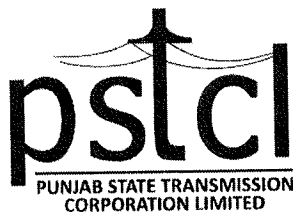


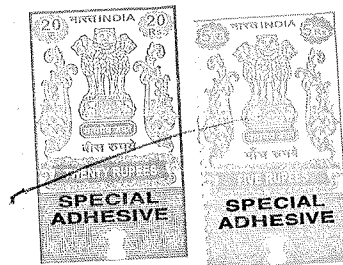
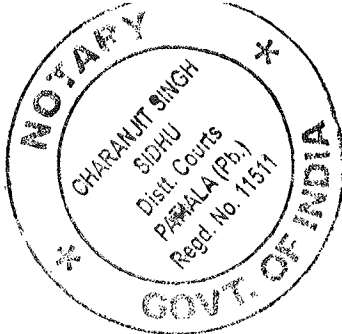
**PETITION FOR TRUE UP FOR FY 2014-  
15, REVIEW OF FY 2016-17 AND MULTI  
YEAR TARIFF  
FOR CONTROL PERIOD FROM  
FY 2017-18 TO FY 2019-20**

Submitted by



01

This Documents has been registered  
at Serial No. 183  
this day of 29 NOV 2016



**BEFORE THE PUNJAB STATE ELECTRICITY REGULATORY COMMISSION,  
CHANDIGARH**

PETITION NO.....

Case No.....

**IN THE MATTER OF:** Approval of the Multi Year Tariff Petition for the control period FY 2017-18 to FY 2019-20 under Section 62, 64 and 86 and other applicable provisions of the Electricity Act, 2003 read with Regulation-60 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, Vinod Bansal, son of late Shri Kedar Nath Bansal aged 52 residing at Patiala do hereby solemnly affirms 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 8 of the petition are true to my knowledge and the statement made in Sections 1 to 8 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 Contents of this affidavit document have been read over to the deponent He/She has accepted the true & correct.

  
DEPONENT  
(Vinod Bansal)

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 28.11.2016.

Attested As Identified  
NOTARY (Govt. of India)  
Distt. PATIALA (Pb.)

  
DEPONENT  
(Vinod Bansal)

29 NOV 2016

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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
BBMB	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	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 the approval of True-up of ARR for FY 2014-15, Review of ARR for FY 2016-17 under Section 62, 64 and 86 of the Electricity Act, 2003 read with the Regulation 13 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (including its amendments) and approval of ARR forecast and determination of Tariff for the Control Period from FY 2017-18 to FY 2019-20 under Section 62 of the Electricity Act, 2003 read with Regulation 60 of PSERC (Terms and Conditions of Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014

AND

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

The Petitioner respectfully submits as under: -

## **1 INTRODUCTION**

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### **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).



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## 1.2 Submission of True-up and Review Petition

In accordance with Regulation 13 of the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005, and its subsequent amendments thereof (hereinafter referred as PSERC Tariff Regulations, 2005), PSTCL is filing for True-up of Aggregate Revenue Requirement (ARR) for FY 2014-15 and Review of ARR for FY 2016-17 in the present Petition.

The Petitioner has filed Petition for True-up for FY 2014-15 based on Audited Accounts and Review of ARR for FY 2016-17 based on Actuals for H1 and estimated values for H2 for FY 2016-17.

The Petitioner submits that it had filed an Appeal No. 262 of 2014 before Hon'ble APTEL against the Tariff Order for FY 2014-15 dated August 22, 2014 with regard to various issues on O&M expenses, Tax on income, Progressive funding, additional employee cost on account of new installations, depreciation on additional installations, interest on loan, carrying cost, etc. The Hon'ble APTEL vide Judgment dated January 14, 2016 has upheld the decision of the Hon'ble Commission. PSTCL has filed a Second Appeal before Hon'ble Supreme Court in Civil Appeal No. 3202 of 2016, which is pending for disposal.

Further, the Petitioner has filed Appeal No. 152 of 2015 before Hon'ble APTEL against the Tariff Order for FY 2015-16 dated May 5, 2015 with regard to various issues on applicability of Tariff Regulations, employee cost, additional employee cost on new installations, outstanding loan, etc. The said Appeal is pending before Hon'ble APTEL.

The Petitioner further submits that it has filed a Review Petition on Tariff Order for FY 2016-17 dated July 27, 2016 before the Hon'ble Commission with regard to various issues on Employee cost, A&G Expenses, R&M Expenses, Depreciation, Investment Plan, Return on Equity, Treatment of Income Tax actually paid, Adjustment of mismatch of revenue and cost related to previous financial year, etc. The said Review Petition is pending before Hon'ble Commission for disposal.

The Petitioner is submitting the True-up for FY 2014-15 and Review of ARR for FY 2016-17 without prejudice to contentions made in the pending Appeals before higher courts, pending Review Petition before Hon'ble Commission and the outcome of the Judgments in the above said Appeals/Review Petition.

### 1.3 Submission of Multi Year Tariff Petition

The Hon'ble Commission 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 (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 the three-year Multi Year Tariff ("MYT") Control Period shall be from FY 2017-18 to FY 2019-20. Regulation 60 of PSERC MYT Regulations, 2014 specifies as under:

#### **"60. TARIFF FILING**

*60.1 The Applicant shall file a petition for approval of ARR & Tariff, for each year of the control period consistent with the business plan and the capital investment plan approved by the Commission. The ARR & tariff filing shall be filed on or before 30<sup>th</sup> November of the year preceding the year of start of the control period. The application shall contain all the components of the ARR and tariff as specified in these regulations. The performae in which the generating company or the licensee or SLDC, as the case may be, has to file the ARR and Tariff Petition will be separately specified by the Commission:*

... ..

*60.3 The application shall also contain the revenue gap for various years of the control period and a tariff proposal for meeting the revenue gap for each year. In the absence of the*

*at*

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*tariff proposal, the petition shall be considered as incomplete and shall be liable for rejection." (emphasis added)*

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. The said Petitions are pending before the Hon'ble Commission for approval.

In line with the above Petitions for approval of Capital Investment Plan and Business Plan, PSTCL is filing the present Petition for determination of ARR and Tariff for each year of the Control Period from FY 2017-18 to FY 2019-20.

#### **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 2014-15:** In this Chapter, the Petitioner has submitted the ARR based on the actual expenses and income as per the audited annual accounts for FY 2014-15. In this Chapter, the Petitioner has also presented its submissions regarding certain critical aspects influencing the true-up of expenses for FY 2014-15.

**Chapter 3- True-up for FY 2015-16:** In this Chapter, the Petitioner has made its submission regarding the True-up for FY 2015-16 and also submitted the provisional figures of Capital Expenditure, Gross Fixed Assets, Loan Balances, etc. for computing expenses for subsequent years.

**Chapter 4- Review of ARR for FY 2016-17:** In this Chapter, the Petitioner has submitted the revised estimates for FY 2016-17 for various heads of expenditure based on the half-year actual data and the projections for second half of FY 2016-17.

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**Chapter 5 - ARR for Control Period from FY 2017-18 to FY 2019-20:** In this Chapter, the Petitioner has submitted the ARR for Control Period from FY 2017-18 to FY 2019-20 in line with PSERC Tariff Regulations, 2014. In this Chapter, the Petitioner has also presented its submissions regarding certain critical aspects influencing the determination of ARR for the Control Period.

**Chapter 6 - Proposed Tariff for the Control Period:** In this Chapter, the Petitioner has submitted the proposed Tariff for Transmission Business and SLDC considering the projected ARR for the Control Period and past revenue gaps.

**Chapter 7 - Prayers:** This Chapter details the prayers made by PSTCL in the present Petition.

**Chapter 8 - Directives:** This Chapter includes the status and compliance of directives issues by the Hon'ble Commission in the past Tariff Orders.

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## 2 TRUE UP OF ARR FOR FY 2014-15

### 2.1 Background

In this Chapter, the Petitioner submits the True up of FY 2014-15 for STU and SLDC functions of PSTCL. The Hon'ble Commission in its Tariff Order for PSTCL for FY 2014-15 dated 22 August, 2014, approved the Aggregate Revenue Requirement (ARR) of Rs. 895.66 Crore after adjustment of past Revenue Gaps and its carrying cost. Further, Hon'ble Commission in Tariff Order for FY 2015-16 dated 5 May, 2015 approved a revised Net ARR of Rs. 907.80 Crore and approved standalone Revenue Gap of Rs. 12.14 Crore for FY 2014-15.

The Petitioner submits the True up for FY 2014-15 on the basis of audited accounts as required under the provisions of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 and subsequent amendments. In the present Petition, the Petitioner has submitted the actual numbers based on audited accounts. The Petitioner also submits its rationale for the key heads of expenditure, which critically impact its overall financial health. This Chapter further describes the various components of ARR as well as the performance of PSTCL in FY 2014-15 for transmission and SLDC business.

### 2.2 Description of Transmission System

Details of the transmission system of PSTCL as on 01<sup>st</sup> April 2014 and 31<sup>st</sup> March 2015 are tabulated below:

**Table 1: Transmission System of PSTCL during FY 2014-15**

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2014)	Addition during the year	Closing (As on 31 <sup>st</sup> March 2015)
<b>Transmission Lines (Circuit kms)</b>				
1	400 kV	367.75	1232.00	1599.75
2	220 kV	5520.77	175.92	5696.69
3	132 kV	3112.20	2.46	3114.66
	<b>Total</b>	<b>9000.72</b>	<b>1,410.38</b>	<b>10,411.10</b>
<b>Substations (Nos.)</b>				
1	400 kV	2	2	4

*On*

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2014)	Addition during the year	Closing (As on 31 <sup>st</sup> March 2015)
2	220 kV	83	5	88
3	132 kV	76	-2	74
	<b>Total</b>	<b>161</b>	<b>5</b>	<b>166</b>
<b>Transmission Substation Bays (Nos.)</b>				
1	400 kV	6	24	30
2	220 kV	469	46	515
3	132 kV	514	4	518
4	66 kV	0	0	0
	<b>Total</b>	<b>989</b>	<b>74</b>	<b>1063</b>
<b>Substation Capacity (MVA)</b>				
1	Substation Capacity	27113	2868	29981

### 2.3 Transmission System Capacity

The Petitioner submits the gross and net transmission capacities of the State, as provided by PSPCL, considering the State and private generating capacities and Central sector allocations of 10287.68 MW as on March 31, 2015 as shown in the following Table.

**Table 2: Generation Capacity in MW as on March 31, 2015**

Name of Project	Gross Installed Capacity / Share (MW)	Net Installed Capacity / Net Share (MW)
GNDTP, Bathinda	460	409.40
GGSTP, Ropar	1,260	1,152.90
GHTP, Lehra Mohabbat (Unit # 1 & 2) (Stage-I)	420	384.30
GHTP, Lehra Mohabbat (Unit # 3 & 4) (Stage-II)	500	457.50
<b>Total Thermal - PSPCL</b>	<b>2640</b>	<b>2404.10</b>
Shanan	110	109.26
UBDC	91	90.56
RSD (Net Share of Punjab)	452.40	451.50
ASHP	134	132.85
MHP	207	206.73

*OW*



Name of Project	Gross Installed Capacity / Share (MW)	Net Installed Capacity / Net Share (MW)
Micro Hydel	5.60	5.60
<b>Total Hydro- PSPCL</b>	<b>1000.35</b>	<b>996.49</b>
<b>PSPCL Share of BBMB</b>	<b>1161.28</b>	<b>1120.81</b>
<b>Central Sector</b>	<b>3503.23</b>	<b>3398.13</b>
<b>IPPs within State of Punjab</b>	<b>2544</b>	<b>2368.15</b>
<b>Grand Total</b>	<b>10848.86</b>	<b>10287.68</b>

## 2.4 Transmission System Availability

The Petitioner submits that the overall Transmission System Availability for FY 2014-15, as certified by Chief Engineer SLDC, was 99.78%. The following table provides the transmission system availability for each month of FY 2014-15:

**Table 3: Transmission System Availability for FY 2014-15**

Sr. No.	Month	Transmission System Availability (%)
1	Apr-14	99.85%
2	May-14	99.84%
3	Jun-14	99.78%
4	Jul-14	99.09%
5	Aug-14	99.80%
6	Sep-14	99.86%
7	Oct-14	99.95%
8	Nov-14	99.85%
9	Dec-14	99.83%
10	Jan-15	99.91%
11	Feb-15	99.85%
12	Mar-15	99.79%
13	<b>Grand Total</b>	<b>99.78%</b>

The incentive on account of achievement of Transmission System Availability is discussed subsequently in this Chapter.

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## 2.5 Transmission Losses

The Hon'ble Commission fixed the transmission loss level at 2.50% for FY 2014-15 at the same level as approved for FY 2013-14. The Hon'ble Commission assured that it would revisit the issue of transmission loss for FY 2014-15 after the boundary meters are provided and energy audit is conducted.

At present, the data has been collected for calculation of transmission losses of August, 2016 through remote connectivity, CMRI & manual reports. The tentative losses are 2.76%, which are being re-verified and further certain anomalies are being resolved which may take another few weeks. It is expected that data from all the boundary meters shall be available through remote connectivity in the CEC after rectifying all the field related problems by November, 2016.

As the transmission loss figures are not available for FY 2014-15, the Petitioner prays to the Hon'ble Commission to approve the transmission losses as requested in Tariff Petition for FY 2014-15.

## 2.6 Employee Costs

In the ARR Petition for FY 2014-15, PSTCL claimed Employee Costs of Rs. 453.54 Crore for Transmission business and Rs. 8.52 Crore for SLDC for FY 2014-15. As against this, the Hon'ble Commission had approved employee costs of Rs. 298.66 crore for Transmission and Rs. 6.80 crore for SLDC in the Tariff Order for FY 2014-15.

In the Review of ARR for FY 2014-15, the Petitioner submitted revised estimates for employee cost as Rs. 396.65 Crore for Transmission business and Rs. 3.81 Crore for SLDC business. As against this, the Hon'ble Commission has approved the employee costs of Rs. 322.31 Crore for Transmission and Rs. 3.73 Crore for SLDC for FY 2014-15.

### **Actual Employee Costs (Audited)**

Since the Audited Accounts for FY 2014-15 are finalised, the Petitioner submits the same to the Hon'ble Commission for consideration. The details of Employee Costs as per Audited Accounts for FY 2014-15 are shown in the following table:

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**Table 4: Employee Costs for FY 2014-15 as per Audited Accounts (Rs. Crore)**

Sr. No	Particulars	Transmission	SLDC	PSTCL
1	Salaries	84.39	2.54	86.93
2	Interim relief/ Wage Revision	1.56	0.03	1.59
3	Overtime	5.27	0.00	5.27
4	Dearness Allowance	77.57	2.44	80.01
5	Other Allowances	17.41	0.53	17.94
	<b>Total (A)</b>	<b>186.21</b>	<b>5.54</b>	<b>191.75</b>
6	Staff Welfare Expenses			
I	Electricity Concession to Employees	1.94	0.00	1.94
II	Staff Welfare Expenses	0.24	0.00	0.24
	<b>Total (B)</b>	<b>2.18</b>	<b>0.00</b>	<b>2.18</b>
7	Medical Reimbursement	0.86	0.05	0.91
8	LTC Expenses	0.17	0.04	0.20
	<b>Total (C)</b>	<b>1.03</b>	<b>0.09</b>	<b>1.11</b>
9	<b>Total(A+B+C)</b>	<b>189.41</b>	<b>5.63</b>	<b>195.04</b>
10	Less :			
I	Establishment cost recoverable on execution of 66 kV works	0.11	0.00	0.11
II	Employee costs capitalized	44.90	0.00	44.90
	<b>Total (D)</b>	<b>45.01</b>	<b>0.00</b>	<b>45.01</b>
11	<b>Net Total (E=A+B+C-D)</b>	<b>144.40</b>	<b>5.63</b>	<b>150.03</b>
12	<b>Terminal benefits</b>			
I	Share of Pension and Gratuity	175.99	0.00	175.99
II	Share of Leave Encashment	16.68	0.00	16.68
III	Medical reimbursement	5.86	0.00	5.86
IV	LTC and Pension	2.12	0.00	2.12
V	Solatium and Momento	0.27	0.01	0.28
VI	Contribution towards NPS, PF, etc.	3.20	0.09	3.29
VII	Terminal Benefits of PSTCL employees	1.37	0.00	1.37
13	<b>Total (F)</b>	<b>205.50</b>	<b>0.10</b>	<b>205.60</b>
14	<b>Grand Total (E+F)</b>	<b>349.90</b>	<b>5.72</b>	<b>355.62</b>

The details of head-wise actual Employee cost for Transmission and SLDC have been provided in Format F1 and F1s respectively.

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### Computation of Normative Employee Cost

Regulation 28 (3) of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (herein after referred as "Tariff Regulations, 2005") (as amended) specifies the determination of Employee costs as under:

*"28. Operation and Maintenance Expenses*

.....

(3) *The employee cost for a distribution licensee (s) shall be determined as follows:*

(a) *The employee cost as claimed by the distribution licensee (s) shall be considered in two parts*

(i) *Terminal benefits such as Death-cum-Retirement Gratuity, Pension, Commuted Pension, Leave Encashment, LTC, Medical reimbursement including fixed medical allowance in respect of pensioners and share of BBMB employee expenses and*

(ii) *all other expenses accounted for under different sub-heads of employee cost taken together. The cost component of terminal benefits and BBMB expenses shall be allowed on actual basis and increase in all other expenses under different sub-heads shall be limited to the increase in Wholesale Price Index (all commodities) as per clause (2) (b) above.*

(b) *Exceptional increase in employee cost on account of pay revision etc. shall be considered separately by the Commission.*

(c) *The additional employee cost in case of New installations/Network for the year of installation shall be considered separately by the Commission on case to case basis keeping in view the principles and methodologies enunciated in these regulations.*

(4) (a) *The O&M expenses (except employee cost) for transmission licensee (s) shall be allowed as per the provisions given in clause (2) above. The employee cost shall however, be determined keeping in view the provisions contained in clause (3)." (emphasis added)*

In view of the above Regulations, for computation of normative Employee Costs, the Petitioner has considered the Terminal benefits of Rs. 205.60 Crore for FY 2014-15 based on audited accounts. Also, impact of pay revision/arrears of Rs. 1.59 Crore based on audited account of FY 2014-15 has been considered separately.

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The Hon'ble Commission in its Order dated July 27, 2016 has approved the employee costs for FY 2012-13 and FY 2013-14 on actual basis. However, in the same Order, the Hon'ble Commission has determined the normative employee costs for the respective years. The Petitioner respectfully submits that while determining the normative employee costs, a methodology different than that specified in Tariff Regulations, 2005 has been adopted. The normative Employee Cost has not been considered based on the installation and assets operated and maintained by the Petitioner.

