 01.06.2019 to 31.03.2020
1.	**SLDC Operation Charges**	1.53	1.918

5.3.2 **Reactive energy charges:** The reactive energy charges, if any, raised by NRLDC on PSTCL will be recoverable from PSPCL directly by PSTCL.

5.3.3 **Charges for use of Network:** The ARR for the Transmission Business of PSTCL has been determined at Rs. 1307.36 Crore for FY 2019-20 as shown in Table 3.34 of this Tariff Order.

Accordingly, the Commission determines the Transmission Charges as under:

Table 5.3: Transmission Operation Charges

(Rs. Crore/Month)

Sr. No.	Particular	Existing Charges as per T.O. for FY 2018-19 continued from 01.04.2019 to 31.05.2019	New charges w.e.f 01.06.2019 to 31.03.2020
1.	**Transmission Charges**	105.30	109.676

5.4 Determination of Open Access Transmission and SLDC Charges

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

5.4.1 On the basis of approved ARR for SLDC business of PSTCL, the SLDC Operation Charges for Open Access customers during FY 2019-20 are determined as under:

Table 5.4: SLDC Operation Charges for Open Access Customers for FY 2019-20

Sr. No.	Particulars	Unit	Quantum
I	II	III	IV
1.	Annual Revenue Requirement (ARR) of SLDC business for FY 2019-20	Rs. Crore	22.24
2.	Transmission System Capacity (net)	MW	11956.32
3.	SLDC Operation Charges for Long Term and Medium Term Open Access customers	Rs./MW/Month	1550
4.	Composite operating charges to be paid by Short Term Open access Customers to the SLDC for each transaction	Rs. Per day or part of the day	2000

5.4.2 On the basis of approved ARR for Transmission Business of PSTCL, the Transmission Charges for Open Access customers for use of the transmission system during FY 2019-20 are determined as under:

Table 5.5: Open Access Transmission Charges for FY 2019-20

Sr. No.	Particulars	Units	Quantum
I	II	III	IV
1.	Annual Revenue Requirement (ARR) of Transmission Business for FY 2019-20	Rs. Crore	1307.36
2.	Transmission System Capacity (net)	MW	11956.32
3.	Transmission charges for Long Term and Medium Term Open Access customers	Rs./MW/ Month	91121
4.	Transmission Charges for Short Term Open Access Customers (based on 56746.49 MkWh of energy input at transmission boundary for sale in the State, as approved in Table 3.3 B of PSPCL Tariff Order for FY 2019-20)	Rs./MWh	230.39

5.5 Date of Effect

The Commission, decides to make the revised Transmission Charges and SLDC Charges determined above applicable w.e.f. 1st June, 2019 and these shall remain operative till March 31, 2020. For the month of April and May 2019, the tariff shall remain as per Tariff Order for FY 2018-19 as specified by the Commission in the Interim Order dated 18.03.2019.

This Order is signed and issued by the Punjab State Electricity Regulatory Commission on this day, the 27th day of May, 2019.

Date: May 27, 2019

Place: CHANDIGARH

Sd/-	Sd/-	Sd/-
(Anjuli Chandra)	**(S.S. Sarna)**	**(Kusumjit Sidhu)**
MEMBER	**MEMBER**	**CHAIRPERSON**

Certified

Sd/-

Secretary

Punjab State Electricity Regulatory Commission,
Chandigarh.

ANNEXURE - I

LIST OF OBJECTORS

Objection No.	Name & Address of Objector
1.	Khanna Paper Mills Limited, NH-3 Bye Pass, Opp. Metro Cash & Carry, Amritsar-143001, Punjab.
2.	Mawana Sugars Ltd, Unit: SIEL Chemical Complex, Charatrampur, Village Khadauli/Sardargarh, Post Box No. 52 Rajpura, Distt. Patiala, Punjab-140401.
3.	PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.
	(Additional Comments): PSEB Engineers Association (Regd)
4.	Comments/Observations of Government of Punjab, Department of Power, (Power Reforms Wing), Chandigarh.

ANNEXURE - II

OBJECTIONS – PSTCL

Objection No. 1 : Khanna Paper Mills Limited, NH-3 Bye Pass, Opp. Metro Cash & Carry, Amritsar-143001, Punjab.

Issue No. 1: Transmission Losses

PSTCL has submitted the transmission loss of 3.12% (actual) for FY 2017-18, 2.80% (RE) for 2018-19 and 2.70% (proj.) for 2019-20. PSTCL has itself offered 2.80% transmission loss for 2017-18 in ARR of FY 2018-19 but now increased to 3.12% and a target of 2.80% has been proposed for FY 2018-19. PSTCL has not achieved the set target of transmission loss despite approval of Capital Investment Plan as requested by PSTCL. The losses have increased when same system transmitted higher quantum of energy and the losses are varying in some months though quantity of electricity transmitted is almost same.

The skewed figures of Transmission loss indicates that the transmission system is not being put to use in an efficient manner and needs to be operated to minimize the transmission losses. The trajectory proposed by the Commission needs to continued. Further new lines and substations needs to be developed so as to reduce losses.

Reply of PSTCL:

Transmission losses are higher as demand curve is not uniform having peak of 12000 MW and crest of 3000 MW. Thermal generation is costly and plants are shut down even when running of these are compulsory for reducing transmission losses.

PSTCL has calculated theoretical transmission losses to be 2.776% for FY 2017-18 which can safely be concluded in range of 3%.

View of the Commission:

The value of the trajectory of transmission loses, which should become the basis of projections of the Control Period, will only be fixed on the basis of truly stabilised data. Meanwhile the transmission loss has been fixed at 2.50%. Also refer para No. 2.3 at page 8 and para 3.3 at page 37 of this Tariff Order.

Issue No. 2: Funding of Capital expenditure

PSTCL is funding Capital expenditure with normative 30% equity and 70% funding. ARR figures reveal that PSTCL is funding equity through Return on Equity earned during the period. Return on Equity belongs to GOP which has invested equity in PSTCL and PSTCL on its own cannot make paper adjustments of ROE. Share capital on 31.03.17 and 31.03.18 remains same i.e. Rs. 605.38 Crores. PSTCL has neither approval to invest on equity nor having equity shares been issued to GOP on account of investment.

