

PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2017-18 AND REVISED PROJECTION OF ARR AND TARIFF FOR FY 2018-19

Submitted by



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BEFORE THE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION, CHANDIGARH

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IN THE MATTER OF: Approval of the Annual Performance Review for the FY 2017-18 and ARR of FY 2018-19 under Section 62, 64 and 86 and other applicable provisions of the Electricity Act, 2003 read with Regulation-11, 61 & 63 of the PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 and other applicable relevant regulations (including its amendments) and guidelines of the Punjab State Regulatory Commission for the Electricity business of Punjab State Transmission Corporation Ltd. and State Load Dispatch Centre.

AND

IN THE MATTER OF: Punjab State Transmission Corporation Limited Regd.Office: PSEB Head Office, The Mall, Patiala -147001

AFFIDAVIT

I, Jatinder Tageja, son of Sh. Radhe Sham aged 41 residing at Patiala do hereby solemnly affirm and state as follows:

I am the Financial Advisor of Punjab State Transmission Corporation Limited, the petitioner in the above matter and am duly authorized by the Corporation to make this affidavit on its behalf.

The statement made in Sections 1 to 5 of the petition are true to my knowledge and the statement made in Sections 1 to 5 are based on the information collected from the concerned offices of the PSTCL and believe them to be true.

There is no case pending in any court of law with regards to the subject matter of the petition.

The Contants of this affidavit document have been read over to the deponent HeiShe has accepted the true & correct.

DEPONENT (Jatinder Tageja)

I, the deponent named above do hereby verify that the content of my above affidavit are true to my knowledge and belief and nothing material has been concealed there from.

Verified at Patiala on the date of 28.11.2017.

I identified the deponent

PATISAL AS Identifica NOTARY (GOVE of India) Dist PATIALA (Ph.) DEPONENT (Jatinder Tageja)

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List of Abbreviations

AAD	Advance Against Depreciation
A&G	Administrative and General
AFC	Annual Fixed Cost
APTEL	Appellate Tribunal for Electricity
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ВВМВ	Bhakra Beas Management Board
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CPI	Consumer Price Index
CWIP	Capital Work in Progress
DPR	Detailed Project Report
GFA	Gross Fixed Assets
LTOA	Long Term Open Access
MAT	Minimum Alternate Tax
O&M	Operations and Maintenance
OA	Open Access
PLR	Prime Lending Rate
PSEB	Punjab State Electricity Board
PSERC	Punjab State Electricity Regulatory Commission
PSPCL	Punjab State Power Corporation Limited
PSTCL	Punjab State Transmission Corporation Limited
RfP	Request for Proposal
R&M	Repairs and Maintenance
RoE	Return on Equity
SBAR	State Bank of India Advance Rate
SBI	State Bank of India
SLDC	State Loan Despatch Centre
STOA	Short term Open Access
STU MARKET	State Transmission Utility
ULDC	Unified Load Dispatch & Communication
WPI	Wholesale Price Index



BEFORE THE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION, CHANDIGARH

Case	No.		

IN THE MATTER OF: Filing of the Petition for Annual Performance Review for FY 2017-18 and approval of revised ARR forecast and determination of Tariff for FY 2018-19 under Section 62, 64 and 86 of the Electricity Act, 2003 read with Regulation 11, 61 and 63 of PSERC (Terms and Conditions of Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014, as amended

AND

from time to time.

IN THE MATTER OF Punjab State Transmission Corporation Limited (hereinafter referred as "PSTCL' or "the Petitioner")

The Petitioner respectfully submits as under: -

1 INTRODUCTION

1.1 Background

The Punjab State Transmission Corporation Limited (hereinafter referred to as PSTCL or the Petitioner) is a transmission licensee for transmission of electricity in the areas as notified by the Government of Punjab vide Notification No. 1/9/08-EB(PR) 196 dated April 16, 2010. PSTCL is vested with the function of intra-State transmission of electricity in the State of Punjab and the operation of State Load Despatch Centre (SLDC). Further, in terms of Section 39 of the Act, the Government of Punjab notified PSTCL as the State Transmission Utility (STU).

1.2 Submission of Annual Performance Review

The Hon'ble Punjab State Electricity Regulatory Commission ("the Commission" or "PSERC") has notified the PSERC (Terms and Conditions of Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 (hereinafter referred to as "PSERC MYT Regulations, 2014") in exercise of powers conferred on it by Section 61 read with Section 181(2) of the Electricity Act 2003

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(No. 36 of 2003). The said Regulations are applicable to Generating Stations, Transmission system, SLDC and Distribution system where tariff for generation and transmission is not determined under Section 63 of the Electricity Act, 2003 through transparent process of competitive bidding in accordance with the Guidelines issued by the Central Government.

As per the Hon'ble Commission's notification dated May 28, 2015, the effective date of enforcement of these Regulations shall be April 1, 2017 and three-year Multi Year Tariff ("MYT") Control Period shall be from FY 2017-18 to FY 2019-20.

PSTCL submits that, in accordance with Regulation 9 and 10 of PSERC MYT Regulations, 2014, it has filed Petition for approval of Capital Investment Plan (Petition No. 44 of 2016) and Business Plan (Petition No. 45 of 2016) for the Control Period from FY 2017-18 to FY 2019-20 on May 30, 2016.

Further, PSTCL has filed the Petition for True-up for FY 2014-15, Review of FY 2016-17 and approval of ARR and Transmission Tariff for MYT Control Period FY 2017-18 to FY 2019-20 (Petition No. 89 of 2016) on November 30, 2016. The Commission vide its Order dated October 23, 2017 has approved the True-up of FY 2014-15, True-up for FY 2015-16, Review of FY 2016-17 and Tariff for PSTCL for MYT Control period FY 2017-18 to FY 2019-20.

However, the Commission provisionally approved the Capital Investment Plan (Petition No. 44 of 2016) and Business Plan (Petition No. 45 of 2016) and final Order in this regard shall be issued separately.

Further, Regulation 11 of PSERC MYT Regulations, 2014 specifies as under:

"11. ANNUAL REVIEW OF PERFORMANCE

11.1. The Applicant shall make an application for Annual Performance Review and tariff resetting not less than 120 days before the close of each year of the control period.

11.3. The Applicant shall publish its application filed for Annual Performance Review as required by Conduct of Business Regulations. The Applicant shall also display the application on its official website.



11.4. The Annual Performance Review shall include the details of actual capital expenditure, details of income tax paid and actual operational and cost data to enable the Commission to monitor the implementation of its order including comparison of actual performance with the approved forecasts (and reasons for deviations). In addition, the Applicant shall also submit Annual Statement of its performance of generation business (indicating the cost data - plant-wise, and performance parameters - unit-wise), transmission business or distribution business, as the case may be, including a copy of its latest audited accounts.

11.5. The Applicant shall provide any other information, as may be asked for by the Commission with a view to assess the reasons and extent of any variation in the performance from the approved forecast and the need for tariff resetting.

11.6. In the application, Applicant shall submit information for the purpose of calculating expected tariff and expenditure along with information on financial and operational performance for the previous year(s). The information for the previous year(s) shall be based on audited accounts and in case audited accounts for the previous year(s) are not available, audited accounts for the latest previous year shall be filed along with unaudited accounts (provisional accounts) for all the succeeding years.

11.7. The scope of the Annual Performance Review shall be a comparison of the performance of the Applicant with the approved forecast of ARR along with the performance targets specified by the Commission.

11.8. The Commission shall review the application made under the preceding clauses based on the same principles as approved in the MYT Order on original application for determination of ARR and Tariff and upon completion of such review, either approve the proposed modification(s) with such changes as it deems appropriate, or reject the application for reasons to be recorded in writing."

Also, Regulation 61 of PSERC MYT Regulations, 2014 specifies as under:

"61. ANNUAL PERFORMANCE REVIEW FILING

The Applicant shall file the Annual Performance Review on or before 30th November in each year of the control period as per the details mentioned in regulation 11 for the Commission's review and approval."





In line with the above provisions of regulations, PSTCL is filing the present Petition for Annual Performance Review for FY 2017-18 and approval of revised ARR forecast for FY 2018-19 and determination of tariff for FY 2018-19.

1.3 Overall approach for filing Annual Performance Review

Regulation 11 of PSERC MYT Regulations specifies that Annual Performance Review shall include the details of actual capital expenditure, details of income tax paid and actual operational and cost data. Also, it is mentioned that the information for the previous year(s) shall be based on audited accounts and in case audited accounts for the previous year(s) are not available, audited accounts for the latest previous year shall be filed along with unaudited accounts (provisional accounts) for all the succeeding years.

PSTCL submits that Hon'ble Commission vide its MYT Order dated October 23, 2017 has approved ARR for FY 2017-18 to FY 2019-20 on the basis of audited accounts for FY 2015-16 and provisional accounts for FY 2016-17. PSTCL further submits that the annual accounts for FY 2016-17 are yet to be finalised.

In view of the above, PSTCL submits the present Petition on the basis of provisional accounts for FY 2016-17, actual values for first half for FY 2017-18, estimated values for second half for FY 2017-18 and revised projections for FY 2018-19.

Further, PSTCL submits that submissions made in the present Petition is without prejudice to contentions made in the pending Appeals before higher courts.

1.4 Contents of the Petition

The present Petition consists of following Chapters as outlined below:

Chapter 1 - Introduction (present Chapter)

Chapter 2- True-up for FY 2016-17: In this Chapter, the Petitioner has made its submission regarding the True-up for FY 2016-17 and also submitted the provisional figures of Capital Expenditure, Gross Fixed Assets, Loan Balances, etc. for computing expenses for subsequent years.

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Chapter 3 – Annual Performance Review for FY 2017-18 and revised ARR for FY 2018-19: In this Chapter, the Petitioner has submitted the APR for FY 2017-18 based on actual values for first half and estimated values for second half of the year. Also, the revised ARR for FY 2018-19 has been projected based on Annual Performance Review for FY 2017-18. In this Chapter, the Petitioner has also presented its submissions regarding certain critical aspects influencing the determination of ARR for the Control Period.

Chapter 4 – Proposed Tariff for FY 2018-19: In this Chapter, the Petitioner has submitted the proposed Tariff for Transmission Business and SLDC for FY 2018-19 considering the revised ARR for FY 2018-19 and Annual Performance Review for FY 2017-18.

Chapter 5 - Prayers: This Chapter details the prayers made by PSTCL in the present Petition.

Chapter 6 - Directives: This Chapter includes the status and compliance of directives issued by the Hon'ble Commission in the past Tariff Orders.

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2 TRUE UP ARR FOR FY 2016-17

2.1 Background

The PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (hereinafter referred as "PSERC Tariff Regulations, 2005") specifies as under:

"9. REVIEW AND TRUING UP ... After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called Truing Up'." (Emphasis supplied)

PSERC Tariff Regulations, 2005 requires PSTCL to file True-up for FY 2016-17 on the basis of audited accounts. The Petitioner respectfully submits annual accounts for FY 2016-17 are yet to be finalised on account of implementation of Indian Accounting Standards. The audited accounts for FY 2016-17 are in final stage and will be finalised shortly.

The Audited Accounts along with report of C&AG of India and replies of the management on the comments of Statutory Auditors will be submitted to the Hon'ble Commission, after it is approved by the Board of Directors of the Petitioner. It is respectfully submitted that the Truing-up exercise may be undertaken for FY 2016-17 after the finalization of audited annual accounts.

In view of this, the Petitioner craves leave for filing of True-up Petition for FY 2016-17 during the proceedings of the present Petition as an additional submission.

Pending True-up of the financials of FY 2016-17, the Petitioner submits the Hon'ble Commission to consider the Provisional figures of capital expenditure, expenditure capitalized, fixed assets, loans raised relating to FY 2016-17, in order to arrive at the interest charges and depreciation for subsequent years as under:

2.2 Investment and Capital Expenditure (Provisional)

The Petitioner submits details of investment and capital expenditure for Transmission and SLDC as shown in the following table:

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Table 1: Capital Investment for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTC L
1	Opening Capital work in progress	756.89	4.76	761.65
2	Add: Addition of Capital Expenditure during the year	398.74	1.46	400.20
3	Less: Transferred to fixed assets during the year	493.82	2.83	496.65
4	Closing Capital Works in progress	661.81	3.39	665.20

2.3 Gross Fixed Assets

The Petitioner submits the Gross Fixed Assets for computation of Depreciation as shown in the following Table:

Table 2: Gross Fixed Assets for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1 5/42 1	Opening GFA for the year	5,458.21	14.78	5,472.99
2	Addition of GFA during the year	496.56	3.88	500.44
3	Closing GFA for the year	5,954.77	18.66	5,973.43

2.4 Loan Balances

The source wise long-term loan outstanding for PSTCL for FY 2016-17 as on March 31, 2016 is shown in the following table:

Table 3: Source wise Loan outstanding for FY 2016-17 (Rs. Crore)

Sr. No.	Name of Source	Opening Balance as on April 1, 2016	Loan Received	Loan Repaid	Closing Balance as on March 31, 2017
1	LIC	56.80	0.00	22.83	33.97
2	REC	2924.81	208.50	205.78	2927.53
3	SBOP	65.56	0.00	21.56	44.00
4	NABARD	127.77	69.81	0.00	197.58
5	OBC	40.10	0.00	40.10	0.00
6	Loan from PSPCL	495.57	7.59	0.00	503.16
7	GPF liability	153.69	0.00	21.95	131.74
8	Bank of India	138.46	50.00	-	188.46
9	PFC	- Denvision	61.05	Note that 13 feet	61.05
10	Loan for SLDC	3.73	3.24	0.27	6.70
11	Total loan for PSTCL	4006.49	400.19	312.49	4094.18

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3 ANNUAL PERFORMANCE REVIEW FOR FY 2017-18 AND REVISED ARR FOR FY 2018-19

3.1 Background

In this Chapter, the Petitioner submits the Annual Performance Review for FY 2017-18 and revised ARR for FY 2018-19.

