

**PETITION FOR TRUE UP OF  
FY 2020-21, ANNUAL  
PERFORMANCE REVIEW OF  
FY 2021-22 AND REVISED  
ARR AND TARIFF FOR FY  
2022-23**

Submitted by



*Sudh*





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

**PETITION NO. ....**

**Case No.....**

**IN THE MATTER OF:** Filing of Petition for the approval of True-up of ARR for FY 2020-21 for Transmission Business and SLDC, Annual Performance Review for FY 2021-22 and approval of revised ARR forecast and determination of Tariff for Transmission Business and SLDC for FY 2022-23, under Section 62, 64 and 86 of the Electricity Act, 2003 read with Regulation 11 & 12 of PSERC (Terms and Conditions of Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2019.

**AND**

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

**MOST RESPECTFULLY SHOWETH:**

Sudhir Kumar, son of Late Shri Jagdish Sharan aged 48 residing at Patiala do hereby solemnly affirms and state as follows:

I am the Chief Accounts Officer (Finance & Audit) 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 6 of the petition are based on the information collected from the concerned offices of the PSTCL and believe them to be true to my knowledge. and belief and nothing material has been concealed there from.

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

The Contents of the affidavit documents have been read over to the documents He/She has accepted the true & correct.

*Sudhir*  
**DEPONENT**  
(Sudhir Kumar)

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.

**Attested As Identified**  
*lh*  
**Notary (Govt. of India)**  
**DISTT. PATIALA (PB.)**  
**25 NOV 2021**

*Sudhir*  
**DEPONENT**  
(Sudhir Kumar)

90206 *neet muni*  
*shiray*

AVTAR SINGH  
Lic No. 422 HRC  
Dist. Courts, Patiala

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

Case No. \_\_ of 2021

IN THE MATTER OF: Filing of Petition for the approval of True-up of ARR for FY 2020-21 for Transmission Business and SLDC, Annual Performance Review for FY 2021-22 and approval of revised ARR forecast and determination of Tariff for Transmission Business and SLDC for FY 2022-23, under Section 62, 64 and 86 of the Electricity Act, 2003 read with Regulation 11 & 12 of PSERC (Terms and Conditions of Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2019.

AND

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

The Petitioner respectfully submits as under: -

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# 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 Electricity Act, 2003 (Act), the Government of Punjab notified PSTCL as the State Transmission Utility (STU).

## 1.2 Submission of True-up of FY 2020-21, Annual Performance Review of FY 2021-22 and Revision of Annual Revenue Requirement of FY 2022-23

The Hon'ble Commission notified the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2019 (herein after referred as "PSERC MYT Regulations, 2019") on May 29, 2019. These Regulations came into force from April 1, 2020 and the three-year Multi Year Tariff ("MYT") Control Period is from FY 2020-21 to FY 2022-23.

PSTCL filed Petition No. 44 of 2020 for Annual Performance Review (APR) for 2020-21 and Revised Annual Revenue Requirement (ARR) and determination of Tariff for FY 2021-22 on November 27, 2020. The Hon'ble Commission issued the Order on May 28, 2021 on the said Petition and approved Tariff for FY 2021-22, along with APR of FY 2020-21.

PSTCL submits that, in accordance with Regulation 9 and 10 of the PSERC MYT Regulations, 2019, it had filed Petition for approval of Capital Investment Plan and Business Plan (Petition No. 19 of 2019) for the Control Period from FY 2020-21 to FY

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2022-23 on August 30, 2019. The Hon'ble Commission had issued the Order on this Petition on December 03, 2019.

Regulation 11, 12 and 58 of PSERC MYT Regulations, 2019 provides for submission of True-up of Previous year, APR of current year and revised ARR and Tariff for ensuing year. In line with these provisions of PSERC MYT Regulations, 2019, PSTCL is filing a Petition for True-up for FY 2020-21, APR for FY 2021-22 and for approval of revised ARR estimates and determination of tariff for FY 2022-23.

### 1.3 Contents of the Petition

The present Petition consists of the following Chapters:

#### **Chapter 1 - Introduction (present Chapter)**

**Chapter 2 - True-up for FY 2020-21:** In this Chapter, the Petitioner submits the ARR for Transmission Business and SLDC, based on the actual expenses as per the Audited Annual Accounts for FY 2020-21. In this Chapter, the Petitioner has also presented its submissions regarding certain critical aspects influencing the true-up of expenses for FY 2020-21.

**Chapter 3 - Annual Performance Review for FY 2021-22 and revised ARR for FY 2022-23:** In this Chapter, the Petitioner has estimated the APR for FY 2021-22 for Transmission Business and SLDC. Also, the revised ARR for FY 2022-23 for Transmission Business and SLDC has been projected based on the PSERC MYT Regulations, 2019. In this Chapter, the Petitioner has also presented its submissions regarding certain critical aspects influencing the determination of APR and ARR for FY 2021-22 and FY 2022-23, respectively.

**Chapter 4 - Proposed Tariff for FY 2022-23:** In this Chapter, the Petitioner submits the proposed Tariff for Transmission Business and SLDC for FY 2022-23 considering the revised ARR for FY 2022-23 and revenue gaps of previous years.

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**Chapter 5 - Directives:** This Chapter includes the status and compliance of directives issued by the Hon'ble Commission in the past Tariff Orders.

**Chapter 6 - Prayers:** This Chapter details the prayers made by PSTCL in the present Petition.

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## 2 TRUE UP OF ARR FOR FY 2020-21

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### 2.1 Background

The Hon'ble Commission vide Order dated May 28, 2021, had approved the Annual Performance Review of Rs. 1,333.05 Crore after adjustment of carrying cost. Out of this, Rs. 21.56 Crore was approved for SLDC for FY 2020-21.

Regulation 12 of PSERC MYT Regulations, 2019, specifies as under:

**"12. TRUE UP**

*12.1. Truing up of the ARR of the previous year shall be carried out along with the Annual Performance Review and will be adjusted in the ARR of the next year of the control period.*

*12.2. Truing up of uncontrollable items and normative items shall be carried out at the end of each year of the control period based on prudence check.*

*12.3. Truing-up exercise will be undertaken only when audited accounts for the year(s) under consideration have been made available. The approved aggregate gain or loss for each business on account of controllable items will be subject to provisions of Regulation 8 and Regulation 30.*

*12.4. Capital Expenditure, Capitalisation and associated ARR items shall be normally trued up at the end of the Control Period in accordance with Regulation 9, while Distribution Loss and Transmission Loss shall be trued up every year along with truing up of ARR based on prudence check.*

*12.5. In case of any change in the approved amounts (positive or negative) during the True up exercise, the Commission shall consider the approved carrying cost as a separate item of the ARR.*

*12.6. The Commission may allow/recover the carrying cost for the trued up amount at the interest rate mentioned in regulation 25.1:*

*Provided that no carrying cost shall be permitted for the period of delay in filing of true up on account of non submission of audited accounts due to the fault of the utility:*

*Provided that if the Commission determines an over recovery by the licensee during the True-up, carrying cost for such trued up amount shall be recovered from the Applicant."*

In the present Petition, the Petitioner has submitted the True-up for FY 2020-21 based on the Audited Accounts for FY 2020-21. The Petitioner also submits its rationale for the key heads of expenditure, which critically impact its overall

financial health. PSTCL has submitted a copy of Audited Accounts for FY 2020-21 as Annexure I along with this Petition.

## 2.2 Description of the Transmission System

The details of the transmission system of PSTCL as on April 1, 2020 and March 31, 2021 are tabulated below:

**Table 1: Transmission System of PSTCL during FY 2020-21**

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2020)	Addition during the year	Retirement during the year	Closing (As on 31 <sup>st</sup> March 2021)
<b>Transmission Lines (Circuit-kms)</b>					
1	400 kV	1,599.75	-	-	1,599.75
2	220 kV	7,642.13	268.004	45.093	7,865.04
3	132 kV	3,135.64	-	42.241	3,093.40
	<b>Total</b>	<b>12,377.52</b>	<b>268.004</b>	<b>87.334</b>	<b>12,558.19</b>
<b>Substations (Nos.)</b>					
1	400 kV	5	-	-	5
2	220 kV	101	-	-	101
3	132 kV	65	-	-	65
	<b>Total</b>	<b>171</b>	<b>-</b>	<b>-</b>	<b>171</b>
<b>Transmission Bays (Nos.)</b>					
1	400 kV	72	-	-	72
2	220 kV	703	4	-	707
3	132 kV	505	5	-	510
	<b>Total</b>	<b>1,280</b>	<b>9</b>	<b>-</b>	<b>1,289</b>
<b>Substation Capacity (MVA)</b>					
1	Substation Capacity	37,708.67	459.00	-	38,167.67

## 2.3 Transmission System Availability

The Petitioner submits that the overall Transmission System Availability achieved by PSTCL for FY 2020-21, as certified by Chief Engineer SLDC, (copy attached as per Annexure II) is 99.8324%. The following table provides the transmission system availability for each month of FY 2020-21:

**Table 2: Transmission System Availability for FY 2020-21**

Sr. No.	Month	Transmission System Availability (%)
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Sr. No.	Month	Transmission System Availability (%)
1	Apr-20	99.8843%
2	May-20	99.4672%
3	Jun-20	99.8743%
4	Jul-20	99.8284%
5	Aug-20	99.9342%
6	Sep-20	99.9568%
7	Oct-20	99.9546%
8	Nov-20	99.7799%
9	Dec-20	99.7814%
10	Jan-21	99.9212%
11	Feb-21	99.8569%
12	Mar-21	99.7396%
	<b>TOTAL</b>	<b>99.8324%</b>

The actual Transmission System Availability for FY 2020-21 is higher than the Normative Target Availability Factor, i.e., 99%. The incentive on account of over-achievement of Transmission System Availability is discussed subsequently in this Chapter.

## 2.4 Transmission Losses

Actual transmission loss of PSTCL during FY 2020-21 is 2.50% as compared to the fixed transmission loss of 2.48% in APR of FY 2020-21, vide Tariff Order dated May 28, 2021. The details of energy input and energy output wheeled through the transmission system of PSTCL during FY 2020-21 are as under:

**Table 3: Actual Transmission Loss for FY 2020-21**

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

## 2.5 Investment and Capitalization

The Petitioner submits that the Hon'ble Commission originally approved Rs. 638 Crore as capital expenditure for FY 2020-21 in the Capital Investment Plan, however, revised to Rs. 400 Crore and subsequently approved Rs. 200 Crore provisionally. The Petitioner had incurred Capital Expenditure of Rs. 218.76 Crore during FY 2020-21 due to COVID-19 and other reasons. Opening Capital Work in Progress for FY 2020-21 as per Audited Accounts is Rs. 282.70 Crore. An amount of Rs. 198.51 Crore has been capitalised and transferred to Fixed Assets. The remaining capital work in progress of Rs. 302.95 Crore is carried over to the next year.

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

PSTCL has incurred capital expenditure of Rs. 4.01 Crore which have been directly transferred to GFA and do not form part of CWIP account. The detail break-up of these assets is shown in the Table below.

**Table 4: Assets directly transferred to GFA during FY 2020-21 (Rs. Cr.)**

Sr. No.	Particulars	FY 2020-21
1	Buildings	0.73
2	Plant and Machinery	1.85
3	Vehicles	0.70

Sr. No.	Particulars	FY 2020-21
4	Furniture and fixture	0.63
5	Office Equipment	0.09
	<b>Total Assets directly transferred to GFA</b>	<b>4.01</b>

The Capitalization of Rs. 198.51 Crore includes Rs. 0.98 Crore and Rs. 6.04 Crore as Contributory Works and Works under PSDF scheme, respectively during FY 2020-21. The same is shown in detail below:

**Table 5: CAPEX and Capitalization for FY 2020-21 (Rs. Crore)**

Sr No.	Particulars	STU	SLDC	PSTCL
	<b><u>CAPEX</u></b>			
1.	CWIP as on 01.04.2020 Contributory - 55.87 PSDF - 7.12 Others - <u>214.37</u> Total 277.36	277.36	5.34	282.70
2a	CAPEX on Spill over schemes during the 2020-21 Contributory - 89.80 PSDF - 6.48 Others - <u>100.4</u> Total 196.68	196.68	0.95	197.63
2b	CAPEX on New Schemes during FY 2020-21	21.13	0.00	21.13
2.	Total CAPEX during the year as per Accounts	217.81	0.95	218.76
3.	Add: Directly Purchased	3.96	0.04	4.01
	<b>Total CAPEX</b>	<b>221.78</b>	<b>0.99</b>	<b>222.77</b>
	<b><u>Capitalization</u></b>			

Sr No.	Particulars	STU	SLDC	PSTCL
1a	Spill over schemes			
	Contributory - 0.98			
	PSDF - 6.04	183.25	4.82	188.07
	Others - <u>176.23</u>			
	<b>Total 183.25</b>			
1b	New Schemes	10.44	0.00	10.44
1.	<b>Total as per Accounts</b>	<b>193.69</b>	<b>4.82</b>	<b>198.51</b>
2.	Add: Directly Purchased	3.96	0.04	4.01
	<b>Total Capitalization</b>	<b>197.65</b>	<b>4.86</b>	<b>202.52</b>
3	Closing CWIP as on 31.03.2021			
	Contributory - 144.70			
	PSDF - 7.56	301.48	1.46	302.95
	Others - <u>149.22</u>			
	<b>Total 301.48</b>			

## 2.6 Funding of Capital Investment

In Tariff Order for FY 2020-21 dated 1.6.2020, in para 4.5.8, Hon'ble Commission has ordered the following:

*"4.5.8..... The Commission allows the funding through loan as explained below:*

*During the 2n*

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

Accordingly, the funding requirement for Capital Investment (Considering CAPEX of Spill over Schemes and Capitalization of New Schemes) during FY 2020-21 for Transmission Business is Rs. 211.09 Crore (Rs. 196.68 Crore for CAPEX of Spill over schemes, Rs. 10.44 Crore for Capitalization of New Schemes and Rs. 3.96 Crore For

Directly Capitalized Asset). Funding requirement for Capital Investment for SLDC Business is Rs. 0.99 Crore (Rs. 0.95 Crore for Spill over schemes and Rs. 0.04 Crore for Directly Capitalised Assets). Thus, the total funding for Capital Investment for PSTCL as a whole is Rs. 212.08 Crore during FY 2020-21.

Further, PSTCL has considered the amount of Rs. 4.01 Crore which is directly incurred on creation of assets as per the Audited Accounts.

Following Table shows the Capital Investment claimed by PSTCL for funding through Loans and Equity for Transmission Business and SLDC Business for FY 2020-21:

**Table 6: Funding Requirement for Capital Investment for FY 2020-21 (Rs. Crore)**

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

As shown in the above Table, PSTCL has considered the Capital Investment of Rs. 115.80 Crore for the purpose of funding from Loan and Equity which includes Rs. 114.81 Crore for Transmission Business and Rs. 0.99 Crore in SLDC Business. During FY 2020-21, PSTCL has booked a profit of Rs. 20.66 Crore and the same has been

considered to be reinvested into the Transmission Business as Equity and the balance Rs. 95.14 Crore is funded through Loans.

## 2.7 O&M Expenses

PSERC MYT Regulations, 2019 has come into effect from FY 2020-21. Regulation 26.1 provides for methodology for computation of normative O&M expenses. The relevant extracts of PSERC MYT Regulations, 2019 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,

...

(i)  $R\&M_n = K \times GFA \times WPI_n / WPI_{n-1}$

Where,

- 'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) for the nth year. The value of 'K' will be specified by the Commission in the MYT order.
- 'GFA' is the average value of the gross fixed assets of the nth year.
- $WPI_n$  means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year.

(ii)  $EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) \times (INDEX_n / INDEX_{n-1})$

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

$$INDEX_n = 0.50 \times CPI_n + 0.50 \times WPI_n$$

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

*Swelling*

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

...

Note 4: Terminal Liabilities such as death-cum-retirement gratuity, pension including family pension, commuted pension, leave encashment, LTC, medical reimbursement including fixed medical allowance in respect of State PSU / Government 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 amount approved by the Commission shall be tried up in the Annual Performance Review.

Note 6: Exceptional increase in employee cost on account of pay Commission based revision State PSU / Government employees will be considered separately by the Commission.

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

..."

Accordingly, normative O&M expenses are calculated as under:

## 2.7.1 Computation of Normative Employee Costs and A&G Expenses

### 2.7.1.1 Computation of Normative Employee Costs

The Hon'ble Commission in Tariff Order dated May 28, 2021 has approved the Other Employee cost of Rs. 190.44 Crore for Transmission Business on the basis of actual for FY 2019-20. The Hon'ble Commission approved the normative employee cost of SLDC at Rs. 7.00 Crore for FY 2019-20 against actual employee cost of Rs. 7.48 Crore since the normative employee cost of SLDC was lower than the actual employee cost.

PSTCL would like to submit that with effect from September 2019, Communication Wing, which was earlier a part of Transmission Business, was transferred to SLDC

Business. The employee cost of this Wing is coming out to be Rs. 1.58 Crore for FY 2019-20. Since the employee cost of Communication Wing is not covered in the base normative SLDC expenses, this has led to disallowance of actual cost of inter-units transfers such as the Communication Wing. Therefore, PSTCL in its Review Petition on Tariff Order dated May 28, 2021 has requested the Hon'ble Commission to allow Rs. 1.58 Crore as an additional employee cost of SLDC over and above the normative employee cost approved.

PSTCL submits that the Communication Wing was again transferred back to Transmission Business on March 16, 2021. Accordingly, the base employee expenses of Rs. 190.44 Crore of FY 2019-20 for Transmission Business have been revised to Rs. 192.02 Crore (adding the cost of employees of the Communication Wing of Rs. 1.58 Crore) has been considered as a base for FY 2020-21. Hence, the base employee expenses for FY 2020-21 have been revised from Rs. 7.48 Crore to Rs. 5.90 Crore for SLDC Business.

PSTCL has applied the weighted average escalation of CPI and WPI indices of 3.16% for FY 2020-21 which have been calculated as below:

**Table 7: Calculation of Index of FY 2020-21**

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

$$INDEX_n / INDEX_{n-1} = (0.5 * 5.02) + (0.5 * 1.29) = 3.16\%$$

Further, Terminal Liabilities on actual basis have been considered. The following table shows the actual amount of Terminal Benefits for FY 2020-21:

**Table 8: Calculation of Terminal Benefits Cost of FY 2020-21**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Share of Pension Gratuity and Medical	296.58	-	296.58
2	Share of Leave Encashment	19.85	-	19.85
3	NPS, CPF, PF, LWF	5.88	0.35	6.23
4	Miscellaneous - P.F inspection fees,	0.29	0.01	0.30

*Sudhif*



Sr. No.	Particulars	Transmission	SLDC	PSTCL
	solatium, Memento etc.			
5	Revision of Final Share with PSPCL	2.57	-	2.57
	<b>Total Terminal Liabilities claimed in Normative Employee Cost</b>	<b>325.17</b>	<b>0.36</b>	<b>325.53</b>

PSTCL has claimed Rs. 2.57 Crore on account of Terminal Benefits relating to FY 2020-21 intimated by PSPCL as 11.36% share of PSTCL in Terminal Benefits after finalization of accounts. The amount stands paid to PSPCL.

The Petitioner has considered the computation of Normative Employee cost on the basis of net amount after adjustment of expenses capitalised instead of gross amount in line with the approach adopted by the Hon'ble Commission without prejudice to the outcome of appeals filed by PSTCL with the Hon'ble APTEL. The effect of the same may be considered by the Hon'ble Commission if the matter is ruled in favour of PSTCL.

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

**Table 9: Computation of Normative Employee Costs for FY 2020-21 (Rs. Crore)**

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

#### 2.7.1.2 Computation of Normative A&G Expenses

The Hon'ble Commission in its Tariff Order dated May 28, 2021, approved A&G Expenses of Rs. 27.12 Crore for FY 2020-21. PSTCL in its Petition for True-up of FY 2019-20 has claimed Rs 0.81 Crore of Lease charges in interest charges. However, the Commission in its Tariff Order dated May 28, 2021 specified that as per Regulations these are a part of A&G expenses. Accordingly, the Hon'ble Commission has

approved Rs 0.81 Crore of Lease charges as part of A&G Expenses for FY 2019-20. However, PSTCL observed that the Hon'ble Commission has inadvertently not considered Rs. 0.81 Crore in A&G expenses for FY 2019-20 in computation of A&G expenses of APR for FY 2020-21. Therefore, PSTCL has considered A&G Expense of FY 2019-20 including Interest on Lease liabilities of Rs. 0.81 Crore.

After applying the weighted average escalation of CPI and WPI indices of 3.16% (computed in previous section), the Normative A&G Expenses for FY 2020-21 are shown in the following table:

**Table 10: Normative A&G Expenses for FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	PSTCL
1	A&G Expenses - Baseline (FY 2019-20)	25.78	0.78	26.56
2	Escalation Factor	3.16%	3.16%	
3	<b>A&amp;G Expenses</b>	<b>26.59</b>	<b>0.80</b>	<b>27.39</b>
4	Add: License and Tariff Determination Fee	0.41	-	0.41
5	Add: Audit Fee	0.06	-	0.06
6	<b>Total</b>	<b>27.06</b>	<b>0.80</b>	<b>27.86</b>

#### 2.7.1.3 Computation of Normative R&M Expenses

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

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

The K-factor has been computed as below:

**Table 11: Computation of K-factor for FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC
1	Opening GFA	10104.44	23.77
2	Additions to GFA	197.65	4.86

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

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

**Table 12: Normative R&M Expenses for FY 2020-21 (Rs. Crore)**

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

#### 2.7.2 Total Normative O&M Expense

The Petitioner submits the normative O&M Expenses for FY 2020-21 are as per table below:

**Table 13: Total Normative O&M Expenses for FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	Normative O&M Expenses
1	Employee Expenses	529.70
2	A&G Expenses	27.86
3	R&M Expenses	32.28
	<b>Total O&amp;M Expenses</b>	<b>589.85</b>

~~PSTCL request the Hon'ble Commission to approve the Normative O&M Expense of Rs. 589.85 Crore for FY 2020-21 according to the PSERC MYT Regulations, 2019.~~

## 2.8 Depreciation

Regulation 21 of the PSERC MYT Regulations, 2019, provides for computation of Depreciation for each year of the Control Period. The Hon'ble Commission approved the Depreciation charges of Rs. 296.92 Crore for Transmission Business and Rs. 1.65 Crore for SLDC in APR for FY 2020-21.

PSTCL has been charging Depreciation in Audited Accounts of FY 2020-21 in line with the methodology specified in Regulation 21 of the PSERC MYT Regulations, 2019, as amended from time to time. PSTCL has not considered Depreciation on the assets of Rs. 7.02 Crore on asset created through Contributory Work and works under PSDF scheme during FY 2020-21. PSTCL has also excluded impairment loss reflected in Audited Accounts of FY 2020-21. PSTCL has revised opening GFA for FY 2020-21 after excluding GFA due to Contributory Works and PSDF grants in FY 2017-18, FY 2018-19 and FY 2019-20 as shown below.

**Table 14: Revised Opening GFA for FY 2020-21 (Rs. Crore)**

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

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

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

**Table 15: Depreciation for Total Assets for FY 2020-21 (Rs. Crore)**

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

**Table 16: Depreciation for Spillover Assets for FY 2020-21 (Rs. Crore)**

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

Sr. No.	Particulars	Transmission	SLDC	PSTCL
7	Depreciation as % of Opening and Closing GFA	4.18%	5.88%	4.18%

**Table 17: Depreciation for New Assets for FY 2020-21 (Rs. Crore)**

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

PSTCL requests the Hon'ble Commission to approve the Depreciation of 299.94 Crore for Transmission Business and Rs. 1.26 Crore for SLDC, based on the Audited Accounts of FY 2020-21.

## 2.9 Interest Charges

Regulation 24 of the PSERC MYT Regulations, 2019, 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.

24.2. Interest and finance charges on the future loan capital for new investments shall be computed on the loans, based on one (1) year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI as may be applicable as on 1st April of the

relevant year, plus a margin determined on the basis of current actual rate of interest of the capital expenditure loan taken by the Generating Company, Licensee or SLDC and prevailing SBI MCLR.

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

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

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

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

In APR of FY 2020-21, the Hon'ble Commission has approved the Interest Charges of Rs. 320.04 Crore for Transmission Business and Rs. 1.23 Crore for SLDC for FY 2020-21. PSTCL submits that the Hon'ble Commission has been disallowing loans with respect to approved Capital Expenditure since Truing-up of FY 2014-15. The opening loan as on April 1, 2020 stands at Rs. 3,488.64 Crore as approved in APR of FY 2020-21 for Transmission Business and at Rs. 12.28 Crore for SLDC Business.

### 2.9.1 Approach of PSTCL in Truing-up of FY 2020-21

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

The source-wise actual long-term loans outstanding, and interest charges borne by Transmission Business and SLDC Business for FY 2020-21 are shown in the following table:

**Table 18: Actual Loan and Interest of Transmission Business for FY 2020-21 (Rs. Crore)**

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

**Table 19: Actual Loan and Interest of SLDC Business for FY 2020-21 (Rs. Crore)**

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

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



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

The computation of Normative Interest and Finance Charges for FY 2020-21 are shown below:

**Table 20: Interest on Loan for all Schemes of PSTCL for FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3511.43	12.28	73.18	3596.89
2	Addition of loan during year	94.14	0.99	-	95.14
3	Repayment of loan during year	270.98	1.26	29.27	301.21
4	Closing loan balance for year	3334.90	12.01	43.91	3390.82
5	Average Loan Balance for year	3423.16	12.15	58.55	3493.85
6	Interest Charges	348.16	1.27	4.36	353.79
7	Less: Interest charges capitalised	12.06	0.00	0.00	12.06
8	Add: Guarantee Fee	3.30	0.00	0.00	3.30
9	Add: Miscellaneous Interest and Finance Charges	0.03	0.01	0.00	0.04
10	<b>Interest and Finance Charges</b>	<b>339.43</b>	<b>1.27</b>	<b>4.36</b>	<b>345.07</b>

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

## 2.10 Return on Equity

Regulation 20 of the PSERC MYT Regulations, 2019, specifies as under:

### **"20. RETURN ON EQUITY**

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

*Provided that Equity invested in foreign currency shall be converted to rupee currency based on the exchange rate prevailing on the date(s) it is subscribed:  
 Provided further that assets funded by consumer contributions, capital subsidies/Govt. grants shall not form part of the capital base for the purpose of calculation of Return on Equity."*

The Hon'ble Commission has approved the Return on Equity (RoE) of Rs. 109.38 Crore for PSTCL in APR for FY 2020-21. PSTCL has considered the opening balance of Equity of FY 2020-21 equal to the closing balance of Equity of FY 2019-20 as approved in Truing-up of FY 2019-20.

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

For the purpose of calculating RoE for FY 2020-21 on normative basis, PSTCL has considered the RoE at the rate of 15.50% in accordance with the PSERC MYT Regulations, 2019, as shown below:

**Table 21: Normative Return on Equity for FY 2020-21 (Rs. Crore)**

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

Therefore, PSTCL prays to the Hon'ble Commission to approve the RoE of Rs. 110.99 Crore for FY 2020-21.

## 2.11 Interest on Working Capital

Regulation 51 of the PSERC MYT Regulations, 2019, specifies as under:

### *"51. INTEREST ON WORKING CAPITAL*

#### *51.1 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.*

#### *51.2 Rate of Interest*

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

Hon'ble Commission, in APR of FY 2020-21, had approved the Interest on Working Capital of Rs. 35.66 Crore for Transmission Business and Rs. 0.59 Crore for SLDC. For the purpose of True-up, the Petitioner has computed the Interest on Working Capital as per the provisions of PSERC MYT Regulations, 2019.

Regulation 25.1 of the PSERC MYT Regulations, 2019, specifies as under:

*"25.1. The rate of interest on working capital shall be equal to the actual rate of interest paid on working capital loans by the Licensee/Generating Company/SLDC or the one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI as may be applicable as on 1st April of the relevant year plus 350 basis points, whichever is lower. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee/Generating Company/SLDC has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures."*

Accordingly, the Petitioner has considered the actual weighted average rate of interest for Working Capital loans for Transmission Business and SLDC, as the actual interest rate is lower than the one-year MCLR rate of State Bank of India plus

350 basis points, as on 1<sup>st</sup> April of the year. The computation of Interest on Working Capital is submitted in the following table:

**Table 22: Interest on Working Capital for FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Receivables equivalent to two months of fixed cost	225.87	3.30	229.17
2	Maintenance spares @ 15% of O&M expenses	87.33	1.14	88.48
3	Operation and Maintenance expenses for one month	48.52	0.64	49.15
4	Total Working Capital (Normative)	361.72	5.08	366.80
5	Rate of Interest applied	9.69%	9.69%	
6	Interest on Working Capital	35.03	0.49	35.52

The Petitioner prays to the Hon'ble Commission to approve the Interest on Working Capital of Rs. 35.03 Crore for Transmission Business and Rs. 0.49 Crore for SLDC for FY 2020-21 after True-up.

