

Petition for Aggregate Revenue Requirement (ARR)

&

Determination of Tariff

For

FY 2012-13

Main Text and Formats

Submitted to

Punjab State Electricity Regulatory Commission

Chandigarh

By

PUNJAB STATE TRANSMISSION CORPORATION LIMITED (PSTCL)

Regd. Office: PSEB H.O.

The Mall, Patiala

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**BEFORE THE HON'BLE PUNJAB STATE ELECTRICITY REGULATORY
COMMISSION, CHANDIGARH**

Filing No.....

Case No.....

IN THE MATTER OF: Petition for approval of the “**Aggregate Revenue Requirement (ARR) & Determination of Tariff**” for FY 2012-13 under Section 62, 64 and 86 of the Electricity Act, 2003 read with the Regulation 13 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 and other applicable relevant regulations (including its amendments) and guidelines of the Hon’ble Commission for the Electricity business of Punjab State Transmission Corporation Limited (PSTCL) and Punjab State Load Despatch Centre (Punjab SLDC).

AND

IN THE MATTER OF: **Punjab State Transmission Corporation Limited (PSTCL)**
Regd. Office: PSEB H.O. The Mall, Patiala

The Applicant respectfully submits as under: -

1 BACKGROUND AND BRIEF HISTORY

1.1 Background

1.1.1 The Punjab State Transmission Corporation Limited (hereinafter referred to as PSTCL) is one of the Successor entities of erstwhile Punjab State Electricity Board (PSEB) which has been constituted under Companies Act, 1956 on April 16, 2010

after restructuring of PSEB by Government of Punjab vide its Notification No. 1/9/08-EB(PR)/196 (also known as Transfer Scheme) dated April 16, 2010.

1.1.2 PSTCL is engaged in the business of electricity transmission in the State of Punjab.

1.1.3 In accordance with the Notification no. 1/9/08-EB (PR)/196 dated 16.4.2010, the Government of Punjab had, in exercise of its powers under section 131, 132, 133 and other applicable provisions of the Electricity Act, 2003 notified the Punjab Power Sector Reforms Transfer Scheme, 2010. (Transfer Scheme)

1.1.4 The relevant features of Transfer Scheme are given hereunder:

“Powercom” means the limited company incorporated under companies Act, 1956 with the principle objective of engaging in the business of Generation, Trading and Distribution of power in the State but excluding Transmission, State Load Dispatch and State Transmission Utility functions.

“Transco” means the limited company to be incorporated under the companies Act 1956, with the principle objective of engaging in the business of Transmission of power (including State Load Dispatch and State Transmission Utility functions) in the State.

“Transmission Undertaking” means the undertaking as the State Government may classify as transmission undertaking in terms of clause 4 of the scheme which shall also include the functions and assets and liabilities pertaining to State Load Dispatch and State Transmission Utility.

3. Transfer of assets and liability –

(1) on and from the effective date of transfer, all assets, properties, interest in properties rights and liability of the Board and including all obligation and contingencies shall stand transferred to and vest in and under the control of the State Government absolutely at book value and all claims of the Board against the State Government and all claims of State Government against the board shall stand extinguished and cancelled, and the above consideration shall be in full and final settlement of all the Board.

(2) Nothing in sub-rule (1) shall apply to rights, responsibilities, liabilities and obligations in respect of the personnel and matters relating thereto including statutory dues such as salary, wages, gratuity, pension, provident fund, compensation and retirement benefits and the same shall be dealt in the manner provided under clause 6 of these Scheme.

5. Transfer of function and undertaking –

(1) on and from the effective date of transfer, the Transmission functions of the Board along with the Transmission undertaking inclusive of all assets, liabilities, interests, right and obligations forming party of the Transmission functions and undertakings as the State Government may specify shall stand re-vested in the Transco for all intent and purpose without further act deed or thing to be done by the Board, the State Government or Transco or any other person and the Transmission functions and the functions of State Load dispatch and State Transmission Utility shall be discharge by the Transco from the above date but subject to the terms and condition of the scheme.

(2) All the reaming functions of Board including Generation, Trading and Distribution functions excluding the Transmission Undertaking shall re-vested in and shall be discharged by the Powercom.

(6) Transfer of Personnel –

(7) subject to sub- clause(a), in respect of all statutory and other schemes and employment related matters including the provident fund, gratuity fund, pension leave encashment and any other Superannuation fund or any other special fund created or existing for the benefit of the personnel, the Powercom shall stand substituted for the Board for all purpose and all the rights, powers and obligations of the board in relation to any and all such matters shall become those of the Powercom and the services of the personnel shall be treated as having continuous for the purpose of the application of the rule.”

- 1.1.5 Government of Punjab, Department of Power vide Notification No. 1/9/08-EB(PR)/196 dated 16.4.2010 issued the Punjab Power Sector Reforms Transfer Scheme, 2010 and have notified Punjab State Transmission Corporation Ltd. (PSTCL) as the State Transmission Utility (STU) and have vested the State Load Despatch functions with PSTCL till further orders of the State Government from the date of transfer.
- 1.1.6 As per the Transfer Scheme, the erstwhile PSEB has been reorganised and unbundled into two Corporate Entities, i.e., POWERCOM and TRANSCO. The POWERCOM and the TRANSCO have been named as Punjab State Power Corporation Limited (PSPCL) and Punjab State Transmission Corporation limited (PSTCL) respectively. PSTCL is engaged in the business of Transmission of Electricity in the State of Punjab. PSTCL is also discharging the statutory functions of the SLDC in the State of Punjab.
- 1.1.7 In terms of the Transfer Scheme notification dated 16.4.2010, the Government of Punjab had assigned the following Assets and Liabilities (as on 31.03.2009) to PSTCL on a Provisional basis:

S. No	Particulars	Amount (Rs. Crore)
1	Gross Block	3315.13
	Less: Accumulated Depreciation	831.59
	Net Fixed Assets	2483.54
2	Capital Expenditure in Progress	247.54
3	Assets not in use	0.69
4	Deferred Cost	0.6
5	Intangible Assets	0
6	Investments	0
	Net Current Assets	
7	Total Current Assets	59
	Less: Current Liability	
8	Consumer Security Deposit	0
9	Other Current Liability	0
	Total Current Liability	0
	Net Current Assets	59
10	Subsidy receivable from the Government	0

S. No	Particulars	Amount (Rs. Crore)
	Net Assets	2791.37
	Financed by	
1	Borrowed for Working Capital	479.28
2	Payment due on Capital Liability	93.98
3	Capital Liability	626.62
4	Funds from State Government	
	Equity	1548.9
	Loans	42.57
	(Other) RBI Bonds	0
5	Reserve and Reserve Funds	0
	Total Funds	2791.35

1.1.8 Status of Provisional Balance Sheet:

- a. According to Rule 9 (1) of Transfer Scheme, 2010, the transfer of assets and liabilities under the scheme is Provisional and will be made final upon the expiry of 12 months from the effective date of transfer or 6 months after the Audited Accounts as on the effective date of transfer are available, whichever is later.
- b. As on the date of filing of this petition, the Government of Punjab has not vested the final assets and liabilities to successor utilities
- c. In the absence of availability of opening balances based on the final Notification of Government of Punjab, as per transfer scheme, PSTCL has considered the following for preparation of ARR and Tariff Petition.
 - i. The Opening GFA (Gross Fixed Assets) of Rs 2040 Crore, as on 1 April 2009, has been considered from the audited books of accounts of PSEB for the transmission business including SLDC. It is also relevant to mention here that the same GFA of Rs 2040 Crore had been approved by Hon'ble Commission in last tariff Order for FY 2010-11 for the transmission business of PSEB.
 - ii. For the Purpose of Return on Equity, Equity Capital of Rs. 328.50 Crore has been derived by grossing up the Return on Equity of Rs 45.99 Crore with the allowed ROE rate of 14% in tariff order of FY 2010-11 for the transmission business.
 - iii. Long Term Loan as on April 16, 2010 to the tune of Rs 887.07 Crore from different agencies like LIC (Life Insurance Corporation of India), OBC

(Oriental Bank of Commerce) and REC (Rural Electrification Corporation Limited) availed by erstwhile PSEB have been considered as the long term loan of PSTCL.

- iv. Except as mentioned above in point iii, PSTCL has not considered opening balances of loan/working capital loan figures as mentioned in transfer scheme in this ARR and tariff petition.
- v. The revenue from open access is only from consumer using the transmission system of PSTCL. All the customers seeking open access to PSTCL Transmission System are classified under two categories i.e. long term open access customers and short term open access customers.
- vi. In the event, the Government of Punjab issues the final Notification for transfer of assets and liabilities to the successor Utilities under rule 9(1) of Punjab Power Sector Reforms Transfer Scheme, 2010, during the pendency of this petition, PSTCL shall submit revised figures of the ARR and tariff for consideration of the Hon'ble Commission.

1.1.9 In accordance with Regulation 13 of the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005, PSTCL is filing the Petition for Review of the financials for the FY 2011-12 and the approval of the Aggregate Revenue Requirement (ARR) and Tariff Determination for the FY 2012-13 for Transmission and SLDC Business of PSTCL.

1.2 Tariff Filing for FY 2011-12

1.2.1 On 30.11.2010, the PSTCL filed a Petition bearing Petition No. 45 of 2010 before the Hon'ble Commission for approval of Aggregate Revenue Requirements and determination of Tariff for financial year 2011-12 for the transmission and State Load Dispatch functions. PSTCL had also filed the revised estimates of the costs/expenses and revenue pertaining to the transmission function for the previous financial year 2010-11 (including SLDC function) for review.

1.2.2 PSTCL had submitted its Aggregate Revenue Requirement based on the provisional figures from 16.4.2010 to 30.9.2010, estimates for October 2010 to March 2011 and projections for 2011-12. PSTCL subsequently submitted additional revenue requirement of Rs.9.50 Crore towards ULDC charges. In the absence of the opening

Balance Sheet, the above was based on the assumptions as discussed earlier in this section.

1.2.3 By the Order dated 09.05.2011, the Hon'ble Commission had decided the following:

- i) Review of Annual Revenue Requirements of Transmission and State Load Dispatch activities for financial year 2010-11 approved by the Hon'ble Commission;
- ii) Annual Revenue Requirements and Transmission Charges for the Appellant for financial year 2011-12; and
- iii) Annual Revenue Requirement and SLDC Charges for Financial Year 2011-12.

1.2.4 Aggrieved by certain aspects of the Order dated 09.05.2011, PSTCL filed an appeal before the Hon'ble Appellate Tribunal for Electricity. The Hon'ble Tribunal has heard the appeal and reserved its judgement. PSTCL crave reference to the records of the case including the Memorandum of Appeal and the written submissions filed before the Hon'ble Tribunal during the course of the proceedings before the Hon'ble Commission.

1.2.5 In any event, it is submitted that every tariff year is a fresh proceedings and PSTCL crave reference to the submissions on the issues which arise in the present petition.

1.3 The Summary of the ARR filed for Transmission and SLDC Business

Table 1: ARR for FY 2011-12 and FY 2012-13 (Rs Crore)

S. No	Particulars	Transmission Business				SLDC Business			
		FY 2011-12			FY 2012-13	FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected	Last Year Petition	Order	Estimated	Projected
1	Employee costs	268.31	162.82	259.32	310.00	4.54	3.32	7.74	8.89
2	R&M expenses	97.15	55.89	61.22	120.12	4.86	0.17	2.24	3.19
3	A&G expenses	21.44	11.17	23.69	74.89	5.42	0.03	0.84	1.40
4	Depreciation	151.80	115.80	132.80	193.41	0.67	0.37	0.36	1.07
5	Interest	138.04	70.72	158.80	251.58	0.33	0.00	0.14	1.34

S. No	Particulars	Transmission Business				SLDC Business			
		FY 2011-12			FY 2012-13	FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected	Last Year Petition	Order	Estimated	Projected
	charges								
6	Interest on Working Capital	25.07	15.47	19.79	42.14	0.93	0.55	0.80	1.09
7	ULDC Charges					10.00	18.91	10.59	21.00
8	Return on Equity	77.14	45.99	89.09	110.01	0.00	0.00	0.11	1.08
9	Provision for bad debts & Other Debits	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
10	Total revenue requirement	778.95	477.86	744.72	1102.15	26.75	23.35	22.81	39.04
11	Less: Non Tariff Income	9.76	9.76	13.05	0.00	0.00	0.00	0.00	0.00
12	Incentive Scheme					0.00	0.00	0.00	0.05
13	Aggregate Revenue Requirement	769.19	468.10	731.67	1102.15	26.75	23.35	22.81	39.09
14	Revenue Gap Carry forward	54.89	0.00	0.00	250.66	0.00	0.00	0.00	0.00
15	Cumulative Revenue Requirement	824.08	468.10	731.67	1352.82	26.75	23.35	22.81	39.09
16	Revenue from Tariff & OA Charges			481.01			23.36	34.37	39.09
17	Revenue Gap	0.00	0.00	250.66		0.00	0.00	-11.56	0.00

Summary of ARR for FY 2011-12 and FY 2012-13 for SLDC and Transmission business
(Rs Crore)

S. No	Particulars	Transmission & SLDC Business			
		FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected
1	Employee costs	272.85	166.14	267.06	318.88
2	R&M expenses	102.01	56.06	63.46	123.31
3	A&G expenses	26.86	11.20	24.52	76.29
4	Depreciation	152.47	116.17	133.16	194.48
5	Interest charges	138.37	70.72	158.94	252.92
6	Interest on Working Capital	26.00	16.02	20.59	43.22
7	ULDC Charges	10.00	18.91	10.59	21.00
8	Return on Equity	77.14	45.99	89.20	111.09
9	Provision for bad debts & Other Debits	0.00	0.00	0.01	0.00
10	Total revenue requirement	805.70	501.21	767.54	1141.19
11	Less: Non Tariff Income	9.76	9.76	13.05	0.00
12	Incentive Scheme	0.00	0.00	0.00	0.05
13	Aggregate Revenue Requirement	795.94	491.45	754.49	1141.24
14	Revenue Gap Carry forward	54.89	0.00	0.00	250.66
15	Cumulative Revenue Requirement	850.83	491.45	754.49	1391.90
16	Revenue from Tariff & OA Charges	0.00	23.36	515.38	
17	Revenue Gap	0.00	0.00	250.66	

1.4 Transmission System Capacity

1.4.1 As per Regulation 38 - "Transmission Tariff" of PSERC (Terms and Condition for Determination of Tariff) Regulation, 2005, PSTCL tariff shall be based on the Zonal Postage Stamp Method and shall be worked on the basis of available transmission capacity and would reflect cost of capital investment and operation and maintenance of the Transmission system to transfer bulk power. For the purpose of calculation of Transmission charges per MW, the Hon'ble Commission has prescribed average capacity to be used as denominator,

"Average Capacity means the average capacity in MW which can be served by the transmission system of the transmission licensee, which shall be the sum of the

generating capacities connected to the transmission system and contracted capacity of other long term transaction handled by the system of the transmission license”.

- 1.4.2 The Hon’ble Commission has approved a total Transmission capacity of 7990.18 MW in the tariff order for FY 2011-12 based on the gross sum of the generation capacities connected to the transmission network handled by the PSTCL.
- 1.4.3 Taking the above as the base figure, the PSTCL has projected a total transmission capacity of 10082 MW after considering the central sector projects (long term) which are expected to be declared for commercial operation during the year 2012-13.
- 1.4.4 PSTCL has derived the generation capacity of the State transmission system by adding all the generation capacity as prescribed by Hon’ble Commission as under:

Table 2: Generating Capacity (in MW)

Generating Stations	MW
Thermal	
GNDTP, (unit #1 to 4), Bhatinda	440.00
GGSSTP, Ropar	1260.00
GHTP, Lehra Mohabbat (Unit #1 & #2)(Stage-I)	420.00
Talwandi Sabo, TPP	1227.60
Mundra, Ultra Mega Project	455.00
GHTP, Lehra Mohabbat (Unit #3 & #4)(Stage-II)	500.00
Total Thermal	4302.60
Hydel	
Shanan HEP, Jodinder nagar	110.00
UBDC-I HEP, Malikpur	45.00
UBDC-II HEP, Malikpur	46.35
RanjitSagarHep, Shahpurkandi	600.00
ASHP, Anandpur Sahib	134.00
Mukerian HEP, Talwara	207.00
Micro HEPs	5.60
Total Hydel	1147.95
Renewable Energy	
PEDA Projects	11.55
Other NRSE projects	68.95
Total Renewable Energy	80.50

Generating Stations	MW
Total Joint Venture	0.00
Central Stations (PSPCL Share only)	80.50
NTPC (TPPs)	
Singrauli	200.00
Rihand - I	110.00
Rihand - II	102.00
Rihand - III	67.00
Anta (G)	49.00
Auraiya (G)	83.00
Dadri (G)	132.00
Unchahar - I	36.00
Unchahar - II	60.00
Unchahar - III	17.00
Farakha	22.00
Kahalgaon - I	51.00
Kahalgaon - II	120.00
Bokaro, TPS	200.00
Raghunathpura, TPP	300.00
Total NTPC	1549.00
NHPC (HEPs)	
Bairasul	84.00
Salal	184.00
Tanakpur	17.00
Chamera -I	55.00
Chamera -II	30.00
Uri	66.00
Dhauliganga	28.00
Dulhasti	32.00
SEWA - II	7.00
Parbati - III	80.00
Chamera - III	23.00
Uri - II	39.00
Total NHPC	645.00
Udupi TPP (UPCL)	102.00
Pragati - III Power Project Bawana	137.00
Durgapur (DVC)	200.00
Nathpa Jhakri (SJVN)	152.00

Generating Stations	MW
Tehri (THDC)	77.00
Koteshwar (THDC)	25.50
Malana - II (TPC)	100.00
NPCIL	
NAPP	51.00
RAPP #3	50.00
RAPP #4	50.00
RAPP-C #5	23.00
RAPP-C #6	23.00
Total Nuclear	197.00
Tala (Located in Bhutan)	29.40
Common Pool Stations	
Bhakra HEP	684.00
Dehar HEP	475.00
Pong HEP	99.00
Total	1258.00
Grand Total	10082.05

It is submitted that the Hon'ble Commission may adopt the above capacity of 10082.05 MW for the financial year 2012-13.

2 BRIEF NOTE ON ARR AND TARIFF PETITION FOR FY 2012-13

2.1 Regulatory Framework

2.1.1 PSTCL has considered Norms as specified by Central Electricity Regulatory Commission in CERC Tariff Regulations, 2009 against those heads where no clear treatment has been given in the Tariff Regulations, 2005 of the Hon'ble Commission, for the purpose of this Petition.

2.2 Summary of Assumptions

2.2.1 PSTCL has premised its tariff petition while projecting its revenue requirements on the following:

a) The provisional figures of FY 2010-11 have been considered for creation of baseline data against various heads.

- b) The relevant Judgements of Hon'ble Appellate Tribunal has been referred to while projection of some of the heads.
- c) After levying of Cross-subsidy Surcharge, the number of Open Access Consumers will decrease.
- d) Escalation Factors have been considered for projecting certain expenses on a realistic basis.

2.3 Final Truing-up of FY 2010-11

- 2.3.1 Clause-9 (2) of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 states as under:

"9. REVIEW AND TRUING UP

...

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

- 2.3.2 PSTCL submits that the Truing-up exercise may be undertaken only on the basis of Audited Accounts. Since the Audit of Accounts for FY 2010-11 are under process and will be finalised upon the notification of the opening balance sheet as on 16/04/2010 by the State Government, it is respectfully submitted that the Truing-up exercise may be undertaken by the Hon'ble Commission for the FY 2010-11 after the finalisation of Audited Accounts.
- 2.3.3 As regard to the revised estimates for FY 2011-12, PSTCL is submitting the actual expenses incurred on account of various heads in first half of FY 2011-12. PSTCL has further projected the expenses for various heads in second half of FY 2011-12 on the basis of past trends, activities that are envisaged to be taken up during the FY 2011-12.

2.3.4 PSTCL, while projecting expenses for FY 2011-12, has also referred to the Judgments given by Hon'ble Appellate Tribunal on various issues along with PSERC (Terms and Conditions for determination of Tariff) Regulations, 2005.

2.4 Projections for FY 2012-13

2.4.1 PSTCL has projected various expenses for FY 2012-13 on the basis of past trends and certain escalation factors.

2.4.2 PSTCL, while projecting expenses for FY 2012-13, has also referred to the Judgments given by Hon'ble Appellate Tribunal on various issues along with PSERC (Terms and Conditions for determination of Tariff) Regulations, 2005.

2.4.3 It is submitted that PSTCL is a newly formed entity which has started working from 16/4/2010 pursuant to the Transfer Scheme of the State Government. PSTCL also discharges the statutory function of the SLDC for the State of Punjab. PSTCL is required to discharge its duties and responsibilities as required under the Electricity Act, 2003, the Licence conditions, Grid Code and the Rules framed under the Act in addition to complying with Companies Act, and other applicable laws. Further, PSTCL has a different organisation structure which is required for a company form of business with different areas in Finance, Accounts, HR, Administration and Legal in addition to the technical disciplines. All of the above are very different from the activities as discharged by the erstwhile PSEB as an integrated utility. In the circumstances, it is respectfully submitted that the principles adopted for the approval of ARR and Tariff of the erstwhile PSEB ought not to be made applicable to PSTCL. PSTCL therefore requests the Hon'ble Commission to consider the fact that it (PSTCL) is at a nascent stage, while undertaking the exercise of Review of FY 2011-12 and determining the ARR and Tariff for FY 2012-13.