The Hon'ble Commission in its MYT Order dated October 23, 2017 approved the Aggregate Revenue Requirement (ARR) of Rs. 1234.87 Crore for PSTCL for FY 2017-18. Out of this, the Net ARR of Rs. 17.88 Crore was approved for SLDC for FY 2017-18.

Also, the Hon'ble Commission approved Net ARR of Rs. 1283.87 Crore for PSTCL for FY 2018-19. Out of this, the Net ARR of Rs. 20.23 Crore was approved for SLDC for FY 2018-19.

The Petitioner has computed the revised estimates of ARR for FY 2017-18 based on the actual values of first half (H1 of FY 2017-18) and projection for H2 of FY 2017-18. Also, the revised ARR for FY 2018-19 has been projected based on Annual Performance Review for FY 2017-18. The Petitioner has also considered the basis of past trends, regulatory norms and activities planned for projecting the expenses for H2 of FY 2017-18 and FY 2018-19.

The deviation sought from the PSERC MYT Regulations, 2014 has been specifically mentioned with the rationale and relaxation has been sought in in accordance with the provisions of PSERC MYT Regulations, 2014.

3.2 Description of the Transmission System

PSTCL has submitted the addition in transmission system based on the Capital Investment Plan submitted to the Hon'ble Commission and subsequent submission made thereafter. The details of the actual addition during H1 of FY 2017-18, estimated addition during H2 of the FY 2017-18 and projected addition during FY 2018-19 to the transmission system of PSTCL are tabulated below:

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Sr. N o.	Particulars	Opening (As on 1st April 2017)	Addition during FY 2017-18 (H1)	Addition during FY 2017-18 (H2)	Addition during FY 2018- 19	Closing (As on 31st March, 2019
Tr	ansmission Lir	es (Circuit l	cms)			
1	400 kV	1599.75	0.00	0.00	10.00	1609.75
2	220 kV	6740.60	181.99	1107.90	260.00	8290.49
3	132 kV	3125.18	0.00	4.70	0.00	3129.88
4	Total	11465.53	181.99	1112.60	270.00	13030.12
Sul	ostations (Nos.)				The space of the	
1	400 kV	5	0	0	0	5
2	220 kV	94	2	2	3	101
3	132 kV	69	0	-1	-3	65
4	Total	168	. 2	1	0	171
Tra	nsmission Sub	station Bays	(Incoming a	nd Outgoins	g) (Nos.)	
1	400 kV	29	0	2	2	33
2	220 kV	394	10	50	14	468
3	132 kV	353	1	0	0	354
4	66 kV	690	11	10	lestrojeno 4:	715
5	Others	57	9 500 6 -1	0	0	56
6	Total	1523	21	62	20	1626
Sub	station Capaci	ty (MVA)	id toxacal mi	SALL SEASONS	Yil vol. tres	s. R. reinamin
1	Substation Capacity	33,566	1,460	1,025	1,240	37,291

3.3 Transmission System Capacity

PSTCL has projected the Transmission Capacity (net) of the system for FY 2017-18, FY 2018-19 and FY 2019-20 as 13647.63 MW, 14660.21 MW and 15010.87 MW respectively. As against this, the Commission has approved the Transmission capacity (net) of PSTCL system as 12278.96 MW, 12500.78 MW and 12608.38 MW for FY 2017-18, FY 2018-19 and FY 2019-20 respectively,

The Petitioner submits the projected transmission capacities of the State System, as provided by PSPCL, considering the State and private generating capacities and Central sector allocations for FY 2017-18 and FY 2018-19 as shown in the following Table.

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Table 5: Projected Net Installed Capacity in MW for the Control Period

Name of Project	FY 2017-18	FY 2018-19
Thermal - PSPCL	2404.10	2404.10
Total Hydro- PSPCL	1014.47	1014.47
Central Sector (Firm Share)	4080.30	4479.60
PSPCL Share of BBMB	1155.47	1155.47
IPPs within State of Punjab	3652.86	3652.86
PEDA and NRSE Projects	1045.46	1172.65
Grand Total	13352.67	13879.15

3.4 Transmission Losses

PSTCL in its MYT Petition has submitted the Transmission loss trajectory of 2.80%, 2.60% and 2.50% for FY 2017-18, FY 2018-19 and FY 2019-20 respectively. As against this, Hon'ble Commission approved Transmission loss of 2.50%, 2.40% and 2.30% for FY 2017-18, FY 2018-19 and FY 2019-20 respectively.

Further, PSTCL submits that it has completed Intra-State Boundary Metering cum Transmission Level Energy Scheme. The actual transmission loss for the period from July, 2016 to September, 2017 is shown in the following Table:

Table 6: Actual Transmission Loss

Sr. No.	Month	Energy Input (MWh)	Energy sent to Distribution network (MWh)	Transmission Loss (%)
1	Apr-17	31,78,328	30,72,798	3.32%
2	May-17	45,82,304	44,48,238	2.93%
3	Jun-17	49,81,671	48,51,319	2.62%
4	Jul-17	65,84,655	64,71,100	1.72%
5	Aug-17	61,78,639	59,66,839	3.43%
6	Sep-17	53,36,484	51,27,861	3.91%
	Total	3,08,42,080	2,99,38,155	2.93%

From the above data, the average transmission loss has been computed as 2.93% for the period from April 2017 to September 2017.

Further, PSTCL submits that the transmission losses in transmission network depends upon various factors such as shift of load centres, energy injection and

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drawal into the network and the extent of inherent technical loss 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 Hon'ble 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.

In view of the above, based on the actual data of transmission losses available till now, PSTCL has requested the Hon'ble Commission to approve the Transmission Loss for FY 2017-18 and FY 2018-19 as shown in the following Table:

Table 7: Transmission Losses for FY 2017-18 and FY 2018-19

Particulars	FY 2017-18	FY 2018-19
Transmission Loss (%)	3.00%	2.80%

3.5 Transmission Availability

Regulation 55 of PSERC MYT Regulations, 2014 specifies the normative Annual Transmission Availability Factor of 98% for recovery of Annual Fixed Charges and 99% for incentive on account of higher Transmission Availability. The average transmission system availability from April to September 2017 (H1) was 99.94%. The following table provides the month wise system availability up to September 2017:

Table 8: Transmission System Availability for FY 2017-18 (H1)

Sr. No.	Month	Transmission System Availability (%)
1	April-2017	99.95%
2	May-2017	99.96%
3	June-2017	99.93%
4	July-2017	99.92%
5	August-2017	99.93%
6	September-2017	99.92%
7	Average	99.94%

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The Petitioner submits that it has maintained the Transmission System Availability well above the normative annual transmission availability factor up to September 2017, as mandated by PSERC Tariff Regulations, 2014.

3.6 Capital Expenditure and Capitalisation

PSTCL submits that, in accordance with Regulation 9 and 10 of PSERC MYT Regulations, 2014, it has filed Petition for approval of Capital Investment Plan (Petition No. 44 of 2016) and Business Plan (Petition No. 45 of 2016) for the Control Period from FY 2017-18 to FY 2019-20 on May 30, 2016. However, the Commission provisionally approves the Capital Investment Plan (Petition No. 44 of 2016) and Business Plan (Petition No. 45 of 2016) and final Order in this regard shall be issued separately.

For the purpose of the present Petition, PSTCL has considered the Capital expenditure and Capitalisation based on its submission made to Hon'ble Commission dated October 4, 2017.

The Capital expenditure and capitalisation proposed for FY 2017-18 and FY 2018-19 is shown in the following Table:

Table 9: Capital Expenditure and Capitalisation for FY 2017-18 and FY 2018-19 (Rs. Crore

Sr. No.	Particulars	FY 201	17-18	FY 2018-19	
		MYT Order	APR	MYT Order	Projected
	Transmission		0.000		
1	Capital Expenditure	328.29	375.50	248.01	250.61
2	Capitalisation	234.63	469.72	572.91	479.76
	SLDC				
3	Capital Expenditure	10.00	10.00	10.00	10.00
4	Capitalisation	14.50	12.00	10.01	10.00

Funding of Capital Expenditure

Regulation 19 of PSERC MYT Regulations, 2014 specifies as under:

"19. DEBT EQUITY RATIO

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



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

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

c. In case, the actual equity employed is less than 30%, the actual debt-equity ratio shall be considered:

... ...

PSERC MYT Regulations, 2014 specifies the normative debt:equity ratio of 70:30. PSTCL is entitled to earn minimum profit equivalent to ROE every year. PSTCL submits that it will utilise the said profit being internal accruals as equity infusion for the capital expenditure during the Control Period. PSTCL has considered the equity amount at 30% of the capital expenditure limited to the extent of Return of Equity considered for previous year.

The remaining funding 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 2017-18 and FY 2018-19 is shown in the following Table:

Table 10: Funding of Capital Expenditure for EV 2017-18 and EV 2018-19 (Re. Croro)

Sr. No.	Particulars	FY 2017	-18	FY 2018-19		
		MYT Order	APR	MYT Order	Projected	
	Transmission				(Less-190) (1)	
1	Equity	98.49	90.91	74.40	75.18	
2	Debt	229.80	284.58	173.61	175.43	
3	Total	328.29	375.50	248.01	250.61	
	SLDC					
4	Equity	3.00	3.00	3.00	3.00	
5	Debt	7.00	7.00	7.00	7.00	
6	Total	10.00	10.00	10.00	10.00	

3.8 O&M Expenses

Regulation 26 of the PSERC MYT Regulations, 2014 and its subsequent first amendment, specifies the normative computation of O&M Expenses for the Control Period as under:



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

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

- R&Mn Repair and Maintenance Costs of the Applicant for the nth year;
- EMP₁₁ Employee Cost of the Applicant for the n_{th} year;
- A&G₁₁ Administrative and General Costs of the Applicant for the n_{th} year;

The above components shall be computed in the manner specified below: (i) $R&M_n + A&G_n = K*GFA*(WPI_n/WPI_{n-1})$ 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.

(ii) $EMP_n = (EMP_{n-1})^*(INDEX_n/INDEX_{n-1})$

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

INDEXn = 0.50*CPIn + 0.50*WPIn

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

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

(iii) Xn is an efficiency factor for nth year

The value of X_n shall be determined by the Commission in its first MYT order for the Control Period."

Further, Regulation 26.1 (Note 3) of PSERC MYT Regulations, 2014 specifies that "O&M expenses shall be allowed on normative basis and shall not be trued up: Provided, if actual O&M expenses are less than 90% of the normative expenses, the Commission shall true up the O&M expenses during the Annual Performance Review for that year on actual basis."

Also, Regulation 8.3 of PSERC MYT Regulations, 2014 specifies that "... ... However, if the actual expenditure is less than the normative, then the allowable expenditure shall be limited to actual expenditure incurred by the applicant."

From the above said regulations, it is noted that O&M expenses are limited to Normative expenses. In view of the above, PSTCL re-iterates its submission made in MYT Petition that as per above any gain on account of efficiency improvement

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in O&M expenses vis-à-vis normative O&M expenses shall be passed on to the consumers, however, the loss shall be borne by the PSTCL. There is no mechanism wherein the gain on account of efficiency improvement shall be shared with the PSTCL.

Hence, the PSTCL has not considered any Efficiency factor for O&M expenses for FY 2017-18 and FY 2018-19.

In view of the above said Regulation, PSTCL makes its submission for Employee Costs, R&M and A&G Expenses as under:

3.8.1 Employee Costs

PSTCL has submitted the Employee costs of Rs. 538.02 Crore for FY 2017-18, Rs. 564.17 Crore for FY 2018-19 and Rs. 595.62 Crore for FY 2019-20 for PSTCL. As against this, Hon'ble Commission approved the Employee Costs of Rs. 437.33 Crore for FY 2017-18, Rs. 452.67 Crore for FY 2018-19 and Rs. 472.82 Crore for FY 2019-20.

Terminal benefits

Regulation 26 of PSERC MYT Regulations, 2014 specifies that Terminal benefits such as death-cum-retirement gratuity, commuted pension, leave encashment, LTC, medical reimbursement including fixed medical allowance in respect of pensioners shall be allowed as per actual paid by the PSTCL. In this regard, PSTCL submits that the actual payout on account of terminal liabilities in respect of pensioners has been considered as per Punjab Power Sector Reforms Transfer Scheme approved by the Government of Punjab.