As per audited profit & loss statement, PSTCL has earned profit of only Rs. 5 Crores whereas PSTCL has been granted ROE of Rs. 101.78 Crore for FY 2017-18. The equity shown as invested on normative basis for capital expenditure is Rs. 106.23 Crores. PSTCL carried out paper adjustments to convert loans of capital investment into equity to gain differential of interest and ROE. When there is only Rs. 5 Crore profit, how it can be allowed to invest Rs. 106.23 Crores as equity.

PSPCL is also incurring capital expenditure but not adopting such practice and so all capital expenditure needs to be treated as long term loans.

Reply of PSTCL:

Funding of Capital expenditure in ratio of 70:30 is strictly in line with the MYT Regulations, 2014 wherein Return on Equity is considered as the regulatory profit for the respective year which cannot be compared with profit in audited accounts as the principles and basis for both are different. For example, the Commission considers Interest on Working Capital on normative basis, and not as per actuals. Therefore, it will be prudent to consider regulatory profit approved by the Commission, instead of the book profit of Rs. 5.00 Crore, while approving the normative equity addition during the year for partial funding of Capital Expenditure.

PSTCL has claimed addition of normative equity of Rs. 106.23 Crores for FY 2017-18 for partial funding of Capital Expenditure for FY 2017-18 as per MYT Regulations, 2014.

View of the Commission:

The Commission has considered Return on equity as per Regulation 20 of PSERC MYT Regulations – 2014 in Para 2.10 of the Tariff Order at page 28.

Issue No. 3: Employee Cost

PSTCL has some reservation on value of GFA to be taken for calculation of employee cost. PSTCL has raised issue with regards to MYT Regulations to work out higher normative Employee cost and then has justified its actual employee cost. PSPCL has not raised any such issue in its ARR. This needs to be dealt strictly as per MYT Regulations and if PSTCL has some issues with Regulations, it may file a separate plea for amendment in Regulation.

Reply of PSTCL:

PSTCL's computation of normative employee cost are as per MYT Regulations 2014 and therefore are independent of GFA.

View of the Commission:

The Commission has determined the employee cost in line with Regulation 26 of PSERC (amended from time to time) Regulations 2014.

Issue No. 4: Funding of Loans

Paper adjustment is evident as there is no mention of funding through equity and interest charges have been claimed on all the loans. If some loans have been funded through equity then equivalent loans should have been reduced and this should have been mentioned distinctly. PSTCL should not be allowed to carry out such adjustments as per Regulations, which require that equity needs to be invested through cash flow from GOP.

Reply of PSTCL:

PSTCL has not replaced loan with equity and considered funding of capital expenditure through loan and equity. PSTCL has incurred capital expenditure of Rs. 354.10 Crores for FY 2017-18 excluding consumer contribution of Rs. 22.78 Crores. The funding of capital expenditure for FY 2017-18 is done through equity addition of Rs. 106.23 Crores and addition of loan of Rs. 247.87 Crores. Further, PSTCL undertook refinancing of PSPCL loan of Rs. 495.57 Crores from PFC to avail the benefit of lower interest rate offered by PFC.

View of the Commission:

The Commission has determined the Debt and equity ratio as per Regulation 19 of PSERC MYT Regulations 2014.

Issue No. 5: Return on Equity (ROE)

ROE needs to be granted only on the Equity actually invested by GOP and not on normative figures.

Reply of PSTCL:

PSTCL has funded 30% capital expenditure through equity in FY 2017-18 by re-investing RoE.

View of the Commission:

ROE is allowed by the Commission in line with Regulation 20 of PSERC MYT Regulations 2014.

Issue No. 6: Reserves and Surpluses

As per its balance sheet, PSTCL has reserves and surpluses of Rs. 2858.93 Crore and Equity of Rs. 605.88 Crore which works out to 4.39 times the equity amount. Consumers are being made to pay 15.50% RoE on equity amount, whereas Reserves and Surplus are not earning any revenue for PSTCL or the consumers. PSTCL should explore liquidation of some equity to GoP to reduce the burden of RoE and for lowering of tariff.

Reply of PSTCL:

PSTCL has major part of the reserves and surplus of Rs. 2858.93 Crore is in the nature of capital reserve represented by fixed assets which cannot be liquidated.

View of the Commission:

The Commission has determined the Debt and equity ratio as per Regulation 19 of PSERC MYT Regulations 2014.

Issue No. 7: Transformation Capacity

PSTCL has transformation capacity of 34954 MW at 220/132 KV levels on 31.03.2018 against 13562 WM contracted demand of PSPCL. Peak demand served by PSPCL during last paddy is 12650MW. In view of huge transformation capacity compared with peak demand being about 2.76 times, the capital investment plan needs to be reviewed critically for pay back as the assets created will require operation and maintenance and interest pay out etc. but may not be used to their capacity.

Reply of PSTCL:

The objection with respect to Transformation Capacity of 34954 MVA against peak demand of 12560 MW is not tenable as the same has not been supported by any technical reasons. The transformation capacity of PSTCL is on lesser side as per the following table.

Description	National Source - Water & Energy International Journal Vol. 61	PSTCL
Transformation Capacity on 31.12.2018	8,75,013 MVA	35,839 MVA
Demand Met	1,60,752 MW	12,650 MW

View of the Commission:

PSTCL should ensure that any transformation capacity to be added in future should be based on load flow studies and in consultation with PSPCL.

Objection No. 2: Mawana Sugars Ltd, Unit: SIEL Chemical Complex, Charatrampur, Village Khadauli/Sardargarh, Post Box No. 52 Rajpura, Distt. Patiala, Punjab-140401.

Issue No. 1: Interest on Working Capital

PSTCL has challenged the disallowances of some of minimum alternate tax on various counts in Tariff Order for FY 2014-15 in APTEL which has decided all issues on 14.01.2016 except issue of calculation of interest of working capital @ 6.75% instead of SBI rate. Same issues also relate to present ARR for FY 2016-17 under consideration. It is requested that the decision of the APTEL on the issues be kept in view while deciding the present ARR.