### 2.12 ULDC Charges

Hon'ble Commission, in APR of FY 2020-21, had approved ULDC Charges as Rs. 9.53 Crore for SLDC. For the purpose of True-up for FY 2020-21, the Petitioner submits the actual ULDC Charges based on Audited Accounts as shown in the following Table:

**Table 23: ULDC Charges for FY 2020-21 (Rs. Crore)**

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

The Petitioner prays to the Hon'ble Commission to approve the actual ULDC charges of Rs. 9.80 Crore for FY 2020-21 after True-up.

## 2.13 Non-Tariff Income

Regulation 28 of the PSERC MYT Regulations, 2019, specifies as under:

### *"28. NON TARIFF INCOME*

*28.1. Following components of income shall be treated as non tariff income for the generation, transmission, SLDC and distribution businesses, as applicable:*

- a. Meter/metering equipment rentals;*
- b. Service line charges;*
- c. Net revenue from late payment surcharge (late payment surcharge less financing cost of late payment surcharge);*
- d. Interest on advances to suppliers/contractors;*
- e. Interest on staff loans and advances;*
- f. Income from trading;*
- g. Income from staff welfare activities;*
- h. Excess found on physical verification;*
- i. Interest on investments, fixed and call deposits and bank balances;*
- j. Net recovery from penalty on coal liaison agents;*
- k. Prior period income;*
- l. Income from open access charges i.e., application fee, cross subsidy surcharge, additional surcharge, transmission and/or wheeling charges, scheduling charges etc.;*
- m. Rebate on timely payment of power purchase including transmission bills:  
Provided that only 50% of the 'rebate for timely payment of power purchase' received by the Licensee shall be considered as non -tariff income;*
- n. Miscellaneous receipts and any other income not included above;*

*The Applicant shall submit full details of its forecast of non-tariff income to the Commission as a part of ARR filing. The amount received by the Applicant on account of non-tariff Income shall be deducted from the aggregate revenue requirement for calculating the net revenue requirement of Applicant's business."*

Hon'ble Commission, in APR for FY 2020-21, had approved the Non-Tariff Income (NTI) of Rs. 25.94 Crore for Transmission and Rs. 0.58 Crore for SLDC. For the purpose of True-up for FY 2020-21, the Petitioner has considered the NTI as indicated in Note 30 of the Audited Accounts. The Petitioner has not considered the

income towards certain heads wherein expenses were not allowed by the Hon'ble Commission in previous Tariff Orders viz.:

- (a) Income of Rs. 0.79 Crore towards interest received on refund of Income Tax has not been considered because the Hon'ble Commission neither allowed expenses under the head of Income Tax nor interest on amount deducted as TDS.
- (b) Income of Rs. 0.80 Crore towards reversal of excess provision of impairment loss has not been considered, as impairment loss was not allowed in previous year.
- (c) PSTCL has considered Late payment Surcharge of Rs. 2.52 Crore for Transmission Business and Rs. 0.02 Crore for SLDC Business. PSTCL also considered the adjustment of financing cost on Late Payment Surcharge of Rs. 2.22 Crore for Transmission Business and Rs. 0.02 Crore for SLDC from the DPS of FY 2020-21. Thus, Net income from Late payment Surcharge is Rs. 0.32 Crore from Transmission Business and nil for SLDC.
- (d) PSTCL has not considered the amount of Rs. 0.01 Crore for SLDC Business being the cost of financing more than the Interest earned on Fixed Deposits reflected in the Audited Accounts under Non-Tariff Income. PSTCL would like to submit that the income from Fixed Deposits are not actually earnings made on surplus amounts available with PSTCL, whereas these are Fixed Deposits made so as to issue Letter of Credit for availing Cash Credit facility and the cost of funds is more than the interest earned.

In view of the above, the Petitioner submits NTI for FY 2020-21 as shown in the following table:

**Table 24: Non-Tariff Income for FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
1	Gain on Sale of Fixed Assets	1.26	-	1.26
2	Income/Fee/Collection against Staff Welfare Activities	0.01	-	0.01
3	Rental for staff quarters	0.28	0.05	0.32
4	NOC charges from open access customers	0.07	0.07	0.14
5	Credit balance written back:			

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
a	Sundry creditors	0.06	-	0.06
b	- Other sundry credit balance	4.96	0.02	4.98
c	-Security Deposits/EMD	0.15	-	0.15
6	Rebate on early payment to NRLDC	-	0.12	0.12
7	Income from O&M of bays of PGCIL	7.51	-	7.51
8	Miscellaneous income	13.75	-	13.75
9	Net Delayed Payment Charges	0.32	-	0.32
10	Penalty imposed on suppliers/contractors	5.52	0.16	5.68
11	Income from Other Business - Sale of Scrap	1.64	-	1.64
	<b>Total</b>	<b>35.52</b>	<b>0.41</b>	<b>35.93</b>

Accordingly, the Petitioner prays to the Hon'ble Commission to approve the Non-Tariff Income of Rs. 35.52 Crore for Transmission Business and Rs. 0.41 Crore for SLDC in FY 2020-21 for True-up.

#### 2.14 Revenue from Open Access Consumers

PSTCL has claimed a receipt of Transmission charges of Rs. 4.00 Crore and SLDC charges of Rs. 0.28 Crore from Open Access Consumers based on the Audited Accounts of FY 2020-21. The amount of revenue from open access consumers is over and above the Transmission charges approved by the Hon'ble Commission. Accordingly, PSTCL prays to the Hon'ble Commission to kindly consider adjustment of Revenue from Open Access Consumers in Truing-up of FY 2020-21.

#### 2.15 Other Expenses

Regulation 47 of the PSERC MYT Regulations, 2019, specifies as under:

**"47. BAD AND DOUBTFUL DEBTS AND OTHER DEBITS**

*47.1 Bad and doubtful debts shall be allowed to the extent the Distribution Licensee has identified/actually written off bad debts, subject to a maximum of 1% of annual sales revenue excluding subsidy, and according to a transparent policy approved by*

*the Commission. In case, there is any recovery of bad debts already written off, the recovered bad debts will be treated as Other Income.*

*47.2 Other debits including miscellaneous losses and write offs, sundry debts, material cost variance, losses on account of flood, cyclone, fire etc. shall be considered by the Commission. "*

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

- (i) PSTCL has written off Rs. 0.1970 Crore and Rs. 0.0244 Crore related to theft incidence occurred at P&M Sahnawal store on October 3, 2017, July 6, 2018 and July 7, 2018. Further, amount of Rs. 6.45 Crore has been written off related to destruction of material due to fire accident on April 3, 2017 at Grid Store, Jalandhar which was decided by the Board of Directors in meeting dated January 18, 2021. Therefore, PSTCL has claimed Rs. 6.68 Crore (Rs. 6.45 Crore + Rs. 0.1970 Crore + Rs. 0.0244 Crore) in the true up of FY 2020-21.
- (ii) During FY 2020-21, PSTCL has written off Rs. 0.30 Crore outstanding balance of sundry debtors as on April 16, 2010. In view of the above methodology adopted by the Hon'ble Commission, PSTCL therefore requests to allow the above said amount while Truing-up of FY 2020-21.
- (iii) Net Delayed Payment Surcharge of Rs. 4.27 Crore (Rs. 4.25 Crore for Transmission Business and 0.02 Crore for SLDC Business) was considered as non-tariff income in FY 2019-20, in the Tariff Order of FY 2021-22. This DPS of Rs. 4.27 Crore has been reversed and has been written off in FY 2020-21 in view of the meeting held on 16<sup>th</sup> April, 2021 between PSTCL and PSPCL. PSTCL has considered the same as part of its Bad and doubtful debts.

**Table 25: Other Expenses for FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	FY 2020-21		
		Transmission	SLDC	Total
1	Written off assets due to theft	6.68	-	6.68

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2	Sundry Creditors written off	0.30	-	0.30
3	Infructuous capital exp. written off	1.64	-	1.64
4	Delayed Payment Charges income written off	4.25	0.02	4.27
	<b>Total</b>	<b>12.86</b>	<b>0.02</b>	<b>12.88</b>

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

### 2.16 Incentive on account of Transmission System Availability

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

**Table 26: Incentive on account of Transmission System Availability for FY 2020-21 (Rs. Crore)**

S. No.	Month	Transmission Availability (%)	Monthly Transmission Charges	Transmission charges inclusive incentive	Incentive
1	Apr-20	99.8843%	110.90	111.74	0.84
2	May-20	99.4672%	114.60	115.14	0.54
3	Jun-20	99.8743%	110.90	111.74	0.84
4	Jul-20	99.8284%	114.60	115.47	0.87
5	Aug-20	99.9342%	114.60	115.47	0.87
6	Sep-20	99.9568%	110.90	111.74	0.84
7	Oct-20	99.9546%	114.60	115.47	0.87
8	Nov-20	99.7799%	110.90	111.74	0.84
9	Dec-20	99.7814%	114.60	115.47	0.87
10	Jan-21	99.9212%	114.60	115.47	0.87
11	Feb-21	99.8569%	103.51	104.29	0.78

S. No.	Month	Transmission Availability (%)	Monthly Transmission Charges	Transmission charges inclusive incentive	Incentive
12	Mar-21	99.7396%	114.60	115.46	0.86
	<b>Total</b>	<b>99.8324%</b>	<b>1349.32</b>	<b>1359.21</b>	<b>9.88</b>

The Petitioner submits to the Hon'ble Commission to approve the incentive for transmission system availability of Rs. 9.88 Crore as computed above for FY 2020-21.

### 2.17 Aggregate Revenue Requirement

After considering 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 27: Net ARR for Transmission and SLDC for FY 2020-21 (Rs. Crore)

Sr. No.	Particulars	Transmission Business			SLDC			Transmission Business and SLDC		
		MYT Order	APR Order	True-up	MYT Order	APR Order	True-up	MYT Order	APR Order	True-up
1	Net Employee costs	510.04	519.01	523.25	6.73	7.71	6.45	516.77	526.72	529.70
2	Net R&M Expenses	38.33	31.11	31.91	1.02	0.63	0.38	39.35	31.74	32.28
3	Net A&G Expenses	27.37	26.32	27.06	0.56	0.80	0.80	27.93	27.12	27.86
4	Depreciation	300.29	296.92	299.94	0.56	1.65	1.26	300.85	298.57	301.21
5	Interest charges	332.58	320.04	343.80	1.53	1.23	1.27	334.11	321.27	345.07
6	Interest on Working Capital	35.44	35.66	35.03	0.49	0.59	0.49	35.93	36.25	35.52
7	ULDC Charges	-	-	-	7.68	9.53	9.80	7.68	9.53	9.80
8	Return on Equity	-	109.38	110.99	-	-	-	108.93	109.38	110.99
9	Other expenses	-	-	12.86	-	-	0.02	-	-	12.88
10	Total Revenue Requirement	1,352.98	1,338.44	1,384.84	18.57	22.14	20.48	1,371.55	1,360.58	1,405.32
11	Less: Non-tariff Income	23.59	25.94	35.52	1.67	0.58	0.41	25.26	26.52	35.93
12	Add: Incentive	-	-	9.88	-	-	-	-	-	9.88

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Sr. No.	Particulars	Transmission Business			SLDC			Transmission Business and SLDC		
		MYT Order	APR Order	True-up	MYT Order	APR Order	True-up	MYT Order	APR Order	True-up
13	Less: Revenue from Open Access	-	-	4.00	-	-	0.28	-	-	4.28
14	Net ARR	1,329.39	1,312.50	1,355.21	16.90	21.56	19.79	1,346.29	1,334.06	1,375.00
15	Past Revenue Gap	(1.01)	(1.01)	(1.01)	-	-	-	(1.01)	(1.01)	(1.01)
16	Net ARR	1,328.38	1,311.49	1,354.20	16.90	21.56	19.79	1,345.28	1,333.05	1,373.99

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## 2.18 Revenue Gap and Carrying Cost for FY 2020-21

The Hon'ble Commission approved the ARR of Rs. 1,333.05 Crore in the APR for FY 2020-21 vide the Tariff Order dated May 28, 2021. As against the approved ARR of Rs. 1,333.05 Crore, PSTCL has claimed ARR of Rs. 1,373.99 Crore in Truing-up of FY 2020-21. PSTCL has claimed carrying cost in line with the PSERC MYT Regulations, 2019 for the differential amount of ARR claimed in Truing-up of FY 2020-21.

The following Table shows the Revenue Gap claimed by PSTCL in Truing-up of FY 2020-21 along with the carrying cost. The interest rate considered for computing carrying cost of FY 2020-21 is in line with the interest rate considered in computation of IoWC for FY 2020-21.

**Table 28: Revenue Gap and Carrying Cost for Truing-up of FY 2020-21 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	ARR approved in MYT Order and ARR of FY 2020-21 vide Tariff Order dated June 01, 2020	1,328.38	16.90	1,345.28
2	ARR claimed after Truing-up of FY 2020-21 in this Petition	1,354.20	19.79	1,373.99
3	<b>Total Revenue Gap (1-2)</b>	<b>25.82</b>	<b>2.89</b>	<b>28.71</b>
4	Less: Revenue Gap/(surplus) considered in APR	(16.89)	4.66	(12.23)
5	<b>Net Revenue Gap/(Surplus) after True-up</b>	<b>42.71</b>	<b>(1.77)</b>	<b>40.94</b>
6	Carrying Cost for FY 2020-21 (half year) (on Sr. No. 3)	1.25	0.14	1.39
7	Carrying Cost for FY 2021-22 (full year) (on Sr. No. 3)	2.50	0.28	2.78
8	Carrying Cost for FY 2022-23 (half year) (on Sr. No. 3)	1.25	0.14	1.39
9	<b>Total Carrying Cost</b>	<b>5.00</b>	<b>0.56</b>	<b>5.56</b>
10	Less: Carrying cost approved in APR	(1.70)	0.48	(1.22)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
11	Less: Carrying cost for half year of FY 2021-22 and half year of FY 2022-23 on amount in Sr. no. 10	(0.16)	0.05	(0.12)
12	Net Revenue Gap/(Surplus) after True-up incl. carrying cost	49.57	(1.74)	47.84

PSTCL requests the Hon'ble Commission to kindly approve the Revenue Gap along with carrying cost of Rs. 49.57 Crore for Transmission and Revenue Surplus of Rs. 1.74 Crore for SLDC after Truing-up of FY 2020-21.

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### 3 APR of FY 2021-22 and Revised ARR of FY 2022-23

#### 3.1 Background

In this Chapter, the Petitioner submits the APR for FY 2021-22 and Revised ARR for FY 2022-23. The Hon'ble Commission in its Tariff Order dated May 28, 2021 approved the Net ARR of Rs. 1330.96 Crore for FY 2021-22 and in its MYT Order dated June, 2020 approved the Net ARR of Rs. 1415.94 Crore for FY 2022-23, including Net ARR of Rs. 22.11 Crore and Rs. 22.63 Crore, respectively, for SLDC.

The Petitioner has computed the estimates in APR of FY 2021-22 and projected the revised ARR of FY 2022-23 in accordance with the provisions of PSERC MYT Regulations, 2019. The deviations/relaxations sought from the PSERC MYT Regulations, 2019, if any, have been specifically mentioned with the rationale and the deviation/relaxation that has been sought under specific provisions.

#### 3.2 Description of the Transmission System

PSTCL has projected the addition in the transmission system based on the Capital Investment Plan submitted to Hon'ble Commission for FY 2021-22 and FY 2022-23. The details of actual addition during H1 of FY 2021-22, estimated addition during H2 of FY 2021-22, and projected addition during FY 2022-23 to the transmission system of PSTCL are tabulated below:

**Table 29: Transmission System of PSTCL for FY 2021-22**

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2021)	Addition during H1	Estimated Addition during H2	Closing (As on 31 <sup>st</sup> March 2022)
<b>Transmission Lines (Circuit kms)</b>					
1	400 kV	1,599.75	-	33	1,632.75
2	220 kV	7,865.04	11.2	40	7,916.24
3	132 kV	3,093.40	-	20	3,113.40
4	<b>Total</b>	<b>12,558.19</b>	<b>11.2</b>	<b>93</b>	<b>12,662.39</b>
<b>Substations (Nos.)</b>					
1	400 kV	5	-	1	6
2	220 kV	101	1	1	103

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2021)	Addition during H1	Estimated Addition during H2	Closing (As on 31 <sup>st</sup> March 2022)
3	132 kV	65	(1)	-	64
4	<b>Total</b>	<b>171</b>	<b>0</b>	<b>2</b>	<b>173</b>
<b>Transmission Bays (Nos.)</b>					
1	400 kV	72	-	2	74
2	220 kV	707	5	12	724
3	132 kV	510	3	-	513
4	<b>Total</b>	<b>1,289</b>	<b>8</b>	<b>14</b>	<b>1,311</b>
<b>Substation Capacity (MVA)</b>					
1	Substation Capacity	38,167.67	185	570	38,922.67

**Table 30: Transmission System of PSTCL for FY 2022-23**

Sr. No.	Particulars	Opening (As on 1 <sup>st</sup> April 2022)	Addition during FY 2022-23	Closing (As on 31 <sup>st</sup> March 2023)
<b>Transmission Lines (Circuit kms)</b>				
1	400 kV	1,632.75	-	1,632.75
2	220 kV	7,916.24	100	8,016.24
3	132 kV	3,113.40	40	3,153.40
4	<b>Total</b>	<b>12,662.39</b>	<b>140</b>	<b>12,802.39</b>
<b>Substations (Nos.)</b>				
1	400 kV	6	1	7
2	220 kV	103	2	105
3	132 kV	64	-	64
4	<b>Total</b>	<b>173</b>	<b>3</b>	<b>176</b>
<b>Transmission Bays (Nos.)</b>				
1	400 kV	74	4	78
2	220 kV	724	24	748
3	132 kV	513	-	513
4	<b>Total</b>	<b>1,311</b>	<b>28</b>	<b>1,339</b>
<b>Substation Capacity (MVA)</b>				
1	Substation Capacity	38,922.67	1,600	40,522.67

### 3.3 Transmission Losses

The Hon'ble Commission, in the MYT Order for the 2<sup>nd</sup> Control Period, approved the Transmission Loss of 2.46% and 2.44% provisionally for FY 2020-21 and FY 2021-



22, respectively. The actual transmission loss for the period from April 2021 to September 2021 is as shown in the following Table:

**Table 31: Actual Transmission Loss for FY 2021-22 (H1)**

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

PSTCL submits that the actual transmission loss of H1 of FY 2021-22 is lower than the transmission loss approved by the Hon'ble Commission for FY 2021-22. PSTCL therefore, requests the Hon'ble Commission to retain the loss level of 2.46% for FY 2021-22 as approved in the MYT Order as the loss of H2 is still to be added. The actual transmission loss of FY 2021-22 shall be submitted at the time of Truing-up of FY 2021-22.

Similarly, PSTCL request the Hon'ble Commission to approve transmission loss of 2.44% for FY 2022-23 as approved in the MYT Order dated June 01, 2020.

### 3.4 Transmission Availability

Regulation 52.1 of the PSERC MYT Regulations, 2019 specifies as under:

*"52.1. Normative Annual Transmission System Availability Factor (NATAF)*

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

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

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

*Provided further that for AC system, actual outage hours shall be considered for computation of availability upto two tripping per year. After two trippings in a year, for every tripping, additional 12 hours outage shall be considered in addition to the actual outage hours:*

*Provided also that in case of outage of a transmission element affecting evacuation of power from a generating station, outage hours shall be multiplied by a factor of 2."*

As stated in the above extracts, NATAF shall be 98.5% for recovery of Annual Fixed Charges and 99% for incentive on account of higher Transmission Availability. The average transmission system availability from April to September 2021 (H1), calculated based on month-wise system availability up to September 2021, is as shown in the Table below:

**Table 32: Transmission System Availability for FY 2021-22 (H1)**

Sr. No.	Month	Transmission System Availability (%)
1	April-2021	99.6328%
2	May-2021	99.6729%
3	June-2021	99.8274%
4	July-2021	99.9070%
5	August-2021	99.9360%
6	September-2021	99.8874%

The Petitioner submits that it has maintained the Transmission System Availability well above the normative Annual Transmission Availability Factor of 98.5% up to September 2021, as mandated by PSERC Tariff Regulations, 2019. PSTCL has therefore, considered entire Annual Fixed Charges for FY 2021-22 as computed in this Petition, for computation of Revenue Gap of FY 2021-22. Similarly, PSTCL has considered entire Annual Fixed Charges of FY 2022-23 for determination of Tariff of FY 2022-23.

PSTCL shall be claiming incentive on Transmission System Availability at the time of Truing-up of FY 2021-22 and FY 2022-23 on the basis of actual Transmission System Availability of respective years.

### 3.5 Capital Expenditure and Capitalisation

The Hon'ble Commission vide Order dated June 1, 2020 approved Capital Investment of Rs. 400 Crore during each Year of Control Period. The Hon'ble Commission vide its Order dated May 28, 2021 re-stated the approved Capital Investment of FY 2021-22 to Rs. 400 Crore. PSTCL submits that it has revised the projections of the Capital Expenditure and Capitalization for FY 2021-22 and FY 2022-23 according to actual planned expenditure in these years. Accordingly, PSTCL has revised the CAPEX for FY 2021-22 and FY 2022-23 as below:

**Table 33: Revised CAPEX for FY 2021-22 and FY 2022-23**

Particulars	Approved By the Commission		Projected by PSTCL	
	FY 2021-22	FY 2022-23	FY 2021-22	FY 2022-23
Transmission Business	382.20	386.58	437.56	608.89
SLDC Business	17.80	13.42	12.24	19.92
Total Capital investment	400	400	449.79	628.81

#### Transfer of 220/132 KV substation of GNDTP Bathinda to PSTCL

The Board of Directors of PSPCL in its 88th meeting held on June 26, 2021 accorded approval to transfer 220/132 KV substation of GNDTP Bathinda to PSTCL. The depreciated value of all items for transfer comes out to be Rs. 26.27 Crore including GST at 18%.

In view of the above transfer of substation, PSTCL has added a total of Rs. 26.27 Crore to GFA addition during FY 2021-22. The Capital Expenditure and Capitalisation proposed for FY 2021-22 and FY 2022-23 vis-a-vis approved by the Commission are shown in the following Table:

**Table 34: Capital Expenditure and Capitalisation for FY 2021-22 and FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	FY 2021-22		FY 2022-23	
		Tariff Order	APR	MYT Order	ARR
	Transmission				

Sr. No.	Particulars	FY 2021-22		FY 2022-23	
		Tariff Order	APR	MYT Order	ARR
1	<b>Opening WIP</b>	403.16	301.48	619.23	281.12
a	Spill over Schemes	288.52	290.79	313.08	185.85
b	New Schemes	114.64	10.69	306.15	95.27
2	<b>Capital Expenditure</b>	382.20	437.56	386.58	608.89
a	Spill over Schemes	132.51	279.91	95.74	288.81
b	New Schemes	249.69	157.65	290.84	320.08
3	<b>Capitalisation</b>	166.14	457.92	857.53	620.80
a	Spill over Schemes	107.96	384.84	321.69	386.23
b	New Schemes	58.18	73.07	535.84	234.58
4	<b>Closing WIP</b>	619.23	281.12	148.28	269.20
a	Spill over Schemes	313.08	185.85	87.13	88.43
b	New Schemes	306.15	95.27	61.15	180.77
	<b>SLDC</b>				
5	<b>Opening WIP</b>	30.71	1.46	46.58	10.41
a	Spill over Schemes	7.68	1.46	7.89	0.09
b	New Schemes	23.03	-	38.69	10.32
6	<b>Capital Expenditure</b>	17.80	12.24	13.42	19.92
a	Spill over Schemes	0.21	0.45	0.23	0.25
b	New Schemes	17.59	11.79	13.19	19.67
7	<b>Capitalisation</b>	1.93	3.29	54.30	29.24
a	Spill over Schemes	-	1.82	2.42	0.25
b	New Schemes	1.93	1.47	51.88	28.99
8	<b>Closing WIP</b>	46.58	10.41	5.70	1.09
a	Spill over Schemes	7.89	0.09	5.70	0.09
b	New Schemes	38.69	10.32	-	1.00

### 3.6 Funding of Capital Investment

The Hon'ble Commission, vide Tariff Order dated June 01, 2020, had worked out the Financing Plan considering the Capital Expenditure approved for Schemes, which are spill-over from the 1<sup>st</sup> Control Period to the 2<sup>nd</sup> Control Period, and Capitalisation of New Schemes approved in the 2<sup>nd</sup> Control Period. The Hon'ble

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Commission had adopted this approach to avoid funding of the Spill-over Schemes twice, since in the 1<sup>st</sup> Control Period, funding was approved in line with Capital Expenditure incurred during the year rather than Capitalisation.

PSTCL has adopted the same approach while computing Funding of Capital Investment for FY 2021-22 and FY 2022-23. PSTCL has considered the Capital Expenditure from Spill-over Schemes and Capitalisation of New Schemes for computation of funding of FY 2021-22 and FY 2022-23 and has claimed the same in line with the amounts considered in the above Table.

PSTCL submits that it has considered the funding of entire Capital Expenditure through Loans only for FY 2021-22 and FY 2022-23; however, at the time of true up of both years, funding through equity shall be claimed as per actuals in line with the PSERC Regulations.

The funding of Capital Expenditure and Capitalization as proposed for FY 2021-22 and FY 2022-23 are shown in the following Table:

**Table 35: Funding of Capital Expenditure and Capitalization for FY 2021-22 and FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	FY 2021-22		FY 2022-23	
		Tariff Order	APR	MYT Order	ARR
<b>A</b>	<b>Transmission</b>				
1	CAPEX of Spill over Schemes	132.51	279.91	95.74	288.81
2	Capitalization of New Schemes	58.18	73.07	535.84	234.58
3	<b>Total CAPEX for Funding</b>	<b>190.69</b>	<b>352.98</b>	<b>631.58</b>	<b>523.38</b>
4	Funding through Grant	-	57.57		27.79
5	Funding through Loan	190.69	295.41	631.58	495.59
<b>B</b>	<b>SLDC</b>				
1	CAPEX of Spill over Schemes	0.21	0.45	0.23	0.25
2	Capitalization of New Schemes	1.93	1.47	51.88	28.99
3	<b>Total CAPEX for Funding</b>	<b>2.14</b>	<b>1.92</b>	<b>52.11</b>	<b>29.24</b>
4	Funding through Loan	2.14	1.92	52.11	29.24

PSTCL has considered the funding of loan as shown in the above Table for computation of Interest on Loan and Return on Equity for FY 2021-22 and FY 2022-23.

### 3.7 O&M Expenses

Regulation 26 of the PSERC MYT Regulations, 2019, specifies the computation of normative O&M Expenses for the Control Period from FY 2020-21 to FY 2022-23, 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<sub>n</sub> - Repair and Maintenance Costs of the Applicant for the nth year;*

*EMP<sub>n</sub> - Employee Cost of the Applicant for the nth year;*

*A&G<sub>n</sub> - Administrative and General Costs of the Applicant for the nth year;*

*It should be ensured that all such expenses capitalized should not form a part of the O&M expenses being specified here."*

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

#### Inflation factor

Since, WPI and CPI are available till September 2021, the escalation index has been computed as per provisions of the PSERC MYT Regulations, 2019. The month-on-month increase in CPI for the period from FY 2021-22 (till September) over FY 2020-21, works out to 5.07% and month-on-month increase in WPI for the same period works out to 11.55%. For computation of Employee and A&G Expenses, the weightage of 50:50 as specified in the above Regulations; works out as 8.31% as shown below:

**Table 36: Calculation of Index of FY 2021-22**

Sr. No.	Particulars	FY 2020-21 (Average of H1)	FY 2021-22 (Average of H1)	Increase (%)

1	CPI	116.04	121.92	5.07%
2	WPI	120.32	134.22	11.55%

$$INDEX_n / INDEX_{n-1} = (0.5 \times 5.07) + (0.5 \times 11.55) = 8.31\%$$

Hence, for the computation of O&M expenses for FY 2021-22 and FY 2022-23, PSTCL has considered the above.

### 3.7.1 Employee Costs and A&G Expenses

#### 3.7.1.1 Employee Costs

The Hon'ble Commission, in its Tariff Order dated May 28, 2021 and MYT Order dated June 01, 2020, approved the Employee cost of Rs. 539.38 Crore for FY 2021-22 and Rs. 549.38 Crore for FY 2022-23 as against Rs. 543.69 Crore for FY 2021-22 and Rs. 582.76 Crore for FY 2021-22 claimed by PSTCL.

The PSERC MYT Regulations, 2019 specifies the computation of normative Employee Costs and A&G Expenses as under:

"26.1 ...

$$(ii) EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) \times (INDEX_n / INDEX_{n-1})$$

*INDEX<sub>n</sub> - Inflation Factor to be used for indexing the Employee Cost and Administrative and General Costs for nth year. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) of nth year and shall be calculated as under: -*

$$INDEX_n = 0.50 \times CPI_n + 0.50 \times WPI_n$$

*'WPI<sub>n</sub>' 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."*

As per PSERC MYT Regulations, 2019, the Other Employee Cost worked out in Truing-up of FY 2020-21 has been taken as the base for computing normative Other Employee Cost for FY 2021-22. Further, the base value of FY 2021-22 is considered for computation of Other Employee Expenses for FY 2022-23.