The 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. Further, the liability has been created for meeting the current terminal liabilities of gratuity and leave encashment in respect of employees recruited by PSTCL in compliance of Ind AS 19 issued by the ICAI. The amount related to NPS is being actually paid.

For the purpose of the present Petition, the PSTCL has considered the Terminal benefits for employees of erstwhile PSEB as approved by the Hon'ble Commission

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in Order dated October 23, 2017. The terminal liabilities of gratuity and leave encashment for employees recruited by PSTCL is considered based on actuarial valuation. The terminal liabilities towards NPS is considered based on actual payout being made. The terminal benefits considered by PSTCL is as shown in the following Table:

Table 11: Terminal Benefits for Control Period (Rs. Crore)

Sr.		FY 2017-18		FY 2018-19	
No.	Particulars	MYT Order	APR	MYT Order 291.65	Projected
1	Terminal benefits for employees of erstwhile PSEB	280.89	280.89	291.65	291.65
2	Terminal benefit towards NPS for new employees recruited by PSTCL	g wobse	3.57	worfe guff	3.75
3	Terminal benefits towards Gratuity and Leave encashment for new employees recruited by PSTCL	e rokah-	4.88	dest -	5.13
4	Total	280.89	289.35	291.65	300.53

Normative Employee Cost

PSTCL in its MYT Petition has requested the Hon'ble Commission to approve the Employee cost on the basis of addition of employees, increase in Basic and Dearness allowance, etc. However, the Employee costs has been approved on normative basis.

As regards the normative employee cost approved in MYT Order, it is observed that:

- (a) For computing the normative employee cost, Hon'ble Commission has considered the approved other Employee costs for FY 2015-16 instead of actual Other Employee Cost. The approved Employee cost for FY 2015-16 is derived on the basis of actual cost of FY 2011-12 and applicable WPI and CPI Increase. The approach adopted is not prudent.
- (b) Employee Costs approved for FY 2017-18 as Rs. 437.33 Crore is lower than the provisional values for Employee costs for FY 2016-17. Hence, there is genuine difficulty regarding the Employee Costs.
- (c) The employee costs approved in MYT Order does not include the impact of addition of new employees in FY 2017-18 onwards.

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Since, the provisional figures for FY 2016-17 are available, the Employee Costs for FY 2016-17 on provisional basis is shown in the following Table:

Table 12: Employee Costs for FY 2016-17 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Terminal Benefits	262.61	0.40	263.01
2	Other Employee Costs	172.64	6.33	178.97
3	Total Employee Costs	435.25	6.72	441.98

Inflation factor

Since, WPI index are available till October, 2017 and CPI Index till September, 2017, the escalation index has been computed as per provisions of PSERC MYT Regulations, 2014 as shown in the following Table:

Table 13: Computation of Escalation Index

Sr. No.	Particulars	FY 2016-17	FY 2017-18	Increase /(decrease)
1	CPI Index (Apr - Sep)	276.33	281.67	1.93%
2	WPI Index (Apr - Oct)	111.00	113.90	2.61%
3	CPI: WPI Index (50:50)	NAMES OF THE OWNER.		2.27%

Accordingly, the inflation factor for FY 2017-18 works out to 2.27%. Accordingly, PSTCL has computed the revised normative Employee Costs for Transmission Business and SLDC for FY 2017-18 and FY 2018-19 as per PSERC MYT Regulations, 2014 as shown in the Table below:

Table 14: Normative Employee Costs for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr.		FY 20	17-18	FY	2018-19
No.	Particulars	MYT Order	MYT Order APR Order MYT Order 280.89 289.35 291.65 141.29 172.64 149.68 2.93% 2.27% 2.93% 149.68 176.56 154.06 130.58 465.91 445.71 6.37 6.33 6.75 2.93% 2.27% 2.93% 6.75 6.47 6.95	Revised Projection	
	Transmission				
1	Terminal Benefits	280.89	289.35	291.65	300.53
2	Other Employee Costs for Base Year	141.29	172.64	149.68	176.56
3	Escalation Index	2.93%	2.27%	2.93%	2.27%
4	Other Employee Costs	149.68	176.56	154.06	180.57
5	Total Med Days	430.58	465.91	445.71	481.10
	SLDC	DOM: HE	sylvandas	20275 965	
6	Other Employee Costs for Base Year	6.37	6.33	6.75	6.47
7	Escalation Index	2.93%	2.27%		2.27%
8	Total	6.75			6.62
9	Grand Total	437.32	472.38	452.66	487.72

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PSTCL submits that it is entitled for Normative Employee costs as per PSERC MYT Regulations, 2014. It may also be noted that Other Employee Costs computed in the above Table for FY 2017-18 would not be sufficient considering the addition of employees and increase in Dearness Allowance. The above computed Normative Employee Cost is grossly inadequate considering annual increments and other expenses. A mere 2.27% hike in Employee Expenses is grossly insufficient to maintain salaries even at industry average.

Moreover, Employee Expenses are driven primarily by retail inflation, i.e. CPI. The Dearness Allowances in the salaries of the employees is linked to CPI Industrial Workers index numbers. PSERC MYT Regulations, 2014 has linked employee expenses to 50% CPI and 50% WPI Index. Correspondingly, the escalation factor considered to be based on longer-term data and should not rely only on short-term data. Employing a short-term inflation to forecast employee expenses has the potential of leaving the Company out of pocket and short of cash to pay its employees or incur appropriate level of general and operational expenses.

PSTCL submits that it has approved the Oraganisation structure and accordingly reduced the approved sanctioned strength to 5138 Nos. of employees as on April 1, 2017 against which only 2870 Nos. of employees were on payroll as on April 1, 2017. After approval of the revised structure, steps have been taken for the recruitment. The projected employee strength after the proposed recruitment is also less than the Sanctioned Strength as shown in the following Table:

Table 15: Proposed Employee Strength (Nos.)

Sr. No.	Particulars	FY 2017-18 (H1)	FY 2017-18 (H2)	FY 2018-19
1	Sanctioned Strength at the beginning of the period (A)	5,138	5,134	5,134
2	Working Strength at the beginning of the period (B)	2,870	3,055	3,131
3	Gap (B)-(A)	2,268	2,079	2,003

PSTCL has proposed to reduce the gap of Working Strength against Sanctioned Strength during the Control Period. PSTCL has projected the Employees cost as under:

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- a) The impact of proposed recruitment has been considered in Basic pay for projection of employee costs for the Control Period. The annual increase of 3% considered for Basic pay
- b) Dearness allowance (DA) has been considered as 132% for period from 1 April, 2017 to 30 June, 2017, 139% for the period from 1 July, 2017 to 31 December, 2017, 142% for the period from 1 January, 2018 to 30 June, 2018 and 145% for the period from 1 July 2018 to 31 March, 2019.
- c) Bonus, Overtime expenses, Other allowance, Medical Expenses reimbursement, Leave Travel assistance, Staff Welfare expenses are projected based on past trends.

The projected Employee Costs for Transmission Business for FY 2017-18 and FY 2018-19 are shown in the following Table:

Table 16: Projected employee Costs for FY 2017-18 and FY 2018-19 for Transmission Business (Rs. Crore)

Sr. No	Particulars	FY 2017-18 (H1)	FY 2017-18 (H2)	FY 2017-18 (Total)	FY 2018-19
1	Salaries	38.87	48.32	87.19	92.64
2	Overtime	0.70	3.52	4.22	4.22
3	Dearness Allowance	44.58	65.96	110.54	129.55
4	Other Allowances	12.80	11.19	23.99	23.99
5	Bonus	-	0.07	0.07	0.07
6	Expenses for engagement of manpower through outsourcing agencies	7.05	15.11	22.16	22.16
	Total (A)	104.00	144.17	248.17	272.62
7	Staff Welfare Expenses	almany amen	erant basales	S de alors	
I	Electricity Concession to Employees	0.00	1.69	1.69	1.69
II	Staff Welfare Expenses	0.09	0.08	0.17	0.17
	Total (B)	0.09	1.77	1.86	1.86
8	Medical Reimbursement	0.55	1.12	1.66	1.66
9	LTC Expenses	0.26	0.04	0.30	0.30
	Total (C)	0.81	1.15	1.96	1.96
10	Less: Employee costs capitalized (D)	ne gradente	43.43	43.43	43.43
11	Net Total (E=A+B+C-D)	104.89	103.67	208.56	233.02
12	Terminal benefits (F)	127.15	162.20	289.35	300.53
13	Grand Total (E+F)	232.04	265.86	497.91	533.54





The projected Employee Costs for SLDC for FY 2017-18 and FY 2018-19 are shown in the following Table:

Table 17: Projected employee Costs for FY 2017-18 and FY 2018-19 for SLDC (Rs.

Sr. No	Particulars	FY 2017-18 (H1)	FY 2017-18 (H2)	FY 2017-18 (Total)	FY 2018-19
1	Salaries	1.34	1.55	2.88	3.05
2	Overtime	-	I BO SOME	Parappear 7	1044-2661
3	Dearness Allowance	1.63	2.24	3.87	4.29
4	Other Allowances	0.26	0.53	0.79	0.79
5	Bonus	3101	1612 822 25 12	T WITH ALLEGE	10-114-apit-2
	Total (A)	3.23	4.32	7.54	8.12
6	Staff Welfare Expenses	ik gradom) is	esergarin	nagrai off be	made bad. I
I	Electricity Concession to Employees	Mind aust	ansimps E	da multi neva	wg23, 61.4±
Π	Staff Welfare Expenses	0.00	0.00	0.00	0.00
	Total (B)	0.00	0.00	0.00	0.00
7	Medical Reimbursement	0.00	0.01	0.01	0.01
8	LTC Expenses	0.01	0.00	0.01	0.01
1	Total (C)	0.01	0.01	0.02	0.02
9	Less: Employee costs capitalized (D)	odken gynča•s	i suman,-	No longen -	in beasture
10	Net Total (F=A+B+C-D)	3.24	4.33	7.57	8.14

The normative Employee costs computed on the basis of provisional figures of FY 2016-17 does not include the impact of recruitment. Hon'ble APTEL in Judgment dated September 11, 2014 in Appeal No. 174 of 2012 held that when the utility needs to comply with the lawful agreements entered into with the employees the same cannot be avoided and wriggled out of. Further, Hon'ble APTEL in Judgment dated March 30, 2015 in Review Petition No. 6 of 2015 also held that the Employee Costs shall be allowed on actual basis.

The PSTCL prays the Hon'ble Commission to approve the projected Employee Costs as shown in the following Table for FY 2017-18 and FY 2018-19.

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Table 18: Employee Costs for FY 2017-18 and FY 2018-19 (Nos.)

Sr. No	Particulars	FY 2017-18 (H1)	FY 2017-18 (H2)	FY 2017-18 (Total)	FY 2018-19
1	Employee Costs for Transmission Business	232.04	265.86	497.91	533.54
2	Employee Costs for SLDC	3.24	4.33	7.57	8.14
3	Grand Total	235.28	270.19	505.48	541.69

PSTCL has not considered impact of wage revision of 6th Pay Commission during the Control Period. PSTCL craves leave to submit these expenses on actual basis, since these expenses are being allowed on actual basis as per Regulation 26 of PSERC MYT Regulations, 2014.

PSTCL had claimed the impact of progressive funding in ARR & Tariff Petition for FY 2014-15. However, Hon'ble Commission in its Tariff Order for FY 2014-15 dated August 22, 2014 disallowed the impact of progressive funding. Aggrieved by this decision of Hon'ble Commission, PSTCL filed an appeal before Hon'ble APTEL in Appeal No. 262 of 2014. Hon'ble Commission vide its Judgment dated January 14, 2016 has upheld the decision of Hon'ble Commission. PSTCL has filed a Second Appeal before Hon'ble Supreme Court. For the purpose of this Petition, PSTCL has not considered the impact of progressive funding, as the matter is pending before Hon'ble Supreme Court. However, PSTCL reserves the right to claim the impact of Progressive funding subject to decision of Hon'ble Supreme Court.

3.8.2 R&M and A&G Expenses

PSTCL has claimed R&M and A&G Expenses of Rs. 61.53 Crore for FY 2017-18, Rs. 64.27 Crore for FY 2018-19 and Rs. 66.86 Crore for FY 2019-20 for PSTCL. As against this, Hon'ble Commission approved R&M and A&G Expenses of Rs. 59.19 Crore for FY 2017-18, Rs. 63.59 Crore for FY 2018-19 and Rs. 67.71 Crore for FY 2019-20.

Hon'ble Commission has approved the R&M and A&G Expenses in accordance with Regulation 26 of PSERC MYT regulations, 2014. On the basis of the revised submission of capital expenditure and capitalisation for FY 2017-18 and FY 2018-19, the revised R&M and A&G Expenses has been computed for FY 2017-18 and FY 2018-19.