Reply of PSTCL:

PSTCL Petition is regarding True up of FY 2017-18, APR of FY 2018-19 and determination of revised ARR and Tariff for FY 2019-20, and doesn't involve FY 2016-17. Further, PSTCL submits that it has made detailed submission in its Petition, and requests the Commission to take appropriate view on it.

View of the Commission:

Noted.

Issue No. 2: Return on Equity

The Commission has approved 15.5% return on equity for 2010-11 to 2018-19 purportedly as per PSERC regulations as per FRP approved by GOP increasing cost of assets by their revaluation and merging the Consumer Contributions, subsidies and grants with GOP equity leading to increase in equity share capital of PSTCL from Rs. 328.50 Crores to Rs. 605.88 Crores, as per FRP and ROE has been increased from Rs. 45.99 Crores to Rs. 93.91 Crores i.e. an increase of 204% without any fresh investment or infusion of cash by GOP or PSTCL. A similar case of PSPCL is pending in Hon'ble Supreme Court and the Order of APTEL is under Stay.

Reply of PSTCL:

It has made detailed submissions in its Petition regarding RoE as per approach adopted by the Commission in previous Order, in line with PSERC MYT Regulations, 2014. Further, since the appeal in similar case of PSPCL is pending with Hon'ble Supreme Court, the Commission may take appropriate view in this regard.

View of the Commission:

The Commission has considered return on equity as per PSERC MYT Regulations 2014. The decision of the Hon'ble Supreme Court is awaited.

Issue No. 3: Transmission Losses

PSTCL has submitted the transmission loss of 3.12% (actual) for FY 2017-18, 2.80% (RE) for 2018-19 and 2.70% (proj.) for 2019-20. PSTCL has itself offered 2.80% transmission loss for 2017-18 but now increased to 3.12% and a target of 2.80% has been proposed for FY 2018-19. PSTCL has not achieved the set target of transmission loss despite approval of Capital Investment Plan as requested by PSTCL. The losses have increased when same system transmitted higher quantum of energy and the losses are varying in some months though quantity of electricity transmitted is almost same.

The skewed figures of Transmission loss indicates that the transmission system is not being put to use in an efficient manner and needs to be operated to minimize the transmission losses. The trajectory proposed by the Commission needs to continued. Further new lines and substations needs to be developed so as to reduce losses.

Reply of PSTCL:

Refer reply of PSTCL in issue No. 1 of Objection No. 1 at page 79.

View of the Commission:

Refer view of the Commission in issue No. 1 of Objection No. 1 at page 79.

Issue No. 4: Employee Cost

PSTCL has some reservation on value of GFA to be taken for calculation of employee cost and raised some issues with regards to MYT Regulations to work out higher normative employee cost and then justifies its actual employee cost. This needs to be dealt strictly as per MYT Regulations and if PSTCL has some issues with Regulations, it may file a separate plea for amendment in Regulations.

Reply of PSTCL:

Refer reply of PSTCL in issue No. 3 of Objection No. 1 at page 80.

View of the Commission:

Refer view of the Commission in issue No. 3 of Objection No. 1 at page 80.

Issue No. 5: Funding of Capital expenditure

PSTCL is considering funding of its capital expenditure with 30% equity and 70% funding and this equity is being funded through return of equity earned during this period. ROE belongs to GoP which has invested in PSTCL. Equity share capital as on 31.03.2017 and 31.03.2018 remains same i.e. Rs. 605.38 Crores. Thus neither there is any approval of GOP to invest in equity nor have equity shares been issued to GOP on account of investment. PSTCL has been granted ROE of Rs. 101.78 Crores for FY 2017-18. The profit is only Rs. 5.00 Crores whereas equity invested for capital expenditure is Rs. 106.23 Crores. PSTCL has carried out jugglery of figures to convert loans of capital investment into equity to gain differential of interest and ROE.

PSPCL is also incurring capital expenditure but not adopting such practice and so all capital expenditure needs to be treated as long term loans.

Reply of PSTCL:

Refer reply of PSTCL in issue No. 2 of Objection No. 1 at page 79.

View of the Commission:

Refer view of the Commission in issue No. 2 of Objection No. 1 at page 79.

Issue No. 6: Funding of Loans

There is no mention of funding through equity but interest charges have been claimed on all the loans.

Reply of PSTCL:

Refer reply of PSTCL in issue No. 4 of Objection No. 1 at page 80.

View of the Commission:

Refer view of the Commission in issue No. 4 of Objection No. 1 at page 80.

Issue No. 7: Return on Equity (ROE)

ROE needs to be granted only on the Equity actually invested by GoP and not on normative figures.

Reply of PSTCL:

Refer reply of PSTCL in issue No. 5 of Objection No. 1 at page 80.

View of the Commission:

Refer view of the Commission in issue No. 5 of Objection No. 1 at page 80.

Issue No. 8: Reserves and Surpluses

As per its balance sheet, PSTCL has reserves and surpluses of Rs. 2858.93 Crores and Equity of Rs. 605.88 Crores which works out to 4.39 times the equity amount. Consumers are being made to pay 15.50% RoE on equity amount, whereas Reserves and Surplus has no returns. PSTCL should explore liquidation of some equity to GoP to reduce the burden of RoE and for lowering of tariff.

Reply of PSTCL:

Refer reply of PSTCL in issue No. 6 of Objection No. 1 at page 80.

View of the Commission:

Refer view of the Commission in issue No. 6 of Objection No. 1 at page 80.

Issue No. 9: Transformation Capacity

PSTCL has transformation capacity of 34954 MW at 220/132 KV levels on 31.03.2018 against 13562 WM contracted demand of PSPCL. Peak demand served by PSTCL during last paddy is 12650MW. In view of huge transformation capacity compared with peak demand being about 2.76 times, the capital investment plan needs to be reviewed critically for pay back as the assets created will required operation and maintenance and interest pay out etc. but may not be used to their capacity

Reply of PSTCL:

Refer reply of PSTCL in issue No. 7 of Objection No. 1 at page 81.

View of the Commission:

Refer view of the Commission in issue No. 7 of Objection No. 1 at page 81.

Objection No. 3: PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.