As discussed in the earlier Chapter, PSTCL has adopted the approach of considering Net Other Employee Cost as baseline for projection purposes. PSTCL has therefore, not considered any employee expenses capitalised for FY 2021-22 and FY 2022-23.

#### **Transfer of Bathinda Substation from PSPCL to PSTCL**

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

#### **Manpower requirement for New Substations at Bahaman Jassa Singh and Dhanansu**

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

#### **Manpower requirement for SAMAST scheme**

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



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

#### **Impact of Pay Revision in 6<sup>th</sup> Pay Commission**

PSTCL would also like to submit that the Government of Punjab through its Notification No. 09/01/2021- 5FP1/1228 dated September 20, 2021 announced an increment in the basic pay of its Employees under 6<sup>th</sup> Pay Commission. Following this, PSPCL through its Finance Circular No. 12/2021 has notified PSPCL (Revised Pay) Regulations, 2021. PSTCL is also expecting a revision in salary structure of its Employees due to implementation of 6<sup>th</sup> Pay Commission in FY 2021-22 and 2022-23 in line with the aforementioned Regulation notified by the PSPCL. Therefore, PSTCL has computed the additional impact on employee cost for FY 2021-22 & 2022-23 and considered the same in this present petition. Also, impact of this pay revision on terminal benefit would be claimed at later date either by an additional submission or it would be claimed at the time of true up of FY 2021-22. The above figure does not include the impact of pay revision arrears which will be claimed according to the Punjab government's notification to be issued for this purpose.

#### **Terminal Benefits**

Regulation 26 of the PSERC MYT Regulations, 2019 specifies that Terminal Benefits such as death-cum-retirement gratuity, Ex-Gratia, Pension including family pension, commuted pension, leave encashment, LTC, medical reimbursement including fixed medical allowance in respect of pensioners, etc., shall be allowed as per actual paid by PSTCL. In this regard, PSTCL submits that the actual pay-out on account of Terminal Benefits in respect of pensioners shall be as per Punjab Power Sector Reforms Transfer Scheme approved by the Government of Punjab. PSTCL shall submit the Terminal Benefits actually paid for FY 2021-22 and FY 2022-23 in additional submission to the Hon'ble Commission. For the purpose of the present Petition, PSTCL has considered the Terminal Benefits of Rs. 328.96 Crore for FY 2021-22 and Rs. 335.91 Crore for FY 2022-23, as approved by the Hon'ble

Commission vide Tariff Order dated May 28, 2021 and MYT Order dated June 01, 2020.

Accordingly, PSTCL has calculated Total Normative Employee Cost for FY 2021-22 and FY 2022-23, after computing Net Other Employee Cost on the basis of CPI and WPI and Terminal Benefits as approved for respective years, as shown in the Table below:

**Table 37: Total Employee Costs for FY 2021-22 (Rs. Crore)**

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

**Table 38: Total Employee Costs for FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Other Employee Cost - Baseline (FY 2021-22)	268.93	8.97	277.90
2	Inflation Factor	8.31%	8.31%	
3	Gross Other Employee Cost	291.27	9.72	300.99
4	Employee Cost for 220 kV Bathinda S/s transferred from PSPCL to PSTCL	0.60		0.60
5	Employee Cost for 400 kV New substation at Bahaman Jassa Singh and Dhanansu FY 2022-23 respectively	1.76		1.76
6	Employee Cost for SAMAST project		1.19	1.19
7	Pay Revision impact according to PSTCL Computation	24.34	1.08	25.43

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
8	Net Other Employee Cost	317.98	11.99	329.97
9	Terminal Benefits approved in MYT Order	335.91	-	335.91
10	Total Employee Cost	653.89	11.99	665.88

PSTCL requests the Hon'ble Commission to approve the Normative Employee Costs as projected by PSTCL in the Table above for FY 2021-22 and FY 2022-23.

### 3.7.1.2 A&G Expenses

The Hon'ble Commission in its Tariff Order dated May 28, 2021 and MYT Order dated June 1, 2020, approved A&G Expenses of Rs. 27.95 Crore for FY 2021-22 and Rs. 31.15 Crore for FY 2022-23, as against Rs.28.22 Crore and Rs. 31.66 Crore claimed by PSTCL for FY 2021-22 and FY 2022-23, respectively.

The normative escalation has worked out to be 8.31% computed on the basis of CPI Index taken at 50% weightage. Similarly, considering the base A&G expenses of FY 2021-22, PSTCL has computed A&G expenses for FY 2022-23.

As per the methodology adopted by the Hon'ble Commission in previous Tariff Orders, PSTCL has additionally claimed Licence Fee and Audit Fee in line with the amounts approved by the Hon'ble Commission for FY 2021-22 and FY 2022-23 in the MYT Order dated June 01, 2020. The normative A&G expenses for FY 2021-22 and FY 2022-23 claimed by PSTCL are as shown in the Tables below:

**Table 39: Normative A&G Expenses for FY 2021-22 (Rs. Crore)**

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

Table 40: Normative A&G Expenses for FY 2022-23 (Rs. Crore)

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

PSTCL requests the Hon'ble Commission to approve the Normative A&G Expenses as projected by PSTCL in the Table above for FY 2021-22 and FY 2022-23. However, PSTCL reserves the right to claim additional A&G expenses on the new assets added during FY 2021-22 and FY 2022-23 at the time of True-up as these are not included in the baseline figures of FY 2020-21.

### 3.7.2 R&M Expenses

The Hon'ble Commission, in its Tariff Order dated May 28, 2021 and MYT Order dated June 1, 2020, approved R&M Expenses of Rs. 31.85 Crore for FY 2021-22 and Rs. 46.07 Crore for FY 2022-23 as against Rs. 36.26 Crore and Rs. 41.34 Crore claimed by PSTCL for FY 2021-22 and FY 2022-23, respectively.

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

$$(i) R\&M_n = K * GFA * WPI_n / WPI_{n-1}$$

Where, .

'k' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) for the nth year. The value of 'K' will be specified by the Commission in the MYT order.

'GFA' is the average value of the gross fixed assets of the nth year.

WPI<sub>n</sub> means the average rate (on monthly basis) of Wholesale Price Index (all commodities) over the year for the nth year."

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

#### SAMAST project

PSTCL also submits that the total CAPEX of Rs. 32.26 Crore was approved by the Hon'ble Commission for SAMAST project in Capital Investment Plan of MYT for 2<sup>nd</sup> Control Period, i.e., for FY 2020-21 to FY 2022-23. As per actual L-1 prices received, the total cost of the project quoted us Rs. 37.27 Crore (all inclusive) which comprises of about Rs. 21.66 Crore as initial cost to be paid up to commissioning of the project, Rs. 15.18 Crore as comprehensive warranty-cum-AMC cost of 6 years and Rs. 0.43 Crore as recurring charges for communication network for 1<sup>st</sup> year of AMC. Thus, R&M cost on account of AMC and recurring Telecom Usage Charges comes out to be Rs. 2.96 Crore per year for 6 years after commissioning.

The commissioning of SAMAST project has been anticipated in mid of the FY 2022-23. Therefore, PSTCL has considered cost of Rs. 1.48 Crore, i.e., half of Rs. 2.96 Crore for SAMAST project on account of AMC and recurring Telecom Usage Charges over and above Base year figures for calculating normative R&M cost for FY 2022-23.

Accordingly, PSTCL has claimed R&M expenses for Transmission Business and SLDC for FY 2021-22 and FY 2022-23 as under:

**Table 41: R&M Expenses for FY 2021-22 (Rs. Crore)**

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
1	Opening GFA	10287.61	28.63	10316.24
2	Addition to GFA	457.92	3.29	461.20
3	Retirement during the year	0.00	0.00	0.00
4	Closing GFA	10745.52	31.92	10777.44

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Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
5	K-factor	0.309%	1.420%	
6	Inflation factor	11.55%	11.55%	
7	R&M Expenses	36.24	0.48	36.72

**Table 42: R&M Expenses for FY 2022-23 (Rs. Crore)**

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

PSTCL requests the Hon'ble Commission to approve normative R&M Expenses as computed above for FY 2021-22 and FY 2022-23.

The following Table shows the total O&M Expenses claimed by PSTCL in APR for FY 2021-22 and ARR for FY 2022-23.

**Table 43: O&M Expenses for FY 2021-22 (Rs. Crore)**

Sr. No.	Particulars	FY 2021-22		
		Transmission	SLDC	PSTCL
1	Employee Expenses	597.89	8.97	606.86
2	A&G Expenses	29.47	0.87	30.34
3	R&M Expenses	36.24	0.48	36.72
	Total O&M Expenses	663.60	10.32	673.92

**Table 44: O&M Expenses for FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Employee Expenses	653.89	11.99	665.88

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
2	A&G Expenses	31.86	0.94	32.81
3	R&M Expenses	38.10	2.22	40.32
	<b>Total O&amp;M Expenses</b>	<b>723.85</b>	<b>15.16</b>	<b>739.00</b>

PSTCL requests the Hon'ble Commission to approve normative O&M Expenses of Rs. 673.92 Crore and Rs. 739.00 Crore for FY 2021-22 and FY 2022-23 respectively.

### 3.8 Depreciation

The Hon'ble Commission, in its Tariff Order dated May 28, 2021 and MYT Order dated June 1, 2020, approved the Depreciation of Rs. 302.40 Crore for FY 2021-22 and Rs. 329.61 Crore for FY 2022-23, as against Rs. 308.10 Crore for FY 2021-22 and Rs. 352.04 Crore for FY 2022-23 claimed by PSTCL.

Regulation 21 of the PSERC MYT Regulations, 2019 specifies as under:

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

*Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:*

*Provided that the land, other than the land held under lease and land for reservoir in case of hydro generating station, shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets:*

*Provided further that Government. grants and consumer contribution shall also be recognized as defined under Indian Accounting Standard 20 (IND AS 20) notified by the Ministry of Corporate Affairs.*

*21.2. The residual/salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of historical capital cost of the asset:*

*Provided that I.T. Equipment and Software shall be depreciated 100% with zero salvage value.*

*21.3. The Cost of the asset shall include additional capitalization.*

*21.4. The Generating Company, Transmission and Distribution Licensee shall provide the list of assets added during each Year of the Control Period and the list of*

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

21.5. Depreciation for Distribution, generation and transmission assets shall be calculated annually as per straight line method over the useful life of the asset at the PSERC – Tariff Order FY 2020-21 for PSTCL 88

rate of depreciation specified by the Central Electricity Regulatory Commission from time to time:

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

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

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

PSTCL has considered the closing GFA (Net of land and land rights) as on March 31, 2021 as claimed in this Petition for True-up for FY 2020-21, as the opening GFA of FY 2021-22. PSTCL has considered addition to GFA equivalent to net Capitalisation transferred from CWIP account as stated in Capital Expenditure and Capitalisation section of this Chapter for FY 2021-22 and FY 2022-23. PSTCL has not considered any retirement of asset during the year for FY 2021-22 and FY 2022-23. Retirement of assets during the year, if any, shall be claimed at actuals at the time of truing up for the respective years.

PSTCL has computed the weighted average Depreciation rate of 4.18% for Transmission Business and 5.88% for SLDC on the basis of Audited Accounts of FY 2020-21. The Depreciation rate has been applied on average GFA of FY 2021-22 and FY 2022-23. Accordingly, PSTCL claims the Depreciation for FY 2021-22 and FY 2022-23 as shown in the Table below:

**Table 45: Depreciation for Spillover Schemes of FY 2021-22 (Rs. Crore)**

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

**Table 46: Depreciation for New Schemes of FY 2021-22 (Rs. Crore)**

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

**Table 47: Depreciation for FY 2021-22 (Rs. Crore)**

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

**Table 48: Depreciation for Spill over Schemes of FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	FY 2022-23		
		Transmission	SLDC	PSTCL
1	Opening GFA (Net of Land and Land	7,442.32	25.66	7,467.98

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

Table 49: Depreciation for New Schemes of FY 2022-23 (Rs. Crore)

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

Table 50: Depreciation for FY 2022-23 (Rs. Crore)

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

PSTCL requests the Hon'ble Commission to approve Depreciation of Rs. 310.65 Crore and Rs. 329.46 Crore for FY 2021-22 and FY 2022-23 respectively.

### 3.9 Interest and Finance Charges on Loan Capital

The Hon'ble Commission, in its Tariff Order dated May 28, 2021 and MYT Order dated June 1, 2020 approved the Interest and Finance Charges of Rs. 298.44 Crore for FY 2021-22 and Rs. 330.30 Crore for FY 2022-23, as against Rs. 314.75 Crore for FY 2021-22 and Rs. 344.27 Crore claimed by PSTCL.

As explained in the previous Chapter, the Hon'ble Commission, in its earlier Tariff Orders of PSTCL, has disallowed the funding of Capital Expenditure through loans that are not long-term in nature, even though such loans were used for funding of Capital Expenditure. However, for the purpose of the present Petition, PSTCL has considered the closing balance of loans for FY 2020-21 as submitted in the True-up Chapter, as the opening loan as on April 1, 2021.

The outstanding existing loans include loans from REC, Commercial Banks, Loan from PSPCL and GPF Liability. The loan addition considered during FY 2021-22 and FY 2022-23 is as per the addition of loan computed in the section on Funding of Capital Investment. PSTCL has considered the loan repayment in line with the Depreciation computed for FY 2021-22 and FY 2022-23. PSTCL has proposed new loans for the proposed investments for FY 2021-22 and FY 2022-23 mainly from Banks/Financial Institutions. PSTCL has claimed interest capitalised for FY 2021-22 and FY 2022-23 computed on the basis of opening and closing CWIP and applicable interest rate during the respective years.

PSTCL has considered the actual interest rate applicable on loans of FY 2020-21 taken from respective Banks/Financial Institutions for computation of interest for FY 2021-22 and FY 2022-23. PSTCL has provisionally considered Guarantee Charges for FY 2021-22 and FY 2022-23 at 2% of the amount of addition of loans of corresponding year. Also, PSTCL has considered interest charges capitalised for FY 2021-22 and FY 2022-23 in proportion to ratio of the actual interest charges capitalised and average amount Loan in FY 2020-21.

Accordingly, interest on loan capital for FY 2021-22 and FY 2022-23 for PSTCL has been submitted as under:

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**Table 51: Interest on Loan for Spillover Schemes of PSTCL for FY 2021-22 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3,334.90	12.01	43.91	3390.82
2	Addition of loan during year	222.33	0.45	0	222.78
3	Repayment of loan during year	307.02	1.46	0	308.48
4	Closing loan balance for year	3,250.21	11.00	43.91	3305.12
5	Average Loan Balance for year	3292.55	11.51	43.91	3347.97
6	<b>Interest Charges</b>	<b>334.87</b>	<b>1.21</b>	<b>3.27</b>	<b>339.36</b>
7	Less: Interest charges capitalised	11.55	0.00	0.00	11.55
8	Add: Guarantee Fee	4.46	0.00	0.00	4.46
9	Add: Miscellaneous Interest and Finance Charges		0.00	0.00	
10	<b>Interest and Finance Charges</b>	<b>327.78</b>	<b>1.21</b>	<b>3.27</b>	<b>332.26</b>

**Table 52: Interest on Loan for New Schemes of PSTCL for FY 2021-22 (Rs. Crore)**

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

**Table 53: Interest on Loan for all Schemes of PSTCL for FY 2021-22 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3334.90	12.01	43.91	3390.82
2	Addition of loan during year	295.41	1.92	-	297.32
3	Repayment of loan during year	309.16	1.50	-	310.66
4	Closing loan balance for year	3321.15	12.43	43.91	3377.49

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
5	Average Loan Balance for year	3328.02	12.22	43.91	3384.15
6	Interest Charges	338.22	1.28	3.27	342.77
7	Less: Interest charges capitalised	11.55	-	0.00	11.55
8	Add: Guarantee Fee	4.46	0.00	0.00	4.46
9	Add: Miscellaneous Interest and Finance Charges	-	0.00	0.00	-
10	Interest and Finance Charges	331.12	1.28	3.27	335.67

**Table 54: Interest on Loan for Spillover Schemes of PSTCL for FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3,250.21	11.00	43.91	3,305.12
2	Addition of loan during year	261.02	0.25	-	261.27
3	Repayment of loan during year	318.44	1.52	-	319.96
4	Closing loan balance for year	3,192.78	9.74	43.91	3246.43
5	Average Loan Balance for year	3221.50	10.37	43.91	3275.78
6	Interest Charges	327.65	1.09	3.27	332.01
7	Less: Interest charges capitalised	11.30	0.00	0.00	11.30
8	Add: Guarantee Fee	5.23	0.00	0.00	5.23
9	Add: Miscellaneous Interest and Finance Charges	-	0.00	0.00	-
10	Interest and Finance Charges	321.57	1.09	3.27	325.94

**Table 55: Interest on Loan for New Schemes of PSTCL for FY 2022-23 (Rs. Crore)**

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

Sr. No.	Particulars	Transmission	SLDC	PSTCL
9	Interest and Finance Charges	18.78	1.46	20.23

**Table 56: Interest on Loan for all Schemes of PSTCL for FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	GPF	PSTCL
1	Opening Loan balance for the year	3321.15	12.43	43.91	3377.49
2	Addition of loan during year	495.59	29.24	-	524.83
3	Repayment of loan during year	327.00	2.46	-	329.46
4	Closing loan balance for year	3489.75	39.21	43.91	3572.87
5	Average Loan Balance for year	3405.45	25.82	43.91	3475.18
6	Interest Charges	344.98	2.55	3.27	350.80
7	Less: Interest charges capitalised	11.30	-	-	11.30
8	Add: Guarantee Fee	6.67	-	-	6.67
9	Add: Miscellaneous Interest and Finance Charges	-	-	-	-
10	Interest and Finance Charges	340.35	2.55	3.27	346.17

PSTCL requests the Hon'ble Commission to approve Interest and Finance Charges of Rs. 335.67 Crore and Rs. 346.17 Crore for FY 2021-22 and FY 2022-23 respectively.

### 3.10 Return on Equity

The Hon'ble Commission, in its Tariff Order dated May 28, 2021 and MYT Order dated June 1, 2020 approved RoE of Rs. 108.93 Crore and Rs. 109.38 Crore for FY 2021-22 and FY 2022-23, as against Rs. 109.27 Crore for FY 2020-21 and Rs. 222.27 Crore for FY 2022-23 claimed by PSTCL.

PSTCL has computed the RoE in accordance with Regulation 20 of the PSERC MYT Regulations, 2019, as reproduced below:

*"20. Return on equity*

*Return on equity shall be computed at the base rate of 15.5% for thermal generating stations, Transmission Licensee, SLDC and run of the river hydro generating stations and at the base rate of 16.5% for the storage type hydro generating stations*

*and run of river generating stations with pondage and 16% for Distribution Licensee on the paid up equity capital determined in accordance with Regulation 19:  
Provided that Equity invested in foreign currency shall be converted to rupee currency based on the exchange rate prevailing on the date(s) it is subscribed:  
Provided further that assets funded by consumer contributions, capital subsidies/Government. grants shall not form part of the capital base for the purpose of calculation of Return on Equity."*

PSTCL submits that it has considered the funding of capital expenditure through 100% of Loan in line with the approach adopted by Hon'ble Commission in Tariff Order dated June 01, 2020. Accordingly, PSTCL has not considered any Equity additions during FY 2021-22 and FY 2022-23. The approach adopted by PSTCL for consideration of opening Equity and addition of Equity in FY 2021-22 and FY 2022-23 is without prejudice to the appeal pending before Hon'ble APTEL. Hon'ble Commission to pass on the effect in opening balance of Return on Equity of FY 2021-22 and for additions during the year in case the matter is ruled in favour of PSTCL. Accordingly, PSTCL has considered the closing equity of FY 2020-21 as submitted in the Truing-up Chapter, as opening equity for FY 2021-22.

PSTCL has considered rate of RoE for FY 2021-22 and FY 2022-23 in accordance with Regulation 20 of the PSERC MYT Regulations, 2019. The RoE computed for FY 2021-22 and FY 2022-23 is as shown in the Table below:

**Table 57: Return on Equity for FY 2021-22 and FY 2022-23 (Rs. Crore)**

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

PSTCL requests the Hon'ble Commission to approve Return on Equity of Rs. 112.59 Crore for both FY 2021-22 and FY 2022-23.

### 3.11 Interest on Working Capital

The Hon'ble Commission, in the Tariff Order dated May 28, 2021 and MYT Order dated June 1, 2020, approved the IoWC for FY 2021-22 as Rs. 36.53 Crore and for FY 2022-23 as Rs. 38.08 Crore, as against IoWC of Rs. 37.43 Crore and Rs. 46.06 Crore for FY 2021-22 and FY 2022-23, respectively, claimed by PSTCL.

PSTCL has computed the working capital requirement in accordance with Regulation 51.1 of the PSERC MYT Regulations, 2019, which specifies as under:

*"51.1. Components of Working Capital*

*The Working Capital shall cover the following:*

- (a) O&M Expenses for 1 month;*
- (b) Maintenance spares @ 15% of the O&M expenses;*
- (c) Receivables equivalent to two (2) months of fixed cost calculated on normative target availability.*

*51.2. Rate of Interest*

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

Regulation 25.1 of the PSERC MYT Regulations, 2019 specifies as under:

*"25.1. The rate of interest on working capital shall be equal to the actual rate of interest paid on working capital loans by the Licensee/Generating Company/SLDC or the one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI as may be applicable as on 1st April of the relevant year plus 350 basis points, whichever is lower. The interest on working capital shall be payable on normative basis notwithstanding that the Licensee/Generating Company/SLDC has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures."*

PSTCL has computed IoWC for FY 2021-22 and FY 2022-23 in line with the provisions of Regulation 51.1 and Regulation 25.1 of the PSERC MYT Regulations, 2019 as stated above. The rate of interest to be considered is either the weighted average rate of interest paid/payable on loans by the Licensee/SLDC or the State Bank of India MCLR plus 350 basis points as on April 1 of the relevant year, whichever is less.



Since, the actual weighted average rate of IoWC loans for FY 2020-21 is coming out to be lower than SBI MCLR plus 350 basis points, PSTCL has considered the actual weighted average rate of interest on working capital loans of FY 2020-21, for computation of IoWC for FY 2021-22 and FY 2022-23. The computation of IoWC for FY 2021-22 and FY 2022-23 is as shown in the following Table:

**Table 58: Interest on Working Capital for FY 2021-22 (Rs. Crore)**

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

**Table 59: Interest on Working Capital for FY 2022-23 (Rs. Crore)**

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

PSTCL requests the Hon'ble Commission to approve Interest on Working Capital of Rs. 38.94 Crore and Rs. 41.99 Crore for FY 2021-22 and FY 2022-23 respectively.

### 3.12 ULDC Charges

The Hon'ble Commission in Tariff Order dated May 28, 2021 and MYT Order dated June 1, 2020 approved the ULDC Charges at Rs. 9.53 Crore for FY 2021-22 and Rs.

7.68 Crore for FY 2022-23, as against Rs. 9.53 Crore and Rs. 9.67 Crore claimed by PSTCL for FY 2021-22 and FY 2022-23.

For the purpose of APR of FY 2021-22 and ARR of FY 2022-23, PSTCL has claimed ULDC Charges of Rs. 9.80 Crore, in line with the actual ULDC charges of FY 2020-21, as claimed in Trueing-up chapter. The actual ULDC Charges shall be submitted at the time of true-up for FY 2021-22 and FY 2022-23, respectively.

### 3.13 Non-Tariff Income

The Hon'ble Commission, in the Tariff Order dated May 28, 2021 and MYT Order dated June 01, 2020, approved NTI of Rs. 26.52 Crore and Rs. 25.26 Crore for FY 2021-22 and FY 2022-23 as against Rs. 25.29 Crore and Rs. 18.51 Crore claimed by PSTCL for FY 2021-22 and FY 2022-23, respectively.

Actual NTI for H1 of FY 2021-22 is Rs. 10.44 Crore which includes NTI of Rs. 10.30 Crore for Transmission Business and Rs. 0.14 Crore for SLDC Business as shown below:

**Table 60: Non-Tariff Income for H1 of FY 2021-22 (Rs. Crore)**

Sr. No.	Particulars	FY 2021-22 (H1)		
		Transmission	SLDC	Total
1	Rental for staff quarters	0.13	0.02	0.15
2	Credit balance written back:			
A	<i>Sundry creditors</i>	0.01	-	0.01
B	<i>Other sundry credit balance</i>	4.84	-	4.84
C	<i>Rebate on early payment to NRLDC</i>	-	0.07	0.07
3	Income from O&M of bays of PGCIL	1.81	-	1.81
4	Miscellaneous income	0.07	-	0.07
5	Penalty imposed on suppliers/contractors	1.59	0.02	1.61
	<b>Total</b>	<b>8.45</b>	<b>0.11</b>	<b>8.56</b>

PSTCL has estimated NTI for H2 of FY 2021-22 as below:

**Table 61: Estimated Non-Tariff Income for H2 of FY 2021-22 (Rs. Crore)**

Sr. No.	Particulars	FY 2021-22 (H2)		
		Transmission	SLDC	Total
1	Rental for staff quarters	0.13	0.02	0.15
2	Sundry creditors	0.01	-	0.01
3	Net Delayed Payment Charges	0.34	-	0.34
4	Rebate on early payment to NRLDC	-	0.07	0.07
5	Income from O&M of bays of PGCIL	1.81	-	1.81
6	Penalty imposed on suppliers/contractors	1.59	0.02	1.61
	<b>Total</b>	<b>3.88</b>	<b>0.11</b>	<b>3.98</b>

Thus, PSTCL has estimated the total NTI of Rs. 12.54 Crore for FY 2021-22 which includes NTI of Rs. 12.33 Crore for Transmission Business and Rs. 0.21 for SLDC Business. PSTCL has considered NTI for FY 2022-23 same as NTI for FY 2021-22.

### 3.14 Revenue from Open Access Consumers

PSTCL has claimed a receipt of Transmission charges of Rs. 1.85 Crore and SLDC charges of Rs. 0.03 Crore from Open Access Consumers in H1 of FY 2021-22. PSTCL estimates similar revenue from H2 of FY 2021-22 also. Thus, PSTCL has claimed a receipt of Transmission charges of Rs. 3.63 Crore and SLDC charges of Rs. 0.06 Crore from Open Access Consumers for entirety of FY 2021-22. The amount of revenue from open access consumers is over and above the Transmission charges approved by the Hon'ble Commission. Accordingly, PSTCL prays to the Hon'ble Commission to kindly consider adjustment of Revenue from Open Access Consumers in APR of FY 2021-22. PSTCL has considered same Revenue from Open Access in FY 2022-23 as in FY 2021-22.

### 3.15 Summary of ARR for FY 2021-22

The summary of ARR for Transmission Business and SLDC for FY 2021-22 is shown in the Table below:

Table 62: Net ARR for Transmission Business and SLDC for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	Transmission Business		SLDC		Transmission Business and SLDC	
		Tariff Order	APR	Tariff Order	APR	Tariff Order	APR
1a	Net Employee costs	531.43	597.89	7.95	8.97	539.38	606.86
1b	Net R&M expenses	31.85	36.24	0.70	0.48	32.55	36.72
1c	Net A&G expenses	27.12	29.47	0.83	0.87	27.95	30.34
1	Total O&M Expenses	590.40	663.60	9.48	10.32	599.88	673.92
2	Depreciation	301.84	309.16	1.88	1.50	303.72	310.65
3	Interest charges	297.24	334.39	1.20	1.28	298.44	335.67
4	Interest on Working Capital	35.93	38.33	0.60	0.61	36.53	38.94
5	ULDC Charges	-	-	9.53	9.80	9.53	9.80
6	Return on Equity	109.38	112.59	-	-	109.38	112.59
7	Total Revenue Requirement	1,334.79	1,458.07	22.69	23.51	1,357.48	1,481.58
8	Less: Non-Tariff Income	25.94	12.33	0.58	0.21	26.52	12.54
9	Less: Revenue from Open Access		3.69		0.06		3.76
10	Aggregate Revenue Requirement	1,308.85	1,442.04	22.11	23.24	1,330.96	1,465.28

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### 3.16 Revenue Gap/(Surplus) for FY 2021-22

The Hon'ble Commission in the Tariff Order dated May 28, 2021 has approved ARR and Tariff of Rs. 1308.85 Crore for Transmission Business and Rs. 22.11 Crore for SLDC. Accordingly, the Revenue Gap/(Surplus) for FY 2020-21 on account of Annual Performance Review has been computed as shown in the following Table:

**Table 63: Revenue Gap/(Surplus) for FY 2021-22 (Rs. Crore)**

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1	Net ARR claimed in APR	1,442.04	23.24	1,465.28
2	ARR approved in Tariff Order	1,308.85	22.11	1,330.96
3	Revenue Gap/(Surplus)	133.19	1.13	134.32

PSTCL has not considered the carrying cost on Revenue Gap/(Surplus) on account of APR for FY 2021-22 and the same will be claimed at the true up of FY 2021-22.