WPI index for FY 2017-18 are available till October 2017. The K-factor has been computed for FY 2017-18 and FY 2018-19 as shown in the following Table:

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Table 19: Computation of K for FY 2017-18 and FY 2018-19 (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Transmission		sangel la	meh veri
K-factor	0.60%	0.61%	0.63%
WPI Index	1.73%	2.61%	2.61%
Escalated K-factor	0.61%	0.63%	0.65%
SLDC			
K-factor	7.19%	7.31%	7.50%
WPI Index	1.73%	2.61%	2.61%
Escalated K-factor	7.31%	7.50%	7.70%

Accordingly, PSTCL has submitted combined R&M and A&G expenses for Transmission and SLDC Business as under:

Table 20: R&M and A&G Expenses for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr.	Particulars	FY 20	17-18	FY 2018-19	
No.		MYT Order	APR	MYT Order	Projected
	Transmission Business	manus ka	ed Alaba	The house	
1	Opening GFA	8882.02	8881.65	9116.65	9351.37
2	Closing GFA	9116.65	9351.37	9689.56	9831.13
3	Average GFA	8999.34	9116.51	9403.11	9591.25
4	Escalated K-factor	0.62%	0.63%	0.63%	0.65%
5	R&M and A&G Expenses	55.80	57.33	59.24	61.90
6	Add: Audit Fee	1.00	1.00	1.00	1.00
7	Add: Licence Fee and ARR Fee	0.50	0.50	0.50	0.50
8	Grand Total	57.30	58.83	60.74	63.40
	SLDC			edi arang bar Tagir radia	
1	Opening GFA	18.18	18.66	32.68	30.66
2	Closing GFA	32.68	30.66	42.69	40.66
3	Average GFA	25.43	24.66	37.69	35.66
4	Escalated K-factor	7.44%	7.50%	7.57%	7.70%
5	R&M and A&G Expenses	1.89	1.85	2.85	2.74



3.9 Depreciation

PSTCL has claimed Depreciation of Rs. 337.49 Crore for FY 2017-18, Rs. 355.10 Crore for FY 2018-19 and Rs. 371.36 Crore for FY 2019-20 for PSTCL. As against this, Hon'ble Commission approved Depreciation of Rs. 281.11 Crore for FY 2017-18, Rs. 300.29 Crore for FY 2018-19 and Rs. 317.74 Crore for FY 2019-20.

Regulation 21 of the PSERC MYT Regulations, 2014 specifies as under:

"21. DEPRECIATION

For the purpose of tariff determination, depreciation shall be calculated in the following

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

Provided that land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset; Provided further that depreciation shall be calculated after deduction of consumer contributions, capital subsidies/ Government grants.

21.2. The cost of the asset shall include additional capitalization.

21.3. The cost shall include foreign currency funding converted to equivalent rupees at the exchange rate prevalent on the date when foreign currency shall actually be availed but not later than the date of commercial operation.

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

21.5. Depreciation for distribution assets and other assets not specified by CERC shall be at the rates notified by the Commission:

Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost;

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

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

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

For computation of Opening GFA as on April 1, 2017, PSTCL has considered the closing GFA (Net of land and land rights) as on March 31, 2017 as per provisional



accounts for FY 2016-17. PSTCL has considered addition of GFA equivalent to capitalisation amount submitted in the present Petition.

PSTCL has computed the weighted average depreciation rate as 5.24% after taking into account scheduled depreciation rates as specified in PSERC MYT Regulations and Gross Fixed Assets as per the provisional accounts for FY 2016-17.

Accordingly, PSTCL submits the depreciation for FY 2017-18 and FY 2018-19 as under:

Table 21: Depreciation for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr.	Particulars	FY 20	17-18	FY 2018-19	
No.		MYT Order	APR	MYT Order	Projected
	Transmission	Ebora tenoi	the prove	nár basaid 1	me J. Iraj
1	Opening GFA (Net of Land and Land Rights)	5,955.14	5,954.77	6,189.77	6,424.49
2	Assets additions during the Year	234.63	469.72	572.91	479.76
3	Closing GFA	6,189.77	6,424.49	6,762.68	6,904.25
4	Depreciation rate (Wt. Avg.)	4.61%	5.24%	4.61%	5.24%
5	Depreciation	279.94	324.45	298.55	349.33
	SLDC	A seem to be	en seur	TAT BOX	ited Inserin
6	Opening GFA (Net of Land and Land Rights)	18.18	18.66	32.68	30.66
7	Assets additions during the Year	14.50	12.00	10.01	10.00
8	Closing GFA	32.68	30.66	42.69	40.66
9	Depreciation rate (Wt. Avg.)	4.61%	5.24%	4.61%	5.24%
10	Depreciation	1.17	1.29	1.74	1.87

3.10 Interest and Finance Charges on Loan Capital

PSTCL has claimed Interest and Finance Charges of Rs. 410.40 Crore for FY 2017-18, Rs. 408.24 Crore for FY 2018-19 and Rs. 405.35 Crore for FY 2019-20 for PSTCL. As against this, Hon'ble Commission approved Interest and Finance Charges of Rs. 359.93 Crore for FY 2017-18, Rs. 354.63 Crore for FY 2018-19 and Rs. 353.51 Crore for FY 2019-20.

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Hon'ble Commission in MYT Order dated October 23, 2017 has not allowed the interest charges for loans, stating that loans are not in the nature of long term loans, even though such loans are used for funding of capital expenditure. While approving the funding of Capital expenditure for FY 2014-15, FY 2015-16 and FY 2016-17, PSTCL has claimed funding from loan only. For funding of such capital expenditure, PSTCL has taken loans from SBOP and Bank of India, which are not in the nature of long term loan.

The Hon'ble Commission has disallowed such loans. On the other hand, the Hon'ble Commission has also not considered any equity on account of funding of such capital expenditure. This approach adopted is not prudent. The funding of such capital expenditure has to be considered either by loan or by equity. Hence, for the purpose of the present Petition, PSTCL has considered the Opening loan as on April 1, 2017 based on the provisional accounts for FY 2016-17 and approach adopted by PSTCL in previous Tariff Petitions.

The outstanding existing loans include loans from REC, LIC, 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. The addition of loan has been considered equivalent to debt amount as submitted in the present Petition. PSTCL has proposed new loans for the proposed investments from Banks/Financial Institution at actual weighted average rate of interest. Three years moratorium period has been considered for the new loan taken for funding of capital expenditure for FY 2017-18 and FY 2018-19.

Accordingly, interest on loan capital for FY 2017-18 and FY 2018-19 for Transmission Business has been submitted as under:

Table 22: Interest on Loan capital for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr. No.	Particulars	FY 20	17-18	FY 2018-19	
		MYT Order	APR	MYT Order	APR
	Transmission				
1	Opening Balance	3740.88	4087.49	3665.90	4073.20
2	Loan addition during year	229.80	284.58	173.61	175.43
3	Loan Repayment during year	304.78	298.87	319.09	324.09
4	Closing Balance	3665.90	4073.20	3520.42	3924.54

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Sr.	Particulars	FY 20	17-18	FY 2018-19	
No.		MYT Order	APR	MYT Order	APR
5	Average Loan	3703.39	4080.34	3593.16	3998.87
6	Rate of Interest	11.10%	10.49%	11.24%	10.58%
7	Net Interest	411.08	428.09	403.87	423.10
8	Less: Interest Capitalised	53.50	53.50	52.14	47.93
9	Miscellaneous Interest and Finance Charges	1.22	0.16	1.21	0.16
10	Guarantee Charges	0.00	10.00	0.00	10.00
11	Interest & Finance Charges	358.80	384.75	352.94	385.33
	SLDC	B. C. C.	E88.303	Left acitifs.	
12	Opening Balance	6.96	6.70	11.85	11.59
13	Loan addition during the year	7.00	7.00	7.00	7.00
14	Loan Repayment during the year	2.11	2.11	2.71	2.71
15	Closing Balance	11.85	11.59	16.14	15.88
16	Average Loan	9.41	9.15	14.00	13.74
17	Rate of Interest	12.05%	12.05%	12.04%	12.04%
18	Interest & Finance Charges	1.13	1.10	1.68	1.65

3.11 Return on Equity

PSTCL has claimed Return on Equity of Rs. 101.19 Crore for FY 2017-18, Rs. 114.34 Crore for FY 2018-19 and Rs. 123.83 Crore for FY 2019-20 for PSTCL. As against this, Hon'ble Commission approved Return on Equity of Rs. 101.78 Crore for FY 2017-18, Rs. 115.64 Crore for FY 2018-19 and Rs. 126.58 Crore for FY 2019-20.

Regulation 20 of PSERC MYT Regulations, 2014 specifies as under:

"20. RETURN ON EQUITY

Return on Equity shall be computed at the rate of 15.5% on the paid up equity capital determined in accordance with regulation 19:

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

For computation of Return on Equity, the PSTCL has considered the closing equity for FY 2016-17 as approved by the Hon'ble Commission in Review for FY 2016-17 as opening equity for FY 2017-18. PSTCL has considered the addition of equity

Of:



equivalent to 30% of capital expenditure to the extent of Return of Equity as discussed in earlier Section. PSTCL has computed Return on Equity for FY 2017-18 and FY 2018-19 in accordance with the above said Regulations as given in the following Table:

Table 23: Return on Equity for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr. No	Particulars	FY 20	17-18	FY 2018-19	
		MYT Order	APR	MYT Order	Projected
1	Opening Balance-Equity Capital	605.88	605.88	707.37	699.79
2	Equity addition during the year	101.49	93.91	77.40	78.18
3	Closing balance-Equity Capital	707.37	699.79	784.77	777.97
5	ROE rate (%)	15.50%	15.50%	15.50%	15.50%
4	Return on Equity	101.78	101.19	115.64	114.53

3.12 Interest on Working Capital

PSTCL has claimed Interest on Working Capital (IoWC) of Rs. 46.94 Crore for FY 2017-18, Rs. 49 Crore for FY 2018-19 and Rs. 51.18 Crore for FY 2019-20 for PSTCL. As against this, Hon'ble Commission approved IoWC of Rs. 38.44 Crore for FY 2017-18, Rs. 39.97 Crore for FY 2018-19 and Rs. 41.70 Crore for FY 2019-20.

Regulation 54 of the PSERC MYT Regulations, 2014 specifies as under:

"54. INTEREST ON WORKING CAPITAL

54.1 Components of Working Capital

The Working Capital shall cover the following:

i. O&M Expenses for 1 month;

ii. Maintenance spares @ 15% of the O&M expenses;

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

54.2 Rate of Interest

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

PSTCL has computed the working capital requirement in accordance with the above Regulations for its Transmission Business and SLDC. The Regulation 25.1 of PSERC MYT Regulations, 2014 specifies that the rate of interest shall be equal to the weighted average rate of interest paid/payable on loans by the licensee/SLDC or the State Bank of India Advance Rate as on April 1 of the relevant year,

Page



whichever is less. PSTCL has considered the actual weighted average rate of Interest based on actual working capital loans.

The computation of Interest on Working Capital for FY 2017-18 and FY 2018-19 is shown in the following Table:

Table 24: Interest on Working Capital Expenses for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr.	Particulars	FY 20	17-18	FY 2018-19	
No.		MYT Order	APR	MYT Order	Projected
	Transmission				
1	Receivables equivalent to two months of fixed cost.	202.83	231.14	210.61	244.73
2	Maintenance spares @ 15% of O&M expenses	73.18	83.51	75.97	89.54
3	Operation and Maintenance expenses for one month.	40.66	46.40	42.20	49.74
4	Total Working Capital Requirement	316.67	361.04	328.78	384.02
5	Rate of Interest	11.95%	11.21%	11.95%	11.21%
6	Interest on Working Capital	37.84	40.46	39.29	43.04
	SLDC	, is, ii 30.	65) 352/162/	a-9augo 1	28 hoj, 20
1	Receivables equivalent to two months of fixed cost.	2.98	2.82	3.37	3.26
2	Maintenance spares @ 15% of O&M expenses	1.30	1.41	1.47	1.63
3	Operation and Maintenance expenses for one month.	0.72	0.78	0.82	0.91
4	Total Working Capital Requirement	5.00	5.01	5.66	5.81
5	Rate of Interest	11.95%	11.21%	11.95%	11.21%
6	Interest on Working Capital	0.60	0.56	0.68	0.65

3.13 ULDC Charges

PSTCL has claimed ₹12.36 crore for FY 2017-18, ₹12.67 crore for FY 2018-19 and ₹12.99 crore for FY 2019-20 towards ULDC charges by applying the escalation factor of 2.53% over the actual ULDC charges for FY 2015-16. As against this,



Hon'ble Commission approved ULDC charges same as actual ULDC charges of FY 2015-16 of Rs. 11.76 crore for each year of Control Period.

