

Commission's Analysis:

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

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

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

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

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

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

Accordingly, Inflation factor= $1 + 0.1270 = 1.1270$

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

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

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

(Rs. Crore)

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

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

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

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

(Rs. Crore)

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

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

(Rs. Crore)

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

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

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

3.7 Depreciation Charges

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

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

PSTCL's Submission:

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

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

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

Table 104: Depreciation claimed by PSTCL for New Schemes of FY 2021-22**(Rs. Crore)**

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

Table 105: Total Depreciation claimed by PSTCL for FY 2021-22**(Rs. Crore)**

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

Table 106: Depreciation claimed by PSTCL for Spillover Schemes of FY 2022-23**(Rs. Crore)**

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

Table 107: Depreciation claimed by PSTCL for New Schemes of FY 2022-23**(Rs. Crore)**

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

Table 108: Total Depreciation claimed by PSTCL for FY 2022-23**(Rs. Crore)**

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

Commission's Analysis:**3.7.4** Regulation 21 of the PSERC MYT Regulations, 2019 specifies as under:

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

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

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

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

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

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

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

21.4. The Generating Company, Transmission and Distribution Licensee shall provide the list of assets added during each Year of the Control Period and the list of assets completing 90% of depreciation in the Year along with Petition for Annual Performance Review, true-up and tariff determination for ensuing Year.

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

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

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

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

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

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

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

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

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

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

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

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

3.8 Interest and Finance Charges

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

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

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

PSTCL's Submission:

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

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

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

Table 113: Interest on Loan capital for New Schemes as submitted by PSTCL for FY 2021-22**(Rs. Crore)**

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

Table 114: Total Interest on Loan capital as submitted by PSTCL for FY 2021-22**(Rs. Crore)**

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

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

(Rs. Crore)

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

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

(Rs. Crore)

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

Table 117: Total Interest on Loan capital as submitted by PSTCL for FY 2022-23**(Rs. Crore)**

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

Commission's Analysis:

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

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

24.2. Interest and finance charges on the future loan capital for new investments shall be computed on the loans, based on one (1) year State Bank of India (SBI) MCLR/ any replacement there of as notified by RBI as may be applicable as on 1st April of the relevant year, plus a margin determined on the basis of current actual rate of interest of the capital expenditure loan taken by the Generating Company, Licensee or SLDC and prevailing SBIMCLR.

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

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

24.5. The interest on excess equity treated as loan shall be serviced at the

weighted average interest rate of actual loan taken from the lenders.

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

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

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

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

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

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

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

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

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

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

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

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

(Rs. Crore)

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

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

(Rs. Crore)

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

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

(Rs. Crore)

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

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

(Rs. Crore)

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

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

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

Interest on GPF Fund:

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

Finance and Guarantee charges:

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

Capitalization of Interest Charges

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

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

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

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

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

(Rs. Crore)			
Sr. No	Particulars	FY 2021-22	FY 2022-23
1.	Interest charges	1.27	2.58

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

3.9 Interest on Working Capital

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

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

PSTCL's Submission:

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

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

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

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

(Rs. Crore)

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

Commission's Analysis:

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

“51.1. Components of Working Capital

The Working Capital shall cover the following:

(a) O&M Expenses for 1month;

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

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

51.2. Rate of Interest

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

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

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

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

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

3.10 Return on Equity

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

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

PSTCL's Submission:

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

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

(Rs. Crore)

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

Commission's Analysis:

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

“20. Return on equity

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

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

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

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

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

(Rs. Crore)

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

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

3.11 Unified Load Dispatch & Communication (ULDC) Charges

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

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

3.12 Non-Tariff Income

PSTCL's Submission:

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

Commission's Analysis:

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

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

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

(Rs. Crore)				
Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Non-Tariff Income	35.58	0.35	35.93

3.13 Income from Open Access Customers

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

3.14 Annual Revenue Requirement

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

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

(Rs. Crore)

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

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

(Rs. Crore)

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

(Rs. Crore)

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

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

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

(Rs. Crore)

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

3.14.3 The summary of the Annual Revenue Requirement for Transmission Business, SLDC Business and overall business of PSTCL for FY 2022-23 is shown in the following tables:

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

(Rs. Crore)

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

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

(Rs. Crore)

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

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

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

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

3.15 Carrying Cost on Revenue Gap

3.15.1 True up of FY 2020-21

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

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

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

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

3.15.2 Impact of Review Petition No. 3 of 2021

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

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

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