

**PUNJAB STATE ELECTRICITY REGULATORY COMMISSION**  
**SCO NO. 220-221, SECTOR 34 A, CHANDIGARH**



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**PUNJAB STATE ELECTRICITY REGULATORY COMMISSION  
SCO NO. 220-221, SECTOR-34-A  
CHANDIGARH**

**PETITION NO. 69 OF 2011**

**IN THE MATTER OF:**

**ANNUAL REVENUE REQUIREMENT**

**FILED BY THE PUNJAB STATE POWER CORPORATION LIMITED**

**FOR THE FINANCIAL YEAR 2012-13**

**PRESENT :**

Ms. Romila Dubey, Chairperson

Er. Virinder Singh, Member

Er. Gurinderjit Singh, Member

Date of Order: July 16, 2012

**ORDER**

The Punjab State Electricity Regulatory Commission (Commission), in exercise of powers vested in it under the Electricity Act, 2003 (Act) passes this Tariff Order determining the Annual Revenue Requirement (ARR) and Tariff for supply of electricity by the Punjab State Power Corporation Limited (PSPCL) to consumers of the State of Punjab for FY 2012-13. The ARR filed by the PSPCL, facts presented by the PSPCL in its various submissions, objections received by the Commission from consumer organizations and individuals, issues raised by the public in hearings held at Ludhiana, Bathinda, Chandigarh and Jalandhar, the responses of the PSPCL to the objections and observations of the Government of Punjab (GoP) in this respect have been considered. The State Advisory Committee constituted by the Commission under Section 87 of the Act has also been consulted and all other relevant facts and material on record have been perused before passing this Order.

## **1.1 Background**

The Commission has in its previous nine Tariff Orders determined tariff in pursuance of the ARR and Tariff Applications submitted by the Punjab State Electricity Board (the Board) for the years 2002-03 to 2006-07, 2008-09, 2009-10, 2010-11 and Punjab State Power Corporation Limited (PSPCL) for FY 2011-12. Tariff Order for the FY 2007-08 had been passed by the Commission in suo motu proceedings.

## **1.2 ARR for the year 2012-13**

PSPCL has filed the ARR for FY 2012-13 on November 30, 2011. In this Petition, PSPCL has submitted that it is one of the 'Successor Entities' of the erstwhile Board duly constituted under the Companies Act, 1956, on April 16, 2010 after unbundling of the Board by the Government of Punjab (GoP) vide notification no.1/9/08-EB(PR)/196 dated April 16, 2010, under the "Punjab Power Sector Reforms Transfer Scheme" (Transfer Scheme). The Balance Sheet appended to the Transfer Scheme is provisional and the Final Transfer Scheme for PSPCL has not been notified yet. Hence, forecast of various financial parameters have been made on the basis of assumptions detailed in the ARR Petition. PSPCL has, therefore, requested the Commission to consider its Petition as a Provisional ARR Petition, subject to finalization of the Transfer Scheme by GoP in due course of time.

The Commission in the Tariff Order for FY 2011-12 had observed that the Provisional Balance Sheets, of the two successor entities, ending March 31, 2009, as appended to the above mentioned Transfer Scheme showed significant variations when compared to the audited balance sheet of the integrated utility. Therefore, the Commission deemed it proper to rely on the information filed by the erstwhile Board in its ARR Petition for FY 2010-11 and not on the Provisional Balance Sheet for the purpose of tariff determination for FY 2011-12. On the same lines, for FY 2012-13 also, the Commission has determined the ARR and tariff based on the submissions of PSPCL in its ARR Petition for FY 2012-13. The Commission has adhered to existing norms and principles during the Review of FY 2011-12.

In the ARR Petition for FY 2012-13, PSPCL has worked out a cumulative revenue gap of Rs.8983.97 crore for FY 2012-13 including amortization of the Regulatory Asset, gap of previous year and carrying cost of previous year gap as well as the Regulatory Asset. As the petition filed by the PSPCL did not contain any proposal to cover this gap, a letter dated December 15, 2011 was issued to PSPCL asking it to

submit a tariff or any other proposal to cover this gap. PSPCL in its response on January 6, 2012 replied that the Commission may determine the gap and fix tariff based on the details furnished by it in its ARR. The Commission took the ARR on record on December 1, 2011. On scrutiny, it was noticed that the ARR was deficient in some respects and in its communications dated December 15, 2011, December 28, 2011 and January 13, 2012 the Commission sought further information which was furnished by PSPCL in its letters dated January 6, 2012, January 10, 2012, January 16, 2012, January 19, 2012 and subsequent submissions.

The Annual Revenue Requirement determined by the Commission in this Tariff Order is based on the petition filed by PSPCL, operating as Utility performing functions of Generation, Distribution and Trading of electricity. The tariff determination by the Commission is based on the revised estimates of FY 2011-12 and projections of FY 2012-13 as submitted by PSPCL.

### **1.3 Objections and Public Hearings**

A public notice was published by the PSPCL in the The Tribune, The Hindustan Times, Dainik Jagran, Punjab Kesri and Daily Ajit on December 13/14, 2011 inviting objections from the general public on the ARR filed by the PSPCL. Copies of the ARR were made available on the website of the PSPCL and in the offices of the Chief Engineer/ARR and TR, PSPCL, Patiala, Liaison Officer, PSPCL Guest House, near Yadvindra Public School, Phase-8, Ajitgarh (Mohali) and also in the offices of all the Chief Engineers (Distribution) and all the Superintending Engineer (Distribution) of the PSPCL. In the public notice, objectors were advised to file their objections with the Secretary of the Commission within 30 days of publication of notice with an advance copy to the PSPCL. The public notice also indicated that after perusing the objections received, the Commission will conduct public hearings on the dates which would be notified subsequently.

The Commission received six written objections by January 13, 2012 and twenty four additional written objections thereafter. The Commission decided to take all these objections into consideration.

Number of objections received from individual consumers, consumer groups, organizations and others are detailed below:

<b>Sr. No.</b>	<b>Category</b>	<b>No. of Objections</b>
1.	Chambers of Commerce	1
2.	Industrial Associations	7
3	Industry	7
4	Railways	1
5	PSEB Engineers Association	2
6	Individuals	5
7	Govt. of Punjab (GoP)	1
8	Others	6
	<b>Total</b>	<b>30</b>

The list of objectors is given in **Annexure-I** to this Tariff Order. The PSPCL submitted its comments on most of the objections which were made available to the respective objectors.

The Commission decided to hold public hearings at Ludhiana, Bathinda, Chandigarh and Jalandhar. A public notice to this effect was published on January 21, 2012 in The Tribune, Indian Express, Times of India, Punjabi Tribune and Amar Ujala as well as uploaded on the website of the Commission and also informed the objectors, consumers and the general public in this respect as per details hereunder:

<b>Venue</b>	<b>Date &amp; Time of public hearing</b>	<b>Category of consumers to be heard</b>
<b><u>LUDHIANA</u></b> Circuit House, Ferozpur Road, Ludhiana.	<b><u>Feb. 1, 2012</u></b> 11.30 AM to 1.30 PM. (To be continued in the afternoon, if necessary).	All consumers/ organizations of the area.
<b><u>BATHINDA</u></b> Circuit House, Civil Lines, Near D.C. residence, Bathinda.	<b><u>Feb. 9, 2012</u></b> 11.30 AM to 1.30 PM (To be continued in the afternoon, if necessary).	All consumers/ organizations of the area.
<b><u>CHANDIGARH</u></b> Commission office i.e. SCO 220-221, Sector 34- A, Chandigarh.	<b><u>Feb. 10, 2012</u></b> 11.00 AM to 1.30 PM	Industry
	3.00 P.M. onwards	Agricultural consumers and their unions.
<b><u>CHANDIGARH</u></b> Commission office i.e. SCO 220-221, Sector 34- A, Chandigarh.	<b><u>Feb. 13, 2012</u></b> 11.00 AM to 1.30 PM	All consumers except Industry, Agricultural consumers and staff unions of the PSPCL and PSTCL.
	3.00 P.M. onwards	Staff unions of the PSPCL and PSTCL and other Organizations.
<b><u>JALANDHAR</u></b> Circuit House, Skylark Chowk, Opp. Skylark Hotel, Jalandhar.	<b><u>Feb. 15, 2012</u></b> 11.30 AM to 1.30 PM (To be continued in the afternoon, if necessary).	All consumers/ organizations of the area.

Through this public notice, it was also intimated that the Commission will conduct a public hearing at Chandigarh on Feb. 22, 2012 in which the PSPCL will reply to written objections of the public and other issues raised during public hearings in addition to presenting its own case.

The public hearings were held as per schedule and objectors, general public and the PSPCL were heard by the Commission. A summary of the issues raised, the response of the PSPCL and the views of the Commission are contained in **Annexure-II** of this Tariff Order.

- 1.4** The Government was approached by the Commission through DO letter no. PSERC/Tariff/T-150/7866-67 dated December 13, 2011 followed by reminder dated

February 14, 2012, reminder no.546 dated 18.4.2012 and DO letter no.1404 dated 15.5.2012 seeking its views on the ARR to which the Government responded vide its letter No. 1/1/2012-EB(PR)/216 dated June 13, 2012. The same has been considered by the Commission.

### **1.5 State Advisory Committee**

The State Advisory Committee constituted under Section 87 of the Act, discussed the ARR of PSPCL in a meeting convened for this purpose on February 14, 2012. The minutes of the meeting of the State Advisory Committee are enclosed as **Annexure-III** to this Order.

The Commission has, thus, taken the necessary steps to ensure that due process, as contemplated under the Act and Regulations framed by the Commission, is followed and adequate opportunity is given to all stakeholders in presenting their views.

### **1.6 Compliance of Directives**

In its previous Tariff Orders, the Commission had issued certain Directives to the PSPCL in the public interest. A summary of Directives issued during FY 2011-12, status of compliance along with the Directives of the Commission for FY 2012-13 is given in **Annexure-IV** to this Tariff Order.

# Chapter-2

## True Up for FY 2010-11

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### **2.1 Background**

The Commission had approved the ARR and Tariff for FY 2010-11 in its Tariff Order dated April 23, 2010; which was based on the costs and revenue estimated by the Board. The Tariff Order for FY 2010-11 contained approvals of costs and revenue projections based on the composite Board's estimates, for different items of costs to be incurred and revenue likely to accrue during the year.

### **2.2 Review of ARR for FY 2010-11**

PSPCL in its ARR Petition for FY 2011-12 had submitted the revised estimates of costs and revenue pertaining to Generation, Trading and Distribution functions, for FY 2010-11 since, there were certain items of cost like Fuel cost, Power Purchase cost etc. which were entirely attributable to PSPCL whereas the other costs like Employee cost, R&M expenses, A&G expenses, Depreciation, Interest and Finance Charges and Return on Equity, etc. of the composite Board were to be apportioned between the two successor entities i.e. PSPCL and PSTCL. Since the Board was unbundled into two successor entities on April 16, 2010 i.e. PSPCL and PSTCL; PSPCL entrusted with Generation, Trading and Distribution functions and PSTCL entrusted with Transmission and State Load Despatch functions, the total expenses were apportioned between these two entities, based on the functions entrusted to each entity.

The Commission considered it appropriate and fair to re-visit and review the approvals granted by it for the Generation and Distribution functions of the Board in the Tariff Order for FY 2011-12 with reference to the revised estimates made available by PSPCL, but without altering the principles and norms adopted earlier and accordingly approved the revised ARR for FY 2010-11 in the Review.



## **2.3 Provisional True up of FY 2010-11**

**2.3.1** The PSPCL, in its ARR Petition for FY 2012-13, prayed for 'Provisional True up' for FY 2010-11 as per Provisional Annual Accounts of the year. The Commission has observed that PSPCL was formed pursuant to the implementation of Punjab Power Sector Reforms Transfer Scheme (Transfer Scheme) by the Government of Punjab. The said Transfer Scheme is provisional and is yet to be finalized by the GoP. As a consequence, the opening balance sheet of PSPCL is also provisional to that extent. PSPCL has further submitted that It will finalize its accounts for FY 2010-11 subsequent to the notification of the final Transfer Scheme.

PSPCL has requested the Commission to carry out the provisional True up of expenses submitted in the petition and further submitted that a final True up may be carried out later after accounts for FY 2010-11 are finalized and got audited.

**2.3.2** Regulation 9 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 reads as follows:

- (1) The Commission shall undertake a review alongwith the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments / changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.
- (2) 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'.
- (3) The Truing up for any year will ordinarily not be considered after more than one year of 'Review'.

From the above, it is evident that True up for FY 2010-11 can be undertaken only after the final actual figures as per audited accounts for FY 2010-11 are made available by PSPCL. Regulation 9(3) of the PSERC (Tariff) Regulations, 2005 debars carrying the True up of an year not after more than one year of "Review". Keeping this in view, the Commission invokes the provisions of Regulation 45 of the Tariff

Regulations *ibid* and decides to undertake the True up for FY 2010-11 along with the PSPCL ARR Petition for FY 2013-14 when the Audited Annual Accounts for FY 2010-11 are likely to be available.

As per earlier practice, the Commission in the Review would adopt the expenses approved by the Commission in the True up (based on Audited Accounts) for the purpose of ascertaining energy requirement details and allowable expenses for the succeeding year. However, in the absence of Audited Accounts of FY 2010-11 and rationale given at length in this Tariff Order, the Commission has no alternative but to treat energy requirement details and expenses in the Review of FY 2010-11 in Tariff Order for FY 2011-12 as the base figures for the purpose of arriving at the corresponding quantum of energy/expenses for FY 2011-12.



# Chapter-3

## Review for FY 2011-12

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### 3.1 Background

PSPCL, in its petition relating to Review for FY 2011-12, has estimated the energy sales, operative parameters, generation, expenditure for generation & distribution and revenue for FY 2011-12, based on actual energy sales, generation, expenditure and revenue for the first half (April 2011 to September 2011) of FY 2011-12 and estimated performance for the remaining part of the year, and has provided the revised estimates of energy sales, generation, expenditure and revenue for FY 2011-12.

The performance of FY 2011-12 (revised estimate) is compared with the ARR for FY 2011-12 approved vide Commission's order dated May 09, 2011.

The Commission has analyzed the energy sales, energy generation and components of expenditure and revenue in the Review for FY 2011-12 in this chapter.

### 3.2 Energy Demand (Sales)

#### 3.2.1 Metered Energy Sales

The Commission in the Tariff Order for FY 2011-12 approved metered energy sales within the State at 24531 MUs as against 23494 MUs projected by PSPCL. PSPCL, in the ARR petition for FY 2012-13, has re-estimated the metered energy sales for FY 2011-12 at 23177 MUs.

PSPCL has estimated energy sales of metered categories for FY 2011-12 on the basis of actuals for the first six months (April 2011 to September 2011) and by applying category-wise half-yearly 3 year compounded annual growth rate (CAGR) of second half of the period from FY 2007-08 to FY 2010-11, to the corresponding actual category-wise energy sales in the second half of FY 2010-11.

The Commission has estimated sales to metered categories on the basis of actual sales for the first six months of FY 2011-12 (April 2011 to September 2011) and by applying category-wise half-yearly CAGR of second half of the period from FY 2007-08 (actual) to FY 2010-11 (as approved in RE of FY 2010-11 in Tariff Order

FY 2011-12) to the corresponding category wise sales of second half for FY 2010-11 approved in the Tariff Order for FY 2011-12, except for Large Supply category sales. PSPCL has submitted that the energy sales in the Large Supply Industrial category have been lower than the approved value in FY 2010-11 due to significant purchase/import of power by these consumers from various other sources (including Power Exchange) under Open Access. During the processing of ARR, PSPCL has informed the Commission that Open Access consumers have purchased about 2880 MUs ending February, 2012, and the Commission feels that this figure may cross 3000 MUs during FY 2011-12. Hence, the Commission considers the sales to this category as projected by PSPCL in the ARR. Accordingly, the Commission works out the estimated sales to metered categories as 22963 MUs for FY 2011-12, as detailed in Table 3.1:

**Table 3.1 Estimated Metered Energy Sales for FY 2011-12**

							(MU)
Sr. No.	Category	Sales during 2 <sup>nd</sup> half of FY 2007-08 (Actual)	Sales during 2 <sup>nd</sup> half of 2010-11 (approved in RE)	3 year CAGR during 2 <sup>nd</sup> half of FY 2007-08 to 2 <sup>nd</sup> half of FY 2010-11	Sales during 1 <sup>st</sup> half of FY 2011-12 (Actual)	Estimated sales during 2 <sup>nd</sup> half of FY 2011-12 (4*5)	Estimated sales for FY 2011-12 (6+7)
1	2	3	4	5	6	7	8
1	Domestic	3109	3949	8.30%	4657	4277	8934
2	Non-Residential	955	1154	6.51%	1405	1229	2634
3	Small Power	368	407	3.41%	442	421	863
4	Medium Supply	823	849	1.04%	910	858	1768
5	Large Supply	-	-	-	4129	* 3791	7920
6	Public Lighting	75	77	0.88%	59	78	137
7	Bulk Supply	256	265	1.16%	276	268	544
8	Railway Traction	60	85	12.31%	68	95	163
<b>9</b>	<b>Total Metered sales</b>				<b>11946</b>	<b>11017</b>	<b>22963</b>

\*Sales projected by PSPCL in the ARR Petition.

The Commission has retained sales to common pool consumers at 313 MUs as projected by the PSPCL. PSPCL has projected Outside State sale during FY 2011-12 as 367 MUs. The Commission notes that this includes free share of Himachal Pradesh (HP) in RSD (76 MUs) and HP royalty in Shanau (53 MUs). The same is required to be excluded from the Outside State sale, in view of the practice being followed by the Commission in the previous Tariff Orders. Therefore, the Commission considers the Outside State sale of 238 MUs (367-76-53) and Common Pool sale of 313 MUs.

The metered energy sales projected by the PSPCL during determination of ARR for FY 2011-12, approved by the Commission in the Tariff Order for FY 2011-12, the revised estimate furnished by PSPCL and now approved by the Commission for FY 2011-12 are given in Table 3.2:

**Table 3.2: Metered Energy Sales approved for FY 2011-12**

(MU)					
Sr. No.	Category	Projected by PSPCL in ARR for FY 2011-12	Approved by the Commission in T.O. for FY 2011-12	Revised estimate of PSPCL in ARR for FY 2012-13	Now approved by the Commission
1	2	3	4	5	6
1.	Domestic	8836	8854	8945	8934
2.	Non-Residential	2618	2623	2728	2634
3.	Small Power	835	835	899	863
4.	Medium Supply	1752	1755	1847	1768
5.	Large Supply	8600	9607	7920	7920
6.	Public Lighting	136	137	132	137
7.	Bulk Supply	537	539	562	544
8.	Railway Traction	181	181	144	163
<b>9.</b>	<b>Total Metered sales within the State</b>	<b>23494</b>	<b>24531</b>	<b>23177</b>	<b>22963</b>
10.	Common Pool sale	302	302	313	313
11.	Outside State sale	116	0	367	238
<b>12.</b>	<b>Total sales (9+10+11)</b>	<b>23912</b>	<b>24833</b>	<b>23857</b>	<b>23514</b>

Accordingly, the metered sales of 22963 MUs within the State, common pool sale of 313 MUs and Outside State sale of 238 MUs are now approved by the Commission as per details shown in Table 3.2.

### 3.2.2 AP Consumption

The Commission, in its Tariff Order for FY 2011-12, approved AP consumption of 10,843 MUs for FY 2011-12 after applying an increase of 5% over the consumption of 10327 MUs approved by the Commission for FY 2010-11 in the Tariff Order for FY 2011-12. In ARR petition for FY 2012-13, PSPCL has revised the estimate of AP consumption to 10993 MUs for FY 2011-12.

PSPCL has revised the AP consumption for FY 2011-12 based on the assessed AP consumption during the first half of FY 2011-12 (April 2011 to September 2011) and estimation for second half of FY 2011-12. PSPCL has assessed the AP consumption for the first half of FY 2011-12 based on sample meters provided throughout the State. As per submission in the ARR, the sample size has reached 9.26%. PSPCL has considered a normative growth rate of 5.00% as approved by the Commission in

Tariff Order for FY 2011-12, and has applied this growth rate twice to the corresponding actual sales figures of second half of FY 2009-10 to arrive at the sales projection for the second half of FY 2011-12. The PSPCL has not taken second half year sales for FY 2010-11 as the base since the consumption during FY 2010-11 was low due to better than normal monsoon.

PSPCL has considered AP consumption during the 1<sup>st</sup> half (April 2011 to September 2011) of FY 2011-12 as 6630 MUs. On verification of the month wise estimated AP consumption from the records of PSPCL, it is noted that the actual estimated AP consumption for the period from April 2011 to September 2011 is 6549 MUs.

It is observed from the AP consumption during the first and second halves of the last four years (FY 2007-08 to FY 2010-11) that the consumption during the second half of the year is about 60% of the first half. The Commission therefore considers the consumption of second half for FY 2011-12 at 3930 MUs (60% of 6549 MUs) as reasonable. Accordingly, the Commission determines the AP consumption of 10479 MUs for FY 2011-12 as shown in Table 3.3:

**Table 3.3: AP Consumption for FY 2011-12**

<b>(MU)</b>				
Particulars	AP consumption projected by PSPCL for FY 2011-12 in ARR for FY 2011-12	AP consumption approved by the Commission for FY 2011-12 in Tariff Order FY 2011-12	AP consumption projected by PSPCL for FY 2011-12 in ARR for FY 2012-13	Now approved by the Commission for FY 2011-12
1	2	3	4	5
First half (April to September)	12253	10843	6630	6549
Second half (October to March)			4363	3930
<b>Total</b>	<b>12253</b>	<b>10843</b>	<b>10993</b>	<b>10479</b>

**Thus, the Commission approves the AP Consumption of 10479 MUs for FY 2011-12.**

### **3.2.3 Total Energy Sales for FY 2011-12**

The total energy sales projected by PSPCL in ARR Petition and now approved by the Commission for FY 2011-12 are given in Table 3.4:

**Table 3.4: Total Energy Sales for FY 2011-12 (RE)**  
(MU)

Particulars	Energy sales projected for FY 2011-12	Energy sales approved by the Commission for FY 2011-12
1	2	3
Metered sales	23177	22963
AP consumption	10993	10479
Total sales within State	34170	33442
Common pool sale	313	313
Outside State sale	367	238
<b>Total</b>	<b>34850</b>	<b>33993</b>

**The Commission approves the total energy sales at 33993 MUs for FY 2011-12.**

### **3.3 Transmission and Distribution Losses (T&D Losses)**

In its ARR petition for FY 2011-12, PSPCL had projected Transmission and Distribution losses at 17% for FY 2011-12 (a reduction of 1% from the loss level of 18% projected for FY 2010-11 and a reduction of 2.81% from the loss level of 19.81% for FY 2009-10). PSPCL had mentioned in the ARR for FY 2011-12 that it has taken a number of initiatives for reduction of T&D losses and submitted a brief to the Commission about the progress achieved in this respect and the proposed course of action in FY 2011-12. The Commission, however, retained/fixed the T&D losses at 19% for FY 2011-12 as target set for FY 2011-12 in its Tariff Order for FY 2010-11.

The PSPCL in its ARR petition for FY 2012-13 has projected the T&D losses for FY 2011-12 at 17.50% (a reduction of 1% with respect to the loss assessed in the year 2010-11), considering AP consumption of 10993 MUs for 2011-12. It has been submitted by PSPCL that the losses for FY 2011-12 have been projected after due consideration of the recommendations of the Abraham Committee on restructuring of the APDRP and review of capital works considered for Distribution Loss Reduction Programs. It has further been submitted by PSPCL that though the investment outlay considered is sufficient for the purpose to achieve the set target, however, since the investment has recently taken place, the capital works would need its due time to achieve the desired results. PSPCL has submitted the details of the initiatives it has taken to reduce the T&D losses in the form of the compliance to the directives given by the Commission in the last Tariff Order apart from furnishing of regular status of these initiatives.



However, the Commission decides to retain T&D losses at 19.00% as fixed in the Tariff Order for FY 2011-12.

As mentioned in para 3.3 and para 4.2 of the Tariff Order for FY 2011-12, the Commission is of the view that since the erstwhile Board has been unbundled into two separate entities i.e. PSTCL & PSPCL, losses should be separately considered and approved for these utilities. On a query from the Commission, PSTCL in their letter dated January 02/04, 2012 has submitted that placing of orders for energy meters for installing at various 220 kV and 132 kV substations has been delayed and so meters will be installed by mid 2012. Under these circumstances, the Commission decides to stipulate only target T & D loss, with segregation into transmission loss and distribution loss within the overall target, pending final adjustment between PSTCL and PSPCL based on actual data while truing-up or at a later stage.

**Keeping the overall T & D loss level of 19.00% and based on the provisionally approved transmission loss of 2.5% for PSTCL for FY 2011-12 in the Tariff Order for PSTCL for FY 2012-13, the target distribution loss (66kV and below) for PSPCL for FY 2011-12 works out to 16.92%, which the Commission approves. The Commission will revisit the distribution loss of PSPCL while undertaking the True up for FY 2011-12.**

### **3.4 Energy Requirement**

- 3.4.1 The total energy requirement to meet the demand of the system is the sum of estimated metered sales including common pool and Outside State sale, estimated AP consumption and T&D losses. The total energy requirement for FY 2011-12 projected in the ARR for FY 2011-12, approved by the Commission in the Tariff Order, revised estimates furnished by PSPCL in the ARR for FY 2012-13 and now approved by the Commission are given in Table 3.5:

**Table 3.5: Energy Requirement for FY 2011-12**

(MU)					
Sr. No.	Particulars	Projected by PSPCL in ARR for FY 2011-12	Approved by the Commission in T.O. for FY 2011-12	Revised estimate by PSPCL for FY 2011-12 (R.E) in ARR Petition FY 2012-13	Now approved by the Commission for FY 2011-12
1	2	3	4	5	6
1	Metered sales within the State	23494	24531	23177	22963
2	AP consumption	12253	10843	10993	10479
<b>3</b>	<b>Total sales within the State (1+2)</b>	<b>35747</b>	<b>35374</b>	<b>34170</b>	<b>33442</b>
4	Common pool sale	302	302	313	313
5	Outside State sale	116	0	367	238
<b>6</b>	<b>Total sales (3+4+5)</b>	<b>36165</b>	<b>35676</b>	<b>34850</b>	<b>33993</b>
7 (a)	T&D losses on Sr.No.3 (%)	17.00%	19.00%	17.5%	19.00%
7 (b)	T&D losses on Sr. No.3	7322	8298	7248	7844
<b>8</b>	<b>Total energy input required [6+7(b)]</b>	<b>43486</b>	<b>43974</b>	<b>42098</b>	<b>41837</b>
<b>9</b>	<b>Energy at transmission periphery to be sold within the State (8-4-5)</b>	-	<b>43672</b>		<b>41286</b>
10 (a)	Transmission loss (%)	-	2.5%		2.50%
10 (b)	Transmission loss	-	1092		1032
11	Energy available to PSPCL [9-10 (b)]	-	42580		40254
12 (a)	Distribution loss (%)	-	16.92%		16.92%
12 (b)	Distribution loss	-	7206		6812
<b>13</b>	<b>Energy available for sale to consumers [11-12 (b)]</b>	-	<b>35374</b>		<b>33442</b>

3.4.2 The revised energy requirement for FY 2011-12 with T&D losses of 19.00% is determined as 41837 MUs which has to be met from the PSPCL's own generation (thermal and hydel) including share from BBMB, purchase from Central Generating Stations and other sources.

### 3.5 PSPCL's own generation

#### 3.5.1 Thermal Generation

PSPCL has estimated the revised gross generation of GNDTP, GGSSTP and GHTP for FY 2011-12 based on actual generation of the respective plants up to September, 2011 and estimating the generation for the second half of FY 2011-12 on the basis of the planned and forced outages of the respective plants and the scheduled renovation and modernization work undergoing (in the case of GNDTP units-III and IV) during second half of FY 2011-12.

The Commission has, however, obtained the actual gross generation of different stations from April 2011 to January 2012 and the projected generation from February 2012 to March 2012. The actual gross generation from April 2011 to January 2012 and the generation projected from February 2012 to March 2012 by PSPCL is summarized in Table 3.6:

**Table 3.6: Actual Gross Thermal Generation from April 2011 to January 2012 and projected Thermal Generation from February 2012 to March 2012**

(MU)				
Sr. No.	Station	Actual gross generation from Apr 11 to Jan 12	Projected gross generation from Feb 12 to Mar 12	Total gross generation
1	2	3	4	5
1	GNDTP Unit I&II	1286.15	286.19	1572.34
2	GNDTP Unit III & IV	294.21	0.00	294.21
3	GGSSTP	8043.33	1609.73	9653.06
4	GHTP	6287.19	1098.88	7386.07
<b>5</b>	<b>Total</b>	<b>15910.88</b>	<b>2994.80</b>	<b>18905.68</b>

The actual station-wise generation from April 2011 to January 2012 is available with the Commission. Further, the generation projected by PSPCL from February 2012 to March 2012 is considered reasonable. The Commission, therefore, decides to approve the gross thermal generation as given under Col.5 of Table 3.6.

**Auxiliary energy consumption and net generation:** The plant-wise auxiliary energy consumption projected by PSPCL during determination of ARR for FY 2011-12, auxiliary energy consumption approved by the Commission in the Tariff Order for FY 2011-12, the revised figures projected by PSPCL in the ARR petition for FY 2012-13, and now approved by the Commission are given in Table 3.7:

**Table 3.7: Auxiliary energy consumption for FY 2011-12**

Sr. No.	Station	Projected by PSPCL in ARR for FY 2011-12	Approved by the Commission in T.O. for FY 2011-12	RE by PSPCL in ARR for FY 2012-13	Now approved by the Commission
1	2	3	4	5	6
1	GNDTP	11.00%	11.00%	11.70%*	11.00%
2	GGSSTP	8.50%	8.50%	8.50%	8.50%
3	GHTP	9.00%	9.00%	8.62%*	8.50%

\* Computed from the gross and net generation given by PSPCL for 1st half and 2<sup>nd</sup> half of FY 2011-12.

In the Tariff Order for FY 2011-12, the Commission had adopted the CERC norms for assessment of net generation for GGSSTP and GHTP, and considered the various issues and submissions regarding the auxiliary energy consumption of GNDTP units, in para 4.4.1 of the Tariff Order for FY 2011-12, and accordingly fixed the auxiliary energy consumption for FY 2011-12 at 11%, 8.50% and 9% for GNDTP, GGSSTP and GHTP respectively. CERC in its Tariff Regulations for the period 2009-10 to 2014-15 has specified auxiliary energy consumption at the rate of 8.5% for thermal generating plants of 200 MWs series with Natural Draft Cooling Tower or without Cooling Tower, provided that for thermal generating plants with Induced Draft Cooling Tower, the auxiliary energy consumption shall be further increased by 0.5%. CERC in its Tariff Regulations for the period 2004-05 to 2008-09 had specified auxiliary consumption at the rate of 8.5% and 9% for thermal generating plants of 200 MWs series without Cooling Tower and with Cooling Tower, respectively. PSPCL vide its letter no. 57 dated January 10, .2012 has intimated that GHTP is having Natural Draft Cooling Towers. The Commission, therefore, decides to re-fix auxiliary energy consumption at the rate of 8.5% for GHTP.

The revised estimate of auxiliary energy consumption reported by PSPCL in the case of GNDTP and GHTP is on the higher side as compared with the level approved/re-fixed by the Commission. In the case of GGSSTP, the auxiliary consumption is in line with the approved one. The PSPCL has not given any justification for higher auxiliary consumption for FY 2011-12 for GNDTP and GHTP.

**The Commission, therefore, approves auxiliary consumption for GNDTP and GGSSTP at the level already approved in the Tariff Order for FY 2011-12 i.e. at 11% and 8.50% respectively, and for GHTP the Commission approves the auxiliary consumption at 8.50%.**

The station-wise generation projected by PSPCL during determination of ARR for FY 2011-12, generation approved by the Commission in its Tariff Order for that year, revised estimates supplied by the PSPCL in the ARR for FY 2012-13 and the generation now approved by the Commission are given in Table 3.8:

**Table 3.8: Thermal Generation for FY 2011-12****(MU)**

Sr. No.	Station	Projected by PSPCL in ARR for FY 2011-12		Approved by the Commission in T.O. for FY 2011-12		Revised estimate of PSPCL in ARR for FY 2012-13		Now approved by the Commission	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net
1	2	3	4	5	6	7	8	9	10
1(a)	GNDTP Unit I & II	2296	2043	2332	2075	1403	1244	1572.34	1399
1(b)	GNDTP Unit III & IV					478	417	294.21	262
2	GGSSSTP	9750	8921	9959	9112	9300	8509	9653.06	8833
3	GHTP	7035	6402	7628	6941	7044	6437	7386.07	6758
4	<b>Total</b>	<b>19081</b>	<b>17366</b>	<b>19919</b>	<b>18128</b>	<b>18225</b>	<b>16607</b>	<b>18905.68</b>	<b>17252</b>

**The Commission approves gross and net thermal generation for FY 2011-12 at 18905.68 (say 18906) MUs and 17252 MUs, respectively.**

### 3.5.2 Hydel Generation

The PSPCL, in the ARR petition for FY 2011-12, projected the net hydel generation including BBMB share at 8352 MUs for FY 2011-12. The Commission, in its Tariff Order for FY 2011-12, approved the net hydel generation including BBMB share at 8251 MUs. PSPCL, in its ARR petition for FY 2012-13, has submitted the revised hydel generation at 9139 MUs, for FY 2011-12.

PSPCL has submitted in the ARR for FY 2012-13 that the availability of hydel generation for FY 2011-12 has been revised on the basis of the actual generation during the first half of FY 2011-12 and the revised generation target for the second half of FY 2011-12. PSPCL has stated that the availability projections for 2<sup>nd</sup> half of FY 2011-12 are based on last three years average for the corresponding months.