For the purpose of the present Petition, PSTCL has claimed the ULDC Charges same as actual ULDC charges for FY 2016-17 based on the provisional accounts. The ULDC Charges submitted by PSTCL for FY 2017-18 and FY 2018-19 are shown in the following Table:

Table 25: ULDC Charges for FY 2017-18 and FY 2018-19 (Rs. Crore)

Sr. No.	Particulars	FY 201	17-18	FY 2018-19	
		MYT Order	APR	MYT Order	Projected
1	ULDC Charges-SLDC own share	9.03	5.68	9.03	5.68
2	ULDC Charges-BBMB share	1.82	1.58	1.82	1.58
3	ULDC Charges-Central Sector share	-	0.33	8884 <u>-</u> 1	0.33
4	NRLDC fees and charges	0.91	2.33	0.91	2.33
5	Grand Total	11.76	9.93	11.76	9.93

3.14 Non-Tariff Income

PSTCL has claimed Non-tariff Income of Rs. 10 crore each for Transmission Business and Rs. 1 crore each for SLDC Business for FY 2017-18, FY 2018-19 and FY 2019-20 respectively. As against this, Hon'ble Commission approved Non-tariff Income of Rs. 49.25 crore for Transmission Business and Rs. 5.41 crore for SLDC Business for each year of Control Period based on the provisional accounts for FY 2016-17.

As regards the late payment surcharge specified in Regulation 28 of PSERC MYT Regulations, 2014 under Non-tariff income, PSTCL submits that the objective of introduction of late payment surcharge on payment of bills was to bring in discipline in payments by Licensees.

For any Utility, it would always be preferable to have minimum time gap between the raising of bills and receiving the payment against that bill. Any delay in payment of bills affects the cash flow of the Utilities, hence, surcharge on late payment is levied. PSERC MYT Regulations, 2014 allows only "Normative Working Capital" and hence any payments or receipts not falling within the

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normative payable-receivable cycle are separately covered through payment security mechanisms such as late payment surcharge.

Such payment security mechanisms ensure that the loss suffered by the receiver on account of delay in receipt of payment or any gain realized by defaulting on the payable side is neutralized through the application of late payment surcharge. In other words, this mechanism of Payment Security is completely outside the purview of Regulated ARR, which permits only normative working capital interest.

Therefore, PSTCL submits that either the late payment surcharge should not form part of the ARR, or if revenue from late payment surcharge is included in Non-Tariff Income, correspondingly higher interest on working capital should be allowed on the cost-side to represent the funding cost for delays in receipt of revenue. Including only Income would mean that the revenue earned by the Licensee through late payment surcharge to fund the additional funding cost is not retained with the Licensee, but is passed through to the consumers, while the additional cost incurred due to the delay in receipt of payment, is not passed on to the consumers.

For the purpose of the present Petition, PSTCL has claimed the Non-tariff Income same as actual Non-tariff Income for FY 2016-17 based on the provisional accounts after excluding the non-recurring income of Rs. 28.48 Crore.

Accordingly, PSTCL submitted the Non-tariff Income of Rs. 20.77 Crore for Transmission Business and Rs. 5.41 Crore for SLDCL for FY 2017-18 and FY 2018-19.

3.15 Income Tax

PSTCL in its MYT Petition submitted that the taxes on income should not be limited to tax on RoE allowed and should be allowed as actuals, as PSTCL is not recovering any amount that has not been approved for recovery by the Hon'ble Commission.

As regards the income Tax, Hon'ble Commission in MYT Order dated October 23, 2017 stated that

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"The Commission consider it appropriate to allow the tax on the basis of Audited Annual Accounts of the utility as and when the same are submitted by PSTCL. As such, no amount on this account is allowed at this stage for MYT Control Period FY 2017-18 to FY 2019-20 as it is to be allowed on actual payment basis at the time of True up for the respective years."

PSTCL submits that the income tax for FY 2017-18 and FY 2018-19 shall be submitted at time of True-up for respective year.

3.16 Summary of ARR

The summary of ARR for Transmission Business and SLDC for FY 2017-18 and FY 2018-19 is as under:

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Table 26: ARR for PSTCL for FY 2017-18 and FY 2018-19 (Rs. Crore)

			Transı	Transmission			ST]	SLDC			PS	PSTCL	
Sr.	Particulars	FY 20	FY 2017-18	FY 20	FY 2018-19	FY 2017-18	17-18	FY 2018-19	18-19	FY 20	FY 2017-18	FY 20	FY 2018-19
;		MYT Order	APR	MYT	Proj.	MYT	APR	MYT	Proj.	MYT	APR	MYT	Proj.
. 1	Net Employee costs	430.58	497.91	445.71	533.54	6.75	7.57	6.95	8.14	437.32	505.48	452.66	541.69
2	Net R&M and A&G expenses	57.30	58.83	60.74	63.40	1.89	1.85	2.85	2.74	59.19	89.09	63.59	66.14
8	Depreciation	279.94	324.45	298.55	349.33	1.17	1.29	1.74	1.87	281.11	325.74	300.29	351.20
4	Interest charges	358.80	384.75	352.94	385.33	1.13	1.10	1.68	1.65	359.93	385.85	354.63	386.99
rv	Interest on Working Capital	37.84	40.46	39.29	43.04	09.0	0.56	0.68	0.65	38,44	41.03	39.97	43.69
9	ULDC Charges	t	133	1	1	11.76	9.93	11.76	9.93	11.76	9.93	11.76	9.93
7	Return on Equity	101.78	101.19	115.64	114.53	(1 t)		ı	1	101.78	101.19	115.64	114.53
80	Income tax	1		J	1	100	1	1	1	1	F	1	I
6	Total Revenue Requirement	1,266.24	1,407.59	1,312.88	1,489.16	23.29	22.31	25.64	25.00	1,289.53	1,429.90	1,338.53	1,514.16
10	Less: Non- Tariff Income	49.25	20.77	49.25	20.77	5.41	5.41	5.41	5.41	54.66	26.18	54.66	26.18
11	Aggregate Revenue Requirement	1,216.99	1,386.82	1,263.63	1,468.40	17.88	16.90	20.23	19.59	1,234.87	1,403.72	1,283.87	1,487.98



4 PROPOSED TARIFF FOR FY 2018-19

4.1 Revenue Gap for FY 2017-18

Hon'ble Commission in MYT Order dated October 23, 2017 has approved the revenue of Rs. 1216.99 Crore towards Transmission Charges and Rs. 17.88 Crore towards SLDC Charges. Accordingly, the revenue gap for FY 2017-18 on account of Annual Performance Review has been computed as shown in the following Table:

Table 27: Revenue Gap for FY 2017-18 (Rs. Crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net ARR	1,386.82	16.90	1,403.72
2	Revenue from Tariff	1,216.99	17.88	1,234.87
3	Revenue Gap/(surplus)	169.83	(0.98)	168.85

The carrying cost for Revenue Gap/(surplus) for FY 2017-18 has been computed as shown in the following Table

Table 28: Computation of Carrying cost for FY 2017-18 (Rs. Crore)

Sr. No.	Particulars	ROI	PSTCL
1	Revenue gap for FY 2017-18		168.85
2	Carrying cost for FY 2017-18 (half year)	11.21%	9.46
3	Carrying cost for FY 2018-19 (half year)	11.21%	9.46
4	Total Carrying cost for recovery	8113114	187.78

The total Revenue Gap along with carrying cost for FY 2017-18 works out to Rs. 187.78 Crore. The Petitioner prays to the Hon'ble Commission to approve this Revenue Gap, arising out of Annual Performance Review of FY 2017-18.

PSTCL proposes to recover Revenue Gap in FY 2018-19 from the Transmission Charges.

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4.2 Proposed Tariff for FY 2018-19

PSTCL submits that at present there is only one distribution licensee (PSPCL) in the State. Hence, the total Annual Fixed Charges for Transmission and SLDC shall be borne by PSPCL for FY 2018-19.

Accordingly, PSTCL has proposed the Transmission Charges for the Transmission Business as shown in the following Table:

Table 29: Proposed Transmission Charges for FY 2018-19

Sr. No.	Particulars	FY 2018-19
1	Net ARR for FY 2018-19	1,468.40
2	Revenue Gap for FY 2017-18 along with carrying cost	187.78
3	Annual Fixed Charges for Transmission Business	1,656.17
4	Transmission System Capacity (Net) (MW)	13,879.15
5	Transmission Charges per month (Rs. Crore per month)	138.01
6	Transmission Charges (Rs./MW/month)	99,440
7	Transmission Charges (paise/kWh)	30

Accordingly, PSTCL has proposed the SLDC Charges for FY 2018-19 as shown in the following Table:

Table 30: Proposed SLDC Charges for FY 2018-19

Sr. No.	Particulars	FY 2018-19
1	SLDC Charges (Rs. Crore)	19.59
2	SLDC Charges per month (Rs. Crore) for PSPCL	1.63
3	SLDC Charges (Rs./MW/month) for Long Term/Medium term Open Access Customers	1,176

PSTCL humbly prays to the Hon'ble Commission to approve the Transmission Charges and SLDC Charges along with past revenue gaps as submitted above.



5 PRAYERS

The Petitioner respectfully prays to the Hon'ble Commission:

- a) Admit the Petition seeking approval of Annual Performance Review for FY 2017-18, revised ARR for FY 2018-19 and determination of Tariff for FY 2018-19 in accordance with PSERC MYT Regulations, 2014;
- b) Allow to submit True-up for FY 2016-17 as an additional submission in accordance with provisions of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005;
- c) Approve the estimated Revenue Gap arising on account of Annual Performance Review for FY 2017-18 along with carrying cost and its recovery through Tariff in FY 2018-19, as worked out in this Petition;
- d) Approve the ARR forecast and Tariff for FY 2018-19 for Transmission Business and SLDC;
- e) Invoke its power under Regulation 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 Hon'ble Commission deems fit to be issued;
- h) Condone any error/omission and to give opportunity to rectify the same;

BY THE APPLICANT THROUGH

FINANCIAL ADVIOSR,

Punjab State Transmission Corporation Limited, Patiala.

6 DIRECTIVES

No.	Issues	PSERC's Comments & Directives	PSTCL's Reply	eply	
6.1	Boundary metering, Energy Audit	The Commission observed that the transmission losses are very high for 132/220/400 kV network in a geographically very small State. The transmission loss	The Overal and reports	I transmission losses ed regularly to Hon'b	The Overall transmission losses are being worked out and reported regularly to Hon'ble PSERC since Jul-2016.
	and T&D loss Reduction	of 7.09% & 6.03% in Dec. 2016 & Jan. 2017 respectively needs to be explained. The voltage wise transmission	The losses	The losses figures are as given below:-	elow:-
		losses i.e. losses at 400/220/132 kV& transformation losses etc needs to be examined to pin point high loss segments. The Commission directs PSTCI, to submit	Sr. No.	Month	Actual Transmission Losses
		the necessary information to the Commission along	1	April-2017	3.32%
		with reasons for high transmission losses. PSTCL shall	2	May-2017	2.92%
		submit the roadmap to reduce these losses to below	3	June-2017	2.61%
		2.5%, within one month of the issue of this Tariff	4 1 1 1 1 1 1	July 2017	1.72%
		Order.	S	August 2017	3.43%
		1.02012-18	9	September 2017	3.91%
		To speed to distain one addition polyatrome 2 and	These figur	es for overall transm	These figures for overall transmission losses of PSTCL
		www.modelender.polect.com is naturally regard setting the project and setting and setting and setting and setting and setting and a particular adversariation of the project and submitted and submitted and setting and setti	have been a exchanged accounted remote con	have been assessed by considering the net-energy int exchanged at boundary points of PSTCL. The data accounted for calculations has been collected through remote connectivity, CMRI, manual reports and data substitution from other courses.	have been assessed by considering the net-energy inter- exchanged at boundary points of PSTCL. The data accounted for calculations has been collected through remote connectivity, CMRI, manual reports and data
6.2	Employee Cost	a) Man power: The Commission notes the action taken and directs	The reply v	The reply will be submitted afterwards.	rwards.
		PSTCL to share the reduction of employee cost achieved with implementation of revised	Control State		

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No.	Issues	PSERC's Comments & Directives	PSTCL's Reply
		organizational structure made effective from 01.04.2016.	
	Cont.	b) Unmanned Su-stations: The Commission notes with serious concern that PSTCL in its submissions in the ARR for FY 2016-17, assured that project for 5 number grid sub-stations will be completed by Nov. 2016. The target date was revised to March 2017. The reasons for not taking up the work at other three grid substations along with commissioning schedule of two grids be shared with the Commission within one month of issue of T.O.2017-18.	The material against the work order has reached the respective sites. Two teams have been deployed for commissioning work at two sites (Lalru and Derabassi) and the retrofitting work for relays is going on. Company has been pursued to take up the execution work of other three substations in the project. As shutdowns are involved for retrofitting of the relay, company is preparing complete schedule for shutdowns required. Soon the erection work of these substations (namely Mohali-I, Mohali-II and Kaharar) will also be taken up.
		c) Training: The Commission notes the action being taken and directs PSTCL to submit the timelines for setting up of Advanced Training Centre at 220 kV Substation, Ablowal within one month of issue of T.O.2017-18	It is hereby submitted that CMD/PSTCL has desired to explore the modalities for Common sharing facilities of PSPCL & PSTCL. In this regard, a committee of PSPCL and PSTCL officers has been constituted. Regarding Advance training and Research Institute at 220 KV Substation, Ablowal, agenda has been sent for putting up in the next meeting of Committee of WTDs, PSTCL for final decision in the matter.
	mad Tee D long metaphysic metaphy	d) Implementation of ERP:- The Commission notes that no tangible progress has been made to implement ERP project except inviting bids, evaluating bids and finally scrapping the bids without deciding further action on the project. The action plan on the ERP project be shared with the Commission within one month of issue of the Tariff Order for FY 2017-18.	PSTCL decided that proposal for ERP implementation in PSTCL shall be taken up later. Meanwhile, PSTCL is considering about implementation of various ERP modules as per the Functionality Matrix prepared by the ERP consultant for ERP project with help of outsourced manpower for programming of some modules and testing wherever necessary.