It may be noted that the Hon'ble Commission, while computing the normative expenses, has considered the other employee cost of Rs. 92.20 Crore allowed for FY 2011-12 as base expenses, in line with PSERC(Terms and Conditions for Determination of Tariff), Second Amendment, Regulations, 2012. However, these Regulations do not mention whether the base expenses to be considered should be gross or net. The Hon'ble Commission may appreciate that the normative Employee expenses to be permitted should be at gross level only, as the expense capitalisation depends on capital projects undertaken and staff or employees of PSTCL dedicated to such project execution.

For example, in case the normative Employee expenses are allowed on a net of capitalization taking a base year but actual capitalisation of that respective year is different from that of base year, then the normative allowance would be lower/higher because these may not be exactly same as of the current year. In some years the capitalization may be very high due to several capital projects being taken up by the licensee whereas in some years it may be negligible due to very less capital projects taken up. Expense capitalization, therefore, is a factor which varies unpredictably and normative Employee expense should be provided at gross level only. The Petitioner respectfully submits that the actual expense capitalized can only be considered in ARR.

In view of the above, the Petitioner has considered Other Employee Cost of Rs. 143.64 Crore for FY 2011-12 for Transmission Business as base expenses after adding capitalised employee costs of Rs. 51.44 Crore. Since, no employee cost has been capitalised for SLDC for FY 2011-12, the Petitioner has considered the Other employee

cost of Rs. 5.72 Crore for FY 2011-12 for SLDC as base expenses. The Gross Other employee costs for FY 2014-15 have been computed as shown in the following table:

**Table 5: Computation of Other Employee Costs for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Other Employee Cost allowed for FY 2011-12	92.20	5.72	97.92
2	Add: Employee Costs capitalised in FY 2011-12	51.44	0.00	51.44
3	Gross Other Employee Costs allowed for FY 2011-12	143.64	5.72	149.36
4	WPI Increase of FY 2014-15 over FY 2011-12	116.05%	116.05%	116.05%
5	Gross Other Employee Cost for FY 2014-15	166.69	6.64	173.33

Further, the Petitioner submits that it is also entitled for the additional employee cost pertaining to new installations/network for the asset added during the year in accordance with Regulation 28 (3) (c) which allows additional employee cost in case of new installations on case to case basis keeping in view the principles and methodologies enunciated in these Regulations. In the absence of any specific methodology in the Regulation, the Petitioner has computed the additional employee costs on account of addition of new installations with respect to FY 2011-12 in accordance with the methodology adopted for A&G and R&M Expenses in Tariff Order for FY 2016-17. The additional gross employee costs on account of addition of new installation/network are computed in the following table:

**Table 6: Computation of Additional employee costs for network installation for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	GFA as on 1 April, 2012	5,265.17	5.50	5,270.67
2	Gross Other employee cost allowed in FY 2011-12	143.64	5.72	149.36
3	% of Employee Expenses	3%	104%	3%
4	GFA as on 1 April, 2014	6591.67	5.78	6597.45

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Sr. No.	Particulars	Transmission	SLDC	PSTCL
5	Addition of GFA from 1 April, 2012 to 1 April, 2014	1,326.50	0.28	1,326.78
6	Addition of GFA during FY 2014-15	1483.85	2.54	1486.39
7	Additional Employee Cost for addition of Opening GFA from 1 April, 2012 to 31 March, 2014	36.19	0.29	36.48
8	Additional Employee Cost for network Installation during the year	20.24	1.32	21.56
9	Total	56.43	1.61	58.04

Accordingly, the normative employee costs for FY 2014-15 are computed as shown in the following table:

**Table 7: Normative Employee Cost for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Terminal Benefits	205.50	0.10	205.60
2	Interim relief/ Wage Revision	1.56	0.03	1.59
3	Gross Other Employee Cost	166.69	6.64	173.33
4	Additional Employee Cost for network Installation	56.43	1.61	58.04
5	Less: Employee expenses capitalized	44.90	-	44.90
6	Less: Establishment cost recovered on execution of 66 kV works	0.11	-	0.11
7	<b>Total Employee Cost</b>	<b>385.17</b>	<b>8.37</b>	<b>393.54</b>

As regards the allowable employee costs, 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 of the said Appeal, held as under:

*"This Appellate Tribunal while dealing with the issue of Wholesale Price Index, framed the said issue and discussed the same at length and then decided the said issue. This Appellate Tribunal in its previous judgment also considered the Regulations and the Wholesale Price Index and held that actual costs need to be considered.*

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*We after considering the previous judgment and discussion on the said issue at length in our judgment dated 11.09.2014 in the said Appeal No. 174 of 2012, after referring to the decision of the State Commission on the Wholesale Price Index, directed that **the actual amount spent, subject to prudence check, is to be considered.** We do not find any error apparent on the face of our judgment dated 11.09.2014 warranting us to review our aforesaid judgment. For a moment, if we accept the contention of the Review Petitioner/State Commission that the finding in para no. 40.1. of our judgment dated 11.09.2014 is to be deleted, then it would result in the Issue No. (ii) framed being rendered without any finding and would also result in the previous decisions also being overruled/reversed. While disposing of the Issue Nos. (i) & (ii) in our judgment in Appeal No. 174 of 2012, we expressed our view in para nos. 17 & 18 of our judgment which we have already quoted above." (Emphasis added)*

Hon'ble Commission vide its Order dated October 14, 2015 decided as under:

*"However the judgments of Hon'ble APTEL, in so far as **Employee Cost for FY 2012-13, 2013-14, 2014-15 etc.** of PSPCL and PSTCL is concerned, shall be implemented during true-up exercise of ARRs for these years after applying prudence check."*

In view of the above, the Petitioner claims the actual employee costs for FY 2014-15 for True-up purpose as shown in the following Table:

**Table 8: Employee Costs for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Terminal Benefits	205.50	0.10	205.60
2	Impact of wage revision/ arrears	1.56	0.03	1.59
3	Other Employee Costs	142.84	5.59	148.43
4	Total Employee Costs	<b>349.90</b>	<b>5.72</b>	<b>355.62</b>

The actual Employee costs are lower than the normative expenses. The Petitioner prays the Hon'ble Commission to approve the actual Employee costs of Rs. 349.90 Crore for Transmission and Rs. 5.72 Crore for SLDC for FY 2014-15.



## 2.7 Repair and Maintenance Expenses

The Hon'ble Commission through its Tariff Regulations, 2005 notified that:

*"(1) Operation & Maintenance expenses" or "O&M expenses" shall mean repair and maintenance (R&M) expenses, employee expenses and administrative & general expenses (A&G) including insurance.*

*(2) O&M expenses for distribution licensee (s) shall be determined by the Commission as follows:*

*(a) O&M expenses as approved by the Commission for the year 2011-12 (true up) shall be considered as base O&M expenses for determination of O&M expenses for subsequent years*

*(b) Base O&M expenses (except employee cost) as above shall be adjusted according to variation in the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year to determine the O&M expenses for subsequent years"*

In the ARR Petition for FY 2014-15, PSTCL claimed R&M Expenses of Rs. 61.33 Crore for Transmission business and Rs. 5.15 Crore for SLDC for FY 2014-15. As against this, the Hon'ble Commission had approved R&M expenses of Rs. 46.45 crore for Transmission and Rs. 4.04 crore for SLDC in the Tariff Order for FY 2014-15.

In the Review of ARR for FY 2014-15, the Petitioner submitted revised estimates for R&M expenses as Rs. 101.19 Crore for Transmission business and Rs. 7.82 Crore for SLDC business. As against this, the Hon'ble Commission had approved R&M expenses of Rs. 50.98 crore for Transmission and Rs. 4.19 crore for SLDC in the Tariff Order for FY 2015-16.

The actual R&M expenses incurred, as per the audited annual account for FY 2014-15 are as below:

**Table 9: R&M Expenses for FY 2014-15 (Audited) (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	R&M Expenses	36.05	1.10	37.15

The details of head-wise R&M Expenses for FY 2014-15 for Transmission and SLDC have been provided in Format F4 and F4s. The Petitioner has worked out the

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normative R&M expenses as per the PSERC Tariff Regulations, 2005 for FY 2014-15 as shown in the following table:

**Table 10: Normative R&M Expenses for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Gross Fixed Assets as on 1 April, 2012 (a)	5265.17	5.50	5270.67
2	Approved R&M cost for FY 2011-12 (b)	25.92	1.93	27.85
3	Gross Fixed Assets as on 1 April, 2014 I	6591.67	5.78	6597.45
4	Base R&M expense for year (d=b x c/a)	32.45	2.03	34.48
5	Increase in WPI from FY 2011-12 (e)	116.05%	116.05%	116.05%
6	Applying WPI Increase on Base R&M (f=d x e)	37.66	2.35	40.01
7	Addition of GFA during FY 2014-15 (g)	1,483.85	2.54	1,486.39
8	% Rate of R&M expenses (h=f/c)	0.57%	40.66%	0.61%
9	R&M expenses for asset addition during year (i=g x h)	4.24	0.52	4.76
10	<b>Total R&amp;M Expenses (f+i)</b>	<b>41.90</b>	<b>2.87</b>	<b>44.77</b>

The actual R&M expenses are lower than the normative expenses. The Petitioner prays the Hon'ble Commission to approve the actual R&M expenses of Rs. 36.05 Crore for Transmission and Rs. 1.10 Crore for SLDC for FY 2014-15.

## 2.8 Administrative and General Expenses

The PSERC Tariff Regulations, 2005 specifies that:

*"(1) Operation & Maintenance expenses" or "O&M expenses" shall mean repair and maintenance (R&M) expenses, employee expenses and administrative & general expenses (A&G) including insurance.*

*(2) O&M expenses for distribution licensee (s) shall be determined by the Commission as follows:*



(a) O&M expenses as approved by the Commission for the year 2011-12 (true up) shall be considered as base O&M expenses for determination of O&M expenses for subsequent years

(b) Base O&M expenses (except employee cost) as above shall be adjusted according to variation in the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year to determine the O&M expenses for subsequent years  
Provided that any expenditure on account of license fee, initial or renewal, fees for determination of tariff and audit fee shall be allowed on actual basis over and above the A&G expenses approved by the Commission.

... ..

(6) O&M expenses excluding employee expenses for gross fixed assets added during the year shall be considered for a period of six months in cases where Commercial Operation Date of the assets is not available otherwise from the date of commissioning on pro-rata basis."

In the ARR Petition for FY 2014-15, PSTCL claimed A&G Expenses of Rs. 30.59 Crore for Transmission business and Rs. 2.60 Crore for SLDC for FY 2014-15. As against this, the Hon'ble Commission had approved A&G expenses of Rs. 21.56 crore for Transmission and Rs. 1.17 crore for SLDC in the Tariff Order for FY 2014-15.

In the Review of ARR for FY 2014-15, the Petitioner submitted revised estimates for A&G expenses as Rs. 23.50 Crore for Transmission business and Rs. 2.88 Crore for SLDC business. As against this, the Hon'ble Commission had approved A&G expenses of Rs. 23.50 crore for Transmission and Rs. 1.21 crore for SLDC in the Tariff Order for FY 2015-16.

The Petitioner has filed a review Petition on Order dated July 27, 2016, which is pending before Hon'ble Commission for disposal. The Petitioner filed review against the methodology adopted by the Hon'ble Commission for allowance of A&G expenses.

The actual A&G expenses incurred, as per the audited annual account for FY 2014-15 are provided as below:

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**Table 11: A&G Expenses for FY 2014-15 (Audited) (Rs. Crore)**

St. No.	Particulars	Transmission	SLDC	PSTCL
<b>1</b>	A&G Expenses	29.37	0.82	30.20

The details of head-wise A&G Expenses for FY 2014-15 for Transmission and SLDC have been provided in Format F5 and F5s.

The Petitioner has worked out the normative A&G expenses for FY 2014-15 as shown in the following table:

**Table 12: Normative A&G Expenses for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Gross Fixed Assets as on 1 April, 2012 (a)	5265.17	5.50	5270.67
2	Approved A&G cost for FY 2011-12 (b)	11.59	0.56	12.15
3	Gross Fixed Assets as on 1 April, 2014 (c)	6,591.67	5.78	6,597.45
4	Base A&G expense for year (d=b x c/a)	14.51	0.59	15.10
5	Increase in WPI from FY 2011-12 (e)	116.05%	116.05%	116.05%
6	Applying WPI Increase on Base A&G (f=d x e)	16.84	0.68	17.52
7	Addition of GFA during FY 2014-15 (g)	1,483.85	2.54	1,486.39
8	% Rate of A&G expenses (h=f/c)	0.26%	11.76%	0.27%
9	A&G expenses for asset addition during year (i=g x h)	1.90	0.15	2.05
<b>10</b>	<b>Total A&amp;G Expenses (j= f+i)</b>	<b>18.74</b>	<b>0.83</b>	<b>19.57</b>
11	Add: Audit Fees (k)	0.26	0.00	0.26
12	Add: Fees for determination of Tariff (l)	0.50	0.00	0.50
<b>13</b>	<b>Total A&amp;G Expenses (j+k+l)</b>	<b>19.50</b>	<b>0.83</b>	<b>20.33</b>

The actual A&G expenses are higher than the normative A&G expenses for FY 2014-15. The Petitioner submits that Government of Punjab vide Notification No. 48-Leg./2013 dated 20 September, 2013 has started levying Property Tax. This has resulted in increase in expenses for PSTCL from FY 2013-14 onwards. PSTCL has paid the Property Tax of Rs. 1.30 Crore during FY 2014-15. Since, these expenses are not included in expenses for FY 2011-12, the normative A&G expenses computed for FY

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2014-15 are at lower level.

The Petitioner submits that the O&M expenses are being claimed as per actual being less than the normative, only actual A&G expenses are higher than normative A&G expenses so these actual expenses may be allowed. Normative O&M expenses comes to Rs. 458.63 Crore against the actual O&M expenses of Rs. 422.97 Crore.

In view of the above, the Petitioner prays the Hon'ble Commission to approve the actual A&G expenses of Rs. 29.37 Crore for Transmission and Rs. 0.82 Crore for SLDC for FY 2014-15.

## 2.9 Investment and Capital Expenditure

The Petitioner submits that Opening Capital Work in Progress for FY 2014-15 as per audited accounts is Rs. 1657.55 Crore. Petitioner had made Investment of Rs. 568.54 Crore during FY 2014-15 and converted Rs. 1486.39 Crore as Fixed Assets. The remaining investment was carried over as Capital Work in Progress to the next year. The details for Transmission and SLDC are shown in the following table:

**Table 13: Capital Investment for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital work in progress	1654.68	2.87	1657.55
2	Add: Addition of Capital Expenditure during the year	567.64	0.90	568.54
3	Less: Transferred to fixed assets during the year	1483.85	2.54	1486.39
4	Closing Capital Works in progress	738.47	1.23	739.71

## 2.10 Funding of Capital expenditure

The Petitioner submits that during FY 2014-15, it has incurred the Capital Expenditure of Rs. 568.54 Crore. The Petitioner has taken capital loan of Rs. 500.80 Crore during FY 2014-15 for funding of Capital Expenditure. The remaining amount of Rs. 67.74

Crore has been met from the loan of Rs. 100 Crore availed from Bank of India. The Petitioner has availed Rs. 100 Crore from Bank of India payable in 10 years at the interest rate of 11.90% per annum.

## 2.11 Depreciation

The PSERC Tariff Regulations, 2005 specifies as under:

*"Regulation 25 Depreciation*

*For the purpose of tariff, depreciation shall be computed in the following manner. The value base for the purpose of depreciation shall be the historical cost of the assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission.*

*Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing depreciation.*

- b. The historical cost of the asset shall include additional capitalisation.*
- c. The historical cost shall include foreign currency funding converted to equivalent rupees at the exchange rate prevalent on the date when foreign currency was actually availed but not later than the date of commercial operation.*
- d. 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.*
- e. Depreciation for distribution and other assets not covered by CERC shall be as per the rates notified in the Companies Act as revised from time to time. Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost."*

Hon'ble Commission in Tariff Order for FY 2014-15 approved the Depreciation of Rs. 186 Crore for Transmission and Rs. 1.45 Crore for SLDC for FY 2014-15. Further, the Petitioner, in Review of ARR of FY 2014-15, revised the projected depreciation charges as Rs. 227.54 Crore for Transmission and Rs. 0.74 Crore for SLDC. As against this, Hon'ble Commission in its Tariff Order for FY 2015-16 has approved the depreciation charges of Rs. 186 Crore for Transmission and Rs. 1.44 Crore for SLDC for FY 2014-15.

For the purpose of True-up of FY 2014-15, the Petitioner submits the details of depreciation as per the annual audited accounts for FY 2014-15 as shown in Table below:

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**Table 14: Depreciation for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Depreciation	217.32	0.44	217.75

The Petitioner requests the Hon'ble Commission to approve the Depreciation of Rs. 217.32 Crore for Transmission and Rs. 0.44 Crore for SLDC as per the audited account for FY 2014-15.

## 2.12 Interest Charges

The Hon'ble Commission in its Tariff Regulations, 2005 has notified:

### *"26. INTEREST AND FINANCE CHARGES ON LOAN*

- 1. For Existing Loan Capital, Interest & finance charges shall be computed on the outstanding Loans, duly taking into account the rate of interest & schedule of repayment as per the Terms & Conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable by the Licensee(s) or the State Bank of India Advance rate as on April, 1 of the relevant year, wherever is lower*
- 2. For New investments, Interest & finance charges shall be computed on the loans, duly taking into account the rate of interest & schedule of repayment as per the Terms & Conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable by the Licensee(s) or the State Bank of India Advance rate as on April, 1 of the relevant year, wherever is lower.*
- 3. The interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the generating company / licensee; Provided that interest and finance charges of renegotiated loan agreements shall not be considered, if they result in higher charges.  
Provided further that interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost.*
- 4. Interest charges on security deposits, if any, made by the consumers with a generating company/licensee, shall be considered at the rate specified by the Commission from time to time.*
- 5. In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.*

6. The Commission shall allow obligatory taxes on interest, commitment charges, finance charges (including guarantee fee payable to the Govt.) and any exchange rate difference arising from foreign currency borrowings, as finance cost.
7. Any saving in costs on account of subsequent restructuring of debt shall be shared between the consumers and the generating company / licensee in such ratio as may be decided by the Commission."

Hon'ble Commission in Tariff Order for FY 2014-15 has approved the Interest Charges of Rs. 318.77 Crore for Transmission and Rs. 1.40 Crore for SLDC. Further, the Petitioner, in Review of ARR of FY 2014-15, revised the projected Interest Charges as Rs. 334.28 Crore for Transmission and Rs. 0.98 Crore for SLDC. As against this, the Hon'ble Commission in its Tariff Order for FY 2015-16 has approved the Interest Charges of Rs. 207.17 Crore for Transmission and Rs. 0.24 Crore for SLDC for FY 2014-15.