3 RELEVANT EXTRACTS FROM JUDGMENTS OF HON'BLE APPELLATE TRIBUNAL OF ELECTICITY ON VARIOUS ISSUES

The procedures laid down by the Hon'ble Appellate Tribunal on different aspects are as under:

3.1 Prudence Check to be carried out by Hon'ble Commission

3.1.1 Hon'ble Appellate Tribunal's Judgment dated 06.10.2009 passed in Appeal No. 36 of 2008 BSES Rajdhani Power Limited versus Delhi Electricity Regulatory Commission reported in 2009 ELR (APTEL) 880). Relevant extracts are quoted herein below:

"116 Before parting with the judgment we have to remind the Commission of the observation in our judgment in Appeal No. 265 of 2006, 266 of 2006 and 267 of 2006 in the case of North Delhi Power Limited Vs. Delhi Electricity Regulatory Commission in which we said the following:

*"60. Before parting with the judgment we are constrained to remark that the Commission has not properly understood the concept of truing up. While considering the Tariff Petition of the utility the Commission has to reasonably anticipate the revenue requested by a particular utility and such assessment should be based on practical considerations. The truing up exercise is meant (sic) to fill the gap between the actual expenses at the end of the year and the anticipated expenses at the beginning of the year. **When the utility gives its own statement of anticipated expenditure, the Commission has to accept the same except where the Commission has reason to differ with the statement of the utility and records reasons thereof of where the Commission is able to suggest some method of reducing the anticipated expenditure. This process of "restructuring the claim of the utility by not allowing the reasonably anticipated expenditure and offering to do the needful in the truing up exercise is not prudence***

*117. All projection and assessments have to be made as accurately as possible. Truing up is an exercise that is necessarily to be done as no projection can be so accurate as to equal the real situation. Simply because the truing up exercise will be may on some day in future the Commission cannot take a casual approach in making its projections. **We do appreciate that the Commission intends to keep the burden on the consumer as low as possible. At the same time one has to remember that the burden of the consumer is not ultimately reduced by under estimating the cost today and truing it up in future as such method also burdens the consumer with carrying cost.**" (Emphasis supplied).*

3.2 Employee Expenses

3.2.1 Hon'ble Appellate Tribunal's decision in Appeal No. 109 of 2007: MSEDCL v/s MERC: The Hon'ble Appellate Tribunal vide its Order dated December 17, 2008 ruled that the Employee Expenses should be approved by the Hon'ble Commission on the basis of actual figures submitted by Licensee rather than normative basis. The relevant extracts from the Judgement are given as under:

“Accordingly, we set aside the impugned order passed by the State Commission in respect of Employee Expenses and A&G expenses for the year 2005-06 with the direction to the Commission to approve the said expenses in totality as submitted by the Appellant, as the same being based on actuals.”(Emphasis supplied)

3.3 Administration & General Expenses (A & G Expenses)

3.3.1 Hon'ble Appellate Tribunal's Ruling in Appeal No. 109 of 2007: MSEDCL v/s MERC dated 17.12.2008

“Accordingly, we set aside the impugned order passed by the State Commission in respect of Employee Expenses and A&G expenses for the year 2005-06 with the direction to the Commission to approve the said expenses in totality as submitted by the Appellant, as the same being based on actuals.”(Emphasis supplied)

3.4 Operation & Maintenance Expenses (O & M Expenses)

3.4.1 Appellate Tribunal's Ruling in Appeal No. 26 of 2008- IPGCL v/s DERC dated 7.4.2011:

“Accordingly, we direct to give effect to the appropriate escalation in the base year expenses based on actual/audited expenditure and increase due to 6 Pay Commission Report at the earliest..” (Emphasis supplied)

3.5 Depreciation

3.5.1 Hon'ble Appellate Tribunal's Ruling in Appeal No. 137 of 2008- TPC v/s MERC dated 15.7.2009:

“In view of the provisions of the Tariff Regulations the Companies Act and the Accounting Standard-6, we find full justification and rationale in the contention of

the appellant that proportionate depreciation has to be allowed even for part of the year when the assets have been put to use. The asset once put to use will be exposed to wear and tear which will not wait to depreciate till the start of the new financial year. We, therefore, allow the appeal in this view of the matter also.”

4 REVISED ESTIMATES FOR FY 2011-12 AND PROJECTIONS FOR FY 2012-13- TRANSMISSION BUSINESS

4.1 Transmission System Availability

4.1.1 Clause-7.3 (1) of Tariff Policy states as under:

“7.3 Other issues in Transmission

1. *Financial incentives and disincentives should be implemented for the CTU and the STU around the key performance indicators (KPI) for these organisations. Such KPIs would include efficient network construction, system availability and loss reduction.*

...”

4.1.2 The issue of Transmission System Availability has not been discussed in PSERC Tariff Regulations, 2005.

4.1.3 PSTCL has put its best efforts to maintain the Transmission System Availability above 99% in FY 2010-11 so as to enable the optimum utilization of Transmission Assets in the State of Punjab. The quarter-wise actual Transmission System Availability during FY 2010-11 is tabulated as under:

Table 3: Transmission System Availability during FY 2010-11 (In Percentage)

S. No	Particulars	FY 2010-11 (Availability during Previous Year)			
		Apr –Jun	July-Sep	Oct.-Dec	Jan-Mar
1	220 kV	99.91	99.91	99.88	99.64
2	132 kV	99.84	99.57	99.91	99.82

4.1.4 The actual Transmission System Availability during FY 2011-12 (April to November) is tabulated as under:

Table 4: Transmission System Availability during FY 2011-12 (In Percentage)

S. No	Particulars	FY 2011-12 (Availability during Current Year)		
		Apr –Jun	July-Sep	Oct.-Nov
1	220 kV	99.86	99.9	99.84
2	132 kV	99.50	99.84	99.60

4.1.5 PSTCL requests the Hon’ble Commission to appropriately incentivise the performance of PSTCL in terms of Transmission System Availability in accordance with Clause-7.3 of National Tariff Policy as mentioned above.

4.2 Transmission Losses

4.2.1 As regards Transmission Losses in FY 2010-11 and FY 2011-12, the Hon’ble Commission in last Tariff Order considered Transmission Loss of 2.5% on the basis of comparative data of other three Utilities, i.e. Haryana Vidyut Prasaran Nigam Limited (HVPNL) operating in Haryana, West Bengal State Transmission Corporation Limited (WBSETCL) operating in West Bengal and Chhattisgarh State Power Transmission Corporation Limited (CSPTCL) operating in Chhattisgarh. The Hon’ble Commission also ruled that it will revisit the Transmission Losses for PSTCL while undertaking the review of FY 2011-12.

4.2.2 PSTCL issued RFP No. SLDC/115/2011 for invitation of bids for undertaking the activity related to Intra-State Boundary metering. However, due to administrative reasons in the tendering process, the RFP was dropped and fresh RFP was issued. Accordingly, SLDC issued RFP No. SLDC/116/2011, i.e., Request for Proposal for Selection of System Integrator for Complete Implementation on Turnkey Basis & Comprehensive O&M Services, in respect of Intrastate Boundary Metering cum Transmission Level Energy Audit Scheme using ABT type and Conventional Energy Meters on October 24, 2011 and the tenders / proposals were scheduled to be opened on November 21, 2011, but on request of the firms now it will be opened on 07.12.2011. The project is expected to take off during FY 2011-12 and to be

completed in FY 2012-2013. However, PSTCL would like to submit that till the time proper interface metering is in place, it is difficult to measure the Transmission loss.

4.2.3 PSTCL submits that it has taken the necessary steps to install energy meters at various 220 kV and 132 kV substations.

4.2.4 PSTCL has compared the Transmission Losses considered by some State Electricity Regulatory Commissions in respective Tariff Orders which is tabulated as under:

Table 5: Transmission Loss approved for Other States

S. No	Particulars	Chhattisgarh	Maharashtra
1	Tariff Order Referred	Order dated March 31, 2011	Order dated Sep 10, 2010
2	Approved for FY	FY 2011-12	FY 2010-11
3	Transmission Loss	4.57%	4.85%*

*Normative Intra-State losses approved by the Commission based on CPRI study.

Table 6: Transmission Loss approved for Other States

S. No	Particulars	Punjab	Rajasthan
1	Tariff Order Referred	Order dated May 9, 2011	Order dated Nov 16, 2010
2	Approved for FY	FY 2011-12	2010-11
3	Transmission Loss	2.50%	4.40%

4.2.5 The above comparison shows that Transmission Loss of more than 4.50% has been approved by the Hon'ble State Electricity Regulatory Commissions of the respective States.

4.2.6 It may be noted that the Commission in its earlier Order has benchmarked the transmission loss of PSTCL with the Haryana Vidyut Prasaran Nigam Limited (HVPNL) Haryana (Commenced business in 1999) having Transmission Losses lesser than 4%, which is not comparable, as PSTCL is in its formative years of unbundling.

4.2.7 HVPNL in its initial years of operation submitted Transmission Loss of 10.98% and 10.31% in FY 1999 and FY 2000 respectively. Haryana Electricity Regulatory Commission in its Tariff Order dated November 26, 1999 ruled as under:

“It is the view of the Commission that there is no alternative to metering and only when all meters are installed, the transmission loss can be determined accurately.

...

The Commission considers the existing transmission loss to be significantly higher than the loss that should occur in a well performing transmission system. However, given the constraints faced by the licensee, the Commission decided to take the following view: for the period up to November 1999, the loss figure projected by HVPNL is accepted. However, the Commission would expect that an effort would be made to reduce the losses so that 0.5% loss can be reduced in December 99, 1% in January 2000, 1.5% in February 2000 and 2% by the end of March 2000. The annualised loss figure for FY 2000 would be 9.89%. This is calculated as follows: the average of 10.31% of loss for 8 months, 9.81% for one month, 9.31% for one month, 8.81% for one month and 8.31% for one month. The Commission would expect that the licensee would maintain at least 2% reduction from the current reported 10.31% level with effect from April 2000.” (Emphasis Supplied)

- 4.2.8 PSTCL has been incorporated as an entity on April 16, 2010 and it is comparable with Chhattisgarh State Power Transmission Company Limited (CSPTCL) which is acting as State Transmission Licensee in Chhattisgarh and became functional on January 1, 2009. Like PSTCL, CSPTCL is mainly handling 132 kV and 220 kV transmission system. Chhattisgarh State Electricity Regulatory Commission has followed CERC Tariff Regulations, 2009 to determine O&M Expenses for CSPTCL.
- 4.2.9 Further, Clause-7.2 of Tariff Policy envisages that the loss compensation should be based on system studies and should be reasonable and linked to applicable technical loss benchmarks. Clause-7.2 of Tariff Policy is reproduced as under:

“7.2 Approach to transmission loss allocation

1. *Transactions should be charged on the basis of average losses arrived at after appropriately considering the distance and directional sensitivity, as applicable to relevant voltage level, on the transmission system. Based on the methodology laid down by the CERC in this regard for inter- state transmission, the Forum of Regulators may evolve a similar approach for intra-state transmission.*

The loss framework should ensure that the loss compensation is reasonable and linked to applicable technical loss benchmarks. The benchmarks may be determined by the Appropriate Commission after considering advice of CEA.

It would be desirable to move to a system of loss compensation based on incremental losses as present deficiencies in transmission capacities are overcome through network expansion.

2. ***The Appropriate Commission may require necessary studies to be conducted to establish the allowable level of system loss for the network configuration, and the capital expenditure required to augment the transmission system and reduce system losses. Since additional flows above a level of line loading leads to significantly higher losses, CTU/ STU should ensure upgrading of transmission systems to avoid the situations of overloading. The Appropriate Commission should permit***

adequate capital investments in new assets for upgrading the transmission system.” (Emphasis supplied)

4.2.10 Hence, the Hon’ble Commission is requested to approve the transmission loss of 4.50% as comparable with the transmission loss of States such as Maharashtra and Chhattisgarh.

4.3 Transmission Capital Expenditure Plan

4.3.1 PSTCL is submitting a Comprehensive Transmission Plan (Investment Plan) to the Hon’ble Commission. This plan has the details of the works to be taken up and completed by PSTCL during the period FY2011-12 and FY 2012-13.

4.3.2 There are 2 nos. 400 kV transmission system projects for evacuation of power to be generated from Talwandi Sabo Thermal Power Project and Rajpura Thermal Power Project.

Talwandi Sabo Thermal Power Project:

4.3.3 In order to meet the growing load demand of power in the State of Punjab, Talwandi Sabo Power Project was envisaged with a capacity addition of 1980 MW (3X 660 MW). The power from this project is to be transferred within the state of Punjab and the Transmission system has accordingly been planned to cater to the major load growth centres in Punjab by formation of a 400 kV ring in the State.

4.3.4 The objective of the project is to provide adequate transmission arrangement to meet the dispersal of power from the bulk consumption points to major load centres with reliability and security, along with interconnections in Northern Regional grid.

4.3.5 The generation from Talwandi Sabo is likely to materialize during the end of XI plan. For evacuation of power from this generation project, 400 kV transmission lines have to be connected to major pockets of various load centres of Punjab viz. Dhuri, Nakodar, Makhu & Muktsar. Further, the transmission system is also to be integrated with Northern Regional system at Moga and Amritsar substation of POWERGRID for reliable operation of the power projects.

4.3.6 The cost of this transmission project is Rs. 1607.95 Crore. The work is being executed by PGCIL on cost plus basis.

4.3.7 The works covered under the project along with the respective targets are as under:-

a) Transmission Lines:

Sr. No.	Name of Line	Line length	Target
1.	400KV Talwandi Sabo-Nakodar DC Line	163 Km	Dec, 2011 upto Moga & balance Apr, 2012
2	LILLO of one ckt. of 400KV Talwandi Sabo-Nakodar line at Moga	9 Km	December 2011
3	400KV Talwandi Sabo-Mukatsar DC Line	107 Km	April 2012
4.	400 kV Talwandi Sabo-Dhuri line	86 Km	March., 2012
5.	400 kV Mukatsar-Makhu DC Line	95 Km	June, 2012
6.	400 kV Makhu-Amritsar DC Line	64 Km	June, 2012

b) Sub-Station

1	400/220 kV Mukatsar (New)	2x315 MVA
2	400/220 kV Makhu (New)	2x315 MVA
3	400/220 kV Nakodar (New)	2x315 MVA
4	400/220 kV Dhuri (New)	2x500 MVA
5	400 kV Amritsar (Extension)	
6	400 kV Moga (Extension)	

The completion of each substation will be linked with the generation schedule of generating power station and it is expected that all the 4 nos. 400 kV Sub Stations shall be commissioned during the year 2012-13.

4.3.8 Progress of works:

a. Financial Progress:

The payment of Rs.167 Crore has been made to PGCIL upto 31.3.2011 and during the current year payment to the tune of Rs.274 Crore has been made to PGCIL for the above

works. For the year 2011-12 the projected financial expenditure is Rs. 484 Crore and for the year 2012-13 the projected expenditure is Rs. 500 Crore. The project is tied up with REC for funding purpose.

b. Physical Progress:

- i. Transmission Lines: The orders for procurement & erection work have been placed. The work of survey for all the lines has been completed and work of stubbing and erection of towers is in progress.
- ii. Sub-Stations: The orders for procurement & erection work have been placed. The land for all the sub-stations has been acquired and civil works have been started.

Rajpura Thermal Power Project :

- 4.3.9 Rajpura Power Project was envisaged with a capacity addition of 1320 MW (2X 660 MW) to meet the growing load demand of power in the state of Punjab. The power from this project is to be transferred within the state of Punjab and the Transmission system has accordingly been planned to cater to the major load growth centres in Punjab by formation of a 400 kV ring in the State.
- 4.3.10 The objective of the project is to provide adequate transmission arrangement to meet the dispersal of power from the bulk consumption points to major load centres with reliability and security, along with interconnections in Northern Regional grid.
- 4.3.11 The generation from Rajpura is likely to come on stream during the FY 2013-14. For evacuation of power from this generation project, 400 KV transmission lines have to be connected to major pockets of various load centres of Punjab viz. Dhuri, Nakodar, Makhu & Rajpura.
- 4.3.12 The estimated cost of this transmission project is Rs.591.61 Crore. The work is to be executed by PSTCL with engineering consultancy from PGCIL; the order was placed on them on 20.8.2010. The works covered under the project is as under:-

a) Transmission Lines:

Sr.No.	Name of Line	Line length
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Sr.No.	Name of Line	Line length
1.	400KV Rajpura TPS – Nakodar DC Line	137 Km
2.	400KV Rajpura TPS-Rajpura S/S DC Line	11 Km
3.	400 KV Dhuri-Rajpura DC Line	81 Km
4.	400KV Makhu-Nakodar DC line	102 Km

b) Sub-Station

1	400/220KV Rajpura (New)	2x500 MVA
2	400/220KV Nakodar (Extension)	
3	400/220KV Dhuri (Extension)	
4	400/220KV Makhu (Extension)	

The sub-stations shall be commissioned during the year 2013-14 but the bays at Dhuri and Rajpura end shall be completed by December 2012 for giving start up power to the Thermal Plant authorities.

4.3.13 Progress of work:

a) Physical Progress:

- i. Transmission Lines: The tower packages for turnkey erection were placed on 30.6.2011 and the stubbing work on all the transmission lines has been started.
- ii. Sub-Station Works: The award of Sub-station & Transformer packages has been made and the work is expected to start very shortly.

b) Financial Progress:

The payment of Rs. 4.70 Crore has been made to PGCIL till date as 1st & 2nd installments of consultancy charges. For the year 2011-12 the projected financial expenditure is Rs. 110 Crore for transmission lines and for the year 2012-13 the total projected expenditure is Rs.265 Crore (Transmission Lines Rs. 200 Crore & Sub-Station Rs. 65 Crore). The project is tied up with REC for funding purpose.

4.3.14 Operation and Maintenance Expenses

4.3.15 Clause- 28 (3) of PSERC Tariff Regulations, 2005 States as under:

“28. Operation and Maintenance Expenses

...

1. *While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by CERC on the matter, as amended from time to time. However, in such determination, the Commission will keep in mind the fact that the CERC regulations mainly relate to inter-state transmission of higher quantum of energy and on extra high voltage over long distances, whereas, the transmission tariff to be determined by the Commission will be relating to intra-state transmission of lower quantum of energy at relatively lower voltages and over short distances.*

...”

4.3.16 Further Clause- 28 (4) of PSERC Tariff Regulations, 2005 States as under:

“28. Operation and Maintenance Expenses

...

4. *O&M expenses for distribution functions shall be determined by the Commission as follows:*
 - a. *O&M expenses as approved by the Commission for the year 2005-06 shall be considered as base O&M expenses for determination of O&M expenses for subsequent years;*
 - b. *Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price Index on April 1 of the relevant year;*
 - c. *In case of unbundling of the Board and formation of separate distribution companies, the Commission will make suitable*

assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.

...” (Emphasis Supplied)

4.3.17 In terms of the above, the Hon’ble Commission has incorporated by reference the provisions of the Tariff Regulations of the Central Commission as amended from time to time with regard to the O&M expenses to be allowed to PSTCL.

4.3.18 The norms for Operation and Maintenance Expenses as prescribed by Central Electricity Regulatory Commission (CERC) in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 are given below:

Table 7: Norms for Operation and Maintenance Expenses for Transmission System

Norms for O&M expenditure for Transmission System

	2009-10	2010-11	2011-12	2012-13	2013-14
Norms for sub-station (Rs Lakh per bay)					
765 kV	73.36	77.56	81.99	86.68	91.64
400 kV	52.40	55.40	58.57	61.92	65.46
220 kV	36.68	38.78	41.00	43.34	45.82
132 kV and below	26.20	27.70	29.28	30.96	32.73
Norms for AC and HVDC lines (Rs Lakh per km)					
Single Circuit (Bundled conductor with four or more sub-conductors)	0.537	0.568	0.600	0.635	0.671
Single Circuit (Twin & Triple Conductor)	0.358	0.378	0.400	0.423	0.447
Single Circuit (Single Conductor)	0.179	0.189	0.200	0.212	0.224
Double Circuit (Bundled conductor with four or more sub-conductors)	0.940	0.994	1.051	1.111	1.174
Double Circuit (Twin & Triple Conductor)	0.627	0.663	0.701	0.741	0.783
Double Circuit (Single Conductor)	0.269	0.284	0.301	0.318	0.336
Norm for HVDC Stations					
HVDC Back-to-back stations (Rs lakh per 500 MW)	443.00	468.00	495.00	523.00	553.00
Rihand-Dadri HVDC bipole scheme (Rs Lakh)	1450.00	1533.00	1621.00	1713.00	1811.00
Talcher-Kolar HVDC bipole scheme (Rs Lakh)	1699.00	1796.00	1899.00	2008.00	2122.00

4.3.19 The O & M Expenses of PSTCL in accordance with the O&M Norms for Transmission System as prescribed by the Central Commission in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 are tabulated as under:

Table 8: O & M Expenses of PSTCL in accordance with CERC Tariff Regulations, 2009

CERC Norms of S/s (Rs Lakh/Bay)	FY 2011-12	FY 2012-13
400 kV	58.570	61.920
220 kV	41.000	43.340
132 kV and below	29.280	30.960

No of Bays-PSTCL	FY 2011-12	FY 2012-13
	Estimated	Projected
400 kV	2	26
220 kV	422	494
132 kV and below	660	660

PSTCL O&M Expenditure Entitlement for Substation (Rs Crore)	FY 2011-12	FY 2012-13
	Estimated	Projected
400 kV	0.20	9.91
220 kV	173.02	209.77
132 kV and below	193.25	204.34
Total	366.46	424.01

CERC Norms of AC/HVDC lines (Rs Lakh per km)	FY 2011-12	FY 2012-13
Single Ckt (Single Conductor)	0.200	0.212
Double Ckt (Single Conductor)	0.301	0.318
Double Ckt (Twin Conductor)	0.701	0.741

Transmission Lines (Ckt Km)-PSTCL	FY 2011-12	FY 2012-13
Single Ckt (Single Conductor)*	4171	4312
Double Ckt (Single Conductor)*	4032	4838
Double Ckt (Twin Conductor)	216	1600

*Average Transmission line length during the year

PSTCL O&M Expenditure Entitlement for Transmission Lines (Rs Crore)	FY 2011-12	FY 2012-13
	Estimated	Projected
Single Ckt (Single Conductor)	8.34	9.14
Double Ckt (Single Conductor)	12.14	15.39
Double Ckt (Twin Conductor)	0.25	5.46
Total	20.73	29.99

Total O&M Expenditure Entitlement (Rs Crore)	FY 11-12	FY 12-13
	Estimated	Projected
O&M Expenditure entitlement for Substation	366.46	424.01
O&M Expenditure entitlement for AC/HVDC lines	20.73	29.99
Total	387.19	454.00

4.3.20 It may be noted also that PSTCL is maintaining 66 kV outgoing bays at its substation, However, PSTCL has not considered its financial implications for the purpose this comparison between entitlement as per CERC Norms and sub-head wise projection of O&M expenses.