Issue No. 1: O&M charges of PSTCL

New CERC Tariff Norms for period 2019-24 will become effective from 01.04.2019. As per draft notification of CERC regarding various norms the total O&M charges for PSTCL admissible per year are Rs. 500 Crores whereas amount stated in ARR (which is employee cost, R&M and A&G expenses) works out to be Rs. 594.23 Crores. PSTCL may check up whether any expenses out of O&M charges are required to be Capitalized and hence reduced from the ARR table.

Reply of PSTCL:

PSTCL has computed the Net Employee Costs and Net R&M and A&G Expenses for FY 2019-20 strictly in accordance with PSERC MYT Regulations, 2014, as amended from time to time.

View of the Commission:

The Commission has determined O&M expenses in line with Regulation 26 (amended from time to time) of PSERC MYT Regulations 2014.

Issue No. 2: O&M charges

The O&M charges are to be seen with respect to the salient outlines of the PSTCL system.

Reply of PSTCL:

No Comments.

View of the Commission:

Refer to the views of the Commission in issue no. 1 above.

Issue No. 3: Transmission Losses

Monthly transmission losses of PSTCL are varying from 2.01 to 4.99% with average loss of 3.12%. CERC has discussed transmission losses in a discussion paper which states that transmission losses considered in present scheduling framework is 4.5 to 5% for inter-State transmission system and 4 to 4.5% for intra State transmission system. The net power delivered to distribution periphery is reduced by 9-10%, which has an impact on cost of supply. An option could be to introduce the norms for inter State transmission losses based on factor within control and International benchmarks.

Reply of PSTCL:

Transmission losses are higher as demand curve is not uniform having peak of 12000 MW and crest of 3000 MW. Thermal generation is costly and plants are shut down even when running of these are compulsory for reducing transmission losses.

PSTCL has calculated theoretical transmission losses to be 2.776% for FY 2017-18 which can safely be concluded in range of 3%.

View of the Commission:

There is a huge variation in losses during same months of the FY 2017-18 and FY 2018-19 and even during the months which have comparable energy inputs.

True up value of the trajectory of transmission loses, which should become the basis of projections of the Control Period, will only be fixed on the basis of truly stabilised data.

Also refer para No. 2.3 at page 8 and para 3.3 at page 37 of this Tariff Order.

Issue No. 4: Depreciation

As per CERC methodology for year 2014-19, the generation/transmission assets are having 70% debt and 30% equity. Amount recovered through depreciation is used to repay debt. Total depreciation is limited to 90% of the capital cost of asset. An anomalous situation may arise in case of assets which are in service for 25 years or more. When depreciation accumulates more than 70%, outstanding loans would get reduce to zero. So while depreciation is recovered every year through tariff but there is no corresponding reduction in debt and capital cost because the debt of 70% has already been recovered/repaid. By this State beneficiary have to pay higher tariff while corresponding tariff relief is not given.

In amended methodology proposed by CERC, residual value of asset of generation or transmission will be 5% instead of 10%. Further, the depreciation will be used to reduce loan and when loans reduced to zero then further depreciation is utilized to reduce equity amount which will ultimately reduced to 5%. With this beneficiaries would have to pay lower tariff by way of reduced ROE component, while licensee would suffer reduced profit and inadequate funds for O&M.

Reply of PSTCL:

PSTCL has followed the methodology given in PSERC MYT Regulations, 2014 and as amended from time to time for the 1st Control Period from FY 2017-18 to FY 2019-20.

View of the Commission:

The Commission has determined the expenses as per PSERC MYT Regulations 2014.

Objection No. 3 (Additional Comments): PSEB Engineers Association (Regd).

Issue No. 1: Spare ICT of 400 kV class, 315 or 500 MVA for PSTCL.

Presently PSTCL has about 30 ICTs of 315 or 500MVA, 400/220 kV by which power from 400 kV system is delivered to 220 kV network of PSTCL. In case there is breakdown or outage of even one ICT it could lead to crisis in meeting load and power cuts. With 30 transformers in service it would be desirable to have one spare ICT of 500 MVA 400/220 KV. However this would be expensive. PSTCL may explore the alternative of pooling of spares with PGCIL so that spare ICT being maintained by PGCIL (for northern region) could also be used for PSTCL as and when required for PSTCL. The commercial terms can be worked out mutually.

Reply of PSTCL:

The 400 kV systems is designed confirming to MVA contingency criteria and once the system is designed and approved by NLDC for N-1 contingency there is no need of any spare ICT.

View of the Commission:

The objector may note the response of PSTCL.

Issue No. 2: Loading of ICTs beyond 70%

PSTCL should put on its website a list of ICTs which have been loaded beyond 70% capacity in the past. This will become basis for determining future ICTs requirement to avoid overloading.

Reply of PSTCL:

PSTCL is regularly up loading the loading status of PSTCL Transmission Lines and Sub Stations with respect to any line and any Sub Station getting over loaded on its website, as per PSERC Directive.

View of the Commission:

The objector may note the response of PSTCL.

Issue No. 3: Emergency Restoration System (ERS)

PGCIL maintains ERS Emergency restoration system to restore 400 kV line in case of tower failure, in least possible time. PSTCL may consider having one ERS (or tie up arrangement with PGCIL).

Reply of PSTCL:

PSTCL had already procured two sets of ERS systems way back of in 2017 and the same are operational.

View of the Commission:

The objector may note the response of PSTCL.

Objection No. 4: Government of Punjab, Department of Power, (Power Reforms Wing).

Issue No. 1: Revenue Gap

Presently, the financial position of PSTCL is not so good. While PSTCL has been showing improvement in its fiscal health, this trend needs to be supported and encouraged. A utility can best serve its consumers when it is financially viable.

In the Revised Estimates for FY 2018-19, PSTCL has depicted revenue gap as Rs.137.56 Crore approximately. The increase in the gap is mainly because of increase in Employee Cost, Interest Charges, Return on Equity etc. It is the statutory duty of the State Government to promote the Financial, Operational and Technical viability of PSTCL. Hence, in terms of Section 86 of the Electricity Act, 2003, the Commission in pursuance to its duties is requested to suggest a road map to meet this goal.