The PSPCL vide its letter nos. 292 dated February 24, 2012 and 322 dated February 28, 2012 has supplied the actual gross generation of PSPCL's own hydel generating stations up to January 2012 and also the projected generation for February 2012 and March 2012. The actual gross generation of PSPCL's own hydel generating stations from April 2011 to January 2012 and the generation projected for February 2012 and March 2012 by PSPCL is summarized in Table 3.9:

**Table 3.9: Actual Gross Hydel Generation from April 2011 to January 2012 and projected Hydel Generation from February 2012 to March 2012**

(MU)

Sr. No.	Station	Actual gross generation from Apr 11 to Jan 12	Projected gross generation for Feb 12 & Mar 12	Total gross generation
1	2	3	4	5
1	Shanan	471.19	50.28	521.47
2	UDBC Stage-I	133.94	13.10	147.04
3	UBDC Stage-II	138.91	12.30	151.21
4	RSD	1706.84	138.57	1845.41
5	MHP	1161.73	159.04	1320.77
6	ASHP	658.54	101.95	760.49
7	Micro Hydel	3.68	1.70	5.38
8	<b>Gross own hydro</b>	<b>4274.83</b>	<b>476.94</b>	<b>4751.77</b>

The actual station-wise generation of PSPCL's own hydel generating stations from April 2011 to January 2012 is available with the Commission. Further, the generation projected by PSPCL of its own hydel generating stations from February 2012 to March 2012 is considered reasonable. The Commission, therefore, approves the gross hydel generation of PSPCL's own hydel generating stations as given under Col.5 of Table 3.9.

PSPCL in its letter no.1708/CC/DTR/232-Vol.I dated June 29, 2011 and in the ARR Petition for FY 2012-13, has submitted that the auxiliary consumption in case of Shanan is higher because the design adopted for the 11 kV bus is different from the standard design due to the space constraints, i.e. instead of directly feeding the 11/132 kV step up transformer, the generation voltage of 11 kV is first taken to 11 kV bus, from where the step up transformers are fed resulting into additional power loss in 11 kV bus at this power house. PSPCL in its letter dated 6<sup>th</sup> January, 2012 has projected the auxiliary consumption of Shanan during FY 2011-12 at 7.44 MUs (in fact this figure is inclusive of transformation losses), which works out to 1.43%. The auxiliary consumption (inclusive of transformation losses) intimated by PSPCL in respect of ASHP and MHP is 1.09% and 1.70% respectively. In case of all these plants, the Commission is allowing normative auxiliary consumption of 0.2% and transformation losses of 0.5%. The auxiliary consumption and transformation losses in case of ASHP and MHP are more than the norms, as also in case of Shanan and comparable with Shanan. The Commission, as such, does not find any justification in PSPCL's submissions for allowing higher auxiliary consumption in case of Shanan.

The Commission, in the approach followed in the previous Tariff Orders, has been deducting the HP share (free) in RSD and HP royalty in Shanan from the gross hydel generation, as these are not considered Outside State sale. In line with the principle

adopted by the Commission in previous Tariff Orders, the Commission has now worked out net hydel generation for FY 2011-12 by deducting the auxiliary consumption, transformation losses, free HP share in RSD and HP royalty in Shanan as indicated in Table 3.10. The Commission approves the net share from BBMB as projected by PSPCL in the ARR. The total availability of station-wise hydel generation as projected by PSPCL in the ARR for FY 2011-12, generation approved by the Commission in its Tariff Order for FY 2011-12, the revised estimate submitted by the PSPCL in the ARR for FY 2012-13, and now approved by the Commission is given in Table 3.10:

**Table 3.10: Hydel Generation for FY 2011-12**

(MU)

Sr. No.	Station	Projected by PSPCL in ARR for FY 2011-12	Approved by the Commission in T.O. for FY 2011-12	Revised estimate of PSPCL in ARR for FY 2012-13	Now Approved by the Commission
1	2	3	4	5	6
1.	Shanan	527	528	520	521.47
2	UDBC Stage-I	368	368	172*	147.04
3	UDBC Stage-II			190*	151.21
4	RSD	1360	1360	1643	1845.41
5	MHP	1127	1127	1202	1320.77
6	ASHP	658	658	772	760.49
7	Micro Hydel	10	10	8	5.38
<b>8</b>	<b>Gross own hydro</b>	<b>4050</b>	<b>4051</b>	<b>4507</b>	<b>4751.77</b> <b>(say 4752)</b>
<b>9</b>	<b>Auxiliary consumption and transformation loss (including RSD share and royalty in Shanan)</b>	<b>47</b>	<b>149</b>	<b>168</b>	<b>** 177</b>
<b>10</b>	<b>Net own hydro</b>	<b>4003</b>	<b>3902</b>	<b>4339</b>	<b>4575</b>
	<b>PSPCL share from BBMB</b>				
11	PSPCL share excluding common pool share (Net)	4047	4047	4487	4487
12	Add Common pool share	303	302	313	313
<b>13</b>	<b>Net share from BBMB</b>	<b>4350</b>	<b>4349</b>	<b>4800</b>	<b>4800</b>
<b>14</b>	<b>Total hydro availability (Net) (Own+BBMB)</b>	<b>8352</b>	<b>8251</b>	<b>9139</b>	<b>9375</b>

\* The breakup of generation between UDBC stage-1 and UDBC stage-II, is based on the additional information furnished by PSPCL, in letter dated 6<sup>th</sup> January, 2012.

\*\* Transformation loss @ 0.5% (24 MUs), Auxiliary consumption @ 0.5% for RSD generation of 1845.41 MUs and UDBC stage-I generation of 147.04 MUs (having static exciters) and @ 0.2% for others (15 MUs), HP share @ 4.6% in RSD (85 MUs) and Royalty to HP in Shanan (53 MUs).

**The Commission, thus, approves revised hydel generation for FY 2011-12 at 4575 MUs (net) from own hydel stations and 4800 MUs (net) as share from BBMB, as shown in Table 3.10.**

The gross and net availability of thermal and hydel generation approved for FY 2011-12 is depicted in Table 3.11:

**Table 3.11: Gross and Net availability of Thermal and Hydel Generation approved for FY 2011-12**

(MU)			
Sr. No.	Thermal and Hydel Generation	Gross Generation	Net Generation
1	2	3	4
1	Thermal	18906	17252
2	Hydel		
(a)	Own generation	4752	4575
(b)	Share from BBMB (including Common Pool share)	-	4800
(c)	<b>Total Hydel (Own + BBMB)</b>	-	<b>9375</b>
<b>3</b>	<b>Total (Thermal + Hydel) availability</b>		<b>26627</b>

### 3.6 Power Purchase

To meet the energy requirement, PSPCL had projected power purchase at 17767 MUs (net) in the ARR for FY 2011-12. The Commission, in its Tariff Order for FY 2011-12, approved power purchase at 17595 MUs (net) for FY 2011-12. PSPCL has now furnished revised estimates of power purchase for FY 2011-12 at 16228 MUs (net) in its ARR petition for FY 2012-13. The approved total energy requirement during FY 2011-12 including Common Pool and Outside State sale and T & D losses are determined as 41837 MUs in the Review as discussed in para 3.4. The energy available from PSPCL's own generating stations including its share from BBMB is 26627 MUs (17252 MUs of thermal generation and 9375 MUs of hydel generation including share from BBMB) as approved in para 3.5. The balance energy requirement works out to 15210 MUs (net) which has to be met through purchases from Central Generating Stations and other sources.

**The Commission, accordingly, approves the revised power purchase at 15210 MUs (net) for FY 2011-12.**



### 3.7 Energy Balance

Details of energy requirement and energy availability projected by the PSPCL in its ARR Petition for FY 2011-12, approved by the Commission in its Tariff Order for FY 2011-12, revised estimates supplied by PSPCL in the ARR Petition for FY 2012-13 and now approved by the Commission is given in Table 3.12:

**Table 3.12: Energy Balance for FY 2011-12**

(MU)					
Sr. No.	Particulars	Projected by PSPCL in ARR for FY 2011-12	Approved by the Commission in Tariff Order for FY 2011-12	Revised Estimates by PSPCL in ARR for FY 2012-13	Now approved by the Commission for FY 2011-12
1	2	3	4	5	6
<b>(A)</b>	<b>Energy Requirement</b>				
1	Metered Sales	23494	24531	23177	22963
2	Sales to Agriculture	12253	10843	10993	10479
<b>3</b>	<b>Total Sales within the State</b>	<b>35747</b>	<b>35374</b>	<b>34170</b>	<b>33442</b>
4	T&D Losses (%)	17.00%	19.00%	17.5%	19.00%
5	T & D Losses	7322	8298	7248	7844
6	Sale to Common Pool consumers	302	302	313	313
7	Outside State Sale	116	0	367	238
<b>8</b>	<b>Total Requirement</b>	<b>43486</b>	<b>43974</b>	<b>42098</b>	<b>41837</b>
<b>(B)</b>	<b>Energy Available</b>				
9	Own generation (Ex-bus)				
(a)	Thermal	17367	18128	16608	17252
(b)	Hydel	4003	3902	4462	4575
10	Share from BBMB (including share of common pool consumers)	4349	4349	4800	4800
11	Purchase (net)	17767	17595	16228	15210
<b>12</b>	<b>Total Availability</b>	<b>43486</b>	<b>43974</b>	<b>42098</b>	<b>41837</b>

### 3.8 Fuel Cost

3.8.1 The PSPCL in the ARR petition for FY 2011-12 had projected fuel cost of Rs. 4066.43 crore for gross generation of 19081 MUs. The Commission, in its Tariff Order for FY 2011-12, approved fuel cost of Rs.3588.17 crore for gross thermal generation of 19,919 MUs. PSPCL, in its ARR petition for FY 2012-13, has revised the estimates of fuel cost to Rs.3596 crore for gross thermal generation of 18225 MUs, based on calorific value and price of coal / oil for FY 2011-12, as given in Table 3.13. PSPCL has submitted that some techno-commercial parameters have been estimated on the basis of historical data. It has also been submitted that the price of

coal has been escalated at CERC rate on the actual billing rate, and the price of oil has been escalated as per recent inflationary price levels.

**Table 3.13: Calorific Value and Price of Coal & Oil, Transit loss of coal, Specific Oil consumption and Station Heat Rate as submitted by the PSPCL for FY 2011-12**

Sr. No.	Station	Period	As submitted by PSPCL						
			Gross Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/ lt)	Price of Oil (Rs./ kL)	Price of coal excluding transit loss (Rs./MT)	Transit Loss (%)	Station Heat Rate (kCal/ kWh)	Specific Oil Consumption (ml/kWh)
1	2	3	4	5	6	7	8	9	10
1	GNDTP	H1	3933	9400	34564	2891	0.93	2975	2.69
	GNDTP	H2	3935	9400	36292	2987	2.00	2937	2.50
2	GGSTP	H1	3938	10000	32322	2993	1.57	2552	0.44
	GGSTP	H2	3935	10000	33938	3093	2.00	2599	1.00
3	GHTP	H1	4046	9500	39425	2879	2.46	2430	0.57
	GHTP	H2	4025	9500	41396	2974	2.00	2500	1.00

H1: April 2011 to September, 2011 & H2: October, 2011 to March, 2012.

Fuel cost being a major item of expense, the Commission thought it prudent to get the same validated. The calorific value of oil & coal and the price of oil & coal accepted by the Commission are indicated in Table 3.14. These values are based on data from April 01, 2011 to September 30, 2011, as validated by the Commission.

**Table 3.14: Calorific Value and Price of Coal & Oil and Transit loss of coal as validated by the Commission for FY 2011-12**

Sr. No.	Station	As validated by the Commission				
		Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (Rs./kL)	Price of coal (Rs./MT) (Excluding Transit Loss)	Transit Loss (%)
1	2	3	4	5	6	7
1	GNDTP	3933	9679	34564.43	2890.88	0.93
2	GGSTP	3938	9839	32337.48	2997.72	1.57
3	GHTP	4046	9587	39367.97	2862.48	2.46

3.8.2 Substantial quantity of coal received from the captive coal mine of PSPCL has been used during FY 2011-12. The Commission has taken the coal quantity received from PANAM (PSPCL's captive coal mine) as submitted by PSPCL. The price of coal and corresponding calorific values given in the ARR Petition of PSPCL [Table 3.13] and those validated by the Commission [Table 3.14] are

weighted average values of coal for 6 months (April 01, 2011 to September 30, 2011) including PANAM coal.

3.8.3 The gross generation considered by the Commission in the estimation of fuel cost for FY 2011-12 is 18905.68 MUs. The fuel cost for different stations corresponding to generation, now approved by the Commission, has been worked out based on the parameters adopted by the Commission in its Tariff Order for FY 2011-12. Table 3.15 details the fuel cost based on calorific value & price of coal & oil as validated & accepted by the Commission.

3.8.4 No transit loss has been allowed for PANAM coal while arriving at fuel cost as prices according to the contract are on F.O.R. destination basis. In the case of coal other than PANAM coal, normative transit loss of 2% has been allowed by the Commission.

**Table 3.15: Fuel Cost for FY 2011-12**

Sr. No.	Item	Derivation	Approved Fuel Cost for FY 2011-12					Total
			Unit	GNDTP Unit I & II	GNDTP Unit III & IV	GGSTP	GHTP	
1	2	3	4	5	6	7	8	9
1	Generation	A	MU	1572.34	294.21	9653.06	7386.07	<b>18905.68</b>
2	Heat Rate	B	kCal/kWh	2825	3000	2500	2500	
3	Specific Oil Consumption	C	ml/kWh	1.00	3.50	1.00	1.00	
4	Calorific value of Oil	D	kCal/lt	9679	9679	9839	9587	
5	Calorific value of Coal	E	kCal/Kg	3933	3933	3938	4046	
6	Overall Heat	F=A x B	GCal	4441861	882630	24132650	18465175	
7	Heat from Oil	G=(A x C x D)/1000	GCal	15219	9967	94976	70810	
8	Heat from Coal	H=F-G	GCal	4426642	872663	24037674	18394365	
9	Actual Oil Consumption	I=Gx1000)/D	kL	1572	1030	9653	7386	
10	Transit Loss of Coal	J	(%)	2.00	2.00	2.00	2.00	
11	Total Coal consumption (excluding Transit Loss)	K=(Hx1000)/E	MT	1125513	221882	6104031	4546309	
12	Quantity of PANAM coal	L	MT	808683	151317	3668542	3357548	
13	Quantity of Coal other than PANAM coal (excluding Transit Loss)	M=K-L	MT	316830	70565	2435489	1188761	

14	Quantity of Coal other than PANAM coal (including Transit Loss)	$N=M/(1-J/100)$	MT	323296	72005	2485193	1213021	
15	Total quantity of Coal required	$O=L+N$	MT	1131979	223322	6153735	4570569	
16	Price of Oil	P	Rs./kL	34564	34564	32337	39368	
17	Price of Coal	Q	Rs./MT	2891	2891	2998	2862	
18	Total cost of Oil	$R=P \times l / 10^7$	Rs. crore	5.43	3.56	31.21	29.08	69.29
19	Cost of Coal	$S=O \times Q / 10^7$	Rs. crore	327.25	64.56	1844.89	1308.10	3544.80
<b>20</b>	<b>Total Fuel Cost</b>	<b>T=R+S</b>	<b>Rs. crore</b>	<b>332.69</b>	<b>68.12</b>	<b>1876.10</b>	<b>1337.17</b>	<b>3614.09</b>
21	Per unit cost	$U=T \times 10 / A$	Rs./unit	2.12	2.32	1.94	1.81	1.91

**The Commission, therefore, approves the revised fuel cost at Rs. 3614.09 crore for gross thermal generation of 18905.68 MUs.**

### 3.9 Power Purchase Cost

3.9.1 The Commission, in its Tariff Order for FY 2011-12, approved the power purchase cost of Rs 5751.26 crore for purchase of 18488 MUs (gross). PSPCL, in its ARR petition for FY 2012-13, has given revised estimates of Rs.5608.22 crore (exclusive of PSTCL transmission charges of Rs. 491.52 crore) for purchase of 17013 MUs (gross) for FY 2011-12. PSPCL subsequently vide its letter no. 182 dated February 2, 2012 revised the power purchase amount to Rs. 5866.33 crore (exclusive of PSTCL transmission charges of Rs. 491.52 crore) for purchase of 16888 MUs (gross) for FY 2011-12.

3.9.2 As discussed in para 3.6, the requirement of 15210 MUs (net) is to be met through purchase from central generating stations and other sources. The transmission loss external to the PSTCL and PSPCL system has to be added to arrive at the quantum of gross energy to be purchased. The Commission in the Tariff Order for FY 2011-12 has considered external losses at a weighted average of 4.83% based on the actual external losses in FY 2009-10 as against 5.57% proposed by PSPCL. PSPCL has assumed the overall weighted average of actual external losses in the first six months of the year at 4.31%. For the full year 2011-12, PSPCL has assumed the overall weighted average of external losses at 4.62%, to compute the power purchase cost. The Commission provisionally accepts the external losses at 4.62% as projected by the utility, subject to True up. After adding the 4.62% external losses, the gross energy required to be purchased works out to be 15947 MUs (15210 MUs + external losses of 737 MUs).

PSPCL in its ARR for FY 2012-13 has shown power purchase of 10766.50 MUs at a total cost of Rs.3450.49 crore (exclusive of PSTCL transmission charges of Rs. 245.76 crore) for the first half of FY 2011-12, which the Commission provisionally approves. Further, the Commission decides to determine the power purchase cost for balance requirement of 5180.50 MUs (15947 – 10766.50) on pro-rata basis based on the cost approved by the Commission for the first half of FY 2011-12. Accordingly, the pro-rata amount for purchase of 5180.50 MUs works out to Rs.1660.27 crore (3450.49 x 5180.50/10766.50). Therefore, the total power purchase cost for FY 2011-12 works out to Rs.5110.76 crore.

**The Commission therefore approves the revised power purchase cost of Rs. 5110.76 crore for the now determined power purchase of 15947 MUs (gross).**

### 3.10 Employee Cost

3.10.1 In the ARR Petition for FY 2011-12, PSPCL claimed employee cost of Rs. 3607.75 crore against which Commission approved a sum of Rs. 2916.98 crore in the Tariff Order for FY 2011-12. PSPCL has now revised employee cost to Rs. 3629.54 crore in the RE for FY 2011-12 in the ARR Petition for FY 2012-13 as detailed in Table 3.16.

**Table 3.16: Employee Cost Estimated by PSPCL for FY 2011-12**

(Rs. crore)		
Sr. No.	Particulars	2011-12 (RE)
1	2	3
1	Basic Pay	1443.61
2	Overtime	12.00
3	Dearness Allowance	679.18
4	Fixed medical Allowance	31.50
5	Other Allowance	205.00
6	Bonus/ Generation Incentive	50.00
7	Medical Expense Reimbursement	13.00
	<b>Total (1 to 7)</b>	<b>2434.29</b>
	<b>Terminal Benefits</b>	
8	Earned Leave Encashment	105.00
9	Gratuity	200.00
10	Commutation of Pension	0.00
11	Workman's compensation	0.20
12	Ex-gratia	0.00
13	Fringe Benefit Tax	0.00
	<b>Total (8 to 13)</b>	<b>305.20</b>
	<b>Pension Payments</b>	
14	Basic Pension	721.31
15	Dearness Pension	0.00
16	Dearness Allowance	0.00
17	Any other expense	102.00

18	Arrear of pension	100.00
19	<b>Total</b>	<b>923.31</b>
20	<b>Total expenses</b>	<b>3662.80</b>
21	Less: Amount capitalized	120.00
22	<b>Net Amount</b>	<b>3542.80</b>
23	Add: Prior period	2.74
24	Add: BBMB share	84.00
25	<b>Net Employer's Cost</b>	<b>3629.54</b>
26	Arrear of pay revision	
27	<b>Total</b>	<b>3629.54</b>

- Basic pay for 2011-12 includes first instalment of 40% arrears on account of pay revision.

PSPCL in its Memo. No. 323/DTR/Dy.CAO/234 dated February 28, 2012 submitted that an amount of Rs. 3.49 crore representing expenses on account of annual license fee was wrongly reflected in the basic pay of Rs.1443.61 crore but has now been included under the A&G Expenses head for FY 2011-12. Thus, with the reduction of an amount of Rs. 3.49 crore from Rs. 1443.61 crore, the amount of basic pay works out to Rs. 1440.12 crore. Accordingly, the claim of employee cost is reduced to Rs. 3626.05 crore.

Besides, during clarifications made vide Memo. No. 139/DTR dated January 19, 2012, PSPCL submitted that 'Any Other Expenses' of Rs.102 crore detailed under the head Pension Payments include expenses other than pension payments of Rs. 40.80 crore. Thus the revised claim of PSPCL on account of Pension Payments is Rs. 882.51 crore. Also, workman compensation of Rs. 0.20 crore is not a part of terminal benefits.

3.10.2 The Commission in its earlier Tariff Orders has been observing that the Employee Cost of the Utility is one of the highest in the Country and has urged the utility to take efficient steps to contain employee cost. It is noted that although some efforts have been initiated by the Utility to enhance employee productivity through various management techniques and a study for rationalization of manpower has been instituted, the utility still needs to go a long way to contain employee cost. The Commission in line with earlier observations in this respect is unable to accept the revised estimates of employee cost and considers it appropriate to determine such cost as per its Regulations.

3.10.3 The provisions of the PSERC Tariff Regulations provide for determination of employee cost in two parts:

- Terminal benefits including BBMB share on actual basis.

- Increase in other employee expenses limited to average increase in Whole Sale Price Index (WPI) for the year.

Regulation 28 (8) (b) also provides for allowing exceptional increase in employee cost on account of pay revision etc which is to be considered separately.

3.10.4 PSPCL has submitted a revised estimate of Rs. 1271.51 (305.00+882.51+84.00) crore towards terminal benefits and BBMB share in the RE for FY 2011-12 based on the actual expenses incurred in the first half of the year. **The Commission allows terminal benefits and BBMB share of Rs. 1271.51 crore for FY 2011-12.**

3.10.5 PSPCL has claimed Rs. 2351.80 crore (after excluding terminal benefits and Rs. 2.74 crore on account of prior period expenses but inclusive of revised pay scale arrears) towards other employee cost in the RE for FY 2011-12. The increase in employee cost other than Terminal benefits and BBMB share is to be allowed based on the average WPI increase during the year on base expenses of FY 2010-11 in accordance with the PSERC Tariff Regulations.

In the past, the Commission in its Review would adopt the expenses approved by the Commission in the True up (based on Audited Accounts) for purposes of ascertaining allowable expenses. However, in the absence of Audited Accounts of FY 2010-11 and the rationale given at length in para 2.3.2 of this Tariff Order, the Commission has no alternative but to treat the approved other expenses in the RE of FY 2010-11 in Tariff Order FY 2011-12 as the base expenses for purposes of arriving at the allowable other expenses for FY 2011-12.

The approved other employee cost of PSPCL for FY 2010-11 (Review) in the Tariff Order FY 2011-12 is Rs. 1380.81 crore. After allowing average WPI increase of 7.4% based on available WPI for 9 months (April 2011 to December 2011), **the allowable 'other employee cost' works out to Rs. 1482.99 crore which is approved by the Commission.**

3.10.6 In its ARR Petition for FY 2012-13, PSPCL has pleaded that the Commission may take into consideration the impact of revision of pay scales in the base 'other employee cost'. PSPCL has vide letter dated January 24, 2012 intimated that the impact of revision of pay scales is Rs. 306.04 crore for FY 2011-12 for both utilities and is inclusive of 9% escalation on account of annual incremental increase in basic pay & DA etc. PSTCL vide its letter dated February 6, 2012 has intimated that the impact of revised pay scales of Rs. 306.04 crore for FY 2011-12 includes the impact

of pay revision of Rs. 24.26 crore pertaining to the employees of PSTCL. The Commission observes that any increase on account of pay/DA is taken care of by allowing WPI increase. A separate increase of 9% on revised pay is not provided for and hence cannot be allowed. Instead, a WPI increase of 7.4 % on pay revision would be reasonable. The impact of pay revision relating to PSPCL and PSTCL after excluding 9% escalation, as submitted by utility, is Rs. 280.78 crore and is inclusive of Rs. 22.25 crore pertaining to PSTCL. The revised pay impact for FY 2011-12 for PSPCL (as submitted by the utility) is thus ascertained at Rs. 258.53 (280.78- 22.25) crore. Allowing a WPI increase of 7.4% on this amount, the Commission ascertains the impact of pay revision for PSPCL for FY 2011-12 as Rs. 277.66 crore.

The Commission has been determining employee cost of PSPCL on a normative basis in accordance with the Tariff Regulations. Therefore, the increase on account of pay revision cannot be allowed over and above the normative employee cost and on actual cost basis as proposed by PSPCL. For the years 2009-10 and onwards the Commission had been approving Employee Cost of the utility after reducing the claim by 28.48% based on average disallowance in the approved Employee Cost for FY 2007-08, FY 2008-09 and FY 2009-10 (projections).

The Hon'ble APTEL in Appeal No 76 of 2011 in the case of PSTCL (Tariff Order for FY 2011-12) has passed an order dated March 02, 2012 stating that it does not find any logic behind reducing the arrears of Rs. 35.49 crore by 28.48%. The Commission's reasoning that in the past it has been reducing the figure by the said percentage is held to be no ground for maintaining that reduction particularly when the appellant is a separate entity and as per the GoP Notification, the appellant has to pay 40% of the total arrears amounting to Rs. 35.49 crore. The Hon'ble APTEL has held that the matter of the fact is that the appellant (PSTCL), being a new entity projected all its figures provisionally. The transfer of assets and liabilities of the bi-furcated entities is yet to be finalized. As such, the Hon'ble APTEL has held that there is ample scope for Review and True up. Therefore, subject to review which may happen after the expiry of FY 2011-12, the Commission will re-examine the matter and pass an appropriate order.

The Commission considers it appropriate to discuss this issue at length in the Tariff Order. The Commission observes that the employee cost of the Board has remained a contentious issue since the Commission came into existence in April 2001 and the Commission, in all its Tariff Orders, has underlined the fact that the employee cost of



the Board was one of the highest in the Country. The Board itself had admitted that it had surplus manpower. This aspect was also highlighted by the various categories of electricity consumers during public hearings held for finalization of tariff. The Commission had been emphasizing the necessity of bringing the Employee Cost at par with other well managed Utilities of the Country. The Board in its various ARR's, had been pleading of having initiated a number of initiatives to bring down its employee cost. The Commission noted that nothing effective was done to contain the employee cost. No steps were taken for rationalization of its manpower. The Commission, in line with Regulations, has been allowing only the justified costs and not the actual costs claimed by the utility. The Commission has time and again reinforced the need to improve various performance parameters of the utility relating to all the three functions viz., Generation, Transmission and Distribution. Over the years the manpower of the Board did reduce but only on account of retirements which was a matter of natural attrition and not on account of efforts made by the utility. The work study report, for which a consulting group Price Water House Coopers was engaged in 2007 is yet to be implemented by the utilities. In the meantime, the Board was unbundled into two successor entities on April 16, 2010 by Government of Punjab. The successor entities inherited the inefficiencies of the erstwhile Board not the least being manpower inefficiencies. The Commission cannot in all fairness overlook such glaring inherited inefficiencies of the successor entities i.e. PSPCL & PSTCL.

Here it would be in the fitness of things to mention that the Hon'ble APTEL has upheld the decision of the Commission to cap employee cost of the utility. In this regard reference is made to the order of Hon'ble APTEL dated May 26, 2006, in Appeal No.4,13,14 & others of 2005, the relevant extracts of which are reproduced as under:

*"The process of reforms which has been triggered by the Act of 1998 and the Act of 2003 will lose its momentum in case salaries/incentives are not linked to the performance of the employees. There is nothing on record to show that there has been improvement in the performance of the employees of the Board. Benefit should be made available for rewarding efficiency in performance. Automatic availability of benefits generates inefficiency and indolence.*

*As already pointed out, the comparative analysis of various parameters clearly establish that the employees of the PSEB are not productive and performance linked incentive shall be the requirement of the day.*

*At the same time we make it clear that in case the employees of the Board do not improve their efficiency, the aforesaid employees cost allowed by the Commission will remain capped till the performance of the Board employees improve.*

*No worthwhile measures were adopted by the Board to reduce the employees cost during the years in question. Even Voluntary Retirement Scheme, which could have been one of the options, was not adopted on the ground that the State Government was not in a position to find funds. These are mere excuses. The State Government itself had taken a stand during the year 2002-03 that the employees cost of Rs. 1316.50 crores claimed by the Board was quite high. Subsequently, the same Government changed its stance for the year 2004-05. It seems to us that it is not prudent for the Board to employ excessive manpower.*

*In the circumstances, we decline to interfere with the decision of the Commission disallowing increase in the employees cost”.*

In view of the above decision of Hon'ble APTEL, the Commission continued to cap the employee cost as the utility showed no improvement in employees' productivity or work performance. The Commission, however, did allow terminal benefits and BBMB share claimed as actuals and WPI increase on the 'other employee cost'. The revised pay scales, based on the recommendations of the 5<sup>th</sup> Pay Commission, were implemented in the Board w.e.f. August, 2009. Therefore, in the Tariff Order of FY 2010-11, the Commission worked out the average disallowance of 28.48% based on the disallowance in employee cost in FY 2007-08 (True up), FY 2008-09 (True up) and FY 2009-10 (projections). During processing of the ARR for FY 2010-11, the Commission was of the view that since the Commission had been disallowing the Employee Cost of the Board by 28.48%, it will be appropriate to reduce the arrears as also any other increase in Employee Cost by 28.48%. Accordingly, the arrears of the Board employees were also reduced by 28.48% in the Tariff Orders for FY 2010-11 and FY 2011-12.

The Hon'ble APTEL in a recent order dated January 11, 2012 in Appeal Nos. 57/2008, 155/2007, 125/2008, 40/2010, 196/2009, 199/2009, 45/2010, 163/2010, 06/2011 and

144/2010 has once again upheld the stand of the Commission to cap employee cost.

The relevant extracts are reproduced as under:

*“In the order dated 26.05.2006 this Tribunal directed that the cost of the employees should remain capped at the level of 2005-06..... but later in Appeal No. 99 of 2009 the Tribunal observed that the employee’s cost has to be increased only to the level of WPI till the Board shows significant improvement in its working.*

*This point was answered by this Tribunal in Appeal No. 153 of 2007 in these words:-*

*“It is noticed that the State Commission has allowed reasonable cost in the tariff order as fixed in the previous order after following the relevant regulation in this regard. As a matter of fact, the State Commission has referred to the Tribunal orders and applied the principles contained in the Tribunal’s order for fixing the employees cost. As a matter of fact, the Commission went by the materials placed by the appellant before the State Commission and found that no worthwhile measures were adopted by the Board to reduce the employees cost during the year in question. Even the voluntary retirement scheme which has been suggested by the Tribunal was not adopted. In the above background that too on the basis of the principles laid down by this Tribunal in 2007 Tribunal, 931 (Siel Vs. Punjab State Electricity Commission), State Commission has approved Rs. 1661.41 crore as employees cost for the year 2007-08. There is nothing wrong in this finding.”`*

*“This order in Appeal No. 153 of 2007 was decided by the Full Bench of this Tribunal on 4<sup>th</sup> March, 2011 and a month thereafter that is, on 13<sup>th</sup> April, 2011 this issue was again considered in Appeal No. 99 of 2009 preferred by the same PSEB challenging the order dated 03.07.2008 wherein the Commission determined the ARR and tariff for the FY 2008-09. In the said order the Commission disallowed the employees cost claimed by the appellant and kept the employees cost at the capped levels and allowed only the wholesale price index escalation.....*

*While deciding the Appeal No. 99 of 2009 this Tribunal had the occasion to refer to a reported decision of this Tribunal namely SIEL Vs. Punjab State Electricity Regulatory Commission & Ors. reported in 2007 Tribunal, 931. In this reported decision the Tribunal declined to interfere with the decision of the Commission disallowing increase in the*

*employees cost. In this decision it was observed by the Tribunal in concurrence with the Commission that unless there has been substantial improvement in the performance of the employees of the Board, there cannot be any automatic allowance with reference to the actual expenditure as the automatic availability of benefits generates inefficiency and indolence. The Tribunal approved the stand of the Commission and held that:*

*“State Commission has taken into account the Regulation 28(6) of the Tariff Regulations and has given reasons as to why the entire claim made by the appellant on employees cost could not be allowed. As a matter of fact, the State Commission has specifically held that the State Commission does not find justification to deviate from the Regulations in determining the employees cost of the appellant as the WPI increase as on March, 2008 against the corresponding period in the previous year stands at 6.68% and applying the same on employees cost determined for the year 2007-08.....*

*This issue was again raised in Appeal No. 40 of 2010. It appears that in the ARR for 2009-10 the Commission by its order dated 8-9-2009 approved Rs. 1856.60 crore as employees cost from Rs. 3454.68 crore as was projected by the Board. As such, it cannot be said that the Commission’s approach to the issue is unjustified; on the contrary the Commission adopted a consistent reasonable approach throughout the year preceding the FY 2010-11. This issue is answered accordingly.”*

From a perusal of the above judgments, it is clear that the Hon’ble APTEL has time and again upheld the Commission’s stand as also the rationale for disallowing employee cost. Consistent with its stand on disallowance of employee cost, the Commission has also disallowed claim of arrears and pay revision which are a part of the employee cost. The Commission would be failing in its duty if it adopted an inconsistent methodology whereby although ‘other employee cost’ was allowed strictly as per its Regulations, the arrears of pay or impact of pay revision which are in respect of same employees and are linked to their salary/allowances would be allowed in totality. Bearing this in mind, the Commission in all its orders has adopted a uniform and consistent approach to disallowance of employee cost. To be fair, the Commission attempted to bring both the disallowances under the head employee cost at par and hence disallowed the arrears by a percentage similar to the disallowance affected under the head ‘employee cost’. The Commission, at that point of time, had

adopted the percentage figure of disallowance based on the disallowance in employee cost for FY 2007-08, FY 2008-09 and FY 2009-10 (Projections). The rationale for disallowance is, thus, logical and in line with the overall disallowance affected in the claim of employee cost. This rationale has also been upheld by Hon'ble APTEL as discussed above and thus has judicial sanction.