4.4 O&M expenses consisting of Employees, R&M expenses and A&G expenses for the FY 2011-12 (H1), estimated 2011-12 (H2), and projected for FY 2012-13 are discussed as under:

4.4.1 Employee Expenses

4.4.2 The Hon'ble Commission in its last Tariff Order applied an average annual increase of 7.55% and 8.91% based on available WPI Indices in FY 2010-11 and FY 2011-12 respectively. The Commission approved employee expenses of Rs. 120 Crore (includes Terminal Benefits of Rs. 27.69 Crore and Penalty of Rs. 6.69 Crore) and Rs. 162.82 Crore (includes Terminal Benefits of Rs. 32.83 Crore and Arrears on

account of pay revision of Rs. 24.95 Crore) in FY 2010-11 and FY 2011-12 respectively.

4.4.3 Also for calculating the employee expenses in FY 2010-11 and FY 2011-12, the Hon'ble Commission considered the employee expenses approved in FY 2009-10 as the base which was determined on the basis of salaries prior to the 5th Pay Commission for the months April – October 2009. However, the revised salaries were payable only with effect from November 2009.

4.4.4 It is submitted that the Hon'ble Appellate Tribunal in its judgment dated December 17, 2008 in Appeal No. 109 of 2007 relating to employees cost has held that the same may be considered on the basis of actual figures submitted by Licensee rather than normative basis. The relevant extracts from the Order are given as under:

“Accordingly, we set aside the impugned order passed by the State Commission in respect of Employee Expenses and A&G expenses for the year 2005-06 with the direction to the Commission to approve the said expenses in totality as submitted by the Appellant, as the same being based on actuals.”

4.4.5 It is submitted that the employees cost are more in the nature of standard costs of the PSTCL and PSTCL does not retain much control over the same. PSTCL has taken all reasonable steps to ensure that the employees cost are not high.

4.4.6 In past period, the Hon'ble Commission has applied escalation factor on the basis of WPI Indices which does not take care of actual employee expenses.

4.4.7 As regards employee expenses, the first amendment of PSERC Tariff Regulations, 2005 dated July 27, 2009 states as under:

*“8. The employee cost for an integrated utility will be determined as follows:-
(a) The employee cost as claimed by the Board/Licensee will be considered in two parts (i) Terminal benefits such as Death-cum-Retirement Gratuity, Pension, Commuted Pension, Leave Encashment, LTC, Medical reimbursement including fixed medical allowance in respect of pensioners and share of BBMB employee expenses and (ii) all other expenses accounted for under different sub-heads of employees cost taken together. The cost component of terminal benefits and BBMB expenses will be allowed on actual basis and increase in all other*

expenses under different sub-heads will be limited to the increase in Wholesale Price Index (all commodities) as per clause (4) (b) above.

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

4.4.8 The employee expenses of PSTCL have been segregated in four heads:

- i. Terminal Benefits
- ii. Expenses on account of arrears
- iii. Expenses on account of existing employees
- iv. Expenses on account of new employees to be recruited

4.4.9 The above heads have been discussed below in detail.

a. Terminal Benefits:

4.4.10 The Terminal Benefits includes Gratuity, Basic Pension and Other Terminal Benefits etc.

4.4.11 The Hon’ble Commission considered Terminal Benefits of Rs. 27.69 Crore and Rs. 32.83 Crore in FY 2010-11 and FY 2011-12 respectively.

4.4.12 During FY 2011-12 (H1), PSTCL incurred expense of Rs. 28.24 Crore on account of Terminal Benefits and Pension Payments. PSTCL has considered 10% escalation on the actual Terminal Benefits incurred in FY 2011-12 (H1) for projecting Terminal Benefits in FY 2011-12 (H2).

4.4.13 For projection of Terminal Benefits in FY 2012-13, PSTCL has considered an escalation of 15% in Terminal benefits projected in FY 2011-12.

b. Expenses on account of Arrears:

- 4.4.14 The Hon'ble Commission in last Tariff Order approved Rs. 24.95 Crore as Arrears on account of Pay Revision for FY 2011-12 as against Rs. 34.89 Crore submitted by PSTCL in last Year's Petition.
- 4.4.15 The Hon'ble Commission reduced the amount of Arrears claimed by PSTCL for FY 2011-12 in the last Year's Petition by 28.48% on the basis of employee expenses disallowed in previous three years.
- 4.4.16 The Hon'ble Commission in the last Tariff Order reduced the employees expenses for FY 2010-11 and FY 2011-12 only on the basis of bifurcation of the expenses of erstwhile Punjab State Electricity Board and determined the cost to be allocated to PSTCL on account of Arrears for FY 2010-11 by applying proportionate cost allowed to erstwhile Punjab State Electricity Board in FY 2009-10 and for FY 2011-12 again by applying the proportionate reduction in the past for erstwhile Punjab State Electricity Board and holding that employees cost should stand reduced by 28.48%.
- 4.4.17 The actual employee cost of PSTCL will be around Rs. 34.89 Crore as Arrears on account of pay Revision of employees which is 40% of the total amount of arrears and any disallowance on the basis of past years trends will put additional burden and directly impact the financial viability of PSTCL.
- 4.4.18 For FY 2012-13, PSTCL has considered 30% of the total amount of Arrears as per the decision of PB. Govt. and balance 30% will be considered in FY 2013-14.

c. Employee Expenses on account of Existing Employees:

- 4.4.19 The Hon'ble Commission in last Tariff Order applied escalation of an average annual increase of 7.55% and 8.91% based on available WPI Indices in FY 2010-11 and FY 2011-12 respectively. The Hon'ble Commission approved net employee expenses of Rs. 99 Crore and Rs. 105.04 Crore in FY 2010-11 and FY 2011-12 respectively. The Hon'ble Commission also levied Penalty of Rs. 6.69 Crore in FY 2010-11 on account of PSTCL's continuing failure to finalise the study of rationalization of Man Power.

- 4.4.20 The Hon'ble Commission has not allowed fully employees cost for the financial year 2010-11 and for the financial year 2011-12 only on the basis of bifurcation of the erstwhile Punjab State Electricity Board expenses and determining the cost to be allocated to the PSTCL for the year 2010-11 by applying proportionate cost allowed to erstwhile Punjab State Electricity Board in the year 2009-10 and for the year 2011-12 again by applying the proportionate reduction in the past for erstwhile Punjab State Electricity Board and holding that employees cost should stand reduced by 28.48%.
- 4.4.21 Also, it is submitted in the Appeal that the State Commission while determining the O&M Expenses for the Appellant should have applied the Tariff Regulations, 2005 notified by the State Commission provides that the O&M Expenses of the transmission Utility shall be guided by the Regulations notified by the Central Commission. Accordingly, the State Commission ought to have applied the O&M Expenses normative as specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The O&M Expenses as per the above Regulation are consistent with the claim made by the PSTCL in its Petition.
- 4.4.22 Further, the Hon'ble Commission did not consider that the employees cost claimed by the appellant for the transmission activities and for the activities of SLDC both for the financial year 2010-11 and financial year 2011-12 which are comparable and consistent with the norms laid down by the Central Commission. .
- 4.4.23 Further, it was also submitted that the Hon'ble Commission has disallowed 28.48% from the amount of arrears payable by the PSTCL on the ground that the State Commission had in the past disallowed on an average 28.48% of the employees cost claimed by the erstwhile Punjab State Electricity Board. It is submitted that PSTCL has been adversely affected on account of the above, while there is no correlation between the reduction to the distribution licensee or the erstwhile PSEB to the reduction to PSTCL. The revenue requirement of PSTCL that needs to be considered separately as it is a new company with the only functions of transmission and also the SLDC functions.
- 4.4.24 The Hon'ble Commission may appreciate that on unbundling of the State Electricity Board and functioning of the PSTCL as an independent company, the O&M expenses including the employees cost of the PSTCL increases substantially as

compared to the cost incurred when the PSTCL's functions were being conducted by erstwhile Punjab State Electricity Board as the PSTCL has to undertake independently number of activities such as planning, safety, quality assurance, human resources, IT, corporate office, regulatory affairs, legal, accounts, finances, auditing etc and various miscellaneous activities.

4.4.25 As regards Employee Expenses on account of existing employees in FY 2011-12 (H1), PSTCL has incurred expense of Rs. Rs. 118.48 Crore (including Rs. 0.74 Crore as Prior Period Expenses). The employee expenses capitalised during FY 2011-12 (H1) was Rs. 12.10 Crore. PSTCL has considered the escalation factor of 10% on actual employee expenses in FY 2011-12 (H1) for projecting employee expenses on account of existing employees in FY 2011-12 (H2), based on 7% DA grossed up applicable for H2 (comes around 10.5%). For FY 2012-13, PSTCL has considered an escalation of 15% on total employee expenses on account of existing employees in FY 2011-12, based on annual increment of 3% and DA of 12%.

d. Employee Expenses on account of new employees added during the Year:

4.4.26 Present employee strength of PSTCL as on 1.4.2010 was 4037. Manpower is one of the most important inputs in efficient working of any organisation. PSTCL has planned to recruit 797 new employees in FY 2012-13 as per the approval of the State Government. This recruitment also includes the requirement of personnel required for operating 400 kV networks which is to be commissioned in FY 2012-13. While finalising the total requirement of recruitment, Report of PWC on Manpower requirement of PSTCL has been duly considered. The status of PWC report is mentioned in Chapter-7 of this Petition. Necessary steps have taken for recruitment of the new personnel which is programmed to be completed by March, 2012. The details of the employees and the number of posts to be filled are tabulated as under:

S. No	Name of Post	Number of Posts	Basic Pay
1	AE/ Elect.	117	22450
2	AE/ Civil	11	22450
3	JE Elect	158	15350
4	JE Civil	44	15350
5	Accounts Officer	11	22450

S. No	Name of Post	Number of Posts	Basic Pay
6	Law Officer	2	16400
7A	UDC (Accounts)	20	9600
7B	UDC (General)	60	9600
8	SSA	325	9350
9A	Draftsman	7	15350
9B	Draftsman	3	15350
10	Asst. Manager	2	22450
11	Asst. Manager/ IT	3	22450
12	Accountant	10	15600
13	Electrician Gr-II	24	8850
14	Total	797	

4.4.27 In addition to the basic pay, these employees will be entitled to Dearness Allowance, House Rent Allowance, Medical Allowance, Local Outdoor Duty Allowance (LODA)/ Local Outdoor Travelling Allowance (LOTA), Contribution towards Pension Funds under the NPS, etc. All these expenses have been considered while projecting employee expenses against new employees to be recruited by March 2012.

4.4.28 Based on the above discussion, the employee expenses for FY 2011-12 and FY 2012-13 are tabulated as under:

Table 9: Employee Expenses for FY 2011-12 and FY 2012-13 (Rs Crore)

S · N o	Particulars	FY 2011-12			FY 2012-13	
		Order	H1 Actuals	H2 Estimated	H1 +H2	Projected
1	Terminal Benefits	32.83	28.26	31.09	59.35	68.25
2	Arrears on account of pay revision	24.95	34.89	0.00	34.89	26.17
3	Employee Expenses of existing employee (a-b)	105.04	106.38	58.70	165.08	188.99
<i>a</i>	<i>Gross Employee Expenses</i>	<i>105.04</i>	118.48	129.51	247.99	284.34
<i>b</i>	<i>Less capitalisation</i>		12.10	70.81	82.91	95.35
4	Expenses for new employees added during FY					26.59

S · N o	Particulars	FY 2011-12			FY 2012-13	
		Order	H1 Actuals	H2 Estimated	H1 +H2	Projected
5	Total Employee Expenses	162.82	169.53	89.79	259.32	310.00

4.4.29 The head-wise expenditure of Employee Expenses in FY 2011-12 and FY 2012-13 has been provided in Form F-1 annexed along with the Petition.

4.4.30 PSTCL requests the Hon'ble Commission to approve the employee expenses as submitted for FY 2011-12 and FY 2012-13. PSTCL further requests the Hon'ble Commission not to penalise PSTCL on account of employee expenses on the basis of justification given above.

4.5 Repair and Maintenance Expenses

4.5.1 The Hon'ble Commission in last Tariff Order applied an average annual increase of 7.55% and 8.91% based on available WPI Indices in FY 2010-11 and FY 2011-12 respectively. The Hon'ble Commission approved R&M Expenses of Rs. 48.26 Crore (including R & M Expenses of Rs. 3.22 Crore on assets added during the Year) and Rs. 55.89 Crore in FY 2010-11 and FY 2011-12 respectively.

4.5.2 For the previous year, the State Commission has not considered the effect of unbundling of the erstwhile Punjab State Electricity Board on the expenditure of the successor entities. As an independent entity with a separate function of transmission, the PSTCL would have different business requirements as compared to an entity with integrated functions of generation, distribution and transmission. There is also an urgent need of strengthening the transmission system after the unbundling of the erstwhile Punjab State Electricity Board and separation of the transmission function. The transmission system of the State is very old and the same has to be maintained efficiently with appropriate replacements of equipments and renovations to ensure uninterrupted power transmission in the State. It was accordingly submitted that PSTCL has to incur major R&M which have been disallowed by the Hon'ble Commission.

4.5.3 Regulation 28(6) of the Tariff Regulations, 2005 provides as under:

“28.

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

- 4.5.4 PSTCL further submitted that the Hon’ble Commission considers the increase in the R&M and A&G expenses on account of additional assets likely to be added during the financial year 2011-12 in the determination of the Annual Revenue Requirement in accordance with the provisions of the Regulations rather than postponing the same to the review in the next year. The above would provide much needed cash flow to PSTCL while also being to the benefit of the consumers as savings in carrying cost for delay in recovery.
- 4.5.5 As against the R&M requirement of Rs. 97.15 Crore, the Hon’ble Commission has allowed only Rs. 55.89 Crore for FY 2011-12. Accordingly PSTCL curtailed its expenditure plan to Rs. 55.89 Crore by deferring certain expenditure to the next financial year. PSTCL has incurred an expense of Rs. 25.38 Crore in FY 2011-12 (H1) and the balance expenditure proposed to be incurred by 31.03.2012.
- 4.5.6 PSTCL has further applied the ratio of capitalisation and R&M expenses on capex of FY 2011-12 (H1) to arrive at the capitalization in FY 2011-12 (H2) and FY 2012-13.
- 4.5.7 PSTCL has finalised a detailed R&M plan for FY 2012-13 which has been attached as Annexure I to this Petition.
- 4.5.8 Further, the first amendment of PSERC Tariff Regulations, 2005 dated July 27, 2009 states as under:

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

4.5.9 PSTCL has applied the ratio of R&M Expenses during the year and Opening GFA on the assets added during the year so as to arrive at R & M Expenses on the assets added during the year. The R&M Expenses claimed during FY 2011-12 and FY 2012-13 is tabulated below:

Table 10: R & M Expenses for assets addition during the year (Rs Crore)

Particulars	FY 2011-12	FY 2012-13
Opening GFA	2276	2644
Net R&M Expenses	55.41	90.31
Average Asset Addition during the year	239	909
Ratio of R&M / Opening GFA	2.43%	3.28 %
R&M for Assets Addition during the year	5.81	29.81

4.5.10 Hence, the R&M expenses from FY 2011-12 and FY 2012-13 are tabulated as under:

Table 11: R & M Expenses for FY 2011-12 and FY 2012-13 (Rs Crore)

S. No	Particulars	FY 2011-12			FY 2012-13	
		Order	Actuals (H1)	Projected (H2)		Total (H1 + H2)
1	R & M Expenses	55.89	25.38	30.51	55.89	90.88
2	less Prior Income		-0.13	0.00	-0.13	
3	R & M Expenses on asset addition during FY		5.81		5.81	29.81
4	Less Capitalisation		0.16	0.19	0.35	0.57
5	Net R & M Expenses		55.89	25.09	36.13	61.22

4.5.11 The head-wise expenditure of R&M Expenses in FY 2011-12 and FY 2012-13 has been provided in Form F-4 annexed along with the Petition.

4.5.12 PSTCL requests the Hon'ble Commission to approve the R&M expenses based on merit individual sub-heads of expenditure, as submitted for FY 2011-12 and FY 2012-13.

4.6 Administration and General Expenses

4.6.1 The Hon'ble Commission in last Tariff Order applied an average annual increase of 7.55% and 8.91% based on available WPI Indices in FY 2010-11 and FY 2011-12 respectively. The Hon'ble Commission approved employee expenses of Rs. 9.64 Crore (includes A & G Expenses of Rs. 0.65 Crore on assets added during the Year) and Rs. 11.17 Crore in FY 2010-11 and FY 2011-12 respectively.

4.6.2 In this regard, it is submitted that so long there is no imprudence in the expenses claimed by the PSTCL, the same may be allowed. The PSTCL ought not to lose on account of such expenses which are essential for the operation of the company.

4.6.3 In the above regard, the Hon'ble Appellate Tribunal's decision in Appeal No. 109 of 2007: MSEDCL v/s MERC dated 17.12.2008 reads as under:

“Accordingly, we set aside the impugned order passed by the State Commission in respect of Employee Expenses and A&G expenses for the year 2005-06 with the direction to the Commission to approve the said expenses in totality as submitted by the Appellant, as the same being based on actuals.”(Emphasis supplied)

4.6.4 The Hon'ble Commission had not in the previous year considered the effect of unbundling of the erstwhile Punjab State Electricity Board on the expenditure of the successor entities. As an independent entity with a separate function of transmission, the Appellant would have different business requirements as compared to an entity with integrated functions of generation, distribution and transmission. There is also an urgent need of strengthening the transmission system after the unbundling of the erstwhile Punjab State Electricity Board and separation of the transmission function. It was further submitted that PSTCL has to incur major R&M and A&G expenses which have been disallowed by the State Commission.

4.6.5 PSTCL further submits that the Hon'ble Commission consider the increase in A&G expenses on account of additional assets likely to be added during the financial year 2011-12 in the determination of the Aggregate Revenue Requirement instead of postponing the same to the review in the next year.

- 4.6.6 PSTCL has incurred expense of Rs. 8.84 Crore in FY 2011-12 (H1) and the capitalisation is Rs. 2.13 Crore.
- 4.6.7 PSTCL has considered various expenses like License Fees, Audit Fees, Expenses incurred for security of Substations, ARR and Tariff Petition Fees, Consultancy Charges, Electricity and Water Charges, Lease Rental, Outsourcing expenses, etc., to project A & G Expenses in future.
- 4.6.8 PSTCL has applied an escalation factor of 5% on actual A & G expenses in FY 2011-12 (H1) for projecting A & G Expenses in FY 2011-12 (H2). PSTCL further applied an escalation factor of 9% based historical trend, on A & G Expenses in FY 2011-12 for projecting A & G Expenses in FY 2012-13.
- 4.6.9 PSTCL is commissioning 400 kV Transmission systems, first of its kind in the State, for evacuation of power from the upcoming thermal generating stations and its dispersal to the load centers. The commissioning of the system will commence in phases and is targeted to be completed by FY 2012-13 and FY 2013-14. Operation and maintenance of 400 kV systems is a very specialized job and new for PSTCL and any mishandling and mal-operation will lead to major system failure. PSTCL has taken steps to impart training to its manpower through PGCIL so that they get the required expertise to maintain the system efficiently. This will take time as the technical personnel proposed to be trained include the personnel to be recruited through the recruitment process which has already been initiated by PSTCL. Therefore, the WTD in their 25th meeting held on 25/11/2011 have taken in-principle decision to outsource the O&M job of the 400 kV grid substations and associated transmission lines to PGCIL, a leading Central PSU who have the requisite skill and expertise till such time the technical personnel of PSTCL are trained to take over the job. The outsourcing contract with PGCIL shall be initially for a period of one year and extendable by one year, if required. Pending finalization of the detailed commercial terms with PGCIL, the out sourcing of R&M cost has been claimed at the rates prescribed by CERC in the Tariff Regulations, 2009, calculated on pro-rata basis of actual capitalisation month and is tabulated below:

Table 12: Outsourcing Expenses for O&M of 400 kV Transmission System

400 kV System-PSTCL

Particulars	Units	FY 2011-12	FY 2012-13
No of Bays-PSTCL- 400 kV	No.	2	26
No of Bays-PSTCL- 220 kV	No.		24
Double Ckt (Twin Conductor)	Ckt.Km	216	1600

CERC Norms

Particulars	Units	FY 2011-12	FY 2012-13
O&M expense for Bays in S/s- 400 kV	Rs Lakh/Bay	58.570	61.920
O&M expense for Bays in S/s-220 kV	Rs Lakh/Bay	41.000	43.340
Double Ckt (Twin Conductor)	Rs Lakh per km	0.701	0.741

Total O&M Expenditure Entitlement for 400 kV System (Rs Crore)

Particulars	Units	FY 2011-12	FY 2012-13
O&M expense for Bays in S/s- 400 kV	Rs Crore	0.20	9.91
O&M expense for Bays in S/s-220 kV	Rs Crore		6.07
Double Ckt (Twin Conductor)	Rs Crore	0.25	5.46
Total	Rs Crore	0.45	21.44

4.6.10 PSTCL has further applied the ratio of actual capitalisation and actual A&G expenses during FY 2011-12 (H1) to arrive at the capitalization in FY 2011-12 (H2) and FY 2012-13.