The total Revenue Gap of FY 2021-22 works out to Rs. 133.19 Crore for Transmission and Rs. 1.13 Crore for SLDC Business. The Petitioner prays to the Hon'ble Commission to approve this Revenue Gap arising out of APR of FY 2021-22.

### 3.17 Summary of ARR for FY 2022-23

The summary of ARR for Transmission Business and SLDC for FY 2022-23 is shown in the Table below.

**Table 64: Net ARR for Transmission Business and SLDC for FY 2022-23 (Rs. Crore)**

Sr. No.	Particulars	Transmission Business		SLDC		Transmission Business and SLDC	
		MYT Order	ARR	MYT Order	ARR	MYT Order	ARR
1a	Net Employee costs	541.98	653.89	7.40	11.99	549.38	665.88
1b	Net R&M expenses	44.55	38.10	1.52	2.22	46.07	40.32
1c	Net A&G expenses	30.03	31.86	1.12	0.94	31.15	32.81
1	Total O&M Expenses	616.56	723.85	10.04	15.16	626.60	739.00
2	Depreciation	327.95	327.00	1.66	2.46	329.61	329.46
3	Interest charges	326.01	343.62	4.29	2.55	330.30	346.17
4	Interest on Working Capital	37.45	41.15	0.63	0.84	38.08	41.99
5	ULDC Charges	-	-	7.68	9.80	7.68	9.80
6	Return on Equity	108.93	112.59	-	-	108.93	112.59
7	Total Revenue Requirement	1,416.90	1,548.21	24.30	30.80	1,441.20	1,579.01
8	Less: Non-Tariff Income	23.59	12.33	1.67	0.21	25.26	12.54
9	Less: Revenue from Open Access		3.69		0.06		3.76
9	Aggregate Revenue Requirement	1,393.31	1,532.18	22.63	30.53	1,415.94	1,562.71
11	Revenue Gap of FY 2020-21	-	42.71	-	(1.77)	-	40.94
12	Carrying cost of FY 2020-21	-	6.87	-	0.03	-	6.90
13	Revenue Gap of FY 2021-22	-	133.19	-	1.13	-	134.32
13	Net ARR	1,393.31	1,714.95	22.63	29.92	1,415.94	1,744.87

*Sudhakar*

## 4 Proposed Tariff for FY 2022-23

### 4.1 Proposed Tariff for FY 2022-23

PSTCL submits that since there is only one Distribution Licensee (PSPCL) in the State, the total Annual Fixed Charges for Transmission Business and SLDC shall be borne by PSPCL through the tariff of FY 2022-23.

PSTCL has considered Transmission System Capacity of 13,539.75 MW as estimated for FY 2022-23. Further, the energy input required at transmission boundary for sale in the State is considered same as approved by Hon'ble Commission in Table 11 of Chapter 4 of PSPCL MYT Tariff Order dated June 01, 2020 for FY 2022-23.

PSERC MYT Regulations, 2019 specify that Transmission Tariff will have the following components:

1. SLDC Charges or System Operation Charge
2. Reactive Energy Charges
3. Transmission Charges or Network Usage Charges

**SLDC Charges or System Operation Charges:** PSTCL has computed the ARR of Rs. 29.92 Crore for SLDC for FY 2022-23, along with carrying cost in the previous Chapter. Accordingly, PSTCL has determined the SLDC Charges or System Operation Charge as under:

**Table 65: SLDC Charges or System Operation Charges for FY 2022-23**

Sr. No.	Particulars	FY 2022-23
1	Annual Fixed Charges for SLDC Business (Rs. Crore)	29.92
2	Monthly SLDC Charges (Rs. Crore/month)	2.49
3	SLDC Charges for LTA/MTA (Rs. /MW/Month)	1841.33

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

**Transmission Charges or Network Usage Charges:** PSTCL has computed the ARR of Rs 1,714.95 Crore for Transmission Business of FY 2022-23, along with carrying cost and other adjustments as discussed in the previous Chapter. Accordingly, PSTCL has determined the Transmission Charges or Network Usage Charge as shown in the following Table:

**Table 66: Proposed Transmission Charges for FY 2022-23**

Sr. No.	Particulars	FY 2022-23
1	Annual Fixed Charges for Transmission Tariff (Rs. Crore)	1,714.95
2	Transmission System Capacity (Net) (MW)	13,539.75
3	Transmission Charges per month (Rs. Crore per month)	142.91
4	Transmission Charges (Rs./MW/month)	1,05,550.28
5	Energy at Transmission Boundary for sale in State (MU)	65,026.00
6	Transmission Charges (paise/kWh)	26.37

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

*Sudhraj*



## 5 Compliance to Directive

PSTCL submits the following compliances to directives of Hon'ble Commission vide Tariff Order dated May 28, 2021.

Sr. No.	Issues	PSERC Comments & Directive	PSTCL's Reply
5.1	Boundary metering, Energy Audit and Reduction in Transmission Losses	PSTCL has provided the monthly transmission losses from April 2020 to December 2020. However PSTCL has not provided the details of monthly input and output energy to analyse and determine the cumulative losses of FY 2020-21 (up to December 2020). PSTCL is directed to provide the requisite data within one month of the issue of this tariff order.	<ul style="list-style-type: none"> <li>As per the direction of Hon'ble PSERC, tender enquiry for implementation of SAMAST scheme in Punjab was floated by PSTCL through which voltage wise transmission losses of Punjab transmission network could be calculated. As per the decision of WTDs taken in its 86<sup>th</sup> meeting held on 24.09.2021, the letter of Intent (LOI) dated 14.10.2021 has been issued to the L-1 firm and also petition has been filed with PSERC on 26.10.2021 for approval so that PO/WO could be placed upon the L-1 firm.</li> <li>PSTCL Transmission losses for FY 2020-21 (April- to Sept 2021) with input &amp; output energy is attached as Annexure-II.</li> </ul>
5.3	Loading Status of PSTCL Transmission lines and Substations	PSTCL is directed to intimate the progress of creation of 220 kV grid sub-station at Jhoke-Harihar to tackle the overloading of 220 kV substation Ferozepur.	<ul style="list-style-type: none"> <li>Amendment for upgradation of Jhoke Harihar has been approved by BoDs. The expenditure for the same is proposed in the years 2021-23 approval of the urgent work.</li> <li>Loading Status of PSTCL Transmission lines and Substations is attached as Annexure-A.</li> </ul>
5.4	Maintenance of voltage wise/	The status of the maintenance of voltage wise/category wise details of fixed assets	<ul style="list-style-type: none"> <li>It is intimated that Haryana Vidyut Prasaran Nigam Limited (HVPNL) has implemented the software for preparation of fixed assets register, but software is not</li> </ul>

Sr. No.	Issues	PSERC Comments & Directive	PSTCL's Reply
	category wise details of fixed assets,	be shared with The Commission within six months of the issue of Tariff Order and updating of the same on yearly basis.	stabilized due to some security audit/ codification of the same. As soon as the HVPNL's software is stabilized it will be studied thoroughly after that Tenders will be called from IT Firms and PSTCL will get it customized according to its requirement at the earliest because development of software afresh will consume lot of time.
5.5	Reactive Compensation.	The final recommendations of CPRI on reactive compensation along with status of its implementation should be intimated to the Commission within one month of issue of the Tariff Order.	The detailed report is still awaited from CPRI. PSTCL is in the process of installing Reactors at 220/400KV level at 400KV S/Stn. Dhuri and Nakodar as per the report of CPRI. Subsequent to the earlier reply already submitted, Order for the installation of reactor placed on dated 19.07.2021 and 17.08.2021 for 220KV (25 MVAR each at 400KV Dhuri and Nakodar) and 400KV (125 MVAR at 400KV Dhuri) reactors respectively. Commission shall be intimated as and when these reactors are installed.
5.6	Preventive maintenance of transmission lines.	During the 1 <sup>st</sup> quarter, 260 tripping/ interruptions on transmission lines have been reported. In many cases, 4 to 5 hours interruption due to transient fault has been reported. The 132 kV Moga-Jamalpur line remained shut for 65 hours reportedly due to transient fault. The 220 kV Moga-Bagapurana line remained shut for	The following measures are being taken for preventive maintenance of Transmission lines like Regular patrolling, jumper checking and tightening of Tension towers, regular checking of healthiness of earth wires of all transmission lines especially over railway crossing/ National highways/Road crossings and river/canal crossings, Washing/Cleaning of porcelain disc insulators of critical 400 KV lines in polluted areas. Apart from this thermo vision scanning of 400/220/132KV transmission elements to check hot

Sr. No.	Issues	PSERC Comments & Directive	PSTCL's Reply
		<p>75 hours due to damage of Y-phase wave trap and 132 Tarn-Taran-Patti line remained shut for over 10 days due to breaker damage.</p> <p>During the 2<sup>nd</sup> quarter, 265 tripping/ interruptions on transmission lines have been reported. Outage due to transient fault for a period of 4.07 hrs and 5.27 hrs have been reported on 132 kV Sarainaga-Moga line.</p> <p>During 3<sup>rd</sup> quarter, 100 tripping/ interruptions on transmission lines have been reported. The 220 KV Jhunir-Sunam Line remained under fault for over 105 hours due to conductor breakdown. The 220KV Bhari – Ganguwal remained under fault due to disc insulator string damaged for over 68 hours. This does not speak highly of PSTCL's</p>	<p>points and attending them online/offline as per the availability of shutdown and fault locators are being used to find out the location of faults. Also, online scanning of disc insulator which are already stands weak/defective are in service which may cause in breakdown/flashover in foggy environment.</p> <p>1. 132KV Moga jamalpur line:- This line is being utilized as link between 132KV Moga and Jamalpur and is kept idle/charged Due to ongoing Covid-19 pandemic, only 50% strength of the staff was called for duties. Further due to the restrictions imposed due to Lockdown, hurdles were faced in the movement of Manpower and machinery resulting in increased response time for attending the fault,</p> <p>2. 220KV Moga Bagapurana ckt-2:- The delay in attending the fault of this line is more due to collapse of towers of 132KV gholian Kalan line which is the only single source supply to 132KV Gholian Kalan, and Smad Bhai, TL gang was engaged to restore the supply of two Grids i.e 132KV Gholian kalan and Smad Bhai by installing the ERS towers. After energising the</p>
		<p>reaction time and the health of the transmission system. The restoration time for faults on transmission lines needs to be brought down. PSTCL should submit the steps being taken to reduce the restoration time.</p>	<p>circuit through ERS tower the breakdown of 220KV Moga Baghapurana was attended as no supply was affected due to this outage. Further due to the restrictions imposed due to Lockdown, hurdles were faced in the movement of Manpower and machinery resulting in increased response time for attending the fault.</p>

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Sr. No.	Issues	PSERC Comments & Directive	PSTCL's Reply
			<p>3. 132KV Taran Tarn- Patti line, In the 2<sup>nd</sup> quarter the delay in attending the fault of 132KV Sarainaga-Moga, In the 3<sup>rd</sup> quarter the delay in attending the fault of 220KV Sunam-Jhunir line:- Due to ongoing Covid-19 pandemic, only 50% strength of the staff was called for duties. Further due to the restrictions imposed due to Lockdown, hurdles were faced in the movement of Manpower and machinery resulting in increased response time for attending the fault. Further, no supply was affected due to this outage.</p> <p>4. 220KV Bhari Ganguwal line:- This line was tripped on 28-12-2020 at 23:40 hr due to breakage of isolator assembly along with post insulators of B-phase of Bus Bar-2 at 220KV Ganguwal S/S which is under control of BBMB. Actually, there was no line fault and it was charged on 31-12-2020 at 19:56 hr after clearance from Ganguwal S/S (BBMB Sub-station).</p> <p>The above delay in attending the breakdown was due to priority given to attending the breakdown of important circuits/single source supply Sub-station and further it is ensured to the commission that the efforts will be made to bring down the restoration time of faults on transmission lines.</p>
5.7	Strengthening of the State Load Despatch Centre	The Commission has notified the Forecasting, Scheduling and Deviations Settlement Mechanism for Wind	As per the decision taken in 66 <sup>th</sup> meeting of BoDs, a committee has been formed to study the CABIL report implemented by other state utilities and the report/ decision of

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Sr. No.	Issues	PSERC Comments & Directive	PSTCL's Reply
	(SLDC)	<p>and Solar generators dated 7<sup>th</sup> January, 2019. The detailed procedure was also approved by The Commission on 23.09.2019. The forecasting and scheduling was to come in to force six months from the date of notification but keeping in view the difficulties the date was extended firstly to 01.01.2020 then to 01.01.2021 and now to 01.01.2022. The Intra-state DSM Regulations have also been notified on 10.09.2020 and the Detailed Operating Procedure for Energy Accounting and Deviation Settlement of State Entities also stands approved by the Commission on 25.02.2021. However, the commercial mechanism has not yet come into effect due to</p>	<p>committee is awaited. The monthly status report in respect of implementation of SAMAST scheme in Punjab is enclosed as Annexure-B.</p>
		<p>non-implementation of SAMSAT. The Commission directs PSTCL to submit a monthly status report in respect of the implementation of SAMSAT scheme and also to start scheduling</p>	

Sr. No.	Issues	PSERC Comments & Directive	PSTCL's Reply
		of RE generators connected to the Intra-State Transmission System.	
5.10	Capital Expenditure and Capitalisation	PSTCL is directed to submit six monthly details of Capital Expenditure and Capitalization with clear break up between Spill Over Schemes and New Schemes approved for the 2nd MYT Period (FY 2020-21 to FY 2022-23).	Requisite information is attached: Annexure-C (HIS &D) Annexure-D (P&M) Annexure-E (SLDC) T-15 (IS)

Judging.

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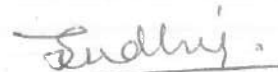
## 6 PRAYERS

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The Petitioner respectfully prays to the Hon'ble Commission:

- a) To admit the Petition seeking approval of True-up of FY 2020-21 in accordance with the PSERC MYT Regulations, 2019, as amended from time to time and approval of Annual Performance Review for FY 2021-22 and revised Aggregate Revenue Requirement and Tariff for FY 2022-23 for Transmission Business and SLDC in accordance with the PSERC MYT Regulations, 2019;
- b) To approve Revenue Gap arising on account of True-up of FY 2020-21 and Annual Performance Review for FY 2021-22 along their carrying cost and allow their recovery through Tariff of FY 2022-23, as computed in this Petition;
- c) To approve the ARR forecast and Tariff for FY 2022-23 for Transmission Business and SLDC Business;
- d) To invoke its power under Regulation 64 in order to allow the deviations from PSERC MYT Regulations, 2019, wherever sought in this Petition;
- e) To allow additions/alterations/modifications/changes to the Petition at a future date;
- f) To allow any other relief, order or direction, which the Hon'ble Commission deems fit to be issued;
- g) To condone any error/ omission and to give opportunity to rectify the same;

BY THE APPLICANT THROUGH



Chief Accounts Officer/Finance and Audit,  
Punjab State Transmission Corporation Limited, Patiala

**FORMATS FOR TARIFF PETITION  
FOR  
FY 2022-23**

*SK*



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**Note:**

1. Electronic Copy of the Petition (in Word format) and detailed calculation as per these formats (in Excel format) and any other information submitted shall also be furnished in the electronic form.

2. Formats may be suitably amended where ever required, and additional formats may be designed for any additional information to be submitted alongwith the Petition.

*[Handwritten Signature]*

## Form T1

## Annual Revenue Requirement - Transmission Business

(Rs. crore)

S. No.	Particulars	FY2020-21	FY 2021-22	Control
		True-up	APR	Projection
I		III	IV	V
A	Receipts			
1	Revenue from Transmission Business and Ancillary Services	1,328.38	1,308.85	1,532.18
B	Expenditure			
1	Expenses for SLDC Fees and Charges			
2	O&M Expenses	582.22	663.60	723.85
a)	R&M Expenses	31.91	36.24	38.10
b)	A&G Expenses	27.06	29.47	31.86
c)	Employee Cost	523.25	597.89	653.89
3	Depreciation	299.94	309.16	327.00
4	Interest and Finance Charges on Loan Capital	343.80	334.39	343.62
5	Interest Charges on Working Capital	35.03	38.33	41.15
6	Prior Period Expenses			
7	Extraordinary Items			
8	Other Debts and Write-Offs	12.86		
9	Income Tax			
	Sub Total Expenditure (1+2+3+4+5+6+7+8+9)	1,273.86	1,345.48	1,435.62
C	Return on Equity	110.99	112.59	112.59
D	Total Revenue Requirement	1,384.84	1,458.07	1,548.21
E	Less: Non-Tariff and other Income	35.52	12.33	12.33
F	Gross ARR	1,349.32	1,445.74	1,535.87
	Add: Incentive	9.88		
	Less: Revenue from Open access	4.00	3.69	3.69
	Add: Past revenue gaps with carrying cost	(1.01)		
G	Net ARR	1,354.20	1,442.04	1,532.18
G	Surplus (+) / Shortfall (-) (A-G) - Before Tariff Revision	(25.82)	(133.19)	

## Note :

The above to be computed based on allocation statement that segregates costs between the Transmission Business and SLDC, until such time both activities are segregated.

## Form T2

## Annual Revenue Requirement - SLDC Business

(Rs. crore)

S. No.	Particulars	FY 2020-21		FY 2021-22		Control	
		True-up	APR	APR	Projection	FY 2022-23	FY 2022-23
I	II	III	IV	IV	V		
A	Revenue						
1	Revenue from Fees and Charges	16.90	22.11	22.11	30.53		
B	Expenditure						
1	O&M Expenses	7.63	10.32	10.32	15.16		
	a) R&M Expenses	0.38	0.48	0.48	2.22		
	b) A&G Expenses	0.80	0.87	0.87	0.94		
	c) Employee Cost	6.45	8.97	8.97	11.99		
2	Depreciation	1.26	1.50	1.50	2.46		
3	Interest and Finance Charges on Loan Capital	1.27	1.28	1.28	2.55		
4	Interest Charges on Working Capital	0.49	0.61	0.61	0.84		
5	ULDC charges	9.80	9.80	9.80	9.80		
6	Other Debts and Write-Offs	0.02	-	-	-		
6	Sub Total Expenditure (1+2+3+4+5)	20.48	23.51	23.51	30.80		
C	Return on Equity						
D1	Non-Tariff and other Income	0.41	0.21	0.21	0.21		
D2	Revenue from Open Access	0.28	0.06	0.06	0.06		
E	Annual Revenue Requirement (B+C-D)	19.79	23.24	23.24	30.53		
F	Surplus(+) / Shortfall(-(A-E) - Before Tariff Revision	(2.89)	(1.13)	(1.13)	-		

## Note :

The above to be computed based on allocation statement that segregates costs between the Transmission Business and

## Operations and Maintenance Expenses Summary

Sr. No.	Particulars	(Rs. Crore)					
		FY 2020-21		2nd Control Period		Remarks	
		Tariff Order	April-March (True-up)	FY 2021-22	FY 2022-23		
		(a) III	(b) IV	(c) = (b) - (a) V	APR VI	Projected VII	
1	O&M Expenses	589.85	583.13	5.69	673.92	739.00	IX
1.1	Employee Expenses	529.70	524.42	5.28	606.86	665.88	
1.2	R&M Expenses	32.28	31.87	0.41	36.72	40.32	
1.3	A&G Expenses	27.86	26.84		30.34	32.81	
2	O&M Expense capitalised	-	31.57	(31.57)	-	-	
3	Total Operation & Maintenance Expenses (net of capitalisation)	589.85	551.56	37.26	673.92	739.00	

Note - 1) PSTCL submitted the O&M Expenses for FY 2020-21 on normative basis. Also, for Control period, O&M expenses submitted on normative basis.

2) This format is submitted consolidated for PSTCL

Form T4

Sr. No.	Particulars	Approved O&M Expenses			3-Year Average (d) = [(a)+(b)+(c)]/3	MYT Control Period			
		FY 2018-19	FY 2019-20	FY 2020-21		FY 2021-22		FY 2022-23	
		(a)	(b)	(c)		Normative	Projected	Normative	Projected
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Employee Expenses	494.36	505.63	529.70	506.56	606.86	506.86	665.88	665.88
2	R & M Expenses	51.89	55.87	32.28	55.97	36.72	36.72	40.32	40.32
3	A&G Expenses			27.86		30.34	30.34	32.81	32.81
4	Total O&M Expenses	536.25	561.5	589.35	562.53	673.92	673.32	739.00	739.00

Note - 1) PSTCL submitted the O&M Expenses for FY 2018-19, FY 2019-20 and FY 2020-21 on normative basis. Also, for Control period, O&M expenses submitted on normative basis.

2) This format is submitted consolidated for PSTCL

## Employee Expenses

S.No	Particulars	(Rs. crore)		
		2020-21 Actual (Audited) III	2021-22 APR IV	Control Projections FY 2022-23 V
<b>A</b>	<b>Employee Cost (Other than covered in 'C&amp;D')</b>			
1	Salaries	70.69		
2	Dearness Allowance (DA)	98.32		
3	Other Allowances	14.86		
4	Interim Relief / Wage Revision	-		
5	Overtime	4.35		
6	Bonus	0.03		
7	Incentive	-		
8	Engagement of man power through outsourcing agencies	34.92		
	<b>Sub Total</b>	<b>223.16</b>	<b>277.80</b>	<b>329.97</b>
<b>B</b>	<b>Other Costs</b>			
1	Medical Expenses Reimbursement	1.24		
2	Travelling Allowance(Conveyance Allowance)	0.70		
3	Debits, Write-offs and Any Other Items	-		
4	Payment Under Workman's Compensation Act	-		
5	Electricity Concession to Employees	-		
6	Other Staff Welfare Expenses	1.37		
7	Any Other Item (Specify) - Uniform & livery expenses	-		
	<b>Sub Total</b>	<b>3.31</b>		
<b>C</b>	<b>Apprentice and Other Training Expenses</b>			
<b>D</b>	<b>Contribution to Terminal Benefits</b>			
1	Share of Earned Leave Encashment	19.85		
2	Share to Pension, Gratuity and Medical	296.58		
3	Any Other Item (Specify)	-		
i	Miscellaneous - PF inspection fees, Solatium, Momen	0.30		
ii	Provision for Gratuity & leave encashment for employ	-		
iii	Prior Period Adjustment related to Terminal Benefits	-		
2	NPS, CPF, PF, LWF	6.23		
3	Revision of final share	2.57		
	<b>Sub Total</b>	<b>325.53</b>	<b>328.96</b>	<b>335.91</b>
<b>E</b>	<b>Grand Total (A+B+C+D)</b>	<b>552.00</b>	<b>606.86</b>	<b>665.88</b>
<b>F</b>	<b>Employee Expenses Capitalized</b>			
		27.58		
<b>G</b>	<b>Net Employee Expenses (E)-(F)</b>	<b>524.42</b>	<b>606.86</b>	<b>665.88</b>

Note :

- 1) The above information is to be provided in consolidated form in case of Transmission
- 2) PSTCL has claimed Employee Costs on normative basis, FY 2020-21 details are based on Audited accounts.

**Employee Strength (Regular)**

S.No.	Particulars	Previous Year (2020-21)		Current Year (2021-22)		Control Period Projections					
		Actuals		Actuals		1st Year (2022-23)		2nd Year (2023-24)		3rd Year (2024-25)	
		Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	Technical										
1	Class I	305	442	341	449	358	449	376	449	395	449
2	Class II	545	1096	490	1101	515	1101	541	1101	568	1101
3	Class III	1262	2344	1119	2357	1175	2357	1234	2357	1296	2357
4	Class IV	49	0	43	0	41	0	39	0	37	0
	Non - Technical										
1	Class I	41	61	36	61	38	61	40	61	42	61
2	Class II	130	186	129	186	135	186	142	186	149	186
3	Class III	223	586	202	588	212	588	223	588	234	588
4	Class IV	176	415	163	417	171	417	180	417	189	417
	Total	2731	5130	2523	5159	2645	5159	2775	5159	2910	5159

Note: Projection values for Working Strength has been taken as 5% increase/decrease (approx.) of the actual values of current year

Administration & General Expenses

FORM IT

S.No	Particulars	FY 2020-21		FY 2021-22	Control FY 2022-23
		Actual (Audited Accounts)	Estimated		
	II		IV		V
	1 Lease/ Rent	0.87			
	2 Insurance	0.04			
	3 Revenue Stamp Expenses Account	0.00			
	4 Telephone, Postage, Telegram & Telex Charges	0.38			
	5 Incentive & Award to Employees/Outsiders	0.00			
	6 Consultancy Charges	0.11			
	7 Technical Fees	7.35			
	8 Other Professional Charges				
	9 Conveyance and Travelling Expenses	0.00			
	10 License and Registration Fees	0.00			
	11 Vehicle Expenses (Other Than Trucks and Delivery Vans)				
	Vehicles Running Expenses Petrol and Oil				
	Hiring of Vehicles				
	12 Debts, Write-offs and Any Other Items				
	Sub Total 'A' (1 to 12)	8.74			
	1 Fee and Subscription for Books and Periodicals	0.41			
	2 Printing and Stationery Expenses	0.23			
	3 Advertisement Expenses (Other than Purchase Related) Exhibition & Demo.	0.07			
	4 Contributions/Donations to Outside Institutes /Associations	0.00			
	5 Electricity Charges of Offices and Water Charges	14.82			
	6 Material related expenses	3.35			
	7 Hospitality	0.07			
	8 Miscellaneous Expenses (specify details)	2.47			
	Sub-Total 'B' (1 To 8)	21.52			
	Legal Fee/Charges	0.24			
	Auditor's Fee	0.06			
	Sub-Total 'C' (1 To B)	0.00			
	1 Vehicle Running Expenses Truck / Delivery Van	0.00			
	2 Vehicle Hiring Expenses Truck / Delivery Van	0.00			
	3 Other Freight	0.00			
	4 Transit Insurance	0.00			
	5 Octroi	0.00			
	6 Incidental Stores Expenses	0.00			
	7 Fabrication Charges	0.00			
	Sub Total 'E' (1 To 7)	0.00			
	Direction And Supervision Charges	0.00			
	Annual license fee and tariff determination fee payable to PSERC	0.00			
	Grand Total (A To G)	30.56			
	Total Charges Chargeable To	3.72			
	Capital Works (A)	26.84		30.34	32.81
	Revenue Expenses				

Note :  
1. The above information is to be provided in consolidated form in case of Transmission Licensee.



## Form T8

## Repair &amp; Maintenance Expenses - Transmission Business

S.No.	Particulars	(Rs. Crore)		
		FY 2020-21 Actual III	FY 2021-22 Estimated IV	Control Period FY 2022-23 V
I				
1	Plant and Machinery	21.86		
A	Sub-Stations	-		
	i) 440 kV	-		
	ii) 220 kV	-		
	iii) 132 kV	-		
B	Others	-		
2	Buildings	3.44		
3	Civil Works	0.91		
4	Lines	5.15		
	i) 440 kV	-		
	ii) 220 kV	-		
	iii) 132 kV	-		
	iv) Cables	-		
5	Vehicles	0.33		
6	Furniture and Fixtures	0.04		
7	Office Equipments	0.02		
8	Station Supplies	-		
9	Maintenance by private agencies	-		
10	Any other item (specify)	-		
11	<b>Total R&amp;M Expenses</b>	<b>31.76</b>		
12	R&M Expenses Capitalized	0.26		
13	<b>Net R&amp;M Expense (11-12)</b>	<b>31.50</b>	<b>36.24</b>	<b>38.10</b>

Note: PSTCL has claimed R&M Expenses on normative basis for FY 2020-21, FY 2021-22 and FY 2022-23. The actual R&M

Form T9

**Repair & Maintenance Expenses - SLDC**

S.No.	Particulars	(Rs. Crore)		
		FY 2020-21 Actual	FY 2021-22 Estimated	Control Period FY 2022-23
I	II	III	IV	V
1	Plant and Machinery	0.32		
2	Building	0.03		
3	Civil Works	-		
4	Lines	-		
5	Vehicles	0.00		
6	Furniture and Fixtures	0.00		
7	Office Equipments	0.01		
8	Station Supplies	-		
9	Maintenance by private agencies	-		
10	Any other item (specify)	-		
11	<b>Total R&amp;M Expenses</b>	<b>0.37</b>		
12	R&M Expenses Capitalized	-		
13	<b>Net R&amp;M Expenses (11-12)</b>	<b>0.37</b>	<b>0.48</b>	<b>2.22</b>

Note: PSTCL has claimed R&M Expenses on normative basis for FY 2020-21, FY 2021-22 and FY 2022-23. The actual R&M Expenses for FY 2020-21 submitted based on audited accounts.