However, the Commission in all fairness also admits that disallowances are dynamic entities which vary from year to year. Up to Tariff Order FY 2011-12, the disallowance of employee cost had been ascertained on the basis of available data for FY 2007-08, FY 2008-09 and FY 2009-10 (Projections). However, now the Commission is in possession of data based on Audited Accounts for FY 2006-07, FY 2007-08, FY 2008-09 and FY 2009-10. The Commission notes that the FY 2006-07, FY 2007-08 and FY 2008-09 are comparable years as up to FY 2008-09 there was no impact of pay revision (consequent upon 5<sup>th</sup> Pay Commission Reports) or amendment of Regulations which allowed terminal benefits on actuals. The Commission, therefore, ascertains the percentage of weighted disallowance of employee cost for the aforementioned years as 17.22% as detailed in Table 3.17.

**Table 3.17: Disallowance of Employee Cost for FY 2011-12**

(Rs. crore)				
Financial Year	Claim of the Utility	Approved by the Commission	Amount disallowed	Percentage of disallowance
1	2	3	4	5
2006-07 (True up)	1751.48	1558.40	193.08	11.02%
2007-08 (True up)	2035.28	1631.02	404.26	19.86%
2008-09 (True up)	2202.04	1768.19	433.85	19.70%
<b>Total</b>	5988.80	4957.61	1031.19	
<b>Weighted Average Percentage of disallowance</b>				17.22%

The Commission considers it correct to adopt this figure for purposes of determining allowable pay revision/ pay arrears of the Utility. The Commission is, therefore, of the view that the claim of PSPCL amounting to Rs. 277.66 crore, being impact of pay revision for FY 2011-12, needs to be reduced by 17.22% and the reduction works out to Rs. 47.81 crore. **The allowable cost towards impact of pay revision for FY 2011-12 thus works out to Rs. 229.85 crore.**

3.10.7 PSPCL has further submitted that the arrears of revised pay scales are payable in three yearly installments in the ratio of 40:30:30 during FY 2011-12, FY 2012-13 and FY 2013-14 and an amount of Rs. 239.46 crore may be allowed by the Commission

for FY 2011-12. In its subsequent submission vide letter No.161 dated January 24, 2012, PSPCL has submitted that the arrears payable during FY 2011-12 are to the extent of Rs. 276.42 crore against Rs. 239.46 crore claimed in the ARR. As discussed in the para 3.10.6 above, the Commission is of the view that the claim of arrears for Rs. 276.42 crore for FY 2011-12 also needs to be reduced by 17.22% and the reduction works out to Rs. 47.60 crore. The allowable cost towards arrears works out to Rs. 228.82 crore. **The Commission, thus, approves the pay arrears of Rs. 228.82 crore for FY 2011-12.**

3.10.8 PSPCL has claimed Rs. 2.74 crore towards prior period expenses in the RE for FY 2011-12. Since the utility has failed to supply the information with regard to the prior period to which these expenses pertain, the Commission disallows the claim considering that these expenses pertain to the period for which employee cost remained capped. The Commission also observes that its approach towards the issue of allowing employee cost as per its Regulations and also the disallowance of prior period expenses has been upheld by the Hon'ble APTEL in various orders as also the recent order dated January 11, 2012.

**Thus, the Commission allows the total employee cost of Rs. 3213.17 (1271.51+1482.99+229.85+228.82) crore for FY 2011-12.**

### **3.11 Repair and Maintenance (R&M) Expenses**

3.11.1 In the ARR Petition for FY 2011-12, PSPCL projected R & M expenses at Rs. 414.74 crore against which the Commission approved Rs. 376.22 crore in the Tariff Order for FY 2011-12. In the ARR petition for FY 2012-13, PSPCL has revised R & M expenses to Rs. 506.68 crore including prior period expenses of Rs. 0.11 crore.

3.11.2 Regulation 28(4) of PSERC Tariff Regulations provides that the R & M expenses are to be determined by adjusting the base O & M expenses (which include R & M expenses) in proportion to the annual increase in WPI to determine O & M expenses for subsequent years. As discussed in para 3.10.5, the Commission adopts approved R&M expenses ascertained in Review of FY 2010-11 in Tariff Order FY 2011-12 as base R&M expenses for FY 2011-12. The base R & M expenses for FY 2011-12 are Rs. 367.10 crore (Rs. 360.28 crore + Rs.6.82 crore) where Rs. 360.28 crore are approved R & M expenses for FY 2010-11 and Rs. 6.82 crore are R & M expenses on fixed assets added during the year. The actual increase in WPI (April 2011 to December 2011) is 7.4%. **After allowing WPI increase of 7.4% on the base figure**

**of Rs. 367.10 crore, the R & M expenses for FY 2011-12 work out to Rs. 394.27 crore.**

3.11.3 In the ARR petition for FY 2012-13, PSPCL has also claimed Rs. 26.77 crore towards R&M expenses on asset addition of Rs. 1262.19 crore during FY 2011-12. It has proposed to capitalize assets to the extent of Rs. 1262.19 crore in the RE for FY 2011-12 against the initial proposed Investment Plan of Rs. 1370.25 crore. PSPCL in its letter No.154 dated January 23, 2012 and letter No.Spl.2/3 dated January 27, 2012 has revised its Investment Plan to Rs. 1868.02 crore for FY 2011-12. Accordingly the capitalization of assets against enhanced Investment Plan (para 3.14.2) of Rs. 1868 crore is determined at Rs. 1538.90 crore.

3.11.4 In accordance with Regulation 28 (6) of the PSERC Tariff Regulations, the R & M expenses are allowable for additional assets added during the year on pro-rata basis from the date of commissioning of assets. Fixed assets approved to be added during the year are considered as having remained in service of PSPCL for 6 months on an average during the year. Based on the ratio of approved R & M expenses of Rs. 394.27 crore to total assets of Rs. 19106.05 crore (which works out to 2.06%) **additional R & M expenses of Rs. 15.85 crore are approved for FY 2011-12.**

3.11.5 As regards prior period expenses of Rs. 0.11 crore claimed by PSPCL, the Commission is of the view that such expenses are to be considered at the time of triuing up when the audited accounts for the year would be available. **Thus, the total allowable R & M expenses work out to Rs. 410.12 (394.27+15.85) crore.**

**The Commission, accordingly, approves the R & M expenses of Rs. 410.12 crore for FY 2011-12.**

### **3.12 Administration and General (A&G) Expenses**

3.12.1 In the ARR Petition for FY 2011-12, PSPCL projected A & G expenses of Rs. 87.95 crore which were approved by the Commission in the Tariff Order for FY 2011-12. In the ARR Petition for FY 2012-13, PSPCL has revised the A & G expenses to Rs. 98.84 crore for FY 2011-12 net of capitalization of Rs. 19.30 crore but including prior period expenses of Rs. 0.19 crore. Besides, as submitted by the utility and as discussed in para 3.10.1 of this Order the expenses for A&G have been increased by Rs. 4.99 (3.49 +1.50) crore on account of Annual License Fee paid by the utility during FY 2011-12. Thus the total A & G expenses for FY 2011-12 work out to Rs. 103.83 (98.84 +4.99) crore.

- 3.12.2 PSPCL has submitted that A & G expenses are estimated based on the historical growth rates and the WPI rate incidental at the beginning of the year. It has further been submitted that additional A & G expenses during the year have been calculated by multiplying the assets added during the year with the ratio of A&G costs and closing GFA (excluding land) in the provisional accounts for FY 2010-11. The assets added during FY 2011-12 have been estimated at Rs. 1262.19 crore (based on original Investment Plan of Rs. 1370.25 crore) and the ratio is calculated to be 0.41%.
- 3.12.3 Regulation 28(4) (a) of PSERC Tariff Regulations provides for adjusting base O & M expenses (including A&G expenses) in proportion to increase in WPI to determine O&M expenses for subsequent years. Based on the WPI data available for 9 months (April 2011 to December 2011), the Commission has calculated the average WPI increase of 7.4% which is adopted for purposes of calculation of allowable A & G expenses. As discussed in para 3.10.5, the Commission adopts approved A & G expenses ascertained in Review of FY 2010-11 in Tariff Order for FY 2011-12 as base A & G expenses for FY 2011-12. The base A & G expenses for FY 2011-12 are Rs. 81.33 crore which include Rs. 79.80 crore as approved A & G expenses for FY 2010-11 and Rs. 1.53 crore as additional A & G expenses for assets added during the year. Applying this increase of 7.4% to the base figure of Rs. 81.33 crore, the A & G expenses work out to Rs. 87.35 crore for FY 2011-12.
- 3.12.4 PSPCL has also claimed Rs. 5.08 crore towards A & G expenses on asset addition of Rs. 1262.19 crore for FY 2011-12. In the ARR, PSPCL has proposed to capitalize assets to the extent of Rs. 1262.19 crore in the RE for FY 2011-12 against the initial proposed Investment Plan of Rs. 1370.25 crore. PSPCL in its letter No.154 dated January 23, 2012 and letter No.Spl.2/3 dated January 27, 2012 has revised its Investment Plan to Rs. 1868.02 crore for FY 2011-12. Accordingly, the capitalization of assets against enhanced Investment Plan (para 3.14.2) of Rs. 1868 crore is determined at Rs. 1538.90 crore.
- 3.12.5 In accordance with Regulation 28 (6) of the PSERC Tariff Regulations, the A & G expenses are permissible for additional assets added during the year on pro-rata basis from the date of commissioning of assets. The approved A & G expenses of Rs. 87.35 crore on the Gross Fixed Assets (GFA) of Rs. 19106.05 crore come to 0.46%. Accordingly, the additional A&G expenses allowable on the approved asset addition of Rs. 1538.90 crore work out to Rs. 3.54 crore considering the asset addition for six months on an average during the year.



3.12.6 As regards prior period expenses of Rs. 0.19 crore claimed by PSPCL, the Commission is of the view that such expenses are to be considered at the time of truing up when the audited accounts for the year would be available. **Thus, total allowable A & G expenses work out to Rs. 90.89 (87.35+3.54) crore for FY 2011-12.**

3.12.7 The Commission observes that A& G expenses are being allowed on normative basis as provided in the PSERC Tariff Regulations, 2005. However, the Commission notes that the utility has claimed an amount of Rs. 4.99 crore on account of Annual license fee paid during FY 2011-12 also. The Commission also observes that the license fee is a mandatory payment to be made by the utility in line with the current Regulations. The Commission, therefore, is of the considered view that the Utility's claim towards expenses of annual license fee of Rs. 4.99 crore are justified expenses. It is also observed that the annual license fee has been paid for the first time in FY 2011-12 and therefore these need to be allowed over and above the normative A & G expenses **The Commission, therefore, allows expenses of Rs. 4.99 crore on this account.**

**The Commission, accordingly, approves the A & G expenses of Rs. 95.88 (90.89+4.99) crore for FY 2011-12.**

### 3.13 Depreciation Charges

3.13.1 In the ARR petition for FY 2011-12, PSPCL projected depreciation charges of Rs. 891.92 crore against which Commission approved depreciation charges of Rs. 841.04 crore. In the ARR petition of FY 2012-13, PSPCL has revised claim of depreciation charges to Rs. 723.34 crore on assets valued at Rs. 19430.05 crore. PSPCL has submitted that depreciation charges for FY 2011-12 have been calculated on the average rate of depreciation which is applied across the asset classes on the opening balance of assets for the year.

3.13.2 The Commission had approved the depreciation charges at Rs. 841.04 crore for FY 2011-12 in the Tariff Order of FY 2011-12 on assets of Rs. 19106.05 crore (as on April 1, 2011). The Utility was required to explain why it had adopted an asset value of Rs. 19430.05 crore as on April 1, 2011 as against value of Rs. 19106.05 crore approved by the Commission in the Tariff Order of FY 2011-12. The Utility was unable to substantiate the asset value of Rs. 19430.05 crore with audited figures. In the absence of audited accounts for FY 2010-11, the Commission adopts the asset value of Rs. 19106.05 crore (as on April 1, 2011) as ascertained in the Tariff Order of

FY 2011-12. Details of function-wise depreciation charges on asset value of Rs. 19106.05 crore are given in Table 3.18.

**Table 3 .18: Depreciation Charges of PSPCL for FY 2011-12**

Sr. No.	Item	Assets as on April 1, 2011 as per ARR FY 2012-13 (Rs. crore)	Depreciation charges claimed in ARR FY 2012-13 (Rs. crore)	Depreciation rate (%)	Assets as on April 1, 2011 as approved by the Commission in Tariff Order FY 2011-12 (Rs. crore)	Depreciation rate (%)	Depreciation charges now approved by the Commission (Rs. crore)
1	2	3	4	5	6	7	8
1	Thermal	5964.37	224.04	3.76%	5688.79	3.76%	213.90
2	Hydro	5958.70	221.83	3.72%	5985.27	3.72%	222.65
3.	Internal Combustion	2.68	0.10	3.73%	2.68	3.73%	0.10
4.	Transmission	2.25	0.08	3.56%	66.35	3.56%	2.36
5.	Distribution	7365.31	274.19	3.72%	7167.86	3.72%	266.64
6.	Others	136.74	5.09	3.72%	195.10	3.72%	7.26
	<b>Total</b>	<b>19430.05</b>	<b>723.34</b>		<b>19106.05</b>		<b>712.91</b>

The Commission considers no depreciation on assets added during the year as the utility has not submitted Audited Accounts for FY 2010-11. Also, it is noted with concern that the Fixed Asset Register (FAR) is pending finalization despite clear directions in this regard. Moreover, the utility has submitted the asset segregation post unbundling as provisional in nature and has rightly claimed depreciation only on the opening balance of assets as in the past. Depreciation on assets added during the year will be considered during True up.

**The Commission, accordingly, approves the depreciation charges of Rs. 712.91 crore for FY 2011-12.**

### 3.14 Interest and Finance Charges

3.14.1 In the ARR Petition for FY 2011-12, PSPCL claimed Interest and Finance Charges of Rs. 2203.27 crore (net) against which the Commission approved an amount of Rs. 1066.86 crore for FY 2011-12. In the ARR Petition for FY 2012-13, PSPCL has revised the interest and finance charges for FY 2011-12 to Rs. 2300.09 crore inclusive of finance charges of Rs. 51.53 crore as detailed in Table 3.19.

**Table 3.19: Interest & Finance Charges claimed by PSPCL for FY 2011-12****(Rs. crore)**

<b>Sr. No.</b>	<b>Description</b>	<b>Interest as depicted in ARR Petition</b>
<b>1</b>	<b>2</b>	<b>3</b>
1	Interest on Institutional Loans	790.72
2	Interest on GoP Loans	-
3	Interest on GPF	160.00
4	Lease rentals	-
5	Interest to Consumers	100.52
<b>6</b>	<b>Sub – Total</b>	<b>1051.24</b>
7	Interest on Working Capital Loan (WCL)	1245.85
8	Other Interest	0.33
9	Finance Charges for Loans	51.53
<b>10</b>	<b>Total (6+7+8+9)</b>	<b>2348.95</b>
11	Less: Capitalization	48.86
<b>12</b>	<b>Net Interest and Finance Charges</b>	<b>2300.09</b>

The Interest and Finance charges allowable to PSPCL are discussed in the ensuing paragraphs.

### 3.14.2 Investment Plan

The Commission in its Tariff Order FY 2011-12 approved an Investment Plan of Rs. 1000 crore. In the ARR Petition for FY 2012-13, PSPCL submitted a revised Investment Plan of Rs. 1370.25 crore. The Investment Plan was further revised to Rs. 1868.02 crore vide letter memo. No. Spl.1/camp at Mohali dated January 27, 2012. As per additional information sought from PSPCL, the Commission observes that the actual capital expenditure incurred by it upto the end of November, 2011 is Rs. 1267.73 (907.22+360.51 towards 66 kV transmission works) crore against the proposed capital expenditure of Rs. 1868.02 crore. The utility has emphasized that the transmission system requires adequate and timely investment and also efficient and coordinated action to develop a robust and integrated power system for the country. Also the 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. The Commission considers the claim for higher investment of the utility as justified in view of growing need of transmission network expansion. Therefore, keeping in view the capital expenditure actually incurred upto November 2011, **the Commission approves the capital investment of Rs. 1868 crore as claimed by PSPCL. However, increase/decrease in actual capital investment, if any, will be considered by the Commission during True up.**

In addition, PSPCL has received consumer contribution of Rs. 159.90 crore up to November, 2011 and after increasing it proportionately, estimated receipts on this account are Rs. 239.85 crore. Accordingly, actual loan requirement for the level of

investment works out to Rs. 1628.15 crore. This loan requirement of Rs. 1628.15 crore is taken into consideration for computation of interest charges.

PSPCL has proposed to capitalize assets to the extent of Rs. 1262.19 crore for FY 2011-12 against the initial proposed Investment Plan of Rs. 1370.25 crore. PSPCL in its letter No.154 dated January 23, 2012 and letter No. Spl. 2/3 dated January 27, 2012 has revised its Investment Plan to Rs. 1868.02 crore for FY 2011-12. Accordingly the capitalization of assets against enhanced Investment Plan of Rs. 1868 crore, is determined as Rs. 1538.90 crore in the ratio of opening capital work-in progress (CWIP) & capital expenditure during the year to sum of CWIP and estimated capital expenditure of PSPCL as approved by the Commission.

In the ARR Petition for FY 2012-13, the opening balance of loans (other than Working Capital Loan (WCL) and GoP loans) is shown as Rs. 7060.73 crore and interest on loans availed by PSPCL is depicted as Rs. 790.72 crore. The Commission in Table 3.13 of Tariff Order of FY 2011-12 had approved closing balance of loans (other than WCL and GoP loans) of Rs. 6003.26 crore for FY 2010-11. Considering the opening balance of loans (other than WCL and GoP) of Rs. 6003.26 crore for FY 2011-12 (as ascertained in Tariff Order for FY 2011-12) and loan requirement of Rs. 1628.15 crore, the interest on loans (other than WCL and GoP) works out to Rs. 690.64 crore as shown in Table 3 .20.

**Table 3.20: Interest on Loans (Other than WCL and GoP Loans) for FY 2011-12**  
(Rs. crore)

Sr. No.	Particulars	Loans as on April1, 2011	Receipt of Loan during FY 2011-12	Repayment of Loan during FY 2011-12	Loans as on March 31, 2012	Amount of Interest
1	2	3	4	5	6	7
1	As per data furnished in ARR Petition (other than WCL and GoP Loans)	7060.73	1377.10	771.73	7666.10	790.72
2	Approved by the Commission (other than WCL and GoP Loans)	6003.26	1628.15	771.73	6859.68	690.64

### 3.14.3 Interest on GoP Loans

PSPCL has not claimed any interest on account of GoP loans as there are no outstanding GoP loans as on April 1, 2011. Thus, there is no interest liability on account of GoP loans.

#### 3.14.4 Interest on Loan taken to replace re-called GoP Loans

The interest on loans of Rs. 3022.10 (1362.00 + 1140.03 + 520.07) crore raised to replace re-called GoP loans adjusted against unpaid subsidy by the GoP is allowed at an average rate of 12.5% per annum for short term and mid-term loans. Thus, interest of Rs. 377.76 crore is approved on this account.

#### 3.14.5 Interest on Bridge Loan

In the ARR Petition for FY 2012-13, PSPCL has submitted that GoP has adjusted an amount of Rs. 981.93 crore against subsidy payable for FY 2011-12. This amount relates to RBI Bonds (including interest) issued under tripartite agreement between CPSUs, Government of India and Government of Punjab. PSPCL has pleaded that interest on this amount of Rs. 981.93 crore be allowed stating that it had to raise short term loans to bridge the cash shortage on account of such adjustment.

The Commission has considered the submissions made by PSPCL. It considers it appropriate to allow interest on Rs. 981.93 crore at Advance Rate of SBI of 13% as on April 1, 2011. The interest @13% on Rs. 981.93 crore works out to Rs. 127.65 crore for FY 2011-12. The amount of Rs. 981.93 crore was adjusted against subsidy on May 24, 2011, as such allowable interest for 313 days works out to Rs. 109.17 crore. **The Commission approves Rs. 109.17 crore towards interest on loans taken in lieu of adjustment of Rs. 981.93 crore for FY 2011-12.**

#### 3.14.6 Interest on General Provident Fund (GPF)

PSPCL has claimed interest of Rs. 160 crore on GPF accumulations. **The Interest of Rs. 160 crore on GPF, being a statutory payment is allowed as claimed by PSPCL.**

#### 3.14.7 Finance Charges

PSPCL has claimed finance charge of Rs. 51.53 crore which include guarantee fee of Rs. 43.50 crore payable to Government of Punjab on the loans availed by PSPCL. The finance charges work out to 2.76% of the estimated borrowings of Rs. 1868 crore. The Commission has approved loan requirement of Rs. 1628.15 crore for FY 2011-12. **Accordingly, the Commission approves the finance charges of Rs. 44.94 crore @ 2.76% for the loan requirement of Rs. 1628.15 crore for FY 2011-12.**

### 3.14.8 Interest on Consumer Security Deposits

PSPCL has claimed Rs. 100.52 crore towards interest to consumers in the FY 2011-12. As per the PSERC (Electricity Supply Code and Related Matters) Regulations, 2007, interest is payable to consumers on the security deposits, against which Commission had allowed an amount of Rs. 82.06 crore in the Review of FY 2010-11 in Tariff Order FY 2011-12, based on Audited Accounts of FY 2009-10. As per the PSERC (Electricity Supply Code and Related Matters) Regulations, 2007, interest is payable to consumers on the security deposits. The Commission, however, restricts the claim to approved interest of Rs. 82.06 crore as allowed in the Review for FY 2010-11 in Tariff Order FY 2011-12. **The Commission accordingly allows interest of Rs. 82.06 crore for FY 2011-12.** However, this issue shall be reconsidered after the receipt of Audited Accounts in the Tariff Order for next year.

### 3.14.9 Capitalization of Interest Charges

PSPCL has claimed Rs. 48.86 crore towards capitalization of interest charges. The Commission has determined the capitalization of interest charges of Rs. 75.17 crore in the ratio of net works in progress to the total capital expenditure. **The Commission, accordingly, approves capitalization of interest charges of Rs. 75.17 crore for FY 2011-12.**

### 3.14.10 Interest on Working Capital

In the Tariff Order for FY 2011-12, the Commission approved working capital of Rs. 1866.23 crore with interest cost of Rs. 219.28 crore. In the ARR Petition of FY 2012-13, PSPCL has submitted a total working capital loan of Rs. 9706.50 (opening balance) crore with an interest liability of Rs. 1245.85 crore.

The Commission has determined the working capital requirement of Rs. 1896.06 crore, in accordance with PSERC Tariff Regulations. By applying the Advance Rate of SBI of 13% as on April 1, 2011, the interest thereon is worked out to Rs. 246.49 crore. The details of working capital requirement as per Regulation 30 and allowable interest thereon are depicted in Table 3.21.

**Table 3.21: Interest on Working Capital Requirement for FY 2011-12****(Rs. crore)**

<b>Sr.No</b>	<b>Particulars</b>	<b>Amount</b>
<b>1</b>	<b>2</b>	<b>3</b>
1	Two months Fuel Cost	602.35
2	One month Power Purchase Cost	425.90
3	One month Employee Cost	267.76
4	One month A & G Cost	7.99
5	One month R & M Cost	34.18
6	Maintenance Spares@15% of O&M expenses	557.88
<b>7</b>	<b>Total Working Capital Required</b>	<b>1896.06</b>
8	State Bank Advance Rate as on April 1, 2011	13.00%
<b>9</b>	<b>Interest on Working Capital Loan</b>	<b>246.49</b>

**The Commission, accordingly, approves interest of Rs. 246.49 crore on Working Capital Requirements for FY 2011-12.**

#### **3.14.11 Diversion of Capital Funds**

The Commission, in paras 2.15.7 and 2.15.8 of the Tariff Order for FY 2011-12, had determined the diversion of capital funds for revenue purposes at Rs. 2458.56 crore based on the Board's Annual Audited Accounts for FY 2009-10. The amount of diverted funds carrying interest liability was worked out to Rs. 1821.21 crore. The Audited Accounts for FY 2010-11 have not been made available to the Commission by PSPCL, as FRP is yet to be finalized by GoP. Therefore, the amount of the diverted funds of Rs. 1821.21 crore, based on the Audited Accounts for FY 2009-10 as determined in the Tariff Order of FY 2011-12, is being considered for FY 2011-12. The interest on these diverted funds @ 13% being SBI advance rate as on April 1, 2011 works out to Rs. 236.76 crore. Of this amount, interest of Rs. 212.37 crore is to be considered in the Tariff Order for PSPCL and the balance amount of Rs. 24.39 crore is to be considered in the Tariff Order for PSTCL.

Retaining the principle of disallowance of interest on diverted funds between PSPCL and GoP, the Commission disallows interest amount of Rs. 89.70 crore of PSPCL on account of deficiencies in its functioning and the balance amount of Rs. 122.67 crore is to the account of GoP. However, the amount of diversion and interest thereon will be reconsidered by the Commission in the True up after receipt of Audited Accounts for FY 2010-11.

Besides, as discussed in para 3.15 of Tariff Order for FY 2011-12, GoP is liable to pay an amount of Rs. 206.01 crore to PSPCL up to 2009-10 on account of excess interest paid by PSPCL to GoP. Thus, total amount payable by GoP now works out to

Rs. 328.68 (206.01+122.67) crore. This amount is being carried forward to para 4.13.11 of this order.

In view of above, the interest and finance charges are approved as detailed in Table 3.22:

**Table 3.22: Interest and Finance Charges for FY 2011-12**

(Rs. crore)						
Sr. No.	Particulars	Loans as on April 1, 2011	Receipt of Loans	Re-payment of Loans	Loans as on March 31, 2012	Interest Approved by Commission
1	2	3	4	5	6	7
1	Approved by the Commission (Other than WCL and GoP Loans)	6003.26	1628.15	771.73	6859.68	690.64
2	GoP Loans	-	-	-	-	-
3	Interest on:					
a)	Loans taken to replace GoP loans					377.76
b).	Interest on Bridge Loan					109.17
4	Interest on GPF					160.00
5	Lease Rentals					0.00
<b>6</b>	<b>Total (1+2+3+4+5)</b>	<b>6003.26</b>	<b>1628.15</b>	<b>771.73</b>	<b>6859.68</b>	<b>1337.57</b>
7	Add: Finance Charges					44.94
8	Add: Interest on Consumer Security Deposits					82.06
<b>9</b>	<b>Gross Interest and Finance Charges (6+7+8)</b>					<b>1464.57</b>
10	Less Capitalization					75.17
<b>11</b>	<b>Net Interest and Finance Charges (9-10)</b>					<b>1389.40</b>
12	Add: Interest on Working Capital					246.49
<b>13</b>	<b>Total Interest</b>					<b>1635.89</b>
14	Less: Disallowed on a/c of diversion: a) PSPCL – Rs. 89.70 crore b) GoP – Rs. 122.67 crore					212.37
<b>15</b>	<b>Balance Interest and Finance Charges</b>					<b>1423.52</b>

**The Commission, accordingly, approves the interest and finance charges of Rs. 1423.52 crore for PSPCL for FY 2011-12.**



### 3.15 Subsidy

3.15.1 In para 6.4.1 of the Tariff Order for FY 2011-12, the requirement of subsidy for FY 2011-12 was determined at Rs. 4257.86 crore for AP consumers, SC Domestic and Non-SC BPL Domestic consumers. After adjusting subsidy paid in excess of Rs. 193.55 crore up to FY 2009-10 and short paid subsidy of Rs. 124.61 crore for FY 2010-11, the total subsidy payable by GoP to PSPCL for FY 2011-12 was approved at Rs. 4188.92 (4257.86-193.55+124.61) crore. The subsidy for FY 2011-12 is revised based on the sales approved for FY 2011-12 as under:

- **AP Consumption:** PSPCL, in its ARR Petition for FY 2012-13, has reported AP consumption for FY 2011-12 at 10993 MUs on which subsidy of Rs. 4021.30 crore inclusive of Meter rental and Service charges is claimed for FY 2011-12. The Commission has, however, revised AP consumption for FY 2011-12 to 10479 MUs as discussed in para 3.2.2 of this Order. Subsidy on account of AP consumption of 10479 MUs @ 365 paise per kWh (Tariff rate of 357 paise per kWh + fuel surcharge @ 8 paise per kWh) inclusive of meter rentals and service charges, works out to Rs. 3833.84 crore (Rs. 3824.84 crore towards subsidy on account of energy charges and Rs. 9.00 crore towards subsidy on account of meter rentals and service charges etc.)

GoP vide its memo No. 11/68/2010-EB2/4175 dated December 16, 2011, has decided to waive off the outstanding electricity bills against tubewell consumers and grant subsidy of Rs. 357.64 ( as claimed by the utility in its Commercial circular 9/2012) crore to be paid to PSPCL in six equated monthly installments. Keeping in view this decision of GoP, only three installments @ Rs. 59.61 crore per month are considered to be payable during FY 2011-12 by GoP to PSPCL. Thus, PSPCL will also be receiving an additional subsidy of Rs. 178.82 crore. Therefore, AP subsidy payable by GoP to PSPCL works out to Rs. 4012.66 (3833.84 + 178.82) crore during FY 2011-12.

- **Scheduled Castes (SC) Domestic Supply (DS) consumers:** PSPCL in its Petition for FY 2012-13 claimed Rs. 311.63 crore towards subsidy on account of sales to scheduled caste domestic supply consumers. PSPCL, in its letter dated January 6, 2012 submitted as under:
  - (a) GoP (Energy Branch) vide its memo No. 11/68/2010-EB2/4175 dated December 16, 2011 has increased free power to SC & Non-SC BPL consumers from 100 units to 200 units per month w.e.f. December 1, 2011.

(b) GoP has also intimated that the increased subsidy to Non-SC-BPL families will be available to 15 lac families from 10 lac families.

Taking into account the above, PSPCL has now claimed Rs. 542.00 crore towards subsidy on account of sale to scheduled castes domestic supply consumers. The claim of PSPCL in this regard is obviously on the higher side and as such not acceptable. The Commission notes that GoP decision of enhancement of free supply of electricity from 100 units to 200 units per month will have the effect of increasing subsidy to SC DS consumers during the last four months of the current financial year. Based on PSPCL's initial estimates of energy charges of Rs. 296.66 crore for FY 2011-12, additional consumption charges are likely to be not more than around Rs. 100 crore (one third) of the initial estimates. The Commission, therefore, determines the subsidy of Rs. 396.66 crore for FY 2011-12 on this account. PSPCL also has revised its claim for subsidy to Rs. 15.08 crore on account of meter rentals and service charges etc. which were revised w.e.f. November 1, 2011. Thus, total amount of subsidy receivable from GoP for sale to Scheduled Caste Domestic Supply consumers works out to Rs. 411.74 crore. The amount of subsidy will, however, be re-determined based on actual consumption after the availability of the Annual Audited Accounts for the year.

- **Non-SC Below Poverty Line (BPL) DS consumers:** PSPCL in its ARR Petition for FY 2012-13 has claimed Rs. 20.41 crore, inclusive of Meter rentals and Service charges of Rs. 0.97 crore, towards subsidy on account of sales to Non-SC Below Poverty Line (BPL) domestic supply consumers. PSPCL, in its letter dated January 6, 2012 has revised the same to Rs. 30.53 crore after taking into account the effect of increase in the higher limit of free supply of electricity to this category. PSPCL has also revised its subsidy claim on account of meter rentals and service charges etc. to Rs. 0.95 crore. Thus, total amount of subsidy receivable from GoP for supply to Non-SC Below Poverty Line (BPL) domestic supply consumers works out to Rs. 31.48 crore.

**Accordingly, the subsidy payable for FY 2011-12 has been determined at Rs. 4455.88 (3833.84+178.82+411.74+31.48) crore.**

3.15.2 The GoP has paid subsidy of Rs. 4182.00 crore to PSPCL in a staggered manner during FY 2011-12. Out of this, subsidy of Rs. 3200.07 crore has been paid in cash and Rs. 981.93 crore through adjustment against the amount of bonds and interest

for payments due to the Central PSUs.

**Accordingly, the balance subsidy determined as payable by the GoP to PSPCL is Rs. 273.88 (4455.88 – 4182.00) crore.**

### **3.16 Return on Equity (ROE)**

3.16.1 In the ARR Petition for FY 2012-13, PSPCL has claimed Rs. 607.55 crore as ROE @ 15.5% (pre-tax) to be grossed up to 23.21% on the opening equity of Rs. 2617.61 crore based on amended CERC Regulations. The Commission in the past, had been allowing 14% ROE as per CERC Regulations prior to amendment in 2009. In the 2009 amendment, CERC adopted a figure of 15.5% (pre-tax) for allowing ROE to power utilities which was to be grossed up as per tax paid by the utility. The Commission took refuge in its clause that 'CERC Regulations will be followed as far as possible' and refrained from adopting a figure of 15.5% (pre-tax) holding that PSPCL had not shown requisite improvement in the critical parameters like employee cost. Now the Hon'ble APTEL in its order dated March 3, 2012 in Appeal No. 76 of 2011 in the case of PSTCL has directed the Commission to adopt ROE of 15.5% (pre-tax), observing that

*Since Regulation 25 of the State Regulations speaks of being guided by the Central Regulations as amended from time to time and as the CERC has framed new Regulations in 2009 (Regulation 15), the said Regulation 15 which is applicable in the instant case shall be applied sans the Regulation 7 of the Central Regulation, 2004 in as much as Regulation 15 of CERC Regulations, 2009 has abolished the provision of Regulation 7 of CERC Regulations, 2004 and there cannot be double advantage accruable to a transmission company who is of course entitled to the benefit of the CERC Regulations, 2009 (Regulation 15). **Once we hold that Regulation 15 of the CERC Regulations, 2009 will become applicable it is implied as also it becomes explicit that tax on income cannot be a pass through to the beneficiaries.***

In compliance of directions of Hon'ble APTEL, the Commission determines ROE of Rs. 405.73 crore @ 15.5% on the equity amount of Rs.2617.61 crore.