4.6.11 Further, the first amendment of PSERC Tariff Regulations, 2005 dated July 27, 2009 states as under:

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

4.6.12 PSTCL has applied the ratio of A & G Expenses during the year and Opening GFA on the assets added during the year so as to arrive at A & G Expenses on the assets

added during the year. The A & G Expenses claimed during FY 2011-12 and FY 2012-13 is tabulated below:

Table 13: A & G Expenses for asset addition during the year (Rs Crore)

Particulars	FY 2011-12	FY 2012-13
Opening GFA	2276	2754
A&G Expenses	21.44	56.30
Average Asset Addition during the year	239	909
Ratio of A&G/Opening GFA	0.94%	2.04%
A&G for Assets Addition during the year	2.25	18.59

4.6.13 Based on the above discussion, the A & G expenses from FY 2010-11 to FY 2012-13 are tabulated as under:

Table 14: A & G Expenses for FY 2011-12 and FY 2012-13 (Rs Crore)

S. No	Particulars	FY 2011-12					FY 2012-13
		Last Year Petition	Order	Actuals for H1	Estimated for H2	Total	Projected
1	Rent, rates & taxes	1.18		0.55	0.58	1.13	1.23
2	Insurance	0.02		0.01	1.00	1.01	1.10
3	Telephone, postage & telegrams	0.49		0.22	0.23	0.45	0.49
4	Consultancy fees	1.21		0.01	0.91	0.92	1.00
5	Technical fees & Other professional charges	2.27		0.01	0.01	0.02	0.02
7	Conveyance & travel expenses	5.46		4.06	4.26	8.32	9.07
8	Electricity & water charges	0.95		0.14	0.15	0.29	0.31
9	Others	2.19		1.33	1.40	2.73	2.97
10	Outsourcing Exp.	4.92		0.65	3.22	3.87	6.87
11	Freight	0.12		0.06	0.06	0.12	0.13
12	Other material related expenses	3.07		1.36	1.43	2.79	3.04
13	License Fees				0.25	0.25	0.25
14	ARR Petition				0.25	0.25	0.25

S. No	Particulars	FY 2011-12					FY 2012-13
		Last Year Petition	Order	Actuals for H1	Estimated for H2	Total	Projected
	Fees						
15	Lease rental	0.62		0.44	0.46	0.90	0.98
16	Auditor's Fees				0.07	0.07	0.10
17	Expenses towards Security of Substations						10.00
18	400 kV Outsourcing expenses				0.45	0.45	21.44
20	Less capitalized	5.42		2.13		2.13	2.96
21	Net expenses	17.07		6.71	14.73	21.44	56.30
23	A&G for Assets Addition during the year	4.37			2.25	2.25	18.59
24	Total expenses charged to revenue	21.44	11.17	6.71	16.98	23.69	74.89

4.6.14 The head-wise expenditure of A&G Expenses in FY 2011-12 and FY 2012-13 has been provided in Form F-5 annexed along with the Petition.

4.6.15 PSTCL requests the Hon'ble Commission to approve the A&G, based on the merit of individual subheads of the expense submitted for FY 2011-12 and FY 2012-13.

4.7 Operation and Maintenance Expenses

4.7.1 Based on the above discussion, the Operation and Maintenance Expenses are summarized below:

Table 15: Operation and Maintenance Expenses for FY 2011-12 and FY 2012-13 (Rs Crore)

S. No	Particulars	FY 2011-12				FY 2012-13
		Order	H1 (Actuals)	H2 (Projected)	Total (H1 + H2)	Projected
1	Employee	162.82	169.53	89.79	259.32	310.00

S. No	Particulars	FY 2011-12				FY 2012-13
		Order	H1 (Actuals)	H2 (Projected)	Total (H1 + H2)	Projected
	Expenses					
2	R&M Expenses	55.89	25.09	36.13	61.22	120.12
3	A & G Expenses	11.17	6.71	16.98	23.69	74.89
4	Total	229.88	201.33	142.90	344.23	505.01

4.7.2 Since the O&M expenses projected by PSTCL are comparable with the O&M expenses calculated in accordance with CERC Tariff Regulations 2009. Hence, PSTCL requests the Hon'ble Commission to allow the O&M expenses of PSTCL for FY 2011-12 and FY 2012-13 as submitted in the Petition. It may also be noted that the PSTCL has not considered its entitlement as per CERC Tariff Regulations, 2009 for O&M expenditure towards 1125 number of 66 kV bays.

4.8 Capital Expenditure and Capitalisation

4.8.1 The Hon'ble Commission in last Tariff Order approved Capital Expenditure of Rs. 400 Crore and Rs. 600 Crore against PSTCL's Claim of Rs. 843.04 Crore and Rs. 1367.44 Crore for FY 2010-11 and FY 2011-12 respectively.

4.8.2 One of the major objectives of Tariff Policy is to ensure optimal development of Transmission Network to promote efficient utilization of generation and Transmission assets in the country. The relevant excerpts from National Tariff Policy are reproduced as under:

"The national transmission network in India is presently under development. Development of the State networks has not been uniform and capacity in such networks needs to be augmented. These networks will play an important role in intra-State power flows and also in the regional and national flows. The tariff policy, insofar as transmission is concerned, seeks to achieve the following objectives:

- 1. Ensuring optimal development of the transmission network to promote efficient utilization of generation and transmission assets in the country;*
- 2. Attracting the required investments in the transmission sector and providing adequate returns." (Emphasis Supplied)*

4.8.3 Similarly, National Electricity Policy (NEP) establishes the need for the development of Transmission System in various States for optimal utilization of resources. Clause-5.3 of National Electricity Policy states as under:

“5.3 TRANSMISSION

5.3.1 *The Transmission System requires adequate and timely investments and also efficient and coordinated action to develop a robust and integrated power system for the country.*

5.3.2 *Keeping in view the massive increase planned in generation and also for development of power market, there is need for adequately augmenting transmission capacity. While planning new generation capacities, requirement of associated transmission capacity would need to be worked out simultaneously in order to avoid mismatch between generation capacity and transmission facilities. The policy emphasizes the following to meet the above objective:*

- *The Central Government would facilitate the continued development of the National Grid for providing adequate infrastructure for inter-state transmission of power and to ensure that underutilized generation capacity is facilitated to generate electricity for its transmission from surplus regions to deficit regions.*
- *The Central Transmission Utility (CTU) and State Transmission Utility (STU) have the key responsibility of network planning and development based on the National Electricity Plan in coordination with all concerned agencies as provided in the Act. The CTU is responsible for the national and regional transmission system planning and development. The STU is responsible for planning and development of the intra-state transmission system. The CTU would need to coordinate with the STUs for achievement of the shared objective of eliminating transmission constraints in cost effective manner.*

- *Network expansion should be planned and implemented keeping in view the anticipated transmission needs that would be incident on the system in the open access regime. Prior agreement with the beneficiaries would not be a pre-condition for network expansion. CTU/STU should undertake network expansion after identifying the requirements in consultation with stakeholders and taking up the execution after due regulatory approvals.*

... ” *(Emphasis Supplied)*

4.8.4 PSTCL being the State Transmission Utility holds the key responsibility of network planning and development in the State of Punjab. The summary of scheme wise Capital Expenditure projected during FY 2011-12 and FY 2012-13 as attached as Annexure II of this petition is tabulated as under:

Table 16: Capital Expenditure for FY 2011-12 and FY 2012-13 (RsCrore)

S. No	Particulars	FY 2011-12	FY 2012-13
1	Capital Expenditure	1042.39	1100.66
2	Capitalisation	477.55	1818.39

4.9 Funding Pattern

4.9.1 Regulation 23 of ‘The Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005’ states that

“DEBT-EQUITY RATIO

For the purpose of determination of tariff, debt-equity ratio in case of a new project commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public;

In case of existing and ongoing projects, the actual debt-equity ratio shall be considered for determination of tariff. However, any expansion shall be governed as per clause (1) above.”

4.9.2 PSTCL has considered the Capital Expenditure to be undertaken during FY 2011-12 and FY 2012-13 will be funded through internal accruals to extent of ROE entitlement of respective financial year and remaining will be funded through debt.

4.9.3 The funding pattern during FY 2011-12 and FY 2012-13 is tabulated below:

Table 17: Funding Pattern during FY 2011-12 and FY 2012-13 (in Rs Crore)

S. No	Particulars	FY 2011-12	FY 2012-13
1	Capital Expenditure during FY	1042.39	1100.66
2	Equity	89.09	110.01
3	Debt ((1)- (2))	953.30	990.65

4.10 Depreciation

4.10.1 The Hon’ble Commission in its last Tariff Order approved depreciation of Rs. 101.63 Crore and Rs. 115.80 Crore on Opening GFA by applying rate of 4.81% as given in the Audited Accounts of erstwhile Punjab State Electricity Board (PSEB). The Commission did not allow depreciation on assets added during the respective Financial Year.

4.10.2 Clause-27 (4) of PSERC Tariff Regulations states as under:

“27. Depreciation

...

4. Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis. “ (Emphasis Supplied)

4.10.3 Accounting Standard-6: Clause 3 defines depreciation, depreciable assets, useful life and depreciable amount as below:

“3.1 Depreciation is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, effluxion of time or obsolescence through technology and market changes. Depreciation is

allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the expected useful life of the asset. Depreciation includes amortization of assets whose useful life is predetermined.

3.2 *Depreciable assets are assets which*

- a. *are expected to be used during more than one accounting period; and*
- b. *have a limited useful life and*
- c. *are held by an enterprise for use in the production or supply of goods and services, for rental to other, or for administrative purposes and not for the purpose of sale in the ordinary course of business*

3.3 *Useful life is either (i) the period over which a depreciable asset is expected to be used by the enterprise; or (ii) the number of production or similar units expected to be obtained from the use of the asset by the enterprise.*

3.4 *Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost in the financial statement, less the estimated residual value.”*

4.10.4 Also as per Note at Serial No. 4 to Schedule XIV of the Companies Act, 1956 reads as under:-

“Where, during any financial year, any addition has been made to any asset, or where any asset has been sold, discarded, demolished or destroyed, the depreciation on such assets shall be calculated on a pro rata basis from the date of such addition or as the case may be, up to the date on which such asset has been sold, discarded, demolished or destroyed”

4.10.5 The Hon’ble Appellate Tribunal vide its Order dated July 15, 2009 (Appeal No. 137 of 2008) allowed the Appeal and ruled as under (TPC Vs MERC):

“In view of the provisions of the Tariff Regulations the Companies Act and the Accounting Standard-6, we find full justification and rationale in the contention of the appellant that proportionate depreciation has to be allowed even for part of the year when the assets have been put to use. The asset once put to use will be exposed to wear and tear which will not wait to depreciate till the start of the new financial year. We, therefore, allow the appeal in this view of the matter also.”

4.10.6 It is submitted that the above decision applies squarely to the case at hand. In line with the above decision of Hon’ble Appellate Tribunal, PSTCL has claimed

depreciation on the assets added during the year by assuming that the assets will be added during the mid of the year. For the purpose of claiming depreciation, PSTCL has considered the rate of 5.28% on the basis of the depreciation schedule provided in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

4.10.7 The depreciation as calculated by PSTCL from FY 2011-12 and FY 2012-13 is tabulated as under:

Table 18: Depreciation for FY 2011-12 and FY 2012-13 (Rs Crore)

S.No	Particulars	FY 2011-12	FY 2012-13
		Estimated	Projected
1	Depreciation (((2)+(4))/2* (5))	132.80	193.41
2	Opening GFA	2276.34	2753.90
3	Assets additions during the Year	477.55	1818.39
4	Closing GFA	2753.90	4572.28
5	Depreciation as % of Opening and Closing GFA	5.28%	5.28%

4.11 Interest and Finance Charges

4.11.1 The Hon'ble Commission in last Tariff Order approved Interest of Rs. 72.22 Crore and Rs. 70.72 Crore corresponding to the capital expenditure approved during FY 2011-12 and FY 2012-13.

4.11.2 The Hon'ble Commission disallowed the interest of Rs. 24.77 Crore and Rs. 26.90 Crore on account of diversion of capital funds. However, PSTCL did not claim any interest as being payable to the Government of Punjab.

4.11.3 PSTCL has considered the addition of loan based on the funding requirement as discussed earlier in this Chapter.

4.11.4 PSTCL has applied the average rate of interest during FY 2010-11, i.e., 7.65% on average of Opening and Closing Balance during FY 2011-12 and FY 2012-13.

4.11.5 The interest expenses computation for FY 2011-12 and FY 2012-13 is tabulated as under:

Table 19: Interest for FY 2011-12 and FY 2012-13 (Rs Crore)

S.No	Particulars	FY 2011-12		FY 2012-13
		Order	Estimated	Projected
1	Opening Balance	1159.11	1054.37	1869.35
2	Loan addition during FY	600.00	953.30	990.65
3	Loan Repayment during FY	139.59	138.32	127.69
4	Closing Balance	1619.52	1869.35	2732.32
5	Interest Expenses	113.40	182.73	287.60
6	Less: Interest Capitalised	15.78	25.43	40.02
7	Interest disallowed on account of diversion of funds	26.90		
8	Net Interest	70.72	157.30	247.58
9	Rate of Interest	8.16%	12.50%	12.50%
10	Guarantee Charges payable/paid to PB. Govt.		1.50	4.00
11	Interest & Finance Charges	70.72	158.80	251.58

4.12 Return on Equity (ROE)

4.12.1 The Commission in last Tariff Order approved Return on Equity of Rs. 45.99 Crore each for FY 2010-11 and FY 2011-12 by applying the rate of 14% on the equity base of Rs. 328.50 Crore for FY 2010-11 and FY 2011-12 in accordance with PSERC Tariff Regulations, 2005.

4.12.2 Section-25 of PSERC Tariff Regulations states as under:

“25. RETURN ON EQUITY

1. *Return on Equity shall be computed on the paid up equity capital determined in accordance with Regulation 24 and shall be guided by the the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 as amended by the CERC from time to time. The same principles will apply for distribution business also as far as possible.*

...” (Emphasis Supplied)

4.12.3 Section-15 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 states as under:

“15. Return on Equity.

1. *Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.*

2. *Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:*

...

3. *The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:*

4. *Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.*

5. *Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:*

6. *Rate of pre-tax return on equity = Base rate / (1-t)*

Where t is the applicable tax rate in accordance with clause (3) of this regulation.”

4.12.4 In this regard, PSTCL requests the Hon’ble Commission to kindly consider the CERC norms for allowing the ROE, the effective rate of return applicable to PSTCL would be 23.48% (15.5 %/(1-33.99%)).

4.12.5 PSTCL has considered the same opening Equity base of Rs. 328.50 Crore as approved by the Commission in last Tariff Order for calculation of Return on Equity.

4.12.6 PSTCL has considered the equity funded through internal accruals to the ROE entitlement of PSTCL for respective years in accordance with PSERC Tariff Regulations, 2005. The Return on Equity as calculated by PSTCL from FY 2010-11 to FY 2012-13 is tabulated below:

Table 20: Return on Equity for FY 2011-12 and FY 2012-13 (in Rs Crore)

S. No	Particulars	Current Year (FY 2011-12)		Ensuing Year (FY 2012-13)
		Order	Projected	Projected
1	Opening Balance-Equity Capital	328.50	379.42	468.51
2	Equity addition during the year through Internal Accruals	0.00	89.09	110.01
3	Closing balance-Equity Capital	0.00	468.51	578.52
4	Return on Equity	45.99	89.09	110.01
5	ROE rate (%)	14.00%	23.48%	23.48%

4.13 Interest on Working Capital

4.13.1 The Commission in last Tariff Order approved interest on working capital as Rs. 12.75 Crore and Rs. 15.47 Crore in FY 2010-11 and FY 2011-12 respectively. The Commission applied the rate of 11.75% for calculating Interest on Working Capital.

Normative Interest on Working Capital:

4.13.2 Clause-30 of PSERC Tariff Regulations 2005 states as under:

“30. Working Capital and Interest Rate on Working Capital

1. For generation and transmission business, the working capital shall be as per CERC norms.

...

3. The interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India of the relevant year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures.”

4.13.3 PSTCL has calculated Interest on working capital in accordance with Clause-18 (c) of CERC Tariff Regulations 2009. PSTCL has considered the following:

a) Receivables equivalent to two months of fixed cost

- b) Maintenance Spares @ 15% of operation and maintenance expenses
- c) Operation and Maintenance Expenses for one month.
- d) PSTCL has considered an interest rate of 13.00% for calculating Interest on Working Capital in FY 2011-12 and FY 2012-13.

4.13.4 The interest on Working Capital as projected by PSTCL is tabulated below:

Table 21: Interest on Working Capital for FY 2011-12 and FY 2012-13 (Rs Crore)

S.No	Particulars	FY 2011-12		FY 2012-13
		Order	Projected	Projected
1	Receivables equivalent to two months of fixed cost.	78.02	78.02	225.47
2	Maintenance spares @ 15% of Operation and Maintenance expenses	34.48	51.63	71.76
3	Operation and Maintenance expenses for one month.	19.16	28.69	39.87
4	Total Working Capital	131.66	158.34	337.10
5	Rate of Interest applied	11.75%	12.50%	12.50%
6	Interest on Working Capital	15.47	19.79	42.14

4.14 Provision for Bad Debts and Other Debits

- 4.14.1 The Hon'ble Commission in last Tariff Order did not consider any amount towards other debits.
- 4.14.2 PSTCL has incurred expenses under the head of other debits to the extent of Rs 0.01 Crore in H1.
- 4.14.3 PSTCL has not projected any amount towards Provision for Bad Debts during FY 2011-12 (H2) and FY 2012-13.
- 4.14.4 PSTCL requests the Commission to consider the above submissions during FY 2011-12 and FY 2012-13.

4.15 Non-Tariff Income

4.15.1 The Commission in last Tariff Order considered Non-Tariff Income of Rs. 8.52 Crore and Rs. 9.76 Crore for FY 2010-11 and FY 2011-12 respectively.

4.15.2 PSTCL has received Rs. 8.05 Crore as Non-Tariff Income during FY 2011-12 (H1).

4.15.3 PSTCL has assumed that after levying of Cross-subsidy Surcharge, there will be less number of Open Access Applications which will result in less Non-Tariff Income. During FY 2011-12 (H2), non-tariff income has been considered as Rs. 5 Crore whereas during FY 2012-13, Non-Tariff Income has been considered as 0.

4.15.4 The Non-Tariff Income as projected by PSTCL for FY 2011-12 and FY 2012-13 is tabulated below:

Table 22: Non-Tariff Income for FY 2011-12 and FY 2012-13

S. No	Particulars	FY 2011-12				FY 2012-13
		Order	H1 (Actuals)	H2 (Projected)	H1 + H2 (Total)	Projected
1	Non-Tariff Income	9.76	8.05	5.00	13.05	0.00

4.16 Aggregate Revenue Requirement

4.16.1 Based upon the above discussion on projection of expenses on various heads, PSTCL has calculated the ARR for FY 2011-12 and FY 2012-13 which is tabulated below:

Table 23: ARR from FY 2011-12 and FY 2012-13

S. No	Particulars	Transmission Business			
		FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected
1	Employee costs	268.31	162.82	259.32	310.00
2	R&M expenses	97.15	55.89	61.22	120.12
3	A&G expenses	21.44	11.17	23.69	74.89
4	Depreciation	151.80	115.80	132.80	193.41
5	Interest charges	138.04	70.72	158.80	251.58

S. No	Particulars	Transmission Business			
		FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected
6	Interest on Working Capital	25.07	15.47	19.79	42.14
7	Return on Equity	77.14	45.99	89.09	110.01
8	Provision for bad debts & Other Debits	0.00	0.00	0.01	0.00
10	Less: Non Tariff Income	9.76	9.76	13.05	0.00
11	Aggregate Revenue Requirement	769.19	468.10	731.67	1102.15
12	Revenue Gap Carry forward	54.89	0.00	0.00	250.66
13	Cumulative Revenue Requirement	824.08	468.10	731.67	1352.82
14	Revenue from Tariff & OA Charges			481.01	
15	Revenue Gap	0.00	0.00	250.66	

4.16.2 PSTCL requests the Hon'ble Commission to consider the justification given by PSTCL and approve the ARR for FY 2011-12 and FY 2012-13 as shown in the table above.