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No.	Issues	PSERC's Comments & Directives	PSTCL's Reply
6.3	Loading Status of PSTCL Transmission Lines and Substations.	Loading status: The Commission observes that over-loading status for 1st, 2nd and 4th quarter of FY 2016-17 has not been uploaded on the website. The Commission directs PSTCL to supply status of over-loading of Substations and lines, if any, to the Commission regularly and ensure that website of PSTCL is updated regularly. Ensure that there is no overloading of any line/substation during next paddy season.	No overloading on any 132/220/400KV Sub-stations or line was observed during the 3 rd quarter for the year 2016-17. The same has also been up-loaded on PSTCL's website.
6.4	Mtc. Of category wise details of fixed assets.	The Commission is not convinced with the reply of PSTCL for slow progress in preparation of Assets Cards and Record. The Commission directs PSTCL to complete the task of preparing the Fixed Assets Cards/Record and submit its status Report within one month of the issue of this Tariff Order.	The fixed asset register as on 31.03.2016 category wise, location code wise, value wise (without quantity wise detail) has been prepared at corporate level and is being finalized as on 31.03.2017. The matter regarding preparation of Fixed Asset Register (FAR) quantity wise as well as value wise was taken up with the consultants in respect of two sub-stations namely P&M Mandi Gobindgarh and P&M Ablowal for preparing a draft sample/model.
6.5	Audited Annual Accounts	Audited Annual Report for FY 2015-16 has been supplied to the Commission. PSTCL is directed to ensure timely submission of audited accounts.	Annual accounts of only FY 2016-17 are pending due to implementation of Indian Accounting Standards. The finalization of these are in progress.
9.9	Reactive Compensation	The Commission notes that as per Reactive Compensation report submitted by CPRI for 220 kV & 132 kV levels, the voltage profiles are low for 26 nos. of 220 kV, 45 nos. of 132 kV, 13 nos. of 66 kV and 54 nos. of 11 kV nodes and three nos. of 33 kV nodes. PSTCL has not submitted any action taken by the licensee to implement the recommendation of CPRI. The	Reactive compensation study report of CPRI has been received and soft copy of the same has already been sent vide this office Memo No. 2612 dated 14.09.2016.

			WINDS AND	
Sr. No.	Issues	PSERC's Comments & Directives	PSTCL's Reply	
		Commission directs PSTCL to submit the action taken report within one month of issue of Tariff Order.	4	
6.7	Transmission System for evacuation of power from IPPs.	PSTCL submitted in the ARR for FY 2016-17 that 220 kV line from Goindwal Sahib TPS to 220 kV Bottianwala shall be completed by Dec., 2016 but the work is still under progress. PSTCL is directed to complete the work at the earliest, under intimation to the Commission.	The work on 220KV lis 220KV Botianwala got d of Goindwal Sahib Th were shifted to commiss projects under TS Orgato avoid unnecessary blis under progress & 30.09.2017 is as under:	The work on 220KV line from Goindwal Sahib TPS to 220KV Botianwala got delayed due to late commissioning of Goindwal Sahib Thermal Power Plant as priorities were shifted to commissioning of other transmission line projects under TS Organization. This was done in order to avoid unnecessary blockage of funds. Now, the work is under progress & the status of this work as on 30.09.2017 is as under:
			Name of work	220KV Goindwal Sahib(TPS)- 220KV Rottianwala DC lines 64 725 lum locath
			Nos. of towers	201
			Nos. of Towers Stubbed	195
		THE PROPERTY OF STATE	Nos. of Towers Erected	178
		Sanda / Blanderd and auditor of the about Report within one	Stringing & Stagging (in ckt. Km)	40.60
0		age and how if you proportion is not stated and proportion.	Expected Date of Commissioning	31.12.2017
0	Calculation of depreciation as per straight line method.	The depreciation rates as per CERC (Terms and Conditions of Tariff) Regulations, 2014 are applicable to PSTCL. Remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets. The Commission directs PSTCL to prepare accounts accordingly.	PSERC (Terms and Con-Generation, Transmissic Tariff) Regulations, 2014 18. The depreciation will Regulations while finality 2017-18.	PSERC (Terms and Conditions of Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 are applicable from the FY 2017-18. The depreciation will be calculated as per these Regulations while finalizing the annual accounts of FY 2017-18.
6.9	Replacement of defective energy meters	The Commission notes with concern that despite directions in T.O. for FY 2015-16 and FY2016-17, PSTCL has failed to share even a single checking	The verification of CT/F points for the various PS carried out by P&M circ.	The verification of CT/PT ratios at boundary metering points for the various PSTCL Sub-stations is again being carried out by P&M circle level Nodal officers, which is
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Name of Persons		12.4 No. 12.6 No. 12	A CONTROL OF THE CONT
Sr. No.	Issues	PSERC's Comments & Directives	PSTCL's Reply
		report regarding verification of Multiplying factors of 11 kV feeder meters or reasons for defective meters. The Commission reiterates its direction to PSTCL to ensure replacement of defective energy meters of 11 kV feeders within 10 working days and keep full record of nature of defects and their duration on real time basis. PSTCL is also directed to share the checking reports of multiplying factors of energy meters on its Substations with the Commission.	under process and the report shall be submitted to PSERC shortly.
6.10	Preventive maintenance of transmission lines	In order to avoid tripping of transmission/subtransmission lines, PSTCL is directed to replace Disc Insulators with Anti-Fog Disc Insulators or to adopt hot line washing system for insulators, as adopted by PGCIL & some other states, to prevent tripping of transmission lines during foggy months. PSTCL is further directed to submit compliance report of the same to the Commission within one month of the issue of this Tariff Order.	It is submitted that most of Disc insulators of transmission lines falling under polluted area have been replaced with anti-fog Disc insulators. Further, the cleaning work of Disc insulators had been completed before the onset of winter 2016. This practice will be continued in future.

FORMATS FOR APR PETITION



SUMMARY OF AGGEGATE REVENUE REQUIREMENT FOR TRANSMISSION BUSINESS AND SLDC

			Transmission	ussion			SI	SLDC	
Gr No	Dankjare	FY 2017-18	7-18	FY 2018-19	-19	FY 2017-18	17-18	FY 2018-19	9-19
	1 directions	MYT Order	APR	MYT Order	Proj	MYT Order	APR	MYT Order	Proj
1	Net Employee costs	430.58	497.91	445.71	533.54	6.75	7.57	6.95	8.14
2	Net R&M and A&G expenses	57.30	58.83	60.74	63.40	1.89	1.85	2.85	2.74
3	Depreciation	279.94	324.45	298.55	349.33	1.17	1.29	1.74	1.87
4	Interest charges	358.80	384.75	352.94	385.33	1.13	1.10	1.68	1.65
Ŋ	Interest on Working Capital	37.84	40.46	39.29	43.04	09.0	0.56	0.68	0.65
9	ULDC Charges			1	4	11.76	9.93	11.76	9.93
7	Return on Equity	101.78	101.19	115.64	114.53	,		1	
8	Income tax	1	1	1 2 3 3		AT.		1	
6	Total Revenue Requirement	1,266.24	1,407.59	1,312.88	1,489.16	23.29	22.31	25.64	25.00
10	Less: Non Tariff Income	49.25	20.77	49.25	20.77	5.41	5.41	5.41	5.41
11	Aggregate Revenue Requirement	1,216.99	1,386.82	1,263.63	1,468.40	17.88	16.90	20.23	19.59

SUMMARY OF AGGEGATE REVENUE REQUIREMENT FOR PSTCL (TRANSMISSION +SLDC)

			PSTCL	LCL	
Sr. No.	Particulars	FY 20	FY 2017-18	FY 2018-19	8-19
		MYT Order	APR	MYT Order	Proj
1	Net Employee costs	437.32	505.48	452.66	541.69
2	Net R&M and A&G expenses	59.19	89.09	63.59	66.14
3	Depreciation	281.11	325.74	300.29	351.20
4	Interest charges	359.93	385.85	354.63	386.99
5	Interest on Working Capital	38.44	41.03	39.97	43.69
9	ULDC Charges	11.76	9.93	11.76	9.93
7	Return on Equity	101.78	101.19	115.64	114.53
80	Income tax	ı	8	F.	1
6	Total Revenue Requirement	1,289.53	1,429.90	1,338.53	1,514.16
10	Less: Non Tariff Income	54.66	26.18	54.66	26.18
11	Aggregate Revenue Requirement	1,234.87	1,403.72	1,283.87	1,487.98



FORM -F1

EMPLOYEE EXPENSES FOR TRANSMISSION BUSINESS

EMPLOYEE EXPENSES FOR SLDC

		FY 2016.17	SWITCHEST CORP. CO. M. CO. CO. CO. CO. CO. CO. CO. CO. CO. CO	TV 00177 10		(MS. III CLUIC)
		/1-010711		FY 2017-18		FY 2018-19
PÅ	Particulars	SLDC	H1 - Actual	H2 - Estimated	Total	Caro
			SLDC	SLDC	SLDC	SEDE
Other Employee Cost	se Cost					
Basic pay		2.72	1.34	1.55	2.88	3.05
Over time payment	nent	1	1	1		1
Dearness allowance	ance	3.06	1.63	2.24	3.87	4 79
Other Allownce	e e	0.52	0.26	0.53	0.79	07.0
Bonus		1	1		200	0.70
xpenses for en	Expenses for engagement of manpower	1	3	,		1
Sub-total		6.30	3.23	4.32	7.54	8 12
Aedical Expens	Medical Expenses reimbusrement	10'0	00:00	0.01	0.01	0.01
eave travel ass	Leave travel assistance/concession	0.01	0.01	0.00	0.01	100
Sub Total		0.02	0.01	0.01	0.02	0.02
Slectricity Conc	Electricity Concession to PSTCL					
employees		1	1		1	
Staff Welfare expenses	penses	00.00	00.00	0.00	00'0	000
Sub Total		0.00	00.00	0.00	0.00	00.0
ess: Eastablism	Less: Eastablisment cost recoverable on					2000
excecution of 66 kV works	s kV works	1		1		
ess: Employee	Less: Employee Cost Capitalised			ı		
Net Salary and	Net Salary and Other Employee Cost	6.33	3.24	4.33	F 7.7	0.10
Arrears		1	1);r:;	\$T'0
Prior period adjustments	ustments		,			
Grand total		6.33	3.24	4.33	7.57	8.14
Terminal Ranofite	199					
Ciliminal Delica	titis	0.40				t
Grand total		6.72	3.24	56 P	77 277	0.14



FORM -F4 - REPAIRS AND MAITAINENCE EXPENSES

		FY 2016-17	FY 2017-18
r. No.	Particulars		H1 - Actual
	Control of the Contro	Transmission	Transmission
1	Plant & machinery	23.36	4.14
2	Building including renovation	1.23	0.39
3	Hydraulic works & civil works	0.66	0.04
4	Line cable & network	0.56	0.35
r)	Vehicles	0.49	0.13
9	Furniture & fixtures	0.01	00.00
7	Office equipments	0.03	10.0
8	Operating expenses	1	1
6	Sub-total	26.33	5.05
10	Less: Expenses Capitalised	0.50	1
1.1	Less:R& M recoverable on execution of 66KV works	1	1
1.2	Net R&M Expenses	25.83	5.05
13	R&M for Assets Addition during the year	1	1
14	Add: Prior period expenses/losses	1	1
15	Total R&M Expenses	25.83	r.