*AS*

**Form T10**  
**Fixed Assets details for the FY 2020-21 :-**

Asset Description	Account Head	Previous Year FY 2020-21 (Fixed Asset excluding asset created through Consumer Contributions and Govt. Grant (Up to 90% Value))												
		Opening Balance as on 01.04.2020	Opening Original Cost of Fixed Asset created through Consumer Contributions (Rt. in Grant)	Opening Original Cost of Fixed Asset created through Govt. Grant (90%) Eligible for Depreciation (Rt. in Grant)	Opening Original Cost of Fixed Asset - Others (Excluding Consumer Contribution and Govt. Grant 90%) Eligible for Depreciation (Rt. in Grant)	Rate of depreciation applied for charging depreciation during FY 2019-20	Opening Depreciation (Rt. in Grant) E.g. 6	Opening Depreciation (Excluding Consumer Contribution and Govt. Grant 90%) E.g. 6	Opening Depreciation (Rt. in Grant) E.g. 6	Opening Depreciation (Excluding Consumer Contribution and Govt. Grant 90%) E.g. 6	Opening Depreciation (Rt. in Grant) E.g. 6	Opening Depreciation (Excluding Consumer Contribution and Govt. Grant 90%) E.g. 6		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Land and Land Rights	10.1	2,944.35	-	-	2,944.35	-	2,944.35	-	-	-	-	-	-	2,944.35
Buildings	10.2	238.74	0.18	2.45	236.11	-	236.11	0.29	0.24	0.02	11.62	-	-	247.75
Other Civil Works	10.4	6.80	-	-	6.80	-	6.80	-	-	-	0.19	-	-	6.99
Plant and Machinery	10.5	3,713.78	1,661	7.16	3,691.01	Mentioned	3,691.01	0.69	6.48	0.65	80.59	1.59	14.92	3,758.92
Lines, Cables, Networks etc.	10.6	3,201.35	5,034	-	3,151.01	respective	3,151.01	-	-	-	101.01	-	-	3,252.02
Vehicles	10.7	10.28	-	-	10.28	asset	10.28	-	-	-	0.71	-	1.12	9.86
Furniture and Fixtures	10.8	4.77	-	-	4.77	-	4.77	-	-	-	0.63	-	0.03	5.37
Office Equipments	10.9	7.98	-	-	7.98	-	7.98	-	-	-	0.09	-	0.01	8.06
Soft ware	10.3	0.15	-	-	0.15	-	0.15	-	-	-	-	-	-	0.15
<b>Grand Total as per PPE (Note No. 3)</b>		<b>10,128.21</b>	<b>66.13</b>	<b>9.61</b>	<b>10,052.47</b>		<b>10,052.47</b>	<b>0.98</b>	<b>6.72</b>	<b>0.67</b>	<b>194.83</b>	<b>1.59</b>	<b>16.08</b>	<b>10,233.48</b>

Asset Description	Account Head	Depreciation charged During the year FY 2020-21													
		1	2	3	4	5	6	7	8	9	10	11	12	13	
Land and Land Rights	10.1	-	-	-	-	-	-	-	-	-	-	-	-	-	2,943.69
Buildings	10.2	6.61	0.01	0.10	0.01	0.09	-	-	6.61	90.47	97.08	150.67	-	-	5.13
Other Civil Works	10.4	0.22	-	-	-	-	-	-	0.22	-	1.87	-	-	-	5.13
Plant and Machinery	10.5	149.53	0.86	0.63	0.06	0.56	1.43	10.98	139.99	1,674.12	1,814.11	1,944.81	-	-	1,944.81
Lines, Cables, Networks etc.	10.6	143.95	2.66	-	-	-	-	-	143.95	1,185.83	1,329.78	1,922.23	-	-	1,922.23
Vehicles	10.7	0.52	-	-	-	-	-	1.01	[0.49]	5.49	5.00	4.87	-	-	4.87
Furniture and Fixtures	10.8	0.23	-	-	-	-	-	0.08	0.23	2.50	2.72	2.65	-	-	2.65
Office Equipments	10.9	0.90	-	-	-	-	-	6.01	0.89	6.24	7.13	0.93	-	-	0.93
Software	10.3	0.02	-	-	-	-	-	-	0.02	0.03	0.05	0.10	-	-	0.10
<b>Grand Total as per PPE (Note No. 3)</b>		<b>302.33</b>	<b>3.53</b>	<b>0.72</b>	<b>0.07</b>	<b>0.65</b>	<b>1.43</b>	<b>12.00</b>	<b>291.76</b>	<b>2,956.64</b>	<b>3,258.40</b>	<b>6,975.07</b>			<b>6,975.07</b>

Expenses for SLDC Fees & Charges

Particulars	Previous Year 2020-21			Current Year 2021-22			Control Period		
	Contracted Capacity/ Energy (MW/MU)	Rate (Rs./MW or Rupee/Unit)	Amount (Rs.) Crore	Contracted Capacity/ Energy (MW/MU)	Rate (Rs./MW or Rupee/Unit)	Amount (Rs.) Crore	Contracted Capacity/ Energy (MW/MU)	Rate (Rs./MW or Rupee/Unit)	Amount (Rs.) Crore
	III	IV	V	VI	VII	VIII	IX	X	XI
Open Access Customers Connected to Transmission/Distribution System :									
a) Long Term Customers	35 MW [Contracted capacity]/11.2.95 [Energy purchased under Open Access]	Rs. 1023.3/MW/Month	0.05	35 MW	Rs. 1555.3/MW/Month [i.e. SLDC Operating Charges] w.e.f. 01.06.2020	0.060	55 MW	Rs. 1655.3/MW/Month [i.e. SLDC Operating Charges] w.e.f. 01.06.2020	0.109
b) Medium Term Customers	3.9 MW			3.9 MW		0.0077	3.9 MW		0.0077
c) Short Term Customers (Intra-State)	7 MW [Contracted capacity under Open Access/ 18.565 MU [Energy Wheeling] *	SLDC Operating Charges	0.006	7 MW	Rs. 2000/per day or part of the day for each transaction	0.006	7 MW	Rs. 2000/per day or part of the day for each transaction	0.006
Short Term Customers (Inter-State)			0.02	35 MW (already granted under LTA)					
Short Term Customers		NOC/Application Fee**	0.05		Rs. 10,000/- [for Inter-State] & Rs. 5000/- for Intra-State	0.07		Rs. 10,000/- [for Inter-State] & Rs. 5000/- for Intra-State	0.07

\* Only includes capacity of 2 no. Intra-State Generating Plants, who have wheeled power under Open Access for captive use. Actual energy figures pertaining to Winoame Farms Ltd. are in KVAFH instead of MW (taken as MW for calculation)

\*\* Also includes application fee of Open Access consumers, who have received their special consent but not purchased/subscribed any power under Open Access.

\*\*\* Figures under Long Term Access are based on LTA granted to Northern Railway for purchase of up to 35 MW power, which have been operationalized w.e.f. 24.11.2019 onwards. Further, Northern Railway is also availing STOA w.e.f. 30.06.2020 onwards for purchase of power through power exchange (with total quantum of 35 MW, already granted under LTA). Thus, total quantum granted under LTA & STOA is 35 MW. Hence figures showing under LTA/STOA (Intra-State) pertain to Northern Railway figures collectively.

\*\*\*\* Figures under MTOA pertain to wheeling of power by Raopal MHP of Winoame Farms limited (granted w.e.f. 09.09.2020 onwards).

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## Form T12

Return on Equity

S. No	Particulars	(Rs. crore)		
		FY 2020-21 True-up	FY 2021-22 APR	Control Period Projection FY 2022-23
I	II	III	IV	V
1	Opening Balance of Equity	705.71	726.38	726.38
2	Net Additions during the Year	20.67	0.00	0.00
3	Closing Balance of Equity	726.38	726.38	726.38
4	Rate of Return (%)*	15.50%	15.50%	15.50%
5	ROE	110.99	112.59	112.59

Loan master for all loans

Particulars	FY 2020-21				FY 2021-22			
	Opening Balance	Repayments	Additions	Closing Balance	Opening Balance	Repayments	Additions	
I	II	III	IV	V	VI	VII	VIII	
<b>Secured Loans</b>								
REC	2531.33	258.58	31.07	2303.82	2303.82	247.92		0.00
PFC (new)	0	0.00	10.24	10.24	10.24	0.00		0.50
SBI	165.13	21.66	52.83	196.31	196.31	95.23		0.00
NABARD	187.93	14.11	0.00	173.82	173.82	18.82		0.00
PFC-2	495.57	0.00	0.00	495.57	495.57	74.34		0.00
REC (SLDC)	7.27	0.69	0.00	6.58	6.58	0.69		0.00
<b>Sub-total</b>	<b>3387.23</b>	<b>295.04</b>	<b>94.14</b>	<b>3186.34</b>	<b>3186.34</b>	<b>437.00</b>		<b>0.50</b>
<b>Unsecured Loans</b>								
PSPCL	7.59	1.9	0	5.69	5.69	0.95		0.00
GPF	73.18	29.27	0	43.91	43.91	21.95		0.00
<b>Sub-total</b>	<b>80.77</b>	<b>31.17</b>	<b>0.00</b>	<b>49.60</b>	<b>49.60</b>	<b>22.90</b>		<b>0.00</b>
<b>Grand Total</b>	<b>3468.00</b>	<b>326.21</b>	<b>94.14</b>	<b>3235.94</b>	<b>3235.94</b>	<b>459.90</b>		<b>0.50</b>

## Form T13

		FY 2022-23					(Rs. crore)
Particulars	Closing Balance	Opening Balance	Repayments	Additions	Closing Balance		
						IX	X
<b>I</b>							
<b>Secured Loans</b>							
REC	2055.90	2055.90	0.00	0.00	2055.90		
PFC (new)	10.74	10.74	0.00	0.00	10.74		
SBI	101.08	101.08	0.00	0.00	101.08		
NABARD	155.00	155.00	0.00	0.00	155.00		
PFC-2	421.23	421.23	0.00	0.00	421.23		
REC (SLDC)	5.89	5.89	0.00	0.00	5.89		
<b>Sub-total</b>	<b>2749.84</b>	<b>2749.84</b>	<b>0.00</b>	<b>0.00</b>	<b>2749.84</b>		
<b>Unsecured Loans</b>							
PSPCL	4.74	4.74	0	0	4.74		
GPF	21.96	21.96	0	0	21.96		
<b>Sub-total</b>	<b>26.70</b>	<b>26.70</b>	<b>0.00</b>	<b>0.00</b>	<b>26.70</b>		
<b>Grand Total</b>	<b>2776.54</b>	<b>2776.54</b>	<b>0.00</b>	<b>0.00</b>	<b>2776.54</b>		





Year-wise (FY 2020-21, FY 2021-22 and FY 2022-23) Capital Expenditure for the second control

Name of scheme/Project	Capital Expenditure During Year										Transfer to GFA		
	Equipment and machinery	IEDC Expenses	Interest Expenses	Other Item of Expense	Total	Equipment and machinery	IEDC Expenses	Interest Expenses	Other Item of Expense	Total	Other Item of Expense	PSDF Total	

Details of Capital Expenditure-scheme-wise are as in T-15 Format

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Detail of Capital Expenditure for FY 2020-21		Detail of Capital Expenditure for FY 2019-20				Detail of Capital Expenditure for FY 2021-22			Detail of Capital Expenditure for FY 2022-23	
Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Closing Capital Expenditure
<b>Table 31: Schemes Approved in 1st Control Period (From FY 2017-18 to FY 2019-20)</b>										
1	A Unforeseen Expenditure on works on 2018-19	1.07	2.63	1.19	2.51	0.28	2.49	0.30	1.40	1.70
2	Bus Bar Protection scheme for 45 no S/Sins. (90% funding Under Power System Development Fund (PSDF), 10% amount accounted for in FY 2017-18	4.89	5.40	4.62	5.67	1.91	7.27	0.31	0.00	0.31
3	220 KV S/S Derabassi	0.01	0.00	0.00	0.01	0.00	0.03	-0.02	0.00	-0.02
4	400 KV S/Sin. Makhu	0.36	8.95	0.47	8.84	27.34	30.77	5.29	0.00	5.29
5	220 KV S/S Dhandhari Kalan 1 and 2	0.24	2.83	0.00	3.07	0.60	3.07	0.60	0.00	-1.86
6							0.00			
80	220 KV S/S Sahnewal	0.45	1.58	0.00	2.03	0.15		2.18	0.40	-0.04
102	New Civil Works in respect of 5 no. stores such as sheds, plinths and Boundary walls etc.	3.29	1.19	4.14	0.34	0.28	0.28	0.34	0.00	0.01

Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalized on during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalized on during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalized on during the year	Closing Capital Expenditure
8	104	Procurement of Hardwares, Server, Furniture, IT Space renovation (Civil Works) & Unforeseen Capital Investment	1.14	0.49	1.48	0.15	0.00	0.00	0.15	0.00	0.00	0.15
9	107	220 KV S/Stn Sadiq	0.00	9.61	7.03	2.58	0.00	2.48	0.10	0.00	0.00	0.10
10	108	220 KV S/StnBejakhana	8.65	0.64	8.86	0.43	0.00	0.42	0.01	0.00	0.00	0.01
11	110	220 KV S/StnGhubaya	1.81	0.15	1.80	0.16	0.10	0.26	0.00	0.28	0.29	-0.01
12	116	220 KV S/StnBanga (U/G from 132 KV)	3.62	12.09	4.11	11.60	1.00	12.24	0.36	0.49	1.20	-0.35
13	119	220 KV Line bays at 220 KV S/StnBanga (Proposed)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	120	220 KV S/Stn Sherpur (Focal Point) (U/G from 66 KV grid with 220 KV side GIS and 66 KV side Conventional)	0.00	1.29	0.00	1.29	7.34	0.00	8.63	3.06	11.69	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
15		L/O of both ckt of 220 KV S/Sin Jamalpur - 220 KV S/Sin Dhandari Kalan-I line at 220 KV S/Sin Sherpur (Focal Point)	0.00	0.17	0.00	0.17	0.88	0.00	1.05
16	123	220 KV S/Sin Budhlada (U/S from 66 KV)	0.00	2.15	0.58	1.58	14.69	0.00	16.26
17	124	220 KV S/Sin Mansa - 220KV S/Sin Budhlada DC Line	0.06	0.00	0.00	0.06	3.00	0.00	3.06
18	128	400 KV S/Sin Doraha (New at Village Dhanansu)	0.00	0.00	0.00	0.00	19.31	0.00	19.31
19		L/O of one ckt. of 400 KV Jalandhar- Kurukshetra D/C line f at 400 kv Dhanansu (Qued Moose)	0.00	0.00	0.00	0.00	10.00	0.00	10.00
20	130	(i) 400 KV Bays (ii) 220 KV Bays at 400 KV S/Sin Doraha	0.00	0.00	0.00	0.00	11.46	0.00	11.46
21	131	220 KV Banur- Mohali (GMADA) DC line	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	132	220 KV DC line from 400 KV Grid near Doraha to 220 KV Kohara	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	133	220 KV DC line from 400 KV Grid near Doraha to 220 KV Doraha	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	134	220 KV DC line from 400 KV Grid near Doraha to 220 KV Ikolaha	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
31	163	132 kV Samadh Bhai	0.00	1.53	1.23	0.30	0.70	0.70	0.30
32	164	132 kV Pathankot	0.97	0.53	0.95	0.55	0.28	1.13	0.83
33	166	220 kV S/SinBhawanigarh	0.04	0.11	0.00	0.15	3.77	0.13	3.86
34	167	220 kV S/SinJadla	0.00	1.09	0.08	1.01	4.87	0.66	5.32
35	168	220 kV S/SinBotanwala (Thatha Sahib)	0.00	0.00	0.00	0.00	3.01	8.41	3.01
36	169	220 kV S/SinMajitha	0.00	0.24	0.00	0.24	3.33	5.45	3.22
37	170	132 kV S/Sin Pathankot	0.00	0.00	0.00	0.00	0.21	0.00	0.00

BT

Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalizati on during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalizatio n during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalizatio n during the year	Closing Capital Expenditure
38	171	132 KV ICC, Bathinda	0.21	0.01	0.18	0.04	0.18	0.18	0.04	0.00	0.09	-0.05
39	172-175	1. Aug/Strengthening of bus bars 2. Extension in Switchyard buildings, Provision for AC etc. 3. Provision for Reactive Compensation 4. Addition of bays/system strengthening required on account of RE generation	10.75	7.41	11.58	6.58	0.62	5.86	1.34	0.00	0.00	1.34
40	176	Replacement of Existing conductor of 220 KV Mohali-I - Mohali-II line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	177	220 KV S/StnFazilka (U/G from 66 KV)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	178	400 KV S/StnMukatsar - 220 KV S/StnFazilka 220 KV DC line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	179	220 KV Bays	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	180	220 KV DC line from 400 KV Jatandhar (PGCIL) to 220 KV Kartarpur	0.00	0.15	0.15	0.00	1.50	0.00	1.50	3.50	5.00	0.00
		<b>Total (A)</b>	<b>61.9597901</b>	<b>81.1121066</b>	<b>59.4526915</b>	<b>83.61920521</b>	<b>128.6885614</b>	<b>70.6772</b>	<b>141.5144177</b>	<b>150.176</b>	<b>195.1960207</b>	<b>96.49439698</b>
<b>Table 13 : Scheme approved by the Board in FY 2019-20 outside the first MYT approval</b>												
45	1a	132 KV Faridkot - Kotkapur-	0.04	0.00	0.00	0.04	0.00	0.00	0.04	7.00	0.80	7.04
46	1b	2 SC link (Amendment no.	0.00	0.00	0.00	0.00	0.50	0.00	0.50	9.16	1.00	8.66
47	2a	132 KV Sihora-132 KV Seh	0.06	0.39	0.00	0.45	6.00	0.00	6.45	0.00	15.11	-8.66
43	2b	SC line	0.74	0.40	0.52	0.12	0.88	1.00	0.00	0.00	0.00	0.00

Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
49	3a	400 kV S/S in Nakodar (2x315 MVA, 400/220 KV) (Amendment no. 43 /2018-19)	0.00	0.28	0.00	0.00	11.27	11.55	0.00
50	3b	Cost of dismantlement of 1x315 MVA, 400/220 KV ICT at 400 KV Nakodar	0.00	0.00	0.00	0.00	0.25	0.25	0.00
51	4	220 KV S/S Beas (new)	0.00	0.00	0.00	0.00	18.27	2.45	15.82
52									
53	5	400 KV Rajpura-220 KV Bassi Pathiana DC Link. (Amendment no. 13 /2018-20)	0.06	0.00	0.00	0.06	4.46	0.00	4.52
54		4no. 220 KV Bays 220 KV Side bus extension arrangement to be made at 400 KV Rajpura for providing suitable space for 2 Nos 220 KV Bays	0.00	0.00	0.00	0.00	2.64	0.00	2.64
55	6	Solar system on roof top.							
56	7	OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57									
58	8	220 KV Patti	0.00	0.00	0.00	0.14	0.35	0.56	-0.07
59	9	220 KV Ferozepur road Ludhalana	1.78	0.25	1.80	0.23	0.00	0.06	-0.06



Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalized on during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capitalization during the year	Closing Capital Expenditure
59								0.00			
	10		0.00	0.00	0.00	0.00	6.06		6.06	14.14	0.00
60	11	220 KV Dhandari Kalan - 2	0.00	0.00	0.00	0.00	0.60		0.60	2.86	-1.86
61	12		0.00	0.00	0.00	0.00	0.00		0.00	0.80	0.00
			2.18	1.04	2.32	0.90	23.15	9.92	14.13	48.79	28.03
		<b>Total (B)</b>	<b>64.14</b>	<b>32.15</b>	<b>61.77</b>	<b>84.52</b>	<b>151.84</b>	<b>80.60</b>	<b>155.65</b>	<b>243.98</b>	<b>124.52</b>
		<b>Total Spill Over (A + B) = C</b>									
		<b>Table 15 : Works Already planned for MYT Period from FY 2020-21 to 2022-23</b>									
62	1	1 No. 400KV ICT bay, 1 No. 400 KV Tie bay, 1 No. 400 KV Future bay, 1 No. 220 KV ICT bay at 400 KV Rajpura. Amendment No. 20/ 2018-19	0.00	0.00	0.00	0.00	17.50		17.50	24.57	-0.07
63	2	Termination of direct link 220 KV between Lalton Kalan Sainewal (Amendment no. 18 / 2018-19)	0.00	0.00	0.00	0.00	0.03	6.03	0.00	0.00	0.00

60

Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	
64	3	400KV, 200MW Permanent Power to Guru Gobind Singh Polymer Addition Project- HPCL Mittal Energy Limited. (Amendment no. 21 (i,iii&iv) / 2018-19)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Total (D)</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>17.53</b>	<b>0.03</b>	<b>17.50</b>	
<b>Table 17 : New Works planned for the 2nd Control Period from FY 2020-21 to 2022-23</b>										
65	1		0.00	0.01	0.00	0.01	0.00	0.00	0.01	
66	2		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
67	3		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
68	4		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
							7.00	24.57	-0.07	
							14.00	0.00	14.01	
							16.00	0.00	16.00	
							7.50	0.00	7.50	
							6.60	0.00	6.60	

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
69					0.00				
	5	400 KV S/s Ropar New Grid (in the premises of GGSSTP)	0.00	0.00	0.00	0.00	3.00	0.00	3.00
70					0.00				
	6		0.00	0.00	0.00	0.00	0.00	0.00	0.00
71					0.00				
	7		0.00	0.00	0.00	0.00	0.00	0.00	0.00

50

Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
72	8		0.00	0.00	0.00	0.00	3.75	0.00	3.75
73					0.00				
	9	400 KV Dhanansu (already planned) its additional 400 KV link required	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	10		0.00	0.00	0.00	0.00	0.00	0.00	0.00
75		220 KV Kharar	0.30	-0.01	0.29	0.00	3.29	0.03	-0.03
76	12		0.00	0.32	0.06	0.26	0.00	5.21	0.26
77	13	220 KV Banga	0.00	0.00	0.00	0.00	2.30	2.30	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
78	14		0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	15	220KV G.T. Road Ludhiana (New GIS) or (in Ludhiana area) including SAS for R/S 1cr.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	16		0.18	3.78	0.00	3.96	0.00	0.00	3.96
81	17		0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	18		0.00	0.00	0.00	0.00	15.77	0.00	15.77

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
83	19	220 kV Gobindgarh S/s (New Grid in the near by area of existing 220 kV S/s Gobindgarh-I). Including SAS for RS 1cr.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	20		0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	21		0.00	0.00	0.00	0.00	0.00	0.00	1.32
86	22		0.00	0.00	0.00	0.00	0.00	0.00	1.17
87	23	220 kV Nawanshahi (new Grid in the premises of 66 kV S/s Nawanshahi) including SAS for RS 1cr.	0.00	0.00	0.00	10.70	29.24	15.74	24.20
88	24		0.00	0.00	0.00	0.50	0.50	0.00	1.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
89	25		0.00	0.00	0.00	0.00	5.17	3.17	4.00
90	26		0.00	0.00	0.00	0.00	0.94	0.58	0.66
91	27	Additional link	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	28		0.00	0.00	0.00	0.00	0.15	0.15	0.00
93	29	Augmentation/additions of transformers at 220/132 KV level.	0.00	0.00	0.00	0.00	4.50	15.00	0.00
94	30	New 220 KV Giaspura including SAS of RS 1 cr.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	31	New 220 KV JhokeHarke including SAS of RS 1 cr.	0.00	0.00	0.00	0.00	16.50	0.00	17.20

Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
96	32	220 KV Gurdaspur including SAS of RS 1 cr	0.02	0.00	0.00	0.02	1.40	0.00	1.42
97	33		0.00	0.00	0.00	0.00	0.57	0.00	0.57
98	34		0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	35	220 kVDhaleke(GIS) including SAS of RS 1 cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
100					0.00				
	36		1.38	0.00	0.00	1.38	0.43	0.43	1.38
101					0.00				
	37	132 kV Swadi Kalan	0.00	0.00	0.33	0.33	0.08	0.41	0.00
102	38		0.00	0.00	0.31	0.31	0.07	0.40	-0.02
103	39	ii) 220 kV Sighawal	0.00	0.00	0.14	0.14	3.56	3.70	0.00
104	40	iii) 220 kV Abohar	0.00	0.00	0.97	0.14	0.28	0.50	-0.08
105	41	iv) 220 kV Passiana	0.00	0.66	0.88	0.35	0.00	0.14	-0.04
106	42	v) 220 kV Dhuri	0.00	0.00	0.83	0.00	0.00	0.14	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
107	43	v) 220 KV Mhali - I	0.00	0.21	0.00	0.21	8.91	9.12	0.00	0.00	0.04	-0.04
108	44	vi) 220 KV Banur	0.00	0.00	0.00	0.00	3.41	3.41	0.00	0.00	0.27	-0.27
109	45	vii) 220 KV Khassa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	1.71	0.00
110	46	viii) 220 KV Algon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	1.71	0.00
111	47	ix) 220 KV Mahipur	0.00	0.30	0.00	0.30	1.06	1.27	0.09	0.00	0.10	0.00
112	48	x) 220 KV Kantarpur	0.00	0.00	0.00	0.00	1.49	1.49	0.00	0.00	0.06	-0.06
113	49	xi) 220 KV Badashpur	0.00	0.00	0.00	0.00	0.28	0.00	0.28	5.77	6.05	0.00
114	50	xii) 220 KV Butari	0.00	0.00	0.00	0.00	1.28	1.00	0.28	0.42	0.81	-0.11
115	51	xiii) 220 KV Udhoke	0.00	0.00	0.00	0.00	3.72	3.72	0.00	3.72	3.72	0.00

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116	52	xiv) 220 kV Pakhtawal	0.00	0.00	0.00	0.00	7.59	7.44	0.15	0.00	0.42	-0.27
117	53	xv) 220 kV Jagraon	0.00	1.89	1.44	0.45	0.60	0.95	0.10	0.00	0.36	-0.26
118	54	xvi) 220 kV Himmatpura	0.00	0.00	0.00	0.00	1.71	1.71	0.00	0.00	0.00	0.00
119	55	xvii) 220 kV Kohara	0.00	0.00	0.00	0.00	0.10	0.00	0.10	1.71	1.83	-0.02
120	56	xviii) 220 kV Doraha	0.00	0.00	0.00	0.00	1.10	1.10	0.00	0.00	0.00	0.00
121	57	xix) 220 kV Baghapurana	0.00	0.34	0.23	0.11	1.00	1.11	0.00	0.00	0.00	0.00
122	58	xx) 132kV SmadhBhai	0.00	0.00	0.00	0.00	0.60	0.60	0.00	0.40	0.40	0.00
123	59	xxi) 132kV Fandkot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	1.71	0.00
124	60	xxii) 132kV Ferozshah	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	1.71	0.00

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125	61	xxiii) 132KV Manasingh Wala	0.00	0.00	0.00	0.00	1.71	1.71	0.00
126	62	xxiv) 132KV Jallalabad	0.00	0.00	0.00	0.00	1.71	1.71	0.00
127	63	xxvi) 132KV Kathunangal	0.00	0.00	0.00	0.00	1.71	1.71	0.00
128	64	xxvii) 132KV Bhikhiwind	0.00	0.00	0.00	0.00	1.71	1.71	0.00
129	65	xxviii) 132KV Shri Hargobindpur	0.00	0.00	0.00	0.00	1.99	2.06	0.00
130	66	xxx) 132KV Phillour	0.00	0.00	0.00	0.00	2.06	2.13	0.00
131	67	xxxi) 132KV Bilaspur	0.00	0.00	0.00	0.00	1.00	1.12	-0.02
132	68	xxxii) 132KV Tangra	0.00	0.00	0.00	0.00	1.28	1.42	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
133	69	Augmentation of bus bars, extension in control room building, providing room for second source for station battery etc.	0.00	0.07	0.00	0.07	5.00	8.07	0.00
134	70	Additional 220/132/65 KV line bays related with feasibility cases or as per PSPCL requirement.	0.00	0.40	0.00	0.40	0.57	7.36	3.47

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
135	71	Second source of battery at various 220/132 kV S/S of PSTCL	0.00	0.00	0.00	0.00	2.25	0.00	2.25
136	72	90 nos PSTCL grids (220 kV) to be provided with SAS. Report already sent for PSDF funding if approved, these stations will be upgraded.	0.00	0.00	0.00	0.00	13.00	0.00	13.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
137	73	Digitization of existing 220 KV S/S Passiana.	0.00	0.00	0.00	0.00	0.50	0.00	0.50
138	74	Replacement of existing conductor of 220 KV Gobindgarh - 400KV Rajpura (DC), 220 KV Kohara - 400 kV Dhanansu (DC), 220 KV Kohara - Sahnewal (B) (SC) with HTLS of suitable capacity.	0.00	0.00	0.00	0.00	23.00	25.00	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
139	75	Additional of 14 No T/f on account of making (N-1) complaint system for those grids where only one T/f existing (Aurkure-C).	0.00	0.14	0.00	0.14	13.00	0.00	13.14	24.00	37.14	0.00
140	76	132 kV S/s Kotkapura-I	0.00	0.00	0.00	0.00	0.07	0.00	0.07	3.38	3.48	-0.03
141	77	132 kV works Bilaspur	0.00	0.00	0.00	0.00	0.10	0.00	0.10	2.46	2.58	-0.02
142	78	132 kV Nawanshehar.	0.00	0.00	0.00	0.00	0.09	0.00	0.09	2.81	2.91	-0.01
143	79	132 kV Kapurthala.	0.00	0.00	0.00	0.00	0.07	0.00	0.07	5.27	5.35	-0.01