4.17 Carrying Cost for Revenue gap disallowed

4.17.1 Hon'ble Appellate Tribunal in its Judgment dated 15.02.2011 passed in Appeal No. 173/09, Tata Power Company Limited Versus Maharashtra Electricity Regulatory Commission. Has made following observations:

*“42. The above judgments of the Tribunal lay down the dictum regarding entitlement of carrying cost for deferred recoveries. However, in the present appeal the Appellant has raised carrying cost as a general issue without reference to any finding of the State Commission in the impugned order or specific claim of interest on deferred recovery. **Therefore, while holding the principle of carrying cost on deferred recovery, we are not in a position to give any specific direction to the State Commission in this regard except to take decision on the claim of the Appellant on carrying cost keeping in view the above judgments of the Tribunal. However, we would like to add that the Appellant is entitled to carrying cost on his claim of legitimate expenditure if the expenditure is:***

(a) accepted but recovery is deferred, e.g. interest on regulatory assets;

(b) claim not approved within a reasonable time; and

(c) disallowed by the State Commission but subsequently allowed by the superior authority.” Emphasis supplied

4.17.2 It is accepted principle that that any deferred recovery of dues/entitlement involve time value of money and hence such recoveries have to be made along with the carrying cost, irrespective whether the dues have to be made along with the carrying cost irrespective of whether the dues are to be paid or to be recovered.

4.17.3 It is also clear from above mentioned Judgment that the burden of the deferred expenses is not ultimately reduced by under estimating the cost today and truing it up in future as such method also burdens the consumer with carrying cost.

4.17.4 Hence, PSTCL would like to request Hon’ble Commission to have a considerate view while determining the revenue requirement and tariff for PSTCL.

4.18 PAYMENT SECURITY MECHANISM

4.18.1 Considering the industry practice in the matter of payment security mechanism which are being adopted by different Power Utilities, PSTCL proposes the following payment security mechanism for recovery of its monthly transmission charges from PSPCL:-

4.18.2 The payment security mechanism specified hereinafter is intended to ensure timely recovery of monthly transmission charges from PSPCL in case of any payment default and not as a mechanism for regular payments.

4.18.3 PSPCL shall open a monthly irrevocable revolving Letter of Credit for an amount equivalent to monthly transmission charges as may be approved by the Hon'ble Commission in favour of PSTCL. The LC (Letter of Credit) shall be opened in a bank mutually agreed upon between PSPCL and PSTCL.

4.18.4 PSTCL shall have a default escrow mechanism with PSPCL for its recovery of monthly Transmission Charges within the due date and PSTCL shall have first charge over the receivable of specified circle/area which shall flow into the escrow

account. In addition, PSTCL shall provide the format of LC and PSPCL shall accept the same.

4.18.5 The LC shall be opened within 15 days from the date of Tariff Order approved by the Hon'ble Commission and shall be valid for a period of one year and shall be renewed thereafter on the same terms & conditions for an amount depending on the monthly transmission charges to be recovered from PSPCL as may be approved by the Hon'ble Commission.

4.18.6 PSPCL shall be free to make direct payment to PSTCL against the monthly transmission bills which can be made through either local cheque or electronic transfer of the amount to PSTCL's designated bank account.

4.18.7 PSTCL shall recover the monthly transmission charges from the escrow account only when PSPCL fails to remit the monthly transmission charges in full within the due date.

4.18.8 In the event of default in payment of the transmission bills within the due date, i.e., within 30 days of the presentation of the transmission bills, PSTCL will be entitled to recover the default amount from the escrow account and in case the same is not sufficient to cover outstanding dues, PSTCL shall be entitled to negotiate and encash the Letter of Credit to the extent of the default amount. Upon such negotiation and encashment of the LC amount, PSPCL shall recoup LC amount within 3 days.

4.18.9 The above security and payment mechanism will entitle PSTCL to recover its monthly transmission charges from PSPCL in time which will ensure regular cash flow of PSTCL to meet its financial obligations and also this will enable PSTCL to offer appropriate payment security mechanism to its lenders for availing Long Term Loan and Working Capital facilities for efficient operation of its Transmission Business.

5 SLDC OPERATION CHARGES

5.1 Background

5.1.1 Section 31(1) of the Electricity Act, 2003, provides that the State Government shall establish a State Load Despatch Centre (SLDC). Section 31(2) provides that the said SLDC shall be operated by a Government company / authority / corporation

constituted by or under any State Act and that until such company /authority / corporation is notified by the State Government, the State Transmission Utility (STU) shall operate the SLDC.

- 5.1.2 Government of Punjab, Department of Power vide Notification No. 1/9/08-EB(PR)/196 dated 16.4.2010 issued the Punjab Power Sector Reforms Transfer Scheme, 2010 and have notified Punjab State Transmission Corporation Ltd. (PSTCL) as the State Transmission Utility (STU) and have vested the State Load Despatch functions with PSTCL till further orders of the State Government from the date of transfer.
- 5.1.3 As per Section 32 of the Act, SLDC shall be the apex body to ensure integrated operation of the power system in a State and shall discharge functions as mentioned under Section 32(2) (a) (b) (c) (d) & (e).
- 5.1.4 Section 32 (3) of the Act provides for levy and collection of such fees and charges from the Generating companies and other licensees engaged in the Intra State transmission of electricity as may be specified by the State Commission.
- 5.1.5 Section 32 (3) of the Act provides for levy and collection of such fees and charges from the Generating companies and other licensees engaged in the Intra State transmission of electricity as may be specified by the State Commission.

5.2 Tariff Filing for FY 2011-12

- 5.2.1 On 30.11.2010, the PSTCL filed a Petition being Petition No. 45 of 2010 before the State Commission for approval of Annual Revenue Requirements and determination of Tariff for financial year 2011-12 for the transmission and State Load Dispatch functions. PSTCL had also filed the revised estimates of the costs/expenses and revenue pertaining to the transmission function for the previous financial year 2010-11 (including SLDC function) for review.
- 5.2.2 At the time of filing of the above Petition No. 45 of 2010, the Government of Punjab had not finalised the transfer of assets and liabilities from the erstwhile Punjab State Electricity Board to the successor Utilities, including the Appellant herein. PSTCL submitted its Annual Revenue Requirements based on the provisional figures from 16.4.2010 to 30.9.2010, estimates for October 2010 to March 2011 and projections

for 2011-12. PSTCL subsequently submitted additional revenue requirement of Rs.9.50 Crore towards ULDC charges.

5.2.3 A public notice was published by PSTCL on 31.12.2010 and 1.1.2011 inviting objections from the general public on the Annual Revenue Requirements filed by the Appellant and the Appellant submitted its comments to all the objections.

5.2.4 By the Order dated 09.05.2011, the State Commission has decided the following:

i) Review of Annual Revenue Requirements of Transmission and State Load Dispatch activities for financial year 2010-11 approved by the State Commission;

ii) Annual Revenue Requirement of SLDC Charges for Financial Year 2011-12.

5.2.5 Aggrieved by the Order dated 09.05.2011, PSTCL filed an appeal under Section 111 of the Electricity Act, 2003 before Hon'ble Appellate Tribunal and the Judgment is reserved with the Tribunal. PSTCL crave reference to the memorandum of appeal and the written submissions filed with the Hon'ble Appellate Tribunal at the time of hearing.

5.3 Status of Ring Fencing of SLDC

5.3.1 The Govt. of India, Ministry of Power vide Order dated 04.02.2008 constituted a Committee under the Chairmanship of Sri Gireesh B Pradhan, Additional Secretary to MoP to examine the issues for ring fencing of State Load Dispatch Centres to ensure their functional autonomy and give recommendation.

5.3.2 The Committee constituted by Govt. of India went into the details of the functioning of Load Dispatch Centres and submitted the Report in August, 2008. Chapter –VI of the Report deals with the recommendations of the Committee and the salient point of the Recommendations are as under:

a) The Load Dispatch Centre should be ring fenced suitably to ensure their functional autonomy by taking the following steps.

i) The Appropriate Government should take suitable steps to facilitate independent functioning of the Load Dispatch Centres in line with the Electricity Act, 2003 and

- National Electricity Policy. To begin with, the State Governments are urged to create a separate representative board structure for governance of LDCs on the lines of wholly owned subsidiary being created for the independent System Operation of RLDCs and NLDC.
- ii) The financial accounts should be separated for all LDCs by 31st March 2009 with the appropriate Electricity Regulatory Commissions (ERC) specifying the fees and charges payable.
- b) For making Load Dispatch Centres financially self-reliant, the Electricity Regulatory Commission should recognize the three distinct revenue streams mentioned as under;
- i) Fees and charges for system operation
 - ii) Tariff for decision support system and IT infrastructure (currently only ULDC tariff)
 - iii) Operating charges for scheduling, metering and settlement for market players.
- 5.3.3 Pursuant to the decision of the Board of Directors of PSTCL taken in its 7th Meeting held on 28.03.2011 vide Memorandum No. 9/D/F&C dated 18.03.2011, the SLDC shall operate as a separate accounting unit of PSTCL with effect from FY 2011-12, as a measure of ring fence the operation of SLDC for its independent functioning. In order to ensure independent operation of the accounting unit, the following measures have been taken:
- a) The Accounts Officer (Open Access) has been re-designated as Accounts Officer (SLDC) as the In-charge of Finance and Accounts wing of SLDC to ensure its operation as a separate accounting unit. The Accounts Officer is reporting directly to Functional Head of SLDC, the Chief Engineer(S O &C), Patiala and is responsible for maintaining of accounts of SLDC.
 - b) The salary and other employee related payments of all the officers/employees posted under Chief Engineer (S O &C) including all other payments are being made at the level of Accounts Officer, SLDC, only.

- c) Separate budget has been approved by the Board of Directors of PSTCL for FY 2011-12 for SLDC operations.
- d) SLDC has been billing PSPCL every month without prejudice to the appeal before the ATE for recovery of the SLDC Charges and is meeting all its expenses out of its own revenue.

5.4 Intra-State Boundary Metering

5.4.1 PSTCL issued RFP No. SLDC/115/2011 for invitation of bids for undertaking the activity related to Intra-State Boundary metering. However, due to administrative reasons in the tendering process, the RFP was dropped and fresh RFP was issued. Accordingly, SLDC issued RFP No. SLDC/116/2011, i.e., Request for Proposal for Selection of System Integrator for Complete Implementation on Turnkey Basis & Comprehensive O&M Services, in respect of Intrastate Boundary Metering cum Transmission Level Energy Audit Scheme using ABT type and Conventional Energy Meters on October 24, 2011 and the tenders / proposals were scheduled to be opened on November 21, 2011, but on request of the firms now it will be opened on 07.12.2011. The project is expected to take off during FY 2011-12 and to be completed in FY 2012-2013.

5.5 Basis of Projection of the Present Petition

5.5.1 State Load Despatch Centre in Punjab has started working independently since FY 2011-12. SLDC of Punjab is at nascent stage of being established as an independent entity. This Section covers the projections of expenses against various components of ARR for FY 2011-12 against approved figures of PSERC in its last Tariff Order and for FY 2012-13 for the SLDC business. The expenses against various components of ARR for FY 2011-12 (H2) and for FY 2012-13 have been projected on the basis of expenses incurred during FY 2011-12(H1).

5.6 Employee Expenses

- 5.6.1 The Hon'ble Commission in its last Tariff Order approved Rs. 3.32 Crore as employee expenses in FY 2011-12 which includes Rs. 0.11 Crore and Rs. 0.43 Crore on account of Terminal Benefits and Arrears respectively.
- 5.6.2 The Hon'ble Commission for the previous year had reduced the employees cost only on the basis of bifurcation of the erstwhile Punjab State Electricity Board expenses and determining the cost to be allocated to the PSTCL for the year 2010-11 by applying proportionate cost allowed to erstwhile Punjab State Electricity Board in the year 2009-10 and for the year 2011-12 again by applying the proportionate reduction in the past for erstwhile Punjab State Electricity Board and holding that employees cost should stand reduced by 28.48%. It is submitted that the Hon'ble Commission need to examine the claim of the employees' expenses on merits instead of proportioning the same to either the expenses of the integrated Punjab State Electricity Board or the expenses to be allowed or disallowed.
- 5.6.3 Also, it is submitted in the Appeal that the State Commission while determining the O&M Expenses for the PSTCL should have applied the Tariff Regulations, 2005 notified by the State Commission which specifically states that the O&M Expenses of the Transmission Utility shall be guided by the Regulations notified by the Central Commission. Accordingly, the State Commission ought to have applied the O&M Expenses on normative basis i.e. as specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The O&M Expenses as per the above Regulation are consistent with the claim made by the PSTCL in its Petition.
- 5.6.4 Further, the State Commission did not consider that the employees cost claimed by the appellant for the activities of SLDC both for the financial year 2010-11 and financial year 2011-12 are comparable and consistent with the norms laid down by the Central Commission. Thus, on merits the employees cost incurred by the Appellant and claimed as a pass through in the tariff was fully justified and rejection of such employees cost on the ground that there has been no rationalisation of manpower may not be correct and applicable.

- 5.6.5 Further, it was also submitted that the Hon'ble Commission had disallowed 28.48% from the amount of arrears payable by the PSTCL on the ground that the Hon'ble Commission had in the past disallowed on an average 28.48% of the employees cost claimed by the erstwhile Punjab State Electricity Board.
- 5.6.6 It is submitted that the status of the PSTCL need to be considered separately and the costs and expenses of PSTCL needs to be considered on merits without reference to the past activities or allowances of PSEB.

Present Petition

- 5.6.7 The actual employee expenses of SLDC in its present petition have been divided in four heads:
- a) Terminal Benefits
 - b) Expenses on account of arrears
 - c) Other Employee Expenses (Salary and Allowances, etc)
 - d) Expenses on account of new employees added during the year

a) Terminal Benefits

- 5.6.8 The Terminal Benefits includes Gratuity, Basic Pension and Other Terminal Benefits. During FY 2011-12 (H1), SLDC incurred expense of Rs. 0.20 Crore on account of Terminal Benefits and Pension Payments. Based on the past trend and H1 figures for FY 2011-12, SLDC has estimated Terminal Benefits for FY 2011-12 and total estimates of FY 2011-12 as a base for projecting expenses for FY 2012-13. The estimates of expenses under this are summarised in the table shown below:

Table 24: Terminal Benefits for FY 2011-12 and FY 2012-13 (in Rs Crore)

Particulars	FY 2011-12			FY 2012-13
	H1 Actuals	H2 Estimates	Total	Projected
Terminal Benefits				
Leave encashment	0.07	0.16	0.23	0.42

Particulars	FY 2011-12			FY 2012-13
	H1 Actuals	H2 Estimates	Total	Projected
Gratuity	0.12	0.25	0.37	0.59
Sub-total	0.19	0.41	0.60	1.01
Pension Payments				
Leave encashment	0.01	0.010	0.02	0.02
Dearness pension	0.00	0.006	0.01	0.02
Dearness allowance	0.00	0.000	0.00	0.00
Any other expenses	0.00	0.005	0.01	0.01
Sub-total	0.01	0.02	0.03	0.05
Total	0.20	0.43	0.63	1.06

b) Expenses on account of Arrears:

- 5.6.9 The Hon'ble Commission in last Tariff Order approved Rs. 0.43 Crore as Arrears on account of Pay Revision for FY 2011-12 on the basis of ratio submitted for PSTCL and SLDC in last Year's Petition.
- 5.6.10 The Commission reduced the amount of Arrears claimed by SLDC for FY 2011-12 in the last Year's Petition by 28.48% on the basis of employee expenses disallowed in previous three years.
- 5.6.11 As regards actual expenses on account of Arrears in FY 2011-12 (H1), SLDC has incurred an expense of Rs. 0.86 Crore.
- 5.6.12 As regards Arrears in FY 2012-13, SLDC has considered payable instalment of 30% of total amount of Arrears amounting to Rs 0.65 Crore.

c) Other Employee Expenses:

- 5.6.13 As regards other Employee Expenses in FY 2011-12 (H1), SLDC has incurred expense of Rs. 2.97 Crore under the head other employee expenses.
- 5.6.14 The Hon'ble Commission in last Tariff Order applied escalation of an average annual increase of 8.91% based on available WPI Indices in FY 2011-12.
- 5.6.15 The Hon'ble Commission approved net employee expenses of Rs. 2.78 Crore in FY 2011-12. As regards other Employee Expenses in FY 2011-12 (H1), SLDC has incurred expense of Rs. 2.97 Crore under the head other employee expenses
- 5.6.16 SLDC has considered the escalation factor of 10% on actual employee expenses in FY 2011-12 (H1) for projecting employee expenses on account of existing employees in FY 2011-12 (H2), based on 7% DA grossed up applicable for H2 (comes around 10.5%). For FY 2012-13, SLDC has considered an escalation of 15% on total employee expenses on account of existing employees in FY 2011-12, based on annual increment of 3% and DA of 12%.

d) Employee Expenses on account of new employees

- 5.6.17 Employee expense pertaining to 6 new employees in FY 2012-13 is shown in the table below:

Table 25: Employee Expenses for new employees joining in FY 2012-13 (in Rs)

S. No	Category	Number of Posts	Revised Pay Scale & Grade Pay	Gross Emoluments	Monthly Salary	Annual Salary
1	LDC	2	6400-20200+2450	17500	0.004	0.04
2	UDC	2	6400-20200+3200	22500	0.005	0.05
3	Sr. Asst.	2	10900-34800+4150	30000	0.006	0.07
4	JE	2	10900-34800+4450	28512	0.006	0.07
5	AE	6	16659-39100+5800	43877	0.026	0.32
	Total	14			0.046	0.55

- 5.6.18 The status of number of employees at the beginning of the year and the number of employees to be added during the respective year is tabulated as under:

Table 26: Number of Employees added during FY 2011-12 and FY 2012-13

S. No	Particulars	FY 2011-12 (Current Year)		FY 2012-13 (Ensuing Year)
		Petition	Actual	Projected
1	Number of employees with PSEB / PSTCL-SLDC as on 1st April	102	92	86
2	Number of employees retired/retiring during the year	2	6	7
3	Number of employees added during the year	0	0	14
4	Number of employees at the end of the year (1-2)	100	86	93

5.6.19 Based on the above discussion, the employee expenses for FY 2011-12 and FY 2012-13 are tabulated as under:

Table 27: Employee Expenses in FY 2011-12 and FY 2012-13 (In Rs Crore)

S. No	Particulars	FY 2011-12				FY 2012-13
		Order	H1 (Actuals)	H2 (Estimated)	Total	Projected
1	Terminal Benefits	0.11	0.20	0.43	0.63	1.06
2	Arrears on account of pay revision	0.43	0.86	0.00	0.86	0.65
3	Other Employee Expenses	2.78	2.97	3.27	6.25	7.18
4	Expenses for new employees added during FY					0.55
5	Total Employee Expenses	3.32	4.04	3.70	7.74	8.89

5.6.20 The head-wise expenditure of Employee Expenses in FY 2011-12 and FY 2012-13 has been provided in Form F-1 annexed along with the Petition.

5.6.21 SLDC requests the Hon'ble Commission to approve the employee expenses based on merit individual sub-heads of expenditure, as submitted for FY 2011-12 and FY 2012-13.

5.7 R&M Expenses

5.7.1 The Hon'ble Commission in its last Tariff Order approved Rs. 0.17 Crore as R&M expenses in FY 2011-12 based on allocation of GFA between SLDC business and Transmission business.

5.7.2 SLDC would like to submit that the basic purpose of unbundling the State Electricity Board was to vest the functions of Transmission including SLDC operation in an independent company so as to increase the transmission network and its smooth operation. The above necessarily involves increase in repair and maintenance cost.

5.7.3 Regulation 28(6) of the Tariff Regulations, 2005 clearly provides as under:

“28.

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

5.7.4 PSTCL submits that the Hon'ble Commission need to consider the increase in the R&M and A&G expenses on account of additional assets likely to be added during the financial year 2011-12 in the determination of the Annual Revenue Requirement in terms of the above Regulations instead of postponing the same to the review in the next year. The above would ensure much needed cash flow to the PSTCL at the same time ensuring that the consumers are not burdened with carrying cost for late recovery of costs and expenses.

Present Petition

5.7.5 SLDC has incurred expense of Rs. 0.90 Crore on account of R&M Expenses in FY 2011-12 (H1). SLDC would like to submit that it is undertaking R&M activities based on realistic identifications of needs of necessary schemes to be carried out for smooth functioning of the SLDC business. SLDC has estimated an escalation factor of 10% on actual R&M expenses in FY 2011-12 (H1) for projecting R&M expenses in FY 2011-12 (H2). For FY 2012-13, SLDC has considered an escalation of 15% on total R&M expenses in FY 2011-12.