(Rs. in Crore)

		FY 2016-17	FY 2017-18
Sr. No.	Particulars	000	H1 - Actual
		2010	SLDC
1	Plant & machinery	0.18	0.24
2	Building including renovation	0.04	0.02
3	Hydraulic works & civil works	ı	-11
4	Line cable & network	1	
5	Vehicles	10.0	00.00
9	Furniture & fixtures	1	1
7	Office equipments	1	1
8	Operating expenses	1	1
6	Sub-total	0.23	0.26
10	Less: Expenses Capitalised	.1	
11	Less:R& M recoverable on execution of 66KV works	1	1
12	Net R&M Expenses	0.23	0.26
13	R&M for Assets Addition during the year	t	1
14	Add: Prior period expenses/losses	1	1)
15	Total R&M Expenses	0.23	0.26

Note - PSTCL has claimed R&M and A&G Expenses combined as per PSERC MYT Regulations, 2014



FORM -F5

ADMINISTRATION AND GENERAL EXPENSES FOR TRANSMISSION BUSINESS

Z		FY 2016-17	(Ks. in Crore) FY 2017-18
or. No.	Particulars		H1 - Actual
F		transmussion	Transmission
- 0	Then, wates & laxes	0.81	0.68
4 0		0.03	0.03
0 4	Telephone, Postage, Telegramme and Telex	0.53	0.22
4 1	Ses	0.34	0.06
0	Audit Fees	0.28	000
9	Consultancy/Technical Charges	0.20	0.00
N	Conveyance & Travel Charges	0000	0000
8	Vehicle Expenses	(60.0)	10.2
6	Fees & Subscription	(H W C)	0.10
1.0	Books & Periodicals	30.0	8.02
1.1	Printing & Stationery	00:0	0.00
12	Advertisement/Publicity expenses	0.50	0.12
13	Electricity/Water Charges	17.0	0.05
14	Expenses on Training	60.0	9.04
15	Hospitality	V.0.0	0.14
16	Conference Expenses	00.0	0.03
17	Contingency Expenses	000	1
18	Outsourcing expenses for engagement of Person	00.7	
20	Contribution payable to NRPC	(200)	-
21.	Miscellenous expenses	(20.0)	011
22	Lease Rentals	(40.0)	67.0
23	Material Related expenses	0.54	0.39
24	Other purchase related expenses	2.11	1
25	Other donations		I
1.9	Other expenses	100	t
26	Sub-total P	02.00	
27	Add: Additional A&G expenses on the asset add	71.77	14.71
28	Add: Audit and Licence and ARR Defermination		1
29	Total expenses	22.00	*** Card 0 0 .
30	Less: A&G expenses recoverable on execution of	78.77	14.71
3.1	Less: A&G Expenses capitalized	07	1
32	Net expenses	0.10	1 1
33	Add :prior period Expenses/Losses	67:/7	14.71
34	Other Debits/Staff Outsourcing Expenses		
35	Total A&G Expenses	96.71	
		Committee of the second	A Charles of the Author of the

Note – PSTCL has claimed R&M and A&G Expenses combined as per PSERC MYT Regulations, 2014

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FORM -F5 (SLDC)

ADMINISTRATION AND GENERAL EXPENSES FOR SLDC

		FY 2016-17	FY 2017-18
Sr. No.	Particulars	SLDC	H1 - Actual SLDC
1	Rent, Rates & Taxes		1
2	Insurance	0.00	00.00
3	Telephone, Postage, Telegramme and Telex	90.0	0.05
4		80.0	10.0
10	Audit Fees	1	ı
9	Consultancy/Technical Charges	1	,
7	Conveyance & Travel Charges	0.04	0,03
83	Vehicle Expenses	0.02	0.01
6	Fees & Subscription	0.02	1
10	Books & Periodicals	-	1
1.1	Printing & Stationery	0.02	0.01
12	Advertisement/Publicity expenses	00.0	1
1.3	Electricity/Water Charges	0.34	0.16
14	Expenses on Training	1	1
15	Hospitality	00.0	0.00
16	Conference Expenses	1	
17	Contingency Expenses		1
1.8	Outsourcing expenses for engagement of Person	1	1
20	Contribution payable to NRPC	0.02	4
2.1	Miscellenous expenses	0.04	0.03
22	Lease Rentals	1	
23	Material Related expenses	1	+
24	Other purchase related expenses	1	1
25	Other donations	1	
19	Other expenses	I.	1
26	Sub-total	69.0	0.29
27	Add: Additional A&G expenses on the asset add	1	1
28	Add: Audit and Licence and ARR Determinatio	1	
29	Total expenses	69.0	0.29
30	Less: A&G expenses recoverable on execution of	1	1
31	Less: A&G Expenses capitalized		-
32	Net expenses	69.0	0.29
33	Add :prior period Expenses/Losses	1	1
34	Other Debits/Staff Outsourcing Expenses	101	
35	Total A&G Expenses	69.0	0.29

Note - PSTCL has claimed R&M and A&G Expenses combined as per PSERC MYT Regulations, 2014

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CAPITAL EXPENDITURE AND CAPITAL WORK IN PROGRESS

						9	(Rs. in Crore)
Sr. No.	Sr. No. Particulars	FY 2016-17	16-17	FY 2017-18	-18	FY 2018-19	3-19
		MYT Order	MYT Order Provisional	MYT Order	APR	MVT Order	Droi
	Transmission					1251	1011
1	Opening CWIP	756.89	756.89	733 33	661 81	00 700	67460
0	Canifal Evnanditura duming the way		1000	0000	10.1.00	020.99	00.700
	Capital Experimente dulug life year	4/5.3/	398.74	328.29	375.50	248.01	250.61
03	Capitalisation during the year	496.93	493.82	234 63	469 72	577 01	17076
4	Closing CWIP	733 33	661.81	876 90	1771	500.00	27.70
	SLDC		70.700	020.00	00.700	202.09	238.43
ı			C. Strate Co. N. C.				
2	Opening CWIP	4.76	4.76	17.66	3 30	1216	1 20
9	Capital Expenditure during the year	16.30	1.46	10.00	10.00	10.00	1.00
7	Capitalisation during the year	3 40	7 83	OH PL	10.00	10.00	10.00
O	41110	24:0	6.00	14.30	12.00	10.01	10.00
0	Closing CW1P	17.66	3.39	13.16	1.39	13.15	1 39
		The state of the s		The state of the s			

FUNDING OF CAPITAL EXPENDITURE

No.	Sr. No. Particulars	FY 2017-18	8	FY 2018-19	118-19
		MYT Order	APR	MYT Order	Proi
	Transmission				
1	Equity	98 49	90.91	77 40	75 10
2	Debt	08 000	201 000	74.40	73.10
8	Total Capital Expenditre	220 20	00.407	1/3.01	1/5.43
	, T. C.	01:010	00.076	748.01	729.61
	SLDC				
4	Equity	3 00	3.00	3 00	2000
22	Debt	2002	7.00	0.00	0.00
9	Total Capital Expenditre	10.00	10.00	00.7	10.00



FORM F9 -

DEPRECIATION FOR TRANSMISSION BUSINESS

The state of the s	The state of the s		and the same of th	A Comment of the Comm	
ir No	Sr No Particulare	FY 2017-18	7-18	FY 2018-19	8-19
		MYT Order	APR	MYT Order	APR
	Transmission				
1	Opening GFA (Net of Land and Land Rights)	5,955.14	5,954.77	6,189.77	6,424.49
2	Assets additions during the Year	234.63	469.72	572.91	479.76
3	Assets replacement/ retirement		1	1	1
4	Closing GFA	6,189.77	6,424.49	6,762.68	6,904.25
S	Depreciation	279.94	324.45	298.55	349.33
9	Depreciation as % of Opening and Closing GFA	4.61%	5.24%		5.24%

FORM F9 (SLDC)-DEPRECIATION FOR SLDC

				_	(Rs. in Crore)
ž	Sr. No. Particulars	FY 2017-18	7-18	FY 2018-19	8-19
		MYT Order	APR	MYT Order	APR
	SLDC				
1	Opening GFA (Net of Land and Land Rights)	18.18	18.66	32.68	30.66
2	Assets additions during the Year	14.50	12.00	10.01	10.00
3	Assets replacement/ retirement	ı	1		1
4	Closing GFA	32.68	30.66	42.69	40.66
rU	Depreciation	1.17	1.29	1.74	1.87
9	Depreciation as % of Opening and Closing GFA	4.60%	5.24%	4	5.24%

Fage



Computation of Weighted Average Rate of Depreciation

	Scheduled	as per MYT Regulations, 2014	0	2 2 4 0 7					18.00%	6.33%			
		Average GRA	88 9000	165 16	2 20	20.00	2 600 4	4,390.47	1.62	3.82	6.78	8.650.09	5,723.21
6-17	ıal	Balance at the end of the vear	2 926 88	175.62	3 80	2 057 10	07.017.0	2,10.70	7.47	3.99	67.9	8,900.31	5,973.43
FY 2016-17	Actual	Additions during the	1	20.91	0.87	70 000	256.46	04.00	(0.40)	0.35	0.02	500.44	500.44
		Balance at the beginning of the year	2,926.88	154.71	2.98	2 834 83	2 462 24	7 83	7.07	3.65	6.77	8,399.87	5,472.99
	,	Karticulars	Land and Land rights	Buildings	Other Civil Works	Plant and Machinery	Line and Cable networks	Vehicles	,	Furniture and fixture	Office Equipment	Total	Total (excluding land and land rights)
	Sr.	No.	1	2	3	4	S	9	1	,	∞		

RETURN ON EQUITY FORM-F16

ir. No.	Sr. No. Particulars	FY 2017-18	-18	FY 2018-19	8-19
		MYT Order	APR	MYT Order	APR
1	Opening Balance-Equity Capital	605.88	605.88	707.37	62 669
2	Equity addition during the year through Internal				
	Accruals	101.49	93.91	77 40	78 18
3	Closing balance-Equity Capital	707.37	62 669	784 77	777 07
5	ROE rate (%)	15.50%	15.50%	15 50%	15.777
4	Return on Equity	101 78	101 19	115.64	114 E2



FORM-F17

DETAILS OF TRANSMISSION LINE LENGTH (ckt-km)

Particulars	As on March 31, 2016	Addition during As on March FY 2016-17	As on March 31, 2017	Addition during FY 2017-18 (H1) Addition during FY 2017-18 (H2) As on Addition As on	Addition during FY 2017-18 (H2)	As on March 31, 2018	Addition As on during FY March 2018-19	As on March 31, 2019
	Actuals	Actuals	Actuals	Actuals	Estimated Estimated Projected Projected	Estimated	Projected	Projected
400 kV	1599.75	0.00	1599.75	00.00	0.00	1599.75	10.00	1609.75
220 kV	6384.31	356.29	6740.60	181.99	1107.90	8030.49	260.00	8290.49
132 kV	3120.22	4.96	3125.18	00.0	4.70	3129.88		3129.88
Total	11104.28	361.25	11465.53	181.99	1112.60	12760.12	270.00	13030.12

FORM-F19

NUMBER OF SUBSTATIONS FOR TRANSMISSION FUNCTION (Nos.)

S. No Particulars	As on March 31, 2016	Addition during FY 2016-17	As on March 31, 2017	Addition during FY 2017-18 (H1)	Addition during FY 2017-18 (H2)	As on March 31, 2018	Addition during FY 2018-19	As on March 31, 2019
	Actuals	Actuals	Actuals	Actuals	Estimated	Estimated	Ex-200000	Projected
1 400 kV	4.00	1.00	5.00	00.00	00.00			N. Section
2 220 kV	89.00	5.00	94.00	2.00	2.00	100	50.5	3 101.00
3 132 kV	73.00	1-4.00	00.69	00.00	-1.00	68.00	197	9 65.00
4 Total	166.00	2.00	168.00	2.00	1.00	1	00.00	

3



FORM-F20

NORMATIVE INTEREST ON WORKING CAPITAL FOR TRANSMISSION BUSINESS

		EV 2017 10	7.10	TAY 20	0 2 0 5
or. No.	Sr. No. Particulars	11 201,	-10	FY 20	FY 2018-19
		MYT Order	APR	MYT Order	ADD
	Transmission			TOTAL CIANT	47
-	Received his convirual and the transfer of the state of t				
	treetivables equivalent to two months of fixed cost.	202.83	231.14	210.61	244 73
2	Maintenance spares @ 15% of O&M expenses	73.18	82 51	70 70	
C		07.07	10.00	12.31	40.70
0	Operation and Maintenance expenses for one month.	40.66	46.40	00.01	107
4	Total Working Capital Requirement	316.67	26.1 04	07 000	49.74
L		0.000	301.02	370.70	384.02
0	Mate of Interest	11.95%	11 21%	11 95%	11 21 %
9	Interest on Working Capital	27.84	70 46		

FORM-F20 (SLDC) NORMATIVE INTEREST ON WORKING CAPITAL FOR SLDC

				The state of the s	
Sr. No.	Sr. No. Particulars	FY 2017-18	7-18	FY 2018-19	8-19
		MYT Order	APR	MYT Order	APR
3100	SLDC				(Y = 1, 7)
П	Receivables equivalent to two months of fixed cost	200	000	100	0
C	Maintenant Const	07:17	70.7	70.0	97.5
7	ivialilleriance spares @ 15% of O&M expenses	1.30	1.41	1 47	1 63
ď	Oneration and Maintenance		1	77.77	7.00
)	Cheragon and Mannierlance expenses for one month.	0.72	0.78	0.82	D 01
4	Total Working Capital Requirement	2,00	200	10:0	0.77
N	Rate of Interest	79 10 17	20.0		2.01
,		11.95%	11.21%	11.95%	11.21%
0	Interest on Working Capital	09.0	95 0		130