**The Commission, accordingly, approves the Return of Equity of Rs. 405.73 for FY 2011-12.**

### **3.17 Transmission charges payable to PSTCL**

The Commission, in its Order dated May 9, 2011 passed on the ARR of PSTCL for FY 2011-12, had determined Rs. 491.45 crore as the transmission charges payable to PSTCL by PSPCL. Accordingly, the amount of Rs. 491.45 crore is included in the ARR of PSPCL for FY 2011-12.

### **3.18 Charges Payable to GoP on account of power from Ranjit Sagar Dam (RSD)**

In the ARR Petition of FY 2011-12, PSPCL had claimed Rs. 10.99 crore as charges payable to GoP for its share of power from RSD being 3% of revenue received by it from sale of power produced by RSD as maintenance charges as well as charges for remaining works of RSD which would be deposited in the Punjab Treasury. The Commission had approved this claim of Rs. 10.99 crore. In the ARR Petition of FY 2012-13, PSPCL has claimed Rs. 11.20 crore on this account which is allowed. **The Commission, accordingly, approves, Rs. 11.20 crore to be included in the ARR of PSPCL for FY 2011-12 on account of charges payable to GOP for RSD power.**

### **3.19 Non Tariff Income**

In the Tariff Order for FY 2011-12, the Commission had approved Non Tariff Income of Rs. 579.11 crore. In the ARR Petition for FY 2012-13, PSPCL submitted a revised estimate of Non Tariff Income of Rs. 666.81 crore. Further, PSPCL vide letter dated January 24, 2012 submitted that Rs. 1.23 crore included in the non-tariff income has been received from SPV Gidderbaha Power Limited (GPL) of which Rs. 1.18 crore is to be paid back to the concerned financial institutions and was hence not in the nature of income of PSPCL. Accordingly, the estimate of Non tariff income of PSPCL is reduced to Rs. 665.63 (666.81-1.18) crore.

This amount of Rs. 665.63 crore is inclusive of wheeling charges of Rs. 46.49 crore as reflected in Format 20 of the ARR Petition for FY 2012-13. However, as per PSPCL letter No.17/CC/DTR/Dy.CAO/234/deficiencies dated January 1, 2012 actual receipts from wheeling charges from April 2011 to November 2011 are Rs. 51.31 crore. Based on aforementioned actuals, PSPCL will be in receipt of wheeling charges of Rs. 76.97 crore during FY 2011-12. Thus, the Non tariff revenue of the utility is to be increased by Rs. 30.48 (76.97-46.49) crore. Besides, meter rentals and service charges of Rs. 25.03 (9+15.08+0.95) crore are also to be accounted for in the Non Tariff Income of PSPCL for FY 2011-12 as these have not been included in the

Non Tariff Income as intimated by PSPCL vide letter No.324/DTR/Dy.CAO/234 dated February 28, 2012.

Besides, PSPCL will also be in receipt of Rs. 125.57 crore on account of cross subsidy surcharge leviable w.e.f. July 1, 2012 on the Open Access consumers as intimated by PSPCL in its letter dated March 5, 2012.

**The Commission, therefore, approves Rs. 846.71 (665.63+30.48+25.03+125.57) crore towards Non Tariff Income of PSPCL for FY 2011-12.**

### **3.20 Treatment of Regulatory Asset**

In para 6.2.2 of the Tariff Order of FY 2011-12, the Commission had established a Regulatory Asset of Rs. 1325.76 crore (being half of the Revenue gap of Rs. 2651.51 crore determined in Tariff Order for FY 2011-12) and had also decided that the Regulatory Asset shall be amortized within a period of three years from FY 2012-13 onwards as provided in the PSERC Tariff Regulations, 2005. Therefore, the amortization of the Regulatory Asset shall be considered in Chapter 4 of this Tariff Order.

### **3.21 Revenue from Existing Tariff**

PSPCL, in its ARR petition for FY 2012-13, has revised the revenue from existing tariff to Rs. 10939.86 (excluding revenue from agriculture, MMC and PLE charges) for FY 2011-12 against Rs. 14682.03 crore approved by the Commission in the Tariff Order for FY 2011-12. Further, PSPCL has revised the estimate of revenue from existing tariff, based on energy sales of 23857 MUs (excluding sale to agriculture). The Commission has determined the revenue at existing tariff for the approved sales of 33993 MUs for FY 2011-12 and considered the PLEC and MMC charges at Rs. 169.00 crore and Rs. 258.05 crore respectively for FY 2011-12 as submitted by PSPCL in the additional information supplied in their letter dated January 23, 2012. Taking, these factors into account, the Commission now revises revenue from existing tariff to Rs. 15394.50 crore for FY 2011-12 as given in Table 3.23.

**Table 3.23: Revenue from Existing Tariff for FY 2011-12**

Sr. No.	Category of Consumers	PSPCL Submission		Now approved by the Commission		
		Energy Sale (MU)	Revenue (Rs. crore)	Energy Sale (MU)	Tariff Rate *(paise/unit)	Revenue (Rs. crore)
1	2	3	4	5	6	7
1	Domestic					
a)	0-100 units	4761	1363	4755	356	1692.78
b)	101-300 units	2736	1357	2733	496	1355.57
c)	Above 300 units	1448	757	1446	523	756.26
	<b>Sub Total</b>	<b>8945</b>	<b>3477</b>	<b>8934</b>		<b>3804.61</b>
2	Non- Residential Supply	2728	1539	2634	564	1485.58
3	Public Lightning	132	73	137	555	76.04
4	Industrial Consumers					
a)	Small Power	899	409	863	455	392.67
b)	Medium supply	1847	929	1768	503	889.30
c)	Large supply	7920	3984	7920	503	3983.76
	<b>Sub total</b>	<b>10666</b>	<b>5322</b>	<b>10551</b>		<b>5265.73</b>
5	Bulk Supply and Grid Supply					
a)	HT	527	266	510	506	258.06
b)	LT	35	18	34	534	18.16
	<b>Sub Total</b>	<b>562</b>	<b>284</b>	<b>544</b>		<b>276.22</b>
6	Railway Traction	144	84	163	586	95.52
7	Common Pool	313	100	313		100.00
8	Outside State	367	60	238		38.91
<b>9</b>	<b>Total (1 to 8)</b>	<b>23857</b>	<b>10940</b>	<b>23514</b>		<b>11142.61</b>
10	AP	10993	0	10479	365	3824.84
11	Add : PLEC, MMC etc.					427.05
<b>12</b>	<b>Grand Total</b>	<b>34850</b>	<b>10940</b>	<b>33993</b>		<b>15394.50</b>

\*The rates include the fuel surcharge of 8 paise per unit.

### 3. 22 Revenue Requirement

A summary of the Review of FY 2011-12 as discussed in the preceding paragraphs is given in Table 3.24.

Table 3.24: Revenue Requirement for FY 2011-12

(Rs. crore)

Sr. No.	Items of Expenses	FY 2011-12		
		Approved in the Tariff Order for FY 2011-12	Proposed by PSPCL in RE	Approved in the Review
1	2	3	4	5
1	Cost of Fuel	3588.17	3595.49	3614.09
2	Cost of power purchase	5751.26	5608.22	5110.76
3	Employee Cost	2916.98	3629.54	3213.17
4	R & M expenses	376.22	506.68	410.12
5	A & G expenses	87.95	98.84	95.88
6	Depreciation	841.04	723.34	712.91
7	Interest charges	1066.86	2300.09	1423.52
8	Return on Equity	366.47	607.55	405.73
9	Transmission charges payable to PSTCL	491.45	491.52	491.45
10	Charges payable to GoP on Power from RSD	17.71	11.20	11.20
<b>11</b>	<b>Total Revenue Requirement</b>	<b>15504.11</b>	<b>17572.47</b>	<b>15488.83</b>
12	Less Non Tariff Income	579.11	666.81	846.71
<b>13</b>	<b>Net Revenue Requirement</b>	<b>14925.00</b>	<b>16905.66</b>	<b>14642.12</b>
14	Revenue from Existing Tariff	14682.03	*15293.20	*15394.50
<b>15</b>	<b>Surplus/ (Gap) for FY 2011-12</b>	<b>(-)242.97</b>	<b>(-)1612.46</b>	<b>(+)752.38</b>
16	Consolidated Revenue gap up to FY 2010-11 as per Tariff Order FY 2011-12.	(-)2116.69	(-)2559.14	(-) 2116.69
17	Add carrying cost of Revenue Gap approved in TO 2011-12	291.85	(-) 526.75	(-) 291.85
<b>18</b>	<b>Net Gap: Surplus (+)/ Deficit (-)</b>		<b>(-) 4698.36</b>	<b>(-) 1656.16</b>

\*Including subsidy.

Review of FY 2011-12 indicates that there is now a surplus of Rs. 752.38 crore for FY 2011-12. After taking into account the cumulative gap (deficit) of Rs. 2116.69 crore up to FY 2010-11 and carrying cost of revenue gap allowed in para 4.14 of Tariff Order FY 2011-12, total gap (deficit) works out to Rs. 1656.16 crore at the end of FY 2011-12. This deficit is being carried forward to the next financial year i.e FY 2012-13.

## Chapter- 4

# Annual Revenue Requirement for FY 2012-13

### 4.1 Energy Demand (Sales)

#### 4.1.1 Metered Energy Sales

PSPCL has projected the metered energy sales for FY 2012-13 based on category-wise 3 years Compounded Annual Growth Rate (CAGR) from FY 2007-08 to FY 2010-11. The category-wise 3 year CAGR has been applied on the revised estimates of FY 2011-12 metered sales of respective categories to arrive at the category-wise metered energy sales projections for FY 2012-13. The details of PSPCL's energy sales projections for FY 2011-12 (RE) and FY 2012-13 (Projected) are as given in Table 4.1.

**Table 4.1: Energy Sales of Metered Categories as per ARR Petition for FY 2012-13 (MU)**

Sr. No.	Category	Metered Energy Sales	
		FY 2011-12 (RE)	FY 2012-13 (Projections)
1	2	4	5
1.	Domestic	8945	10082
2.	Non-Residential	2728	3126
3.	Small Power	899	939
4.	Medium Supply	1847	1918
5.	Large Supply	7920	7856
6.	Public Lighting	132	129
7.	Bulk Supply	562	576
8.	Railway Traction	144	156
9.	<b>Total metered Sales (within the State)</b>	<b>23177</b>	<b>24781</b>

Since the audited figures for FY 2010-11 have not been provided by PSPCL, the Commission has estimated the category-wise sales within the State for FY 2012-13 for all categories, except for Large Supply category, by applying category-wise 3 year CAGR of the period from FY 2007-08 (actual) to FY 2010-11 (as approved for FY 2010-11 in Tariff Order of FY 2011-12) on category-wise sales of FY 2011-12 (RE) as approved in Chapter-3 of this order. PSPCL has submitted that the energy sales in the Large Supply Industrial category have been lower than the approved value in FY 2010-11 due to significant purchase/import of power by these consumers from various other sources (including Power Exchange) under Open Access. PSPCL has projected negative growth for this category. Hence, the Commission considers the energy sales to this category as projected by PSPCL in the ARR.



Approved sales for FY 2007-08 and FY 2010-11 (as approved in RE of FY 2010-11 in Tariff Order FY 2011-12), 3 year CAGR for FY 2007-08 to FY 2010-11 (RE) as calculated by the Commission and sales approved now for FY 2011-12 (RE) and FY 2012-13 for different metered categories within the State are given in Table 4.2.

**Table 4.2: 3 Year CAGR & Estimated Sales within the State for FY 2012-13 (MU)**

Sr. No.	Category	FY 2007-08 (Actual)	FY 2010-11 (Approved in Review: T.O. FY 2011-12 )	3 year CAGR (FY 2007-08 to FY 2010-11 (RE))	Sales now approved for FY 2011-12	Approved sales by the Commission for FY 2012-13
1	2	3	4	5	6	7
1.	Domestic	6491	8162	7.93%	8934	9642
2.	Non-Residential	1919	2401	7.76%	2634	2838
3.	Small Power	738	813	3.28%	863	891
4.	Medium Supply	1579	1709	2.67%	1768	1815
5.	Large Supply	-	-	-	7920	* 7856
6.	Public Lighting	140	134	(-) 1.45%	137	135
7.	Bulk Supply	501	523	1.44%	544	552
8.	Railway Traction	113	162	12.76%	163	184
<b>9.</b>	<b>Total metered sales (within the State)</b>				<b>22963</b>	<b>23913</b>

\* Sales projected by PSPCL in the ARR.

#### 4.1.2 Sales to Common Pool Consumers and Outside State Sale

PSPCL has projected sale to common pool consumers and Outside State sale for FY 2012-13 as below:

Category	FY 2011-12 (RE)	FY 2012-13 (Projections)
Common Pool Consumers	313	305
Outside State sale	367	111

PSPCL has submitted that the sale to common pool consumers for FY 2012-13 is based on the actual figures of sale to common pool for FY 2010-11 and envisaged changes due to other provisions.

The Outside State sale of 111 MUs is projected by PSPCL in the ARR Petition for FY 2012-13. The Commission notes that these sales include free share of Himachal Pradesh in RSD (63 MUs) and its (HP) royalty in Shanau (48 MUs). In view of the practice followed by the Commission in the previous Tariff Orders, the same have to be excluded from the Outside State sale and so the Outside State sale is considered as Nil. The Commission accepts the Common Pool sale of 305 MUs as projected by PSPCL.

**The Commission approves the Outside State sale at Nil and the sale of 305 MUs to Common Pool Consumers for FY 2012-13.**

The total metered sales for FY 2012-13 estimated by PSPCL and approved by the Commission are given in Table 4.3.

**Table 4.3: Metered Sales for FY 2012-13**

(MU)			
Sr. No.	Category	Projected by PSPCL for FY 2012-13	Approved by the Commission
1	2	3	4
1	Domestic	10082	9642
2	Non-Residential	3126	2838
3	Small Power	939	891
4	Medium Supply	1918	1815
5	Large Supply	7856	7856
6	Public Lighting	129	135
7	Bulk Supply	576	552
8	Railway Traction	156	184
<b>9</b>	<b>Total Metered Sales</b>	<b>24781</b>	<b>23913</b>
10	Common Pool	305	305
11	Outside State sale	111	0
<b>12</b>	<b>Total Sales</b>	<b>25197</b>	<b>24218</b>

**The Commission, thus, approves metered sales at 24218 MUs against 25197 MUs projected by PSPCL.**

#### 4.1.3 AP Consumption

PSPCL has projected the AP consumption at 11922 MUs for FY 2012-13. It is stated that the consumption is considered based on 3 years CAGR of 8.45% from FY 2006-07 to FY 2009-10. The consumption of FY 2010-11 has not been considered by PSPCL, as it was a good monsoon year and registered less energy demand in the agriculture sector due to widespread timely rainfall.

The Commission, during the Review for FY 2011-12 in Chapter 3 has approved AP sales of 10479 MUs for FY 2011-12 based on actuals for the first half of the year (April 2011 to September, 2011) as noted during validation of data and the sales for the second half of FY 2011-12 at 60% of the sales of first half as observed from the last four years data. The Commission decides to estimate the AP sales for FY 2012-13 by applying 5% increase (ad hoc) over the sales of 10479 MUs approved by the Commission for FY 2011-12 in Review, as per the practice adopted in the Tariff Orders for FYs 2010-11 and 2011-12. Thus, AP consumption for FY 2012-13 work

out to 11003 MUs. This will be reviewed on the basis of revised estimates in the Tariff Order for FY 2013-14.

**The Commission, thus, approves the AP consumption at 11003 MUs for FY 2012-13.**

#### 4.1.4 Total Energy Demand (Sales)

The total metered sales, AP sales, Common Pool and Outside State sales projected by PSPCL and as approved by the Commission for FY 2012-13 are given in Table 4.4.

**Table 4.4: Total Energy Sales for FY 2012-13**

(MU)			
Sr. No.	Category	Projected by PSPCL for FY 2012-13	Approved by the Commission
1	2	3	4
1	Total Metered sales	24781	23913
2	AP Consumption	11922	11003
<b>3</b>	<b>Total sales within the State (1+2)</b>	<b>36703</b>	<b>34916</b>
4	Common Pool	305	305
5	Outside State sale	111	0
<b>6</b>	<b>Total sales</b>	<b>*37119</b>	<b>35221</b>

*\* Wrongly depicted in the petition as 37120 MUs.*

**The Commission, thus, approves total energy sales to different categories of consumers at 35221 MUs including Common Pool and Outside State sales.**

#### 4.2 Transmission and Distribution Losses (T&D Losses)

PSPCL has submitted that in view of the existing loss level of 18.49% during FY 2010-11, it has proposed a loss level of 17.5% for FY 2011-12 and 17.0% for FY 2012-13. PSPCL has submitted that a loss level of 17% for a utility of the size of the PSPCL in terms of the geography that it serves and its consumer base is indicative of the efficient performance of the PSPCL in terms of loss reduction and network planning initiatives. However, any further reduction in losses would require huge investments and the return in the form of loss reduction may not justify the investment in certain cases, and, accordingly, the PSPCL would need to carefully identify schemes for investments targeted at loss reduction. In view of this, it has been prayed by PSPCL that the loss reduction trajectory of 0.5% per year be approved by the Commission for FY 2012-13 and onwards. It has further been submitted that driven by the targets and directives given by the Commission, the PSPCL is making concerted efforts to reduce and control the losses.

The Commission in its Tariff Order for FY 2010-11, while fixing the T&D loss target for FY 2010-11 at 20.00%, determined the loss trajectory for FY 2011-12 and FY 2012-13 at 19.00% and 18.00% respectively. The Commission, as brought out in para 3.3 of this Order, has retained the T&D losses for FY 2011-12 at 19.00%. As such, the Commission fixes the T&D losses at 18.00% for FY 2012-13.

As mentioned in para 3.3 of this Tariff Order, the Commission is of the view that the losses are to be separately considered and approved for PSTCL and PSPCL. Since PSTCL is still in the process of installing energy meters at various 220 kV and 132 kV substations and could not provide the required data to estimate losses for PSTCL system separately, the Commission decides to stipulate only target T&D losses, with segregation into transmission loss for PSTCL system and distribution loss for PSPCL system within the overall target, pending final adjustment between PSTCL and PSPCL based on actual data at a later stage.

**Keeping the overall T&D loss level of 18% as the target set for FY 2012-13 and based on the provisionally approved Transmission Loss of 2.50% for PSTCL for FY 2012-13 in the Tariff Order for PSTCL for FY 2012-13, the target Distribution Loss (66 kV and below system) of PSPCL for FY 2012-13 works out to 15.90%, which the Commission approves provisionally. The Commission will revisit the Distribution Loss of PSPCL while undertaking the Review/ True up for FY 2012-13.**

#### **4.3 Energy Requirement**

The total energy requirement is the sum of estimated energy sales including Common Pool and outside State sales and T&D losses. The projected energy sales, T&D losses and energy requirement as reported by PSPCL and as approved by the Commission for FY 2012-13 are given in Table 4.5.

**Table 4.5: Energy Requirement for FY 2012-13**

(MU)

Sr. No.	Category	Projected by PSPCL for FY 2012-13	Approved by the Commission
1	2	3	4
1	Metered sales within the State	24781	23913
2	AP Consumption	11922	11003
<b>3</b>	<b>Total sales within the State (1+2)</b>	<b>36703</b>	<b>34916</b>
4	Common Pool sales	305	305
5	Outside State sale	111	0
<b>6</b>	<b>Total sales (3+4+5)</b>	<b>37119</b>	<b>35221</b>
7 (a)	T&D losses on Sr. No. 3 (%)	17.00%	18.00%
7 (b)	T&D losses on Sr. No. 3	7518	7664
<b>8</b>	<b>Total energy input required [6+7(b)]</b>	<b>44637</b>	<b>42885</b>
<b>9</b>	<b>Energy at Transmission periphery to be sold within the State (8-4-5)</b>		<b>42580</b>
10 (a)	Transmission Loss (%)		2.50%
10 (b)	Transmission Loss		1065
11	Energy available to PSPCL [9-10(b)]		41515
12 (a)	Distribution Loss (%)		15.90%
12 (b)	Distribution Loss		6599
<b>13</b>	<b>Energy available for Sale to consumers within the State [11-12(b)]</b>		<b>34916</b>

#### 4.4 PSPCL's own Generation

##### 4.4.1 Thermal Generation

PSPCL has projected gross thermal generation for FY 2012-13 at 2815 MUs for GNDTP, 9300 MUs for GGSSTP and 6989 MUs for GHTP. PSPCL has submitted that it envisages sustaining the generation for each of these plants for FY 2012-13 at the target output level set by the Central Electricity Authority (CEA) for current year through pro-active, consistent and regular maintenance and by taking up timely renovation and overhaul of its units. The Plant Load Factor (PLF) for the plants is based on this assumption. It has also been submitted by PSPCL that availability from Unit III of GNDTP would increase in FY 2012-13 with the completion of the Renovation & Modernization (R&M) activities. PSPCL has further submitted that the installed capacity of Unit III is expected to increase by 10 MWs (to 120 MWs) on completion of the R&M works as agreed to by BHEL.

##### Plant Availability

- The plant availability of GNDTP for FY 2012-13 has been projected at 81.1% in the ARR for FY 2012-13, based on maintenance schedules and annual overhauling targets. The Capital overhauling is planned for 45 days for unit-I and

annual overhauling for 30 days each for units II and III, R&M of unit-IV for 98 days from 01.04.2012 to 07.07.2012 (ongoing from 8.11.2011). However, subsequently PSPCL in its letter No.315 dated February 27, 2012 has revised the availability to 74.18% based on annual overhauling of unit I & II each for 30 days, R&M of unit IV for 244 days and 5% forced outages.

- The plant availability of GGSSTP for FY 2012-13 has been projected at 91%, based on maintenance schedules. The annual maintenance is planned for unit-I for 38 days, unit-II for 42 days and unit-V for 30 days.
- The plant availability for GHTP for FY 2012-13 has been projected at 92% based on historical performance and maintenance schedules. The annual maintenance is planned for unit-I for 20 days, unit-II for 33 days and unit-III for 20 days.

The availability of GNDTP, GGSSTP, GHTP stage I (unit I&II) and GHTP stage II (unit III&IV) based on maintenance schedules and R&M (excluding forced outages) for FY 2012-13, has been calculated by the Commission as 79.18% (91.78% for GNDTP Unit I&II, 66.58% for GNDTP Unit III&IV), 94.98%, 92.74% and 97.26% respectively.

The Commission has assessed availability and generation for GNDTP and GGSSTP for FY 2012-13 based on the average of actual availability and average of actual generation for the past three years (FY 2007-08, FY 2008-09 and FY 2009-10). The Commission has not considered the figures of FY 2010-11, as the audited annual accounts for FY 2010-11 are not available. The availability based upon actual number of maintenance days (including periods of forced outages, if any) and actual generation of GNDTP and GGSSTP for FY 2007-08, FY 2008-09 and FY 2009-10 along with average generation and availability of these three financial years have been worked out in Table 4.6:

**Table 4.6: Availability and Generation for FY 2007-08 to FY 2009-10**

Sr.No.	Station	FY 2007-08	FY 2008-09	FY 2009-10	Average
1.	<b>GNDTP</b>				
	Generation (MU)	3008	2846	2723	2859
	Availability (%)	94.93%	92.74%	88.63%	92.10%
2.	<b>GGSSTP</b>				
	Generation (MU)	9806	9611	10056	9824
	Availability (%)	93.97%	95.39%	94.43%	94.60%

Considering the projected availability in FY 2012-13 and the average availability and generation for FY 2007-08, FY 2008-09 and FY 2009-10 as worked out in Table-4.6,

gross generation for FY 2012-13 for GNDTP and GGSSTP has been computed in Table 4.7:

**Table 4.7: Availability, Gross Generation and PLF of GNDTP and GGSSTP for FY 2012-13**

Sr. No.	Station	Three years average availability	Three years average generation (MU)	Computed by the Commission for FY 2012-13		
				Availability as per maintenance schedule for FY 2012-13	Generation (MU) (4X5)/3	PLF (calculated)
1	2	3	4	5	6	7
1.	GNDTP Unit I&II	92.10%	2859	91.78%	1425*	73.94%
2.	GNDTP Unit III&IV			66.58%	1127*	53.61%
2.	GGSSTP	94.60%	9824	94.98%	9863	89.36%

*\*Firstly, generation for GNDTP worked out as 2458 MUs (2859 x 79.18 / 92.10). Then this generation of 2458 MUs apportioned between GNDTP Unit I&II and GNDTP Unit III&IV on the basis of plant availability of 91.78% and 66.58% respectively, i.e. 1425 MUs and 1033 MUs. Then, in view of the submission by PSPCL that installed capacity of GNDTP Unit III and IV is expected to increase by 10 MWs each (from 110 MWs to 120 MWs), as agreed to by BHEL on the R&M works, the estimated generation for GNDTP Unit III&IV worked out as 1127 MUs by multiplying 1033 MUs with a factor of (240/220).*

It is noted that the GHTP unit-III and unit-IV (GHTP stage II units) have become operational since October, 2008 and January, 2010 respectively; and data for generation and plant availability in respect of these units is not available for FY 2008-09 and FY 2009-10. The Commission has assessed availability and generation for GHTP stage – I (unit I & II) for FY 2012-13, based upon actual number of maintenance days (including periods of forced outages, if any) and actual generation for FY 2006-07, FY 2007-08 and FY 2008-09, as done in the Tariff Order for FY 2011-12 and is given in Table 4.8.

**Table 4.8: Availability, Gross Generation of GHTP (Stage-I) for FY 2006-07 to FY 2008-09**

Station	FY 2006-07	FY 2007-08	FY 2008-09	Average
Generation (MU)	3443	3508	3532	3494
Availability (%)	94.30	96.10	98.08	96.16

With the availability of 92.74% computed by the Commission for FY 2012-13 and average generation and availability as given in Table-4.8 above for GHTP stage – I (unit I & II) having total installed capacity of 420 (2X210) MWs, the Commission has worked out generation for GHTP stage-I (unit I & II) at 3370 MUs for FY 2012-13. Further, based on the maintenance schedule of GHTP stage – II (unit III & IV) with

total installed capacity of 500 (2X250) MWs, the projected availability of these units works out to 97.26%. Now, since availability and generation data for the last three financial years in respect of GHTP stage-II (unit III & IV) is not available, the Commission decides to work out the estimated generation for FY 2012-13 in respect of GHTP stage II (unit III & IV) on prorata basis, taking the base values of availability and generation of GHTP stage – I (unit I & II) as calculated above, i.e 92.74% and 3370 MUs. Thus, the estimated generation of GHTP stage-II (unit III & IV) for FY 2012-13 works out to 4207 MUs  $[(3370 \times 97.26 / 92.74) \times 500 / 420]$ . Total gross generation from the thermal generating plants during FY 2012-13 will, therefore, be as in Table 4.9:

**Table 4.9: Gross Thermal Generation for FY 2012-13**

			(MU)
Sr. No.	Station	Approved generation	
1	2	3	
1.	GNDTP Unit I&II	1425	
2.	GNDTP Unit III&IV	1127	
3.	GGSSSTP	9863	
4.	GHTP Unit I&II	3370	
5.	GHTP Unit III&IV	4207	
	<b>Total</b>	<b>19992</b>	

Accordingly, the Commission assesses the total gross thermal generation for FY 2012-13 as 19992 MUs against 19104 MUs projected by PSPCL in the ARR for FY 2012-13.

### **Performance parameters**

PSERC Tariff Regulations provide that for determining the cost of generation of each generating station, the Commission shall be guided, as far as feasible, by the principles and methodology of CERC, as amended from time to time. This approach has been adopted consistently by the Commission in its Tariff Orders from FY 2005-06 onwards. CERC vide its notification No. L-7/145 (160) / 2008 – CERC dated January, 19, 2009, notified Terms and Conditions of Tariff Regulations, 2009 for electricity tariff for the five year period beginning April 1, 2009, wherein operating norms for thermal plants have also been prescribed. These norms of CERC have been followed by the Commission for estimating the fuel cost in previous Tariff Orders i.e. for FY 2009-10, FY 2010-11 and FY 2011-12. The Commission decides to follow these norms for FY 2012-13 also.

CERC, has, however, not specified any norms for 110/120 MWs units and the Commission had, in the case of GNDTP, adopted the norms specified for Tanda Thermal Station of NTPC, which like GNDTP, has 4 units of 110 MWs each. The



Commission notes that units I & II of GNDTP have achieved commercial operation on 31.05.2007 and 19.01.2006 respectively after completion of renovation and modernization, and units III & IV are likely to be operational in FY 2012-13 after completion of renovation and modernization by 31.12.2011 and 07.07.2012, revised to 31.03.2012 and 30.11.2012 respectively vide letter no. 315 dated 27.02.2012. The Commission in the Tariff Order for FY 2011-12 had decided to adopt SHR value for GNDTP unit I & II as per CERC Tariff Regulations effective from April 1, 2009, in which CERC has also revised operational norms of Tanda Thermal Power Station after its renovation and modernization. Accordingly, the SHR value of 2825 kCal/kWh has been taken for calculating the fuel cost for GNDTP units I, II, III and IV. PSPCL has, however, submitted that GGSSTP, Ropar and GNDTP, Bathinda are very old and are not capable of achieving the norms of SHR as prescribed by the Commission. These plants are operating at their best thermal efficiency (lowest heat rate) since their inception. PSPCL has submitted the extracts of various orders issued by Hon'ble APTEL and extracts of various orders issued by other SERCs in the country, in support of its submissions for allowing higher SHR. It has also been brought out in the petition that the Commission had already agreed to allow higher SHR for GGSSTP, Ropar based on study report of CPRI for this plant. PSPCL has requested the Commission, in its petition, to consider allowing higher SHR to GNDTP also on the basis of achievable SHR as being determined / studied by CPRI.

The individual performance parameters are further discussed, later in this chapter.

### **Auxiliary Consumption and Net Generation**

The Commission has adopted CERC norms for assessment of net generation of GGSSTP and GHTP. The Commission had considered the various issues and submissions regarding the auxiliary consumption of GNDTP units in para 2.4.1 of the Tariff Order for FY 2010-11 and accordingly fixed the auxiliary consumption for FY 2008-09 at 11%. The same was adopted for the True up of FY 2009-10, for Review of 2010-11 and for FY 2011-12 in Tariff Order FY 2011-12. Accordingly, the Commission decides to fix auxiliary consumption for GNDTP and GGSSTP at 11.00% and 8.50% respectively for FY 2012-13. The same values have been projected by PSPCL for FY 2012-13 in the ARR Petition. In the case of GHTP, as explained in para 3.5.1, the allowable norm as per CERC Regulations is 8.50% as the station is having natural draft cooling tower. Accordingly, auxiliary consumption of 8.50% is fixed and approved for GHTP for FY 2012-13 against 9% projected by PSPCL in the ARR. Auxiliary consumption and net generation from the three thermal

generating stations, as projected by PSPCL and approved by the Commission for FY 2012-13 are given in Table 4.10:

**Table 4.10: Generation and Auxiliary Consumption for Thermal Plants for FY 2012-13 (MU)**

Sr. No.	Station	Projected by PSPCL			Approved by the Commission		
		Gross generation	Auxiliary consumption	Net generation	Gross generation	Auxiliary consumption	Net generation
1	2	3	4	5	6	7	8
1.	GNDTP Units I&II	2815	310	2505	2552	281	2271
	GNDTP Units III & IV		11.00%			11.00%	
2.	GGSSTP	9300	791	8509	9863	838	9025
			8.50%			8.50%	
3.	GHTP	6989	629	6360	7577	644	6933
			9.00%			8.50%	
	<b>Total</b>	<b>19104</b>	<b>1730</b>	<b>17374</b>	<b>19992</b>	<b>1763</b>	<b>18229</b>

Net thermal generation approved by the Commission is 18229 MUs, against 17374 MUs projected by PSPCL.

#### 4.4.2 Hydel Generation

In the ARR petition for FY 2012-13, PSPCL has projected hydel generation from its own stations for FY 2012-13, based on the historical trend. The Commission has estimated the hydel generation, based on the average of three years i.e. FY 2007-08, FY 2008-09 and FY 2009-10. The Commission has not considered the figures of FY 2010-11, as the audited annual accounts for FY 2010-11 are not finalised.

The generation projected by PSPCL and the generation approved by the Commission is given in Table 4.11:

**Table 4.11: Own Hydel Generation for FY 2012-13 (MU)**

Sr. No.	Station	Generation projected by the PSPCL for FY 2012-13	Actual generation			Generation approved by the Commission (Based on 3 year average)
			FY 2007-08	FY 2008-09	FY 2009-10	
1	2	3	4	5	6	7
1.	Shanan	545.11	540	532	511	528
2.	UBDC Stage 1	378.43	184	140	142	155
3.	UBDC Stage 2		244	199	195	213
4.	RSD	1454.69	1538	1474	1069	1360
5.	MHP	1112.37	1362	1132	886	1127
6.	ASHP	678.76	710	689	574	658
7.	Micro Hydel	9.37	7	10	13	10
	<b>Total own hydel generation (Gross)</b>	<b>4178.72</b>	<b>4585</b>	<b>4175</b>	<b>3390</b>	<b>4051</b>

The Commission approves estimated gross generation of 4051 MUs from PSPCL's own hydel stations. The Commission also approves PSPCL's share from BBMB at

3905 MUs and common pool share at 305 MUs as projected by PSPCL for FY 2012-13. The total hydel generation approved by the Commission is depicted in Table 4.12.