5.7.6 The R&M expenses on account of Opening GFA during FY 2011-12 and FY 2012-13 is tabulated below:

Table 28: R&M Expenses in FY 2011-12 and FY 2012-13 (In Rs Crore)

S. No	Particulars	FY 2011-12				(FY 2012-13)
		Order	H1 (Actuals)	H2 (Projected)	Total	Projected
1	Plant & Machinery		0.88	1.16	2.04	2.80
2	Building/Renovation of SLDC Building		0.01	0.16	0.17	0.20
3	Vehicles		0.01	0.02	0.03	0.05
5	Total	0.17	0.90	1.34	2.24	3.05

5.7.7 The first amendment of PSERC Tariff Regulations, 2005 dated July 27, 2009 states as under:

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

5.7.8 SLDC has considered R & M expenses on asset added during FY 2011-12 as 5% of assets added during FY 2011-12. Since FY 2012-13 is an abnormal year in which very high asset addition during the year is projected, SLDC has considered R&M expenses under this head as 1% of assets to be added during FY 2012-13. The R & M Expenses claimed during FY 2011-12 and FY 2012-13 is tabulated below:

Table 29: R & M Expenses for asset addition during the year (in Rs Crore)

Particulars	FY 2011-12	FY 2012-13
Average Addition during the year	0.05	13.66
% claimed on asset addition	5.00%	1.00%
R & M for Assets Addition during the year	0.003	0.137

5.7.9 Based on the above discussion, the R&M expenses from FY 2010-11 to FY 2012-13 are tabulated as under:

Table 30: R & M Expenses from FY 2011-12 to FY 2012-13 (in Rs Crore)

S. No	Particulars	FY 2011-12				FY 2012-13
		Order	H1 (Actuals)	H2 (Projected)	Total (H1 + H2)	Projected
1	R & M Expenses	0.17	0.90	1.34	2.24	3.05
2	R & M Expenses on assets added during the Year	0.00	0.00	0.00	0.00	0.14
3	Net R & M Expenses	0.17	0.90	1.34	2.24	3.19

5.7.10 The head-wise expenditure of R&M Expenses in FY 2011-12 and FY 2012-13 has been provided in Form F-3 annexed along with the Petition.

5.7.11 SLDC requests the Commission to approve the R & M expenses as submitted for FY 2011-12 and FY 2012-13.

5.8 A&G Expenses

5.8.1 The Commission in its last Tariff Order approved Rs. 0.033 Crore as A&G expenses in FY 2011-12 based on allocation of GFA between SLDC business and Transmission business.

5.8.2 As similar to the other elements of O&M expenses, PSTCL submits that the Hon'ble Commission need to consider the increase in the A&G expenses on account of additional assets likely to be added during the financial year 2011-12 in the determination of the Annual Revenue Requirement instead of postponing the same to the review in the next year.

Present Petition

5.8.3 SLDC has incurred expense of Rs. 0.09 Crore on account of A&G Expenses in FY 2011-12 (H1).

5.8.4 SLDC has considered actual A &G expenses in FY 2011-12 (H1) and estimated A&G expenses for FY 2011-12 (H2) based on sub head wise estimation. For FY 2012-13, SLDC has followed the same approach of projecting the expenditure based on sub-head wise requirement.

A&G Expenses on account of asset addition during the year

5.8.5 The first amendment of PSERC Tariff Regulations, 2005 dated July 27, 2009 states as under:

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

5.8.6 SLDC has considered A & G expenses on asset added during FY 2011-12 as 5% of assets added during FY 2011-12. Since FY 2012-13 is an abnormal year in which very high asset addition during the year is projected, SLDC has considered A & G expenses as 1% of assets to be added during FY 2012-13. The A & G Expenses claimed during FY 2011-12 and FY 2012-13 is tabulated below:

Table 31: A&G Expenses on Asset Addition during the Year (in Rs Crore)

Particulars	FY 2011-12	FY 2012-13
Average Asset Addition during the year	0.05	13.66
% claimed on asset addition during FY	5.00%	1.00%
A & G Expenses for asset added during the year	0.003	0.137

5.8.7 A&G expenses estimation for FY 2011-12 and FY 2012-13 is summarised as under:

Table 32: A&G Expenses from FY 2011-12 to FY 2012-13 (in Rs Crore)

S. No	Particulars	FY 2011-12			FY 2012-13
		Actuals H1	Estimates H2	Total	Projected
1	Insurance	0.004	0.000	0.004	0.005
2	Telephone, postage & telegrams	0.012	0.060	0.072	0.100
3	Consultancy fees			0.000	0.100
4	Technical fees			0.000	
5	Other professional charges/Legal Charges	0.001	0.002	0.003	0.004
6	Conveyance & travel expenses	0.028	0.030	0.058	0.070
7	Electricity & water charges	0.000	0.500	0.500	0.800
8	Training	0.013	0.050	0.063	0.080
9	Others	0.033	0.050	0.083	0.100
11	Cost for outsourcing for peons, security guards, etc. (30 employees)		0.050	0.050	0.100
12	Other material related expenses			0.000	
13	Total	0.091	0.742	0.833	1.359
14	Total expenses	0.091	0.742	0.833	1.359
15	Less Capitalisation			0.000	0.095
16	Net expenses	0.091	0.742	0.833	1.264
17	Add prior period			0.000	

S. No	Particulars	FY 2011-12			FY 2012-13
		Actuals H1	Estimates H2	Total	Projected
18	A&G for Assets Addition during the year		0.001	0.003	0.137
19	Total	0.091	0.743	0.836	1.401

5.8.8 The head-wise expenditure of A & G Expenses in FY 2011-12 and FY 2012-13 has been provided in Form F-4 annexed along with the Petition.

5.8.9 SLDC requests the Hon'ble Commission to approve the A & G expenses based on merit individual sub-heads of expenditure, as submitted for FY 2011-12 and FY 2012-13.

5.9 ULDC Charges

5.9.1 For Load Dispatch activities, a SCADA/ EMS system is already commissioned under NR Unified Load Dispatch and Communication (NR-ULDC) Scheme by PGCIL since 2002. Under this scheme computerized Control Centers for SCADA/ EMS (Supervisory Control and Data Acquisition/ Energy Management System) system along with necessary communication facilities such as PLCC (power Line Carrier Communication), Microwave, Optical fiber on Ground Wire (OPGW) etc. has been implemented so as to get real time data of the Power system and to efficiently operate the Northern grid.

5.9.2 Erstwhile PSEB's financial liability in the NR-ULDC scheme is as under:

- a) Liability for the ULDC in the state is around Rs.25.50 Crore.
- b) Liability due to its share in BBMB is 44.65% (i.e. Rs 12.11 Cr) of the ULDC project cost of Rs 27.14 Cr, (the percentage is to checked in reference to the recent judgment)
- c) Liability in NRLDC & other Central sector projects is around 12% (i.e. Rs. 30.702 Cr) average of Rs 255.85 Cr.

5.9.3 The above liability is being paid off by way of monthly payments towards ULDC transmission charges being decided by CERC from time to time w.e.f. Aug 2002 to Jul 2017, as under:

- i) Monthly payment of around Rs.24 Lacs as ULDC transmission charges i.r.o. ULDC in Punjab.
- ii) Monthly payment of around Rs.11 Lacs as ULDC transmission charges due to Punjab's share in BBMB.
- iii) Monthly payment of around Rs.68 Lacs as ULDC transmission charges due to Punjab's share in Central Sector projects.

The Commission in its last Tariff Order accepted the amount of Rs. 18.91 Crore towards ULDC Charges as submitted by SLDC.SLDC incurred an expense of Rs. 4.59 Crore towards ULDC Charges during FY 2011-12 (H1).

5.9.4 On the basis of above charges, the projection of ULDC Charges during FY 2011-12 (H2) and FY 2012-13 is tabulated as under:

Table 33: ULDC Charges from FY 2011-12 to FY 2012-13 (in Rs Crore)

S. No	Particulars	FY 2011-12				FY 2012-13
		Order	H1 (Actuals)	H2 (Projected)	Total (H1+H2)	Projected
1	ULDC Charges	18.91	4.59	6.00	10.59	13.00
2	Expansion of NR- Unified Load Despatch Scheme (ULDC Phase-II) *					
3	Replacement of Microwave system with OPGW and provision of additional new OPGW Links**					8.00
	Total	18.91	4.59	6.00	10.59	21.00

Note:

* Cost of the Project is Rs 26 Crore and payment for this scheme will start from FY 2013-14.

** Cost of the Project is Rs 42 Crore and payment for this scheme will start from FY 2012-13.

5.10 Capital Expenditure and Capitalisation

5.10.1 The Hon'ble Commission in last Tariff Order approved Capital Expenditure of Rs. 25 Crore for FY 2011-12.

5.10.2 SLDC has planned the capital expenditure of Rs. 3.13 Crore and Rs. 24.28 Crore to be incurred FY 2011-12 and FY 2012-13 respectively. The Capital Expenditure during FY 2011-12 and FY 2012-13 is tabulated below:

Table 34: Capital Expenditure from FY 2011-12 to FY 2012-13 (in Rs Crore)

S. No	Particulars	FY 2011-12 (Estimated)	FY 2012-13 (Projected)
1	47 No. RTU	2.00	4.00
2	Procurement of additional RTU for remaining/upcoming substation of PSTCL	0.00	2.00
3	Replacement of existing RTUs	0.00	2.00
4	Implementation of Intrastate boundary metering scheme based upon ABT type energy meter	1.00	14.00
5	Purchase of computer items for SLDC	0.10	0.20
6	Furniture and Fixtures	0.03	0.03
7	Tools and Plants (Frequency Meters, etc.)	0.00	0.05
8	Building expenditure for energy center	0.00	2.00
9	Total	3.13	24.28

5.10.3 The Capitalisation proposed to be capitalized by SLDC during FY 2011-12 and FY 2012-13 is tabulated below:

Table 35: Capitalisation from FY 2011-12 and FY 2012-13 (in Rs Crore)

S. No	Particulars	FY 2011-12	FY 2012-13
1	Capitalisation	0.10	27.31

5.11 Funding Pattern

5.11.1 Regulation 23 of 'The Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005' states that

"DEBT-EQUITY RATIO

For the purpose of determination of tariff, debt-equity ratio in case of a new project commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.

Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public;

In case of existing and ongoing projects, the actual debt-equity ratio shall be considered for determination of tariff. However, any expansion shall be governed as per clause (1) above.”

5.11.2 SLDC has considered the Capital Expenditure to be undertaken during FY 2011-12 and FY 2012-13 to be funded through 70% debt and 30% equity in accordance with PSERC Tariff Regulations, 2005 and the equity infusion will be funded through internal accruals.

5.11.3 The funding pattern during FY 2011-12 and FY 2012-13 is tabulated below:

Table 36: Funding Pattern during FY 2011-12 and FY 2012-13 (in Rs Crore)

S. No	Particulars	D:E* Ratio	FY 2011-12	FY 2012-13
1	Capital Expenditure during FY		3.13	24.28
2	Equity	30%	0.94	7.28
3	Debt	70%	2.19	17.00

*Debt: Equity ratio

5.12 Depreciation

5.12.1 The Hon’ble Commission in last Tariff Order approved depreciation of Rs. 0.37 Crore for SLDC Business in FY 2011-12.

5.12.2 The depreciation during FY 2011-12 and FY 2012-13 on Opening GFA and assets added during the respective year of SLDC has been calculated according to the rates prescribed in CERC Tariff Regulations, 2009. The applicable depreciation rates for

calculation of depreciation during FY 2011-12 and FY 2012-13 are tabulated as under:

Table 37: Depreciation rates for FY 2011-12 and FY 2012-13 (in %)

S. No	Particulars	Depreciation Rates
1	Land and Land Rights	0%
2	Buildings and Civil Works	3.34%
3	Plant and Machinery	5.28%
4	Line and Cable Networks	5.28%
5	Computer Accessories	6.33%
6	Meters	5.28%
7	Vehicles	9.50%
8	Furniture and Fixtures-Office Equipments	6.33%

5.12.3 Accounting Standard-VI: Clause 3 defines depreciation, depreciable assets, useful life and depreciable amount as below:

“3.1 Depreciation is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, effluxion of time or obsolescence through technology and market changes. Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the expected useful life of the asset. Depreciation includes amortization of assets whose useful life is predetermined.

3.2 Depreciable assets are assets which are expected to be used during more than one accounting period; and have a limited useful life and are held by an enterprise for use in the production or supply of goods and services, for rental to other, or for administrative purposes and not for the purpose of sale in the ordinary course of business

3.3 Useful life is either (i) the period over which a depreciable asset is expected to be used by the enterprise; or (ii) the number of production or similar units expected to be obtained from the use of the asset by the enterprise.

3.4 *Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost in the financial statement, less the estimated residual value.”*

5.12.4 Note at Serial No. 4 to Schedule XIV of the Companies Act, 1956 reads as under:-

“Where, during any financial year, any addition has been made to any asset, or where any asset has been sold, discarded, demolished or destroyed, the depreciation on such assets shall be calculated on a pro rata basis from the date of such addition or as the case may be, up to the date on which such asset has been sold, discarded, demolished or destroyed”

5.12.5 The Hon’ble Appellate Tribunal vide its Order dated July 15, 2009 (Appeal No. 137 of 2008) allowed the Appeal and ruled as under:

“In view of the provisions of the Tariff Regulations the Companies Act and the Accounting Standard-6, we find full justification and rationale in the contention of the appellant that proportionate depreciation has to be allowed even for part of the year when the assets have been put to use. The asset once put to use will be exposed to wear and tear which will not wait to depreciate till the start of the new financial year. We, therefore, allow the appeal in this view of the matter also.”

5.12.6 In line with the decision of Hon’ble Appellate Tribunal, SLDC has claimed depreciation on the assets added during the year by assuming that the assets will be added during the mid of the year.

5.12.7 Depreciation entitlement for FY 2011-12 and FY 2012-13 is tabulated below:

Table 38: Total depreciation during FY 2011-12 and FY 2012-13 (in Rs Crore)

S. No	Particulars	FY 2011-12		FY 2012-13
		Order	Estimated	Projected
1	Depreciation	0.37	0.36	1.07

5.13 Interest and Finance Charges

5.13.1 The Hon’ble Commission in last Tariff Order approved Interest and Finance Charges of Rs. 0.20 Crore for SLDC Business in FY 2011-12 which includes capitalisation of

Rs. 0.08 Crore. The Hon'ble Commission further deducted Rs. 0.20 Crore on account of diversion of capital funds.

5.13.2 It is submitted that there is no evidence of the SLDC having diverted any funds borrowed for capital expenditure for meeting the revenue expenses. There is no diversion of funds by the SLDC either at the instance of the State Government or otherwise. SLDC has not even claimed any interest as being payable to the Government of Punjab. In the circumstances, the issue of diversion of funds for SLDC does not arise.

5.13.3 Hence, SLDC would request the Hon'ble Commission to allow interest expenses for the FY 2011-12 and FY 2012-13 based on entitlement as per Regulations and not to disallow expenses on arbitrary basis, as it would adversely affect cash flow of SLDC and may lead to additional burden to the consumers in the form of carrying cost of disallowed amount while carrying out final truing up of respective years.

5.13.4 As discussed in the section of funding pattern PSTCL has considered 70% of the capital expenditure to be funded through Loan. PSTCL has considered interest rate of 12.50% for the purpose of calculation of interest on debt raised during FY 2011-12 and FY 2012-13. The interest on debt to be raised during FY 2011-12 and FY 2012-13 is tabulated as under:

Table 39: Interest and Finance Charges from FY 2011-12 to FY 2012-13 (in Rs Crore)

S.No	Particulars	Current Year (FY 2011-12)			Ensuing Year (FY 2012-13)
		Last Year Petition	Order	Estimated	Projected
1	Opening balance of loan	1.45	1.45	0.00	2.19
2	Add: addition during the year	56.66	25.00	2.19	17.00
3	Less: Repayment	0.00	0.00	0.00	0.00
4	Closing Balance	58.11	26.45	2.19	19.19
5	Amount of Interest	3.28	0.28	0.14	1.34
6	Interest Rate	0.11		0.13	0.13
7	Less Interest Capitalised	2.95	0.20	0.00	0.00
8	Interest Reduction on a/c of diversion of funds	0.00	0.03	0.00	0.00
9	Net Interest Amount	0.33	0.05	0.14	1.34

5.14 Return on Equity

5.14.1 The Hon’ble Commission in last Tariff Order did not consider any amount towards Return on Equity during FY 2011-12 in line with the submission of SLDC in previous ARR Petition.

5.14.2 As per Regulation 15 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 notified dated 19th January, 2009, for the period 2009-14, Return on equity for transmission utility shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up with the tax rate applicable to the Utility.

“Provided that return on equity with respect to the actual tax rate applicable to the transmission licensee, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below

In case of the transmission licensee paying normal corporate tax @ 33.99% including surcharge and cess:

Rate of return on equity = $15.50 / (1 - 0.3399) = 23.481\%$ ”

5.14.3 In this regard, PSTCL requests the Hon’ble Commission to kindly consider the CERC norms for allowing the ROE, the effective rate of return applicable to PSTCL would be 23.48% (15.5 %/(1-33.99%)).

5.14.4 PSTCL has considered 30% of the Capital Expenditure as equity to be added during FY 2011-12 and FY 2012-13. The Return on Equity for FY 2011-12 and FY 2012-13 is tabulated below:

Table 40: Return on Equity during FY 2011-12 and FY 2012-13 (in Rs Crore)

S.No	Particulars	Current Year (FY 2011-12)			Ensuing Year (FY 2012-13)
		H1	H2 (Estimates)	Total	Projected
1	Opening Balance of Equity	0.00	0.00	0.00	0.94

S.No	Particulars	Current Year (FY 2011-12)			Ensuing Year (FY 2012-13)
		H1	H2 (Estimates)	Total	Projected
2	Equity Addition during the Year	0.00	0.94	0.94	7.28
3	Deduction in Equity on account of retirement of assets	0.00	0.00	0.00	0.00
4	Closing balance of Equity	0.00	0.94	0.94	8.22
5	Equity Percentage			23.48%	23.48%
6	Return on Equity			0.11	1.08

5.15 Interest on Working Capital

5.15.1 The Commission in last Tariff Order approved interest on working capital as Rs. 0.55 Crore in FY 2011-12. The Commission applied the rate of 11.75% for calculating Interest on Working Capital.

5.15.2 Clause-30 of PSERC Tariff Regulations 2005 states as under:

“30. Working Capital and Interest Rate on Working Capital

For generation and transmission business, the working capital shall be as per CERC norms.

...

The interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India of the relevant year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures.”

5.15.3 SLDC has calculated Interest on working capital in accordance with Clause-18 (c) of CERC Tariff Regulations 2009 based on following parameters:

- a) Receivables equivalent to two months of fixed cost
- b) Maintenance Spares @ 15% of operation and maintenance expenses
- c) Operation and Maintenance Expenses for one month.

d) SLDC has considered an interest rate of 12.50 % for calculating Interest on Working Capital in FY 2012-13.

5.15.4 The interest on Working Capital as projected by SLDC is tabulated below:

Table 41: Interest on Working Capital from FY 2011-12 and FY 2012-13 (in Rs Crore)

S.No	Particulars	Current Year (FY 2011-12)		Ensuing Year (FY 2012-13)
		Order	Total	Projected
1	Receivables equivalent to two months of fixed cost.	3.89	3.89	5.55
2	Maintenance spares @ 15% of Operation and Maintenance expenses	0.53	1.62	2.02
3	Operation and Maintenance expenses for one month.	0.29	0.90	1.12
4	Total Working Capital	4.71	6.42	8.69
5	Rate of Interest	11.75%	12.50%	12.50%
6	Interest on Working Capital	0.55	0.80	1.09

5.16 Non-Tariff Income

5.16.1 The Hon'ble Commission in its last Tariff Order did not consider any amount towards Non-Tariff Income in line with the submission of SLDC in last Year's Tariff Petition.

5.16.2 SLDC has not received any amount towards Non-Tariff Income during FY 2011-12 (H1). Therefore, no amount on account of Non-Tariff Income has been projected in FY 2011-12 and FY 2012-13. It may be noted that SLDC fees and charges collected from open access consumers are classified under revenue income for the purpose of this Petition.

5.17 Aggregate Revenue Requirement (ARR) for SLDC Business

5.17.1 The Hon'ble Commission in last Tariff Order approved an ARR of Rs. 23.35 Crore to be recovered in FY 2011-12.

5.17.2 Based on the above discussion on projection of expenses on various heads, SLDC has calculated the ARR for FY 2011-12 and FY 2012-13 which is tabulated below:

Table 42: ARR from FY 2011-12 to FY 2012-13 (in Rs Crore)

S.No	Particulars	Current Year (FY 2011-12)			FY 2012-13
		Last Year Petition	Order	Estimated	Projected
1	Employee costs	4.54	3.32	7.74	8.89
2	R&M expenses	4.86	0.17	2.24	3.19
3	Administration and general expenses	5.42	0.03	0.84	1.40
4	Depreciation	0.67	0.37	0.36	1.07
5	Interest charges	0.33	0.00	0.14	1.34
6	Interest on working capital	0.93	0.55	0.80	1.09
7	ULDC Charges	10.00	18.91	10.59	21.00
8	Return on Equity			0.11	1.08
9	Total revenue requirement	26.76	23.35	22.81	39.04
10	Less: non tariff income	0.00	0.00	0.00	0.00
11	Incentive Scheme				0.05
12	Net revenue requirement (9-10+11)	26.76	23.35	22.81	39.09
13	Revenue from tariff	26.76	23.36	34.37	
14	Revenue Gap/ Surplus	0.00	0.00	-11.56	

5.18 SLDC Development Fund

5.18.1 CERC in its Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2009 on September 18, 2009 provides for a special provisioning for development of Load Despatch Centre through creation of LDC Development Funds in which the details of LDC Development Funds are given.

5.18.2 Clause-9 of CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2009 states as under:

“9. LDC Development Fund

The Power System Operation Company shall create and maintain a separate fund called 'LDC Development Fund'.

The charges on account of return on equity, interest on loan, depreciation and other income of the Regional Load Despatch Centre and National Load Despatch centre such as registration fee, application fee, short-term open access charges, etc shall be deposited to the LDC development fund.

The Power System Operation Company shall be entitled to utilise the money deposited to the LDC development fund for loan repayment, servicing the capital raised in the form of interest and dividend payment, meeting stipulated equity portion in asset creation and margin money for raising loan from the financial institutions and funding R & D projects.

The LDC development fund shall not be utilized for any other revenue expenditure.