For the purpose of True up for FY 2014-15, the Petitioner has considered the Interest Charges based on Audited Accounts and actual loan taken against the investment done during FY 2014-15. The source wise long term loan outstanding for PSTCL for FY 2014-15 as on March 31, 2015 is shown in the following table:

**Table 15: Source wise Loan outstanding for FY 2014-15 (Rs. Crore)**

Sr. No.	Name of Source	Opening Balance as on April 1, 2014	Loan Received	Loan Repaid	Closing Balance as on March 31, 2015
1	LIC	138.63	0.00	40.92	97.71
2	REC	2564.89	396.63	116.48	2845.04
3	SBOP	25.01	60.00	8.34	76.67
4	NABARD	0.00	43.51	0.00	43.51
5	OBC	97.31	0.00	28.60	68.71
6	Loan from PSPCL	693.80	0.00	99.11	594.69
7	GPF liability	197.59	0.00	21.95	175.64
8	Bank of India	0.00	67.74	0.00	67.74
9	Loan for SLDC	0.77	0.66	0.00	1.43
10	<b>Total loan for PSTCL</b>	<b>3718.00</b>	<b>568.54</b>	<b>315.40</b>	<b>3971.14</b>



The Petitioner submits that it has incurred the Interest Charges as given in the table below:

**Table 16: Interest and Finance Charges for FY 2014-15 (Audited) (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
	<b>Interest on Loans:</b>			
1	Life Insurance Corporation	12.60	0.00	12.60
2	Rural Electrification Corporation	330.62	0.16	330.78
3	SBOP	4.16	0.00	4.16
4	NABARD	0.51	0.00	0.51
5	OBC	10.16	0.00	10.16
6	Loan from PSPCL	77.12	0.00	77.12
7	General Provident Fund	16.65	0.00	16.65
8	Loan from Bank of India	2.06	0.00	2.06
	<b>Total</b>	<b>453.89</b>	<b>0.16</b>	<b>454.05</b>
9	<b>Other interest &amp; finance charges:</b>			
I	Miscellaneous Finance Charges	0.43	0.00	0.43
II	Guarantee Charges	4.70	0.00	4.70
III	<b>Sub-total</b>	<b>5.13</b>	<b>0.00</b>	<b>5.13</b>
10	Less : Interest capitalized	109.15	0.00	109.15
11	<b>Net Total</b>	<b>349.87</b>	<b>0.16</b>	<b>350.03</b>

The Petitioner prays the Hon'ble Commission to approve the Interest Charges of Rs. 349.87 Crore for Transmission and Rs. 0.16 Crore for SLDC for FY 2014-15 after True-up.

### 2.13 Return on Equity

The PSERC Tariff Regulations, 2005 specifies as under:

*"25. RETURN ON EQUITY*

*1. Return on Equity shall be computed @ 15.5% on the paid up equity capital determined in accordance with Regulation 24.*

*2. Equity invested in foreign currency shall be allowed a return up to the prescribed limit under clause (1) of this Regulation in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate on the date of declaration of dividends. The difference in actual exchange rate and the provisional*

exchange rate considered while determining the ARR and Tariff shall be taken into consideration at the time of Truing Up.

3. The premium raised by the generating company or the licensee while issuing share capital and investment of internal resources created out of free reserve, if any, shall also be reckoned as paid up equity capital for the purpose of computing return on equity, subject to limit prescribed in Regulation 24, provided such premium amount and internal resources are actually utilised for meeting capital expenditure.

4. For allowing Return on Equity, the Commission shall consider the actual amount of equity employed in creation of assets."

Hon'ble Commission in Tariff Order for FY 2014-15 has approved the Return on Equity of Rs. 93.91 Crore for Transmission. Further, the Petitioner, in Review of ARR of FY 2014-15, revised the Return on Equity as Rs. 106.30 Crore for Transmission. Against this, Hon'ble Commission in Tariff Order for FY 2015-16 has approved the Return on Equity of Rs. 93.91 Crore for Transmission.

The Petitioner submits that it has utilized internal accruals for funding the capital expenditure for FY 2012-13 and FY 2013-14 and accordingly claimed the Return on Equity in its Petition for True-up for FY 2012-13 and FY 2013-14. However, the same have been disallowed by the Hon'ble Commission in Tariff Order dated July 27, 2016. The Petitioner has filed a review Petition on Order dated July 27, 2016, which is pending before Hon'ble Commission for disposal.

For the purpose of computation of Return on Equity for FY 2014-15, Petitioner has considered the Opening Equity for FY 2014-15 of Rs. 605.88 Crore based on closing equity allowed for FY 2013-14 in Tariff Order dated July 27, 2016. The Petitioner has considered the RoE at the rate of 15.5% in accordance with PSERC Tariff Regulations, 2005. The Petitioner computed the RoE for FY 2014-15 with details as provided below:

**Table 17: Return on Equity for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	PSTCL
1	Equity at the opening of FY 2014-15	605.88
2	Addition of equity during the year	0.00
3	Equity at the closing of FY 2014-15	605.88

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Sr. No.	Particulars	PSTCL
4	Rate of Return (%)	15.50%
5	Return on Equity [605.88x 15.50%]	93.91

The Petitioner prays the Hon'ble Commission to approve the Return on Equity of Rs. 93.91 Crore for FY 2014-15 after True-up.

## 2.14 Interest on Working Capital

The PSERC Tariff Regulations, 2005 specifies as under:

*"Regulation 30- Working Capital & Interest rate on Working Capital*

*For transmission licensee (s) and SLDC, the working capital shall be the sum of the following*

*(i) Operation and Maintenance expenses for one month*

*(ii) Receivables equivalent to two months*

*(iii) Maintenance spares @ 15% of Operation and Maintenance expenses"*

Hon'ble Commission in Tariff Order for FY 2014-15 has approved the Interest on Working Capital of Rs. 28.76 Crore for Transmission and Rs. 0.52 Crore for SLDC. Further, the Petitioner, in Review of ARR of FY 2014-15, revised the projected Interest on Working Capital as Rs. 49.55 Crore for Transmission and Rs. 1.02 Crore for SLDC. As against this, the Hon'ble Commission in Tariff Order for FY 2015-16 has approved the Interest on Working Capital of Rs. 28.63 Crore for Transmission and Rs. 0.55 Crore for SLDC.

For the purpose of True-up, the Petitioner has computed the Interest on Working Capital as per the provisions of Tariff Regulations, 2005. The Petitioner has considered the actual weighted average rate of interest for Working capital loans for Transmission Business. The computation of Interest on Working Capital is submitted in the following table:

**Table 18: Interest on Working Capital for FY 2014-15 (Rs. Crore)**

Sr. No	Particulars	Transmission	SLDC
1	Receivables equivalent to two months of fixed cost	185.37	1.44

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Sr. No	Particulars	Transmission	SLDC
2	Maintenance spares @ 15% of O&M expenses	62.30	1.15
3	Operation and Maintenance expenses for one month	34.61	0.64
4	Total Working Capital (Normative)	282.28	3.23
5	Rate of Interest applied	11.90%	12.25%
6	<b>Interest on Working Capital</b>	<b>33.59</b>	<b>0.40</b>

The Petitioner prays the Hon'ble Commission to approve the Interest on Working Capital of Rs. 33.59 Crore for Transmission and Rs. 0.40 Crore for SLDC for FY 2014-15 after True-up.

### 2.15 ULDC Charges

Hon'ble Commission in Tariff Order for FY 2014-15 has approved the ULDC charges of Rs. 17.61 Crore for SLDC. Further, the Petitioner, in Review of ARR of FY 2014-15, revised the projected ULDC Charges as Rs. 8 Crore, which was approved by the Hon'ble Commission in Tariff Order for FY 2015-16.

For the purpose of True-up for FY 2014-15, the Petitioner submits the actual ULDC Charges based on Audited Accounts as shown in the following table:

**Table 19: ULDC Charges for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	ULDC Charges - SLDC own share	0.00	2.27	2.27
2	ULDC Charges - BBMB share	0.00	0.93	0.93
3	ULDC Charges - Central Sector share	0.00	2.08	2.08
4	NRLDC Charges	0.00	2.97	2.97
5	<b>Total</b>	<b>0.00</b>	<b>8.25</b>	<b>8.25</b>

The Petitioner prays the Hon'ble Commission to approve the ULDC charges of Rs. 8.25 Crore for FY 2014-15 under True-up.

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## 2.16 Prior Period Expenses

The Petitioner submits the Prior Period Expenses of Rs. 11.36 Crore for FY 2014-15 based on audited accounts. The Petitioner has claimed Prior Period Expenses under this section only and has not been claimed under the items of ARR discussed in this Petition. The Petitioner has merged the prior period expenses under Employee cost (Rs. 0.0057 Crore), Depreciation (Rs. 11.16 Crore), R&M expenses (Rs. 0.0067 Crore), ULDC Charges (Rs. 0.17 Crore) and A&G expenses (Rs. 0.0095 Crore). These expenses are pertaining to past period and the break-up of the same has been submitted as shown in the following table:

**Table 20: Break-up of Prior Period expenses for FY 2014-15 (Rs.)**

Sr. No.	Particulars	Prior to 16.04.10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	Total
1	Employee Cost - other terminal benefits	57,261	0.00	0.00	0.00	0.00	57,261
2	Depreciation						
I	Building	1,14,832	4,29,991	12,02,651	17,81,902	12,11,382	47,40,758
II	Plant & Machinery	(63,63,853)	6,69,719	47,43,100	93,35,969	(6,68,609)	77,16,326
III	Lines & Cables	1,16,78,163	23,82,288	46,10,347	4,60,73,760	3,49,30,882	9,96,75,440
IV	Vehicles	0.00	0.00	0.00	0.00	(3,20,752)	(3,20,752)
V	Furniture	(854)	0.00	0.00	0.00	(9,425)	(10,279)
VI	Office equipment	0.00	0.00	(51,947)	(72,094)	(71,050)	(1,95,091)
VII	Total	54,28,288	34,81,998	1,05,04,151	5,71,19,537	3,50,72,428	11,16,06,402
3	R&M Expenses	66,671	0.00	0.00	0.00	0.00	66,671
4	A&G Expenses- Traveling expenses, etc.	88,911	6,167	0.00	0.00	0.00	95,078
5	ULDC Charges	6,44,877	7,33,810	3,52,418	0.00	0.00	17,31,105
6	<b>Grand Total</b>	<b>62,86,008</b>	<b>42,21,975</b>	<b>1,08,56,569</b>	<b>5,71,19,537</b>	<b>3,50,72,428</b>	<b>11,35,56,517</b>

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The Prior Period expenses for Transmission and SLDC are submitted as under:

**Table 21: Prior Period Expenses for FY 2014-15 (Rs. Crore)**

St. No.	Particulars	Transmission	SLDC	PSTCL
1	Prior Period Expenses	11.18	0.17	11.36

The Petitioner prays the Hon'ble Commission to approve the Prior Period expenses of Rs. 11.36 Crore for FY 2014-15 for true-up purpose.

### 2.17 Non-tariff Income

The PSERC Tariff Regulations, 2005 specifies as under:

*"Regulation 34 Non Tariff Income*

*Following components of income shall be treated as non tariff income for the generating company or the licensee (s) as applicable:*

- *Meter/metering equipment/service line rentals*
- *Service charges*
- *Customer charges*
- *Revenue from late payment surcharge*
- *Miscellaneous receipts*
- *Incentives from CGS's*
- *Miscellaneous charges (except PLEC charges)*
- *Interest on staff loans and advances*
- *Interest on advances to suppliers*
- *Income from trading*
- *Income from staff welfare activities*
- *Excess found on physical verification*
- *Interest on investments, fixed and call deposits and bank balances*
- *Net recovery from penalty on coal liaison agents*
- *Prior period income*
- *Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and/or wheeling charges, scheduling charges etc."*

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Hon'ble Commission in Tariff Order for FY 2014-15 has approved the Non-tariff Income of Rs. 10.72 Crore for Transmission and Rs. 3.32 Crore for SLDC. Further, the Petitioner, in Review of ARR of FY 2014-15, revised the projected Non-tariff Income of Rs. 14.61 Crore for Transmission Business and Rs. 3.95 Crore for SLDC. As against this, the Hon'ble Commission in Tariff Order for FY 2015-16 has approved the Non-tariff Income of Rs. 19.16 Crore for Transmission and Rs. 4.90 Crore for SLDC.

For the purpose of True-up for FY 2014-15, the Petitioner submits the actual Non-tariff Income based on Audited Accounts as shown in the following table:

**Table 22: Non-tariff Income for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Non-tariff Income	28.81	8.41	37.23

The Petitioner prays the Hon'ble Commission to approve the Non-tariff Income of Rs. 28.81 Crore for Transmission and Rs. 8.41 Crore for SLDC for FY 2014-15 for True-up.

### 2.18 Incentive on account of Transmission System Availability

In accordance with Tariff Regulations, 2005, the Petitioner is eligible for incentive for over achieving the availability targets for transmission system availability which has been verified and certified by SLDC. The net transmission charges inclusive of incentive on the basis of fixed charges for Transmission and computation of incentive are given as per the table below.

**Table 23: Incentive on account of Transmission System Availability for FY 2014-15(Rs. Crore)**

Sr. No.	Month	Transmission Availability (%)	Monthly Transmission Charges	Transmission charges inclusive incentive	Incentive
1.	Apr-14	99.85%	89.78	91.48	1.69
2.	May-14	99.84%	92.78	94.52	1.74
3.	Jun-14	99.78%	89.78	91.42	1.63
4.	Jul-14	99.09%	92.78	93.81	1.03
5.	Aug-14	99.80%	92.78	94.48	1.70

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Sr. No.	Month	Transmission Availability (%)	Monthly Transmission Charges	Transmission charges inclusive incentive	Incentive
6.	Sep-14	99.86%	89.78	91.49	1.70
7.	Oct-14	99.95%	92.78	94.62	1.85
8.	Nov-14	99.85%	89.78	91.48	1.69
9.	Dec-14	99.83%	92.78	94.51	1.73
10.	Jan-15	99.91%	92.78	94.59	1.81
11.	Feb-15	99.85%	83.80	85.38	1.58
12.	Mar-15	99.79%	92.78	94.47	1.69
13	<b>Total</b>		<b>1092.38</b>	<b>1112.24</b>	<b>19.87</b>

The Petitioner submits to the Hon'ble Commission to approve the incentive of Rs. 19.87 Crore for transmission system availability as determined above for FY 2014-15.

### 2.19 Carrying Cost for past years

Hon'ble Commission in para 6.14 of Tariff Order of FY 2014-15 has approved the net carrying cost of Rs. 3.43 Crore on past Revenue Gaps, after adjusting Rs. 39.05 Crore as payable by Government of Punjab. The adjustment of past Revenue Gaps and carrying cost has been discussed subsequently in Chapter 6 of this Petition.

### 2.20 Aggregate Revenue Requirement

After taking into account the expenses claimed for various components of Aggregate Revenue Requirement, Net ARR for Transmission and SLDC is summarised in the following table:

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Table 24: Net ARR for Transmission and SLDC for FY 2014-15(Rs. Crore)

Sr. No.	Particulars	Transmission Business		SLDC		Transmission Business and SLDC	
		Tariff Order	True-up	Tariff Order	True-up	Tariff Order	True-up
1	Net Employee costs	298.66	349.90	6.80	5.72	305.46	355.62
2	Net R&M expenses	46.45	36.05	4.04	1.10	50.49	37.15
3	Net A&G expenses	21.56	29.37	1.17	0.82	22.73	30.20
4	Depreciation	186.00	217.32	1.45	0.44	187.45	217.75
5	Interest charges	318.77	349.87	1.40	0.16	320.17	350.03
6	Interest on Working Capital	28.76	33.59	0.52	0.40	29.28	33.99
7	ULDC Charges	-	-	17.61	8.25	17.61	8.25
8	Return on Equity	93.91	93.91	-	-	93.91	93.91
9	Income tax	-	-	-	-	-	-
10	Prior Period Expenses	-	11.18	-	0.17	-	11.36
11	<b>Total Revenue Requirement</b>	<b>994.11</b>	<b>1,121.19</b>	<b>32.99</b>	<b>17.07</b>	<b>1,027.10</b>	<b>1,138.26</b>
12	Less: Non-tariff Income	10.72	28.81	3.32	8.41	14.04	37.23
13	<b>Gross Aggregate Revenue Requirement</b>	<b>983.39</b>	<b>1,092.38</b>	<b>29.67</b>	<b>8.65</b>	<b>1,013.06</b>	<b>1,101.03</b>
14	Incentive	-	19.87	-	-	-	19.87
15	<b>Net ARR</b>	<b>983.39</b>	<b>1,112.24</b>	<b>29.67</b>	<b>8.65</b>	<b>1,013.06</b>	<b>1,120.90</b>

## 2.21 Revenue from Tariff

For the purpose of True-up for FY 2014-15, the Petitioner has considered the revenue based on Audited Accounts as shown in the following table:

**Table 25: Revenue from Tariff for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Transmission Charges from PSPCL	865.99	0.00	865.99
2	SLDC Charges from PSTCL	0.00	29.67	29.67
3	<b>Grand Total</b>	<b>865.99</b>	<b>29.67</b>	<b>895.66</b>

It may be noted that Audited Accounts has shown the revenue of Rs. 39.05 Crore under Transmission charges from Others. In this regards, the Petitioner submits that the revenue of Rs. 39.05 Crore is shown against Un-recovered amount of carrying cost on Government of Punjab, which was recognized by the Hon'ble Commission in Tariff Order for FY 2014-15 and has not been allowed to be recovered from PSPCL. Hon'ble Commission in Tariff Order for FY 2014-15 has not considered the carrying cost while deciding the tariff for FY 2014-15. The relevant extract of the Order is shown as under:

*"6.14.3. ... .. Thus, the total carrying cost receivable by PSTCL works out to ₹42.48 crore out of which ₹3.43 (51.35-47.92) crore is payable by PSPCL and ₹39.05 (31.07+7.98) crore is payable by Government of Punjab."*

Further, the Petitioner in Review of ARR for FY 2014-15 has claimed the amount of Rs. 39.05 Crore. The Hon'ble Commission in tariff Order dated May 5, 2015 ruled as under:

***"3.14 Uncovered amount of Carrying Cost on GoP as per Tariff Order for FY 2014-15***

*PSTCL has submitted that the Commission in its T.O. for FY 2014-15 passed on carrying cost of ₹39.05 crore to the GoP due to delay in the finalization on the Opening Balance Sheet of PSTCL by the Government. PSTCL has argued that since this amount was not allowed to be recovered through tariff from PSPCL, the same may be allowed to be recovered. The issue has already been decided in para 6.14 of Tariff Order for FY 2014-15 of PSTCL. The matter may be taken by PSTCL with GoP."*

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In view of the above, the Petitioner submits that the amount of Rs. 39.05 Crore towards unrecovered amount of carrying cost on Government of Punjab has not been allowed as expenses in past tariff Orders so, the revenue against such expenses should not be considered while computing the revenue gap for FY 2014-15. Accordingly, the Petitioner has not considered the amount of Rs. 39.05 Crore as revenue, for true-up purpose.