**Table 4.12: Total Hydel Generation for FY 2012-13**

(MU)			
Sr. No.	Station	Projected by PSPCL for FY 2012-13	Approved by the Commission
1	2	3	4
1.	Shanan	545.41	528
2.	UBDC	378.43	368
3.	RSD	1454.69	1360
4.	MHP	1112.37	1127
5.	ASHP	678.76	658
6.	Micro hydel	9.37	10
7.	<b>Total own generation (Gross)</b>	<b>4178.72</b>	<b>4051</b>
8.	<b>Auxiliary consumption and transformation loss (including RSD share and royalty in Shanan)</b>	<b>155.17</b>	<b>* 149</b>
9.	<b>Total own generation (Net)</b>	<b>4023.55</b>	<b>3902</b>
10.	<b>PSPCL share from BBMB</b>		
(a)	PSPCL share (Net)	3904.83	3905
(b)	Common pool share (Net)	305.43	305
11.	<b>Share from BBMB (Net)</b>	<b>4210.27</b>	<b>4210</b>
12.	<b>Total hydro (Net) (Own + BBMB)</b>	<b>8233.82</b>	<b>8112</b>

\* Transformation losses @ 0.5% (20 MUs), auxiliary consumption @ 0.5% for RSD generation of 1360MUs and UBDC stage -1 generation of 155 MUs (having static exciters) and @ 0.2% for others (13 MUs). HP share @ 4.6% in RSD (63 MUs) and royalty to HP in Shanan (53 MUs).

**The Commission, thus, approves net hydel generation of 8112 MUs for FY 2012-13, against 8233.82 MUs projected by PSPCL.**

#### 4.4.3 Total availability of energy from PSPCL's own stations and share from BBMB

The approved net generation from own thermal and hydel stations of PSPCL and share from BBMB is given in Table 4.13:

**Table 4.13: Net Own Generation for FY 2012-13**

(MU)		
Sr. No.	Station	Energy available (ex-bus)
1	2	3
1.	Thermal stations	18229
2.	Hydel stations	3902
3.	Share from BBMB (including 305 MUs share of Common Pool consumers)	4210
4.	<b>Total availability</b>	<b>26341</b>

**The Commission approves the total energy availability from PSPCL's own generating stations (thermal and hydel) including share from BBMB as 26341 MUs.**

## 4.5 Purchase of Power

- 4.5.1 The total energy required to meet the demand during FY 2012-13 including Common Pool and Outside State sales is 42885 MUs as discussed in para 4.3. The energy available from own generating stations of PSPCL including its share from BBMB is 26341 MUs as approved in para 4.4.
- 4.5.2 The balance energy requirement of 16544 MUs (net) has to be met through purchase from Central Generating Stations and other sources. This is against a requirement of 18917 MUs (net) projected by PSPCL for FY 2012-13.

## 4.6 Energy Balance

The energy balance, which takes into account the approved energy sales to different categories of consumers, T & D losses and energy availability, is given in Table 4.14.

**Table 4.14: Energy Balance for FY 2012-13**

(MU)			
Sr. No.	Particulars	Projected by PSPCL for FY 2012-13	Approved by the Commission
1	2	3	4
<b>A) Energy Requirement</b>			
1	Metered Sales	24781	23913
2	AP Consumption	11922	11003
<b>3</b>	<b>Total Sales within the State</b>	<b>36703</b>	<b>34916</b>
4	T & D Losses (%)	17.00%	18.00%
5	T & D losses	7518	7664
6	Sales to Common pool consumers	305	305
7	Outside State Sale	111	0
<b>8</b>	<b>Total Requirement</b>	<b>44637</b>	<b>42885</b>
<b>B) Energy Available</b>			
9	Own generation (Ex-bus)		
(a)	Thermal	17375	18229
(b)	Hydro	4135	3902
10	Share from BBMB (including share of Common Pool consumers)	4210	4210
11	Purchase (net)	18917	16544
<b>12</b>	<b>Total Availability</b>	<b>44637</b>	<b>42885</b>

## 4.7 Fuel Cost

### 4.7.1 Fuel Cost projected by PSPCL

PSPCL has projected fuel cost of Rs. 4172 crore for a total generation of 19104 MUs during FY 2012-13 based on operational and cost parameters as detailed in Table 4.15:

**Table 4.15: Operation and Cost Parameters projected by PSPCL for FY 2012-13**

Sr. No.	Station	PLF (%)	Station heat rate (kCal/kWh)	Transit loss of coal (%)	Coal price excluding transit loss (Rs./MT)	Calorific value of coal (kCal/Kg)	Price of oil (Rs/kL)	Specific oil consumption (ml/kWh)	Calorific value of oil (kCal/lt)
1	2	3	4	5	6	7	8	9	10
1.	GNDTP	71.00	2905	2.00	3186	3935	39921	2.50	9400
2.	GGSSSTP	84.26	2599	2.00	3299	3935	37332	1.00	10000
3.	GHTP	87.00	2500	2.00	3172	4025	45536	1.00	9500

4.7.2 PSPCL has submitted as follows regarding the projected parameters and requested for the approval of the same:

- Station Heat Rate (SHR) for GNDTP has been projected at 2905 kCal/kWh, based on historical performance / average. PSPCL has requested for approval of SHR as projected relaxing the SHR norms for old stations as done by many other Commissions since the station has outlived its economic life.

For GGSSTP, the SHR has been projected at 2599 kCal/kWh, based on historical performance / average.

For GHTP, the SHR has been projected at 2500 kCal/kWh, based on historical performance / average and in line with the Tariff Regulations.

- The price of oil for FY 2012-13 has been projected considering an escalation as per recent inflationary price levels.
- The price of coal for FY 2012-13 has been projected with escalation at CERC rates on the actual billing rate.
- The calorific values of oil and coal are based on actual delivered measures.
- Transit loss of coal has been projected as per PSERC limits.
- Specific oil consumption in case of GGSSTP and GHTP has been projected as per norms. In case of GNDTP, value of 2.50 ml/kWh has been considered as compared to actual value of 2.69 ml/kWh for FY 2011-12 (first half) since slight improvement is expected after R&M.

#### **4.7.3 Fuel Cost approved by the Commission**

##### **Gross Generation**

The gross generation of thermal plants for FY 2012-13 has been discussed in para 4.4.1 and summarized in Table 4.9:

## Station Heat Rate

The CERC has laid down norms of gross SHR for coal based thermal stations as given in Table 4.16:

**Table 4.16: CERC Norms for Gross Station Heat Rate**

<b>Sr. No.</b>	<b>Unit size / Plant</b>	<b>SHR norms (kCal/kWh)</b>
<b>1</b>	<b>2</b>	<b>3</b>
1.	200/210/250 MWs sets	2500
2.	500 MWs and above sets	2425
3.	Talcher Thermal Power Station	2950
4.	Tanda Thermal Power Station	2825

On the above basis, the Commission approves SHR at 2500 kCal/kWh for GGSSTP and GHTP. As CERC has not specified any norm for 110/120 MWs units, the Commission has decided in para 4.4.1 to allow SHR of 2825 kCal/kWh for GNDTP units based on CERC norms for Tanda TPS after its R&M.

PSPCL at the time of processing of ARR for FY 2011-12 had intimated in its letter No.112 dated March 21, 2011 that for SHR study of thermal units at GGSSTP, they have decided to appoint Central Power Research Institute (CPRI), Bengaluru as consultants. The Commission, in the Tariff Order for FY 2011-12, had ordered that the issue of allowing higher SHR for GGSSTP will be considered after receipt of study report of CPRI in the matter of SHR. PSPCL has recently forwarded a copy of the Station Heat Rate Study Report in respect of GGSSTP and GNDTP (Unit I&II) carried out by CPRI Bengaluru. The Commission has made certain observations on the results computed by CPRI and clarifications have been sought from them. The Commission will consider any revision of SHR for GGSSTP and GNDTP, after receipt of required clarifications, while reviewing FY 2012-13 in its next Tariff Order.

## Coal Transit Loss

PSPCL in its ARR for FY 2012-13 has projected transit loss of coal for FY 2012-13 at 2% for GNDTP, GGSSTP and GHTP.

The Commission considered the whole issue of transit loss of coal in its Tariff Order for FY 2006-07 and approved a transit loss of 2% for the Indian coal in respect of all the three thermal stations during the year 2006-07. The Commission has been approving the transit loss of 2% for Indian coal in respect of all the three thermal stations in its subsequent Tariff Orders.

The actual transit loss of coal reported by the erstwhile PSEB/PSPCL for different thermal stations for the years from 2005-06 to 2011-12 (first half) is given below:

Year	GNDTP (%)	GGSSTP (%)	GHTP (%)
2005-06	4.90	3.00	3.00
2006-07	2.60	2.15	1.60
2007-08	2.04	2.50	1.49
2008-09	1.41	2.20	1.69
2009-10	0.66	1.14	1.16
2010-11	-0.15 (Provisional)	1.14 (Provisional)	1.33 (Provisional)
2011-12	H1 – 0.93%	H1 – 1.57	H1 – 2.46

From the above table, it is observed that the transit loss of coal has considerably improved and in some cases it has come even below 1.5%.

Section 61(a) of the Electricity Act, 2003 dealing with Tariff Regulations provides that the appropriate Commission shall be guided by the provisions and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees. CERC in its Tariff Regulations for the tariff block 2009-14, has laid down norms for transit and handling losses as percentage of the quantity of coal dispatched by the coal supplying company. These are 0.3% for pit head generating stations and 0.8% for non pit head generating stations. The Commission in its Tariff Order for FY 2006-07, after considering the CERC norms as laid down in Tariff Regulations of CERC for tariff block 2004-09, actual transit loss of coal suffered by the erstwhile Board during the previous years (2001-02 to 2004-05) and the contention of Board that application of CERC norm would not be fair since the thermal stations located in the State of Punjab are far away from the coal mines than the central generating stations, fixed the norm of 2% for transit loss of coal for all the three thermal stations.

Now, since the actual transit loss of coal in respect of all the three thermal stations of PSPCL has considerably come down (even less than 1.5% in some cases), the Commission feels that it will be fair to review the decision and cap the transit loss of coal at 1.5% for FY 2012-13.

Further, the Commission notes that PSPCL has engaged an outside agency for the work of coal linkage materialization and shortage minimization in respect of coal for its thermal plants, the expenditure on which is being charged to the fuel cost of the respective generating stations. The Commission, therefore, considers it fair to pass on the benefit of reduction in transit loss of coal to the consumers and at the same

time cap the maximum transit loss of coal at 1.5% for FY 2012-13 and 1.0% for FY 2013-14 & onwards.

**In view of the above, the Commission approves the transit loss for all the generating stations of PSPCL at actuals, subject to a maximum of 1.5%, for FY 2012-13. However, no such loss is permissible in the case of PANAM coal, as the same is priced on FOR destination basis.**

#### **Price and Calorific Value of Coal and Oil**

Fuel cost being a major item of expense, the actual calorific value and price of coal and oil and transit loss of coal for the first six months of FY 2011-12 were verified and the results are given in Table 4.17:

**Table 4.17: Validated Calorific Value and Price of Coal and Oil and Transit Loss of Coal for FY 2011-12**

<b>Sr. No.</b>	<b>Station</b>	<b>Calorific value of coal (kCal/Kg)</b>	<b>Calorific value of oil (kCal/lt)</b>	<b>Price of oil (Rs/kL)</b>	<b>Price of coal (Rs./MT) (excluding transit loss)</b>	<b>Transit loss (%)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1.	GNDTP	3933	9679	34564.43	2890.88	0.93
2.	GGSSSTP	3938	9839	32337.48	2997.72	1.57
3.	GHTP	4046	9587	39367.97	2862.48	2.46

In working out the fuel cost for FY 2012-13, the Commission has considered the price and calorific value of coal and oil as validated for first six months of FY 2011-12. The price and calorific value of coal indicated above are the weighted average values of coal, including PANAM coal.

#### **Specific oil consumption**

PSPCL has projected specific oil consumption at GNDTP, GGSSSTP and GHTP as 2.50, 1.00 and 1.00 ml/kWh respectively.

The Commission has adopted CERC norms for specific oil consumption as in the case of other performance parameters of thermal plants. As per CERC Regulations, effective from 01/04/2009, the Commission approves 1.0 ml/kWh specific oil consumption for GNDTP, GHTP and GGSSSTP.



**Table 4.18: Fuel Cost (Coal and Oil) for FY 2012-13**

Sr.No.	Item	Approved Fuel Cost for FY 2012-13					
		Derivation	Unit	GNDTP	GGSSSTP	GHTP	Total
1	2	3	4	5	6	7	8
1	Generation	A	MU	2552	9863	7577	19992
2	Heat Rate	B	kCal/kWh	2825	2500	2500	
3	Specific Oil Consumption	C	ml/kWh	1.00	1.00	1.00	
4	Calorific value of Oil	D	kCal/lt	9679	9839	9587	
5	Calorific value of Coal	E	kCal/Kg	3933	3938	4046	
6	Overall Heat	F=A x B	GCal	7209400	24657500	18942500	
7	Heat from Oil	G=(A x C x D)/1000	GCal	24701	97042	72641	
8	Heat from Coal	H=F-G	GCal	7184699	24560458	18869859	
9	Actual Oil Consumption	I=(Gx1000)/D	kL	2552	9863	7577	
10	Total Coal Consumption excluding Transit Loss	K=(Hx1000)/E	MT	1826773	6236785	4663831	
11	Transit Loss of Coal	J	(%)	1.50	1.50	1.50	
12	Quantity of PANAM coal	L	MT	960000	3671640	3385002	
13	Quantity of coal other than PANAM coal excluding Transit Loss	M=K-L	MT	866773	2565145	1278829	
14	Quantity of coal other than PANAM coal including Transit Loss	N=M/(1-J/100)	MT	879973	2604208	1298303	
15	Total quantity of Coal required	O=L+N	MT	1839973	6275848	4683305	
16	Price of Oil	P	Rs./kL	34564	32337	39368	
17	Price of Coal	Q	Rs./MT	2891	2998	2862	
18	Total cost of Oil	R=Pxl/10 <sup>7</sup>	Rs. crore	8.82	31.89	29.83	70.54
19	Total cost of Coal	S=OxQ/10 <sup>7</sup>	Rs. crore	531.94	1881.50	1340.36	3753.80
<b>20</b>	<b>Total Fuel Cost</b>	<b>T=R+S</b>	<b>Rs. crore</b>	<b>540.76</b>	<b>1913.39</b>	<b>1370.19</b>	<b>3824.34</b>
21	Per unit cost	U=Tx10/A	Rs./unit	2.12	1.94	1.81	1.91

**Based on the generation and operational parameters approved by the Commission above, cost of fuel for FY 2012-13 works out to Rs. 3824.34 crore for thermal generation of 19992 MUs (gross) as detailed in Table 4.18, which the Commission approves.**

4.7.4 During the Fuel Audit of the Thermal Plants of PSPCL, conducted by the Commission through CPRI, three new issues have come to the notice of the Commission. Their effect shall be considered by the Commission at the time of Review of FY 2012-13. These issues are as under:

- i) PSPCL pays an incentive to the coal liaison agent if the transit loss of coal is less than 2% and this payment to the liaison agent is loaded to the ARR/ consumers. The Commission is allowing normative coal transit loss of 2% to PSPCL in its various Tariff Orders. As such, the consumers get doubly loaded. This needs to be corrected. While truing up, the Commission will allow coal transit loss, as approved in para 4.7.3 above.
- ii) The coal received from washeries is weighed at Plant end and no coal transit loss is admissible as per contract with washeries. Necessary corrections/ changes, if required, after verification from the PSPCL, shall be carried out at the time of True up.
- iii) The normal drop in Gross Calorific Value of receipt coal and the coal going to bunkers should be about 150 kCal/Kg, whereas the drop at the Thermal Plants of PSPCL has been observed much higher (about 800 kCal/Kg). This drop needs to be examined and the effect of this, if any, shall be taken into consideration at the time of Review/ True up.

CPRI has also recommended provision of additional facilities / infrastructure at PSPCL Thermal Plants to reduce fuel cost, as under:

Sr. No.	Type of Measure	Investment (Rs. in lac)
1	Improvement in coal quality and quantity measurement process	309
2	Improvement in Transit Loss	60
3	Improvement in uploading infrastructure, coal management at the coal yard and reduction of demurrages	489
4	Total Investment	858

**The above measures need to be implemented by PSPCL in consumers' interest as per directions given in para 4.13.2 of this Tariff Order.**

#### 4.7.5 Fuel Cost Adjustment (FCA)

Any change in the fuel cost from the level approved by the Commission is to be passed on to the consumers as FCA in line with FCA formula specified in Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005.

According to this stipulation, any change in fuel cost would be passed on to the consumers on quarterly basis with the prior approval of the Commission.

#### 4.8 Power Purchase

4.8.1 **Projection by PSPCL:** PSPCL has projected power purchase cost of Rs. 7207.38 crore (excluding transmission charges of Rs. 568.65 crore to PSTCL) for purchase of 19683 MUs (gross) for FY 2012-13. PSPCL has projected energy availability for FY 2012-13 from various Central Generating Stations (CGS) based on average energy received during the last four financial years i.e. from FY 2007-08 to FY 2010-11.

The following new power plants have also been considered by PSPCL for assessing energy availability during FY 2012-13, as given in Table 4.19.

**Table 4.19: Details of New Power Plants**

Sr. No.	Name of New Power Plant	Capacity (MW)	PSPCL Share (MW)	Remarks
1	Rihand III TPP	1000 (2x500)	67	Expected to be operative w.e.f. September 2012 (unit no. 5) and April 2013 (unit no. 6)
2	Parbati-III HEP	520 (4x130)	80	Expected to be operative w.e.f. April 2012
3	Chamera-III HEP	231 (3x77)	23	Expected to be operative w.e.f. April 2012
4	Uri-II HEP	240 (4x60)	39	Expected to be operative w.e.f. April 2012
5	Pragati III Gas Plant	1371	137	Expected to be operative w.e.f. April 2012
6	Koteshwar HEP (some units)	400 (4x100)	26	Expected to be operative w.e.f. April 2012
7	Bokaro TPS	500	200	Expected to be operative w.e.f. October 2012
8	Durgapur TPP	1000 (2x500)	200	Expected to be operative w.e.f. April 2012
9	Raghunathpur TPP	1000 (2x500)	300	Expected to be operative w.e.f. October 2012
10	Nagarjuna Udipi TPS	1015 (2x507.5)	101.5	Expected to be operative w.e.f. April 2012
11	Malana – II HEP	100 (2x50)	100	Expected to be operative w.e.f. April 2012
12	Mundra UMPP	3800	475	Expected to be operative w.e.f. April 2012 (unit no.1), July 2012 (unit no.2), Oct. 2012(unit no.3), and Jan. 2013 (unit no.4)
13	Talwandi Sabo TPP	1980 (3x660)	1980	One unit expected to be operative w.e.f. November 2012

On a query from the Commission, PSPCL has submitted in their reply dated January 10, 2012 that the Power Purchase Agreements (PPAs) for all the above projects have already been signed with various developers.

4.8.2 **Requirement of Energy through Purchase:** As discussed in para 4.5.2, the energy requirement of 16544 MUs has to be met through purchase from Central Generating

Stations and other sources. The transmission loss external to the PSPCL and PSTCL systems has to be added to arrive at the total quantum of energy to be purchased.

**4.8.3 Transmission Loss external to PSPCL System and PSTCL System:** For net purchase of 18917 MUs, PSPCL has shown gross power purchase of 19683 MUs after adding weighted average transmission loss of 3.89% as external to PSPCL and PSTCL systems.

The Commission considers the external loss at 3.54% in line with the actual loss of past 52 weeks, i.e from 31.01.2011 to 29.01.2012, as per NRLDC calculations. The gross energy to be purchased, thus, works out to 17151 MUs (16544 MUs + external transmission losses of 607 MUs) as against 19683 MUs projected by PSPCL.

**4.8.4 Entitlement from Central Generating Stations:** PSPCL has considered the average of energy received for the last four years viz FY 2007-08 to FY 2010-11 from various stations to arrive at the energy availability projections for FY 2012-13. In order to estimate the energy entitlement of PSPCL from different Central Generating Stations (CGSs), the Commission has considered the average of the actual energy purchased by PSPCL / Board for the three years (FY 2007-08, FY 2008-09 and FY 2009-10) as approved in Tariff Order for FY 2011-12. The figures of FY 2010-11 have not been considered since PSPCL has not yet furnished audited figures. Based on the above, the plant-wise energy available from NTPC, NHPC and NPC stations is shown in Table 4.20, Table 4.21 and Table 4.22, respectively.

**Table 4.20: PSPCL entitlement from NTPC stations for FY 2012-13**

Sr. No	Station	Capacity	Firm Allocation		Energy entitlement based on 3 years average	Actual share allocation based on 3 years average
		MW	%	MW	(MU)	(%)
1	2	3	4	5	6	7
1	NTPC					
1	Anta (GF)	419	11.69	49	243	13.68
2	Anta (RF)				51	11.30
3	Anta (LF)				31	11.54
4	Auriaya (GF)	663	12.52	83	443	13.66
5	Auriaya (RF)				28	9.85
6	Auriaya (LF)				49	11.52
7	Dadri (GF)	830	15.90	132	630	16.69
8	Dadri (RF)				40	12.16
9	Dadri (LF)				138	12.23
10	Singrauli	2000	10.00	200	1732	11.67
11	Rihand I	1000	11.00	110	989	12.64

Sr. No	Station	Capacity	Firm Allocation		Energy entitlement based on 3 years average	Actual share allocation based on 3 years average
			MW	%	MW	(MU)
1	2	3	4	5	6	7
12	Rihand II	1000	10.20	102	926	11.85
13	Unchahar I	420	8.57	36	288	9.09
14	Unchahar II	420	14.28	60	520	15.98
15	Unchahar III	210	8.10	17	162	9.76
16	Farrakka (ER)+	1600	1.39	22	243	1.39
17	Kahalgaon I (ER)+	840	6.07	51	457	6.07
18	Kahalgaon 2 (ER)+	1500	8.02	120	594	8.02
19	NCTPS-2(Dadri-II)*	980			184	
20	IGSTPS Jhajjar *	500			25	
21	Rihand-III**	1000		67	126	

+Energy entitlement and share allocation taken as projected by PSPCL for FY 2012-13 in the ARR as the percentage share allocation was revised during FY 2009-10.

\* Energy entitlement taken as projected by PSPCL for FY 2012-13 in the ARR as past data is not available.

\*\* New station which is expected to be commissioned during FY 2012-13. Energy entitlement is considered as projected by PSPCL.

**Table 4.21: PSPCL Entitlement from NHPC stations for FY 2012-13**

Sr. No	Station	Capacity	Firm Allocation		Energy entitlement based on 3 years average	Actual share allocation based on 3 years average
			MW	%	MW	(MU)
1	2	3	4	5	6	7
	<b>NHPC</b>					
1	Bairasiul	180	46.50	84	290	46.50
2	Salal	690	26.60	184	818	26.63
3	Tanakpur	94	17.93	17	69	15.54
4	Chamera I	540	10.20	55	213	10.21
5	Chamera II	300	10.00	30	173	12.56
6	Uri	480	13.75	66	377	13.75
7	Dhauliganga	280	10.00	28	139	12.28
8	Dulhasti	390	8.28	32	244	11.16
9	Sewa-II*	80	8.33	6.66	47	11.07
10	Uri-II**	240		39	183	
11	Parbati-III**	520		80	175	
12	Chamera-III**	231		23	107	

\* Energy entitlement taken as projected by PSPCL for FY 2012-13 in the ARR as past data is not available.

\*\* New station which is expected to be commissioned during FY 2012-13. Energy entitlement is considered as projected by PSPCL.

**Table 4.22: PSPCL entitlement from NPC stations – FY 2012-13**

Sr. No	Station	Capacity	Firm Allocation		Energy entitlement based on 3 years average	Actual share allocation based on 3 years average
		MW	%	MW	(MU)	(%)
1	2	3	4	5	6	7
	<b>NPC</b>					
1	NAPP	440	11.59	51	80	13.47
2	RAPP 3&4	440	22.73	100	463	24.63
3	RAPP 5&6*	440	10.41	46	251	14.26

\* Energy entitlement taken as projected by PSPCL for FY 2012-13 in the ARR as past data is not available as it was commissioned during FY 2010-11 only.

#### **4.8.5 Cost of Power Purchase**

##### **(a) Central Generating Stations (CGS)**

PSPCL in the ARR petition for FY 2012-13 has submitted that the power purchase cost for each station has been estimated as per the capacity charges and variable charges for the respective stations. PSPCL has further submitted that the capacity charges for CGS have been considered as per the orders issued by CERC for the respective stations.

The Commission notes that the Terms and Conditions of Tariff Regulations issued by CERC in January, 2009 are applicable for all Central Generating Stations from April 1, 2009 onwards. CERC has issued provisional Tariff Orders for some stations and final Tariff Orders for some other stations. The Commission has decided to consider fixed charges as per respective Tariff Orders issued by the CERC, and in cases where Tariff Order has not been issued, fixed charges have been taken as per bills for September 2011, and where bills for September 2011 are also not available, fixed charges have been taken as projected by the PSPCL in the ARR. The variable charges have been considered as per bills for September 2011, and where bills for September 2011 are not available, variable charges as projected by PSPCL in the ARR for FY 2012-13 have been considered by the Commission.

##### **NTPC Stations**

##### **Fixed Cost**

As per CERC Tariff Regulations, fixed cost is payable in proportion to the share allocation of PSPCL in each of the Central Generating Stations and the Commission has accepted this principle. CERC has issued provisional Tariff Orders for tariff block

FY 2009-14 for all NTPC stations except for Dadri- II (Thermal). For Dadri – II (Thermal), the final order for tariff block FY 2009-14 has been issued. The Annual Fixed Charges (AFC) in case of NTPC stations (Anta, Auriya, Dadri, Singrauli, Rihand-I, Rihand-II, Unchahar-I, Unchahar-II, Unchahar-III, Farakka (ER), Kahalgaon-I, Kahalgaon-II, NCTPS-2C (Dadri-II) and IGSTPS Jhajjar (NTPC JV)) have been considered by the Commission as per Tariff Orders issued by the CERC.

### **Variable Cost**

PSPCL has considered variable charges for existing NTPC plants at 5% higher than those in the month of September, 2011.

The Commission has assessed variable cost for FY 2012-13 as per NTPC bills for September, 2011 for different stations.

### **NHPC Stations**

#### **Fixed Cost**

CERC Tariff Regulations provide that fixed cost is payable in proportion to the share allocation of PSPCL in each of the Central Generating Stations and the Commission has accepted this principle. PSPCL has submitted that final Tariff Orders for all plants have been issued except for Chamera-II HEP. For Chamera-II HEP, NHPC has provisionally raised the bills at the tariff approved by CERC for FY 2008-09, i.e as per last year of tariff block 2004-09 and annual fixed cost has been considered accordingly. Annual fixed cost in the case of NHPC stations (Bairasiul, Salal, Tanakpur, Chamera-I, Chamera-II, Uri, Dhauliganga, Dulhasti and Sewa-II) has been considered by the Commission as per Tariff Orders issued by the CERC.

#### **Variable Cost**

PSPCL has calculated fixed charges and variable charges for existing NHPC plants as per applicable Annual Fixed Charges for FY 2012-13.

The Commission has assessed variable cost for FY 2012-13 as per NHPC bills for September, 2011 for different Central Generating Stations (CGS) and then increasing it on prorata basis with reference to Annual Fixed Charges (AFC) for FY 2012-13. In case of Uri-II, Parbati-III and Chamera-III where the bills are not available (new stations), variable cost has been considered as projected by PSPCL in the ARR petition for FY 2012-13.

## **NPC Stations**

The power purchase rates for NAPP, RAPP – 3&4 and RAPP – 5&6 Stations have been considered by the Commission as per bills for September, 2011.

### **(b) Long-term and Short-term Power Purchase from New and Renewable Sources of Energy (NRSE) (including Jalkheri) within the State**

Quantum and rate of power purchase (Long-term as well as Short-term) from NRSE (including Jalkheri) are provisionally approved as per PSPCL's projections in ARR Petition for FY 2012-13.

### **(c) Power Purchase from SJVNL & Tehri and Power Purchase from New Plants**

The energy entitlement and the actual power allocation from SJVNL and Tehri have been taken as projected by PSPCL in the ARR Petition for FY 2012-13. The annual fixed charges and variable charges for SJVNL and Tehri have been considered as per bills for September, 2011. Other charges for Tehri and SJVNL are provisionally approved as projected by PSPCL in the ARR Petition for FY 2012-13.

Quantum of power purchase from new plants (Rihand-III TPS, Durgapur TPS, Raghunathpura TPS, Bokaro TPS, Udipi TPS, Pragati-III Gas Plant, Koteswar HEP, Tala HEP, Mallana-II HEP, Mundra UMPP and Talwandi Saboo TPS) has been provisionally approved as projected by PSPCL.

For new thermal/gas plants (Rihand-III TPS, Durgapur Steel TPS, Raghunathpura TPS, Bokaro TPS, Udipi TPS and Pragati-III Gas Plant), PSPCL has considered the variable charges 5% higher than that of average per unit rate of all NTPC plants for second half of FY 2011-12 (where variable charges of September, 2011 have been considered) i.e 324 paise / unit and raising this rate by 10% (5% each for variable and fixed charges), thus overall rate has been considered as 356 paise/unit. The Commission has not accepted the proposed 10% escalation and has considered 324 paise/unit as the rate of power purchase from these new thermal/gas plants.

For Koteswar HEP, PSPCL has calculated fixed and variable charges as per applicable Annual Fixed Charges for FY 2012-13, and the Commission has accepted the same.

For Tala HEP, Mallana-II HEP, Mundra UMPP and Talwandi Saboo TPS, the Commission has accepted the tariff rates as projected by PSPCL.



#### **(d) Power Purchase and Sale under Banking**

PSPCL has submitted the net of power purchase and sale under banking from HPSEB, Uttarakhand Power Corporation Limited (UPCL), J&K and banking through Traders as 3619.32 MUs of power sale. The Commission notes that the PSPCL has projected to purchase 1599.00 MUs (Gross) and to sell 5218.32 MUs (Gross) under Banking arrangements from/to HPSEB, UPCL, J&K and through traders, during FY 2012-13. The Commission provisionally accepts the net power sale and its rate / cost under banking from HPSEB, UPCL, J&K and banking through Traders as per PSPCL's projections.

#### **(e) Power Purchase and Sale from Traders and through UI**

PSPCL has projected power purchase of 19682.84 MUs (Gross) from Central Generating Stations and other sources, including 2254.80 MUs short-term power purchase through traders. The Commission has estimated the power available from all Central Generating Stations and other sources including Banking (net) as 17570 MUs (i.e. aggregate of items (I) to (VII) of Table 4.23). The gross power purchase requirement as worked out under para 4.8.3 is 17151 MUs. As such, there is a surplus availability of 419 MUs of energy. PSPCL has projected to purchase short-term power of 2254.80 MUs at 485 paise per unit. Now since surplus energy is available, the short-term power purchase of 2254.80 MUs by PSPCL is not justified. As such, the Commission does not approve short-term power purchase during FY 2012-13, as proposed by PSPCL. Further, the Commission approves the sale of available surplus energy at a rate not less than the average power purchase rate of 329 paise / unit during FY 2012-13.

**The Commission directs PSPCL to sell the surplus energy judiciously, by watching the Market / Power Exchange rates, UI and Banking.**

However, if in case of any exigency, PSPCL has to go in for short-term purchase of power through traders, then it should be done in a judicious manner. For the purpose of approving the rate for short-term purchase, the Commission has analyzed the monthly reports on short-term transactions of electricity published by Market Monitoring Cell (MMC) of CERC. Based on such monthly Reports, the Commission has worked out the weighted average price of short-term bilateral transactions for the period from April 2011 to February 2012 as 417 paise per unit, which the Commission considers to be reasonably realistic for short-term power purchase.

**Accordingly, the Commission decides to limit the cost of short-term power purchase from traders / UI at an average rate of 417 paise per unit for FY 2012-13.**

**The Commission reiterates that PSPCL needs to purchase power in a judicious and economic manner and also resort to Demand Side Management practices, to maintain its commercial viability.**

**(f) Inter-State Transmission Charges**

PSPCL has stated in the ARR Petition that

- (i) CERC had notified the Regulations for sharing of Interstate Transmission Charges and losses on 15.06.2010, effective from 01.07.2011. New Regulations stipulate the charging of transmission charges on load flow analysis to factor-in the distance, direction and quantum of power flow. These charges are called Point of Connection (PoC) charges.
- (ii) PoC charges for every State have been calculated separately by the National Load Dispatch Centre (NLDC) which is the Implementing Agency for initial two years. In order to smoothen the transition process, only three slab rates have been decided for the first year i.e. Rs. 70,000/-, Rs. 85,000/- and Rs. 1,00,000 / MW / month for NEW grid (Northern, Eastern and Western). These charges work out to 10, 12 & 14 paise/unit. For Punjab, withdrawal rate is Rs. 1,00,000 / MW / month i.e. 14 paise / unit.
- (iii) Present slab rates have been fixed considering tariff of existing transmission system upto 1.7.2011 and also the transmission system which would be coming into service upto 30.9.2011. From July to September 2011, 28 paise/unit transmission charges have been estimated for all long-term projects (14 paise/unit for injection and 14 paise/unit for withdrawal). Since, after 30.9.2011, new generation capacities and corresponding transmission assets will be regularly added into transmission network, slab rates are bound to rise.
- (iv) As per PoC methodology, same transmission charges for long term power and short-term power/banking have been assumed for FY 2012-13. To account for rise in slab rates due to addition of new assets during FY 2012-13, a rise of 5% has been assumed on transmission charges for short-term power during second half of FY 2011-12, i.e  $29.40 \times 1.05 = 30.87$  paise/unit (PSPCL has assumed Open Access charges for short-term power / Banked

power during second half of 2011-12 at 29.40 paise/unit, considering 5% escalation on 28 paise/unit).