Any asset created by the Power System Operation Company out of the money deposited to the LDC development fund shall not be considered for computation of return on equity and interest on loan.

The Commission shall review the LDC development fund every year."

- 5.18.3 On similar lines, Orissa Electricity Regulatory Commission issued Orissa Electricity Regulatory Commission (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010 which includes the provision for development of State Load Despatch Centre (SLDC) development funds. Clause-8 of Orissa Electricity Regulatory Commission (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010 states as under:

"8. SLDC Development Fund

The SLDC shall create and maintain a separate fund called 'SLDC Development Fund under a separate Head of Account'.

The charges on account of return on equity and other income of the State Load Despatch Centre such as registration fee, application fee, short-term open access charges, etc shall be deposited to the SLDC Development Fund.

The SLDC shall be entitled to utilize the money deposited to the SLDC Development Fund for meeting stipulated equity portion in asset creation and

margin money for raising loan from the financial institutions and funding R & D projects with due approval of the Commission.

The SLDC Development Fund shall not be utilized for any other revenue expenditure.

Any asset created by the SLDC out of the money deposited to the SLDC Development Fund shall not be considered for computation of return on equity and interest on loan.

The Commission shall review the SLDC Development Fund every year.”

5.18.4 There is no Regulation at present which specifies the terms and conditions of the working and development of SLDC in the State of Punjab. SLDC is in nascent stage and will require funds in future years for development of assets so as to ensure the state of Art system to promote development of power market in State of Punjab. Hence, it is submitted that the Hon’ble Commission to create the SLDC Development Fund in which surplus, if any, generated from SLDC business can be deposited for future utilisation in the SLDC business.

5.19 Annual Charges

5.19.1 Regulation 20, 21, 22, 23 and 24 of Central Electricity Regulatory Commission (fees and charges of Regional Load Despatch Centre and other related matters) Regulations, 2009, states that Annual charges shall comprise of following components:

- a) System Operation Charges (SOC) i.e. 80% of Annual charge
- b) Market Operation Charges (MOC) i.e. 20% of Annual charge

5.19.2 Further, System Operation Charges (SOC) shall be collected from the users in the following ratio

- a) Intra State Transmission Licensee-10% on the basis of Ckt-KMs
- b) Generating Company & Seller - 45% on the basis of Install capacity
- c) Distribution Licensee & buyers - 45% on the basis of allocation

5.19.3 Market Operation Charges (MOC) shall be collected equally from the Discoms and Generating Companies apportioning to the entitlement and installed Capacity.

5.19.4 The details of SLDC charges are indicated as below:

Table 43: Details of SLDC Charges

S. No	Particulars	Amount (Rs. Crore)
1	Annual Charges	39.09
2	Total Cost (Annual Fixed Cost)	39.09
3	Monthly Charges	3.26

5.19.5 PSTCL requests the Hon'ble Commission to approve the SLDC charges of Rs 39.09 Crore to be recovered from PSPCL (Punjab State Power Corporation Limited). Charges shall be recovered on monthly basis i.e. Rs 3.26 Crore per month for FY 2012-13.

6 AGGREGATE REVENUE REQUIREMENT

6.1.1 The table given below summarizes the Aggregate Revenue Requirement for FY 11-12 and FY 12-13:

Table 44: ARR of PSTCL and SLDC for FY 2011-12 and FY 2012-13

S. No	Particulars	Transmission Business				SLDC Business			
		FY 2011-12			FY 2012-13	FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected	Last Year Petition	Order	Estimated	Projected
1	Employee costs	268.31	162.82	259.32	310.00	4.54	3.32	7.74	8.89
2	R&M expenses	97.15	55.89	61.22	120.12	4.86	0.17	2.24	3.19
3	A&G expenses	21.44	11.17	23.69	74.89	5.42	0.03	0.84	1.40
4	Depreciation	151.80	115.80	132.80	193.41	0.67	0.37	0.36	1.07
5	Interest charges	138.04	70.72	158.80	251.58	0.33	0.00	0.14	1.34

S. No	Particulars	Transmission Business				SLDC Business			
		FY 2011-12			FY 2012-13	FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected	Last Year Petition	Order	Estimated	Projected
6	Interest on Working Capital	25.07	15.47	19.79	42.14	0.93	0.55	0.80	1.09
7	ULDC Charges					10.00	18.91	10.59	21.00
8	Return on Equity	77.14	45.99	89.09	110.01	0.00	0.00	0.11	1.08
9	Provision for bad debts & Other Debits	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
10	Total revenue requirement	778.95	477.86	744.72	1102.15	26.75	23.35	22.81	39.04
11	Less: Non Tariff Income	9.76	9.76	13.05	0.00	0.00	0.00	0.00	0.00
12	Incentive Scheme					0.00	0.00	0.00	0.05
13	Aggregate Revenue Requirement	769.19	468.10	731.67	1102.15	26.75	23.35	22.81	39.09
14	Revenue Gap Carry forward	54.89	0.00	0.00	250.66	0.00	0.00	0.00	0.00
15	Cumulative Revenue Requirement	824.08	468.10	731.67	1352.82	26.75	23.35	22.81	39.09
16	Revenue from Tariff & OA Charges			481.01			23.36	34.37	39.09
17	Revenue Gap	0.00	0.00	250.66		0.00	0.00	-11.56	0.00

S. No	Particulars	Transmission & SLDC Business			
		FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected
1	Employee costs	272.85	166.14	267.06	318.88
2	R&M expenses	102.01	56.06	63.46	123.31

S. No	Particulars	Transmission & SLDC Business			
		FY 2011-12			FY 2012-13
		Last Year Petition	Order	Estimated	Projected
3	A&G expenses	26.86	11.20	24.52	76.29
4	Depreciation	152.47	116.17	133.16	194.48
5	Interest charges	138.37	70.72	158.94	252.92
6	Interest on Working Capital	26.00	16.02	20.59	43.22
7	ULDC Charges	10.00	18.91	10.59	21.00
8	Return on Equity	77.14	45.99	89.20	111.09
9	Provision for bad debts & Other Debits	0.00	0.00	0.01	0.00
10	Total revenue requirement	805.70	501.21	767.54	1141.19
11	Less: Non Tariff Income	9.76	9.76	13.05	0.00
12	Incentive Scheme	0.00	0.00	0.00	0.05
13	Aggregate Revenue Requirement	795.94	491.45	754.49	1141.24
14	Revenue Gap Carry forward	54.89	0.00	0.00	250.66
15	Cumulative Revenue Requirement	850.83	491.45	754.49	1391.90
16	Revenue from Tariff & OA Charges	0.00	23.36	515.38	
17	Revenue Gap	0.00	0.00	250.66	

6.1.2 PSTCL proposes to recover the total ARR of Rs 1352.82 Crore from PSPCL on monthly basis i.e. Rs. 111817.72/MW towards transmission charges and also to recover the total ARR of Rs 39.09 Crore toward SLDC charges i.e. Rs. 3.26 Crore per month from PSPCL.

6.2 Transmission & Long and Short Term Open Access Charges.

6.2.1 The Hon'ble Commission has notified the Punjab State Electricity Regulatory Commission (Terms and Conditions for Intra-state Open Access) Regulations, 2011 under Section 42 read with Section 181 of the Electricity Act, 2003. Consumers availing open access shall be required to pay the transmission charges for use of the transmission systems of PSTCL.

6.2.2 Regulations 23 of Punjab State Electricity Regulatory Commission (Terms and Conditions for Intra-state Open Access) Regulations, 2011, states as under:

“ ...

Long term, Medium term and Short term Open Access customers availing supply at 132/220kv shall be liable to pay full transmission charges;

...”

6.3 Open Access Charges in terms of Rs./MW/Day

- 6.3.1 The revenue from Short Term Open Access Charges to be charged to Short Term Open Access Customers is uncertain and therefore, PSTCL has not factored the same in to the Miscellaneous Receipts proposed in this Application for FY 2012-13. It is submitted that revenue if any from the Short Term Open Access consumers will be adjusted in the revenue as year-end-adjustments at the end of the year on actual basis. Therefore, PSTCL considers Short Term Access Charges as Nil in this Application.
- 6.3.2 Short term Open Access customer shall be liable to pay transmission charges determined by the Hon’ble Commission.
- 6.3.3 Surcharge and/ or any other charge on Long / Short Term Open Access, if any, as decided by the Hon’ble Commission will be leviable.
- 6.3.4 The transmission charge payable by a short-term customer will be levied on hourly basis in Rs/MWh.
- 6.3.5 The total State generation capacity including ISGS share which will flow through the transmission network of PSTCL is 10082 MW. PSTCL, therefore, proposes the LTOA charges and STOA charges as below:

Table 45: Transmission and Open Access Charges (in Rs Crore)

S. No	Particulars	Unit	Reference	FY 2012-13 (Projected)
1	ARR	Rs. Crore	A	1352.82
2	Monthly ARR	Rs. Crore / Month	B=A/12	112.73
3	MW Capacity	MW	C	10082.00
4	Proposed Transmission Tariff	Rs./ MW/ Month	D=B/C	111817.72
5	Proposed Transmission Tariff	Rs./ MW/ day	E=D/30	3727.26

6.3.6 Considering the methods shown above, PSTCL requests the Hon’ble Commission to determine Open Access Charges as per Punjab State Electricity Regulatory Commission (Terms and Conditions for Intra-state Open Access) Regulations, 2011 for the Aggregate Revenue Requirement of Rs. 1352.82 Crore for FY 2012-13.

6.4 REACTIVE ENERGY CHARGES

6.4.1 As per regulation 38 (C) of PSERC (Terms and Condition for determination of Tariff) Regulations, 2005, reactive energy charges would be variable charge reflecting voltage related drawals/returns shall be payable at the rate prescribed by the CERC from time to time. The PSTCL requests the Hon’ble Commission to allow the reactive energy charges as per the Regulation.

7 COMPLIANCE TO DIRECTIVES

7.1 Directives given by the Commission in Tariff Order issued on May 9, 2011

7.1.1 The Commission in last Tariff Order gave various new directives to PSTCL. The steps taken by PSTCL in compliance of the directives are elaborated along with the directives.

S. No	Directive given by the Commission	Action taken by PSTCL
1	The Hon’ble Commission directed PSTCL to ensure financial autonomy and independent operation of SLDC at the earliest.	Pursuant to the decision of the Board of Directors of PSTCL taken in its 7th Meeting held on 28.03.2011 vide. Memorandum No. 9/D/F&C dated 18.03.2011 that the SLDC shall operate as a separate accounting unit of PSTCL with effect from FY 2011-12, as a measure of ring fence the operation of SLDC for its independent functioning. In order to

S. No	Directive given by the Commission	Action taken by PSTCL
		<p>ensure independent operation of the accounting unit, the following measures have been taken:</p> <p>The Accounting Officer (Open Access) has been re-designated as Account Officer (SLDC) as the Incharge of Finance and Accounts wing of SLDC to ensure operation of as a separate accounting unit. The Accounts Officer is reporting directly to Chief Engineer(S O &C), Patiala and is responsible for maintaining of accounts of SLDC.</p> <p>The salary and other employee related payments of all the officers/employees posted under Chief Engineer (S O &C) and including other payments are being made at the level of Account Officer, SLDC, only.</p> <p>Separate budget has been approved by the Board of Directors of PSTCL for FY 2011-12 for SLDC operations.</p>
2	The Hon'ble Commission directed PSTCL to take necessary steps to install the energy meters at various 220 kV and 132 kV substations at the earliest	PSTCL issued RFP No. SLDC/115/2011 for invitation of bids for undertaking the activity related to Intra-State Boundary metering. However, due to administrative reasons in the tendering process, the RFP was dropped and fresh RFP was issued. Accordingly, SLDC issued RFP No. SLDC/116/2011, i.e., Request for Proposal for Selection of System Integrator for Complete Implementation on Turnkey Basis & Comprehensive O&M Services, in respect of Intrastate Boundary Metering cum Transmission Level Energy Audit Scheme

S. No	Directive given by the Commission	Action taken by PSTCL
		using ABT type and Conventional Energy Meters on October 24, 2011 and the tenders / proposals were scheduled to be opened on November 21, 2011, but on request of the firms now it will be opened on 07.12.2011. The project is expected to take off during FY 2011-12 and to be completed in FY 2012-2013.
3	The Hon'ble Commission directed PSTCL to maintain the Category-wise details of Assets as per provisions of Companies Act, 1956.	M/s Sushil Jeet Puria & company, the consultant were appointed by PSEB to prepare fixed asset register. Their contract has been extended to prepare fixed asset register as on 31.3.2010. After the availability of report of the consultants and Notification of Opening Balance Sheet, PSTCL will take necessary steps to prepare Fixed Asset register for its area of operation.
4	<p>a) The Hon'ble Commission directed PSTCL to undertake the short circuit studies to check adequacy of rupturing capacity of the existing switchgears installed and suitability of the existing earth mats to absorb the short circuit current.</p> <p>b) The Commission further directed PSTCL to undertake the activity of replacement of switchgears and strengthening of earth mats wherever required and to maintain earthing parameters as per IEEE Earthing Guide 80.</p>	<p>a. PSTCL conducted has in-house study based on the directive of Hon'ble Commission and found that short circuit current of all the substations is within permissible limits.</p> <p>b. PSTCL conducted has in-house study based on the directive of Hon'ble Commission and measured earth mats resistivity of each of the substations and has taken corrective actions in some cases where it has found where earthing parameters were not as per IEEE Earthing Guide 80.</p>

S. No	Directive given by the Commission	Action taken by PSTCL
5	The Hon'ble Commission directed PSTCL to finalise the Work Study Report on Manpower and submit implementation Action Plan to the Commission.	PWC Work Study Report on Manpower was submitted by them and was put up to Board of Directors of PSTCL. Board of Directors constituted a committee comprising of Director (Finance & Commercial), Director (Technical) and Special Secretary, Power, Government of Punjab. The Committee is in process of examining the report and it will put up its recommendations to the Board of Directors of PSTCL for its approval. PSTCL will submit the implementation Action Plan to the Hon'ble Commission, once the report is approved by Board of Directors of PSTCL.

8 PRAYERS

8.1.1 Based on the submissions in foregoing Chapters, PSTCL humbly prays the Hon'ble Commission to kindly approve the following:

- a) Final truing up of FY 2010-11 may be deferred till finalisation of Audited Accounts of FY 2010-11.
- b) Review of ARR for FY 2011-12 and ARR of FY 2012-13 considering the justification and rationale submitted for Transmission Business.
- c) Review of ARR for FY 2011-12 and ARR of FY 2012-13 considering the justification and rationale submitted for SLDC Business.
- d) Approve the Payment Security mechanism as proposed by PSTCL in this Petition.
- e) Approve SLDC Development Fund.
- f) Condone any inadvertent omissions/errors/shortcomings and permit PSTCL to add/change/modify/alter/clarify this filing and make further submissions as may be required at a future date.
- g) Pass such further orders, as the Hon'ble Commission may deem fit and proper keeping in view the facts and circumstances of the case.

8.1.2 PSTCL undertakes to place all further details and justifications as may be necessary for the disposal of the present Petition.

**BY THE APPLICANT
THROUGH**

**Financial Advisor
Punjab State Transmission Corporation Limited, Patiala**

Annexure-I

Annual R&M Plan for 2012-13 (in Rs Lakh)

Sr.No.	Description	Amount	Remarks
1.	10 No. Bus bar Prot. Schemes @ Rs. 25.00 Lac per	250.00	Process will be initiated by S/S design.
2.	10 No. Replacement of old 132KV Breaker @ Rs.10.00 Lac	100.00	Requirement for equipments which have outlived its life is being sent to S/S design for procurement
3.	40 No. Replacement of old 66 kV Breaker @ Rs.10.00 Lac	400.00	-----do-----
4.	120 No. Replacement of old 11 KV Breaker @ Rs.3.00 Lac	360.00	-----do-----
5.	50 No. Replacement of old 220 KV CT @ Rs. 3.00 Lac	150.00	-----do-----
6.	80 No. Replacement of old 132 KV CT @ Rs. 1.20 Lac	100.00	-----do-----
7.	110No.Replacement of old 66 KV CT @ Rs. 0.70 Lac	77.00	-----do-----
8.	50 No. Replacement of old 11 KV CT @ Rs. 4000	2.00	Will be replaced against damage.
9.	15 No.Replacement of old Battery+B/Charger @ Rs.6.25 Lac	94.95	Will be replaced against outlived.
10.	20 No. Replacement of 220KV & 66KV PT's @ 0.75 lacs	15.00	----do----
11.	10 No. Replacement of 220/132/66KV C&R Panels @ 8.00 lacs	80.00	Against damage/ outlived.
12.	Op. &Mtc. of 400KV S/S's	1000.00	Arrangement to outsource OP/Mtc to PGCIL is under process.
13.	10 No. Power Cable 750 Mtr @ Rs. 1500/-Per Mtr	11.25	Against damage
14.	Replacement of various type of old relays with numerical relays @ Rs. 2.00 lacs	40.00	Are being procured.
15.	15000No. Replacement of old Discs @ Rs. 624/-	93.60	Ordinary discs to be replaced with antifog.
16.	20 No Replacement of old 220KV breaker @ Rs.20Lacs	400.00	Process will be initiated by S/S design.
17.	Replacement of old Conductor of 132KV Lines (1987.5 Ckt KM)	380.00	As the conductor has outlived its life and needs replacement.
18.	Mtc. of 220/132/66KV lines per P&M Divns.25 Nos.@ Rs.13.10 Lac	327.50	Process to outsource the mtc. of 220/132KV Trans. Lines is under process
19	Mtc. of Road & Path per Divn. 25 Nos. @ Rs. 1.50 Lac	65.00	Annual mtc
20	Mtc.of Water Supply &Sewrage 25No Divn @ 1.00 Lac		----do----

Sr.No.	Description	Amount	Remarks
21.	Mtc.of Electrical Equipt.Per Divn.25 No. @ Rs.8.36 Lac	209.00	----do----
22.	Mtc.of Residential Buildings 25 No Divn @ Rs.8.25 Lac	200.00	----do----
23.	Mtc. of Non-residential builsing 25 No. Divn@ 8.00 Lac		----do----
24.	Capital Mtc, of 5 No. P/T/F @ Rs. 50.00 Lac	250.00	Needs to be attended by grid org.
25.	Prot. Audit of S/S as per NRPC requirement 53x5 Lac	265.00	Process is being initiated through NRPC.
26.	Replacement of Mech. Meter with Electronic Meter for energy accounting 427 Nos. @ Rs. 20,000/- per	85.40	Process is being initiated by C.E./ SO & C
27.	Cap. Mtc. of 20 Nos. 220/132KV ABCBs at different s/s @ Rs. 4.25 Lac	85.00	Process being started.
28.	Spare P T/Fs for replacement of 5 No. 66/11KV 16/20MVA @ Rs.150 lacs& 3 No. 100 MVA T/F against damaged ones @ Rs. 500 Lacs	2250.00	
29.	Replacement of HT Shunt Capacitors Bank 132KV = 2 Nos, 66KV =4 Nos. 33KV =2 Nos, 11KV=11No.	106.59	
30.	Furniture & fixture	14.00	
31.	Mtc. & Repair of Vehicles	25.00	Annual mtc.
32.	Face Lifting of 220/132 S/Ss @ Rs:25.00 Lacs per Sation.	200.00	Is being under taken for all old 220/132KV S/Stations in phases.
33.	Antiweed treatment at 220/132KV S/Ss. As per power grid norms. @ 50.00 Lacs per station.	1000.00	---do---
34.	Repair of disturbance recorder @ 2.00 Lacs.	02.00	
35.	Repair of Roads at various S/Ss Rs.05.00 Lacs per Sub-Station.	20.00	
36.	3 No. replacement of old 220/132KV Bus bars @Rs.10.00 Lacs per	30.00	To strengthen the bus bar.
37.	Reconstruction of damaged / fallen towers due to storm.	200.00	As per past trend
38	Renovation and Modernisation expenses	200.00	
	TOTAL	9088.29	

Annexure-II : Capex Summary Details (in Rs Lakh)

S. No	Particulars	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
1	Transmission Lines							
a	132 kV	145.40	375.17	317.43	203.14	178.00	381.14	0.00
b	220 kV	5804.52	17146.60	8412.86	14538.27	16201.88	29931.11	809.03
I	Total	5949.92	17521.77	8730.28	14741.41	16379.88	30312.25	809.03
2	Sub-stations							
a	132 kV	649.94	3372.91	3820.21	202.65	518.50	721.15	0.00
b	220 kV	10297.39	23944.56	24204.82	10037.13	16668.00	26705.13	0.00
II	Total	10947.33	27317.47	28025.03	10239.77	17186.50	27426.27	0.00
III	Talwandi Sabo Project - 400kV system	16700.00	48400.00	11000.00	54100.00	50000.00	104100.00	0.00
IV	Rajpura - 400kV system	0.00	11000.00	0.00	11000.00	26500.00	20000.00	17500.00
V	Grand Total	33597.25	104239.24	47755.31	90081.18	110066.38	181838.53	18309.03

S. No	Particulars	FY 2011-12	FY 2012-13
1	Capital Expenditure (Rs Crore)	1042.39	1100.66
2	Capitalisation (Rs Crore)	477.55	1818.39