View of the Commission:

PSTCL has accumulated profit of Rs. 394.82 Crore as per Audited Annual Accounts FY 2017-18. PSTCL is also able to invest 30% of capital expenditure out of profit accumulated. The finances of PSTCL are sufficient to meet the expenditure as per Audited profit & loss account of FY 2017-18. Revenue Gap is determined keeping in view the expenses and income approved by the Commission as per PSERC Regulations.

Issue No. 2: Disallowances

The Commission while determining electricity tariff has been making some disallowances. These have been mainly related to employee costs and interest charges. Disallowance in Actual expenses such as Employee Costs, Interest Charges etc. affects financial position of Utility and erode its capacity to make investments that would help it provide quality and affordable power to the consumers in the State.

View of the Commission:

The Commission processes the ARR as per the notified regulations and accordingly determines the ARR on prudent check of the expenses projected in the ARR. The justified costs are allowed to the utility after processing the ARR as per notified regulations (amended from time to time). The Commission has stressed upon PSTCL in its various Tariff Orders to improve its working by limiting its expenses within the approved amount and improving its performance parameters. The utility has to improve its performance through various efficiency measures and achieve the targets in respect of various parameters fixed by the Commission.

Issue No. 3: Employee Cost

The Commission has been consistently disallowing the Employee Cost to the Utility, which can in no way be reduced, since the terms and conditions of an employee once recruited cannot be changed to his disadvantage during the course of his service. Further, the employees who are retiring are also contributing to increase in employee cost of PSTCL by way of payment of Gratuity, Pension etc. The actual employee cost should be allowed as pass through as it is a legitimate historical component of the cost of supply and a committed liability of PSTCL.

PSTCL has proposed employees cost for 2019-20 at Rs.531.58 Crore against 2018-19 (RE) of Rs.495.53 Crore. PSTCL is striving hard to reduce employee cost and bring in efficiency, but it will take time for PSTCL to reduce the employee cost and bring it at par with other advanced State Utilities. Till then, the Employee Cost, which is a genuine cost of Utility, must be passed on to the end consumers on an actual basis keeping in view the APTEL Judgments and genuine requirements which are statutory in nature. Therefore, the Commission is requested to allow employee cost as projected by PSTCL.

View of the Commission:

The Commission allows employee cost as per PSERC MYT Regulations-2014 (amended from time to time)/APTEL Judgment. While approving employee cost, terminal benefits are allowed on actual basis.

Issue No. 4: Administration and General (A&G) expenses and Repair & Maintenance (R&M)

The PSTCL has submitted the Administration and General (A&G) expenses and Repair & Maintenance (R&M) expenses and to provide quality, uninterrupted and affordable power to its valuable consumers in the State, special Repair & Maintenance works in addition to General Repair& Maintenance that has to be carried out. The State Government has been taking huge initiative for providing quality, uninterrupted and affordable power to its valuable consumers in the State and the transmission system needs to maintain at its best. Repair & Maintenance of Transmission System with appropriate replacements of equipments and renovations is of great importance so that uninterrupted supply can be maintained and grid failure be avoided. The Commission is requested to allow Administration and General (A&G) expenses and Repair & Maintenance (R&M) Expenses as submitted by PSTCL.

View of the Commission:

The Commission allows R&M and A&G Expenses as per Regulation-26 of PSERC MYT Regulations-2014 (amended from time to time) after prudent check.

Issue No. 5 & 6: Capital Expenditure/Capacity Addition

The PSTCL has submitted Capital Expenditure of Rs. 310.72 Crore and Rs.521.62 Crore during FY 2018-19 and FY 2019-20 respectively which includes works related with construction of new Sub-Stations, new lines, addition and augmentation of transmission system to cope up with the growing demand, Automation of Five 220 KV Sub-Stations, ERP etc., laying of transmission network for evacuation of power from generation projects in the State as well as for evacuation of power share of Punjab from various Central Sector Projects.

Because of the capacity addition in the State Generation, appropriate Transmission capacity is also required to be created. The Commission is requested to allow these expenses keeping in view the overall expenditure of the utility.

View of the Commission:

The Commission allows the capital expenditure after prudence check as per PSERC Regulations. Refer para 3.4 and 3.5 of this Tariff Order (Page 39 to 43).

Issue No. 7: SLDC Business

PSTCL is discharging the statutory functions of the State Load Dispatch Centre (SLDC) in the State of Punjab. SLDC in Punjab has started working independently since FY 2011-12. PSTCL has submitted the revised estimates for SLDC to the tune of Rs.23.39 Crore for FY 2018-19 and total revenue requirement of Rs. 20.36 Crore for FY 2019-20 for monitoring grid operations, supervision and control over the intra state transmission system, carrying out real time operations for grid control and dispatch of electricity within the state through secure and economic operation of the State grid in accordance with Grid Standards and State Grid Code. The SLDC is pivotal to the State's power sector. Its financial, operational and technical viability has to be maintained at every cost. The Commission is requested to approve the expenditure as detailed in the ARR for smooth functioning of SLDC.

View of the Commission:

The Commission separately approves the expenses projected in the ARR for SLDC business of

PSTCL in accordance with PSERC Regulations after prudence check.

Issue No. 8:
The Commission is requested to keep in view above aspects, overall expenditure of the utility and various guidelines/ instructions issued by Ministry of Power, Government of India and various Judgments by APTEL and other Courts so that a financial, operational and technical viability of PSTCL is maintained while finalizing the tariff for FY 2019-20.

View of the Commission:
The Commission determines the net revenue requirement keeping in view the PSERC Regulations, guidelines /instruction issued by MoP, GoI, as well as the judgment of the APTEL and other Courts.

ANNEXURE - III

Minutes of the Meeting of State Advisory Committee of Punjab State Electricity Regulatory Commission, Chandigarh held on 12th February, 2019.