## 2.22 Revenue Gap/(Surplus) for FY 2014-15

The Petitioner has computed the Revenue Gap/(Surplus) after True-up for FY 2014-15 as shown in the following Table:

**Table 26: Revenue Gap/(Surplus) for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Aggregate Revenue Requirement	1112.24	8.65	1120.90
2	Revenue from Tariff	865.99	29.67	895.66
3	Revenue Gap/(Surplus)	246.25	(21.02)	225.23

Thus, the Petitioner prays the Hon'ble Commission to allow the revenue gap of Rs. 225.23 Crore for PSTCL for FY 2014-15 as per the above given Table.

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## 3 TRUE UP ARR FOR FY 2015-16

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### 3.1 Background

The 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 2015-16 on the basis of audited accounts. The Petitioner respectfully submits that it had filed an Interim application dated September 8, 2016 along with Review Petition on Tariff Order for FY 2016-17 dated July 26, 2016, seeking clarifications with regard to the adjustment of past revenue gaps/surplus. The Hon'ble Commission has issued its Order on November 21, 2016 on the Interim Application filed by the Petitioner. It has not been possible on the part of the Petitioner to complete the audit of accounts of FY 2015-16 and file the same with the Hon'ble Commission for True-up by 30<sup>th</sup> November, 2016. 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.

PSTCL submits that the Truing-up exercise may be undertaken only on the basis of audited annual accounts. Since the audited accounts for FY 2015-16 are not available, it is respectfully submitted that the Truing-up exercise may be undertaken for FY 2015-16 after the finalization of audited annual accounts.

Pending True-up of the financials of FY 2015-16, the Petitioner submits the Hon'ble Commission to consider the Provisional figures of capital expenditure, expenditure

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capitalized, fixed assets, loans raised relating to FY 2015-16, in order to arrive at the interest charges and depreciation for subsequent years as under:

### 3.2 Investment and Capital Expenditure

The Petitioner submits that Opening Capital Work in Progress for FY 2015-16 is Rs. 739.71 Crore. The Petitioner had made Investment of Rs. 409.66 Crore during FY 2015-16 and converted Rs. 389.96 Crore as Fixed Assets. The remaining investment was carried over as Capital Work in Progress to the next year. The details for Transmission and SLDC are shown in the following table:

**Table 27: Capital Investment for FY 2015-16 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital work in progress	738.48	1.23	739.71
2	Add: Addition of Capital Expenditure during the year	405.29	4.37	409.66
3	Less: Transferred to fixed assets during the year	389.11	0.85	389.96
4	Closing Capital Works in progress	754.66	4.76	759.41

### 3.3 Gross Fixed Assets

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

**Table 28: Gross Fixed Assets for FY 2015-16 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA for the year	5,127.33	8.32	5,135.65
2	Addition of GFA during the year	389.11	0.85	389.96
3	Asset retirement/replacement during the year	38.69	0.00	38.69
4	Closing GFA for the year	5,477.76	9.17	5,486.92

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### 3.4 Loan Balances

The source wise long term loan outstanding for PSTCL for FY 2015-16 as on March 31, 2015 is shown in the following table:

**Table 29: Source wise Loan outstanding for FY 2015-16 (Rs. Crore)**

Sr. No.	Name of Source	Opening Balance as on April 1, 2015	Loan Received	Loan Repaid	Closing Balance as on March 31, 2016
1	LIC	97.71	-	40.91	56.80
2	REC	2845.04	258.27	178.50	2,924.81
3	SBOP	76.67	-	11.11	65.56
4	NABARD	43.51	84.26	-	127.77
5	OBC	68.71	-	28.61	40.10
6	Loan from PSPCL	594.69	-	99.12	495.57
7	GPF liability	175.64	-	21.95	153.69
8	Bank of India	67.74	64.83	-	132.57
9	Loan for SLDC	1.43	2.30	0.00	3.73
10	<b>Total loan for PSTCL</b>	<b>3971.14</b>	<b>409.66</b>	<b>380.20</b>	<b>4000.60</b>



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## 4 REVIEW OF ARR FOR FY 2016-17

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### 4.1 Background

In this Chapter, the Petitioner submits Review of ARR of FY 2016-17 for Transmission and SLDC functions of the PSTCL. The Hon'ble Commission in its Tariff Order dated July 27, 2016 for FY 2016-17 approved the Aggregate Revenue Requirement (ARR) of Rs. 1151.01 Crore, after adjustment of carrying cost, for PSTCL. Out of this, the Net ARR of Rs. 25.92 Crore was approved for SLDC for FY 2016-17.

Further, Hon'ble Commission vide Order dated November 21, 2016 in the matter of Interim Application in Review Petition No. 4 of 2016 in Petition No. 78 of 2015 (Tariff Order for FY 2016-17), decided that PSTCL shall recover total amount of Rs. 1047.02 Crore during FY 2016-17, which is the difference between Rs. 1151.01 Crore and Rs. 103.99 Crore.

The Petitioner submits that it has computed the revised estimates of ARR for FY 2016-17 based on the actual values of first half (H1 of FY 2016-17) and projection for H2 of FY 2016-17. The Petitioner has also considered the basis of past trends, regulatory norms and activities planned and proposed to be taken up during the remaining period of FY 2016-17 for projecting the expenses for various heads for FY 2016-17. The Petitioner submits that it has prepared this Petition on the basis of the provisions of PSERC Tariff Regulations, 2005 and its subsequent amendments thereof.

### 4.2 Description of the Transmission System

The details of the actual addition during H1 of FY 2016-17 and estimated addition during H2 of the FY 2016-17 to the transmission system of PSTCL are tabulated below:

**Table 30: Transmission System for PSTCL during FY 2016-17**

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2016)	Addition during H1	Addition during H2	Closing (As on 31 <sup>st</sup> March 2017)
<b>Transmission Lines (Circuit kms)</b>					
1	400 kV	1599.75	0.00	0.00	1599.75
2	220 kV	6384.31	114.39	328.00	6826.70
3	132 kV	3120.22	0.00	0.00	3120.22
4	<b>Total</b>	<b>11,104.28</b>	<b>114.39</b>	<b>328.00</b>	<b>11546.68</b>
<b>Substations (Nos.)</b>					
1	400 kV	4	1	0	5
2	220 kV	89	4	2	95
3	132 kV	73	(3)	0	70
	<b>Total</b>	<b>166</b>	<b>2</b>	<b>2</b>	<b>170</b>
<b>Transmission Substation Bays (Nos.)</b>					
1	400 kV	12	2	2	16
2	220 kV	252	17	22	291
3	132 kV	242	2	2	246
4	66 kV	701	3	5	709
	<b>Total</b>	<b>1207</b>	<b>24</b>	<b>31</b>	<b>1262</b>
<b>Substation Capacity (MVA)</b>					
1	Substation Capacity	30,599	1495	1675	33,769

### 4.3 Transmission System Capacity

The Petitioner submits that it has projected the net transmission capacity of the system for FY 2016-17 as 12730 MW (net) and 13261 MW (Gross) in Tariff Petition for approval of ARR for FY 2016-17 and the Hon'ble Commission in its Tariff Order had approved transmission capacity of 11537.30 MW (net) for FY 2016-17.

The Petitioner submits that based on the actual transmission capacity of Punjab along with the proposed capacity addition plan as intimated by CE/PPR, PSPCL, estimated Net Transmission Capacity as on 31 March, 2017 would be 13176.84MW. The details are shown in the following Table:





**Table 31: Generation Capacity in MW as on March 31, 2017**

Particulars	Firm Share (MW)	Net Installed Capacity (MW)
GNDTP, Bathinda	409.40	409.40
GGSSTP, Ropar	1152.90	1152.90
GHTP, Lehra Mohabbat	841.80	841.80
<b>Total Thermal - PSPCL</b>	<b>2404.10</b>	<b>2404.10</b>
<b>Total Hydro- PSPCL</b>	<b>1008.80</b>	<b>1008.80</b>
Micro Hydel	5.60	5.60
NRSE Private Projects	911.27	817.68
PSPCL Share of BBMB	1155.47	1128.05
<b>Central Sector</b>	<b>4260.85</b>	<b>4159.74</b>
<b>IPPs within State of Punjab</b>	<b>3652.86</b>	<b>3652.86</b>
<b>Grand Total</b>	<b>13305.37</b>	<b>13176.84</b>

#### 4.4 Transmission System Availability

The Petitioner submits that it has maintained the Transmission System Availability well above the normative annual transmission availability factor up to September 2016, as mandated by Hon'ble Commission in PSERC Tariff Regulations, 2005. The average transmission system availability from April to September 2016 (H1) was 99.95%. The following table provides the month wise system availability up to September 2016:

**Table 32: Transmission System Availability for FY 2016-17 (H1)**

Sr. No.	Month	Transmission System Availability (%)
1	Apr-16	99.97%
2	May-16	99.93%
3	Jun-16	99.94%
4	Jul-16	99.97%
5	Aug-16	99.95%
6	Sep-16	99.93%

#### 4.5 Transmission Losses

The Petitioner in Tariff Petition for FY 2016-17 requested Hon'ble Commission to approve the Transmission Loss of 4% for FY 2016-17 till the availability of actual Transmission Losses. The Hon'ble Commission vide Tariff Order dated July 27, 2016 fixed the transmission loss level at 2.50% for FY 2016-17 at the same level as approved for FY 2015-16. The Hon'ble Commission held that it would revisit during review/true up for FY 2016-17, after the intra-state boundary meters are made fully functional and energy audit is conducted.

At present, the data has been collected for calculation of transmission losses of August, 2016 through remote connectivity, CMRI & manual reports. The tentative losses are 2.76%, which are being re-verified and further certain anomalies are being resolved which may take another few weeks. It is expected that data from all the boundary meters shall be available through remote connectivity in the CEC after rectifying all the field related problems by November, 2016.

As the transmission loss figures are not available for FY 2016-17, the Petitioner prays to the Hon'ble Commission to approve the transmission losses at 2.90%.

#### 4.6 Employee Costs

In the ARR Petition for FY 2016-17, PSTCL claimed Employee Costs of Rs. 399.47 Crore for Transmission business and Rs. 6.73 Crore for SLDC for FY 2016-17. As against this, the Hon'ble Commission had approved employee costs of Rs. 361.48 crore for Transmission and Rs. 7.26 crore for SLDC in the Tariff Order for FY 2016-17.

#### Terminal Benefits

The Petitioner has considered the Terminal benefits for the employees of erstwhile PSEB covered under Pension as Rs. 244.53 Crore as allowed by the Hon'ble Commission in Tariff Order for FY 2016-17 pursuant to Regulation 33 of PSERC Tariff Regulations, 2005, which states that "*with regard to the unfunded past liabilities of pension and gratuity, the Commission will follow the principle of pay as you go*".

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It is submitted that 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. For discharging the said terminal liabilities, PSTCL has gone for actuarial valuation as on March 31, 2017 towards gratuity and leave salary. For the purpose of the present Petition, the Petitioner has considered the Terminal Liability as per the actuarial valuation. The above 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 AS 15 issued by the ICAI and is not covered under regulation 33 of the PSERC Tariff Regulations mentioned above. The Petitioner has considered the Terminal benefits for new employees recruited after April 16, 2010.

**The Petitioner has not considered any progressive funding of terminal benefits in view of pending appeal before Hon'ble Supreme Court.**

The Petitioner submits the Terminal benefits for FY 2016-17 as shown in the following table:

**Table 33: Terminal Benefits for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Terminal benefits for employees of erstwhile PSEB	244.53	0.00	244.53
2	Terminal benefits for new employees recruited by PSTCL	5.05	0.00	5.05
3	<b>Terminal Benefits</b>	<b>249.58</b>	<b>0.00</b>	<b>249.58</b>

The Petitioner has considered the actual other Employee cost for H1 of FY 2016-17 and estimated the Employee cost based on number of employee addition and retirement during the H2 of FY 2016-17. The Petitioner has considered the impact of proposed recruitment of 838 Nos. of employees for three (3) months from January 2017 to March 2017 towards the payment of basic and grade pay. The Petitioner has also considered 6% hike in Dearness Allowance during H2 of FY 2016-17. In addition to this, the amount of Rs. 1.38 Crore towards final instalment of the arrears of DA for the period

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of April 1, 2014 to September 30, 2014 has been considered in H2 of FY 2016-17. Accordingly, the Petitioner estimated employee cost for FY 2016-17 as shown in the following Table:

**Table 34: Estimated employee Costs for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	Transmission	SLDC	PSTCL
1	Salaries	106.44	2.94	109.38
2	Interim relief/ Wage Revision	0.14	0.00	0.14
3	Overtime	5.12	0.00	5.12
4	Dearness Allowance	125.17	3.68	128.85
5	Other Allowances	18.45	0.59	19.04
	<b>Total (A)</b>	<b>255.32</b>	<b>7.21</b>	<b>262.53</b>
6	Staff Welfare Expenses			
I	Electricity Concession to Employees	1.75	0.00	1.75
II	Staff Welfare Expenses	0.34	0.00	0.34
	<b>Total (B)</b>	<b>2.09</b>	<b>0.00</b>	<b>2.09</b>
7	Medical Reimbursement	1.38	0.03	1.41
8	LTC Expenses	0.18	0.01	0.19
	<b>Total (C)</b>	<b>1.56</b>	<b>0.04</b>	<b>1.60</b>
9	<b>Total(A+B+C)</b>	<b>258.98</b>	<b>7.25</b>	<b>266.23</b>
10	Less :			
I	Establishment cost recoverable on execution of 66 kV works	0.31	0.00	0.31
II	Employee costs capitalized	46.59	0.00	46.59
	<b>Total (D)</b>	<b>46.90</b>	<b>0.00</b>	<b>46.90</b>
11	<b>Net Total (E=A+B+C-D)</b>	<b>212.08</b>	<b>7.25</b>	<b>219.33</b>
12	<b>Terminal benefits (F)</b>	<b>249.58</b>	<b>0.00</b>	<b>249.58</b>
13	<b>Grand Total (E+F)</b>	<b>461.66</b>	<b>7.25</b>	<b>468.91</b>

## Computation of Normative Employee Cost

Fifth Amendment of PSERC Tariff Regulations, 2005 dated October 15, 2015, specifies as under:

*“Sub-clause (a) of clause (3) shall be substituted as under:*

*(a) The employee cost as claimed by the distribution licensee (s) shall be considered in two parts:*

*(i) Terminal benefits such as Death-cum-Retirement Gratuity, Pension, Commuted Pension, Leave Encashment, LTC, Medical reimbursement including fixed medical allowance in respect of pensioners and share of BBMB employee expenses and*

*(ii) all other expenses accounted for under different subheads of employee cost taken together.*

*The cost component of terminal benefits and BBMB expenses shall be allowed on actual basis. All other expenses under different subheads of employee cost shall be determined by the Commission limited to actual expenses after prudence check as per formula given below:-*

*Employee cost other than terminal benefits*

$$(EMP_n) = (EMP \text{ base}) * (INDEX_n / INDEX_{base})$$

*Where,*

*EMP<sub>n</sub> - Employee Cost approved by the Commission for nth year.*

*EMP base- Employee Cost approved by the Commission for base year.*

*INDEX<sub>n</sub> - 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:-*

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

*INDEX<sub>base</sub> - 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 base year and shall be worked out as under:-*

$$INDEX_{base} = (0.50 * CPI_{base} + 0.50 * WPI_{base})$$

*CPI = Consumer Price Index (Industrial Workers)*

*WPI = Wholesale Price Index (All Commodities)”*

In line with the approach adopted in True-up for FY 2014-15, the Petitioner has computed the Gross Other employee costs for FY 2016-17 as shown in the following table:

**Table 35: Computation of Other Employee Costs for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Other Employee Cost allowed for FY 2011-12	92.20	5.72	97.92
2	Add: Employee Costs capitalised in FY 2011-12	51.44	0.00	51.44
3	Gross Other Employee Costs allowed for FY 2011-12	143.64	5.72	149.36
4	CPI:WPI (50:50) Increase of FY 2016-17 over FY 2011-12 (Apr-Sep)	131.87%	131.87%	131.87%
5	Gross Other Employee Cost for FY 2016-17	189.42	7.54	196.96

Further, the Petitioner submits that it is also entitled for the additional employee cost pertaining to new installations/network for the asset added during the year in accordance with Regulation 28 (3) (c) which allows additional employee cost in case of New installations on case to case basis keeping in view the principles and methodologies enunciated in these regulations. In the absence of any specific methodology in the regulation, the Petitioner has computed the additional employee costs on account of addition of new installations with respect to FY 2011-12. The additional gross employee costs on account of addition of new installation/network are computed in the following table:

**Table 36: Computation of Additional employee costs for network installation for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Gross Fixed Assets as on 1 April, 2012	5,265.17	5.50	5,270.67
2	Gross Other employee cost allowed in FY 2011-12	143.64	5.72	149.36
3	% of Employee Expenses	3%	104%	3%
4	Gross Fixed Assets as on 1 April, 2016	8,398.99	14.78	8,413.76

Sr. No.	Particulars	Transmission	SLDC	PSTCL
5	Addition of GFA from 1 April, 2012 to 1 April, 2016	3,133.82	9.28	3,143.09
6	Addition of GFA during FY 2016-17	841.74	21.03	862.77
7	Additional Employee Cost for addition of Opening GFA from 1 April, 2012 to 1 April, 2016	85.49	9.65	95.14
8	Additional Employee Cost for network Installation during the year	11.48	10.94	22.42
9	Total	96.98	20.58	117.56

Accordingly, the normative employee costs for FY 2016-17 are computed as shown in the following table:

**Table 37: Normative Employee Cost for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Terminal Benefits	249.58	0.00	249.58
2	Interim relief/ Wage Revision	0.14	0.00	0.14
3	Gross Other Employee Cost	189.42	7.54	196.96
4	Additional Employee Cost for network Installation	96.98	20.58	117.56
5	Less: Employee expenses capitalized	46.59	0.00	46.59
6	<b>Total Employee Cost</b>	<b>489.52</b>	<b>28.13</b>	<b>517.65</b>

As discussed in earlier Chapter of True-up for FY 2014-15, the Petitioner is entitled for the employee costs for FY 2016-17 on actual basis in view of the Hon'ble Commission's Order dated October 14, 2015.

The Petitioner prays the Hon'ble Commission to approve the Employee costs of Rs. 461.66 Crore for Transmission and Rs. 7.25 Crore for SLDC for FY 2016-17 estimated as discussed above.