PSPCL has projected, in the ARR Petition, the transmission charges payable to PGCIL in FY 2012-13 at Rs.572.68 crore.

The Commission notes that CERC vide its order dated 30.3.2012 has approved the slabs for injection and demand, PoC charge, as suggested by the Implementing Agency for the six months period from 1.4.2012 to 30.9.2012. The new slab rates are Rs.80000/MW/month, Rs.95000/MW/month and Rs.110000/MW/month for NEW Grid and Rs.70000/MW/month, Rs.85000/MW/month and Rs.100000/MW/month for SR Grid (Southern Region). These equate to short term open access rates of 11 paise/unit, 13 paise/unit and 15 paise/unit for NEW Grid and 10 paise/unit, 12 paise/unit and 14 paise/unit for SR Grid respectively. The slab rates for Punjab are Rs.80,000 / MW i.e. 11 paise/unit for injection from Anta, Auriaya, Dadri, Unchahar-I, II, III, NCTPS- 2C (DADRI II), IGSTPS Jhajjar, Bairasiul, Salal, Tanakpur, Chamera-I, II, III, Uri, Dhauli Ganga, Dulhasti, Sewa-II, Uri-II, Parbati-III, NAPP, RAPP- 3 & 4, RAPP- 5 & 6, Nathpa Jhakri, Tehri, Koteshwar, Tala, Malana, Mundra; Rs. 95000 / MW i.e. 13 paise / unit for injection from Singrauli, Rihand-I, II, III, Farakka, Kahalgaon-I, II, Pragati-III; Rs. 85000 / MW i.e. 12 paise / unit for injection from Udiipi; Rs. 1,10,000 / MW i.e. 15 paise / unit for injection from Durgapur, Raghunathpura and Bokaro and Rs. 1,10,000 / MW i.e. 15 paise per unit for withdrawal. The Commission considers the transmission charges payable to PGCIL for FY 2012-13, accordingly, which work out to Rs. 508.38 crore for purchase of power of 18693 MUs (i.e. aggregate of items (I) to (III), (V) & (VII) except purchase from Talwandi Sabo of Table 4.23) from sources outside the State. In addition, the Commission also considers Open Access charges for Banked energy at the rate of 26 paise / unit. Accordingly, for the purchase of 1599 MUs under Banking, the inter-state transmission charges at the rate of 26 paise/unit work out to Rs. 41.57 crore.

Based on the above, the cost of power purchase for FY 2012-13 is worked out at Rs. 5636.69 crore as detailed in Table 4.23.

**Table 4.23: Power Purchase cost for FY 2012-13**

Sr. No.	Source	Purchase (MU)	AFC (Rs. crore)	PSPCL share (%)	VC (Ps/Unit)	FC (Rs. crore)	VC (Rs. crore)	Other Charges (Rs. crore)	Total (Rs. crore) (7+8+9)
1	2	3	4	5	6	7	8	9	10
I	<b>NTPC</b>								
1	Anta (G/F)	243	193.83	13.68%	251.60	26.52	61.14		87.65
2	Anta (R/F)	51		11.30%	466.40		23.79		23.79
3	Anta (L/F)	31		11.54%	813.50		25.22		25.22
4	Auraiya (G/F)	443	288.84	13.66%	233.90	39.46	103.62		143.07
5	Auraiya (R/F)	28		9.85%	700.20		19.61		19.61
6	Auraiya (L/F)	49		11.52%	990.50		48.53		48.53
7	Dadri Gas (G/F)	630	341.15	16.69%	229.30	56.94	144.46		201.40
8	Dadri Gas (R/F)	40		12.16%	543.20		21.73		21.73
9	Dadri Gas (L/F)	138		12.23%	795.20		109.74		109.74
10	Singrauli	1732	759.97	11.67%	159.50	88.69	276.25		364.94
11	Rihand-I	989	527.54	12.64%	178.20	66.68	176.24		242.92
12	Rihand-II	926	635.98	11.85%	179.90	75.36	166.59		241.95
13	Unchahar-I	288	241.72	9.09%	224.10	21.97	64.54		86.51
14	Unchahar-II	520	279.02	15.98%	224.20	44.59	116.58		161.17
15	Unchahar-III	162	198.18	9.76%	224.30	19.34	36.34		55.68
16	Farakka (ER)	243	873.62	1.39%	393.20	12.14	95.55		107.69
17	Kahalgaon-I (ER)	457	525.05	6.07%	343.20	31.87	156.84		188.71
18	Kahalgaon-II (ER)	594	1214.06	8.02%	323.90	97.37	192.40		289.76
19	NCTPS- 2C (DADRI II)	184	1097.62	2.40%	286.50	26.34	52.72		79.06
20	IGSTPS Jhajjar (NTPC JV)	25	757.90	1.21%	338.89	9.17	8.47		17.64
21	Rihand- III	126			324.00		40.82		40.82
	<b>Sub Total (NTPC)</b>	<b>7899</b>				<b>616.44</b>	<b>1941.17</b>		<b>2557.61</b>
II	<b>NHPC</b>								
22	Bairasiul	290	97.54	46.50%	71.63	25.77	20.77		46.54
23	Salal	818	240.49	26.63%	44.77	36.39	36.62		73.01
24	Tanakpur	69	84.47	15.54%	107.25	7.46	7.40		14.86
25	Chamera-I	213	261.92	10.21%	90.53	15.19	19.28		34.48
26	Chamera-II	173	348.78	12.56%	133.70	24.89	23.13		48.02
27	Uri	377	333.65	13.75%	74.21	26.07	27.98		54.04
28	Dhauri Ganga	139	270.47	12.28%	137.06	18.87	19.05		37.92
29	Dulhasti	244	966.96	11.16%	291.65	61.31	71.16		132.48
30	Sewa-II	47	191.81	11.07%	208.68	12.20	9.81		22.01
31	Uri-II	183			360.00		65.88		65.88
32	Parbati-III	175			360.00		63.00		63.00
33	Chamera-III	107			360.00		38.52		38.52
	<b>Subtotal (NHPC)</b>	<b>2835</b>				<b>228.16</b>	<b>402.61</b>		<b>630.76</b>
III	<b>NPC</b>								
34	NAPP	80		13.47	204.18		16.33		16.33
35	RAPP-3 &4	463		24.63	249.94		115.72		115.72

Sr. No.	Source	Purchase (MU)	AFC (Rs. crore)	PSPCL share (%)	VC (Ps/Unit)	FC (Rs. crore)	VC (Rs. crore)	Other Charges (Rs. crore)	Total (Rs. crore) (7+8+9)
36	RAPP-5 & 6	251		14.26	302.29		75.87		75.87
	<b>Subtotal (NPC)</b>	<b>794</b>					<b>207.93</b>		<b>207.93</b>
<u>IV</u>	<u>NRSE Power (Punjab)</u>								
37	Long-term NRSE Power	724			454.78		329.26		329.26
38	Short-term NRSE Power	126			423.78		53.40		53.40
	<b>Sub total (NRSE Power)</b>	<b>850</b>			<b>878.56</b>		<b>382.66</b>		<b>382.66</b>
<u>V</u>	<u>NJPC, Tehri and Power from New Plants</u>								
39	NJPC	782	1312.43	11.69	114.10	87.20	89.23	18.44	194.87
40	Tehri	244	18000/MW/day	9.26	250.00	69.16	61.00	11.75	141.91
41	Koteswar (THDC)	70	234.63	7.95	217.50	10.59	15.23		25.82
42	Durgapur (DVC)	1296			324		419.90		419.90
43	Raghunanthpura TPS (DVC)	485			324		157.14		157.14
44	Bokaro TPS (DVC)	646			324		209.30		209.30
	<b>Sub total(New plants)</b>	<b>3523</b>				<b>166.95</b>	<b>951.80</b>	<b>30.19</b>	<b>1148.94</b>
<u>VI</u>	<u>Net Banking</u>								
45	Net Banking with HPSEB, UPCL, J&K and through Traders	-3619			323		-1168.94		-1168.94
46	Open Access charges for Banking							41.57	41.57
	<b>Sub total (Net Banking)</b>	<b>-3619</b>					<b>-1168.94</b>	<b>41.57</b>	<b>-1127.37</b>
<u>VII</u>	<u>Traders / IPPs</u>								
47	Malana - II HEP (PTC)	414			269		111.37		111.37
48	Tala - HEP (PTC)	102			202		20.60		20.60
49	UDIPI TPP (UPCL)	658			324		213.19		213.19
50	Pragati- III Gas plant (Bawana) (PPCL)	931			324		301.64		301.64
51	Mundra (UMPP) (CGPL)	1537			226		347.36		347.36
52	Talwandi Sabo TPS (Sterlite)	1646			286.43		471.46		471.46
	<b>Sub total (Traders/IPP)</b>	<b>5288</b>					<b>1465.63</b>		<b>1465.63</b>
<u>VIII</u>	<u>Traders (Short-term)</u>								
53	<b>Sales - Power Exchange/ UI</b>	-419			329		<b>-137.85</b>		<b>-137.85</b>

Sr. No.	Source	Purchase (MU)	AFC (Rs. crore)	PSPCL share (%)	VC (Ps/Unit)	FC (Rs. crore)	VC (Rs. crore)	Other Charges (Rs. crore)	Total (Rs. crore) (7+8+9)
54	<b>Open Access charges for Short-term Power Purchase</b>								<b>0.00</b>
	<b>Sub total</b>	-419					<b>-137.85</b>	<b>0</b>	<b>-137.85</b>
IX	<u>Other charges</u>								
55	PGCIL							<b>508.38</b>	<b>508.38</b>
	<b>Total</b>	<b>17151</b>				<b>1011.55</b>	<b>4045.00</b>	<b>580.14</b>	<b>5636.69</b>

#### 4.8.6 Cost of purchase of RECs

As per Punjab State Electricity Regulatory Commission (Renewable Purchase Obligation and its compliance) Regulations, 2011, the distribution licensee in the State i.e. PSPCL was required to purchase 984.71 MUs of non-Solar and 12.46 MUs of Solar RE power to meet with its RPO during FY 2011-12. This has been worked out by PSPCL on the basis of input energy in the distribution system of PSPCL during FY 2011-12. As per PSPCL letter no.787 dated 16.05.2012, 697.85 MUs of non-Solar RE power and 4.67 MUs of Solar RE power had been purchased by PSPCL during FY 2011-12, leaving a shortfall of 286.88 MUs and 7.8 MUs of non-Solar and Solar RE power, respectively.

The Commission in its order dated 04.05.2012 has decided that the shortfall in the RPO for FY 2011-12 could be carried forward to the next year. PSPCL has also submitted that they will have to purchase the RECs for the shortfall as RE power is not likely to be available to make up for the shortfall.

The total amount of purchase of (i) Non-Solar RECs @ Rs. 2.50/unit, and (ii) Solar RECs @ Rs. 11/unit, has been worked out as Rs. 80.35 crore by PSPCL.

**The total power purchase amount as such has been worked out as Rs. 5717.04 crore for FY 2012-13, comprising of Rs. 5636.69 crore for purchase of 17151 MUs during FY 2012-13 and Rs. 80.35 crore for purchase of RECs, which the Commission approves.**

## 4.9 Employee Cost

4.9.1 PSPCL has projected an employee cost of Rs. 3834.72 crore, net of capitalization of Rs. 130.00 crore, in the ARR and Tariff Petition for FY 2012-13. This is inclusive of Rs. 200 crore on account of pay arrears and Rs.88.20 crore on account of BBMB share as detailed in Table 4.24.

**Table: 4.24: Employee Cost projected by PSPCL for FY 2012-13**

(Rs. crore)		
Sr. No	Particulars	FY 2012-13 (Projected)
1	2	3
1	Basic Pay	1200.81
2	Overtime	13.00
3	Dearness Allowance	856.05
4	Fixed medical Allowance	31.00
5	Other Allowances	215.00
6	Bonus / Generation Incentive	60.00
7	Medical Expenses Reimbursement	15.00
<b>8</b>	<b>Total (1 to 7)</b>	<b>2390.86</b>
<b>9</b>	<b>Terminal Benefits</b>	
10	Earned Leave Encashment	115.00
11	Gratuity	200.00
12	Commutation of Pension	0.00
13	Workman's compensation	0.20
14	Ex-gratia	0.00
15	Fringe Benefit Tax	0.00
<b>16</b>	<b>Total (10 to 15)</b>	<b>315.20</b>
<b>17</b>	<b>Pension Payment</b>	
18	Basic Pension	765.46
19	Dearness Pension	0.00
20	Dearness Allowances	0.00
21	Any other expenses	105.00
22	Arrear Of Pension	100.00
<b>23</b>	<b>Total (18 to 22)</b>	<b>970.46</b>
<b>24</b>	<b>Total Expenses</b>	<b>3676.52</b>
25	Less: Amount Capitalized	130.00
<b>26</b>	<b>Net amount</b>	<b>3546.52</b>
27	Add: Prior period	
28	Add: BBMB Share	88.20
<b>29</b>	<b>Net Employee Cost</b>	<b>3634.72</b>
30	Arrear of Pay Revision	200.00
<b>31</b>	<b>Total</b>	<b>3834.72</b>

PSPCL has submitted that the employee cost comprises of salaries and allowances of employees of PSPCL, expenses for ex-PSEB employees and BBMB share.

4.9.2 PSPCL has submitted that it has taken into consideration the following assumptions in projecting the employee cost for FY 2012-13:

- (a) An increase of 3% has been considered from the actual employee cost for estimating employee cost for FY 2012-13.
- (b) Increase in DA has been taken as 14% (two installments of 7% each).
- (c) Impact of pay revision arrears is considered to be payable in three yearly installments in the ratio of 40:30:30 during FY 2011-12, FY 2012-13 and FY 2013-14 respectively.

4.9.3 PSPCL has further submitted that in line with the directives of the Commission it has taken the following initiatives for reducing the manpower and manpower costs:

- (a) Freezing of fresh recruitments against retirement / death cases since 1999.
- (b) Ban on creation of new posts / charges.
- (c) Withdrawal of compassionate employment to dependents of deceased employees by providing solatium benefits.
- (d) Increase in the manpower productivity through implementing new construction or expansion works through the existing manpower.

PSPCL has also informed that the utility has been able to save nearly Rs. 1800 crore on employee cost over a period of six years (FY 2003 - 09) on account of retirement and the number of employees have reduced to 55547 (during FY 2010-11) which will be further reduced to 44169 by FY 2012-13. PSPCL has further submitted that, being a Government owned company, it has to inherit the liability towards employee expenses as transferred by the Government under the transfer scheme. The transfer scheme does not provide flexibility to reduce the pay scales of the employees and to reduce the work force. PSPCL has requested that the employee costs be approved as proposed for FY 2012-13.

4.9.4 The Commission in its earlier Tariff Orders has been observing that the Employee Cost of the Utility is one of the highest in the Country and has urged the utility to take effective steps to contain employee cost. It is noted that although some efforts have been initiated by the Utility to enhance employee productivity through various management techniques and a study for rationalization of manpower has been instituted, the utility still needs to go a long way to contain employee cost. The Commission in line with earlier observations in this respect is unable to accept the revised estimates of employee cost and considers it appropriate to determine such cost as per its Regulations.



The provisions of Regulation 28 (8) of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 provide for determination of employee cost in two parts.

- Terminal benefits including BBMB share on actual basis
- Increase in other employee expenses limited to average increase in Whole Sale Price Index (WPI)

Regulation 28 (8) (b) also provides for consideration of any exceptional increase in employee cost on account of pay revision.

4.9.5 PSPCL has projected the terminal benefits and BBMB share amounting to Rs. 1373.86 (315.20 + 970.46 + 88.20) crore. PSPCL's projection includes Rs.105 crore towards 'Any other expense'. With reference to a query from the Commission, PSPCL in its Memo No.139/DTR/Dy.CAO / 234 dated January 19, 2012 informed that the amount of Rs. 105 crore includes Rs. 41.50 crore towards Leave Travel Assistance, Leave Travel Concession and Staff Welfare expenses, which are not in the nature of pension payments. Also workman's compensation of Rs. 0.20 crore is not in the nature of terminal benefits. **Thus, the claim of pension stands reduced to Rs. 928.96 crore.**

The Commission, accordingly, determines the terminal benefits and BBMB share at Rs. 1332.16 (315+928.96+88.20) crore and allows the same for FY 2012-13.

4.9.6 PSPCL has projected the other employee cost at Rs. 2302.56 crore for FY 2012-13 after excluding terminal benefits of Rs. 1332.16 crore and arrears of pay of Rs. 200 crore. The allowable other employee cost is to be limited to average increase in Whole Sale Price Index (WPI). The average annual WPI increase for FY 2012-13 would only be available next year and it is the normal practice of the Commission to apply the WPI increase of the previous year while allowing enhancement in employee cost. Accordingly, based on the WPI indices available for 9 months (April 2011 to December 2011) the Commission has calculated the average annual increase in WPI of 7.4%. The approved 'other employee cost' in the Review for FY 2011-12 in para 3.10.5 of this order is Rs. 1482.99 crore. Applying a WPI increase of 7.4% on this amount **the other employee cost works out to Rs. 1592.73 crore for PSPCL for FY 2012-13.**

4.9.7 In its ARR Petition for FY 2012-13, PSPCL has pleaded that the Commission may take into consideration the impact of revision of pay scales in the base 'other employee cost'. PSPCL has vide letter dated January 24, 2012 intimated that the

impact of revision of pay scales for FY 2012-13 was Rs. 333.57 crore for both utilities and is inclusive of 9% escalation on account of annual incremental increase in basic pay and DA etc. PSTCL vide its letter dated February 6, 2012 has intimated that the impact of revised pay scales of Rs. 333.57 crore for FY 2012-13 includes the impact of pay revision of Rs. 26.44 crore for FY 2012-13 relating to the employees of PSTCL. The Commission observes that any increase on account of pay/DA is taken care of by allowing WPI increase. A separate increase of 9% on revised pay is not provided for and hence cannot be allowed. Instead, a WPI increase of 7.4% on pay revision would be reasonable. The revised impact of pay revision for FY 2012-13 for both utilities, after excluding 9% escalation as submitted by utility, is thus ascertained at Rs. 306.04 crore and includes Rs. 24.26 crore pertaining to PSTCL. The pay revision impact for PSPCL is thus calculated at Rs. 281.78 (306.04 -24.26) crore. Allowing a WPI increase of 7.4% on this amount, the Commission ascertains the impact of pay revision for PSPCL for FY 2012-13 as Rs. 302.63 crore.

The Commission has been determining employee cost of PSPCL on a normative basis in accordance with the Tariff Regulations. Therefore, the increase on account of pay revision cannot be allowed over and above the normative employee cost and on actual cost basis as proposed by PSPCL. For FY 2006-07 and onwards the Commission had been approving Employee Cost of the utility after reducing the claim by 28.48% based on average disallowance in the approved Employee Cost for FY 2007-08, FY 2008-09 and for FY 2009-10 (Projections). However, as discussed in para 3.10.6 of Chapter 3 of the Tariff Order for FY 2012-13, the Commission is of the view that the claim of PSPCL amounting to Rs. 302.63 crore, being impact of pay revision for FY 2012-13, needs to be reduced by 17.22% and the reduction works out to Rs. 52.11 crore. **The allowable cost towards impact of pay revision works out to Rs. 250.52 crore which is allowed by the Commission.**

As discussed in para 3.10.6, Commission is of the view that the claim of arrears of Rs. 200 crore also needs to be reduced by 17.22% and the reduction works out to Rs. 34.44 crore. The allowable cost towards arrears works out to Rs. 165.56 crore. **The Commission thus approves pay arrears of Rs. 165.56 crore for FY 2012-13.**

**Thus, the Commission approves the total employee cost of Rs. 3340.97 (1332.16+1592.73+250.52+165.56) crore.**

#### **4.10 Repair and Maintenance (R&M) Expenses**

4.10.1 PSPCL has projected the R&M expenses at Rs. 562.15 crore, which includes R&M of Rs. 40.72 crore for asset addition during the year, in the ARR and Tariff Petition for FY 2012-13. PSPCL has submitted that the additional R&M expenses during the year have been calculated by multiplying the assets added during the year with the ratio of R&M costs and closing GFA (excluding land) in the provisional accounts for FY 2010-11.

4.10.2 The Commission has been approving the R&M expenses in accordance with the provisions of Regulation 28 (8) of PSERC Tariff Regulations by adjusting the base R&M expenses in proportion to the increase in WPI. The base R&M expenses of Rs. 425.97 crore (410.12 crore as the R&M expenses approved for FY 2011-12 and Rs. 15.85 crore as additional R&M expenses for assets added during the year) have been considered for FY 2012-13. After applying WPI increase of 7.4% as discussed in para 3.10.5, allowable R&M expenses for FY 2012-13 works out to Rs. 457.49 crore.

4.10.3 PSPCL has claimed R&M expenses of Rs. 40.72 crore for likely asset addition of Rs. 1919.63 crore during FY 2012-13 in terms of PSERC Tariff Regulations. As regards this claim of Rs. 40.72 crore on proposed addition of assets in terms of the PSERC Tariff Regulations, the Commission is of the view that the increase in R&M expenses demanded on this account cannot be allowed at this stage and will be considered at the time of Review next year.

**The Commission, accordingly, approves the R&M expenses of Rs. 457.49 crore for FY 2012-13.**

#### **4.11 Administration and General (A&G) expenses**

4.11.1 PSPCL has projected the A&G expenses at Rs. 111.45 crore, which include A&G expenses of Rs. 7.73 crore for asset addition during the year, in the ARR and Tariff Petition for FY 2012-13.

PSPCL has submitted that it has considered an escalation of 9% based on the historical growth rates of the A&G expenses and the WPI rate incidental at the beginning of the year. PSPCL has further submitted that additional expenses during the year have been calculated by multiplying the assets added during the year with the ratio of A&G costs and closing GFA (excluding land) in the provisional accounts

for FY 2010-11. The assets added during the year have been estimated at Rs. 1919.63 crore.

4.11.2 The Commission has been approving the A&G expenses in accordance with provisions of the Regulation 28 (8) of PSERC Tariff Regulations by adjusting the base A&G expenses in proportion to the increase in WPI. The base A&G expenses of Rs. 94.43 crore (90.89 crore as A&G expenses approved for FY 2011-12 and Rs. 3.54 crore as additional A&G expenses for asset addition during the year) have been considered for FY 2012-13. Based on the actual increase in WPI (April 2011 to December 2011) of 7.4%, as discussed in para 4.10.2, the allowable A&G expenses for FY 2012-13 work out to Rs. 101.42 crore.

4.11.3 PSPCL has claimed A&G expenses to the extent of Rs. 7.73 crore on the proposed asset addition of Rs. 1919.63 crore during FY 2012-13. The claim of Rs. 7.73 crore on the proposed asset addition in terms of the PSERC Tariff Regulations, cannot be allowed at this stage but will be considered at the time of Review next year. The total allowable A&G expenses, thus, work out to Rs. 101.42 crore.

**The Commission, accordingly, approves the A&G expenses of Rs. 101.42 crore for FY 2012-13.**

#### **4.12 Depreciation Charges**

4.12.1 PSPCL has projected depreciation charges at Rs. 770.32 crore for FY 2012-13 in the ARR and Tariff Petition on assets of Rs. 20692.23 crore as on April 1, 2012.

4.12.2 PSPCL has submitted that depreciation expenses for FY 2012-13 have been calculated on the average rate of depreciation, which is applied across the asset classes on the opening balance of assets for the year.

PSPCL has also submitted that in the provisional transfer scheme 66 kV and 33 kV transmission lines have been retained with the distribution company and requested the Commission to allow modification to the asset base in future ARR Petitions based on the final restructuring plan and consider the submissions as provisional.

4.12.3 In the ARR Petition for FY 2012-13, PSPCL has claimed Rs. 770.32 crore towards depreciation on the opening balance of Gross Fixed Assets (GFA) of Rs. 20692.23 crore by applying an average rate of depreciation of 3.72% across the asset classes on the opening balance of the year.

In the absence of Audited Accounts for FY 2010-11, the Commission adopted the asset value of Rs. 19106.05 crore as on April 01, 2011 as ascertained in the Tariff Order of FY 2011-12. Taking into consideration the approved asset addition of Rs. 1538.90 crore in the Review for FY 2011-12 the asset value as on April 01, 2012 is considered at Rs. 20644.95 (19106.05+1538.90) crore. The approved asset addition of Rs. 1538.90 crore in FY 2011-12 has been apportioned in the same ratio among the different asset categories as projected by PSPCL in its ARR Petition.

Accordingly, the Commission determines depreciation of Rs. 768.00 crore for FY 2012-13 on assets of Rs. 20644.95 crore as detailed in Table 4.25.

**Table 4.25: Depreciation Charges for FY 2012-13**

Sr. No.	Item	Assets as on April 1, 2011 as per ARR FY 2012-13 (Rs. crore)	Depreciation charges claimed in ARR FY 2012-13 (Rs. crore)	Depreciation rate as claimed (%)	Assets as on April 1, 2011 as approved by the Commission (Rs. crore)	Depreciation rate as claimed (%)	Depreciation charges now approved by the Commission (Rs. crore)
1	2	3	4	5	6	7	8
1	Thermal	6014.37	223.90	3.72%	6136.14	3.72%	228.26
2	Hydro	5973.70	222.39	3.72%	6429.60	3.72%	239.18
3.	Internal Combustion	2.68	0.10	3.73%	2.68	3.73%	0.10
4.	Transmission	87.19	3.25	3.73%	72.84	3.73%	2.72
5.	Distribution	8477.55	315.60	3.72%	7798.42	3.72%	290.10
6.	Others	136.74	5.09	3.72%	205.27	3.72%	7.64
	<b>Total</b>	<b>20692.23</b>	<b>770.32</b>		<b>20644.95</b>		<b>768.00</b>

**The Commission, accordingly, approves the depreciation charges of Rs. 768.00 crore for FY 2012-13.**

#### **4.13 Interest and Finance Charges**

4.13.1 PSPCL has claimed Interest and Finance Charges at Rs. 2571.68 crore in the ARR Petition for FY 2012-13 net of capitalization of Rs. 122.17 crore and inclusive of Rs. 50.00 crore as finance charges as detailed in Table 4.26.

**Table 4.26: Interest and Finance Charges projected for FY 2012-13****(Rs. crore)**

<b>Sr. No.</b>	<b>Description</b>	<b>FY 2012-13 (Projected)</b>
<b>1</b>	<b>2</b>	<b>3</b>
1	Interest on Institutional Loans	1010.40
2	Interest on GoP Loans	-
3	Interest on GPF	165.00
4	Lease rentals	-
5	Interest to Consumers	110.00
<b>6</b>	<b>Sub Total</b>	<b>1285.40</b>
7	Interest on WCL/STL/MTL	1358.45
8	Other Interest	-
9	Finance Charges	50.00
<b>10</b>	<b>Total (6+7+8+9)</b>	<b>2693.85</b>
11	Less: Capitalization	122.17
<b>12</b>	<b>Net Interest and Finance Charges</b>	<b>2571.68</b>

PSPCL has submitted that it has planned significant capital expenditure covering various schemes resulting in increased long term loans from various financial institutions. PSPCL has further submitted that interest expenses have been projected on the basis of the current outstanding loans and the proposed new borrowings corresponding to the planned capital expenditure, loan repayment schedule and the interest rate charged on the respective loans. It is further submitted by PSPCL that it has considered the average of opening balance and closing balance of new loans for calculation of interest expenses.

The Interest and Finance charges allowable to PSPCL are discussed in the ensuing paragraphs.

#### **4.13.2 Investment Plan**

PSPCL has projected the capital expenditure at Rs. 3286.19 crore in the ARR and Tariff Petition for FY 2012-13 as summarized in Table 4.27.

**Table 4.27: Summary of Projected Capital Expenditure****(Rs. crore)**

<b>Sr.No.</b>	<b>Particulars</b>	<b>FY 2012-13 (Projected)</b>
<b>1</b>	<b>2</b>	<b>3</b>
(a)	Generation	990.19
(b)	Transmission (66 kV & below)	250.00
(c)	Distribution	2046.00
	<b>Total</b>	<b>3286.19</b>

#### **(a) Generation**

PSPCL has submitted that it has planned to undertake significant amount of capital expenditure for R&M activities of its power plants. The proposed expenditure is envisaged for new generation projects namely, Shahpur Kandi Hydro Electric project

(Rs. 205.61 crore), 1320 MWs State Sector Thermal near Mukerian (Rs. 350 crore), R&M of GNDTP (Rs. 196.25 crore), GGSSTP and Hydro generating stations of PSPCL.

#### **b) Transmission**

PSPCL has submitted that it has planned to undertake network capacity addition, augmentation and improvement projects for its network of 66 kV and below. The envisaged expenditure is for augmentation of existing grid stations, construction of new sub stations and mini grid sub stations as well as the associated transmission lines during FY 2012-13.

#### **(c) Distribution**

PSPCL has submitted that distribution related capital expenditure is an ongoing process and the size of the projects undertaken varies from small works to large scale network capacity addition / improvement works and demand side management works under funded schemes.

The Commission has examined the capital expenditure plan projected for FY 2012-13. PSPCL has envisaged huge capital expenditure especially under distribution and generation. The Commission has approved the capital expenditure at Rs. 1868 crore, based on the actual capital expenditure incurred up to end of November, 2011, in the Review for FY 2011-12. The proposed capital expenditure for FY 2012-13 is 75.92%, higher than what has been approved for FY 2011-12. PSPCL has proposed to capitalize an amount of Rs. 1919.63 crore against the proposed capital expenditure of Rs. 3286.19 crore for FY 2012-13. The Commission is of the view that the estimates of investment plan for FY 2012-13 are on the higher side and would impose an avoidable burden on the consumers by way of increase in tariff on account of high expenditure. The Commission, therefore, considers the capital expenditure provisionally at Rs. 2800 crore for FY 2012-13. The Commission, however, emphasizes that this is a one time increase allowed by the Commission keeping in view the proposed projects. The increase shall be reconsidered in the Review on the basis of actual expenditure incurred on this account and progress made thereof.

The Commission notes that Central Power Research Institute (CPRI), Bangalore engaged by the Commission to carry out Fuel Audit of PSPCL Thermal Plants, has observed that in case PSPCL spends an amount of Rs. 8.58 Crore (reference para 4.7.4 of this Order) in providing additional facilities / infrastructure at its thermal

plants, there would be substantial reduction in fuel cost. The Commission further observes that all the measures can be taken in about 4 months time. **The Commission, therefore, directs PSPCL to provide proposed facilities / infrastructure out of funds available under Capital Expenditure Plan for FY 2012-13 so that fuel costs are reduced.**

**The Commission, accordingly, approves the capital expenditure at Rs. 2800 crore for FY 2012-13.**

PSPCL has proposed to capitalize assets to the extent of Rs. 1919.63 crore in the ARR Petition for FY 2012-13 against the proposed Investment Plan of Rs. 3286.19 crore. The Commission has approved Capital expenditure of Rs. 2800 crore in the Investment Plan for FY 2012-13 and the corresponding capitalization in the ratio of sum of opening Capital Works in Progress (CWIP) and estimated capital expenditure by PSPCL works out to Rs. 1801.11 crore. The Commission considers capitalization of assets of Rs. 1801.11 crore for FY 2012-13.

The Commission has approved the consumer contribution at Rs. 239.85 crore in the Review for FY 2011-12. The Commission takes into consideration, the consumer contribution of Rs. 240 crore at the level approved in the Review for FY 2011-12 towards funding the capital expenditure for FY 2012-13. Accordingly, the loan requirement, for the approved investment of Rs. 2800 crore, works out to Rs. 2560 (2800-240) crore for FY 2012-13. This loan requirement is taken into consideration for computation of interest charges.

In the ARR Petition for FY 2012-13, the opening balance of loan (other than WCL and GoP loans) is taken as Rs. 7666.10 crore and interest on loan availed by PSPCL is depicted as Rs. 1010.40 crore. The Commission has approved the closing balance of loans (other than WCL and GoP loans) of Rs. 6859.68 crore in para 3.14.2 of this Order. Considering the opening balance of loan (other than WCL and GoP) of Rs. 6859.68 crore for FY 2012-13 and the loan requirement of Rs. 2560 crore, the interest on loans (other than WCL and GoP) works out to Rs. 878.09 crore as shown in Table 4.28.



**Table 4.28: Interest on Loans (Other than WCL and GoP Loans) for FY 2012-13**

(Rs. crore)						
Sr. No.	Particulars	Loans as on April 1, 2012	Receipt of Loan during FY 2012-13	Repayment of Loan during FY 2012-13	Loans as on March 31, 2013	Amount of Interest
1	2	3	4	5	6	7
1	As per data furnished in ARR Petition (other than WCL and GoP Loans)	7666.10	3286.00	757.56	10194.54	1010.40
2	Approved by the Commission (other than WCL and GoP Loans)	6859.68	2560.00	757.56	8662.12	878.09

**The Commission approves the interest on loan at Rs. 878.09 crore for FY 2012-13.**

#### **4.13.3 Interest on GoP Loans**

PSPCL has not claimed any interest on account of GoP loans as there are no outstanding GoP loans as on April 1, 2012. Thus, there is no interest liability on account of GoP loans.

#### **4.13.4 Interest on loans taken to replace re-called GoP loans**

The interest on loans of Rs. 3022.10 (1362.00+1140.03+520.07) crore raised to replace re-called GoP loan adjusted against unpaid subsidy by the GoP is allowed at an average rate of 12.5% per annum for short term and mid term loans as considered in the Review for FY 2011-12. **Thus interest of Rs. 377.76 crore is approved on this account.**

#### **4.13.5 Interest on Bridge Loan**

In the ARR Petition for FY 2012-13, PSPCL has submitted that GoP has adjusted an amount of Rs. 981.93 crore against subsidy payable for FY 2011-12. This amount relates to RBI Bonds (including interest) issued under tripartite agreement between CPSUs, Government of India and Government of Punjab. PSPCL has pleaded that interest on this amount of Rs. 981.93 crore be allowed stating that it had to raise short term loans to bridge the cash shortage on account of such adjustment.