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalized on during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalized on during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalized on during the year	Closing Capital Expenditure
144	80	132 KV Susan.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.31	3.31	0.00
145	81	132 KV Panjiraan.	0.00	0.00	0.00	0.00	2.46	2.46	0.00	0.00	0.00	0.00
146	82	132 Baluana.	0.00	0.00	0.00	0.00	0.21	0.21	0.00	2.46	0.00	2.46
147	83	IGC Bathinda (Aug)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.36	2.46	0.00
148	84	132 KV Gholian Kalan.	0.00	0.00	0.00	0.00	0.14	0.14	0.14	1.60	1.74	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure
149		LILO of 132 kV Verka - Malmandi SC line at 220 kV S/s Nawainpind (132 kV bus) LILO length = 1 KM approx. DC on DC.			0.00			0.00	
	85		0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	86	Augmentation of 132 kV Nawainpind - Verka, 5 KM (0.2sq") and 132 kV Nawainpind - Malmandi (5KM 0.2sq") with suitable HTLS conductor.	0.00	0.00	0.00	0.80	0.00	0.00	0.00
151	87	Augmentation of 132 kV GGSSTP - Asroin) 6 KM 0.2sq") and 132 kV GGSSTP - Ropar (19.76 KM) 0.2sq".			0.00			0.00	
			0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	88	CE/ R&M Agenda No. 145/2017-18 dtd 20.09.17. Best Practices recommended by Protection Sub Committee of NRPC in operation & construction of Sub Stations	0.00	0.23	0.17	0.06	0.07	0.00	0.13



Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capitalization during the year	Closing Capital Expenditure
160	4	To procure testing Equipment to check healthiness of OPGW channels and Ethernet Switch Network in Substation automation.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	5	Tan-Delta Measurement Set (7 No.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	6	Tan Delta and Resistive kit for testing of Transformer oil.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	7	PT/CVT testing kit for ODTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	8	Remote Control Operation of 400kV S/Strns Mukhtisar, Nakodar and Makhu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	9	Insulation Tester for new Substations (25 No.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	10	Online partially discharge monitoring kit equipment for 400 KV ICT at 400KV S/s (14 No.)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	11	CRM-Contact Resistance measurement meter for maintenance gang	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	12	Upgrading of 2 No. 3 Phase Relay testing kits of 400KV protection Hub and SAP Hub with CMGPS (testing kit synchronising equipment and software) for end to end testing as per recommendation of 3rd party protection audit alongwith advance teaspaly software.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	13	Loader cum Crane for Amritsar Circle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	14	Mobile oil filtration sets under P&M Circle (4 No., SKL/H)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Sr No.	Sr No. as per CIP Order	Particulars	Opening Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capital Expenditure during the year	Capitalization during the year	Closing Capital Expenditure	Capitalization during the year	Closing Capital Expenditure
171	15	Construction of Security Huts at 220/132KV Sub stations.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	15	Refixing of UC Fencing at top toe wall to safeguard yard area from fire.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	17	Providing Plinths for 2 sets (20 No.) of ERS- Emergency Rastoration System Towers at 400KV S/S Rajpura, Nakodar and 220KV Muktsar.	0.00	0.43	0.43	0.00	0.00	0.00	0.00	0.00	0.00
174	18	Providing RCC Roads in 220KV S/S to facilitate movement of heavy vehicle loaded with equipment.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	19	Providing PCC in the yard area in 220KV S/S	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	20	Providing AC and Furniture at Kangra Rest House	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		<b>Total (F)</b>	<b>0.00</b>	<b>0.43</b>	<b>0.43</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
		<b>Total New Works (D + E + F) = G</b>	<b>1.88</b>	<b>21.13</b>	<b>10.44</b>	<b>12.57</b>	<b>129.97</b>	<b>65.78</b>	<b>76.76</b>	<b>234.58</b>	<b>136.45</b>
		<b>Grand Total (C + G) = H</b>	<b>66.03</b>	<b>103.28</b>	<b>72.21</b>	<b>97.10</b>	<b>281.81</b>	<b>146.38</b>	<b>232.41</b>	<b>478.56</b>	<b>260.98</b>
		<b>Less : Cost of Dismantal Transformers being re-used (I)</b>	0.00	0.00	0.00	0.00					
		<b>Net Capital Investment (H - I) = J</b>	<b>66.03</b>	<b>103.28</b>	<b>72.21</b>	<b>97.10</b>					
55	Table 13 - 6	Solar system on roof top. (Approved vide Order dated 22.06.2021 (Pet no. 10/2021)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		<b>Contributory</b>	42.55	65.56	0.32	107.78	57.57	193.37	-28.02	27.79	-31.63
		<b>Any Other</b>	168.13	49.61	121.13	96.61	110.41	121.45	82.88	93.89	36.68
		<b>Total CAPEX</b>	<b>276.70</b>	<b>218.45</b>	<b>193.66</b>	<b>301.49</b>	<b>449.79</b>	<b>461.20</b>	<b>287.27</b>	<b>628.81</b>	<b>266.03</b>

## Interest and Finance Charges

S. No.	Loan Source	Rate of Interest (%)				Interest Due (Rs. Crore)	
		FY 2020-21	FY 2021-22	FY 2022-23	FY 2021-22	FY 2022-23	
I	II	III	IV	V	VIII	IX	X
A	Secured Loans						
1	REC	10.37%	9.59%	9.59%	250.65	209.00	197.11
2	PFC (New)	16.41%	9.75%	9.75%	0.84	1.05	1.05
2	SBI	8.46%	7.45%	7.30%	15.28	11.08	7.37
3	NABARD	10.13%	9.49%	9.49%	18.07	15.60	14.71
4	PFC-2	9.92%	9.35%	9.35%	49.15	42.87	39.39
10	REC (SLDC)	10.54%	9.94%	9.94%	0.73	5.89	0.59
11	Sub-total				334.72	285.49	250.22
B	Unsecured Loans						
1	PSPCL				0.00	0.00	0.00
2	GPFL	7.45%	7.32%	7.32%	4.36	2.41	1.61
3	Sub-total				4.36	2.41	1.61
C	Grand Total (A+B)				339.09	287.90	261.83
D	Other Interest & Finance Charges						
1	Cost of raising Finance / Bank Charges				3.30		
2	Interest on Security Deposit				0.00	0.00	0.00
3	Penal Interest Charges				0.00	0.00	0.00
4	Lease Rentals				0.80	0.00	0.00
5	Sub Total				4.10	0.00	0.00
E	Grand Total of Interest & Finance Charges (C+D)				343.19	287.90	261.83
F	Less: Interest & Finance Charges Capitalised				12.73		
G	Net Interest & Finance Charges (E-F)				330.46	287.90	261.83

## Note :

1. The above information is to be provided in consolidated form for Transmission Licensee.

For T17

Net Prior Period Expenses / Income					(Rs. Crore)	
S.No.	Particulars	FY 2020-21	FY 2021-22	FY 2021-22	Control	
		Actual	Estimated	Estimated	Projection	
		III	IV	IV	V	
A	<b>Income Relating to Previous Period</b>					
1	Interest income relating to prior period	-	-	-	-	
2	Income Tax relating to prior period	-	-	-	-	
3	Excess Provision for Depreciation	-	-	-	-	
4	Excess Provision for Interest and Finance Charges	-	-	-	-	
5	Receipts from Consumers	-	-	-	-	
6	Other Excess Provisions	-	-	-	-	
7	Other Income	-	-	-	-	
	<b>Sub Total A</b>	-	-	-	-	
B	<b>Expenditure Relating to Previous Period</b>					
1	Power Purchase	-	-	-	-	
2	Operating Expenses	-	-	-	-	
3	Excise Duty on Generation	-	-	-	-	
4	Employee Cost	-	-	-	-	
5	Depreciation	-	-	-	-	
6	Interest and Finance Charges	-	-	-	-	
7	A&G Expenses	-	-	-	-	
8	Withdrawal of Revenue Demand	-	-	-	-	
9	Material Related	-	-	-	-	
10	Others	-	-	-	-	
	<b>Sub-Total B</b>	-	-	-	-	
	<b>Net Prior Period Credit/(Charges) : A-B</b>	-	-	-	-	

Note :

1. Prior period expenses are Nil

## Form T18

Details of Expenses Capitalised

S.No.	Particulars	(Rs. Crore)		
		FY 2020-21 Actual	FY 2021-22 Estimated	Control Projection FY 2022-23
I	II	III	IV	V
1	Interest & Finance charges Capitalised	12.73	-	-
2	Employee Expenses Capitalised	27.58	-	-
3	A&G Expenses Capitalised	3.72	-	-
4	R&M Expenses Capitalised	0.26	-	-
5	Any Other Expenses	-	-	-
	<b>Grand Total</b>	<b>44.29</b>	<b>-</b>	<b>-</b>

**Note :**

- Expenses capitalised are submitted for FY 2018-19 based on audited accounts
- R&M and A&G Expenses are considered on normative basis. Hence, no

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## Form T19

		<u>Debits, Write-offs and Any Other Items</u>			<u>(Rs. Crore)</u>	
S. No	Particulars	FY 2020-21	FY 2021-22	Control		
		Actual	Estimated	FY 2022-23	Projection	
I		III	IV	V		
	II					
1	Delay payment charges written off	4.27				
2	Miscellaneous Losses and Written Off	0.30	-	-		
3	Written off assets due to theft	6.68	-	-		
4	Infructuous capital exp. written off	1.64	-	-		
5	Loss on sale of fixed assets		-	-		
6	Prior period adjustment					
7	Sub Total	12.88	-	-		
8	Less Chargeable to Capital Expenses					
9	Net Chargeable to Revenue	12.88	-	-		

Key Characteristics of the Transmission Utility

S.No	Particulars	Previous year FY 2020-21				Current Year FY 2021-22				Control Period Projections				
		Actual				(Actual upto 31/08/2021)				FY 2021-22 Projected		FY 2022-23 Projected		
		At the start of year	Additions during the year	Withdrawal from service	At the end of year	Additions during the year	Withdrawal from service	At the end of year	Additions during the year	Withdrawal from service	At the end of year	Additions during the year	Withdrawal from service	At the end of year
1	Length of lines (ckt-km)													
	a) 400 KV	1599.75	0.00	0.00	1599.75	0.00	0.00	1599.75						
	i) Single Circuit	329.00	0.00	0.00	329.00	0.00	0.00	329.00						
	ii) Double Circuit	1270.75	0.00	0.00	1270.75	0.00	0.00	1270.75						
	b) 220 KV	7642.13	288.00	45.09	7865.04	11.20	0.00	7876.24						
	i) Single Circuit	4280.86	0.00	45.09	4235.76	11.20	0.00	4246.96						
	ii) Double Circuit	3361.27	288.00	0.00	3629.28	0.00	0.00	3629.28						
	c) 132 KV	3135.64	0.00	42.24	3093.40	0.00	0.00	3093.40						
	i) Single Circuit	2536.32	0.00	42.24	2494.08	0.00	0.00	2494.08						
	ii) Double Circuit	599.32	0.00	0.00	599.32	0.00	0.00	599.32						
Total	12377.52	268.00	87.33	12566.19	11.20	0.00	12569.39							
2	Number of Sub-Stations													
	i) 400 KV	5.00	0.00	0.00	5.00	0.00	0.00	5.00						
	ii) 220 KV	101.00	0.00	0.00	101.00	1.00	0.00	102.00						
	iii) 132 KV	65.00	0.00	0.00	65.00	0.00	1.00	64.00						
	Total	171.00	0.00	0.00	171.00	1.00	1.00	171.00						
3	Number of Bays													
	i) 400 KV Sub-Station	72.00	0.00	0.00	72.00	0.00	0.00	72.00						
	ii) 220 KV Sub-Station	709.00	4.00	0.00	707.00	5.00	0.00	712.00						
	iii) 132 KV Sub-Station	505.00	5.00	0.00	510.00	3.00	0.00	513.00						
	Total	1280.00	9.00	0.00	1289.00	8.00	0.00	1297.00						
4	No. of Transformers at													
	i) 400 KV Sub-Station	12.00	0.00	0.00	12.00	0.00	0.00	12.00						
	ii) 220 KV Sub-Station	437.00	2.00	0.00	439.00	6.00	0.00	445.00						
	iii) 132 KV Sub-Station	180.00	1.00	0.00	181.00	0.00	3.00	178.00						
	Total	629.00	3.00	0.00	632.00	6.00	3.00	635.00						
5	Transformation Capacity (MVA) of													
	i) 400 KV Sub-Station	4890.00	500.00	0.00	5390.00	0.00	0.00	5390.00						
	ii) 220 KV Sub-Station	28440.00	735.00	0.00	29175.00	604.00	0.00	29779.00						
	iii) 132 KV Sub-Station	4378.17	0.00	-16.00	4394.17	2.50	0.00	4396.67						
	Total	37708.17	1235.00	-16.00	38959.17	606.50	0.00	39565.67						
4	Intra State Transmission Losses (%)													
	Availability (%)													
5	a) 400 KV Lines													
	i) Single Circuit													
	ii) Double Circuit													
	b) 220 KV lines													
	i) Single Circuit													
	ii) Double Circuit													
c) 132 KV Lines	i) Single Circuit													
	ii) Double Circuit													

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S.No	Particulars	Previous Year FY 2020-21 Actual			Current Year FY 2021-22 (Actual upto 31/08/2021)			Control Period Projections				
		At the start of year	Additions during the year	Withdrawal from service	At the end of year	Additions during the year	Withdrawal from service	FY 2021-22 Projected		At the end of year		
								Additions during the year	Withdrawal from service		Additions during the year	Withdrawal from service
	d) Transformers											
	i) 400 KV Sub-Station											
	ii) 220 KV Sub-Station											
	iii) 132 KV Sub-Station											
	e) SVCs											
	f) Bus Reactors											
6	Number of Meters											
	(a) Total no. interface points with Gencos											
	i) No. of interface points with ABT compliant meters											
	ii) No. of interface points with non-ABT compliant meters											
	iii) No. of interface points without meters											
	b) Total no. interface points with Discoms											
	i) No. of interface points with ABT compliant meters											
	ii) No. of interface points with non-ABT compliant meters											
	iii) No. of interface points without meters											
	Total											
7	Employee Strength											
	Technical	2161.00			1993.00							2190.00
	Non- Technical	570.00			530.00							585.00
8	Total	2731.00			2523.00							2775.00

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Form T21

Normative Parameters

Particulars	Unit	FY 2020-21	Years of the Control	
			FY 2021-22	FY 2022-23
I	II	III	IV	V
Rate of Return on Equity	%	15.50%	15.50%	15.50%
Target Availability	%	99.00%	99.00%	99.00%
Normative O&M Expenses for WC	in Month	1.00	1.00	1.00
Spares for WC as % of O&M	%	15%	15%	15%
Receivables in Months for WC	Months	2.00	2.00	2.00

*Handwritten mark*

## Transmission Capacities

FY 2020-21						
S.No.	Source	Approved Capacity (MW) (Gross)	Auxiliary Consumption and Transformation Losses (%)	Approved Injection (MW) (Net)	PSPCL's Firm Share (%)	PSPCL's Firm Share (MW)
1	<b>PSPCL Own THERMAL</b>					
	GNDTP, Balhinda	0	11%	0.00	100%	0.00
	GGSSTP, Ropar	840	8.5%	769.60	100%	769.60
	GHTP, Lehra Mohabbat	920	8.5%	841.80	100%	841.80
	<b>Total</b>	<b>1760</b>		<b>1610.40</b>		<b>1610.40</b>
2	<b>PSPCL Own HYDRO</b>					
	Shanman	110	2.00%	107.80	100%	107.80
	UBDC	91.35	0.90%	90.53	100%	90.53
	RSD Net Share Less 20% J&K and 4.6% HP share from RSD	452.4	1.00%	447.88	100%	447.88
	ASHP	134	0.65%	133.13	100%	133.13
	MHP	225	1.00%	222.75	100%	222.75
	Micro Hydel	2.5	0.00%	2.50	100%	2.50
	<b>Total</b>	<b>1015.25</b>		<b>1004.58</b>		<b>1004.58</b>
3	<b>PSPCL share from SBMB</b>	<b>1133.20</b>	<b>0.50%</b>	<b>1127.53</b>		<b>1127.53</b>
4	<b>Independent Power Producers (IPPs) within Punjab (Private Sector Projects)</b>					
	Nabha TPP (NPL)	1400	5.71%	1320.05	100%	1320.06
	Talwandi Sabo TPP (TSPL)	1980	7.00%	1841.40	100%	1841.40
	GVK	540	9.00%	491.40	100%	491.40
	NRSE Private Projects	1165.46		1165.46	100%	1165.46
	<b>Total</b>	<b>5085.46</b>		<b>4818.32</b>		<b>4818.32</b>
5	<b>PSPCL Share from Central Sector</b>					
	PTC Talai(Hydro)	1020	1.00%	1009.80	2.84%	28.89
	Kahal gaon-II (ER)	1500	6.25%	1406.25	8.02%	112.78
	Singrauli	2000	7.13%	1857.40	10.00%	185.74
	Rihand-I	1000	8.00%	920.00	11.00%	101.20
	Rihand-II	1000	6.25%	937.50	10.20%	95.53
	Unchehar-I	420	9.60%	382.20	0.00%	0.00
	Unchehar-II	420	8.80%	378.84	14.28%	54.10
	Unchehar-III	210	9.00%	191.10	8.10%	15.48
	Arita GPS	419	2.75%	407.48	11.58%	47.63
	Auraya GPS	663	2.75%	644.77	12.52%	80.72
	Dadri NCGPS	830	2.75%	807.18	15.90%	128.34
	NAPP	440	10.50%	393.80	11.58%	45.64
	RAPP-B	440	10.50%	393.80	22.73%	89.51
	RAPP-C	440	10.50%	393.80	10.41%	40.86
	Bairasuli	180	1.20%	177.84	46.50%	82.70
	Selal	890	1.00%	883.10	26.60%	181.70
	Rampur	412.02	1.00%	407.90	5.62%	22.92
	Nathpa Jhakri(SJVNL)	1600	1.20%	1482.00	10.13%	150.13
	Tehri(THDC)	1000	1.20%	988.00	7.70%	76.08
	Dulhasi	390	1.20%	385.32	8.28%	31.90
	Tanakpur	94	1.20%	92.67	17.93%	16.85
	Chamera-I	540	1.20%	533.52	10.20%	54.42
	Parbati-III	520	1.20%	513.76	7.86%	40.38
	Dhauli-ganga	280	1.20%	276.64	10.00%	27.66
	Chamera-II	300	1.20%	296.40	10.00%	29.64
	SEWA-II	120	1.20%	118.56	8.33%	9.88
	Uri	480	1.20%	474.24	13.75%	65.21
	Uri-II	240	1.20%	237.12	8.13%	19.28
	Jhajjar (JV)	1500	5.75%	1413.75	0.00%	0.00
	Koteshwar(THDC)	400	1.00%	396.00	6.38%	25.19
	Rihand - III	1000	6.25%	937.50	8.27%	77.50
	Koldam HEP	900	1.00%	782.00	7.73%	61.22
	Dadri (Th.)-II	980	5.75%	823.65	0.00%	0.00
	Chamera-III	231	1.20%	228.23	7.86%	17.93
	Unchehar-IV	500	6.25%	469.75	0.00%	0.00
	Singrauli SHEP	8	1.00%	7.82	0.00%	0.00
	Kishanganga	330	1.20%	328.04	0.00%	0.00
	Meja	1320	6.25%	1237.50	3.64%	45.05
	Tanda Stage-II	660	5.75%	622.05	0.00%	0.00
	DVC -Durgapur	1000	5.75%	942.50	20.00%	188.50
	DVC RTPS 1&2	1200	5.75%	1131.00	25.00%	282.75
	Pragati-III(Bawana)CCGT	1371	2.75%	1333.50	10.00%	133.33
	MALANA-2 (PTC)	100	1.30%	98.70	88.00%	86.86
	SASAN Ultra Mega Project	3960	6.00%	3722.40	15.00%	558.36
	MUNDRA UMPP	4000	5.00%	3800.00	12.50%	475.00
	DVC -BTPS	500	5.75%	471.25	40.00%	188.50
	KARCHAM (PTC)	1000	1.20%	988.00	20.00%	197.60
	NVAVN Solar Power	37	0.00%	37.00	100.00%	37.00
	SECI Solar Power	30	0.00%	30.00	100.00%	30.00
	SECI-Wind Power	350	0.00%	350.00	100.00%	350.00
	<b>Total</b>	<b>38825.02</b>		<b>37048.72</b>		<b>4590.79</b>
6	<b>Grand Total (Transmission Capacity)</b>	<b>47818.83</b>		<b>45609.65</b>		<b>13151.63</b>

FY 2021-22						
S.No.	Source	Approved Capacity (MW) (Gross)	Auxiliary Consumption and Transformation Losses (%)	Approved Injection (MW) (Net)	PSPCL's Firm Share (%)	PSPCL's Firm Share (MW)
1	<b>PSPCL Own THERMAL</b>					
	GNDTP, Bathinda	0	11%	0.00	100%	0.00
	GGSTP, Ropar	840	8.5%	768.60	100%	768.60
	GHTP, Lahra Mohabbat	820	8.5%	841.80	100%	841.80
	<b>Total</b>	<b>1760</b>		<b>1610.40</b>		<b>1510.40</b>
2	<b>PSPCL Own HYDRO</b>					
	Sherman	110	2.00%	107.80	100%	107.80
	UBDC	81.35	0.80%	80.53	100%	80.53
	RSD Net Share Less 20% J&K and 4.6% HP share from RSD	452.4	1.00%	447.88	100%	447.88
	ASHP	134	0.65%	133.13	100%	133.13
	MHP	225	1.00%	222.75	100%	222.75
	Micro Hydel	2.5	0.00%	2.50	100%	2.50
	<b>Total</b>	<b>1015.25</b>		<b>1004.58</b>		<b>1004.58</b>
3	<b>PSPCL share from BBMB</b>	<b>1133.20</b>	<b>0.50%</b>	<b>1127.53</b>		<b>1127.53</b>
4	<b>Independent Power Producers (IPPs) within Punjab (Private Sector Projects)</b>					
	Nabha TTP (NPL)	1400	5.71%	1320.06	100%	1320.06
	Talwandi Sabo TTP (TSPL)	1880	7.00%	1841.40	100%	1841.40
	GVK	540	9.00%	491.40	100%	491.40
	NRSE Private Projects	1168.56		1168.56	100%	1168.56
	<b>Total</b>	<b>5088.56</b>		<b>4821.42</b>		<b>4821.42</b>
5	<b>PSPCL Share from Central Sector</b>					
	PTC Talai(Hydro)	1020	1.00%	1009.80	2.84%	29.69
	Kahai gaon-II (ER)	1500	6.25%	1405.25	8.02%	112.78
	Singrauli	2000	7.13%	1857.40	10.00%	185.74
	Rihand-I	1000	8.00%	920.00	11.00%	101.20
	Rihand-II	1000	6.26%	937.50	10.20%	95.53
	Unchahar-I	420	9.00%	382.20	0.00%	0.00
	Unchahar-II	420	9.80%	378.84	14.28%	54.10
	Unchahar-III	210	9.00%	191.10	8.10%	15.48
**	Ansa GPS	419	2.75%	407.48	11.69%	47.63
**	Aurelya GPS	663	2.75%	644.77	12.52%	80.72
**	Dadri NCGPS	830	2.75%	807.18	15.90%	128.34
	NAPP	440	10.50%	393.80	11.59%	45.64
	RAPP-B	440	10.50%	393.80	22.73%	89.51
	RAPP-C	440	10.50%	393.80	10.41%	40.69
	Dairaski	180	1.20%	177.84	48.50%	82.70
	Salal	650	1.00%	643.10	28.80%	181.70
	Rampur	412.02	1.00%	407.90	5.82%	22.92
	Nahpa Jhakri(SJVNL)	1500	1.20%	1482.00	10.13%	150.13
	Tehr(THDC)	1000	1.20%	988.00	7.70%	76.08
	Duhastil	390	1.20%	385.32	8.28%	31.90
	Tanakpur	94	1.20%	92.87	17.83%	16.65
	Chamera-I	540	1.20%	533.52	10.20%	54.42
	Parbati-II	520	1.20%	513.76	7.86%	40.38
	Dhauliganga	280	1.20%	278.64	10.00%	27.66
	Chamera-II	300	1.20%	296.40	10.00%	29.64
	SEWA-II	120	1.20%	118.56	8.33%	9.88
	Ur	480	1.20%	474.24	13.75%	65.21
	Ur-I	240	1.20%	237.12	8.13%	18.28
	Jhajjar (JV)	1500	5.75%	1413.75	0.00%	0.00
	Kaleshwar(THDC)	400	1.00%	396.00	6.38%	25.19
	Rihand - III	1000	6.25%	937.50	8.27%	77.50
	Koldam HEP	800	1.00%	792.00	7.73%	61.22
	Dadri (Th)-II	880	5.75%	823.65	0.00%	0.00
	Chamera-III	231	1.20%	228.23	7.85%	17.93
	Unchahar-IV	500	6.25%	488.75	0.00%	0.00
	Singrauli SHEP	8	1.00%	7.92	0.00%	0.00
	Kishanganga	330	1.20%	326.04	0.00%	0.00
*	Meja	1320	6.25%	1237.50	3.64%	45.05
	Tanda Stage-II	880	5.75%	822.05	0.00%	0.00
*	DVC -Durgapur	1000	5.75%	942.50	20.00%	188.50
*	DVC RTPS 1&2	1200	5.75%	1131.00	25.00%	282.75
*	Pragati-III(Bewana)CCGT	1371	2.75%	1333.30	10.00%	133.33
	MALANA-2 (PTC)	100	1.30%	88.70	88.00%	86.86
	SASAN Ultra Mega Project	3980	8.00%	3722.40	15.00%	558.36
	MUNDRA UMPP	4000	5.00%	3800.00	12.50%	475.00
*	DVC -BTPS	500	5.75%	471.25	40.00%	188.50
	KARCHAM (PTC)	1000	1.20%	988.00	20.00%	197.60
	NVSN Solar Power	37	0.00%	37.00	100.00%	37.00
NEW	SECI Hybrid (Solar + Wind)	800	0.00%	800.00	100.00%	800.00
	SECI Solar Power	30	0.00%	30.00	100.00%	30.00
	SECI-Wind Power	350	0.00%	350.00	100.00%	350.00
	<b>Total</b>	<b>39825.02</b>		<b>37648.72</b>		<b>5390.78</b>
6	<b>Grand Total (Transmission Capacity)</b>	<b>48622.03</b>		<b>46412.66</b>		<b>13854.73</b>

\* Power from these plants is available up to 31.10.2021 as the notices have been given by PSPCL to end the respective PPAs.

\*\* Power from these plants is available up to 12.02.2022 as the notice has been given by PSPCL to end the respective PPAs.