The meeting of the PSERC, State Advisory Committee was held in the office of the Commission at Chandigarh on 12th February, 2019 to discuss Petition of True up for FY 2017-18, Annual Performance Review and Annual Revenue Requirement for FY 2018-19 and FY 2019-20 respectively filed by PSPCL and PSTCL. The following were present/ represented:

Sr. No.	Name and Address	Designation
1.	Ms. Kusumjit Sidhu Chairperson, PSERC, SCO 220-221, Sector-34-A, Chandigarh.	Ex-officio Chairperson
2.	Er. S.S. Sarna Member, PSERC, SCO 220-221, Sector-34-A, Chandigarh.	Ex-officio Member
3.	Er. Anjuli Chandra Member, PSERC, SCO 220-221, Sector-34-A, Chandigarh.	Ex-officio Member
4.	Principal Secretary Department of Power, Government of Punjab, Chandigarh.	Member
5.	Principal Secretary New and Renewable Sources of Energy (NRSE), Govt. of Punjab, Chandigarh (Represented by Sh. R.S. Randhawa, CEO, PEDA)	Member
6.	Smt. Parneet Mahal Suri, Secretary, PSERC, SCO 220-221, Sector-34-A, Chandigarh.	Ex-officio Secretary
7.	Chairman-cum-Managing Director, PSPCL, The Mall, Patiala.	Member
8.	Chairman-cum-Managing Director, PSTCL, The Mall, Patiala	Member
9.	Labour Commissioner, Deptt. of Labour & Employment, Government of Punjab, Chandigarh (Represented by Mr. Vikas Kumar, Labour-cum-Conciliation Officer)	Member
10.	Chairman, Punjab Farmers' Commission for the State of Punjab, Punjab Mandi Board, Bhawan and Sector-65 A, Phase-XI, Mohali, Punjab.	Member
11.	S. Bhupinder Singh Mann, Ex-MP, (Rajya Sabha), National President (BKU), Chairman, National Kisan Coordination Committee, Outside Qazi Mori Gate, Batala, District Gurdaspur	Member
12.	Chairman, CII, Punjab State Council, Sector 31-A, Chandigarh (Represented by Dr. Harish Anand, of CII Punjab State Council)	Member

Sr. No.	Name and Address	Designation
13.	Chairman, PHDCCI, Punjab Committee, Sector 31-A, Chandigarh	Member
14.	Director, Local Govt. Department, Punjab, Chandigarh. (Represented by Sh. S.P. Singh, Executive Engineer)	Member
15.	Director, Agriculture Department of Agriculture Govt. of Punjab, Chandigarh. (Represented by Sh. Bhagwant Singh Kalsi, Agriculture Engineer, Punjab)	Member
16.	Indian Energy Exchange Limited, Fourth Floor, TDI Centre, Plot No.-7, Jasola, New Delhi-110025	Member
17.	Chief Engineer, Punjab Agriculture University, Ludhiana	Member
18.	Sh. P.P. Singh Vice President (E&U) Nahar fibers, Ludhiana	Member
19.	Sh. P.S. Virdi, President, The Consumer Protection Federation (Regd.), Kothi No. 555, Phase-1, Sector-55, Mohali.	Member
20.	Mr. Nitin Bhatt, Regional Manager – Punjab/Haryana, Chandigarh. Energy Efficiency Services Limited, 4th floor, IWAI Building, A-13, Sector-1, Noida-201301	Member
21.	Sh. Mohinder Gupta, President, Mandi Gobindgarh, Induction Furnaces Association, Gobindgarh	Member

At the outset, the Chairperson welcomed the members of the State Advisory Committee to the meeting of the newly constituted Committee and thanked everyone present for having taken out time to attend the meeting. The Chairperson thereafter requested the members to offer suggestions/comments on the Petitions of True Up for FY 2017-18, APR for FY 2018-19 and Revised Estimates for the MYT control period financial year 2019-20 filed by PSPCL and PSTCL. The Chairperson appreciated the progress shown by Punjab State Power Corporation Limited in the sale of surplus power out of Punjab. Sh. S.S. Sarna, Member/PSERC highlighted the Commission’s concern for the protection of consumers’ interest and grievances redressal in an effective manner and sought views/suggestions of the Members of the State Advisory Committee to ensure speedy resolution of complaints of power consumers of State of Punjab Smt. Anjuli Chandra, Member/PSERC also welcomed State Advisory Committee Members requested them to give their suggestions for promoting industry in the State of Punjab. Smt. Anjuli Chandra sought the views of the Members for optimum utilization of available power by enhancing consumption by the existing industry as well as by ensuring that the sick/shutdown industry is revived.

The Chairperson informed that the Commission has set up a Consumer Advocacy Cell headed by Dy. Director/M&F, Nodal Officer, with the primary object of generating consumer awareness and educating them on the process of consumer grievance redressal and other matters relating to their rights and duties. The Chairperson further stated that the Commission, recently, commissioned a "***Survey on Electricity Consumer Satisfaction in the State of Punjab***" through University Business School, Punjab University, Chandigarh. The Commission is of the belief that the benefit of electricity reforms can reach the consumers only when they participate effectively in the regulatory process and considering the special nature of the Electricity Act, consumers need to be educated & empowered by way of information to play their vital role.

Thereafter, the members gave their valuable suggestions / views as under:

1. **Principal Secretary / Department of Power** stated that PSPCL tariff rates are competitive and less than most of the States except the hill States. He also high-lighted the following issues :

    - PSPCL has reduced its employee cost and T&D losses.
    - 70% of our power requirement is met through power purchase. Cost of generation is going up day by day due to increase in coal cost and Railway freight charges. PSPCL's generating plants are suffering losses of around 60-70 paise per unit.
    - Power grid has also revised the methodology of charging transmission charges from Stamp method to PoC method and States like Punjab are the worst sufferer. Moreover, Central Utilities are earning profit at the cost of State Utilities.
    - PSPCL was expecting to be in profit during FY 2018-19. But, on account of BBMB arrears, interest liability due to non-receipt of funds under UDAY Scheme and increase in cost of power by Central Utilities, an increase in tariff by 20% in the ARR filed by PSPCL for FY 2019-20 has been envisaged. However, in view of the overall position of State Consumers, an increase in tariff of 6 to 8% may be considered to avoid the tariff shock to the consumers.

2. **Sh. Bhupinder Singh Mann** stated that agriculture be considered as an industry. It is contributing to the state as well as to the nation through taxes collected through Punjab Mandi Board and Food Corporation of India. It was also stated that

agriculture is not being subsidized free of cost by the Govt. and that approximately, 7000-7500 crore p.a. is being paid by the Farmers through local taxes, charges etc. to the Govt. Agencies as and when agriculture goods, equipments are purchased by the farmers and also through proceeds of crops sold in the market. He further informed the committee about the hardships being faced by the agriculture sector.