The Commission has considered the submissions made by PSPCL. It considers it appropriate to allow interest on Rs. 981.93 crore at the available Advance Rate of SBI of 13% as on April 1, 2011. **The interest @13% on Rs. 981.93 crore works out to Rs. 127.65 crore for FY 2012-13.**

#### **4.13.6 Interest on General Provident Fund (GPF)**

PSPCL has claimed interest of Rs. 165 crore on GPF accumulations. The Interest of Rs. 165 crore on GPF, being a statutory payment is allowed as claimed by PSPCL.

#### **4.13.7 Finance Charges**

PSPCL has claimed finance charges of Rs. 50.00 crore which include guarantee fees payable to Government of Punjab on the Loans availed by PSPCL. The finance charges work out to 1.52% of the estimated borrowings of Rs. 3286 crore. The Commission has approved loan requirement of Rs. 2560 crore for FY 2012-13. **Accordingly, the Commission approves the finance charges of Rs. 38.91 crore @ 1.52% for the loan requirement of Rs. 2560 crore for FY 2012-13.**

#### **4.13.8 Interest on Consumer Security Deposits**

PSPCL has claimed Rs. 110.00 crore towards interest to consumers in the Projections for FY 2012-13. As per the PSERC (Electricity Supply Code and Related Matters) Regulations 2007, interest is payable to consumers on the security deposits. The Commission observes that Audited Accounts of FY 2010-11 are not available. In the absence of Audited Accounts for FY 2010-11, the Commission has no alternative but to allow the claim based on Audited Accounts of FY 2009-10 and restrict the claim to approved interest of Rs. 82.06 crore as allowed for FY 2011-12. **The Commission accordingly allows interest of Rs. 82.06 crore for FY 2012-13.** However, the issue will be reconsidered on receipt of Audited Accounts of FY 2010-11 and FY 2011-12.

#### **4.13.9 Capitalization of Interest Charges**

PSPCL has claimed Rs. 122.17 crore towards capitalization of interest charges. The Commission determines the capitalization of interest to be Rs. 139.84 crore in the ratio of capital works in progress to the total capital expenditure. **The Commission, accordingly, approves capitalization of interest and finance charges of Rs. 139.84 crore for FY 2012-13.**

#### **4.13.10 Interest on Working Capital**

PSPCL has not projected its working capital on the basis of norms as per PSERC Tariff Regulations. Instead, PSPCL has submitted a total working capital loan of Rs. 10216.00 crore as on April 1, 2012 with an interest liability of Rs. 1358.45 crore.

The Commission has determined the Working Capital requirement of Rs. 2023.77 crore as per PSERC Tariff Regulations. By applying the State Bank Advance Rate of 13% as on April 1, 2011, the interest thereon is worked out as shown in Table 4.29.

**Table 4.29: Interest on Working Capital Requirement for FY 2012-13**

(Rs. crore)		
Sr.No	Particulars	Amount
1	2	3
1	Two months Fuel Cost	637.39
2	One month Power Purchase Cost	476.42
3	One month Employee Cost	278.41
4	One month A&G Cost	8.45
5	One month R&M Cost	38.12
6	Maintenance Spares @ 15% of O&M expenses	584.98
7	<b>Total Working Capital Required</b>	<b>2023.77</b>
8	State Bank Advance Rate as on April 01, 2011	13.00%
9	<b>Interest on Working Capital Loan</b>	<b>263.09</b>

**The Commission, accordingly, approves Rs. 263.09 crore towards interest on working capital requirement for FY 2012-13.**

#### **4.13.11 Diversion of Capital Funds**

The Commission, in paras 2.15.7 and 2.15.8 of the Tariff Order for FY 2011-12, had determined the diversion of capital funds for revenue purposes at Rs. 2458.56 crore based on the Board's Annual Audited Accounts for FY 2009-10. The amount of diverted funds carrying interest liability was worked out to Rs. 1821.21 crore. The Audited Accounts for FY 2010-11 have not been made available to the Commission by PSPCL, as FRP is yet to be finalized by GoP. Therefore, the amount of the diverted funds of Rs. 1821.21 crore based on the Audited Accounts for FY 2009-10 as determined in the Tariff Order of FY 2011-12 is being considered for FY 2012-13. The interest on these diverted funds @ 13% being SBI advance rate as on April 1, 2011 works out to Rs. 236.76 crore. **Of this amount, interest of Rs. 212.37 crore is to be considered in the Tariff Order for PSPCL and the balance amount of Rs. 24.39 crore is to be considered in the Tariff Order for PSTCL.**

Retaining the rate of disallowance between PSPCL and GoP, the Commission disallows interest amount of Rs. 89.70 crore of PSPCL on account of deficiencies in its functioning and the balance amount of Rs. 122.67 crore is to the account of GoP. However, the amount of diversion and interest thereon will be reconsidered by the Commission in the True up after receipt of Audit Accounts for FY 2012-13.

Besides, as discussed in para 3.14.11 of Tariff Order for FY 2011-12, GoP is liable to pay an amount of Rs. 206.01 crore to PSPCL up to FY 2009-10 on account of excess interest paid by PSPCL to GoP. After adding payable amount of Rs. 122.67 crore

disallowed for diversion of capital funds for FY 2011-12 in para 3.14.11 of this order, the total amount works out to Rs. 328.68 crore. Adding further disallowance of Rs. 122.67 crore as determined above, **total amount payable by GoP to PSPCL works out to Rs. 451.35 crore upto March 31, 2013.** This is carried forward to para 6.4.3 of this Order.

Based on the analysis and decisions discussed above the interest and finance charges are allowed as detailed in Table 4.30.

**Table 4.30: Interest and Finance Charges for FY 2012-13**

						(Rs. crore)
Sr. No.	Particulars	Loans as on April 1, 2012	Receipt of Loans	Repayment of Loans	Loans as on March 31, 2013	Interest/ Finance Charges approved by the Commission
1	2	3	4	5	6	7
1	Approved by the Commission (Other than WCL and GoP Loans)	6859.68	2560.00	757.56	8662.12	878.09
2	GoP Loans	-	-	-	-	
3	Interest on Loans taken:					
a)	To replace GoP Loans of Rs 3022.10 crore					377.76
b)	Interest on Bridge Loan					127.65
4	Interest on GPF					165.00
5	Lease Rentals					0.00
<b>6</b>	<b>Total (1+2+3+4+5)</b>	6859.68	2560.00	757.56	8662.12	<b>1548.50</b>
7	Add: Finance Charges					38.91
8	Interest on consumers security					82.06
<b>9</b>	<b>Gross Interest and Finance Charges (6+7+8)</b>					<b>1669.47</b>
10	Less: Capitalization					139.84
<b>11</b>	<b>Net Interest and Finance Charges (9-10)</b>					<b>1529.63</b>
12	Add: Interest on Working Capital					263.09
<b>13</b>	<b>Total Interest</b>					<b>1792.72</b>
14	Less: Disallowed on a/c of diversion: a) PSPCL – Rs. 89.70 crore b) GoP – Rs 122.67 crore					(-)212.37
<b>15</b>	<b>Balance Interest and Finance Charges</b>					<b>1580.35</b>

**The Commission, accordingly, approves the interest and finance charges of Rs. 1580.35 crore for PSPCL for FY 2012-13.**

#### 4.14 Return on Equity (RoE)

4.14.1 PSPCL has claimed Rs. 607.55 crore towards ROE in the ARR for FY 2012-13.

PSPCL has submitted that, in States where restructuring has been successfully

implemented the appropriate Commissions have allowed / allow for a post-tax 15.5% / 16% reasonable return on equity and requested the Commission to approve the RoE in accordance with the CERC norms.

PSPCL has submitted that it has claimed ROE @ 15.5% (pre tax) to be grossed up to 23.21% (at 33.22% comprising of Base rate of 30%, surcharge of 7.5% thereon and 3% cess on the overall amount) on the opening equity of Rs. 2617.61 crore. The opening equity of Rs. 2617.61 is as considered by the Commission in the Review for FY 2011-12 in para 3.16.

As discussed in para 3.16.1, of the Tariff Order of FY 2012-13, the Commission allows ROE @ 15.5% on an equity of Rs. 2617.61 crore which works out to Rs. 405.73 crore.

**The Commission, accordingly, approves the ROE of Rs. 405.73 crore in the ARR for FY 2012-13.**

#### **4.15 Transmission Charges payable to PSTCL**

The Commission, in Tariff Order dated July 16, 2012 passed on the ARR of PSTCL for FY 2012-13, has determined **Rs. 830.01 crore (Rs. 801.44 crore for Transmission business & Rs. 28.57 crore for SLDC business) as the transmission charges payable to PSTCL by PSPCL.** Accordingly, this is being included in the ARR of PSPCL for FY 2012-13.

#### **4.16 Charges payable to GOP on account of power from Ranjit Sagar Dam (RSD)**

PSPCL has claimed Rs. 10.50 crore on account of charges payable to GOP for its share of power from RSD towards 3% share of the revenue received by it from sale of power produced from RSD, as maintenance charges as well as charges for remaining works of RSD which would be deposited in the Punjab treasury.

**The Commission allows Rs. 10.50 crore to be included in the ARR of PSPCL for FY 2012-13.**

#### **4.17 Non Tariff Income**

PSPCL has projected non tariff income of Rs. 700.07 crore in the ARR for FY 2012-13. PSPCL has submitted that it has included the expected revenues from late payment surcharge for FY 2012-13 in the overall non tariff income. It has requested not to include the late payment surcharge in the non-tariff income for determining the

Revenue Gap stating that there is no compensation to the PSPCL on account of interest accrued on delayed payment against bills issued.

The Commission is of the view that the late payment surcharge is an element devised to compensate the utility for delay in payment by the consumers. The Commission is of the considered view that no further interest on this compensation / surcharge is justified. Further revenue from late payment surcharge is one of the components of non tariff income as per Regulation 34 of PSERC Tariff Regulations.

The Commission has amended PSERC (Terms and Conditions for Intra-state Open Access) Regulation, 2011 vide notification dated May 04, 2012 which would result in substantial increase in wheeling charges. Therefore, the receipts on this account are determined at Rs. 225.00 crore (as against Rs. 48.82 crore reflected by PSPCL) in addition to cross subsidy surcharge of Rs. 167.44 crore for FY 2012-13.

Besides, meter rentals and service charges of Rs. 25.03 crore of subsidized categories are also to be added to non tariff income of FY 2012-13 based on similar enhancement of non tariff income for FY 2011-12.

**The Commission, therefore, approves the Non tariff income at Rs. 1068.72 (700.07 + 225.00 - 48.82 + 167.44 + 25.03) crore as projected by PSPCL for FY 2012-13.**

#### **4.18 Revenue from Existing Tariff for FY 2012-13**

The revenue from existing tariff proposed by PSPCL for FY 2012-13 is Rs. 16310.62 crore, including revenue from AP consumption. PSPCL has not projected PLEC, MMC and other charges for FY 2012-13 separately in its ARR Petition. PSPCL has however, furnished the PLEC/MMC charges at Rs. 448.45 crore for FY 2012-13 in their letter No.154 dated January 23, 2012. The Commission, accordingly, allows the PLEC charges at Rs. 448.45 crore as projected by PSPCL for FY 2012-13. The expected revenue from the existing tariff on the basis of sales approved by the Commission works out to Rs. 16003.96 crore as shown in Table 4.31.

**Table 4.31: Revenue from Existing Tariff – FY 2012-13**

Sr. No	Category of consumers	Approved by the Commission		
		Energy Sale (MU)	*Tariff Rate (Paise/unit)	Revenue (Rs. crore)
1	2	3	4	5
1	Domestic			
a)	0-100 Units	5132	356	1826.99
b)	101-300 Units	2949	496	1462.70
c)	Above 300 Units	1561	523	816.40
	<b>Sub-Total</b>	<b>9642</b>		<b>4106.09</b>
2	Non-Residential Supply	2838	564	1600.63
3	Public Lightening	135	555	74.93
4	Industrial Consumers			
a)	Small Power	891	455	405.41
b)	Medium Supply	1815	503	912.95
c)	Large Supply	7856	503	3951.57
	<b>Sub-Total</b>	<b>10562</b>		<b>5269.93</b>
5	Bulk Supply & Grid Supply			
a)	HT	518	506	262.11
b)	LT	34	534	18.16
	<b>Sub-Total</b>	<b>552</b>		<b>280.27</b>
6	Railway Traction	184	586	107.82
7	Common Pool	305	327	99.74
8	Outside State	0		0
<b>9</b>	<b>Total (1 to 8)</b>	<b>24218</b>		<b>11539.41</b>
10	AP	11003	365	4016.10
11	Add: PLEC, MMC Etc.			448.45
	<b>GRAND TOTAL</b>	<b>35221</b>		<b>16003.96</b>

\* The Tariff Rate includes fuel surcharge of 8 paise per unit.

#### 4.19 Carrying Cost of Gaps

PSPCL has claimed carrying cost of Rs. 440.07 crore for FY 2011-12 and Rs. 318.90 crore for FY 2012-13 on accumulated gap till the year and half the gap of that year in Tariff Order for FY 2011-12.

Regulation 9 (4) of PSERC Tariff Regulations provide for allowing carrying cost for the revenue gaps determined in the True up and Review exercises. The Commission has been allowing interest on the revenue gap of the relevant year considering carrying cost for six months for the year in which the gap is created ,one year for the succeeding year and six months for the ensuing year in which the recovery of gap is considered as having been made through tariff revision. Thus, the Commission has been allowing carrying cost for the revenue gap of any year for a period of two years. As such, the Commission has allowed carrying cost on the gaps up to the year 2009-10 as is amply clear from the Tariff Orders for FY 2010-11 and FY 2011-12. The Commission has not allowed any carrying cost for FY 2010-11 it being a revenue

surplus year. In view of the above, the Commission does not approve any further carrying cost for the previous year revenue gaps.

However, the Commission observes that as a result of costs approved in the Review of FY 2011-12, the gap of FY 2011-12 works out to Rs. 1656.16 crore which includes gap on account of Regulatory Asset of Rs. 1325.76 crore. Thus the Review of FY 2011-12 indicates a revenue gap of Rs. 330.40 (1656.16-1325.76) crore over and above the gap on account of the Regulatory Asset on which carrying cost of Rs. 21.48 crore is allowed @ 13%, being Advance Rate of SBI as on April 01, 2011.

## **Regulatory Asset**

### **(a) Amortization of Regulatory Asset**

The PSPCL has claimed Rs. 441.92 crore towards amortization of Regulatory Asset of Rs. 1325.76 crore approved in the Tariff Order for FY 2011-12. The Commission observes that as a result of costs approved in the Review of FY 2011-12, the gap for FY 2011-12 works out to Rs. 1656.16 crore. Accordingly the Regulatory Asset created in the Tariff Order for FY 2011-12 gets merged in the gap in the Review for FY 2011-12.

### **(b) Carrying Cost on Regulatory Asset**

The PSPCL has claimed Rs. 206.66 crore (Rs. 86.68 crore and Rs. 119.98 crore for FY 2011-12 and FY 2012-13) towards carrying cost of Regulatory Asset of Rs. 1325.76 crore approved in the Tariff Order for FY 2011-12. Carrying cost is to be allowed at @ 13%, being the Advance Rate of SBI as on April 1, 2011. Applying the rate of 13% on the amount of Regulatory Asset of Rs. 1325.76 crore created in the Tariff Order FY 2011-12, the carrying cost works out to Rs. 258.51 crore (interest for one year for FY 2011-12 and 6 months for FY 2012-13 on Rs. 1325.76 crore), which the Commission allows.

**Accordingly, the Commission approves total carrying cost of Rs. 279.99 (258.51 + 21.48) crore for PSPCL for FY 2012-13.**

## **4.20 Revenue Requirement for FY 2012-13**

A summary of the Aggregate Revenue Requirement of PSPCL for FY 2012-13 as discussed in the preceding paragraphs is given in Table 4.32.



**Table 4.32: Revenue Requirement for FY 2012-13**

Sr. No.	Items of Expenses	FY 2012-13	
		Proposed by PSPCL	Approved by Commission
1	2	3	4
1	Cost of Fuel	4171.13	3824.34
2	Cost of power purchase	7207.38	5717.04
3	Employee Cost	3834.72	3340.97
4	R & M expenses	562.15	457.49
5	A & G expenses	111.45	101.42
6	Depreciation	770.32	768.00
7	Interest charges	2571.68	1580.35
8	Return on Equity	607.55	405.73
9	Transmission and SLDC charges payable to PSTCL	568.65	830.01
10	Royalty charges payable to GoP on Power from RSD	10.5	10.50
<b>11</b>	<b>Total Revenue Requirement</b>	<b>20415.53</b>	<b>17035.85</b>
12	Less: Non Tariff Income	700.07	1068.72
<b>13</b>	<b>Net Revenue Requirement</b>	<b>19715.46</b>	<b>15967.13</b>
14	Revenue from existing tariff	16310.62	16003.96
<b>15</b>	<b>Surplus/ (Gap) for FY 2012-13</b>	<b>(-) 3404.84</b>	<b>(+) 36.83</b>
16	Gap for previous year (2011-12)	(-) 4698.35	(-)1656.16*
<b>17</b>	<b>Carrying cost on previous year gap</b>	<b>(-) 318.9</b>	-
18	Amortization of Regulatory asset	(-) 441.92	-
19	Add: Carrying Cost on Regulatory Asset of Rs.1325.76 crore	(-) 119.98	(-)258.51
20	Add :carrying cost on gap in excess of Regulatory Asset for 2011-12 of Rs.330.40 crore		(-) 21.48
<b>21</b>	<b>Total Net Gap for FY 2012-13</b>	<b>(-) 8983.99</b>	<b>(-) 1899.32</b>
22	Energy Sales (MU)	37119	35221

\* The gap of Rs. 1656.16 crore (FY 2011-12) includes the Regulatory Asset of Rs. 1325.76 crore.

\*\* surplus (+) / deficit (-).

The cumulative gap for FY 2012-13 is determined at Rs. 1899.32 crore. The Annual Revenue Requirement for FY 2012-13 is assessed at Rs. 17035.85 crore with energy sales of 35221 MUs. The average cost of supply with this revenue requirement comes to 483.68 paise per unit (Rs. 17035.85 crore/35221 MUs). The combined average cost of supply works out to 538.66 paise per unit (Rs. 18972.00 crore/35,221 MUs) after taking into account the ARR of Rs. 17035.85 crore for FY 2012-13, approved consolidated gap of Rs. 1656.16 crore for FY 2011-12 and carrying cost of Rs. 279.99 crore for the approved revenue gaps.

# Chapter-5

## Tariff Related Issues

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Certain tariff related issues are raised by several consumers/consumer organisations in response to the public notice issued on ARR and Tariff Petition of PSPCL for FY 2012-13 and during the course of public hearings held by the Commission regarding the ARR and Tariff determination for FY 2012-13. The Commission has examined these issues taking into account the public objections and responses of PSPCL. The issues are discussed below.

### 5.1 Two Part Tariff for Retail Supply

The PSPCL has submitted proposal of Two Part Tariff (TPT) for retail supply consumers except agricultural pump set consumers, temporary supply consumers and public lighting in compliance to directive issued by the Commission in the Tariff Orders for FY 2010-11 and FY 2011-12. Proposal of PSPCL is based upon following assumptions:

- (a) **Revenue Neutrality:** Revenue neutrality has been ensured for PSPCL as a whole keeping in view the tariff approved by the Commission for 2011-12. Revenue from energy charges, MMC and service charges leviable under Schedule of General Charges have only been considered for the same.
- (b) **Discontinuation of Service Charges:** Service charges currently leviable as per Sr. No. 7 of the Schedule of General Charges shall be discontinued. All other charges including rentals and deposits as per Schedule of General Charges, Supply Code and General Conditions of Tariff and Schedules of Tariff approved by the Commission shall continue at the existing rates.
- (c) **Discontinuation of MMC:** Monthly Minimum Charges (MMC) being levied currently shall be discontinued.
- (d) **Golden Temple Amritsar and Durgiana Temple Amritsar:** The tariff currently applicable to these consumers is proposed to be continued and these consumers shall not be brought under TPT.
- (e) **Basis of recovering fixed charges:** The fixed charges shall be based on sanctioned load or contract demand of the consumer as the case may be.
- (f) **Calculation of utilization factor:** Energy charges shall be worked out on different utilization factors of the consumers. The utilization factor of different consumers shall be calculated using the following formula:

**For monthly billing**

$$\text{Utilization factor} = \frac{\text{Consumption in the month}}{\text{Sanctioned Load in kW}} * \frac{12}{8760}$$

**For bimonthly billing:**

$$\text{Utilization factor} = \frac{\text{Consumption in the bimonthly cycle}}{\text{Sanctioned Load in kW}} * \frac{6}{8760}$$

For consumers having contract demand, the load shall be:

Sanctioned Contract Demand in kVA x 0.9

- (g) **Applicability of energy charges:** For applying the energy charges on different consumers, their utilization factor shall be calculated and consumers falling within a particular range of utilization factor shall be billed for the entire consumption at rates mentioned against that range of utilization.
- (h) **Cold storage, Ice factories and Ice candies:** These consumers shall be billed on rates as applicable to general consumers in their respective load categories.
- (i) **Seasonal consumers:** Seasonal consumers shall be billed at uniform fixed and energy charges throughout the year.
- (j) **Applicability of surcharges:** All other surcharges shall continue to be applicable (unless expressly mentioned in the current proposal).
- (k) **Demand Surcharge:** Demand surcharge leviable for maximum demand in excess of sanctioned contract demand shall be at the rate of Rs. 1250 per kVA instead of Rs. 750 per kVA.

5.1.1 Various consumers/consumer organizations raised objections on the proposal of PSPCL for introduction of Two Part Tariff. The objections raised are briefly given below:

- (i) Existing Monthly Minimum Charges are adjusted against consumption and the fixed charges shall be in addition to variable tariff charges, which is not in the interest of consumers facing regularly scheduled power cuts.
- (ii) The rate should be lower with higher consumption, whereas the proposal is otherwise against growth of industry.
- (iii) The proposal does not differentiate between HT and EHT consumers regarding fixed and variable charges.
- (iv) The demand charges should be on actual maximum demand and not on sanctioned contract demand.
- (v) Rate of Fixed charges for LS consumers with higher demand are more

than consumers with lower demand. There is no rationale for charging differently as the fixed costs incurred by PSPCL for both the categories are same.

5.1.2 In its response, PSPCL has stated that:

- (i) The proposed Two Part Tariff structure is close to current tariff ensuring a revenue neutral situation. It is actually a breakup of existing tariff for 2011-12 into fixed and variable components.
- (ii) Whatever be the utilization factor, the average per unit rate will remain close to existing rate and hence no consumer will be at disadvantage.
- (iii) The PSPCL is agreeable to consider different rates for HT and EHT consumers.
- (iv) Fixed charges are recovered on account of dedicated infrastructure being maintained by the utility for which contract demand is an indicator.
- (v) In order to supply a consumer with higher demand, more transmission and generation capacity needs to be blocked thereby increasing the fixed cost. However, energy rates for these consumers are relatively less for the same utilization factor thereby compensating for the higher fixed charges.
- (vi) PSPCL vide its letter dated January 19, 2012 has requested the Commission to postpone the implementation of the Two Part Tariff.

5.1.3 The erstwhile Board had TPT for LS & MS consumers upto the year 1989, under which demand charges were based on higher of actual recorded maximum demand or 75% of sanctioned contract demand or 100 kVA in case of LS consumers and connected load in case of MS consumers. From 1989, all MS consumers and LS consumers, with load upto 1 MW were brought under single part tariff. However, in 1994, Two Part Tariff was substituted with single part tariff for all consumers. The main argument for reverting to single part tariff was simplification in understanding and billing and avoidance of manipulation of actual maximum demand recorded by electro-mechanical (E/M) meters.

5.1.4 The Board submitted the proposal for introduction of Two Part Tariff for Large Supply consumers and Railway Traction during the determination of ARR for the year 2006-07. The proposal submitted by the Board contained the recovery of tariff in two parts – fixed/demand charges to be levied on the sanctioned contract demand and energy charges on actual consumption. With introduction of TPT, the Board had proposed to discontinue the recovery of Monthly Minimum Charges.

Several Consumer Associations had vehemently objected to the proposal of the Board for introduction of TPT. Their main plea was that rate of fixed charges is high and consumers having low consumption/ load factor would be hit hardest with their overall rate increasing substantially. According to them, fixed charges should be levied on actual maximum demand or a predetermined fixed part of sanctioned contract demand. It was further suggested that the Board should not be allowed to mobilize additional revenue under the garb of TPT and there should be provision for maximum overall rate.

The Commission further observed that Two Part Tariff proposal submitted by the Board would lead to wide disparity in overall tariff rates for different consumers even of the same category.

In the light of the above, the Commission did not consider appropriate to introduce Two Part Tariff during the year 2006-07 and advised the Board to furnish a detailed proposal which addresses concerns raised by consumers during tariff hearings of 2006-07.

The Board again submitted Two Part Tariff Proposals during the suo motu determination of ARR by the Commission for the year 2007-08 which was not comprehensive and the Board was again directed to submit the proposal addressing all the observations made by the Commission in its earlier Tariff Orders. The Two Part Tariff proposal of the Board was again examined by the Commission during determination of ARR for the year 2008-09. The Commission observed that the National Tariff Policy enjoins the introduction of separate fixed and variable charges for Large Supply consumers with the fixed tariff representing the cost of the Licensee's infrastructure in making electricity available to a consumer. The Board's proposal for introduction of Two Part Tariff envisaged the fixed charge being 10% of the prevailing tariff but in order to make the proposal revenue neutral, it was liable to be enhanced on the basis of contract demand of a consumer in case the proposal results in a revenue loss to the Board.

The Commission had noted that it would, perhaps, be impractical to recover the entire fixed costs through fixed charges as it would impose a very harsh burden on the consumers especially those with low utilization factor. In addition, it will provide undeserving comfort to the Licensee who would then have no incentive to perform better. The Commission had also observed that implementation of the Board's proposal would result in possible advantages to a few consumers with higher

consumption and better load factor as opposed to the majority who would end up paying, decidedly, higher tariffs. The Commission did not consider it prudent to introduce Two Part Tariff on this basis. Accordingly, it was decided that Single Part Tariff for all categories of consumers including Large Supply and Railway Traction consumers would continue.

- 5.1.5 The Commission observes that with the coming up of more accurate and sophisticated electronic metering equipment, there is hardly any possibility of manipulation of maximum demand etc. However, in view of the complicating/divergent views expressed by various stakeholders, the Commission does not consider it appropriate to introduce Two Part Tariff during the year 2012-13 but would like to more surely prepare the ground for implementation from the next financial year.

**The Commission while mindful of National Tariff Policy enjoining early introduction of Two Part Tariff is nevertheless of the considered view that Two Part Tariff should be introduced only after building a consensus amongst various stakeholders of the utility through public hearings and by critically analyzing the actual billing data to determine the impact on consumers as well as revenue of utility. PSPCL is, therefore, directed to examine the issues raised by the consumers / consumer organizations and submit detailed revised proposal within 3 months of this Order for introduction of Two Part Tariff addressing the concerns of the consumers/consumer organisations.**

## **5.2 Additional Charge for Continuous Process Industry**

- 5.2.1 PSPCL in its Tariff Petition has proposed an additional charge of 10 paise per unit from consumers having continuous process industry. The objectors have urged that this is totally arbitrary, illegal and unjustified and without any basis. They have further stated that levy of such additional charge is against the accepted principle of tariff determination as well as against Section 61 of Electricity Act, 2003 which stress upon non discrimination among different categories of consumers.
- 5.2.2 The PSPCL in its response has stated that continuous uninterrupted power is supplied to such industries and on several occasions in situations of power shortage, PSPCL is forced to purchase power from costly sources to meet with the requirement of continuous process industry. PSPCL has further stated that Section-62 of the Electricity Act, 2003 allows the utility to differentiate on the basis of consumer's load factor, power factor, voltage, total consumption of electricity

during any specified period or the time at which supply is required or the geographical position of any area, the nature of supply and the purpose for which supply is required.

5.2.3 Presently, continuous process industries are getting uninterrupted power supply for the full load even when there is weekly off on the general industry. During peak load hours also, uninterrupted power as per requirement of the consumer is supplied, whereas in shortage scenario, such supply is refused to general (non-continuous) process industry.

5.2.4 The Commission notes that the continuous process industry is always given preference while imposing power regulatory measures and such consumers are not subjected to any power cut or weekly off days. During peak load hours, the continuous process industry is allowed to avail power by paying peak load exemption charges, whereas in shortage scenario, this facility is not available to general industry.

5.2.5 The Commission has separately issued an Order dated June 1, 2012 laying down the procedure for declaring an industrial consumer as a continuous process industry. The revised procedure inter-alia specifies the schedule for issuing public notice by PSPCL, self declaration of the load required for continuous process during peak load hours and non peak load hours by the consumer. The load so declared by the industrial consumer shall form the basis for regulating his supply during peak load hours, non peak load hours and weekly off days. The entire process is scheduled to be completed within three months from the date of issue of *ibid* Order.

5.2.6 Furthermore, Section 62 of the Electricity Act, 2003 allows the utility to apply differential tariff on the basis of nature of supply and the purpose for which the supply is required.

**In the above circumstances, the Commission holds that there is sufficient justification for levy of 10 paise/unit on continuous process industries and the Act allows charging differential tariff. This additional charge of 10 paise/unit over and above the normal tariff shall be leviable on the prorata consumption worked out on the basis of the contract demand sought by the consumer for running the industry on continuous basis during non peak load hours and total sanctioned Contract Demand. The levy of 10 paise/unit on pro-rata basis on continuous process industries shall commence with effect from November 01, 2012.**

# Chapter - 6

## Determination of Tariff

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### 6.1 Annual Revenue Requirement

6.1.1 The Commission has determined the ARR of PSPCL for FY 2012-13 at Rs. 17035.85 crore. True up of FY 2010-11 has not been undertaken since the PSPCL has not provided the Audited Annual Accounts for FY 2010-11. The Review of FY 2011-12 indicates a surplus of Rs. 752.38 crore, resulting in a consolidated gap of Rs. 1656.16 crore after considering consolidated revenue gap of Rs. 2116.69 crore upto FY 2010-11 and carrying cost of revenue gap of Rs. 291.85 crore, as determined in Tariff Order for FY 2011-12.

6.1.2 The combined impact of these exercises and the approved carrying cost of gaps indicate a gross revenue requirement of Rs. 18972.00 (17035.85+1656.16+258.51+21.48) crore for FY 2012-13. After making adjustment on account of non-tariff income and revenue from tariff at the existing level, the revenue gap accepted by the Commission for FY 2012-13 is Rs. 1899.32 crore. The total gap includes Regulatory Asset of Rs. 1325.76 crore created in Tariff Order for FY 2011-12 along with carrying cost thereon.

### 6.2 Determination of Retail Tariff

#### 6.2.1 Amortization of Regulatory Asset

In para 6.2.2 of Tariff Order for FY 2011-12, the Commission had approved Regulatory Asset amounting to Rs. 1325.76 crore which was required to be amortized in subsequent three years (FY 2012-13, FY 2013-14 and FY 2014-15) under the provisions of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. As a result of the costs approved in the Review for FY 2011-12 in para 3.22 of this Order, the revenue gap for FY 2011-12 has been re-determined at Rs. 1656.16 crore, which includes the Regulatory Asset of Rs. 1325.76 crore. Taking into consideration the provisions under National Tariff Policy, the Commission's own Regulations and the recent directions issued by the Hon'ble APTEL, the entire Regulatory Asset of Rs. 1325.76 crore along with the carrying cost is now considered for amortization in the Tariff Order for FY 2012-13.



6.2.2 In determining tariff, the Commission is guided by the principles laid down in Section 61 of the Act as well as its own Regulations which provide the framework for working out the ARR of a Power Utility and tariff for different categories of consumers. The Commission has also kept in mind the relevant aspects of the National Electricity Policy, National Tariff Policy, the norms adopted by it in earlier Tariff Orders and inputs received from consumers during the process of public hearings.

Income from tariff at existing rates taken into account for working out the percentage of increase in tariff required to cover the gap, does not include income from sales to Common Pool consumers, Outside State sale and Peak Load Exemption Charges (PLEC).

6.2.3 To meet this revenue gap of Rs. 1899.32 crore for FY 2012-13, an increase of 12.08% is required over the existing tariff (including FCA of 8 paise/unit) and MMC but excluding revenue from sales to Common Pool consumers, Outside State sale and PLEC. The combined average cost of supply with this increase works out to 538.66 paise per unit.

The provisions of the Act, National Tariff Policy and the Commission's own Regulations require that there should be a gradual reduction of cross-subsidies. Therefore, to bring the cross subsidy levels within  $\pm 20\%$  of the combined average cost of supply as per National Tariff Policy, the Commission decides to increase the tariff of all categories as given in Table 6.1. Lower tariff increase has been considered for categories subsidizing more than 20%. Simultaneously, the Commission considers it prudent to enhance the Tariff of AP and Domestic category (first slab) (both subsidized) by a minimum of 53 paise/unit i.e. the per unit increase required across the board to recover the revenue gap of Rs. 1899.32 crore. There will be no change in PLEC rates. The existing and revised tariffs are indicated in Table 6.1.