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FY 2022-23						
S.No.	Source	Approved Capacity (MW) (Gross)	Auxiliary Consumption and Transformation Losses (%)	Approved Injection (MW) (Net)	PSPCL's Firm Share (%)	PSPCL's Firm Share (MW)
1	<b>PSPCL Own THERMAL</b>					
	GNDTF, Balhinda	0	11%	0.00	100%	0.00
	GGSSTP, Roper	840	8.5%	768.60	100%	768.60
	GHTP, Lehra Mohabbat	920	8.5%	841.80	100%	841.80
	<b>Total</b>	<b>1760</b>		<b>1610.40</b>		<b>1610.40</b>
2	<b>PSPCL Own HYDRO</b>					
	Shannan	110	2.00%	107.80	100%	107.80
	UBDC	91.35	0.90%	90.53	100%	90.53
	RSD Net Share Less 20% J&K and 4.5% HP share from RSD	452.4	1.00%	447.88	100%	447.88
	ASHP	134	0.85%	133.13	100%	133.13
	MHP	225	1.00%	222.75	100%	222.75
	Mizro Hydel	2.5	0.00%	2.50	100%	2.50
	<b>Total</b>	<b>1015.25</b>		<b>1004.58</b>		<b>1004.58</b>
3	<b>PSPCL share from BBMB</b>	<b>1133.20</b>	<b>0.50%</b>	<b>1127.53</b>		<b>1127.53</b>
4	<b>Independent Power Producers (IPPs) within Punjab (Private Sector Projects)</b>					
	Nabha TPP (NPL)	1400	5.71%	1320.06	100%	1320.06
	Talwandi Sabo TPP (TSPL)	1980	7.00%	1841.40	100%	1841.40
	GVK	540	9.00%	491.40	100%	491.40
	NRSE Private Projects	1453.56		1453.56	100%	1453.56
	<b>Total</b>	<b>5373.56</b>		<b>5108.42</b>		<b>5108.42</b>
5	<b>PSPCL Share from Central Sector</b>					
	PTC Talai(Hydro)	1020	1.00%	1009.80	2.94%	29.69
	Kahal gaon-II (ER)	1500	8.25%	1406.25	8.02%	112.78
	Singrauli	2000	7.13%	1857.40	10.00%	185.74
	Rihand-I	1000	8.00%	920.00	11.00%	101.20
	Rihand-II	1000	6.25%	937.50	10.20%	95.53
	Unchahar-I	420	9.00%	382.20	0.00%	0.00
	Unchahar-II	420	9.80%	378.84	14.28%	54.10
	Unchahar-III	210	9.00%	191.10	8.10%	15.48
	NAPP	440	10.50%	393.80	11.59%	45.84
	RAPP-B	440	10.50%	393.80	22.73%	89.51
	RAPP-C	440	10.50%	393.80	10.41%	40.99
	Bairasiul	180	1.20%	177.84	46.50%	82.70
	Saial	890	1.00%	883.10	26.60%	181.70
	Rampur	412.02	1.00%	407.90	5.62%	22.92
	Nathpa Jhakri(SJVNL)	1500	1.20%	1482.00	10.13%	150.13
	Tehri(THDC)	1000	1.20%	989.00	7.70%	76.08
	Dudhesli	380	1.20%	375.32	8.28%	31.90
	Tanakpur	94	1.20%	92.87	17.93%	16.55
	Chamera-I	540	1.20%	533.52	10.20%	54.42
	Parbati-III	520	1.20%	513.76	7.86%	40.38
	Dheuliganga	280	1.20%	276.64	10.00%	27.66
	Chamera-II	300	1.20%	296.40	10.00%	28.84
	SEWA-II	120	1.20%	118.56	8.33%	8.88
	Uri	480	1.20%	474.24	13.75%	65.21
	Uri-II	240	1.20%	237.12	8.13%	19.28
	Jhajjar (JV)	1500	5.75%	1413.75	0.00%	0.00
	Koteshwar(THDC)	400	1.00%	396.00	6.38%	25.19
	Rihand - III	1000	9.25%	937.50	8.27%	77.60
	Koldam HEP	800	1.00%	792.00	7.73%	61.22
	Dadni (Th.)-II	980	5.75%	923.85	0.00%	0.00
	Chamera-III	231	1.20%	228.23	7.86%	17.93
	Unchahar-IV	500	6.25%	468.75	0.00%	0.00
	Singrauli SHEP	8	1.00%	7.92	0.00%	0.00
	Krishanganga	330	1.20%	326.04	0.00%	0.00
	Tanda Stage-II	650	5.75%	622.05	0.00%	0.00
	MALANA-2 (PTC)	100	1.30%	98.70	89.00%	86.86
	SASAN Ultra Mega Project	3960	6.00%	3722.40	15.00%	558.36
	MUNBRA-UMP	4600	6.00%	3800.00	12.50%	475.00
	KARCHAM (PTC)	1000	1.20%	988.00	20.00%	197.60
NEW	Parbati-II (PTC)	800	1.20%	790.40	10.00%	79.04
NEW	Subansiri	500	1.20%	494.00	3.20%	15.81
	NVVN Solar Power	37	0.00%	37.00	100.00%	37.00
	SECI Hybrid ( Solar + Wind )	800	0.00%	800.00	100.00%	800.00
NEW	NTPC Solar	300	0.00%	300.00	100.00%	300.00
	SECI Solar Power	30	0.00%	30.00	100.00%	30.00
	SECI-Wind Power	350	0.00%	350.00	100.00%	350.00
	<b>Total</b>	<b>33922.02</b>		<b>32458.15</b>		<b>4690.82</b>
6	<b>Grand Total (Transmission Capacity)</b>	<b>43204.03</b>		<b>41307.09</b>		<b>13539.75</b>

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## Energy Balance

S. No.	Particulars	Unit	₹ crore)		
			FY 20-21 Actual	FY 21-22 (Upto SEPT. 21) Actual	Control Period Projection FY 2022-23
1	Energy Input into Transmission System a) Energy from sources inside the State (G-T Interface)	MU	20230.17351	12647.88534	
	b) Energy from Sources outside the State (Intra state-Intra state transmission system interface)	MU	32969.83273	22805.40795	
	c) Total (a+b)	MU	53200.00624	35453.09329	
2	Energy transmitted to Distribution Licensees (T-D Interface)	MU	51422.05642	34415.96821	
3	Energy transmitted to EHT Consumers		448.725116	263.985755	
4	Energy transmitted to Open Access Customers	MU	192.247*	250**	480**
5	Energy transmitted for Intra State Sale	MU			
6	Intra State Transmission Loss ((1(c)-2-3-4-5)/1(c))	%	2.50%	2.18%	

## Note/Assumptions:-

1. All figures are in respect of all Open Access Customers embedded within Punjab. Units transmitted are the Units scheduled/ purchased/ wheeled under STOA, MTOA & LTA at customer periphery (i.e. after deducting CTU & State transmission & distribution losses).

\*It includes figures for 11 no. TSS (14 no. interface points) of Northern Railway for which Long Term Access (LTA) has been operationalized w.e.f. 24.11.2019 onwards.

\*\*Though the power transacted under open access depends on the market scenario changing on day to day basis and thus is unpredictable. However, figures for FY 2021-22 have been projected on higher side depending on the current scenario. Further, 18 no. additional Railway TSS are anticipated to get operationalised in subsequent years (9 TSS during FY 2022-23 and 9 TSS during FY 2023-24 as informed by Northern Railway). Hence, Northern Railways Projection Figures for FY 2022-23 and FY 2023-24 have been calculated by increasing the average demand by 20 MW (i.e. total 55 MW) for FY 2022-23 and by 15 MW (i.e. total 70 MW) for FY 2023-24 w.r.t. LTA



**Projection of Energy Sales****A) Energy Sales/Transmitted (in MU)**

S. No	Category	Previous Year (2020-21)	Current Year (2021-22)	Control Period
		Actual	Estimated	Projection 2022-23
1	Distribution Licensees (T-D Interface)			
2	CPP Consumers Connected to Transmission System			
3	Consumers Connected to Transmission System			
4	<b>Open Access Customers Connected to Transmission System</b>			
	a) Long Term Customers	172.62	250	450
	b) Medium Term Customers	7.02	8	8
	c) Short Term Customers (Intra-State)	8.04	9	9
	Short Term Customers (Inter-State)	4.56	0	0
5	Other Customers/Consumers			
	<b>Grand Total</b>			

**B) Connected Load (in MVA)**

S. No	Category	Previous Year (2020-21)	Current Year (2021-22)	Control Period
		Actual	Estimated	Projection 2022-23
1	Distribution Licensees (T-D Interface)			
2	CPP Consumers Connected to Transmission System			
3	Consumers Connected to Transmission System			
4	<b>Open Access Customers Connected to Transmission System</b>			
	a) Long Term Customers	107	107	182
	b) Medium Term Customers	6.5	6.5	6.5
	c) Short Term Customers (Intra-State)	26	26	26
	Short Term Customers (Inter-State)	0	0	0
5	Other Customers/Consumers			
	<b>Grand Total</b>			

**C) Maximum or Peak Demand (in MVA)**

S. No	Category	Previous Year (2020-21)	Current Year (2021-22)	Control Period
		Actual	Estimated	Projection 2022-23
1	Distribution Licensees (T-D Interface)			
2	CPP Consumers Connected to Transmission System			
3	Consumers Connected to Transmission System			
4	<b>Open Access Customers Connected to Transmission System</b>			
	a) Long Term Customers	53.72	70	85
	b) Medium Term Customers	3.77	2	2
	c) Short Term Customers (Intra-State)	3.94	4	4
	c) Short Term Customers (Inter-State)	-	-	-
5	Other Customers/Consumers			
	<b>Grand Total</b>			

**Projection of Energy Sales****D) Minimum Demand (in MVA)**

S. No	Category	FY 20	FY 21	Control Period
		Actual	Estimated	Projection
1	Distribution Licensees (T-D Interface)			FY 22
2	CPP Consumers Connected to Transmission System			
3	Consumers Connected to Transmission System			
4	Open Access Customers Connected to Transmission System			
	a) Long Term Customers	9.44	9.97	10
	b) Medium Term Customers	Zero	Zero	Zero
	b) Short Term Customers	Zero	Zero	Zero
5	Other Customers/Consumers			
	<b>Grand Total</b>			

**E) Average Demand (in MVA)**

S. No	Category	FY 20	FY 21	Control Period
		Actual	Estimated	Projection
1	Distribution Licensees (T-D Interface)			FY 22
2	CPP Consumers Connected to Transmission System			
3	Consumers Connected to Transmission System			
4	Open Access Customers Connected to Transmission System			
	a) Long Term Customers	35	40	55
	b) Medium Term Customers	0.8	1	1
	c) Short Term Customers (Intra-State)	0.93	1	1
	Short Term Customers (Inter-State)			
5	Other Customers/Consumers			
	<b>Grand Total</b>			

**Note/ Assumptions:**

- All figures are in respect of all Open Access Customers, whether connected to transmission or distribution system and irrespective of voltage level (includes all OA customers connected at 11KV, 33KV, 66KV & 132 KV and above Voltage Levels)
  - Connected Load pertains to Sanctioned Contract demand (CD) of OA consumers, who transacted during the financial year. Further, the connected load under MTOA pertains to sanctioned CD of Winsome Yarns Limited (i.e. 10 MVA) w.r.t. MTOA granted to MHP Raawal from 09.09.2020 onwards. The same has also been included under STOA (Intra-State) w.r.t. other 4 no. MHP of Winsome Yarns Limited.
  - Energy Sales/ transmitted are the Units scheduled/ wheeled in Million kWh under Open Access at customer periphery (i.e. after deducting CTU losses & State transmission & distribution losses).
  - Data of Maximum Demand in MVA is available only in case of Northern Railway and In MW in other Open Access Transactions, as all other Open Access transactions are in MW/ MWH in line with prevailing Open Access Regulations issued by PSERC & CERC. Accordingly the data has been provided in MW and pertains to maximum quantum of power scheduled/ purchased by open access consumer in single 15 min time-block during the year (at customer periphery).
  - Data of Minimum Demand pertains to minimum quantum of power scheduled/ purchased by open access consumer in single 15 min time-block during the year (at customer periphery).
  - Data of Average Demand in MVA is available only in case of Northern Railway, as all the Open Access transactions are in MW/ MWH in line with prevailing Open Access Regulations issued by PSERC & CERC. Accordingly the data has been provided in MW and pertains to average quantum of power scheduled/ purchased by open access consumer in single 15 min time-block during the year (at customer periphery).
- As STOA consumer (Nahar Industrial Enterprises Ltd.) wheels around 3-4 MW power for 4 months of a

**Projection of Energy Sales**

7. Figures under Long Term Access are based on LTA granted to Northern Railway for purchase of upto 35 MW power, which have been operationalized w.e.f. 24.11.2019 onwards. Further, 9 no. each additional Railway TSS are anticipated to get operationalised during FY 2022-23 and FY 2023-24 respectively as informed by Northern Railway to this office. Hence, data of Average demand of Northern Railways for FY2022-23 and FY2023-24 have been calculated by increasing the average demand by 15MW i.e. 53 MW (for FY 2022-23) and 10MW i.e. 63MW (for FY 2023-24) w.r.t. LTA customer i.e. Northern Railways.
8. As the power transacted under open access depends on the market scenario changing on day to day basis, the same is unpredictable. However based on the prevailing decline in open access, figures projected for FY 2021-22 onwards have been considered on higher side depending on the current scenario.

*SK*

Form-T-25

Revenue from Tariff & Charges

(A) Revenue from Infrastructure Wheeling of Power:

Particulars	Calendar Period															
	FY 2022-23					FY 2021-22										
Sl. No.	Transmission Capacity Allocated	MW	MVA	MW	MVA	Units Transmitted	Revenue from Transmission Charges	Revenue from Reactive Energy Charges	External Supply/ Demand Support	Total Realization	Collection against Revenue Demand	Collection Efficiency (%)	No. of Consumers	Calendar Period		
														2022-23	2021-22	
1	27	28	28	31	31	31	32	33	34	35	35	37	38	39	40	41
2																
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\* Includes wheeled units (in MW) accounted for Open Access at draw end including draw/distribution losses i.e. 10.11%

\*\* Includes units (MW) included under SDOA by Northern Railway.

Particulars	Calendar Period															
	FY 2022-23					FY 2021-22										
Sl. No.	Transmission Capacity Allocated	MW	MVA	MW	MVA	Units Transmitted	Revenue from Transmission Charges	Revenue from Reactive Energy Charges	External Supply/ Demand Support	Total Realization	Collection against Revenue Demand	Collection Efficiency (%)	No. of Consumers	Calendar Period		
														2022-23	2021-22	
1	27	28	28	31	31	31	32	33	34	35	35	37	38	39	40	41
2																
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1. All units are in respect of all Open Access Customers (under State as well as Non-State) (Transmission or distribution) which connected to transmission or distribution system and irrespective of voltage level (including all Open Access customers connected at 11KV, 33KV, 66KV & 132 KV Voltage Levels)

2. Transmission Capacity Allocated includes Load Allocated for purchase of power, as applicable, for the Open Access Customers who have been granted Open Access.

3. Data in MW is not available, as all the Open Access transactions are in MW (MVA is not available) for the Open Access Customers who have been granted Open Access.

4. Data in MVA is not available, as all the Open Access transactions are in MW (MVA is not available) for the Open Access Customers who have been granted Open Access.

5. Units transmitted are the units actually purchased/wholesaled under Open Access at customer periphery (i.e. after deducting CTU losses, State transmission & distribution losses).

6. Revenue from Transmission Charges includes the cost of transmission charges only and do not include Wheeling Charges, SLC Operating Charges and Application Fee.

7. Revenue from Reactive Energy Charges includes the cost of reactive energy charges only and do not include Wheeling Charges, SLC Operating Charges and Application Fee.

8. Open Access Customers are categorized into Long Term Customers (LTTC) and Short Term Customers (STTC) based on the nature of their business.

9. Open Access Customers are categorized into Long Term Customers (LTTC) and Short Term Customers (STTC) based on the nature of their business.

10. Though the power transmitted under open access depends on the market available changing on day to day basis and thus is unpredictable, however, figures from 2020-21 onwards have been projected on the current scenario.

**Demand in MVA (Peak)**

(MVA)

Months in the Financial Year 2020-21													
S. No.	Particulars	April	May	June	July	August	September	October	November	December	January	February	March
1	Distribution Licensees (T-D Interface)												
2	CPP Consumers Connected to Transmission System												
3	Consumers Connected to Transmission System												
4	Open Access Customers Connected to Transmission System												
	a) Long Term Customers	28.55	27.84	28.55	32.014	34.45	30.52	17.05	19.4	27.1	27.6	27.9	22.3
	b) Medium Term Customers	0.5	1.0	2.0	2.0	1.5	2.0	2.0	0.5	0.0	0.0	0.5	0.5
	c) Short Term Customers (Intra-State)	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5
5	Other Customers/Consumers												
	Grand Total												

(MVA)

Months in the Financial Year 2021-22													
S. No.	Particulars	April	May	June	July	August	September	October	November	December	January	February	March
1	Distribution Licensees (T-D Interface)												
2	CPP Consumers Connected to Transmission System												
3	Consumers Connected to Transmission System												
4	Open Access Customers Connected to Transmission System												
	a) Long Term Customers	31.21	29.18	30.48	43.57	43.95	44.3	45	45	45	45	45	45
	b) Medium Term Customers	0.5	1.0	2.0	2.0	1.5	2.0	2.0	0.5	0.0	0.0	0.5	0.5
	c) Short Term Customers (Intra-State)	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5
	Short Term Customers (Inter-State)												
5	Other Customers/Consumers												
	Grand Total												

(MVA)

Months in the Financial Year 2022-23													
S. No.	Particulars	April	May	June	July	August	September	October	November	December	January	February	March
1	Distribution Licensees (T-D Interface)												
2	CPP Consumers Connected to Transmission System												
3	Consumers Connected to Transmission System												
4	Open Access Customers Connected to Transmission System												
	a) Long Term Customers	55	55	55	55	55	55	55	55	55	55	55	55
	b) Medium Term Customers	0.5	1.0	2.0	2.0	1.5	2.0	2.0	0.5	0.0	0.0	0.5	0.5
	c) Short Term Customers (Intra-State)	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5
5	Other Customers/Consumers												
	Grand Total												

(MVA)

Months in the Financial Year 2023-24													
S. No.	Particulars	April	May	June	July	August	September	October	November	December	January	February	March
1	Distribution Licensees (T-D Interface)												
2	CPP Consumers Connected to Transmission System												
3	Consumers Connected to Transmission System												
4	Open Access Customers Connected to Transmission System												
	a) Long Term Customers	70	70	70	70	70	70	70	70	70	70	70	70
	b) Medium Term Customers	0.5	1.0	2.0	2.0	1.5	2.0	2.0	0.5	0.0	0.0	0.5	0.5
	c) Short Term Customers (Intra-State)	0	0	0	0	0	0	0	0	3.5	3.5	3.5	3.5
5	Other Customers/Consumers												
	Grand Total												

**Note/ Assumptions:**

- All figures are in respect of all Open Access Customers, whether connected to transmission or distribution system and irrespective of voltage level [includes all OA customers connected at 11KV, 33KV, 66KV & 132 KV Voltage Levels]
- Demand Pertains to Average quantum of power scheduled/ purchased by open access consumer in MVA in each 15 min time-block during the peak period (1800 Hrs to 2200 Hrs) of the year (at customer periphery) in case of Northern Railway and in MW in case of other Open Access consumers as the data is not available in MVA, as all the Open Access transactions are in MW MWH in line with prevailing Open Access Regulations issued by PSECL & CERC.
- Figures under Long Term Access are based on LTA granted to Northern Railway for purchase of upto 35 MW power, which have been operationalized w.e.f. 24.11.2019 onwards. Further, Northern Railway is also availing STOAs w.e.f. 30.06.2020 onwards for purchase of power through power exchange (with total quantum of 35 MW, already granted under LTA). Thus, total quantum granted under LTA & STOAs is 35 MW. Hence figures showing under LTA/STOA (Inter-State) pertains to Northern Railway figures collectively.
- Figures under MTOA Pertains to wheeling of power by Raawal MHP of Winsome Yarns Limited (granted w.e.f. 09.09.2020 onwards).
- As the power transacted under open access depends on the market scenario changing on day to day basis, the same is unpredictable. However based on the prevailing decline in open access, figures projected FY 2020-21 onwards have been considered on lower side depending on the current scenario.

Form T27

**Working Capital Requirement - Transmission Business**

₹ crore)

S.No.	Particulars	FY 2020-21	FY 2021-22	Control Period Projection
		True-up	APR	FY 2022-23
I	II	III	IV	V
1	O&M Expenses			
a.	R&M Expenses	31.91	36.24	38.10
b.	A&G Expenses	27.06	29.47	31.88
c.	Employee Expenses	523.25	587.69	653.89
d.	Total (a+b+c)	582.22	663.60	723.85
e.	O&M Expenses for 1 month	48.52	55.30	60.32
2	Receivables equivalent to 2 (Two) months of Fixed Cost calculated on Normative Target Availability	225.87	240.86	255.98
3	Maintenance Spares @15% of O&M Expenses	87.33	99.54	108.59
	Total Working Capital (1(e) + 2+ 3)	361.72	395.80	424.88
4	Interest Rate*	9.69%	9.69%	9.69%
5	Interest on Working Capital	35.03	38.33	41.15

\* Rate of Interest is weighted average rate of interest on Working capital loans

Form T27

**Working Capital Requirement - SLDC**

₹ crore)

S.No.	Particulars	FY 2020-21	FY 2021-22	Control Period Projection
		True-up	APR	FY 2022-23
I	II	III	IV	V
1	O&M Expenses			
a.	R&M Expenses	0.38	0.48	2.22
b.	A&G Expenses	0.80	0.87	0.94
c.	Employee Expenses	6.45	8.97	11.99
d.	Total (a+b+c)			
e.	O&M Expenses for 1 month	0.64	0.86	1.26
2	Receivables equivalent to 2 (Two) months of Fixed Cost calculated on Normative Target Availability	1.14	1.55	2.27
3	Maintenance Spares @15% of O&M Expenses	0.64	0.86	1.26
	Total Working Capital (1(e) + 2+ 3)	2.42	3.27	4.80
4	Interest Rate*	9.69%	9.69%	9.69%
5	Interest on Working Capital	0.49	0.61	0.84

\* Rate of Interest is weighted average rate of interest on Working capital loans

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## Form T28

Income from Investments and Other Non-Tariff Income- PSTCL (Transmission +SLDC)  
(Rs. Crore)

S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2021-22	Control
		Actual (Audited Accounts) III	True-up IV	APR V	FY 2022-23 VI
1	II		IV	V	VI
A	Income from Investment, Fixed & Call Deposits				
1	Interest Income from Investments	-	-	-	-
2	Interest Income from Fixed Deposits	0.01	0.01	-	-
3	Interest Income from Banks other than from Fixed Deposits	0.79	0.79	-	-
4	Interest Income from any other source	-	-	0.00	0.00
	<b>Sub-Total</b>	0.80	0.80	0.00	0.00
B	Other Non-Tariff Income				
1	Interest on Loans and Advances to Staff	-	-	-	-
2	Interest on Loans and Advances to Licensee	-	-	-	-
3	Interest on Loans and Advances to Lessors	-	-	-	-
4	Interest on Advances to Suppliers / Contractors	-	-	-	-
5	Gain on Sale of Land - Additional Compensation	-	-	-	-
6	Gain on Sale of Fixed Assets	2.07	2.07	-	-
7	Income/Fee/Collection against Staff Welfare Activities	0.01	0.01	0.01	0.01
8	Miscellaneous Receipts	-	-	-	-
	Rental for staff quarters	0.32	0.32	0.29	0.29
	Sale of tender forms	-	-	-	-
	NOC charges from open access customers	0.14	0.14	0.00	0.00

S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2021-22	Control
		Actual (Audited Accounts)	True-up	APR	FY 2022-23
I	II	III	IV	V	VI
A	Income from Investment, Fixed & Call Deposits				
	Credit balance written back:	-	-	-	-
	-Sundry creditors	0.06	0.06	0.02	0.02
	- Other sundry credit balance	4.98	4.98	4.84	4.84
	-Security Deposits/EMD	0.15	0.15	-	-
	Rebate on early payment to NRLDC	0.12	0.12	0.13	0.13
	Income from O&M of bays of PGCIL	7.51	7.51	3.62	3.62
	Miscellaneous income	13.75	13.75	0.07	0.07
9	Delayed Payment Charges from Consumers	2.54	2.54	1.78	1.78
10	Penalty imposed on suppliers/contractors	5.68	5.68	3.22	3.22
11	Income from Other Business - Sale of Scrap	1.64	1.64	-	-
12	Excess Provision of Income tax withdrawn	-	-	-	-
13	Reversal of excess provision of impairment Loss	-	-	-	-
14	Any other income - Provisions withdrawn on unserviceable / obsolete items & losses under investigation	-	-	-	-
	Prior Period Income	-	-	0.00	0.00
	Less: Interest received on refund of Income tax	0.01	0.01	-	-
	Less: Provision withdrawn on unserviceable/obsolete items & losses under investigation	0.79	0.79	-	-
	Less: Reversal of excess provision of impairment loss	-	-	-	-



S. No.	Particulars	FY 2020-21		FY 2021-22		Control	
		Actual (Audited Accounts)	True-up	APR	FY 2022-23		
I	II	III	IV	V	VI		
A	Income from Investment, Fixed & Call Deposits						
	Less Financing Cost of Late Payment						
	Surcharge (Applicable on Principal Amount of Delayed Payment)	0.80	0.80	-	-		
	Less Income from Fixed Deposits made for Letter of Credit	2.22	2.22	1.44	1.44		
	<b>Sub-Total</b>	<b>35.12</b>	<b>35.12</b>	<b>12.54</b>	<b>12.54</b>		
	<b>Total</b>	<b>35.93</b>	<b>35.93</b>	<b>12.54</b>	<b>12.54</b>		

**Income from Investments and Other Non-Tariff Income- Transmission Business (Rs. Crore)**

S. No.	Particulars	FY 2020-21		FY 2021-22		Control	
		Actual (Audited Accounts)	True-up	APR	FY 2022-23		
I	II	III	IV	V	VI		
A	Income from Investment, Fixed & Call Deposits						
1	Interest Income from Investments	-	-	-	-		
2	Interest Income from Fixed Deposits	-	-	-	-		
3	Interest Income from Banks other than from Fixed Deposits	0.79	0.79	-	-		
4	Interest Income from any other source	-	-	-	-		
	<b>Sub-Total</b>	<b>0.79</b>	<b>0.79</b>	<b>-</b>	<b>-</b>		
B	Other Non-Tariff Income						
1	Interest on Loans and Advances to Staff	-	-	-	-		

S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2021-22	Control
		Actual (Audited Accounts)	True-up	APR	FY 2022-23
I	II	III	IV	V	VI
A	Income from Investment, Fixed & Call Deposits				
2	Interest on Loans and Advances to Licensee	-	-	-	-
3	Interest on Loans and Advances to Lessors	-	-	-	-
4	Interest on Advances to Suppliers / Contractors	-	-	-	-
5	Gain on Sale of Land - Additional Compensation	-	-	-	-
6	Gain on Sale of Fixed Assets	2.07	2.07	-	-
7	Income/Fee/Collection against Staff Welfare Activities	0.01	0.01	0.01	0.01
8	Miscellaneous Receipts	-	-	-	-
	Rental for staff quarters	0.28	0.28	0.26	0.26
	Sale of tender forms	-	-	-	-
	NOC charges from open access customers	0.07	0.07	-	-
	Credit balance written back:	-	-	-	-
	-Sundry creditors	0.06	0.06	0.02	0.02
	- Other sundry credit balance	4.96	4.96	4.84	4.84
	-Security Deposits/EMD	0.15	0.15	-	-
	Rebate on early payment to NRLDC	-	-	-	-
	Income from O&M of bays of PGCIL	7.51	7.51	3.62	3.62
	Miscellaneous income	13.75	13.75	0.07	0.07
9	Delayed Payment Charges from Consumers	2.52	2.52	1.78	1.78
10	Penalty imposed on suppliers/contractors	5.52	5.52	3.17	3.17
11	Income from Other Business - Sale of Scrap	1.64	1.64	-	-

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S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2021-22	Control
		Actual (Audited Accounts)	True-up	APR	FY 2022-23
I	II	III	IV	V	VI
A	<b>Income from Investment, Fixed &amp; Call Deposits</b>				
12	Excess Provision of Income tax withdrawn	-	-	-	-
13	Reversal of excess provision of Impairment Loss	-	-	-	-
14	Any other income - Provisions withdrawn on unserviceable / obsolete items & losses under investigation	-	-	-	-
	Prior Period Income	-	-	0.00	0.00
	Less: Interest received on refund of Income tax	-	-	-	-
	Less: Provision withdrawn on unserviceable/obsolete items & losses under investigation	0.79	0.79	-	-
	Less: Reversal of excess provision of impairment loss	-	-	-	-
	Less Financing Cost of Late Payment Surcharge (Applicable on Principal Amount of Delayed Payment)	0.80	0.80	-	-
	Less Income from Fixed Deposits made for Letter of Credit	2.20	2.20	1.44	1.44
	<b>Sub-Total</b>	<b>34.73</b>	<b>34.73</b>	<b>12.33</b>	<b>12.33</b>
	<b>Total</b>	<b>35.52</b>	<b>35.52</b>	<b>12.33</b>	<b>12.33</b>

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S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2021-22	Control
		Actual (Audited Accounts)	True-up	APR	FY 2022-23
I	II	III	IV	V	VI
A	Income from Investment, Fixed & Call Deposits				

**Income from Investments and Other Non-Tariff Income- SLDC**

S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2021-22	Control
		Actual (Audited Accounts)	True-up	APR	FY 2022-23
I	II	III	IV	V	VI
A	Income from Investment, Fixed & Call Deposits				
1	Interest Income from Investments	-	-	-	
2	Interest Income from Fixed Deposits	0.01	0.01	-	
3	Interest Income from Banks other than from Fixed Deposits	-	-	-	
4	Interest Income from any other source	-	-	0.00	
	<b>Sub-Total</b>	0.01	0.01	0.00	-
B	<b>Other Non-Tariff Income</b>				
1	Interest on Loans and Advances to Staff	-	-	-	
2	Interest on Loans and Advances to Licensee	-	-	-	
3	Interest on Loans and Advances to Lessors	-	-	-	
4	Interest on Advances to Suppliers / Contractors	-	-	-	
5	Gain on Sale of Land - Additional Compensation	-	-	-	
6	Gain on Sale of Fixed Assets	-	-	-	