3. **Sh. Ajay Vir Jakhar, Chairman of Punjab State Farmers Commission** stressed the importance of transparency in the process of decision making.

4. **Sh. Rajesh Mendiratta of Indian Energy Exchange Limited, New Delhi** informed about the latest trend in the electricity transactions w.r.t. intra-day market. He further stated that non-solar RPO compliance should be adjustable against Solar RPO compliance and vice-versa. It was informed by him that renewable energy will be available soon through trading on the power exchanges. The obligated entities will have the choice of purchasing RE power through exchange or purchase of RECs for RPO compliance.

   It was discussed that the Commission has already allowed adjustment of the shortfall in non-solar RPO compliance against the surplus solar RPO compliance by the distribution licensee in the State in FY 2016-17 and FY 2017-18.

5. **Sh. R.S. Sachdeva, Chairman/PHDCCI** congratulated the Commission for efforts made by it during the last 2 years as also the PSPCL for substantial reduction in employee strength. He further suggested that:

   - Tariff Order for this year should also be issued in time and in case it is delayed due to any exigency it should be made applicable only prospectively.
   - Expenses once denied to PSPCL should not be reiterated in the future ARR's as it gives wrong indication about the tariff requirement.
   - Benefit of exceeding the threshold consumption should be continued and there should be a provision in PSPCL software for giving automatic benefit of the same to the consumers crossing the threshold limit. Proper Ledgers in these regard be maintained by licensee.
   - Maximum Overall Rate (MOR) should be specified for the industry.
   - Rationalization of voltage surcharges and rebates.
   - Prepaid meter system be implemented for Industrial Consumers.
   - Solar generation especially in DS Category be encouraged rather made mandatory

6. **Dr. Harish Anand of CII, Punjab State Council** made the following suggestions:

- Being surplus in power, efforts should be made to increase the consumption in the State i.e.:
  - o Incentive for higher consumption including to those who shifts from captive power should be provided on the pattern of Gujarat/ Madhya Pradesh.
  - o Open Access should be minimized.
  - o Create a new tariff or provide a concessional tariff for those who want to shift their Industrial Plants from other states to Punjab.
- Detail of surplus power / cost of surrendered power to be provided in Tariff Order.
- PSPCL has not submitted any proposal for increasing the consumption within the State.
- Provision should be made in the billing software for assessment of load on the basis of consumption and based on the same consumer should be asked to get their load regularized. Spot billing in case of Industry should also be implemented to avoid delay in bill distribution.
- Continue with rebate on threshold consumption as it has given good dividend.
- Provision of incentive/ disincentive should be made for the areas having low/ high distribution losses.
- Power cut timings be reduced to avoid revenue losses.
- New Technology meters, which record the load also should be installed, so as to detect the excess load connected by some of the consumers.
- Dispute Settlement Mechanism should be strengthened in such as a way that same nature of dispute should not arise twice as dispute between PSPCL and consumer arises due to
  - o Lack of clarity in Supply Code/wrong interpretation of supply code
  - o Lack of understanding of the field officer.
  - o Lack of awareness at consumer end.
  - o Arrangement of Lok Adalat can be worked out with the help of the Commission, GoP and PSPCL. All disputes of commercial nature pending for more than 5-7 years or 10 years may be got settled through them.
  - o Region wise list of T&D losses be prepared to identify regions of high T&D

losses and corrective action taken to bring them down to average level.

7. **Sh. P.P. Singh, Vice-President, Nahar Fibers** congratulated the Commission for solving various tariff related issues in the tariff order and appreciated CMD-PSPCL for selling surplus power. He made the following suggestions:

- ToD surcharge be reduced. Further, in view of change in Time of Paddy Transplantation, period of ToD surcharge should be made applicable from 15th June instead of 1st June.
- Clarification needs to be issued regarding charging of fixed charges subject to the maximum period of 365 days in a year for which PSPCL confirmed to issue the clarification.
- Agriculture consumption needs to be recorded in kVAh to account for low power factor in the AP Sector.
- Highlighted the importance of installing capacitors on the AP motors and also suggested that power factor at the feeder level may be monitored regularly by PSPCL.

He also added that it is clear that Commission and Punjab Government are interested in establishing industry in Punjab. PSPCL has taken some initiatives for sale of surplus power which is evident from the Petition filed by PSPCL. He further expressed more confidence in the working of the Commission from Industry point of view. He also suggested that Tariff should be announced well in time.

He appreciated the constitution of Consumer Advocacy Cell in the Commission and stated that:

1. There is no denying the fact that consumer needs awareness regarding the latest rules and regulations and participation in the regulatory process as a stake holder.
2. The industry has no problem with senior PSPCL officers but at ground level there are many problems. He requested that a separate meeting be convened in this regard, in the presence of PSERC as well as PSPCL officers and representatives of industry, to have better understanding between consumers and PSPCL.

8. **Er P.S. Virdi** suggested that installation of rooftop solar PV power plants should be made mandatory for houses in Punjab. Sh. N.S. Randhawa, Chief Executive, PEDA informed that the Govt. of Punjab has made mandatory the installation of rooftop solar PV plants for Govt. buildings. However, it is not possible in case of old

buildings. In this regard, he was informed that the Commission's role is limited to Tariff fixation, specifying RPO and its compliance.

9. **Sh. Mohinder Gupta, President Mandi Gobindgarh Induction Furnaces Association, Gobindgarh,** he made following suggestions:

- Tariff should be same for Power Intensive Unites (PIU) and General Industry Units.
- Tariff Order for 2019-20 to be made effective prospectively.
- Period of exclusive night category be increased from the existing period of 8 hours.
- Power cuts/break-downs of transmission lines be eliminated/controlled as these cause lot of hardship to the industries.
- Every year the night rebate becomes effective from 00 Hrs of 1st Oct. and peak charges ceases from 24 Hrs of 30th Sept. The billing software needs to be adjusted for automatically record readings as on 00 Hrs of changeover.
- To extend night rebate period from 31st May to 15th of June in view of shifting of paddy sowing.
- MOR be specified for the industrial category or freeze the fixed charges at the present levels.
- Staff shortages at 66 KV Grid Sub- stations needs attention

10. **Sh. Nitin Bhatt, Regional Manager, Punjab/Haryana, Chandigarh, Energy Efficiency Services Limited, Noida,** stressed upon the need for reduction in cost of supply by reducing T&D losses and adopting energy efficient appliances.