FORM-F21

INTEREST AND FINANCE CHARGES FOR TRANSMISSION BUSINESS

Sr. No. Particulars	ticulars	FY 2017-18	-18	FY 2018-19	-19
		MYT Order	APR	MYT Order	APR
Tre	Transmission				
1 Op	Opening Balance	3740.88	4087.49	3665.90	4073.20
2 Lo	Loan addition during FY	229.80	284.58	173.61	175.43
3 Lo	Loan Repayment during FY	304.78	298.87	319.09	374 09
4 Clc	Closing Balance	3665.90	4073.20	3520.42	3924 54
5 Av	Average Loan	3703.39	4080.34	3593.16	3998.87
6 Rai	Rate of Interest	11.10%	10.49%	11 24%	10 58%
7 Ne	Net Interest	411.08	428.09	403.87	423.10
8 Les	Less: Interest Capitalised	53.50	53.50	52.14	47.93
9 Mi	Miscellenous Interest and Finance Charges	1.22	0.16	1.21	0.16
10 Gu	Guarantee Charges	00:00	10.00	00:00	10.00
11 Int	Interest & Finance Charges	358.80	384.75	352.94	385 33

FORM-F21 (SLDC)

INTEREST AND FINANCE CHARGES FOR SLDC

		FY 2017-18	.18	FV 2018 10	10
L' NO.	Sr. No. Farneulars			OTOW T	7
1080		MYT Order	APR	MYT Order	APR
	SLDC				
1	Opening Balance	96.9	6.70	11.85	11 50
2	Loan addition during FY	7.00	7.00		7.00
3	Loan Repayment during FY	2.11	211		17.6
4	Closing Balance	11.85	11 59		15.00
5	Average Loan	9.41	915	14.00	13.74
9	Rate of Interest	12.05%	12.05%		12.04%
7	Net Interest	1.13	1.10		1 61

3



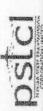
PSLCI F21 -INTEREST AND FINANCE CHARGES (DETAILED)

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				FY 20	FY 2017-18		
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the	Repayment during the	Closing	Amount of interest
	Existing Loans						
	LIC	33.97	8 65%	00.0	20 00	4 10 10 10	1
	REC	2927.53	10501	106.03	00000	11.14	0.7
	SBOP	00 88	70.00	00.00	10.002	2886.15	305.72
1	NABARD	001	10.22 /0	00.00	15.77	28.23	3.69
	Can Can	197.58	10.25%	32.46	00.00	230.04	21.92
	Coc	00.00		00.00	00.00	00.00	0.00
1	FSFCL	503.16	10.69%	00.00	00.00	503.16	52 77
1	GPF	131.74	7.95%	000	20 10	100 70	
	BOI	188 46	7002 11	000	0000	27.501	2.00
	PEC	200	11.70%	00.00	00.00	188.46	22.05
I	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CD.10	10.25%	00.00	00.00	61.05	6.26
T	DOI-New Loan	0	11.34%	55.19	0	55 19	6.7
T	Sub-total	4,087.49	10.49%	284.58	798.87	4 073 20	430.00
	Less: Interest Capitalised					07:010:00	420.02
	1,-	Character Character					53.50
Γ	Customers Of the control of the cont	ice Citations					91.0
T	Guarantee Charges						10.00
7	Grand Lotal						384 75

FY 2018-19

				FY 20	FY 2018-19		
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the	Repayment during the	Closing	Amount of interest
	Existing Loans				759		
1.	LIC	11.14	6.46%	000	N 1 1 1 1	000	
2	REC	2886.15	70 KOP	102.00	*1.1.1	0.00	0.36
(1)	SBOP	28.73	44 000%	00.00	265.00	2/44.15	298.41
4	NABARD	200000	11.02.0	0.00	16.00	12.23	2.23
n	OBC	230.04	10.25 %	20.00	10.00	270.04	25.63
,		00.00	%00.0	00.0	0.00	00.0	000
9	PSPCL	503.16	10.69%	0.00	000	EO3 16	70.00
7	GPF	109 78	2018	000	0 0 0	07.000	33.77
8	BOI		0.10%	0.00	41.95	87.83	8.00
0	700	188.46	11.70%	0	0	188.46	22.05
		61.05	10.25%	0	0	61 05	968
10	BOI-New Loan	55,19	11.34%	2.43	C	0 0 0	04:0
1.1	Sub-total	4 073 20	10 E80/	CI IN MAN AND	0 00 200	20.76	0.40
12	Less: Interest Capitalicad		20000	110.40	524.09	3,924.54	423.10
13	Missellenous Interest and Electrical						47.93
1.4	Character Characterist and Final	ce Charges					0.16
2	Cuanalities Charges						10.00
	Grand Lotal		The second second second				385 33



TRANSMISSION AVAILABILITY FORM-F22

Z	S No Particulare	FY 2017-18
	* armeniaro	Actual
1	April	%36.66
2	May	%96.66
3	June	%86.93%
4	July	85.92%
5	August	%86.993%
9	September	99.92%
13	Average	% 76 6b

TRANSMISSION LOSSES FORM-F23

		FY 2017-18		FY 2	FY 2018-19
Particulars	MYT Order	Actual (H1)	APR	MYT Order	Revised
Transmission Loss	2.50%	2.93%	3.00%	2.40%	2 80%

ULDC CHARGES

Sr. No.	Sr. No. Particulars	FY 2017-18	-18	FY 2018-19	3-19
		MYT Order	APR	MYT Order	APR
1	ULDC Charges - SLDC Own Share	9.03	2,68	9.03	07 1
2	III DC Charges - RRMB Charg	7 00	0 10	20.7	0.00
	CED CAMBES - DOIND SIMIE	1.62	1.58	1.82	1.58
3	ULDC Charges - Central Sector Share	1	0.33		0.33
4	NRLDC Fees and Charges	0.01	000	1000	00.0
		0.71	5.33	0.91	2.33
5	Lotal	11.76	9.93	92.11	9.03



TRANSMISSION SYSTEM CAPACITY FOR FY 2018-19 (MW)

S. No.	Source	Approved Capacity (MW) (Gross)	Auxiliary Consumption and Transformation Losses (%)	Approved Injection (MW) (Net)	PSPCL's Firm Share	PSPCL's Firm Share (MW)
Н	PSPCL Own THERMAL					
1.1	GNDTP, Bathinda	460	11%	409 40	100%	400 40
1.2	GGSSTP, Ropar	1260	8 5%	1152 90	100%	1150.00
1.3	GHTP, Lehra Mohabbat	920	8.5%	841.80	100%	841 80
1.4	Total	2640		2404 10	0/004	2404.40
2	PSPCL Own HYDRO			WINITOT Y		01.2027
2.1	Mukerian Hydel Project Stage-II 2*9	18	0.13%	17.98	100%	17 98
2.2	Shannan	110	%29.0	109.26	100%	100.75
2.3	UBDC	91.35	0.87%	95 06	100%	90.56
	RSD Net Share Less 20%				200	00:00
2.4	IP share from RSD	452.4	0.20%	451.50	100%	451.50
2.5	ASHP	134	%98.0	132.85	100%	132.85
2.6	MHP- Stage-1	207	0.13%	206.73	100%	206 73
2.7	Micro Hydel	5.6	0.00%	5.60	100%	5.60
2.8	Total	1018.35		1014.47		1014.47
3	PSPCL share from BBMB	1161.28	0.50%	1155.47		1155.47
4	Independent Power Producers (IPPs) within Pu	within Punjab (Private Sector Projects)	ector Projects)			
4.1	Nabha TPP (NPL)	1400	5.71%	1320.06	100%	1320.06
4.2	Talwandi Sabo TPP (TSPL)	1980	7.00%	1841.40	100%	1841.40
4.3	GVK	540	%00.6	491.40	100%	491 40
4.4	NRSE Private Projects	1306.86	10.27%	1172.65	100%	1172 65
4.5	Total	5226.86		4825.51		1875 51
10	PSPCL Share from Central Sector					TOTOTO
5.1	Farakka STPS	1600	6.47%	1496.48	1.39%	20.80
5.2	Kahalgaon-I	840	%00.6	764 4n	%209	16.40

			ACCOUNTS AND THE COLUMN			
S. No.	Source	Approved Capacity (MW) (Gross)	Auxiliary Consumption and Transformation Losses (%)	Approved Injection (MW) (Net)	PSPCL's Firm Share	PSPCL's Firm Share (MW)
5.0	lala	1020	1.00%	1009.80	2.94%	29.69
D.4	Kahalgaon-II STPS	1500	5.75%	1413.75	8.02%	113.38
0.0	Singrauli SIPS	. 2000	6.88%	1862.40	10.00%	186.24
0.0	Nihand S11'S-1	1000	7.75%	922.50	11.00%	101.48
) r	Minana S.I.'S Stage-II	1000	5.75%	942.50	10.20%	96.14
0 0	Ulchalar-1	420	%00.6	382,20	8.57%	32.75
2.0	Unchanar-11	420	%00.6	382.20	14.28%	54.58
0.10	Onchanar-III	210	%00.6	191.10	8.10%	15.48
0.11	Anta GPS	419	2.50%	408.53	11.69%	47.76
27.5	Auraiya GPS	693	2.50%	646.43	12.52%	80.93
5.13	Dadri NCGPS	830	2.50%	809.25	15.90%	128,67
7.14	NAPS	440	10.50%	393.80	11.59%	45.64
5.15	KAPP B	440	10.50%	393.80	22.73%	89.51
5.16	KAPPC	440	10.50%	393.80	10.41%	40.99
5.17	Bairasiul HPS	180	1.00%	178.20	46.50%	82.86
2.18	Salal HPS	069	1.00%	683.10	26.60%	181.70
0.19 0.19	Kampur HEP	412.02	1.20%	407.08	5.62%	22.88
0.20	Taling Juakri HPS	1500	1.20%	1482.00	10.13%	150.13
7.41	Jenn Stage-1	1000	1.20%	988.00	7.70%	76.08
27.72	Luinasti HEF	390	1.20%	385.32	8.28%	31.90
D.60	Chanakpur FIPS	94	0.70%	93.34	17.93%	16.74
7.7. F OF	Chamera HrS-1	540	1.20%	533.52	10.20%	54.42
D.23	Farbatt-III HEP	520	1.20%	513.76	7.86%	40.38
0.70	Ohaunganga HEP	280	1.20%	276.64	10.00%	27.66
77.0	Citamera H.PII	300	0.70%	297.90	10.00%	29.79
07.70	Sewa-II HEP (3 Units)	120	1.00%	118.80	8.33%	9.90

STREET, SQUARE, SQUARE			CENTRAL DATE OF THE			
S. No.	Source	Approved Capacity (MW) (Gross)	Auxiliary Consumption and Transformation Losses (%)	Approved Injection (MW) (Net)	PSPCL's Firm Share (%)	PSPCL's Firm Share (MW)
5.29	Uri-I HPS	480	1.20%	474.24	13.75%	65.21
5.30	Uri-II HPS	240	1.20%	237.12	8.13%	19.28
5.31	Indira Gandhi STPS Jhajjar	1500	5.25%	1421.25	0.00%	0.00
5.32	Koteshwar HEP	400	1.20%	395.20	6.36%	25.13
5.33	Rihand-III	1000	5.75%	942.50	8.27%	77.92
5.34	Koldam HEP	800	1.00%	792.00	7.73%	61.22
5.35	Dadri-II	086	5.25%	928.55	%00.0	0.00
5.36	Chamera-III	231	0.70%	229.38	7.86%	18.02
5.37	Durgapur TPS (DVC)	1000	%00.9	940.00	20.00%	188.00
5.38	Raghunathpura RTPS (DVC)	1200	5.25%	1137.00	25.00%	284.25
5.39	Pragati-III(Bawana)PPCL	1371	3.00%	1329.87	10.00%	132.99
5.40	MALANA-2 (PTC)	100	1.20%	98.80	88.00%	86.94
5.41	SASAN Ultra Mega Project	3960	%00.9	3722.40	15.00%	558.36
5.42	MUNDRA Ultra mega project	4000	2.00%	3800.00	12.50%	475.00
5.43	Total	36530.02		34818.90		3847.20
9	NEW PROJECTS					
6.1	Bokaro TPS -A (DVC)	200	7.50%	462.50	40.00%	185.00
6.2	Unchahar-IV	200	5.75%	471.25	0.00%	0.00
6.3	Meja	099	7.50%	610.50	2.50%	15.26
6.4	Kishan Ganga HEP	330	0.50%	328.35	10.00%	32.84
6.5	Tanda	1320	7.50%	1221.00	10.00%	122.10
9.9	Parbati-II HEP	800	0.50%	796.00	10.00%	79.60
6.7	Karcham Wangtoo HEP (PTC)	1000	1.20%	988.00	20.00%	197.60
8.9	Total	5110.00		4877.60		632.40
7	Grand Total (Transmission Capacity)	51686.51		49096.05		13879.15
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