## 4.7 Repair and Maintenance Expenses

The Hon'ble Commission through its Tariff Regulations, 2005 notified that:

*"(1) Operation & Maintenance expenses" or "O&M expenses" shall mean repair and maintenance (R&M) expenses, employee expenses and administrative & general expenses (A&G) including insurance.*

*(2) O&M expenses for distribution licensee (s) shall be determined by the Commission as follows:*

*(a) O&M expenses as approved by the Commission for the year 2011-12 (true up) shall be considered as base O&M expenses for determination of O&M expenses for subsequent years*

*(b) Base O&M expenses (except employee cost) as above shall be adjusted according to variation in the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year to determine the O&M expenses for subsequent years"*

In the ARR Petition for FY 2016-17, PSTCL claimed R&M Expenses of Rs. 45.76 Crore for Transmission business and Rs. 5.96 Crore for SLDC for FY 2016-17. As against this, the Hon'ble Commission had approved R&M expenses of Rs. 47.28 crore for Transmission and Rs. 4.54 crore for SLDC in the Tariff Order for FY 2016-17.

In line with the approach adopted in True up for FY 2014-15, the Petitioner has worked out the normative R&M expenses for FY 2016-17 as shown in the following table:

**Table 38: Normative R&M Expenses for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	Transmission	SLDC	PSTCL
1	Gross Fixed Assets as on 1 April, 2012 (a)	5,265.17	5.50	5,270.67
2	Approved R&M cost for FY 2011-12 (b)	25.92	1.93	27.85
3	Gross Fixed Assets as on 1 April, 2016 (c)	8,398.99	14.78	8,413.76
4	Base R&M expense for year (d=b x c/a)	41.35	5.19	46.53
5	Increase in WPI from FY 2011-12 (e)	113.12%	113.12%	113.12%

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Sr. No	Particulars	Transmission	SLDC	PSTCL
6	Applying WPI Increase on Base R&M (f=d x e)	46.77	5.87	52.64
7	Addition of GFA during FY 2016-17 (g)	841.74	21.03	862.77
8	% Rate of R&M expenses (h=f/c)	0.56%	39.72%	0.63%
9	R&M expenses for asset addition during year (i=g x h)	2.34	4.18	6.52
10	<b>Total R&amp;M Expenses (f+i)</b>	<b>49.11</b>	<b>10.05</b>	<b>59.16</b>

In the present Petition, the Petitioner has claimed the R&M expenses on normative basis since actual R&M expenses for FY 2016-17 are not available at this stage. The R&M Expenses shall be considered on actuals basis at the time of True-up.

The Petitioner prays the Hon'ble Commission to approve the normative R&M expenses of Rs. 49.11 Crore for Transmission and Rs. 10.05 Crore for SLDC for FY 2016-17.

#### 4.8 Administrative and General Expenses

The Hon'ble Commission through its Tariff Regulations, 2005 notified that:

*"(1) Operation & Maintenance expenses" or "O&M expenses" shall mean repair and maintenance (R&M) expenses, employee expenses and administrative & general expenses (A&G) including insurance.*

*(2) O&M expenses for distribution licensee (s) shall be determined by the Commission as follows:*

*(a) O&M expenses as approved by the Commission for the year 2011-12 (true up) shall be considered as base O&M expenses for determination of O&M expenses for subsequent years*

*(b) Base O&M expenses (except employee cost) as above shall be adjusted according to variation in the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year to determine the O&M expenses for subsequent years*

Provided that any expenditure on account of license fee, initial or renewal, fees for determination of tariff and audit fee shall be allowed on actual basis over and above the A&G expenses approved by the Commission.

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(6) O&M expenses excluding employee expenses for gross fixed assets added during the year shall be considered for a period of six months in cases where Commercial Operation Date of the assets is not available otherwise from the date of commissioning on pro-rata basis."

In the ARR Petition for FY 2016-17, PSTCL claimed A&G Expenses of Rs. 24.90 Crore for Transmission business and Rs. 7.06 Crore for SLDC for FY 2016-17. As against this, the Hon'ble Commission had approved A&G expenses of Rs. 21.74 crore for Transmission and Rs. 1.82 crore for SLDC in the Tariff Order for FY 2016-17.

In line with the approach adopted in True up for FY 2014-15, the Petitioner has worked out the normative A&G expenses for FY 2016-17 as shown in the following table:

**Table 39: Normative A&G Expenses for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Gross Fixed Assets as on 1 April, 2012 (a)	5,265.17	5.50	5,270.67
2	Approved A&G cost for FY 2011-12 (b)	11.59	0.56	12.15
3	Gross Fixed Assets as on 1 April, 2016 (c)	8,398.99	14.78	8,413.76
4	Base A&G expense for year (d=b x c/a)	18.49	1.50	19.99
5	Increase in WPI from FY 2011-12 (e)	113.12%	113.12%	113.12%
6	Applying WPI Increase on Base A&G (f=d x e)	20.91	1.70	22.61
7	Addition of GFA during FY 2016-17 (g)	841.74	21.03	862.77
8	% Rate of A&G expenses (h=f/c)	0.25%	11.50%	0.27%
9	A&G expenses for asset addition during year (i=g x h)	1.05	1.21	2.26
10	<b>Total A&amp;G Expenses (j= f+i)</b>	<b>21.96</b>	<b>2.91</b>	<b>24.87</b>

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Sr. No.	Particulars	Transmission	SLDC	PSTCL
11	Add: Audit Fees (k)	0.17	0.00	0.17
12	Add: Fees for determination of Tariff (l)	0.62	0.00	0.62
13	<b>Total A&amp;G Expenses (j+k+l)</b>	<b>22.75</b>	<b>2.91</b>	<b>25.65</b>

In the present Petition, the Petitioner has claimed the A&G expenses on normative basis since actual A&G expenses for FY 2016-17 are not available at this stage. The A&G Expenses shall be considered on actuals basis at the time of True-up.

The Petitioner prays the Hon'ble Commission to approve the normative A&G expenses of Rs. 22.75 Crore for Transmission and Rs. 2.91 Crore for SLDC for FY 2016-17.

#### 4.9 Capital Expenditure Plan for PSTCL

The Petitioner in Tariff Petition for FY 2016-17 submitted the Capital Investment of Rs. 512.98 Crore for Transmission Business and Rs. 16.30 Crore for SLDC. As against this, Hon'ble Commission has approved the Capital Investment of Rs. 500 Crore for Transmission Business and Rs. 16.30 Crore for SLDC.

The Petitioner submits the revised Capital Investment after taking into account the existing schemes which are already in progress and the new schemes which are being planned to be taken up during this financial year.

The Petitioner submits that the total expenditure of Rs. 473.37 Crore for Transmission Business for FY 2016-17 as shown in the following table:

**Table 40: Capital Investment for Transmission Business for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission
1	400 kV Works	12.50
2	220/132 kV Works	415.49
3	ERP Implementation	6.40
4	Training	10.98

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Sr. No.	Particulars	Transmission
5	Others	28.00
6	Grand Total	473.37

The capital investment for SLDC during FY 2016-17 is summarized below:

**Table 41: Capital Investment for SLDC for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	SLDC
1	Procurement of additional RTUs for remaining upcoming substations of PSTCL	6.30
2	Implementation Intrastate Boundary Metering cum Transmission Level Energy Audit Scheme in PSTCL	6.00
3	Implementation of Islanding Scheme in Punjab	2.00
4	Intermediary SCADA between solar, small IPPs & SCADA/EMS	2.00
	Total	16.30

#### 4.10 Investment and Capital Expenditure

The Petitioner submits that it has considered Closing Work in Progress submitted for FY 2015-16 in earlier Chapter as Opening Capital Work in Progress for FY 2016-17. The Capital Expenditure has been considered based on revised estimates and actual status of scheme. The details for Transmission and SLDC are shown in the following table:

**Table 42: Capital Investment for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening Capital work in progress	754.66	4.76	759.41
2	Add: Addition of Capital Expenditure during the year	473.37	16.30	489.67
3	Less: Transferred to fixed assets during the year	841.74	21.03	862.77
4	Closing Capital Works in progress	386.29	0.03	386.31

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#### 4.11 Funding of Capital expenditure

The Petitioner submits that Hon'ble Commission has approved the Capital Expenditure of Rs. 500 Crore for Transmission Business and Rs. 16.30 Crore for SLDC for FY 2016-17. It may be noted that in Tariff Order for FY 2016-17 (Table 6.6 and 6.7), the funding of these expenditure has been considered from Loan only and accordingly new loans of Rs. 500 Crore and Rs. 16.30 Crore has been considered for Transmission and SLDC respectively. The Petitioner submits that it has estimated the Capital Investment for FY 2016-17 for Transmission and SLDC of Rs. 473.37 Crore and Rs. 16.30 Crore respectively, for which the loans will be availed from the bank/financial institutions.

#### 4.12 Depreciation

The Hon'ble Commission through its PSERC Tariff Regulations, 2005 notified that:

*"Regulation 25 Depreciation*

*For the purpose of tariff, depreciation shall be computed in the following manner:*

*a. The value base for the purpose of depreciation shall be the historical cost of the assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission.*

*Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing depreciation.*

*b. The historical cost of the asset shall include additional capitalisation.*

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

*d. 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.*

*e. Depreciation for distribution and other assets not covered by CERC shall be as per the rates notified in the Companies Act as revised from time to time. Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost."*

The Petitioner in ARR Petition for FY 2016-17 submitted the Depreciation of Rs. 321.72 Crore for Transmission Business and Rs. 1.46 Crore for SLDC for FY 2016-17. As against this, Hon'ble Commission in Tariff Order for FY 2016-17 approved the Depreciation of Rs. 210.46 Crore for Transmission and Rs. 0.59 Crore for SLDC for FY 2016-17.

The revised depreciation charges for FY 2016-17 have been computed considering the average of opening and closing GFA for FY 2016-17 on account of asset addition during FY 2016-17. The Depreciation rates have been taken as per average depreciate rate of previous year (FY 2015-16) i.e., 5.23% for Transmission and 6.00% for SLDC. The Depreciation Charges submitted by the Petitioner for the FY 2016-17 is shown in the following Table:

**Table 43: Depreciation for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Opening GFA (Net of Land and land rights)	5,477.76	9.17	5,486.92
2	Addition of GFA during the year	841.74	21.03	862.77
3	Closing GFA	6,319.50	30.20	6,349.69
4	Avg. Depreciation Rate	5.23%	6.00%	5.24%
5	Depreciation	308.64	1.18	309.82

The Petitioner requests the Hon'ble Commission to approve the Depreciation of Rs. 308.64 Crore for Transmission and Rs. 1.18 Crore for SLDC for FY 2016-17.

#### 4.13 Interest Charges

The Hon'ble Commission in its PSERC Tariff Regulations, 2005 has notified:

*"26. INTEREST AND FINANCE CHARGES ON LOAN*

*1. For Existing Loan Capital, Interest & finance charges shall be computed on the outstanding Loans, duly taking into account the rate of interest & schedule of repayment as per the Terms & Conditions of relevant agreements. The rate of interest*

shall be the actual rate of interest paid/payable by the Licensee(s) or the State Bank of India Advance rate as on April, 1 of the relevant year, wherever is lower

2. For New investments, Interest & finance charges shall be computed on the loans, duly taking into account the rate of interest & schedule of repayment as per the Terms & Conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable by the Licensee(s) or the State Bank of India Advance rate as on April, 1 of the relevant year, wherever is lower.

3. The interest rate on the amount of equity above 30% treated as loan shall be the weighted average rate of interest on loan capital of the generating company / licensee; Provided that interest and finance charges of renegotiated loan agreements shall not be considered, if they result in higher charges.

Provided further that interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost.

4. Interest charges on security deposits, if any, made by the consumers with a generating company/licensee, shall be considered at the rate specified by the Commission from time to time.

5. In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

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

7. Any saving in costs on account of subsequent restructuring of debt shall be shared between the consumers and the generating company / licensee in such ratio as may be decided by the Commission."

The Petitioner in ARR Petition for FY 2016-17 submitted the Interest Charges of Rs. 420.52 Crore for Transmission Business and Rs. 1.43 Crore for SLDC for FY 2016-17. As against this, Hon'ble Commission in Tariff Order for FY 2016-17 approved the Interest Charges of Rs. 409.47 Crore for Transmission and Rs. 1.43 Crore for SLDC for FY 2016-17.

In order to compute the revised interest and finance charges for FY 2016-17, the Petitioner has considered the actual Interest Charges and loan balances for H1 of FY 2016-17 and estimated the loan requirement based on the capital expenditure. Interest Charges have been calculated on the basis of actual interest rates and opening and closing of various loans for H1 and H2 of FY 2016-17. The details of Loan balances and Interest charges considered for H1 and H2 for FY 2016-17 has been depicted in Format F21 attached to this Petition.

The Source wise loan outstanding considered for FY 2016-17 is shown in the following table:

**Table 44: Source wise Loan outstanding for FY 2016-17 (Rs. Crore)**

Sr. No.	Name of Source	Opening Balance as on April 1, 2016	Estimated Loan Received	Estimated Loan Repayment	Closing Balance as on March 31, 2017
1	LIC	56.80	0.00	22.83	33.97
2	REC	2,924.81	380.23	209.39	3095.65
3	SBOP	65.56	0.00	21.56	44.00
4	NABARD	127.77	93.14	0.00	220.91
5	OBC	40.10	0.00	40.10	0.00
6	Loan from PSPCL	495.57	0.00	0.00	495.57
7	GPF liability	153.69	0.00	21.96	131.73
8	Loan from Bank of India	132.57	0.00	0.00	132.57
9	Loan for SLDC	3.73	16.30	0.00	20.03
10	<b>Total loan for PSTCL</b>	<b>4000.60</b>	<b>489.67</b>	<b>315.84</b>	<b>4174.43</b>

The Petitioner submits Interest Charges for FY 2016-17 as given in the table below:

**Table 45: Interest and Finance Charges for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
	<b>Interest on Loans:</b>			
1	Life Insurance Corporation	4.46	0.00	4.46
2	Rural Electrification Corporation	337.90	1.43	339.33
3	SBOP	6.25	0.00	6.25
4	NABARD	18.29	0.00	18.29

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Sr. No.	Particulars	Transmission	SLDC	PSTCL
5	OBC	2.98	0.00	2.98
6	Loan from PSPCL	54.51	0.00	54.51
7	General Provident Fund	11.60	0.00	11.60
8	Bank of India	15.48	0.00	15.48
	<b>Sub-total</b>	<b>451.47</b>	<b>1.43</b>	<b>452.90</b>
9	Miscellaneous interest/finance charges	1.37	0.00	1.37
10	Guarantee Charges	14.00	0.00	14.00
12	Less: Interest capitalized	59.60	0.00	59.60
13	<b>Net Total</b>	<b>407.25</b>	<b>1.43</b>	<b>408.68</b>

As regards the loan from OBC, PSTCL submits that amount of Rs. 40.10 Crore was outstanding as on April 1, 2016 and out of which Rs.28.25 Crore was to be repaid by March 31, 2017 and Rs. 11.85 Crore by January 31, 2018. The rate of interest of such loan was 12.50% payable monthly. PSTCL paid the entire loan on October 13, 2016 by availing the loan at the lower rate of interest to reduce the impact of higher interest amount in subsequent period. This transaction led to saving of interest amount of Rs. 0.06 Crore during FY 2016-17. As the interest on working capital is allowed on normative basis, hence PSTCL requests the Hon'ble Commission to allow the Interest expenses of Rs. 0.93 Crore for the loan taken towards repayment of loan of OBC included in the interest expenses of OBC loan.

The Petitioner prays the Hon'ble Commission to approve the Interest Charges of Rs. 407.25 Crore for Transmission and Rs. 1.43 Crore for SLDC for FY 2016-17.

#### 4.14 Return on Equity

The Hon'ble Commission in its Tariff Regulations, 2005 has notified:

*"25. RETURN ON EQUITY*

- 1. Return on Equity shall be computed @ 15.5% on the paid up equity capital determined in accordance with Regulation 24.*
- 2. Equity invested in foreign currency shall be allowed a return up to the prescribed limit under clause (1) of this Regulation in the same currency and the payment on this*

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account shall be made in Indian Rupees based on the exchange rate on the date of declaration of dividends. The difference in actual exchange rate and the provisional exchange rate considered while determining the ARR and Tariff shall be taken into consideration at the time of Truing Up.

3. The premium raised by the generating company or the licensee while issuing share capital and investment of internal resources created out of free reserve, if any, shall also be reckoned as paid up equity capital for the purpose of computing return on equity, subject to limit prescribed in Regulation 24, provided such premium amount and internal resources are actually utilised for meeting capital expenditure.

4. For allowing Return on Equity, the Commission shall consider the actual amount of equity employed in creation of assets."

The Petitioner in ARR Petition for FY 2016-17 submitted the Return on Equity of Rs. 156.71 Crore for FY 2016-17. As against this, Hon'ble Commission in Tariff Order for FY 2016-17 approved Return on Equity of Rs. 93.91 Crore for FY 2016-17.

For the purpose of computation of Return on Equity for FY 2016-17, Petitioner has considered the Opening Equity for FY 2016-17 of Rs. 605.88 Crore equivalent to closing equity for FY 2015-16 as submitted in this Petition. The Petitioner has determined the RoE at the rate of 15.5% in accordance with PSERC Tariff Regulations, 2005. The Petitioner computed the RoE for FY 2016-17 with details as provided below:

**Table 46: Return on Equity for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	PSTCL
1	Opening equity of FY 2016-17	605.88
2	Addition of equity during the year	0.00
3	Closing equity of FY 2016-17	605.88
4	Rate of Return (%)	15.50%
5	<b>Return on Equity (605.88 x 15.5%)</b>	<b>93.91</b>

The Petitioner prays the Hon'ble Commission to approve the Return on Equity of Rs. 93.91 Crore for FY 2016-17.

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#### 4.15 Interest on Working Capital

The Hon'ble Commission through its Tariff Regulations, 2005 has notified:

*“Regulation 30- Working Capital & Interest rate on Working Capital  
For transmission licensee (s) and SLDC, the working capital shall be the sum of the following:*

- (i) Operation and Maintenance expenses for one month*
- (ii) Receivables equivalent to two months*
- (iii) Maintenance spares @ 15% of Operation and Maintenance expenses”*

The Petitioner in ARR Petition for FY 2016-17 submitted the Interest on Working Capital of Rs. 40.50 Crore for Transmission Business and Rs. 1.35 Crore for SLDC for FY 2016-17. As against this, Hon'ble Commission in Tariff Order for FY 2016-17 approved Interest on Working Capital of Rs. 33.99 Crore for Transmission and Rs. 0.90 Crore for SLDC for FY 2016-17.