S. No.	Particulars	FY 2020-21	FY 2020-21	FY 2021-22	Control
		Actual (Audited Accounts)	True-up	APR	FY 2022-23
I	II	III	IV	V	VI
A	Income from Investment, Fixed & Call Deposits				
7	Income/Fee/Collection against Staff Welfare Activities	0.00	0.00	0.00	0.00
8	Miscellaneous Receipts	-	-	-	-
	Rental for staff quarters	0.05	0.05	0.03	0.03
	Sale of tender forms	-	-	-	-
	NOC charges from open access customers	0.07	0.07	0.00	0.00
	Credit balance written back:	-	-	-	-
	-Sundry creditors	-	-	-	-
	- Other sundry credit balance	0.02	0.02	0.00	0.00
	-Security Deposits/EMD	-	-	-	-
	Rebate on early payment to NRLDC	0.12	0.12	0.13	0.13
	Income from O&M of bays of PGCIL	-	-	-	-
	Miscellaneous income	0.00	0.00	0.00	0.00
	Operating Charges from Open Access Consumers		-		-
	Transmission Charges from Open Access Consumers		-		-
9	Delayed Payment Charges from Consumers	0.02	0.02	-	-
10	Penalty imposed on suppliers/contractors	0.16	0.16	0.05	0.05
11	Income from Other Business - Sale of Scrap	-	-	-	-
12	Excess Provision of Income tax withdrawn	-	-	-	-
13	Reversal of excess provision of Impairment Loss	-	-	-	-

S. No.	Particulars	FY 2020-21		FY 2021-22		Control	
		Actual (Audited Accounts)	True-up	APR	FY 2022-23		
I	II	III	IV	V	VI		
A	<b>Income from Investment, Fixed &amp; Call Deposits</b>						
14	Any other income - Provisions withdrawn on unserviceable / obsolete items & losses under investigation	-	-	-	-		
	Prior Period Income	-	-	-	-		
	Less: Interest received on refund of Income tax	0.01	0.01	-	-		
	Less: Provision withdrawn on unserviceable/obsolete items & losses under investigation	-	-	-	-		
	Less: Reversal of excess provision of impairment loss	-	-	-	-		
	Less Financing Cost of Late Payment Surcharge (Applicable on Principal Amount of Delayed Payment)	-	-	-	-		
	Less Income from Fixed Deposits made for Letter of Credit	0.02	0.02	-	-		
	<b>Sub-Total</b>	<b>0.39</b>	<b>0.39</b>	<b>0.21</b>	<b>0.21</b>		
	<b>Total</b>	<b>0.41</b>	<b>0.41</b>	<b>0.21</b>	<b>0.21</b>		

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## Contributions, Grants and Subsidies towards Cost of Capital Assets- Transmission

S. No	Particulars	FY 2020-21			FY 2021-22			Control Period		
		Actual			Estimated			FY 2022-23		
		Balance at the beginning of the year	Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year
I	II	III	IV	V	VI	VII	VIII	IX		
1	Consumer Contribution Towards Cost of Capital Assets	66.14	0.98	67.12	167.68	234.80	18.40	253.19		
2	Subsidies Towards Cost of Capital Assets	-	-	-	-	-	-	-		
3	Grants Towards Cost of Capital Assets	9.61	6.04	15.65	7.57	23.22	13.00	36.22		
	<b>Total</b>	<b>75.74</b>	<b>7.02</b>	<b>82.76</b>	<b>175.25</b>	<b>258.01</b>	<b>31.40</b>	<b>289.41</b>		

## Contributions, Grants and Subsidies towards Cost of Capital Assets- SLDC

S. No	Particulars	FY 2019-20			FY 2020-21			Control Period		
		Actual			Estimated			FY 2021-22		
		Balance at the beginning of the year	Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year
I	II	III	IV	V	VI	VII	VIII	IX		
1	Consumer Contribution Towards Cost of Capital Assets	-	-	-	-	-	-	-		
2	Subsidies Towards Cost of Capital Assets	-	-	-	-	-	-	-		
3	Grants Towards Cost of Capital Assets	-	-	-	-	-	-	-		
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		

Existing & Proposed Tariff Schedule - Transmission Business

S. No.	User Type	Previous Year (2020-21) Actual			Current Year (2021-22) Estimated			Central Period Projections 2022-23		
		Contacted Capacity/ Energy Wheeled (MW/MU)	Transmission Tariff (₹ crore per MW per month/ paise/unit)	Amount (₹ crore)	Contacted Capacity/ Energy Wheeled (MU)	Transmission Tariff (₹ crore per MW per month/ paise/unit)	Amount (₹ crore)	Contacted Capacity/ Energy Wheeled (MU)	Transmission Tariff (₹ crore per MW per month/ paise/unit)	Amount (₹ crore)
1	Distribution Licensee (PSPCL)			1,328.38						
2	CPP Wheeling									
3	EHT Consumer Wheeling									
4	Other States Energy Wheeling									
5	Open Access Consumers:									
		(At customer periphery after T&D losses)								
	a) Long Term Consumers	172.822	Rs. 91963.63/MW/Month	3.86	250	Rs. 85138.03/MW/Month	480	105550.28	3.49	
		181.73			8	Rs. 85138.03/MW/Month or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)	8	105550.28		3.49
	b) Medium Term Consumers	7.02	Rs. 91963.63/MW/Month or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)	0.14	8.8	Rs. 229.825/MWWh or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)	8	304/MWWh or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)	0.20	
		7.81			8		8.7			
	Short term Consumers (Intra-State)	8.04	Rs. 252.16/MWWh or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)		8		8			
		8.71			8.7		8.7			

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## Revenue from Current Tariffs in Ensuing Years -Transmission Business

FY 2021-22							
S.No.	User Type	Energy Wheelled (MU)	Maximum Demand (MVA)	Transmission Tariff (₹/ MW/ month)	Total Amount (₹ crore)	Proposed Realization Rate (₹/ unit)	Transmission charge in ₹/unit
1	Distribution Licensee (PSPCL)				1,308.85		
2	CPP Wheeling						
3	EHT Consumer Wheeling						
4	Other States Energy Wheeling						
5	Open Access Consumers:						
	a) Long term Consumers	250	70	Rs. 85138.03/MW/Month			
	b) Medium term Consumers	8	2	Rs. 85138.03/MW/Month or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)	3.49	0.66	
	c) Short term Consumers (Intra-State)	9	4	Rs. 229.825/MWh or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)	0.20	0.22	229.825
6	Other Customers						

FY 2022-23							
S.No.	User Type	Energy Wheelled (MU)	Maximum Demand (MVA)	Transmission Tariff (₹/ MW/ month)	Total Amount (₹ crore)	Proposed Realization Rate (₹/ unit)	Unit Cost of transmission in ₹/unit
1	Distribution Licensee (PSPCL)				1,393.31		
2	CPP Wheeling						
3	EHT Consumer Wheeling						
4	Other States Energy Wheeling						
5	Open Access Consumers:						
	a) Long term Consumers	480	85	105550.28	6.97		
	b) Medium term Consumers	8	2	105550.28	0.49		
	c) Short term Consumers (Intra-State)	9	4	Rs. 304/MWh or 10% of revenue realized from 2% additional injection (for Intra-State Open Access by NRSE Projects)	0.27		
6	Other Customers						

## Note/ Assumptions:

- Energy Wheelled are the Units scheduled in Million kWh under Open Access at customer periphery (i.e. after deducting CTU losses and State transmission & distribution losses).
- Data of Maximum Demand in MVA is available only in case of Northern Railway as all other Open Access transactions are in MW/MWh in line with prevailing Open Access Regulations issued by PSERC & CERC. Accordingly the data has been provided in MW and pertains to maximum quantum of power scheduled/ purchased by open access consumer in single 15 min time-block during the year (at customer periphery).
- Figures under Long Term Access are based on LTA granted to Northern Railway for purchase of upto 35 MW power, which have been operationalized w.e.f. 24.11.2018 onwards.
- Figures under MTOA Pertains to wheeling of power by Raowal MHP of Winsome Yams Limited (granted w.e.f. 09.09.2020 onwards).
- As the power transacted under open access depends on the market scenario changing on day to day basis, the same is unpredictable. However based on the prevailing decline in open access, figures projected for FY 2020-21 onwards have been considered on lower side depending on the current scenario. Further, the transmission tariff is also subject to revision, as approved by Hon'ble PSERC in its Tariff Orders to be issued for upcoming financial years.

Revenue from Proposed Tariffs in Enacting Year- Transmission Business

FY 2021-22									
S.No.	User Type	Energy Wheelled (MU)	Maximum Demand (MVA)	Transmission Tariff (₹/MWh month)	Total Amount (₹ crore) without tax	Proposed Realization Rate (₹/unit)	Transmission charge in ₹/unit	Expected additional Revenue of proposed charges (₹ crore) for Full Year	Proposed Percentage Increase (%)
1	Distribution Licensee (PSPCL)				1,442.94				
2	CRP Wheeling								
3	EHT Consumer Wheeling								
4	Other States Energy Wheeling								
5	Open Access Consumers								
	a) Long term Consumers	250	70	Rs. 651.38/0.03/MWh/month or Rs. 05138.03/MVAmth or					
	b) Medium term Consumers	8	2	10% of revenue realized from 2% additional injection for Intra-State Open Access by NRECE Projects)	3.48				
	b) Short term Consumers	8	4	Rs. 226.838/MWh or 10% of revenue realized from 2% additional injection for Intra-State Open Access by NRECE Projects)	0.20				
6	Other Customers								

FY 2022-23									
S.No.	User Type	Energy Wheelled (MU)	Maximum Demand (MVA)	Transmission Tariff (₹/MWh month)	Total Amount (₹ crore) without tax	Proposed Realization Rate (₹/unit)	Unit Cost of transmission in ₹/unit	Expected additional Revenue of proposed charges (₹ crore) for Full Year	Proposed Percentage Increase (%)
1	Distribution Licensee (PSPCL)				1,537.18				
2	CRP Wheeling								
3	EHT Consumer Wheeling								
4	Other States Energy Wheeling								
5	Open Access Consumers								
	a) Long term Consumers	460	85	105550.38	8.87				
	b) Medium term Consumers	8	2	105550.38	0.20				
	b) Short term Consumers	8	4	Rs. 3046/Mth or 10% of revenue realized from 2% additional injection for Intra-State Open Access by NRECE Projects)	0.24				
6	Other Customers								

FY 2023-24									
S.No.	User Type	Energy Wheelled (MU)	Maximum Demand (MVA)	Transmission Tariff (₹/MWh month)	Total Amount (₹ crore) without tax	Proposed Realization Rate (₹/unit)	Unit Cost of transmission in ₹/unit	Expected additional Revenue of proposed charges (₹ crore) for Full Year	Proposed Percentage Increase (%)
1	Distribution Licensee (PSPCL)								
2	CRP Wheeling								
3	EHT Consumer Wheeling								
4	Other States Energy Wheeling								
5	Open Access Consumers								
	a) Long term Consumers	800	100	Rs. 85000/MVAmth or Rs. 850000/MVAmth or	7.14				
	b) Medium term Consumers	8	2	10% of revenue realized from 2% additional injection for Intra-State Open Access by NRECE Projects)					
	b) Short term Consumers	8	4	Rs. 230/Mth or 10% of revenue realized from 2% additional injection for Intra-State Open Access by NRECE Projects)					
6	Other Customers								

Note Assumption:

- Energy Wheelled are the units scheduled in MWh on kWh under Open Access of customer periphery (i.e. after deducting CTU losses and State transmission & distribution losses).
- Data of Maximum Demand in MVA is available only in case of Northern Railway as all other Open Access transactions are in MVA MWh in Eng with prevailing Open Access Regulation issued by P&RNC & CERC. Accordingly the data has been provided in MVA and periphery in maximum quantum of power scheduled purchased by open access consumer in single 15 min time-block during the year (at customer periphery).
- Figures under Long Term Access are based on LTA granted to Northern Railway for purchase of upto 26 MW power, which have been operationalized w.e.f. 24.11.2018 onwards.
- Figures under MTDA Parties to wheeling of power by Revised 100% of Winesha Yana Bhatid (granted w.e.f. 06.08.2020 onwards).
- As the power transacted under open access depends on the market scenario changing on day to day basis, the same is unascertainable. However based on the prevailing trends in open access, figures projected for FY 2023-24 onwards have been considered on lowest side depending on the current scenario. Further, the transmission tariff is also subject to revision, as approved by Hon'ble P&RNC in its Tariff Orders to be issued for upcoming financial years.

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**Losses in the Transmission System**

	Particulars	FY 20-21	FY 21-22
		Actual	Actual (Upto September 2021)
<b>A</b>	<b>Losses in EHT System (400 kV)</b>		
	1 Energy received into the system		
	2 Energy Transmitted at this voltage level to consumers/beneficiaries		
	3 Energy transmitted to the next (lower) voltage level		
	4 Energy Lost (1-2-3)		
	5 <b>Total Loss in the System (4/1)</b>		
<b>B</b>	<b>Losses in EHT System (220 kV)</b>		
	1 Energy received into the system		
	2 Energy sold at this voltage level		
	3 Energy transmitted to the next (lower) voltage level		
	4 Energy Lost (1-2-3)		
	5 <b>Total Loss in the System (4/1)</b>		
<b>C</b>	<b>Losses in EHT System (132 kV)</b>		
	1 Energy received into the system		
	2 Energy sold at this voltage level		
	3 Energy transmitted to the next (lower) voltage level		
	4 Energy Lost (1-2-3)		
	5 <b>Total Loss in the System (4/1)</b>		
<b>D</b>	<b>Overall Losses</b>		
	1 Energy Received (in MWh)	53200006.237	35453093.285
	2 Energy Lost (in MWh)	1329224.703	773141.319
	3 Total Transmission Loss (2/1)	2.50%	2.18%*

**PSTCL Transmission Losses are not calculated as per Voltage level.**

\* Figures are from April,21-Sept. 21

**Note: 1. Overall PSTCL Transmission Losses are calculated as per Boundary Metering scheme. PSTCL Transmission Losses are not calculated as per Voltage level.**

**2. Projections are not dealt by this office.**

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Voltage Wise System Losses - Month Wise \$LDC

(MU)

S. No.	Particulars	FY 2020-21											
		April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
I	System Losses at 400 KV	5,4072	7,6613	14,0968	15,9928	14,2327	12,3900	8,6470	8,8082	8,163	12,144	11,037	8,722
II	System Losses at 220 KV	28,9888	62,9848	102,3233	113,9852	116,6108	118,5412	78,8253	51,3716	63,105	65,509	64,014	59,291
III	System Losses at 132 KV	12,6920	17,8009	29,8849	39,3360	38,7365	42,1618	16,6047	12,4032	15,686	15,821	14,979	20,263
	Overall Losses (in MU)	47,0880	88,5470	146,3150	169,3030	169,5790	173,193	104,078	72,384	86,953	93,476	90,030	88,277

S. No.	Particulars	FY 2021-22											
		April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
I	System Losses at 400 KV	8,7348	7,1663	14,3610	15,6528	16,7748	15,2113						
II	System Losses at 220 KV	59,1405	68,8378	81,8048	101,8159	117,4233	90,7244						
III	System Losses at 132 KV	13,9437	14,8639	37,2182	36,6682	37,1540	35,6223						
	Overall Losses (in MU)	81,8197	90,8686	133,3850	154,1372	171,3525	141,558						

Note: 1. Segregation of Voltage wise losses from Actual Overall Losses has been done by calculating %age of Voltage wise losses from sum of Peak & Off-Peak Losses as calculated in ESSE software and then allocating that %age to actual Overall Losses.

Note: 1. Overall PSTCL Transmission Losses are calculated as per Boundary Metering scheme by this office.

2. Projections are not dealt by this office.

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Voltage Wise System Losses (Peak) - Month Wise SLDC

S. No.	Particulars	FY 2020-21											
		April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
A	System Losses at 400 KV (in MWh)	0.875	1.725	3.525	3.525	3.4750	2.650	2.850	1.376	1.325	2.725	2.700	1.725
B	System Losses at 220 KV (in MWh)	7.125	18.2	25.3	25.925	25.1500	21.950	27.500	11.250	14.000	15.350	15.950	13.700
C	System Losses at 132 KV (in MWh)	2.65	4.5	8.1	8.35	7.7750	7.550	4.975	1.775	2.700	2.975	3.050	3.975
E	Overall Losses (MWh)	10.65	24.425	36.925	37.8	38.4000	32.1500	35.325	14.400	18.025	21.050	21.700	19.400

S. No.	Particulars	FY 2021-22											
		April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
A	System Losses at 400 KV (in MWh)	1.9	1.825	4.075	4.475	4.900	4.150						
B	System Losses at 220 KV (in MWh)	15.575	21.125	24.05	24.95	27.150	22.275						
C	System Losses at 132 KV (in MWh)	2.875	3.75	10.625	10.3	10.475	9.525						
E	Overall Losses (MWh)	20.350	26.700	38.750	39.725	42.525	35.950						

Note: Voltage-wise Transmission Losses are calculated through PSSE software based upon Peak load of the month (assuming Peak Load for a 15-min block).

S. No.	Particulars	FY 2022-23 (Projections)											
		April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
A	System Losses at 400 KV												
B	System Losses at 220 KV												
C	System Losses at 132 KV												
E	Overall Losses (MWh)												

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Voltage Wise System Losses (Off Peak) - Month Wise, SLDC

S. No.	Particulars	FY 2020-21											
		April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
A	System Losses at 400 KV	0.925	0.875	0.825	0.650	0.925	0.825	0.6	0.95	0.9	0.825	0.8	0.75
B	System Losses at 220 KV	2.525	3.175	6.275	3.850	10.900	11.325	3.95	2.625	3.2	3.8	4.35	3.125
C	System Losses at 132 KV	1.575	1.575	1.125	1.925	4.200	4.275	1.65	1.575	1.575	1.65	1.7	1.775
E	Overall Losses (MWh)	5.025	5.625	8.225	6.425	16.025	16.425	6.200	5.150	5.675	6.275	6.850	5.650

S. No.	Particulars	FY 2021-22											
		April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
A	System Losses at 400 KV	0.825	0.775	0.700	0.925	1.150	0.75						
B	System Losses at 220 KV	2.875	3.850	3.150	10.175	15.200	6.95						
C	System Losses at 132 KV	1.475	1.650	1.750	2.350	2.925	1.85						
E	Overall Losses (MWh)	5.175	6.275	5.600	13.450	19.275	9.650						

Note: Voltage-wise Transmission Losses are calculated through PSSE software based upon Off-Peak load of the month (assuming Off-Peak load for a 15-min block)

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S.No	Particulars	FY 2020-21						FY 2021-22*					
		Number of interface points at the beginning of the year	Number of meters targeted to be installed during the year	Number of ABT compliant meters installed during the year	Number of defective interface meters at the end of the year	Number of interface points without meters at the end of the year	Number of interface points at the end of the year	Number of meters targeted to be installed during the year	Number of ABT compliant meters installed during the year	Number of defective interface meters at the end of the year	Number of interface points without meters at the end of the year	Number of interface points at the end of the year	
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
Meters													
1	Distribution Licensee (PSPCL)												
2	CPP whealing												
3	EHT Consumer Whealing												
4	Other States Energy Whealing												
5	Open Access Consumers:												
	a) Long Term Consumers												
	b) Medium Term												
	b) Short Term Consumers												
6	Other Customers												
Electronic Meters													
1	Distribution Licensee (PSPCL)	405	4	4	1	0	399	4	1	0	0	399*	
2	CPP whealing	5	0	0	0	0	5	0	0	0	0	5*	
3	EHT consumer whealing	6	0	0	0	0	5	0	0	1	0	5*	
4	Other States energy whealing	68	1	1	0	0	69	0	0	0	0	69*	
5	Open Access Consumers**:												
	a) Long term consumers	14	0	0	0	0	14	3	0	0	1*	15**	
	b) Medium Term	0	0	0	0	0	0	0	0	0	0	0	
	b) Short term consumers	0	0	0	0	0	0	0	0	0	0	0	
6	Other Customers	0	0	0	0	0	0	0	0	0	0	0	

NOT APPLICABLE

Note: \* Status as per SEPT. 2021 month  
 2. Target is tentative figures.  
 3. 3 Nos. solar generators and 2 nos. biomass generator connected to PSTCL at 132kv Voltage level are selling power to PSPCL.

Note:  
 \*\* This information pertains to only those Active Open Access Consumers who are connected to only Transmission system of PSTCL  
 \*\* It includes 14 no. interface points for Northern Railway for which Long Term Access (LTA) has been operationalized w.e.f. 24.11.2019 onwards and one no. additional interface point for Which Northern Railway is applying for grant of Long Term Access (LTA) shortly, as informed by Northern Railway to this office.  
 # 3 no. ABT Meters w.r.t. One no. interface point i.e. upcoming Railway TSS, Gari Bhagi are pending to be installed as on date. Meters may be installed during the balance year, as informed by Northern Railway.  
 ## 3 no. meters have been installed w.r.t. each interface point of Northern Railway i.e. Main, Check at traction end alongwith one no. standby meter at grid substation end of PSTCL. Further, Transmission line work is complete for additional seven no. Railway TSS. However, Northern Railway has not applied for Open Access w.r.t. additional seven no. TSS.

## Voltage Profile

S.No.	Particulars	First six months of the Previous Year(2020-21)			Last six months of the Previous Year(2020-21)			For the Current Year (2021-2022) six months			Corrective Measures Proposed
		III	IV	V	VI	VII	VIII	IX			
I	II	Percentage of time when volatage was			Percentage of time when volatage was			Percentage of time when volatage was			
	At 400/220/132 KV side of transformer (Incoming point of 400/220/132KV bus)	Below (12.5%)	Above (10%)	Below (12.5%)	Above (10%)	Below (12.5%)	Above (10%)	Below (12.5%)	Above (10%)		
	Include all Feeders										
1	400 KV Dhuri	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00		
2	400 KV Muktsar	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00		
3	400 KV Nakodar	0.07	0.00	0.01	0.00	0.00	0.00	0.00	0.00		
4	400 KV Makhu	0.00	0.00	0.10	0.00	0.24	0.00	0.00	0.00		
5	400 KV Rajpura	0.00	0.61	0.01	0.14	0.00	0.00	0.00	0.00		
6	132 KV Ropar	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00		
7	132KV Mukerian I	0.23	0.04	0.00	0.08	1.32	0.00	0.00	0.00		
8	132 KV Muktsar	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
9	132 kv Civil Line Amritsar	0.16	0.00	0.68	0.32	0.00	0.10	0.00	0.10		
10	132 KV Chohal	0.03	0.00	0.00	0.13	0.01	0.07	0.00	0.07		
11	220 KV Mohali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
12	220 KV Jhunjir	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00		
13	220KV Perozpur Rd Luddhiana	0.02	0.05	0.39	0.21	0.03	0.00	0.03	0.00		
14	220 KV Babadurgarh	0.00	0.11	0.00	0.28	0.00	0.00	0.00	0.00		
15	220 KV Rajpura	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	* The information may be furnished for five selected critical EHV substations.										





Form T40

Failure of Transformers

S.No	Particulars	Previous Year		Current Year		Control	
		FY 2020-21		FY 2021-22		FY 2022-23	
		Number	%	Number	%	Number	%
I	II	III	IV	V	VI	VII	VIII
1	EHT Transformer						
	i) 400 kV Sub-Stations						
	ii) 220 kV Sub-Stations	8	1.822	3	0.674		
	iii) 132 kV Sub-Stations	1	0.552	4	2247		
2	Power Transformer (HT)						
	i) 400 kV Sub-Stations						
	ii) 220 kV Sub-Stations						
	iii) 132 kV Sub-Stations						

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Peak Demand in MW

S.No.	Particulars	(MW)						
		Actual FY (n-5) III	Actual FY (n-4) IV	Actual FY (n-3) V	Actual FY (n-2) VI	Actual FY (n-1) VII	Previous Year FY 2020-21 VIII	Current Year FY 2021-22 IX
1	Peak Period							
	a) Winter							
	b) Summer							
	c) Other							
2	Maximum Peak Demand							
	a) Restricted	10852	11408	11705	12638	13606	13148	13431
	b) Unrestricted	10852	11408	11705	12638	13606	13148	13431
3	Peak Availability Assessed							
4	Shortfall in meeting Peak Demand							
	a) Restricted	0	0	0	0	0	0	0
	b) Unrestricted	0	0	0	0	0	0	0

Note : Details of Peak Demand and Load Rostering may be provided along with this format i.e. in terms of MW, MU and number of hour

Month-wise Peak Demand

		FY 2020-21 (Actuals)											
(MW) S.No.	Particulars	April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
1	Peak Period												
	a) Morning												
	b) Afternoon												
	c) Evening												
	d) Night												
2	Maximum Peak Demand												
	a) Restricted	5113	8201	12683	13148	12815	12433	8940	6002	6707	7017	7117	7440
	b) Unrestricted	5113	8201	12683	13148	12815	12433	8940	6002	6707	7017	7117	7440
3	Peak Availability Assessed												
4	Shortfall in meeting Peak Demand												
	a) Restricted	0	0	0	0	0	0	0	0	0	0	0	0
	b) Unrestricted	0	0	0	0	0	0	0	0	0	0	0	0

		FY 2021-22 (For Six Months)											
(MW) S.No.	Particulars	April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
1	Peak Period												
	a) Morning												
	b) Afternoon												
	c) Evening												
	d) Night												
2	Maximum Peak Demand												
	a) Restricted	6860	8185	13359	13431	13215	12002						
	b) Unrestricted	6860	8185	13359	13431	13215	12002						
3	Peak Availability Assessed												
4	Shortfall in meeting Peak Demand												
	a) Restricted	0	0	0	0	0	0						
	b) Unrestricted	0	0	0	0	0	0						

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FY 2021-22

(MW)	S.No.	Particulars	April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
1	1	Peak Period												
		a) Morning												
		b) Afternoon												
		c) Evening												
		d) Night												
2		Maximum Peak Demand												
		a) Restricted												
		b) Unrestricted												
3		Peak Availability Assessed												
4		Shortfall in meeting Peak Demand												
		a) Restricted												
		b) Unrestricted												

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Note :  
Details of Peak Demand and Load Rostering may be provided along with this format i.e. in terms of MW, MU and number of hours per day.

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**Month-wise Off Peak Demand  
FY 2020-21 (Actuals)**

(MW) S.No.	Particulars	April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
1	Peak Period												
	a) Morning												
	b) Afternoon												
	c) Evening												
	d) Night												
2	Maximum Peak Demand												
	a) Restricted	1898	3247	4051	4758	3779	4148	2807	2689	2416	2814	2821	1375
	b) Unrestricted	1898	3247	4051	4758	3779	4148	2807	2689	2416	2814	2821	1375
3	Peak Availability Assessed												
4	Shortfall in meeting Peak Demand												
	a) Restricted	0	0	0	0	0	0	0	0	0	0	0	0
	b) Unrestricted	0	0	0	0	0	0	0	0	0	0	0	0

Note : Details of Peak Demand and Load Rostering may be provided along with this format i.e. in terms of MW, MU and number of hours per day.

**FY 2021-22+C48 (For Six Months)**

(MW) S.No.	Particulars	April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
1	Peak Period												
	a) Morning												
	b) Afternoon												
	c) Evening												
	d) Night												
2	Maximum Peak Demand												
	a) Restricted	1317	2314	4586	2514	5717	6743						
	b) Unrestricted	1317	2314	4586	2514	5717	6743						
3	Peak Availability Assessed												
4	Shortfall in meeting Peak Demand												
	a) Restricted	0	0	0	0	0	0	0	0	0	0	0	0
	b) Unrestricted	0	0	0	0	0	0	0	0	0	0	0	0

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FY 2022-23

(M/W)	S.No.	Particulars	April III	May IV	June V	July VI	August VII	September VIII	October IX	November X	December XI	January XII	February XIII	March XIV
	1	Peak Period												
		a) Morning												
		b) Afternoon												
		c) Evening												
		d) Night												
	2	Maximum Peak Demand												
		a) Restricted												
		b) Unrestricted												
	3	Peak Availability Assessed												
	4	Shortfall in meeting Peak Demand												
		a) Restricted												
		b) Unrestricted												

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Form T44

Income Tax Provisions

(Rs. crore)

S. No.	Particulars	Previous Year	Current year	Control
		Actual	Estimated	Projection
I	II	III	IV	V
1	Provision made/Proposed for the Year	-	-	-
2	Details as per Return filed for the Year	-	-	-
3	As Assessed for the Year	-	-	-
4	Credit/Debit of Assessment Year (Give Details)	-	-	-
	<b>Total</b>	-	-	-

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Form T45

Sr.No.	Months	Transmission Availability (%)		
		FY 2020-21	FY 2021-22	Control Period
		Actual	Estimated	Projection
I	II	III	IV	V
1	April	99.8843%	99.6328%	99.0000%
2	May	99.4672%	99.6729%	99.0000%
3	June	99.8743%	99.8274%	99.0000%
4	July	99.8284%	99.9070%	99.0000%
5	August	99.9342%	99.9360%	99.0000%
6	September	99.9568%	99.8874%	99.0000%
7	October	99.9546%	99.0000%	99.0000%
8	November	99.7799%	99.0000%	99.0000%
9	December	99.7814%	99.0000%	99.0000%
10	January	99.9212%	99.0000%	99.0000%
11	February	99.8569%	99.0000%	99.0000%
12	March	99.7396%	99.0000%	99.0000%

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