A. Scheme wise Capex Details- Transmission Lines (in Rs Lakh)

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
1	220 KV GHTP-Himmatpura DC (40.536 Kms 0.4 Sq")	0.00	29.32	29.32	0.00	0.00	0.00	0.00
2	LILO of 220 KV Verpal- Patti line at Tarn Taran (6.705 KM 0.4 Sq")	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	LILO of one ckt of 220 KV Moga-Mukatsar DC line at Sadiq (18.961 KM 0.4 Sq")	0.00	79.24	79.24	0.00	0.00	0.00	0.00
4	LILO of 220 KV Bhatinda- Mukatsar SC line at Malout (24.385 KM 0.4 Sq")	0.00	159.12	159.12	0.00	0.00	0.00	0.00
5	LILO of 220 KV Lalton- Humbran SC line at 220 KV FZR Rd Ludhiana (9.562 KM 0.4 Sq"	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
6	220 KV Nalagarh-Mohali DC line (55.866 Km 0.4 Sq")	3051.06	7.49	3058.55	0.00	0.00	0.00	0.00
7	Shifting arrangement of 220 KV Mohali- Dera Bassi & Mohali-Rajpura DC line for 220 KV Nalagarh-Mohali line (3.00 KM 0.4 Sq")	191.09	0.00	0.00	191.09	0.00	0.00	191.09
8	LILO of one ckt of 220 KV GGSSTP-Mohali DC line at 220 KV Kharar (3.230 KM 0.4 Sq")	0.00	4.49	4.49	0.00	0.00	0.00	0.00
9	220 KV Focal Point Nabha-Phagan Majra DC line (3.230 KM 0.4 Sq")	818.12	23.95	842.07	0.00	0.00	0.00	0.00
10	LILO of 220 KV Malerkotla- Lalton SC line at 220 KV Pakhowal (0.970 KM 0.4 Sq")	0.00	1.54	1.54	0.00	0.00	0.00	0.00
11	LILO of 220 KV Mohali- Dera Bassi line at Lalru DC (16.899 KM 0.4	569.77	23.25	593.02	0.00	0.00	0.00	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
	Sq")							
12	LILO of one ckt of 220 KV Sunam-Mansa line at Jhunir DC (33.787 KM 0.4 Sq")	717.21	398.95	1116.16	0.00	0.00	0.00	0.00
13	LILO of one ckt of existing Lalton-Sahnewal DC line at 400 KV PGCIL Ludhiana (3.747 KM 0.4 Sq")	58.95	119.61	178.56	0.00	0.00	0.00	0.00
14	b) LILO of one ckt of existing 220 KV Lalton Kalan-Dhandari Kalan at 400 KV PGCIL Ludhiana and Diversion of 220 KV Lalton Kalan-Malerkotla line to 400 KV PGCIL Ludhiana	23.04	231.28	254.32	0.00	0.00	0.00	0.00
15	220KV Patti-Algaon SC on DC	144.74	572.16	716.90	0.00	0.00	0.00	0.00
19	220 KV Jalandhar-Dasuya line for 220 KV Kapurthala/Kanjali	28.07	469.70	0.00	497.77	43.23	541.00	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
20	LILO of one ckt of 220 KV GGSSTP-Gobindgarh-I, 2xDC line for 220 KV Bassi Pathana	0.94	528.41	0.00	529.35	177.46	706.81	0.00
21	220 KV Pakhowal-Mehal Kalan SC line on DC Towers	148.04	704.55	0.00	852.59	37.46	890.05	0.00
22	a)LILO of one ckt of 220 KV Jamsheer- Mahilpur line at 220 KV Rehana Jattan	20.25	31.56	51.81	0.00	0.00		0.00
23	b)220 KV line from 400 KV Nakodar to 220 KV Rehana Jattan	11.16	0.00	0.00	11.16	1099.70	1110.86	0.00
24	LILO of one ckt of 220 KV GHTP-Mansa line at 220 KV Talwandi Sabo	0.00	352.27	0.00	352.27	443.00	795.27	0.00
25	Strgg. Of 2nd ckt of 220 KV Sunam-Patran line	0.01	488.47	0.00	488.48	0.00	0.00	488.48
26	220 KV Goindwal Sahib- Sultanpur DC line	0.00	872.46	743.00	129.46	0.00	0.00	129.46
27	220 KV DC line from 400 KV Rajpura to 220 KV Devigarh	0.00	0.00	0.00	0.00	743.00	743.00	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
28	220 KV Bahadurgarh-Devigarh DC line	0.00	587.12	0.00	587.12	58.00	645.12	0.00
29	220 KV Mukatsar - Abohar DC line	0.00	352.27	0.00	352.27	1417.00	1769.27	0.00
30	i) LILO of 220 KV Bajakhana-Mukatsar line at 220 KV Kotkapura	0.00	131.52	131.52	0.00	0.00	0.00	0.00
31	ii)220 KV DC line from 400 KV Mukatsar to 220 KV Kotkapura	0.00	821.97	0.00	821.97	601.00	1422.97	0.00
32	220 KV line from 440 KV Mukatsar to 220 KV Ghubaya	0.00	234.85	0.00	234.85	866.00	1100.85	0.00
33	220KV SC line on DC Towers from 400 KV Dhuri to 220 KV Nabha	0.00	775.00	0.00	775.00	663.00	1438.00	0.00
34	i)LILO of one ckt of 220 KV Sunam-Patran line for 220 KV Bangan	0.00	587.12	0.00	587.12	169.00	756.12	0.00
35	ii)220 KV DC line from 400 KV Dhuri to 220 KV Bangan	0.00	1174.24	0.00	1174.24	858.00	2032.24	0.00
36	iii)LILO on both ckts of 220 KV Sunam- Dhuri line	0.00	1047.42	0.00	1047.42	223.00	1270.42	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
	at 400 KV Dhuri (Loop in)							
37	220 KV DC line from 400 KV Nakodar to 220 KV Kartarpur	0.00	587.12	0.00	587.12	1165.00	1752.12	0.00
38	220 KV DC line from 400 KV Nakodar to 220 KV Nurmehal	2.26	352.27	0.00	354.53	106.74	461.27	0.00
39	LILO of one ckt of 220 KV Khassa-Civil Lines ASR DC line at 220 KV Chogawan	17.16	410.98	0.00	428.14	82.84	510.98	0.00
40	LILO of one ckt of 220 KV Sultanpur-Patti line at 220 KV Chola Sahib	0.02	234.85	0.00	234.87	14.98	249.85	0.00
41	LILO of one ckt of 220 KV Patiala-Patran line at 220 KV Passiana	0.10	218.29	218.39	0.00	0.00		0.00
42	LILO of one ckt of 220 KV Rajpura-Mohali-I DC line at 220 KV Banur	0.00	218.41	0.00	218.41	186.00	404.41	0.00
43	LILO of one ckt of 220 KV Patran-Rajla DC line for	0.00	58.71	0.00	58.71	60.00	118.71	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
	220 KV Kakrala							
44	LILO of one ckt of Jansher- Sultanpur line at 220 KV Badshahpur	0.00	46.97	0.00	46.97	53.00	99.97	0.00
45	220 KV Goindwal Sahib- Khassa DC line	0.00	35.23	0.00	35.23	30.00	65.23	0.00
46	220 KV Goindwal Sahib- Bottianwala DC line	0.00	352.27	0.00	352.27	1136.00	1488.27	0.00
47	LILO of 220 KV Malerkotla SC line at 220 KV Ikolaha	0.00	528.41	0.00	528.41	108.00	636.41	0.00
48	LILO of 220 KV GGSSTP- Kohara line at 220 KV Gaunsgarh	0.00	1174.24	0.00	1174.24	115.00	1289.24	0.00
49	LILO of 220 KV GGSSTP- Sahnewal line at 220 KV Ghulal	0.00	234.85	0.00	234.85	40.30	275.15	0.00
50	LILO of 220 KV Wadala Granthian- Verpal line at 220 KV S/S Udhoke	0.00	252.46	0.00	252.46	215.00	467.46	0.00
51	LILO of 220 KV Malout- Bhatinda	2.52	352.27	0.00	354.79	376.88	731.67	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
	line at 220 KV Badal							
52	LILO of both ckts of 220 KV Moga-FZR lline at 220 KV Talwandi Bhai	0.01	352.27	0.00	352.28	115.99	468.27	0.00
53	LILO of both ckts of 220 KV Patiala-Mandi Gobindgarh DC line at 400 KV Rajpura	0.00	0.00	0.00	0.00	1859.00	1859.00	0.00
54	220 KV DC line from 400 KV Rajpura to 220 KV Lalru	0.00	0.00	0.00	0.00	743.00	743.00	0.00
55	i) LILO of 220 KV Bajakhana-Mukatsar line at 220 KV Sandhwan	0.00	17.61	0.00	17.61	25.30	42.91	0.00
56	ii) 220 KV DC line from 400 KV Mukatsar to 220 KV Sandhwan	0.00	516.67	0.00	516.67	1018.00	1534.67	0.00
57	Strgg of 2nd ckt of 220 KV Sahnewal-Doraha line	0.00	117.42	117.42	0.00	0.00	0.00	0.00
58	Strgg of 2nd ckt of 220 KV Pakhowal-Mehal Kalan line	0.00	117.42	117.42	0.00	0.00	0.00	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
59	220 KV DC line from 400 KV Makhu to 220 KV Tarn Taran	0.00	135.04	0.00	135.04	1000.00	1135.04	0.00
60	LILO of 220 KV Barnala- Sangrur SC lien at Dhanaula	0.00	23.48	0.00	23.48	352.00	375.48	0.00
61	132 KV line from 220 KV Mahilpur to 132 KV Hoshiarpur	104.61	27.07	131.68	0.00	0.00	0.00	0.00
62	Replacement of conductor of 132 KV Sultanpur-Khera mandir line	15.04	4.93	19.97	0.00	0.00	0.00	0.00
63	220 KV Mukatsar to 132 KV Mukatsar (New link line using existing right of way)	25.75	140.03	165.78	0.00	0.00	0.00	0.00
64	Augmentation of conductor from 0.15 Sq" to 0.2 Sq" for 132 KV Jamalpur- Moga line ckt no 1	0.00	162.05	0.00	162.05	138.00	300.05	0.00

Sr No	Name & Scope of Work	Opening WIP as on March 31, 2011	Expenditure during FY 2011-12	Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure during FY 2012-13	Transferred to Assets	Closing WIP as on March 31, 2013
65	Augmentation of conductor from 0.15 Sq" to 0.2 Sq" for 132 KV Moga-Kotkarore line 2nd ckt for Moga-2	0.00	41.10	0.00	41.10	40.00	81.10	0.00

B. Scheme wise Capex Details- Substations (in Rs Lakh)

Sr . No.	Circle	Closing WIP as on March 31, 2011	Total expenditure during FY 12	Expenditure Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure Transferred to Assets	Closing WIP as on March 31, 2013
	220 kV Substations						
1	220KV Mastewala(New) 1x100MVA, 220/66KV T/F	148.14	1385.44	1533.58	0.00	0	0
2	Doraha (U/G) (U/G From 132 KV) 1x100MVA, 220/66KV T/F	659.71	658.89	1318.60	0.00	0	0
3	Kapurthala /Kanjli (New) 1x100MVA, 220/66KV T/F	830.89	549.73	1380.62	0.00	0	0
4	Algaon (U/G) U/G From 66KV 1x100MVA, 220/66KV T/F	654.79	510.68	1165.47	0.00	0	0
5	220 KV Lalru (New) 1x100MVA, 220/66KV T/F	895.3	218.74	1114.04	0.00	0	0

Sr . No.	Circle	Closing WIP as on March 31, 2011	Total expenditure during FY 12	Expenditure Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure Transferred to Assets	Closing WIP as on March 31, 2013
6	220KV S/S Bassi Pathana (New) 1x100MVA,220/66KV T/F	0	1264.43	1264.43	0.00	115.00	0
7	220 KV Jhunir (New) 1x100MVA, 220/66KV T/F	1207.08	122.31	1329.39	0.00	0	0
8	220 KV Mehal Kalan (New) 1x100MVA, 220/66KV T/F	1068.71	6.48	1075.19	0.00	0	0
9	220 KV Rehana Jattan (U/G) from 66 KV) 1x100MVA, 220/66KV T/F	572.45	361.76	934.21	0.00	0	0
10	220 KV S/S Patran (Aug) Addl. 1x100MVA, 220/66KV T/F	588.07	364.68	952.75	0.00	0	0
11	220 KV S/S GOBINDGARH-4 (New) 1x100MVA, 220/66KV T/F	672.92	853.25	1526.17	0.00	0	0
12	220 KV Bazakhana(Aug) Addl. 1x100MVA, 220/66KV T/F	568.15	367.03	935.18	0.00	0	0
13	220 KV S/S Butari (Aug) Addl.1x100MVA, 220/66KV T/F	514.39	454.87	969.26	0.00	0	0
14	220 KV Badal (U/G from 132 KV) 1x100MVA, 220/66KV T/F	0	856.83	0	856.83	1483.83	0.00
15	220KV S/S Talwandi Sahibo (U/G) from 66KV 1x100MVA, 220/66KV T/F	0	612.02	0	612.02	1439.02	0.00
16	220 KV S/S Dasuya (Switching Station(Aug) 1x100MVA,220/66KV T/F	25.67	1053.08	1078.75	0.00	0.00	0.00
20	220 KV S/S Chola Sahib (New) 1x100MVA, 220/66KV T/F	21.68	1040.83	1062.51	0.00	200.00	0.00
21	220 KV Ghulal U/G From 132KV 2x100MVA, 220/66KV T/F	0	1836.06	1836.06	0.00	682.00	0.00
22	220 KV Udhoke(U/G from 66 KV)	0	367.21	0	367.21	1311.21	0.00

Sr . No.	Circle	Closing WIP as on March 31, 2011	Total expenditure during FY 12	Expenditure Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure Transferred to Assets	Closing WIP as on March 31, 2013
	1x100MVA, 220/66KV T/F						
23	220 KV Kharar(Aug) Addl.1x100MVA, 220/66KV (2nd T/F)	621.9	240.03	861.93	0.00	50.00	0.00
24	220KV Sarna (New) 1x100MVA, 220/66KV T/F	0	244.81	0	244.81	1414.81	0.00
25	220 KV Talwandi Bhai (U/G) from 132KV 1x100MVA, 220/66KV T/F. 1x100MVA, 220/132KV T/F	0	1224.04	0	1224.04	2285.04	0.00
26	220KV Goraya (Aug) Addl. 1x100MVA, 220/66KV T/F	593.87	357.58	951.45	0.00	0.00	0.00
27	220KV S/S Abhoar U/G from 132KV 1x100MVA, 220/66KV T/F	0	367.21	0	367.21	1167.21	0.00
28	220KV GAUNSGARH (New) 1x100MVA, 220/66KV T/F	0	612.02	0	612.02	1184.02	0.00
29	220KV Iklaha, (U/G)from 66KV 1x100MVA, 220/66KV T/F	0	612.02	0	612.02	1184.02	0.00
30	220 KV Dhanaula (U/G from 66 KV) 1x100MVA, 220/66KV T/F	0	734.42	0	734.42	1206.42	0.00
31	220 KV Kotkapura(New) 1x100MVA, 220/66KV T/F	0	489.62	0	489.62	1161.62	0.00
32	220 KV S/S Khassa(Aug.) Addl. 1x100MVA, 220/66KV T/F	528.31	73.44	601.75	0.00	0.00	0.00
33	220 KV Khassa (Aug) Exst. 1x100MVA, 220/66KV T/F Repl. with New 100MVA, 220/66KV T/F	125.36	92.59	217.95	0.00	0.00	0.00
34	220KV Civil Lines Amritsar, (Aug.) Addl.1x100MVA, 220/66KV T/F	0	135.86	135.86	0.00	0.00	0.00
35	220KV S/S Bangan (U/G) from 132 KV 1x100MVA, 220/66KV T/F	0	367.21	0	367.21	1139.21	0.00

Sr . No.	Circle	Closing WIP as on March 31, 2011	Total expenditure during FY 12	Expenditure Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure Transferred to Assets	Closing WIP as on March 31, 2013
36	220KV S/S Devigarh (U/G) from 66 KV 1x100MVA, 220/66KV T/F	0	489.62	0	489.62	1189.62	0.00
37	220KV S/S Passiane U/G from 66KV 1x100MVA, 220/66KV T/F	0	918.03	0	918.03	1240.03	0.00
38	220KV S/S Banur U/G from 66KV 1x100MVA, 220/66KV T/F	0	367.21	0	367.21	1139.21	0.00
39	220KV S/S Kakrala U/G from 66KV 1x100MVA, 220/66KV T/F	0	367.21	0	367.21	1139.21	0.00
40	220KV S/S Lalru (Aug) 1x100MVA, 220/66KV T/F (2nd)	0	244.81	0	244.81	930.81	0.00
41	220KV S/S Mohali (Aug) 1x100MVA, 220/66KV T/F (2nd)	0	244.81	0	244.81	930.81	0.00
42	220 KV S/S Dhuri (Aug) 1x100MVA, 220/66KV T/F (3rd)	0	1084.50	1084.50	0.00	0.00	0.00
43	220 KV Sadiq(AUG) 1x100MVA, 220/66KV T/F (2nd)	0	122.40	0	122.40	908.40	0.00
44	220 KV Badshahpur (U/G) from 66KV 1x100MVA, 220/66KV T/F (2nd)	0	183.61	0	183.61	1105.61	0.00
45	220 KV Nurmehal(U/G) from 132KV 1x100MVA, 220/66KV	0	306.01	0	306.01	1156.01	0.00
46	220KV Kotla Jangan (Addl.) 100MVA, 220/66KV T/F	0	306.01	0	306.01	942.01	0.00
47	220 KV S/S Himmatpura (New) 100MVA 220/66KV T/F	0.00	61.20	61.20	0.00	0.00	0.00
48	220 KV S/S Rashiana (New) 100MVA 220/66KV T/F	0.00	24.48	24.48	0.00	0.00	0.00

Sr . No.	Circle	Closing WIP as on March 31, 2011	Total expenditure during FY 12	Expenditure Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure Transferred to Assets	Closing WIP as on March 31, 2013
49	220 KV S/S Kharar (U/G) from U/G 132 KV 100MVA ,220/66KV T/F	0.00	24.48	24.48	0.00	0.00	0.00
50	220 KV S/S Sadiq (U/G) from 132 KV 100MVA ,220/66 KV T/F	0.00	36.72	36.72	0.00	0.00	0.00
51	220 KV S/S Pakhowal (U/G) from 66KV 100MVA ,220/66KV KV T/F	0.00	30.60	30.60	0.00	0.00	0.00
52	220 KV S/S F.P.Nabha(U/G) from 66KV 100MVA, 220/66KV T/F	0.00	31.83	31.83	0.00	0.00	0.00
53	220 KV S/S Ferozepur Road Ludhiana. (U/G) From 66KV 100MVA, 220/66 KV T/F	0.00	30.60	30.60	0.00	0.00	0.00
54	Algaon (U/G) U/G From 66KV 1x100MVA, 220/66KV T/F	0.00	122.40	122.40	0.00	0.00	0.00
55	220 KV Jhunir (New) 1x100MVA, 220/66KV T/F	0.00	122.40	122.40	0.00	0.00	0.00
56	220 KV S/S Amlah Road Mandi Gobindgarh-3 Addl 100 MVA 220/66	0.00	18.36	18.36	0.00	0.00	0.00
57	220 KV S/S Sahnewal (Aug) Addl. 3rd 100MVA , 220/66KV T/F	0.00	73.44	73.44	0.00	0.00	0.00
58	220 KV S/S Kohara (Aug) 100MVA , 220/66KV T/F	0.00	164.02	164.02	0.00	0.00	0.00
60	220 KV S/S Verpal 1x100MVA 220/66KV To Rpel. 30/50MVA , 220/66Kv & 20/25MVA 132/66KV T/F	0.00	12.24	12.24	0.00	0.00	0.00
61	220 KV S/S Majitha 100MVA , 220/66KV T/F	0.00	122.40	122.40	0.00	0.00	0.00
	132 kV Substations						
1	11/A/PTA	35.23	368.15	403.38	0.00	0.00	0.00

Sr . No.	Circle	Closing WIP as on March 31, 2011	Total expenditure during FY 12	Expenditure Transferred to Assets	Closing WIP as on March 31, 2012	Expenditure Transferred to Assets	Closing WIP as on March 31, 2013
2	A/68/NWSR	16.75	276.94	293.69	0.00	0.00	0.00
3	A/140/MKT	5.16	197.49	0.00	202.65	221.15	0.00
4	Ammd 137/09-10/10-11 Sr No 138/A-S-PTA/09-10 M.No 58/59 Dt 18-01-110000	317.5	22.64	340.14	0.00	0.00	0.00
5	SO&C PTA M.No 1338/40 Dt 06-09-10 Sr No 6/132 KV 10-11	49.69	428.79	478.48	0.00	0.00	0.00
6	3/TTN/ 2010-11 CE SO&C PSTCL , Patiala	0	24.48	24.48	0.00	365.00	0.00
7	04/FDK/2010-11 CE/TL PTA Ammd 1011-12 m.no 292 dt 23-05-11	51.48	163.43	214.91	0.00	0.00	0.00
8	Amm- 14 /ASR / 2010-11 dated 4/2/2011	0.14	272.79	272.93	0.00	50.00	0.00
9	SE/Plann-1 PTA Memo no 157/58 dt 18-03-11 Ammd No 22	0	297.44	297.44	0.00	0.00	0.00
10	Non Pld	173.99	84.47	258.46	0.00	0.00	0.00
11	Sr No 3/Ammd No16/PSTCL/11-12/KPT M.No 112/13 Dt 07-04-1	0	297.44	297.44	0.00	0.00	0.00
12	Amm – 4 / JLD / 2010-11 dated 8/4/2011	0	938.84	938.84	0.00	85.00	0.00