The Petitioner has computed the revised working capital requirement for FY 2016-17 for Transmission and SLDC in line with the provisions of PSERC Tariff Regulations, 2005. The Petitioner has considered the rate of interest as approved by the Hon'ble Commission in Tariff Order for FY 2016-17. The computation of Interest on Working Capital is submitted in the following table:

**Table 47: Interest on Working Capital for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC
1	Receivables equivalent to two months of fixed cost	225.25	5.79
2	Maintenance spares @ 15% of O&M expenses	80.03	3.03
3	Operation and Maintenance expenses for one month	44.46	1.68
4	Total Working Capital (Normative)	349.74	10.51
5	Rate of Interest applied	11.95%	12.00%
6	<b>Interest on Working Capital</b>	<b>41.79</b>	<b>1.26</b>

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The Petitioner prays the Hon'ble Commission to approve the Interest on Working Capital of Rs. 41.79Crore for Transmission and Rs. 1.26Crore for SLDC for FY 2016-17.

#### 4.16 ULDC Charges

The Petitioner in ARR Petition for FY 2016-17 submitted the ULDC Charges of Rs. 16.10 Crore for FY 2016-17, which has been approved by Hon'ble Commission in Tariff Order for FY 2016-17.

It is submitted that the ULDC charges are on account of expenses made by the SLDC. The Petitioner submits the revised ULDC charges for FY 2016-17 as shown in the following table:

**Table 48: ULDC Charges for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	H1	H2	FY 2016-17
1	ULDC Charges - SLDC own share	2.55	5.89	8.44
2	ULDC Charges - BBMB share	0.73	1.68	2.40
3	NRLDC Charges	1.59	3.67	5.26
4	<b>Total</b>	<b>4.86</b>	<b>11.24</b>	<b>16.10</b>

The Petitioner prays the Hon'ble Commission to approve the ULDC charges of Rs. 16.10 Crore for FY 2016-17.

#### 4.17 Income Tax

In accordance with the PSREC Tariff Regulations, 2005, the Petitioner is not claiming income tax in review petition and tax on income, if any, will be claimed at the time of true up on actual basis.

#### 4.18 Non-tariff Income

The Hon'ble Commission in its Tariff Regulation has notified:

*"Regulation 34 Non Tariff Income*

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*Following components of income shall be treated as non tariff income for the generating company or the licensee (s) as applicable:*

- *Meter/metering equipment/service line rentals*
- *Service charges*
- *Customer charges*
- *Revenue from late payment surcharge*
- *Miscellaneous receipts*
- *Incentives from CGS's*
- *Miscellaneous charges (except PLEC charges)*
- *Interest on staff loans and advances*
- *Interest on advances to suppliers*
- *Income from trading*
- *Income from staff welfare activities*
- *Excess found on physical verification*
- *Interest on investments, fixed and call deposits and bank balances*
- *Net recovery from penalty on coal liaison agents*
- *Prior period income*
- *Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and/or wheeling charges, scheduling charges etc."*

The Petitioner in ARR Petition for FY 2016-17 submitted the Non-tariff Income of Rs. 5 Crore for Transmission Business for FY 2016-17. As against this, Hon'ble Commission in Tariff Order for FY 2016-17 approved Non-tariff Income of Rs. 41.05 Crore for Transmission and Rs. 6.72 Crore for SLDC for FY 2016-17.

Based on actual values of Non-tariff Income received during H1 of FY 2016-17, the Petitioner submits the revised estimate of Non-tariff income for FY 2016-17. The Petitioner has considered the Income from Open Access Customers as Rs. 19.11 towards transmission charges and Rs. 3.09 Crore towards Operating Charges for SLDC based on actual of H1 of FY 2016-17.

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The estimated Non-tariff income for FY 2016-17 is shown in the following table:

**Table 49: Non-tariff Income for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	H1 (Actual)	H2 (Estimated)	FY 2016-17
<b>1</b>	Non-tariff Income for Transmission	26.37	7.26	33.63
<b>2</b>	Non-tariff Income for SLDC	4.25	1.16	5.41

The details of head wise Non-tariff Income is submitted in Format F12 for Transmission and Format F12s for SLDC.

The Petitioner prays the Hon'ble Commission to approve the Non-tariff Income of Rs. 33.63 Crore for Transmission and Rs. 5.41 Crore for SLDC for FY 2016-17.

#### 4.19 Carrying cost for past years

Hon'ble Commission in Tariff Order for FY 2016-17 has considered the net recoverable carrying cost of Rs. 12.19 Crore for FY 2012-13, FY 2013-14 and FY 2015-16, after adjusting the amount of Rs. 34.87 Crore pertaining to FY 2012-13 and FY 2013-14, payable by Government of Punjab.

The adjustment of past Revenue Gaps and Carrying cost is discussed subsequently in Chapter 6 of this Petition.

#### 4.20 Aggregate Revenue Requirement

After taking into account the expenses claimed for various components of Aggregate Revenue Requirement, Net ARR for Transmission and SLDC is summarised in the following table:

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Table 50: Net ARR for Transmission and SLDC for FY 2016-17(Rs. Crore)

Sr. No.	Particulars	Transmission Business			SLDC			Transmission Business and SLDC		
		Tariff Order	Review of ARR	Tariff Order	Review of ARR	Tariff Order	Review of ARR	Tariff Order	Review of ARR	
1	Net Employee costs	361.48	461.66	7.26	7.25	368.74	468.91			
2	Net R&M expenses	47.28	49.11	4.54	10.05	51.82	59.16			
3	Net A&G expenses	21.74	22.75	1.82	2.91	23.56	25.65			
4	Depreciation	210.46	308.64	0.59	1.18	211.05	309.82			
5	Interest charges	409.47	407.25	1.43	1.43	410.90	408.68			
6	Interest on Working Capital	33.99	41.79	0.90	1.26	34.89	43.05			
7	ULDC Charges	-	-	16.10	16.10	16.10	16.10			
8	Return on Equity	93.91	93.91	-	-	93.91	93.91			
9	Income tax	-	-	-	-	-	-			
10	<b>Total Revenue Requirement</b>	<b>1,178.33</b>	<b>1,385.12</b>	<b>32.64</b>	<b>40.18</b>	<b>1,210.97</b>	<b>1,425.30</b>			
11	Less: Non-tariff Income	41.05	33.63	6.72	5.41	47.77	39.04			
12	<b>Gross Aggregate Revenue Requirement</b>	<b>1,137.28</b>	<b>1,351.49</b>	<b>25.92</b>	<b>34.76</b>	<b>1,163.20</b>	<b>1,386.26</b>			
13	Incentive	-	-	-	-	-	-			
14	<b>Net ARR</b>	<b>1,137.28</b>	<b>1,351.49</b>	<b>25.92</b>	<b>34.76</b>	<b>1,163.20</b>	<b>1,386.26</b>			

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#### 4.21 Revenue from Tariff

The Petitioner submits that Hon'ble Commission in Tariff Order for FY 2016-17 read with Order dated November 21, 2016 in Interim Application in Review Petition No. 4 of 2016 has approved Net ARR for FY 2016-17 as shown in the following Table:

**Table 51: Net ARR for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	Tariff Order for FY 2016-17	Order on I.A. in Review Petition No. 4 of 2016
1	Net ARR	1163.20	1163.20
2	Total Revenue Gap/(Surplus) for past years	0.00	(103.99)
3	Total Carrying cost for past years	(12.19)	(12.19)
4	Total Revenue Requirement for FY 2016-17	1151.01	1047.02

Hon'ble Commission vide Order dated November 21, 2016 in I.A. in Review Petition No. 4 of 2016 on Tariff Order for FY 2016-17, has approved recoverable amount of Rs. 1047.02 Crore for FY 2016-17, which includes Rs. 25.92 Crore for SLDC for FY 2016-17, after adjustment of carrying cost.

For calculating the revenue gap on review of FY 2016-17, the total Transmission Charges recoverable by PSTCL from PSPCL has been taken as Rs. 1047.02 Crore. In fact, this recoverable amount is the Aggregate Revenue Requirement of PSTCL for FY 2016-17, which has been arrived at after adjustment of Revenue Gap/(Surplus) of FY 2012-13, FY 2013-14 and FY 2015-16 on True-up/Review in the Tariff Order of FY 2016-17 and the same is in accordance with the Regulation 14(2) of the PSERC Tariff Regulations, 2005. This Aggregate Revenue Requirement of Rs. 1047.02 Crore includes the Revenue Gap of Rs. 164.10 Crore of FY 2015-16, which stands payable by PSPCL to PSTCL during FY 2015-16, but it is to be recovered in FY 2016-17. While reviewing the financials of FY 2016-17, the recoverable amount of Rs. 1047.02 Crore may be treated as Aggregate Revenue Requirement recoverable from PSPCL as required under Regulation 14(2) of PSERC Tariff Regulations, 2005.

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Accordingly, the Petitioner has considered the revenue for FY 2016-17 as shown in the following table:

**Table 52: Revenue from Tariff for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Transmission Charges from PSPCL	1,021.10	0.00	1,021.10
2	SLDC Charges from PSTCL	0.00	25.92	25.92
3	<b>Grand Total</b>	<b>1,021.10</b>	<b>25.92</b>	<b>1,047.02</b>

#### 4.22 Revenue Gap/(Surplus) for FY 2016-17

The Petitioner computed the revenue gap/(surplus) after True-up for FY 2016-17 as shown in the following table:

**Table 53: Revenue Gap/(Surplus) for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net Aggregate Revenue Requirement	1,351.49	34.76	1,386.26
2	Revenue from Tariff	1,021.10	25.92	1,047.02
3	Revenue Gap/(Surplus)	330.39	8.84	339.24

The Petitioner prays the Hon'ble Commission to allow the revenue gap of Rs. 339.24 Crore for PSTCL for FY 2016-17 as per the above given Table.

The Petitioner submits that ARR after Review of FY 2016-17 may be re-determined at Rs. 1386.26 Crore, as estimated above, which is payable by PSPCL to PSTCL during FY 2016-17 as against the Tariff of Rs. 1047.02 Crore approved for FY 2016-17.

The computation of cumulative Revenue Gap/(Surplus) up to FY 2016-17 and its recovery has been discussed in subsequent Chapter of this Petition.



## 5 PROJECTIONS FOR MYT CONTROL PERIOD FROM FY 2017-18 TO FY 2019-20

### 5.1 Background

In this Chapter, the Petitioner has projected the ARR for the Control Period from FY 2017-18 to FY 2019-20 in accordance with the provisions of PSERC MYT Regulations, 2014 and its subsequent amendments thereof. The Petitioner has also considered the basis of past trends, regulatory norms and activities planned and proposed to be taken up during the Control period of FY 2016-17 for projecting the expenses. The deviation sought from the PSERC MYT Regulations, 2014 has been specifically mentioned with the rationale and relaxation has been sought in accordance with the provisions of PSERC MYT Regulations, 2014.

### 5.2 Description of the Transmission System

PSTCL has projected the addition in transmission system based on the Capital Investment Plan submitted to the Hon'ble Commission. The details of projected the transmission system for the Control Period are tabulated below:

**Table 54: Transmission System for PSTCL during Control Period**

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2017)	Addition during FY 2017-18	Addition during FY 2018-19	Addition during FY 2019-20	Closing (As on 31 <sup>st</sup> March 2020)
<b>Transmission Lines (Circuit kms)</b>						
1	400 kV	1599.75	0.00	44.40	0.00	1644.15
2	220 kV	6826.70	302.54	370.00	0.00	7499.24
3	132 kV	3120.22	0.00	0.00	0.00	3120.22
4	<b>Total</b>	<b>11546.68</b>	<b>302.54</b>	<b>414.40</b>	<b>0.00</b>	<b>12263.61</b>
<b>Substations (Nos.)</b>						
1	400 kV	5	0	1	0	6
2	220 kV	95	6	2	0	103
3	132 kV	70	-5	0	0	65
	<b>Total</b>	<b>170</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>174</b>
<b>Transmission Substation Bays (Nos.)</b>						
1	400 kV	16	0	4	0	20
2	220 kV	291	14	16	4	325

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2017)	Addition during FY 2017-18	Addition during FY 2018-19	Addition during FY 2019-20	Closing (As on 31 <sup>st</sup> March 2020)
3	132 kV	246	0	0	0	246
4	66 kV	709	9	3	0	721
	<b>Total</b>	<b>1262</b>	<b>23</b>	<b>23</b>	<b>4</b>	<b>1312</b>
<b>Substation Capacity (MVA)</b>						
1	Substation Capacity	33769	1,934	2,188	740	38,631

### 5.3 Transmission System Capacity

The Petitioner submits the projected transmission capacities of the State, as provided by PSPCL, considering the State and private generating capacities and Central sector allocations as shown in the following Table.

**Table 55: Projected Net Installed Capacity in MW for the Control Period**

Name of Project	FY 2017-18	FY 2018-19	FY 2019-20
GNDTP, Bathinda	409.40	409.40	409.40
GGSSTP, Ropar	1152.90	1152.90	1152.90
GHTP, Lehra Mohabbat (Unit # 1 & 2) (Stage-I)	384.30	384.30	384.30
GHTP, Lehra Mohabbat (Unit # 3 & 4) (Stage-II)	457.50	457.50	457.50
<b>Total Thermal - PSPCL</b>	<b>2404.10</b>	<b>2404.10</b>	<b>2404.10</b>
Shanan	109.26	109.26	109.26
UBDC	90.56	90.56	90.56
RSD (Net Share of Punjab)	451.50	451.50	451.50
ASHP	132.85	132.85	132.85
MHP	206.73	206.73	206.73
Mukerian Hydel Project Stage II	17.91	17.91	17.91
Micro Hydel	5.60	5.60	5.60
<b>Total Hydro- PSPCL</b>	<b>1014.40</b>	<b>1014.40</b>	<b>1014.40</b>
Central Sector (Firm Share)	4223.57	4460.83	4573.96
PSPCL Share of BBMB	1132.58	1131.73	1131.49
IPPs within State of Punjab	3652.86	3652.86	3652.86
PEDA and NRSE Projects	1220.12	1996.29	2234.07
<b>Grand Total</b>	<b>13647.63</b>	<b>14660.21</b>	<b>15010.87</b>

## 5.4 Transmission Losses

PSTCL submits that the following metering arrangement has been made under Intra-state Boundary Metering cum Transmission Level Energy Audit Scheme: As discussed in earlier Chapter, at present, the data has been collected for calculation of transmission losses of August, 2016 through remote connectivity, CMRI & manual reports. The tentative losses are 2.76%, which are being re-verified and further certain anomalies are being resolved which may take another few weeks. It is expected that data from all the boundary meters shall be available through remote connectivity in the CEC after rectifying all the field related problems by November, 2016.

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

As regards the trajectory of transmission losses during the Control Period, PSTCL submits that no past data of transmission losses is available and also the data for actual losses for whole year is also not yet available, hence, it would be difficult to establish baseline for transmission losses.

It may be noted that transmission loss for the other States in the country are in the range of 2.48% - 4.99% as given in the following Table:

**Table 56: Benchmarking of Transmission Losses for FY 2014-15**

Sr. No.	State (Transmission Utility)	Transmission Loss (%)
1	Andhra Pradesh (APTRANSCO)	4.02%
2	Chhattisgarh (CSPTCL)	3.22%
3	Gujarat (GETCO)	4.99%
4	Haryana	2.48%
5	Madhya Pradesh	3.00%
6	Maharashtra (InSTS)	3.98%

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Sr. No.	State (Transmission Utility)	Transmission Loss (%)
7	Telangana	4.02%
8	Uttar Pradesh (UPTCL)	3.59%

Source: Tariff Orders

As can be seen from the above Table, transmission loss level of PSTCL is lower than that prevalent in most of the States. This is the result of continuous efforts taken by PSTCL. 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 projected the following trajectory for transmission losses for the Control Period.

**Table 57: Transmission Losses Trajectory for Control Period**

Particulars	FY 2017-18	FY 2018-19	FY 2019-20
<b>Transmission Loss (%)</b>	2.80%	2.60%	2.50%

## 5.5 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.

PSTCL submits that the actual transmission availability in past years is higher than 99%. PSTCL has been investing considerable amounts on new transmission network, strengthening and augmentation of existing transmission network, system reliability and efficiency improvement, etc., which has been submitted as part of the Capital Investment Plan for the Control Period. PSTCL will endeavour to achieve Normative Annual Transmission Availability Factor as specified in PSERC MYT Regulations, 2014. The computation of incentive/disincentive on account of Transmission Availability shall be undertaken during True-up for the respective years of the Control Period.

## 5.6 Baseline Values

Regulation 8.1 of PSERC MYT Regulations, 2014 specifies that baseline values for the Control Period shall be determined by the Hon'ble Commission and the projections for the Control Period shall be based on these figures. These baseline values shall be inter-alia based on figures approved by the Hon'ble Commission in the past, latest audited accounts, estimate of the expected figures for the relevant year, industry benchmarks/norms and other factors considered appropriate by the Hon'ble Commission.

The Commission vide Tariff Order dated July 27, 2016 read with Order dated November 21, 2016 in Interim Application in Review Petition No. 4 of 2016, approved the ARR and Tariff for FY 2016-17 and in the present Petition, PSTCL is submitting the review of ARR for FY 2016-17 based on actual values for H1 of FY 2016-17. The actual figures for FY 2016-17 are not available now. The unaudited accounts for FY 2015-16 are available with PSTCL. Accordingly, PSTCL has considered unaudited values of FY 2015-16 as baseline values for projecting the ARR for the MYT Control Period from FY 2017-18 to FY 2019-20.

The Petitioner respectfully submits that the audited accounts of FY 2015-16 is likely to be available during the proceedings of the present Petition. The Audited Accounts will be submitted to the Hon'ble Commission, after it is approved by the Board of Directors of the Petitioner. The Audited figures of FY 2015-16 may be taken as base values for the projection of the Control Period.

## 5.7 Components of ARR for Transmission and SLDC Business

Regulation 15.1 of PSERC MYT Regulations, 2014 specifies the components of ARR of Transmission and SLDC Business as under:

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

- a. Return on Equity;*
- b. Interest and Finance Charges on Loan Capital;*
- c. Interest Charges on Working Capital;*
- d. Depreciation;*
- e. Operation and Maintenance Expenses;*

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- f. ULDC Charges;
- g. Statutory levies and taxes, if any. "

PSTCL has projected the components of ARR for the Control Period in subsequent sections.

## 5.8 O&M Expenses

Regulation 26 of the PSERC MYT Regulations, 2014 and its subsequent first amendment, specifies 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,

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

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

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

- $INDEX_n$  - 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:-

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

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

'CPI<sub>n</sub>' means the average rate (on monthly basis) of Consumer Price Index (Industrial workers) over the year for the nth year.

Note 1: The O&M expenses of BBMB for the entire Control Period shall be projected separately based on the latest actual payout. The Commission shall true up the O&M expenses of BBMB during the Annual Performance Review based on the actual payout. The O&M expenses of BBMB shall be treated as uncontrollable cost item. However, when CERC determines the tariff in respect of generating plants/units, transmission system and SLDC of BBMB, the Commission shall consider the same.