While sharing progress of distribution of LED lamps in the State of Punjab, he requested the Commission that proposal of PSPCL for free distribution of LED lamps to Below Poverty Line (BPL) families be sympathetically considered.

11. **Sh. Vijay Talwar** did not attend. But sent his views/suggestions which are as under:

- Appreciated the formation of Consumer Advocacy Cell in PSERC which will further strengthened to help, guide and watch the interest of electricity consumers.
- To ease out the burden of expenses paid for surplus power that causes increase in Tariff every year, he suggested that :

- Tariff for Power Intensive Unit and General Industry under LS category should be the same so as to encourage PIU to use more power which will ultimately let Industry to compete with similar industry in other States such as Himachal, Jharkhand, Chhattisgarh, Madhya Pradesh and J&K etc.
- PIU Industry should be allowed to install independent feeder exceeding Contract Demand of 1000kVA, which will solve problem of harmonics generation and it will increase the usage of surplus power by getting un-interrupted supply.
- T.O.D. tariff and Threshold limit rebates should be allowed to all the consumers irrespective of load/voltage so as to encourage usage of electricity during night hours by switching electric appliances and replacing the gas burners with electric heater/induction heater for cooking food.
- Consumers should be allowed to increase 10% load/demand every year without any service connection charges to meet demand which will ultimately benefit PSPCL by way of additional fixed charges on extended Load/demand.
- PSPCL should release electricity connection within 30 days from receipt of Application (A&A Form) as mandated U/S 43 of Indian Electricity Act-2003.
- Feeder length should not be more than 2 KM to save line losses. Consumers near or far away from sub-stations should be charged proportionately the cost of feeder assuming 2 KM as length of feeder irrespective of actual length. This will encourage consumers to install new connections and extension in load/demand which will reduce surplus power.
- Permissible supply voltage for 11 kV should be increased to 6000kVA from 4000kVA, since 150MM2XLPE cable can take load up to 9000 kVA which will boost the installation of composite plants comprising of induction furnace with rolling mill as well as General Industry.
- LT supply should be given for getting the load sanctioned up to 150 kVA instead of 99kVA so that consumer may extend their load/demand.
- Consumers with load up to 7kW may be allowed to have 3 phase connection at their option so that consumers having single phase supply, able to install electric installations such as geysers, air conditions etc. within sanctioned load less than 7 kW.

- PSPCL should provide technical staff in the field offices especially in North Zone for the maintenance of Sub-stations and distribution lines to give un-interrupted supply.
- Fixed charges should be 40% of sanctioned contract demand instead of 80% because sanctioned load/demand of all the consumers is approximately 4000 MV/MVA which they have paid service connection charges however, capacity to cater supply by PSPCL/PSTCL is only upto maximum 13000 MV/MVA.
- PSPCL should not be allowed to charge late payment surcharge for bills more than 2 months period to avoid accumulation of defaulting amount.
- All consumers irrespective of category should be metered. To discourage un-metered supply, Tariff for flat rate supply should be increased by 25% every year. Prepaid meters are the need of the day. PSPCL should install the same immediately.
- Tariff category should be made simple and voltage wise for all consumers. Proposed categories are LT Supply: Single Phase. LT Supply: 3 Phase, HT supply: 11kV to 33 kV, EHT Supply: 66 kV and Extra EHT Supply: 132 kVA and above.

12. **Sh. N.S.Randhawa Chief Executive, PEDA** stated that requirement of non-solar and solar renewable energy will increase in view of the amended RPO trajectory by PSERC for FY 2019-20 to FY 2022-23. PEDA has to ensure that the projected capacity is added in the respective years to achieve the targets. However, PSPCL is not signing PPAs for procurement of RE power as PSPCL has not signed PPA with the selected Developers of 100% Rice Straw based plants on the plea that the rate of Rs.8.16 is very high. PEDA approached MNRE for grant of VGF for 100% Rice Straw based plants to which MNRE agreed in principle. PSPCL put a pre condition that they will purchase power from proposed projects on fixed tariff of Rs.5/- per unit. Regarding purchase of surplus power from Cogeneration power plants, PSPCL has been conducting negotiations with the Cogeneration plant developers on the rate of purchase of power instead of signing PPAs on the generic tariff notified by the Commission.

Sh. Baldev Singh Sran, CMD, PSPCL responded by stating that purchasing of costly renewable energy from the developers selected by PEDA would load the consumers of the State. The purchase of costly non-solar renewable energy is possible with the support of the State/Central Govt. through Viability Gap Funding (VGF). The rates of solar power have come down on all India basis and it is prudent to purchase solar power from the most economical sources across the country. PSPCL has no compulsion to buy renewable energy from the developers selected by PEDA and as such PSPCL should not be forced to buy the same.

13. **Sh. Baldev Singh Sran, CMD/PSPCL,** while welcoming the feedback of the committee members, informed as under:

- Typical load pattern of the State, wherein maximum demand varies from 5000-5500 MW in winter to around 12000 MW in the summer. Also there is wide variation load pattern during day and night in the winter. With this type of load, it is difficult to optimize the generation capacity of own sources and power procurement from other sources. As a result, we have surplus power during the winter.
- PSPCL is trying its best to decrease the burden of surrendered power by selling power through exchange.
- Hon'ble Supreme Court's decision regarding the payment of coal washing charges to IPPs has resulted in increased cost of power from IPPs.
- Operationalization of Pachhwara coal mine and Shahpur Kandi Hydel Project will substantially reduce cost of supply.
- PSPCL is committed to give quality supply to its consumers.
- Suitable action is being taken regarding recovery of arrears.
- The Commission has specified RPO as a percentage of the total consumption of electricity in the area of PSPCL after excluding energy from hydro sources. The percentage of RPO should be fixed by excluding all the renewable power from the total consumption of electricity in the area of PSPCL.

The meeting ended with a vote of thanks to the Chair.