Note 2: For the purpose of estimation, the same WPI<sub>n</sub> and CPI<sub>n</sub> values shall be used for all years of the Control Period. However, the Commission will consider the actual values of the WPI<sub>n</sub> and CPI<sub>n</sub> at the end of each year during the Annual Performance Review exercise and true up the Employee cost on account of this variation. Further, the Commission will consider the actual values of the WPI<sub>n</sub> at the end of each year during the Annual Performance Review exercise and true up the R&M and A&G Expenses on account of this variation.

Note 3: 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.

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

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

Note 6: Exceptional increase in employee cost on account of pay revision etc. will be considered separately by the Commission.

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

Note 8: O&M expenses of assets taken on lease/hire-purchase and those created out of the consumers' contribution shall be considered in case the generating



company or the licensee has the responsibility for its operation and maintenance and bears O&M expenses.

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

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

(iii)  $X_n$  is an efficiency factor for  $n$ th year

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

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."

In view of the above, the O&M expenses are limited to Normative expenses. The PSTCL submits that as per above any gain on account of efficiency improvement 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 the projection of O&M expenses for the Control Period.

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

#### 5.8.1 Employee Costs

For projection of Employee Costs for the Control Period, the PSTCL has considered the Employee costs for FY 2015-16 as base values as shown in the following Table:

**Table 58: Employee Costs for FY 2015-16 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Terminal Benefits	235.05	0.09	235.14
2	Impact of wage revision/arrears	1.10	0.06	1.16
3	Gross Other Employee Costs	207.97	6.29	214.26
4	Less: Employee Expenses capitalised	46.29	0.00	46.29
5	Total Employee Costs	<b>397.83</b>	<b>6.44</b>	<b>403.97</b>

For projection of other employee cost, the PSTCL has considered the Gross Employee Costs for FY 2015-16 and employee costs capitalised has been projected for each year of the Control Period based on proposed Capitalisation and actual employee costs capitalised, on pro-rata basis.

#### **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. 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 AS 15 issued by the ICAI. PSTCL has considered the Terminal benefits for these employees recruited after 16 April, 2010 on the basis of actuarial valuation at the end of March 31, 2017.

PSTCL has projected the Terminal Benefits for the employees of erstwhile PSEB and employees recruited by PSTCL as shown in the following Table:

**Table 59: Terminal Benefits for Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Terminal benefits for employees of erstwhile PSEB	297.13	308.90	325.43
2	Terminal benefits for new employees recruited by PSTCL	5.66	6.34	7.11
3	<b>Terminal Benefits</b>	<b>302.79</b>	<b>315.24</b>	<b>332.53</b>

### Inflation factor

Since, WPI index are available till September, 2016 and CPI Index till August, 2016, the escalation index has been computed as per provisions of PSERC MYT Regulations, 2014 as shown in the following Table:

**Table 60: Computation of Escalation Index**

Sr. No.	Particulars	FY 2015-16	FY 2016-17	Increase / (decrease)
1	CPI Index (Apr - Aug)	260.40	276.20	106.07%
2	WPI Index (Apr - Sep)	177.35	181.83	102.53%
2	CPI: WPI Index (50:50)	218.88	229.02	104.30%

Accordingly, the inflation factor for the Control Period as per PSERC MYT Regulations, 2014 works out to 4.30%. The PSTCL has worked out the Gross Other Employee costs for the Control Period on the basis of actual Gross Other employee costs for FY 2015-16 multiplies by the Inflation factor. Accordingly, PSTCL has computed the Employee Costs for Transmission Business and SLDC for Control Period as per PSERC MYT Regulations, 2014 as shown in the Table below:

**Table 61: Employee Expenses for Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Transmission Business</b>			
1	Terminal Benefits	302.79	315.24	332.53
2	Gross Other Employee Costs	226.23	235.96	246.10
3	Less: Employee Costs capitalised	46.89	46.89	46.89
4	<b>Total Employee Costs</b>	<b>482.44</b>	<b>504.61</b>	<b>532.04</b>
	<b>SLDC</b>			
5	Employee Expenses	6.91	7.20	7.51

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 comes out lower than the estimated Other Employee Costs for FY 2016-17.

The PSTCL submits that the above computed Normative Employee Cost is grossly inadequate considering even the average rise in salaries and other expenses. The Hon'ble Commission would appreciate that in any industry with poachable talent, it is important that salaries are raised at least at par with the industry average to retain employees. Considering the fact that Employee Expenses form the biggest chunk in the overall operational expenditure, a mere 4.30% 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. The Employee expense forecast will be approved for a period of three years. 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 Organisation structure and accordingly reduced the approved sanctioned strength to 5064 Nos. of employees as on April 1, 2016 against which only 3592 Nos. of employees were on payroll as on April 1, 2016. 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 62: Proposed Employee Strength (Nos.)**

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
1	Sanctioned Strength at the beginning of the year	5064	5064	5064	5064
2	Working Strength at the beginning of the year	3592	4430	4587	4561
3	Gap (2)-(1)	1472	634	477	503

*Day*

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:

- 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 4% considered for Basic pay
- b) Dearness allowance (DA) as on April 1, 16 has been increased from 119% to 125%. The impact of increase of DA has been already considered in FY 2016-17. DA of 125% has been considered for Control period.
- c) Other allowance, Medical Expenses reimbursement, Leave Travel assistance, Staff Welfare expenses are projected based on past trends.
- d) Bonus to employees has not been considered at this stage considering the pay limit to employees. However, the same will be considered at time of Annual Performance Review.

The projected Employee Cost for Transmission Business for the Control Period is shown in the following Table:

**Table 63: Projected employee Costs for Control Period for Transmission Business (Rs. Crore)**

Sr. No	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Salaries	112.23	116.72	121.39
2	Overtime	5.67	6.28	6.96
3	Dearness Allowance	132.16	137.77	143.60
4	Other Allowances	20.44	22.64	25.08
	<b>Total (A)</b>	<b>270.50</b>	<b>283.41</b>	<b>297.03</b>
5	Staff Welfare Expenses			
I	Electricity Concession to Employees	1.94	2.15	2.39
II	Staff Welfare Expenses	0.37	0.41	0.46
	<b>Total (B)</b>	<b>2.32</b>	<b>2.57</b>	<b>2.84</b>
6	Medical Reimbursement	1.53	1.69	1.88
7	LTC Expenses	0.19	0.20	0.21
	<b>Total (C)</b>	<b>1.72</b>	<b>1.89</b>	<b>2.09</b>
8	Less :			

Sr. No	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
I	Establishment cost recoverable on execution of 66 kV works	0.31	0.31	0.31
II	Employee costs capitalized	46.59	46.59	46.59
	<b>Total (D)</b>	<b>46.90</b>	<b>46.90</b>	<b>46.90</b>
9	<b>Net Total (E=A+B+C-D)</b>	<b>227.64</b>	<b>240.98</b>	<b>255.07</b>
10	<b>Terminal benefits (F)</b>	<b>302.79</b>	<b>315.24</b>	<b>332.53</b>
11	<b>Grand Total (E+F)</b>	<b>530.43</b>	<b>556.23</b>	<b>587.60</b>

Similarly, the projected Employee Cost for SLDC for the Control Period is shown in the following Table:

**Table 64: Projected employee Costs for Control Period for SLDC (Rs. Crore)**

Sr. No	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Salaries	3.06	3.18	3.31
2	Overtime	0.00	0.00	0.00
3	Dearness Allowance	3.82	3.98	4.14
4	Other Allowances	0.65	0.72	0.80
	<b>Total (A)</b>	<b>7.54</b>	<b>7.88</b>	<b>8.25</b>
5	Staff Welfare Expenses			
I	Electricity Concession to Employees	0.00	0.00	0.00
II	Staff Welfare Expenses	0.00	0.00	0.00
	<b>Total (B)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6	Medical Reimbursement	0.04	0.05	0.06
7	LTC Expenses	0.01	0.01	0.01
	<b>Total (C)</b>	<b>0.05</b>	<b>0.06</b>	<b>0.07</b>
8	Less :			
I	Establishment cost recoverable on execution of 66 kV works	0.00	0.00	0.00
II	Employee costs capitalized	0.00	0.00	0.00
	<b>Total (D)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
9	<b>Net Total (E=A+B+C-D)</b>	<b>7.59</b>	<b>7.94</b>	<b>8.32</b>
10	<b>Terminal benefits (F)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
11	<b>Grand Total (E+F)</b>	<b>7.59</b>	<b>7.94</b>	<b>8.32</b>


The Normative employee cost is based on actual values of FY 2015-16, which does not consider the impact of recruitment of employees in subsequent years. The Normative Employee cost computed as per PSERC MYT Regulations, 2014 is lower than the projected Employee Cost for the Control Period. 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 the Control Period.

**Table 65: Proposed Employee Strength (Nos.)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Employee Cost for Transmission Business	530.43	556.23	587.60
2	Employee Cost for SLDC	7.59	7.94	8.32
3	Employee Cost for PSTCL	538.02	564.17	595.92

**PSTCL has not considered impact of wage revision of 6<sup>th</sup> 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.



### 5.8.2 R&M and A&G Expenses

PSTCL submits that R&M expenses and A&G Expenses have been linked to K factor and WPI index. K is the constant governing the relationship between R&M and A&G Expenses and Gross Fixed Assets. For computing K, PSTCL has analysed actual audited R&M and A&G expenses and GFA for FY 2015-16, as shown in the following Table:

**Table 66: Computation of K (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Gross Fixed Asset as on April 1, 2015	8054.17	8.32	8062.49
2	Gross Fixed Asset as on March 31, 2016	8398.99	14.78	8413.76
3	R&M Expenses	33.35	0.18	33.53
4	A&G Expenses	16.04	0.65	16.69
5	R&M and A&G Expenses as % of Average GFA (K)	0.60%	7.21%	0.61%

From the above table, PSTCL has considered K constant for Transmission as 0.60% and for SLDC as 7.21% i.e., K value for FY 2015-16 based on actual expenses.

The increase in WPI index works out to 2.53% as per PSERC MYT Regulations, 2014. Hence, for the purpose of projection of R&M and A&G Expenses, PSTCL has considered the escalation index of 2.53%. PSTCL has also considered the Audit Fee and Licence and ARR fees over and above the R&M and A&G expenses computed above.

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

**Table 67: R&M and A&G Expenses for Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Transmission Business</b>			
1	Opening GFA	9240.73	9420.91	9890.67
2	Closing GFA	9420.91	9890.67	10019.68
3	Average GFA	9330.82	9655.79	9955.18



Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
4	K factor	0.60%	0.60%	0.60%
5	Escalation factor	2.53%	2.53%	2.53%
5	<b>Gross R&amp;M and A&amp;G Expenses</b>	<b>57.43</b>	<b>59.43</b>	<b>61.28</b>
6	Add: Audit Fee	1.00	1.00	1.00
7	Add: Licence Fee and ARR Fee	0.50	0.50	0.50
8	<b>Total R&amp;M and A&amp;G Expenses</b>	<b>58.93</b>	<b>60.93</b>	<b>62.78</b>
	<b>SLDC</b>			
1	Opening GFA	30.20	40.20	50.20
2	Closing GFA	40.20	50.20	60.20
3	Average GFA	35.20	45.20	55.20
4	K factor	7.21%	7.21%	7.21%
5	Escalation factor	2.53%	2.53%	2.53%
6	<b>Total R&amp;M and A&amp;G Expenses</b>	<b>2.60</b>	<b>3.34</b>	<b>4.08</b>

## 5.9 Capital Expenditure and Capitalisation

PSSTCL has considered the capital expenditure and capitalisation for its Transmission and SLDC Business in line with the Capital Investment Plan being submitted to the Hon'ble Commission. The capital expenditure and capitalisation for the Control Period are as under:

**Table 68: Capital Expenditure and Capitalisation for the Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Transmission</b>			
1	Capital Expenditure	371.50	242.61	145.33
2	Capitalisation	180.19	469.76	129.01
	<b>SLDC</b>			
3	Capital Expenditure	10.00	10.00	10.00
4	Capitalisation	10.00	10.00	10.00
	<b>PSTCL (Transmission + SLDC)</b>			
5	Capital Expenditure	381.50	252.61	155.33
6	Capitalisation	190.19	479.76	139.01

## 5.10 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;
- d. The premium, if any raised by the Applicant while issuing share capital and investment of internal accruals created out of free reserve, shall also be reckoned as paid up capital for the purpose of computing return on equity subject to the normative debt-equity ratio of 70:30, provided such premium amount and internal accruals are actually utilized for meeting capital expenditure of the Applicant's business. "

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. The PSTCL has considered the equity amount at 30% of the capital expenditure limited to the extent of Return of Equity considered for previous year.

PSTCL submits that it will be in profit during the Control Period as all the Revenue Gaps of the previous years will be allowed till FY 2017-18 and it will have free reserves minimum of Rs. 93.91 Crore (earned as RoE) during the relevant years which are to be reckoned as equity as per Regulation 19 of PSERC MYT Regulations, 2014.

The remaining funding of capital works shall be carried out by taking loans from banks and/or financial institutions. PSTCL further submits that since, schemes considered under Capital Expenditure are in planning stage, hence, it would be

difficult to ascertain the exact source of debt financing at this stage as it depends on bank and/or financial institutions coming forward for such projects.

The funding of capital expenditure as proposed for the Control Period is shown in the following Table:

**Table 69: Funding of Capital Expenditure for the Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Debt	287.59	176.83	108.73
2	Equity	93.91	75.78	46.60
3	Total	381.50	252.61	155.33

### 5.11 Depreciation

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 manner:*

*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 as on March 31, 2017 as submitted in the present Petition, after taking into account the actual closing GFA for FY 2015-16 and estimated addition of GFA during FY 2016-17.

PSTCL has computed the depreciation on estimated GFA as on April 1, 2017 and projected addition of assets during the Control Period. PSTCL has considered the average depreciation rate of 5.23% for Transmission and 6.00% for SLDC, based on actual values of FY 2015-16.

Accordingly, PSTCL submits the depreciation for the Control Period as under:

**Table 70: Depreciation for the Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Transmission</b>			
1	Opening GFA for the year	6319.50	6499.68	6969.44
2	Addition of GFA during the year	180.19	469.76	129.01
3	Closing GFA for the year	6,499.68	6,969.44	7,098.45
4	Depreciation	335.38	352.39	368.05
	<b>SLDC</b>			
5	Opening GFA for the year	30.20	40.20	50.20
6	Addition of GFA during the year	10.00	10.00	10.00
7	Closing GFA for the year	40.20	50.20	60.20
8	Depreciation	2.11	2.71	3.31

*Qay*

## 5.12 Interest and Finance Charges on Loan Capital

Regulation 24 of the PSERC MYT Regulations, 2014 specifies as under:

### ***"24. INTEREST ON LOAN CAPITAL***

*24.1. For existing loan capital, interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the licensee or the State Bank of India Advance Rate as on April 1 of the relevant year, whichever is less.*

*24.2. Interest and finance charges on the actual loan capital for new investments shall be computed on the loans, duly taking into account the actual rate of interest and the schedule of repayment as per the terms and conditions of relevant agreements. The rate of interest shall be the actual rate of interest paid/payable (other than working capital loans) on loans by the licensee or the State Bank of India Advance Rate as on April 1 of the relevant year, whichever is less.*

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

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

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

For computing the Interest on Long Term Loan capital, PSTCL has considered the opening loan balances for FY 2017-18 equivalent to estimated closing loan balance as on March 31, 2017, as submitted in the present Petition for FY 2016-17.

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 PSTCL has also considered the Interest expenses of CC limit towards repayment of OBC loan, as discussed in earlier Chapter 4 of this Petition. PSTCL has proposed new loans for the proposed investments from Banks/Financial Institution at actual weighted average rate of interest.

Accordingly, interest on loan capital for the Control Period has been submitted as under:

**Table 71: Interest on Loan capital for the Control Period (Rs. Crore)**

St. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
	<b>Transmission Business</b>			
1	Opening Loan Balance for the year	4,154.40	4,127.21	3,974.95
2	Addition of loan during year	277.59	166.83	98.73
3	Repayment of loan during year	304.78	319.09	308.95
4	Closing Loan Balance for the year	4,127.21	3,974.95	3,764.73
5	Gross Interest Expenses	459.64	455.21	439.64
6	Less: Interest Capitalisation	53.50	52.14	40.30
7	Add: Misc. Interest and Finance Charges	1.37	1.37	1.37
8	<b>Interest Expenses</b>	<b>407.52</b>	<b>404.45</b>	<b>400.72</b>
	<b>SLDC</b>			
1	Opening Loan Balance	20.03	27.92	35.21
2	Addition of loan during year	10.00	10.00	10.00
3	Repayment of loan during year	2.11	2.71	3.31
4	Closing Loan Balance	27.92	35.21	41.90
5	<b>Interest Expenses</b>	<b>2.89</b>	<b>3.80</b>	<b>4.64</b>

### 5.13 Return on Equity

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 submitted in the present Petition as opening equity for FY 2017-18. PSTCL has considered the addition of equity 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 the Control Period in accordance with the above said Regulations as given in the following Table:



**Table 72: Return on Equity for the Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Opening Equity for the year	605.88	699.79	775.57
2	Addition of Equity during the year (out of internal accruals/free reserves)	93.91	75.78	46.60
3	Closing Equity for the year	699.79	775.57	822.17
4	Rate of RoE	15.50%	15.50%	15.50%
5	Return on Equity	101.19	114.34	123.83

### 5.14 Interest on Working Capital

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, whichever is less. PSTCL has considered the actual weighted average rate of Interest based for FY 2015-16 for computation of interest on working capital.

The computation of Interest on Working Capital for the Control Period is shown in the following Table:

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**Table 73: Interest on Working Capital Expenses for Control Period (Rs. Crore)**

Sr.No	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
<b>Transmission Business</b>				
1	Receivables for two months	248.53	258.47	268.27
2	Maintenance spares @15% of O&M	88.40	92.57	97.56
3	O&M Expenses for one month	49.11	51.43	54.20
4	Total Working Capital	386.05	402.47	420.02
5	Rate of Interest (%)	11.95%	11.95%	11.95%
6	<b>Interest on Working Capital</b>	<b>46.13</b>	<b>48.10</b>	<b>50.19</b>
<b>SLDC</b>				
1	Receivables for two months	4.56	5.06	5.56
2	Maintenance spares @15% of O&M	1.53	1.69	1.86
3	O&M Expenses for one month	0.85	0.94	1.03
4	Total Working Capital	6.94	7.69	8.45
5	Rate of Interest (%)	11.72%	11.72%	11.72%
6	<b>Interest on Working Capital</b>	<b>0.81</b>	<b>0.90</b>	<b>0.99</b>

### 5.15 ULDC Charges

PSTCL has projected ULDC charges for SLDC by applying escalation factor of 3.80%, same as considered for R&M and A&G expenses, over the actual ULDC charges for FY 2015-16. ULDC charges proposed for Control Period is as under:

**Table 74: ULDC Charges for Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	ULDC Charges-SLDC own share	9.49	9.73	9.98
2	ULDC Charges-BBMB share	1.91	1.96	2.01
3	NRLDC fees and charges	0.95	0.98	1.00
4	<b>Grand Total</b>	<b>12.36</b>	<b>12.67</b>	<b>12.99</b>

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## 5.16 Non-Tariff Income

Regulation 28 of PSERC MYT Regulations, 2014 specifies the indicative list for Non-Tariff Income. The income from late payment surcharge is also considered under Non-Tariff income.

In this regard, 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 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.

PSTCL has earned Non-tariff income in the past for rental charges of staff quarters, sale of tender forms, income from staff welfare activities, etc. This income received is primarily related to fixed activities and is not likely to increase in the future. PSTCL has not considered any income towards transmission charges and operating charges of Open Access Customers.

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The Non-tariff Income projected by PSTCL for the Control Period is shown in the following Table:

**Table 75: Non-Tariff Income for Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Non-tariff Income for Transmission Business	10.00	10.00	10.00
2	Non-tariff Income for SLDC	1.00	1.00	1.00

### 5.17 Income Tax

Regulation 23 of PSERC MYT Regulations, 2014 has allowed recovery of Income Tax, as part of ARR, as under:

**“23. INCOME TAX**

*23.1 Obligatory taxes, if any, on the income of the generating company or the licensee or the SLDC from its core/licensed business shall be computed as an expense and shall be recovered from the customers/consumers:*

*Provided that tax on any income other than the core/licensed business shall not constitute a pass through component in tariff and tax on such other income shall be payable by the generating company or the licensee or the SLDC.*

**23.2 Tax on income, if actually liable to be paid, shall be limited to tax on return on equity allowed, excluding incentives.**

*... ..”(emphasis added)*

Income Tax has been limited to tax on Return on Equity, excluding incentives. The Income Tax on incentive has been specifically excluded by the Hon’ble Commission in these Regulations. In this regard, PSTCL submits the following:

- a) The tariff is approved based on ARR, which includes the profit equal to RoE allowed by the Hon’ble Commission. If PSTCL reduces its expenses during the year after taking exhaustive efforts on efficiency improvement, the profit would be more than the RoE allowed by the Hon’ble Commission. However, as per the above said Regulations, PSTCL has to bear the Income Tax on account of such efficiency improvement, as Income Tax has been limited to tax on RoE, as income tax on profits due to such efficiency improvement will

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be disallowed. In totality, PSTCL will be losing out on account of efficiency improvement, which is against the spirit of the Electricity Act, 2003 and Tariff Policy.

- b) The Hon'ble Commission, while approving the tariff for the Control Period is likely to allow the past period recoveries, which reflects only on revenue side of PSTCL, as the expenses have already been booked in the respective year. In such case, the Income Tax would be more than tax on ROE. This will also add burden on PSTCL.
- c) The Income Tax is being allowed based on the lower of Tax on ROE and the actual Income Tax. In the future years, when the revenue is higher on account of past recoveries, the profits and hence, the actual Income Tax will be higher, but the same shall be limited to the tax on ROE. Hence, PSTCL will never be able to recover the tax on the legitimate past recoveries. If the Income Tax is allowed up to the RoE in all years, irrespective of the actual Income Tax, then over the period, the recovery of Income Tax will not tally with the Income Tax actually paid, which will not be fair to PSTCL.

In view of the above, PSTCL prays to the Hon'ble Commission that Income Tax should not be limited to tax on RoE allowed and should be allowed at actuals, as PSTCL is not recovering any amount that has not been approved for recovery by the Hon'ble Commission. Regulation 67 of PSERC MYT Regulations, 2014 specifies as under:

***"67. POWER OF RELAXATION***

*The Commission may in public interest and for reasons to be recorded in writing, relax any of the provision of these regulations. "*

The Hon'ble Commission by exercising its power under above said Regulation may relax the provision of Regulations. PSTCL humbly requests the Hon'ble Commission to allow the Income Tax on actual basis, by exercising its powers under Regulation 67 of PSERC MYT Regulations, 2014.

At this stage, PSTCL has computed the Income Tax on RoE with the applicable MAT rate i.e., 21.34%, without prejudice to above said prayer for allowing Income

Tax at actuals. The Income tax projected by PSTCL for the Control Period is as under:

**Table 76: Income Tax for the Control Period (Rs. Crore)**

Particulars	FY 2017-18	FY 2018-19	FY 2019-20
<b>Income Tax</b>	21.60	24.40	26.43

### 5.18 Summary of ARR

The summary of ARR for Transmission Business for Control Period is as under:

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Table 77: ARR for Transmission Business for Control Period (Rs. Crore)

Sr. No.	Particulars	Transmission Business				SLDC				PSICL			
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	FY 2018-19	FY 2019-20	FY 2017-18	FY 2018-19	FY 2019-20
		530.43	556.23	587.60	7.59	7.94	8.32	538.02	564.17	595.92			
1	Employee Expenses	530.43	556.23	587.60	7.59	7.94	8.32	538.02	564.17	595.92			
2	R&M and A&G expenses	58.93	60.93	62.78	2.60	3.34	4.08	61.54	64.28	66.86			
3	Depreciation	335.38	352.39	368.05	2.11	2.71	3.31	337.49	355.09	371.36			
4	Interest on Loan Capital	407.52	404.45	400.72	2.89	3.80	4.64	410.41	408.25	405.36			
5	Interest on Working Capital	46.13	48.10	50.19	0.81	0.90	0.99	46.95	49.00	51.18			
6	ULDC Charges	-	-	-	12.36	12.67	12.99	12.36	12.67	12.99			
7	Return on Equity	101.19	114.34	123.83	-	-	-	101.19	114.34	123.83			
8	Income Tax	21.60	24.40	26.43	-	-	-	21.60	24.40	26.43			
9	Aggregate Revenue Requirement	1,501.19	1,560.83	1,619.59	28.36	31.37	34.33	1,529.54	1,592.20	1,653.92			
10	Less: Non-Tariff Income	10.00	10.00	10.00	1.00	1.00	1.00	11.00	11.00	11.00			
11	Net Aggregate Revenue Requirement	1,491.19	1,550.83	1,609.59	27.36	30.37	33.33	1,518.54	1,581.20	1,642.92			

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## 6 PROPOSED TARIFF FOR CONTROL PERIOD FROM FY 2017-18 TO FY 2019-20

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### 6.1 Cumulative Revenue Gaps and its recovery

Hon'ble Commission in past Tariff Orders has considered the Revenue Gaps and its carrying cost for past years at time of determination of Tariff for the year. Hence, the Tariff includes the Standalone ARR, past Revenue Gaps and its carrying cost. However, at time of True-up for respective years, such past Revenue Gaps and its carrying cost had not been considered in expenses. So, effectively, such Revenue Gaps and its carrying cost were not recovered through tariff in past years.

For the purpose of the present Petition, the Petitioner has considered such Revenue Gaps for the years. The PSTCL has computed the cumulative Revenue Gap for FY 2014-15 and FY 2016-17 as under:

#### 6.1.1 Revenue Gap - True-up for FY 2014-15

Hon'ble Commission in Tariff Order for FY 2014-15 has approved Net ARR of Rs. 895.66 Crore which consists of Standalone Revenue Requirement of Rs. 1,013.06 Crore, past Revenue Surplus of Rs. 120.83 Crore and carrying cost on such Revenue Gap/(Surplus) of Rs. 3.43 Crore for the period from FY 2010-11 to FY 2013-14.

The Petitioner has considered the Revenue Surplus of Rs. 120.83 Crore pertaining to period from FY 2010-11 to FY 2013-14. This past Revenue Surplus of Rs. 120.83 Crore consists of Revenue Gap of Rs. 136.48 Crore of True-up for FY 2010-11, Revenue Gap of Rs. 140.34 Crore of True-up for FY 2011-12, Revenue Gap of Rs. 18.02 Crore of Review for FY 2012-13 and Revenue Surplus of Rs. 415.67 Crore of Review for FY 2013-14.

For the purpose of the present Petition, the Petitioner has considered the Revenue Gap/(Surplus) and its carrying cost for True-up for FY 2010-11, Review of FY 2012-13 and FY 2013-14 as approved by Hon'ble Commission in Tariff Order for FY 2014-15.

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For computation of carrying cost on Revenue Gap for FY 2011-12, the Petitioner submits that, in the Tariff Order for FY 2014-15, Hon'ble Commission has computed the carrying cost on Revenue Gap of Rs. 69.17 Crore (Rs. 140.34 Crore - Rs. 71.17 Crore) because the Revenue Gap of Rs. 71.17 Crore and its carrying cost of Rs. 4.63 Crore for FY 2011-12 was considered in Tariff Order for FY 2012-13. However, it is submitted that Revenue Gap of Rs. 71.17 Crore and carrying cost of Rs. 4.63 Crore of Review for FY 2011-12 has not been allowed subsequently at time of True-up for FY 2012-13 in Tariff Order for FY 2016-17. Hence, the Petitioner has computed the carrying cost on total Revenue Gap of Rs. 140.34 Crore as shown in the following Table:

**Table 78: Carrying cost on Revenue Gap of True-up for FY 2011-12 (Rs. Crore)**

Sr. No	Particulars	Rate of Interest (%)	FY 2011-12
1	Revenue Gap after True-up		140.34
2	Carrying cost for FY 2011-12 (Half year)	13.00%	9.12
3	Carrying cost for FY 2012-13	10.93%	15.34
4	Carrying cost for FY 2013-14	11.53%	16.18
5	Carrying cost for FY 2014-15 (Half year)	11.53%	8.09
6	Total Carrying cost		48.73
7	Carrying cost recoverable from PSPCL (till half year of FY 2013-14)		32.55
8	Carrying cost recoverable form GoP		16.18

The computation of Revenue Gap for FY 2014-15 is shown in the following Table:

**Table 79: Total Revenue Gap for FY 2014-15 (Rs. Crore)**

Sr. No	Particulars	Tariff Order for FY 2014-15	FY 2014-15 (Petition)
1	ARR	1,013.06	1,120.89
2	Less: Revenue from Tariff	-	895.66
3	Revenue Gap/(Surplus) for the year (a)	-	225.23
4	Revenue Gap of True-up of FY 2010-11	136.48	136.48

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Sr. No	Particulars	Tariff Order for FY 2014-15	FY 2014-15 (Petition)
5	Revenue Gap of True-up of FY 2011-12	140.34	140.34
6	Revenue Gap of Review of FY 2012-13	18.02	18.02
7	Revenue Surplus of Review of FY 2013-14	(415.67)	(415.67)
8	<b>Total Revenue Gap/(Surplus) for past years (b)</b>	<b>(120.83)</b>	<b>(120.83)</b>
9	Carrying cost on True-up of FY 2010-11	33.22	33.22
10	Carrying cost on True-up of FY 2011-12	16.05	32.55
11	Carrying cost on Review of FY 2012-13	2.08	2.08
12	Carrying cost on Review of FY 2013-14	(47.92)	(47.92)
13	<b>Total Carrying cost for past years (c)</b>	<b>3.43</b>	<b>19.93</b>
14	<b>Total Revenue Gap/(Surplus) for FY 2014-15 including past years Revenue Gaps and carrying cost</b>	-	<b>124.34</b>

Hon'ble Commission in Tariff Order for FY 2015-16 has approved the Revenue Gap of Rs. 12.14 Crore and the carrying cost of Rs. 1.44 Crore of Review of FY 2014-15. For the purpose of the present Petition, the Petitioner has considered the Revenue Gap of Rs. 213.09 Crore (Rs. 225.23 Crore - Rs. 12.14 Crore) for True-up of FY 2014-15. The Revenue Gap of Rs. 12.14 Crore and Carrying cost of Rs. 1.44 Crore shall be claimed at the time of True-up for FY 2015-16.

The Petitioner has computed the carrying cost on Revenue Gap for FY 2014-15 as shown in the following Table:

**Table 80: Carrying cost on Revenue Gap of True-up for FY 2014-15 (Rs. Crore)**

Sr. No.	Particulars	Rate of Interest (%)	FY 2014-15
1	Revenue Gap after True-up		225.23
2	Revenue Gap considered in Tariff Order for FY 2015-16		12.14
3	Net Revenue Gap recoverable for FY 2014-15		213.09
4	Carrying cost for FY 2014-15 (Half year)	11.90%	12.68

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Sr. No.	Particulars	Rate of Interest (%)	FY 2014-15
5	Carrying cost for FY 2015-16	11.95%	25.46
6	Carrying cost for FY 2016-17	11.95%	25.46
7	Carrying cost for FY 2017-18 (Half year)	11.95%	12.73
8	Total Carrying cost		76.34

The Petitioner has considered the recovery of Revenue Gap of FY 2014-15 and its carrying cost in FY 2017-18 as discussed in subsequent Section.

#### 6.1.2 Revenue Gap - Review of ARR for FY 2016-17

The Hon'ble Commission in Tariff Order for FY 2016-17 read with Order dated November 21, 2016 in I.A. in Review Petition No. 4 of 2016 has approved the Revenue Requirement of Rs. 1,047.02 Crore recoverable from PSPCL which according to the Orders, consists of Standalone Revenue Requirement of Rs. 1,163.20 Crore for FY 2016-17, Revenue Surplus of Rs. 135.36 Crore of True-up for FY 2012-13, Revenue Surplus of Rs. 25.49 Crore of True-up for FY 2013-14, Revenue Gap of Rs. 56.85 Crore of Review of FY 2015-16 and carrying cost payable of Rs. 12.19 Crore for respective Revenue Gap/(Surplus).

For computing the cumulative Revenue Gap/(surplus) for FY 2016-17, the Petitioner has considered the past Revenue Gap/(Surplus) and its carrying cost as approved by the Hon'ble Commission in Order dated November 21, 2016.

Since, the Petitioner has considered the Revenue Gap of Rs. 56.85 Crore and its carrying cost of Rs. 6.66 Crore of Review of FY 2015-16 as approved by the Hon'ble Commission, it shall claim the differential Revenue Gap for FY 2015-16 and its carrying cost at the time of True-up for FY 2015-16.

The computation of Revenue Gap for FY 2016-17 is shown in the following Table:

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**Table 81: Total Revenue Gap for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	Order on I.A. in Review Petition No. 4 of 2016	FY 2016-17 (Petition)
1	ARR	1163.20	1386.26
2	Less: Revenue from Tariff	-	1047.02
3	<b>Revenue Gap/(Surplus) for the year (a)</b>	-	<b>339.24</b>
4	Revenue Surplus of True-up of FY 2012-13	(135.36)	(135.36)
5	Revenue Surplus of True-up of FY 2013-14	(25.49)	(25.49)
6	Revenue Gap of Review of FY 2015-16	56.85	56.85
7	<b>Total Revenue Gap/(Surplus) for past years (b)</b>	<b>(103.99)</b>	<b>(103.99)</b>
8	Carrying cost on True-up of FY 2012-13	(15.86)	(15.86)
9	Carrying cost on True-up of FY 2013-14	(2.99)	(2.99)
10	Carrying cost on Review of FY 2015-16	6.66	6.66
11	<b>Total Carrying cost for past years (c)</b>	<b>(12.19)</b>	<b>(12.19)</b>
12	<b>Total Revenue Requirement for FY 2016-17 including past Revenue Gaps and carrying cost d=a+b+c</b>	<b>1047.02</b>	<b>223.05</b>

The Petitioner has computed the carrying cost on Revenue Gap for FY 2014-15 as shown in the following Table:

**Table 82: Computation of Carrying cost for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	ROI	PSTCL
1	Revenue gap for FY 2016-17		339.24
2	Carrying cost for FY 2016-17 (half year)	11.95%	20.27
3	Carrying cost for FY 2017-18 (half year)	11.95%	20.27
4	Total Carrying cost for recovery		40.54

### 6.1.3 Recovery of Past Revenue Gaps

The Petitioner prays to the Hon'ble Commission to approve the cumulative Revenue Gap as detailed in the below Table, arising out of True-up for FY2014-15 and Review of ARR for FY 2016-17.

PSTCL proposes to recover the cumulative Revenue Gap in FY 2017-18 from the Transmission Charges. Accordingly, the cumulative Revenue Gap proposed for recovery has been worked out as under:

The Petitioner has projected the total Aggregate Revenue Requirement for the Control Period for Transmission Business and SLDC as shown in the following Table:

**Table 83: Total Aggregate Revenue Requirement for Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Standalone ARR for Transmission Business	1,491.19	1,550.83	1,609.59
2	ARR for SLDC	27.36	30.37	33.33
3	<b>Standalone ARR for PSTCL (a)</b>	<b>1518.54</b>	<b>1581.20</b>	<b>1642.92</b>
	<b>True-up for FY 2014-15</b>			
3	Revenue Gap of True-up for FY 2014-15	225.23	-	-
4	Past Revenue Gap/(Surplus) considered in FY 2014-15	(120.83)		
5	Carrying cost on True-up for FY 2014-15	76.34		
6	Carrying cost on Past Revenue Gap/(Surplus) considered in FY 2014-15	19.93		
7	<b>Sub-total (b)</b>	<b>200.68</b>		
	<b>Review of FY 2016-17</b>			
8	Revenue Gap of Review for FY 2016-17	339.24	-	-
9	Past Revenue Gap/(Surplus) considered in FY 2016-17	(103.99)	-	-
10	Carrying cost on Review for FY 2016-17	40.54	-	-
11	Carrying cost on Past Revenue Gap/(Surplus) considered in FY 2016-17	(12.19)	-	-
12	<b>Sub-total (c)</b>	<b>263.60</b>	-	-
13	<b>Total Aggregate Revenue Requirement</b>	<b>1,982.82</b>	<b>1,581.20</b>	<b>1,642.92</b>

## 6.2 Proposed Tariff for the Control Period

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 during the Control Period.

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

**Table 84: Proposed Transmission Charges for Control Period**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	Annual Transmission Charges (Rs. Crore)	1,955.46	1,550.83	1,609.59
2	Transmission System Capacity (Net) (MW)	13,647.63	14,660.21	15,010.87
3	Transmission Charges per month (Rs. Crore per month)	162.96	129.24	134.13
4	Transmission Charges (Rs./MW/month)	1,19,402	88,154	89,357
5	Transmission Charges (paise/kWh)	35	27	27

Accordingly, PSTCL has proposed the SLDC Charges for the Control Period as shown in the following Table:

**Table 85: Proposed SLDC Charges for Control Period**

Sr. No.	Particulars	FY 2017-18	FY 2018-19	FY 2019-20
1	SLDC Charges (Rs. Crore)	27.64	30.90	34.10
2	SLDC Charges per month (Rs. Crore) for PSPCL	2.28	2.53	2.78
3	SLDC Charges (Rs./MW/month) for Long Term/Medium term Open Access Customers	1,670	1,726	1,850

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

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