**Table 6.1: Existing and Revised Tariff for FY 2012-13**

Sr. No.	Category of Consumers	Existing Tariff		Revised Tariff approved by the Commission	
		*Energy Rate (paise/kWh)	MMC (Rs.)	Energy Rate (paise/kWh)	MMC (Rs.)
<b>A) PERMANENT SUPPLY</b>					
<b>1</b>	<b>Domestic</b>				
a)	Upto 100 units	356	Loads upto 100 kW: Rs. 41/kW. Loads exceeding 100 kW: Rs. 37/kVA	409	Loads upto 100kW: Rs. 46/kW. Loads exceeding 100 kW: Rs.41/kVA
b)	101 to 300 units	496		549	
c)	Above 300 units	523		581	
2	Non-Residential Supply	564	Loads upto 100 kW: Rs. 148/kW. Loads exceeding 100 kW: Rs. 133/kVA	603	Loads upto 100 kW: Rs.166/kW. Loads exceeding 100 kW: Rs.149/kVA
3	Public Lighting	555	As per 8 hrs/Day	603	As per 8 hrs/Day
4	Agricultural Pumpsets	i) Without GoP subsidy: 365 paise/kWh or Rs. 304 /BHP/ Month	Not Applicable	i) Without GoP subsidy:418 paise/kWh or Rs. 339/BHP/ month	Not Applicable
		ii) With GoP subsidy: Nil		ii) With GoP subsidy: NIL	
5	AP High – Technology	365	Not Applicable	418	Not Applicable
<b>6</b>	<b>Industrial Consumers</b>				
a)	Small Power	455	122/kW	510	137/kW
b)	Medium Supply	503	162/kW	561	182/kW
c)	Large Supply				
i)	General Industry	503	145/kVA	561	163/kVA
ii)	PIU	503	383/kVA	561	429/kVA
iii)	Arc Furnace	503	383/kVA	561	429/kVA
<b>7</b>	<b>Bulk Supply (including MES)</b>				
a)	HT	506	239/kVA	559	268/kVA
b)	LT	534		587	
8	Railway Traction	586	245/kVA	603	275/kVA

Sr. No.	Category of Consumers	Existing Tariff		Revised Tariff approved by the Commission	
		*Energy Rate (paise/kWh)	MMC (Rs.)	Energy Rate (paise/kWh)	MMC (Rs.)
<b>B) SEASONAL INDUSTRY: COTTON GINNING, PRESSING AND BAILING PLANT, RICE SHELLERS / HULLER MILLS, KINNOW GRADING AND WAXING CENTRES, RICE BRAN STABILISATION UNITS (WITHOUT T.G.SETS) (SP, MS, LS)</b>					
a)	During Season (From 1 <sup>st</sup> September to 31 <sup>st</sup> May next year)				
	SP	455	448/kW	510	502/kW
	MS	503	448/kW	561	502/kW
	LS	503	403/kVA	561	452/kVA
b)	Off Season				
	SP	538	NA	603	NA
	MS	575	NA	644	NA
	LS	575	NA	644	NA
<b>C) ICE FACTORY &amp; ICE CANDIES AND COLD STORAGE</b>					
a)	April to July				
	SP	455	609/kW	510	683/kW
	MS	503	609/kW	561	683/kW
	LS	503	549/kVA	561	615/kVA
b)	August to March Next Year				
	SP	455	122/kW	510	137/kW
	MS	503	122/kW	561	137/kW
	LS	503	109/kVA	561	122/kVA
<b>D) GOLDEN TEMPLE, AMRITSAR AND DURGIANA TEMPLE, AMRITSAR</b>					
a)	First 2000 units	Free	NA	Free	NA
b)	Beyond 2000 units	414	NA	467	NA
<b>E) TEMPORARY SUPPLY</b>					
i)	Domestic	888	Rs.752 or Rs.150/kW, whichever is higher	995	Rs.843 or Rs.168/kW whichever is higher
ii)	NRS	888	Rs.1505 or Rs.377/kW, whichever is higher	995	Rs.1687 or Rs.423/kW, whichever is higher
iii)	Industrial (SP,MS & LS)	As per Tariff approved at A(6) above for permanent supply + 100%	Rs.603/kW of sanctioned load for SP and MS and Rs.542/kVA for LS	As per Tariff approved at A(6) above for permanent supply + 100%	Rs.676/kW of sanctioned load for SP and MS and Rs. 607/kVA for LS
iv)	Wheat Threshers	As per Tariff approved at A(6) above for permanent supply + 100%	Rs. 603/kW of sanctioned load for SP and MS and Rs. 542/kVA for LS	As per Tariff approved at A(6) above for permanent supply + 100%	Rs.676/kW of sanctioned load for SP and MS and Rs. 607/kVA for LS
v)	Fairs, Exhibition & Mela Congregations	Bulk Supply tariff as at A(7) + 50%	Rs.6024 per service	Bulk Supply tariff as at A(7) + 50%	Rs.6752 per service

Sr. No.	Category of Consumers	Existing Tariff		Revised Tariff approved by the Commission	
		*Energy Rate (paise/kWh)	MMC (Rs.)	Energy Rate (paise/kWh)	MMC (Rs.)
vi)	<b>Touring Cinemas</b>				
a)	Lights and Fans	888	For (a) and (b), Rs. 1505 or Rs.377/kW of sanctioned load, whichever is higher	995	For (a) and (b), Rs.1687 or Rs.423/kW of sanctioned load, whichever is higher
b)	Motive Load	Rate for Industrial permanent supply as at A(6) + 100%		Rate for Industrial permanent supply as at A(6) + 100%	

\* Including FCA @ 8 paise/unit during FY 2011-12

Notes:

- (i) SC and Non SC BPL Domestic consumers with connected load upto 1000 watts will be given 200 units of free power per month in view of GoP subsidy;
- (ii) AP consumers and consumers mentioned in (i) above will not be charged service charges and meter rentals in view of Government Subsidy;
- (iii) All other charges including rentals and deposits as per Schedule of General Charges, Supply Code, General Conditions of Tariff and Schedule of Tariff approved by the Commission will continue to be charged at the existing rates till these are revised by the Commission;
- (iv) Operating conditions of MMC will continue to be as specified in the relevant Schedule of Tariff. Rates of MMC in Rs/kVA shall be charged on the Contract Demand of the consumers. However, Cooperative Group Housing Societies/ Employers availing single point supply under PSERC (Single Point Supply to Cooperative Group Housing Societies/Employers) Regulations will be levied monthly minimum charges as applicable to Domestic Supply consumers with load exceeding 100 kW i.e. Rs. 41 per kVA.
- (v) Consumers obtaining one point supply for providing electricity to ultimate users in the Co-operative Group Housing Societies / Residential Colonies/ Commercial Complexes/Shopping Malls/Industrial Estates etc. will be eligible for rebate as specified in the Conditions of Supply approved by the Commission, in addition to other voltage rebates as may be applicable;
- (vi) Levy of 10 paise/unit on prorata basis, on continuous process industries, shall commence with effect from November 01, 2012 as per para 5.2.6 of this Order.

### 6.3 Effect of revised tariff on cross subsidy

6.3.1 The Commission in its Tariff Regulations has defined cross subsidy for a consumer category as the difference between the average realisation per unit from that category and the combined average cost of supply, expressed in percentage terms. The total quantum of cross subsidy generated and utilised in the system as worked out for energy sales for FY 2012-13 at existing tariff is depicted in Table 6.2.

**Table 6.2: Aggregate quantum of cross subsidy for Energy Sales of FY 2012-13 at Existing Tariff (Combined average cost of supply =484.73 paise/unit)**

Sr. No.	Consumer Category	Energy Sales (MU)	Existing Tariff (Paise/unit) including FCA 8Ps/unit	Revenue with Existing Tariff (Rs. crore)	PLEC + MMC etc. (Rs. crore)	Non-Tariff Income (Rs. crore)	Total Revenue (Rs. crore) (5+6+7)	Expected Revenue with Average cost (Rs. crore)	Cross Subsidy generated (+)/Utilised (-) (8-9) (Rs. crore)
1	2	3	4	5	6	7	8	9	10
1	Domestic								
a)	Upto 100 Units	5132	356	1826.99	58.15	155.72	2040.86	2487.63	-446.77
b)	101-300 Units	2949	496	1462.70	33.41	89.48	1585.60	1429.47	156.13
c)	Above 300 Units	1561	523	816.40	17.69	47.37	881.46	756.66	124.79
	<b>Total</b>	<b>9642</b>		<b>4106.10</b>	<b>109.25</b>	<b>292.57</b>	<b>4507.92</b>	<b>4673.76</b>	
2	NRS	2838	564	1600.63	32.16	86.11	1718.90	1375.66	343.24
3	Public Lighting	135	555	74.93	1.53	4.10	80.55	65.44	15.11
4	<b>Industrial</b>								
a)	Small Power	891	455	405.41	10.10	27.04	442.54	431.89	10.64
b)	Medium Supply	1815	503	912.95	20.57	55.07	988.58	879.78	108.80
c)	Large Supply	7856	503	3951.57	266.51	238.38	4456.46	3808.04	648.42
	<b>Total</b>	<b>10562</b>		<b>5269.92</b>	<b>297.17</b>	<b>320.49</b>	<b>5887.58</b>	<b>5119.72</b>	
5	<b>Bulk Supply</b>								
a)	HT	518	506	262.11	5.87	15.72	283.70	251.09	32.61
b)	LT	34	534	18.16	0.39	1.03	19.57	16.48	3.09
	<b>Total</b>	<b>552</b>		<b>280.26</b>	<b>6.25</b>	<b>16.75</b>	<b>303.27</b>	<b>267.57</b>	
6	Railway Traction	184	586	107.82	2.08	5.58	115.49	89.19	26.30
7	Common Pool	305	327	99.74	0.00	9.25	108.99	147.84	-38.85
8	Outside State	0		0.00	0.00	0.00	0.00	0.00	0.00
9	AP	11003	365	4016.10	0.00	333.87	4349.96	5333.48	-983.52
10	<b>Total</b>	<b>35221</b>		<b>15555.50</b>	<b>448.45</b>	<b>1068.72</b>	<b>17072.67</b>	<b>17072.67</b>	<u>1469.14</u> -1469.14

6.3.2 The position of cross subsidy levels in the system for energy sales of FY 2012-13 with revised tariffs (as approved in para 6.2) is indicated in Table 6.3.

6.3.3 Category-wise MMC income has been computed by apportioning the same in the ratio of energy sale to different categories, except AP, Common Pool and Outside State sale. Non-tariff income has been apportioned in the ratio of energy sale to

different categories, except Outside State sale, while PLEC has been loaded to the LS category only.

**Table 6.3: Aggregate quantum of cross subsidy for Energy Sales of FY 2012-13 at Revised Tariff (Combined average cost of supply = 538.66 paise/unit)**

Sr. No.	Consumer Category	Energy Sales (MU)	Revised Tariff (Paise/unit)	Revenue with Revised Tariff (Rs. crore)	PLEC + MMC etc. (Rs. crore)	Non-Tariff Income (Rs. crore)	Total Revenue (Rs. crore) (5+6+7)	Expected Revenue with Average cost (Rs. crore)	Cross Subsidy generated (+)/Utilised(-) (8-9) (Rs. crore)
1	2	3	4	5	6	7	8	9	10
1	Domestic								
a)	Upto 100 Units	5132	409	2098.99	65.72	155.72	2320.43	2764.38	-443.95
b)	101-300 Units	2949	549	1619.00	37.76	89.48	1746.25	1588.50	157.75
c)	Above 300 Units	1561	581	906.94	19.99	47.37	974.30	840.84	133.45
	<b>Total</b>	<b>9642</b>		<b>4624.93</b>	<b>123.47</b>	<b>292.57</b>	<b>5040.97</b>	<b>5193.72</b>	
2	NRS	2838	603	1711.31	36.34	86.11	1833.77	1528.71	305.07
3	Public Lighting	135	603	81.41	1.73	4.10	87.23	72.72	14.51
4	<b>Industrial</b>								
a)	Small Power	891	510	454.41	11.41	27.04	492.86	479.94	12.91
b)	Medium Supply	1815	561	1018.22	23.24	55.07	1096.53	977.66	118.87
c)	Large Supply	7856	561	4407.22	278.10	238.38	4923.70	4231.68	692.02
	<b>Total</b>	<b>10562</b>		<b>5879.84</b>	<b>312.76</b>	<b>320.49</b>	<b>6513.08</b>	<b>5689.28</b>	
5	<b>Bulk Supply</b>								
a)	HT	518	559	289.56	6.63	15.72	311.91	279.02	32.89
b)	LT	34	587	19.96	0.44	1.03	21.43	18.31	3.11
	<b>Total</b>	<b>552</b>		<b>309.52</b>	<b>7.07</b>	<b>16.75</b>	<b>333.34</b>	<b>297.34</b>	
6	Railway Traction	184	603	110.95	2.36	5.58	118.89	99.11	19.78
7	Common Pool	305	327	99.74		9.25	108.99	164.29	-55.30
8	Outside State			0.00			0.00		0.00
9	AP	11003	418	4599.25		333.87	4933.12	5926.83	-993.71
10	<b>Total</b>	<b>35221</b>		<b>17416.95</b>	<b>483.73</b>	<b>1068.72</b>	<b>18969.40</b>	<b>18972.00</b>	<u>1490.36</u> -1492.96

The cross subsidy likely to be generated at the revised level of tariff comes to Rs. 1490.36 crore against which Rs. 1492.96 crore cross subsidy is required leaving a deficit of Rs. 2.60 crore.

6.3.4 Taking into account the quantum of cross subsidy in each consumer category determined for sales of FY 2012-13 as per existing tariffs brought out in Table 6.2 and as per revised tariffs brought out in Table 6.3, the gross quantum of cross subsidy from each category for FY 2012-13 at existing tariff and revised tariff is given in Table 6.4.

**Table 6.4: Aggregate quantum of Cross Subsidy - Comparison with Average Cost of supply 484.73 paise/unit (Existing Tariff) and Average cost of Supply 538.66 paise/unit (Revised Tariff)**

Sr. No.	Consumer Category	Quantum of Cross Subsidy in absolute terms			
		Existing Tariff		Revised Tariff	
		Energy Sales (MU)	Cross Subsidy (Rs. crore)	Energy Sales (MU)	Cross Subsidy (Rs. crore)
1	2	3	4	5	6
1	Domestic				
a)	Upto 100 Units	5132	-446.77	5132	-443.95
b)	101-300 Units	2949	156.13	2949	157.75
c)	Above 300 Units	1561	124.79	1561	133.45
	<b>Total</b>	<b>9642</b>		<b>9642</b>	
2	NRS	2838	343.24	2838	305.07
3	Public Lighting	135	15.11	135	14.51
4	<b>Industrial</b>				
a)	Small Power	891	10.64	891	12.91
b)	Medium Supply	1815	108.80	1815	118.87
c)	Large Supply	7856	648.42	7856	692.02
	<b>Total</b>	<b>10562</b>		<b>10562</b>	
5	<b>Bulk Supply</b>				
a)	HT	518	32.61	518	32.89
b)	LT	34	3.09	34	3.11
	<b>Total</b>	<b>552</b>		<b>552</b>	
6	Railway Traction	184	26.30	184	19.78
7	Common Pool	305	-38.85	305	-55.30
8	Outside State	0	0.00	0	0.00
9	AP	11003	-983.52	11003	-993.71
10	<b>Total</b>	<b>35221</b>	<u>1469.14</u> -1469.14	<b>35221</b>	<u>1490.36</u> -1492.96

6.3.5 Further, the cross subsidy levels based on the energy sales determined for FY 2012-13 at existing and revised tariffs in percentage terms are brought out in Table 6.5.

**Table 6.5: Cross Subsidy Levels**

Sr. No.	Consumer Category	Existing Tariff				Revised Tariff			
		Combined Average Cost of Supply 484.73 Paise/Unit				Combined Average Cost of Supply 538.66 Paise/Unit			
		Energy Sales (MU)	Total Revenue (Rs. crore)	Realisation per unit (Paise per unit)	Cross Subsidy Levels (%)	Energy Sales (MU)	Total Revenue (Rs. crore)	Realisation per unit (Paise per unit)	Cross Subsidy Levels (%)
1	2	3		4	5			6	
1	Domestic								
a)	Upto 100 Units	5132	2040.86	397.67	-17.96%	5132	2320.43	452.15	-16.06%
b)	101-300 Units	2949	1585.60	537.67	10.92%	2949	1746.25	592.15	9.93%
c)	Above 300 Units	1561	881.46	564.67	16.49%	1561	974.30	624.15	15.87%
	<b>Total</b>	<b>9642</b>	<b>4507.92</b>			<b>9642</b>	<b>5040.97</b>		
2	NRS	2838	1718.90	605.67	24.95%	2838	1833.77	646.15	19.96%
3	Public Lighting	135	80.55	596.67	23.09%	135	87.23	646.15	19.96%
4	<b>Industrial</b>								
a)	Small Power	891	442.54	496.67	2.46%	891	492.86	553.15	2.69%
b)	Medium Supply	1815	988.58	544.67	12.37%	1815	1096.53	604.15	12.16%
c)	Large Supply	7856	4456.46	567.27	17.03%	7856	4923.70	626.74	16.35%
	<b>Total</b>	<b>10562</b>	<b>5887.58</b>			<b>10562</b>	<b>6513.08</b>		
5	<b>Bulk Supply</b>								
a)	HT	518	283.70	547.67	12.98%	518	311.91	602.15	11.79%
b)	LT	34	19.57	575.67	18.76%	34	21.43	630.15	16.98%
	<b>Total</b>	<b>552</b>	<b>303.27</b>			<b>552</b>	<b>333.34</b>		
6	Railway Traction	184	115.49	627.67	29.49%	184	118.89	646.15	19.96%
7	Common Pool	305	108.99			305	108.99		
8	Outside State	0	0.00			0	0.00		
9	AP	11003	4349.96	395.34	-18.44%	11003	4933.12	448.34	-16.77%
10	<b>Total</b>	<b>35221</b>	<b>17072.67</b>	<b>484.73</b>		<b>35221</b>	<b>18969.40</b>	<b>538.58</b>	

As per Regulations framed by the Commission, tariff is to be determined in such a way that it progressively reflects combined average cost of supply. The Commission observes that, in consonance with the PSERC Tariff Regulations, there is in general, a reduction in the cross subsidy levels of both the subsidized and subsidizing categories as compared to those on existing tariff. As provided in the National Tariff Policy, the revised tariffs of all the categories are within  $\pm 20\%$  of the combined average cost of supply.



## 6.4 GoP Subsidies

6.4.1 After determining the ARR and tariff for FY 2012-13, the Commission in its D.O. letter No. 2396 dated June 13, 2012 (Annexure IX), solicited the views of GoP regarding its intention to extend subsidy to any consumer or class of consumers under Section 65 of the Act. The said letter indicated the implications if GoP continued its present policy of subsidizing AP consumers, SC DS consumers and Non-SC BPL DS consumers as under:

- **AP Consumption:** In its ARR for FY 2012-13, PSPCL has projected AP consumption of 11922 MUs against which the Commission has determined the same to be 11003 MUs in para 4.1.3 of this Tariff Order. The revenue from AP consumption of 11003 MUs @ 418 paise/unit (which translates into Rs. 339/BHP/Month) works out to Rs. 4599.25 crore.
- As discussed in para 3.15.1 of this order, an additional subsidy of Rs. 178.82 crore would also be payable by GoP to PSPCL being 50% on account of waiver of outstanding amount against AP consumers as per State Cabinet decision dated Dec. 10, 2011 conveyed vide Secretary, Department of Power, Punjab vide memo no.11/68/2010-EB2/4175 dated December 16, 2011.

Thus, total AP subsidy payable by GoP works out to Rs. 4778.07 (4599.25 + 178.82) crore during FY 2012-13.

- **Meter Rentals and Service Charges:** In addition, subsidy of Rs. 9.00 crore on account of meter rentals and service charges (assumed at previous year level) in respect of AP consumers is also payable by the GoP for FY 2012-13. Accordingly, total AP subsidy of Rs. 4787.07 (4778.07 + 9.00) crore will be payable by GoP in respect of AP consumers for FY 2012-13.
- **Scheduled Castes Domestic Supply (SC DS) consumers:** Secretary/Power, Punjab vide memo no.11/68/2010-EB2/4175 dated December 16, 2011, has informed that GoP had enhanced the upper ceiling of consumption to 200 units per month for SC consumers with connected load upto 1000 watts. PSPCL in the ARR of FY 2012-13 has claimed subsidy of Rs. 1058.76 crore inclusive of meter rentals and service charges of Rs. 15.91 crore. The claim of subsidy for this category of consumers is considered to be on the higher side in comparison to the subsidy claimed in previous years. The Commission, therefore, considers it appropriate to allow increase in subsidy claimed by the utility in proportion to the hike in tariff ordered by the Commission and the subsidy determined for the same category of consumers for FY 2011-12 in this Tariff Order. Accordingly, the

Commission determines subsidy of Rs. 687.97 crore inclusive of meter rentals and service charges of Rs. 15.08 crore for FY 2012-13.

- **Non-SC Below Poverty Line (BPL) DS consumers:** Similarly, GoP in its decision conveyed vide letter dated December 16, 2011, has fixed the upper ceiling of consumption of 200 units per month in respect of non SC BPL consumers with connected load upto 1000 watts. PSPCL has claimed subsidy of Rs. 519.00 crore inclusive of meter rentals and service charges of Rs. 7.80 crore on this account for FY 2012-13. The claim of subsidy by the utility is considered to be on the higher side. Therefore, the Commission considers it appropriate to allow increase in subsidy in proportion to the hike in tariff ordered and allows the subsidy accordingly. The Commission, therefore, determines the subsidy of Rs. 36.03 crore inclusive of meter rentals and service charges of Rs. 0.95 crore for FY 2012-13.

**Thus, total requirement of subsidy for FY 2012-13 works out to Rs. 5511.07 (4787.07 +687.97 + 36.03) crore.**

6.4.2 For FY 2011-12, the Commission has determined subsidy of Rs. 4455.88 crore as discussed in para 3.15 of this Tariff Order. Against this, GoP has already paid/adjusted an amount of Rs. 4182.00 crore during FY 2011-12. After adjustment of the paid/adjusted amount of Rs. 4182.00 crore, the balance subsidy payable by GoP works out to Rs. 273.88 (4455.88 - 4182.00) crore.

6.4.3 Change in subsidy for FY 2010-11, if any, will be determined at the time of true up of FY 2010-11 when Audited Accounts are submitted by PSPCL along with next ARR.

On the above basis, subsidy payable by GoP during FY 2012-13 is detailed in Table 6.6.

**Table:6.6 Subsidy payable by Govt. of Punjab to PSPCL for FY 2012-13**

(Rs. crore)

Subsidy payable by the GoP	AP +Meter rentals and service charges	SC DS + Meter rentals and service charges	Non-SC DS BPL + Meter rentals & service charges	Total
<b>FY 2012-13</b>				
a) Subsidy payable for AP consumption of 11003 MUs @ 418 paise/unit and SC DS and Non-SC BPL DS consumers at the revised tariff.	4599.25 (+) 9.00 4608.25	672.89 (+)15.08 687.97	35.08 (+)0.95 36.03	
b) Add Subsidy based on GoP letter No. 11/68/2010-EB2/4175 dated December 16, 2011 sanctioning waiver off outstanding amount of Rs. 357.64 crore against AP consumers to be paid by GoP in six equated instalments, of which three instalments are payable during 2012-13.	178.82			
<b>Total subsidy payable by GoP for FY 2012-13</b>	<b>4787.07</b>	<b>687.97</b>	<b>36.03</b>	<b>5511.07</b>
<b>FY 2011-12</b>				
a) Subsidy payable as determined by the Commission in para 3.15	3824.84 (+) 9.00 3833.84	396.66 (+)15.08 411.74	30.53 (+) 0.95 31.48	
b) Add Subsidy based on GoP letter No. 11/68/2010-EB2/4175 dated December 16, 2011 sanctioning waiver off outstanding amount of Rs. 357.64 crore against AP consumers to be paid by GoP in six equated instalments, of which three instalments were payable during FY 2011-12.	178.82			
Total subsidy payable for FY 2011-12 as determined in para 3.15	4012.66	411.74	31.48	4455.88
Less subsidy paid/adjusted by GoP during FY 2011-12		i) Amount paid in Cash ii) Adjusted against bonds and interest <b>Total:</b>	= 3200.07 = 981.93 = <b>4182.00</b>	<b>4182.00</b>
<b>Amount of subsidy short paid for FY 2011-12</b>	<b>4455.88 – 4182.00</b>		<b>= 273.88</b>	<b>273.88</b>
<b>Total subsidy and interest payable by GoP during FY 2012-13</b>	<b>5511.07 + 273.88</b>		<b>= 5784.95</b>	<b>5784.95</b>

The Commission has also informed GoP that the subsidy of Rs. 5784.95 crore is required to be paid to PSPCL in advance in monthly installments, of which Rs. 800 crore has already been paid up to the end of May 2012 and the balance subsidy of Rs. 4984.95 crore is required to be paid in ten advance installments @ Rs. 581.95

crore per month from June 2012 to August 2012 and @ Rs. 462.73 crore per month from September 2012 to March 2013. GoP has also been intimated that the additional subsidy on account of FCA surcharge, if any, leviable during FY 2012-13 will also be payable by GoP to PSPCL. GoP in its letter dated July 11, 2012 (Annexure-X) has conveyed approval for the payment of subsidy of Rs. 5784.95 crore during current year. Keeping this decision of GoP in view, the Commission has incorporated the same in the tariff structure in Table 6.1.

**The Commission, therefore, approves a total subsidy of Rs. 5784.95 crore payable by GoP to PSPCL for FY 2012-13.**

**Besides, the Commission has also determined an amount of Rs. 451.35 crore payable by GoP to PSPCL during FY 2012-13 as discussed in para 4.13.11 of this Tariff Order.**

## **6.5 Renewable Energy**

### **6.5.1 Background**

The Act, under Section 86 (1) (e) mandates the Commission to promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee. The National Electricity Policy and Tariff Policy formulated under the Act further provide that the share of electricity from non-conventional sources as specified by State Electricity Regulatory Commissions (SERCs) need to be progressively increased and such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under section 63 of the Act.

In order to develop and promote new and renewable sources of energy (NRSE) based technologies, GoP notifies the NRSE Policy from time to time. Presently, NRSE Policy 2006 is in vogue and the NRSE Policy 2012 is likely to be notified in near future.

### **6.5.2 Tariff for Purchase of Electricity from Renewable Sources of Energy**

The Commission is in the process of separately determining the generic levellised tariff for purchase of electricity from the various types of renewable energy power projects to be commissioned during the year 2012-13. The tariff payable to the

existing renewable energy generating stations during FY 2012-13 shall be as per the Terms & Conditions of their respective Power Purchase Agreements (PPAs).

#### **6.5.3 Renewable Purchase Obligation**

The Commission notified the Punjab State Electricity Regulatory Commission (Renewable Purchase Obligation and its compliance) Regulations, 2011 (RPO Regulations) on 3.6.2011, wherein Renewable Purchase Obligation (RPO) for the years 2011-12 to 2014-15, both Non-Solar & Solar, was specified for compliance by the Obligated Entities. As per the Regulations, the RPO can be complied with by the Obligated Entity i.e. PSPCL by purchasing electricity from renewable sources of energy or alternatively Renewable Energy Certificates (RECs) from the Power Exchange(s) or a combination of both. However, in case the Obligated Entity fails to comply with the obligation to purchase the required percentage of electricity from renewable sources of energy or the RECs, it is liable for proceedings under section 142 of the Act.

In order to ensure that the RPO so specified by the Commission in the aforementioned Regulations is realistically achievable, it was finalized after consultative discussion with Punjab Energy Development Agency (PEDA) and PSPCL on the renewable energy capacity likely to be added/installed in the State and committed to PSPCL. While specifying the RPO, the Commission was mindful of the fact that the State of Punjab is not sufficiently endowed with various renewable energy resources except biomass, which is also not fully available for power generation as the same is also used by other Industrial/Commercial establishments such as brick-kilns, paper/pulp industry, textile mills etc. Accordingly, the RPO was specified by the Commission at an achievable level.

#### **6.5.4 RPO for FY 2012-13**

The RPO specified by the Commission for FY 2012-13 is 2.83% (Non-Solar) and 0.07% (Solar) i.e. 2.9% (overall). For meeting the said RPO, PSPCL has furnished Source/Project wise details in respect of capacity (MW) & generation (MU) for the renewable energy power projects vide memo. no. Spl-001/IPC-330 dated 9.4.2012. The information furnished by PSPCL read with that submitted by PEDA indicates that the renewable energy capacity available to PSPCL as on 31.3.2012, in addition to short term purchases from such sources, and projected to be added during FY 2012-13 is as under:

**Table 6.7: Existing Renewable Energy Capacity and Projections for FY 2012-13**

\*

	<b>Biomass</b>	<b>Non-fossil fuel Co-generation</b>	<b>Small Hydro</b>	<b>Solar</b>	<b>Waste to Energy</b>	<b>Total</b>
	<b>(MW)</b>	<b>(MW)</b>	<b>(MW)</b>	<b>(MW)</b>	<b>(MW)</b>	<b>(MW)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Upto 31.3.2012	50.50	47.20	129.50	9.25	1.00	<b>237.45</b>
Projections for FY 2012-13	48.00	15.00	8.03	27.50	0.00	<b>98.53*</b>

\* Including slippages from FY 2011-12

The Commission also notes that as per the Minutes of Review Meeting held on 26.4.2012 with PSPCL and PEDDA, the generation/purchase from renewable energy power projects during FY 2012-13 has been projected to be 1135.39 MUs [1121.82 MUs (Non-Solar) and 13.57 MUs (Solar)]. PSPCL was advised to meet the shortfall, if any, by arranging additional power from renewable energy projects so as to comply with the RPO for FY 2012-13.

**The Commission, therefore, directs PSPCL to comply with the RPO specified in the RPO Regulations for FY 2012-13.**

#### 6.5.5 Pooled Cost of Purchase of Electricity of PSPCL

The Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 provide for determination of 'Pooled Cost of Purchase' of electricity, for the purpose of eligibility for a generating company engaged in generation of electricity from renewable sources of energy to apply for registration for issuance of and dealing in renewable energy certificates. The ibid CERC Regulations, under Regulation-5 for 'Eligibility and Registration for Certificates', define the 'Pooled Cost of Purchase' as hereunder:

*'Pooled Cost of Purchase' means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be.'*

As per the ibid CERC Regulations, a generating company engaged in generation of electricity from renewable sources of energy, on fulfilling the conditions specified there-under, one of them being to sell the electricity generated to the distribution licensee (PSPCL) of the area in which it is located, at a price not exceeding the pooled cost of purchase of the distribution licensee, shall be eligible to apply for registration for issuance of and dealing in Renewable Energy Certificates.

Accordingly, the Commission has determined the 'Pooled Cost of Purchase' as Rs. 3.11 per kWh. This 'Pooled Cost of Purchase', based on the data for FY 2011-12, will be applicable during FY 2012-13.

## **6.6 Separate tariff for each Function**

- 6.6.1 In compliance with the directions of the Hon'ble Appellate Tribunal for Electricity, the Commission, in its previous Tariff Orders has been determining separate tariffs for generation, transmission and distribution by segregating the ARR of the erstwhile Board. Now, the transmission function has already been segregated and entrusted upon PSTCL, one of the successor entities of the erstwhile Board, for which separate Tariff Order for FY 2012-13 has been issued by the Commission. In this Order, the Commission is determining separate tariffs for generation and distribution functions which have been entrusted to PSPCL, the other successor entity of the erstwhile Board. The segregation of the ARR for FY 2012-13 of PSPCL into generation and distribution functions has been carried out based on the information furnished by PSPCL in its letter dated 30.03.2011 and the audited accounts of FY 2009-10 of the erstwhile Board, since the audited accounts for FY 2010-11 are not provided by PSPCL.
- 6.6.2 The allocation under each head (generation and distribution) is detailed at Annexure-V and ROE is bifurcated proportionately on the value of fixed assets of each function. In addition, the consolidated gap and carrying cost of gaps upto FY 2011-12 has been computed in proportion to the revenue requirement (in Table 6.8) of each function.
- 6.6.3 The segregated ARR on the above basis is given in Table 6.8. The generation function has also been further divided into thermal and hydel taking into account the fact that the Regulations for determining the tariff for these are different.

**Table 6.8: Segregation of ARR for FY 2012-13****(Rs. crore)**

Sr. No.	Item of expense	Generation			Distribution	Total
		Hydel	Thermal	Total		
1	2	3	4	5	7	8
1	Cost of fuel	0.00	3824.34	3824.34	0.00	3824.34
2	Cost of Power purchase	0.00	0.00	0.00	5717.04	5717.04
3	Employee cost	172.73	483.44	656.17	2684.80	3340.97
4	R&M expenses	109.29	215.02	324.31	133.18	457.49
5	A&G expenses	6.00	7.81	13.81	87.61	101.42
6	Depreciation	151.37	248.29	399.66	368.33	767.99
7	Interest charges	651.89	382.76	1034.65	545.69	1580.34
8	Return on Equity	133.49	126.83	260.32	145.41	405.73
9	Transmission charges payable to PSTCL	0.00	0.00	0.00	830.01	830.01
10	Charges payable to GoP on Power from RSD	10.50	0.00	10.50	0.00	10.50
<b>11</b>	<b>Total revenue requirement</b>	<b>1235.27</b>	<b>5288.49</b>	<b>6523.76</b>	<b>10512.07</b>	<b>17035.83</b>
12	Add: Consolidated Gap upto FY 2011-12	120.09	514.13	634.22	1021.94	1656.16
13	Add Carrying Cost of Revenue Gaps	18.74	80.25	98.99	159.52	258.51
14	Add: Carrying cost on Gap in excess of Regulatory Asset	1.56	6.67	8.23	13.25	21.48
<b>15</b>	<b>Total Consolidated Gap and carrying cost</b>	<b>140.39</b>	<b>601.05</b>	<b>741.44</b>	<b>1194.71</b>	<b>1936.15</b>
<b>16</b>	<b>Gross revenue requirement (11+15)</b>	<b>1375.66</b>	<b>5889.54</b>	<b>7265.20</b>	<b>11706.78</b>	<b>18971.98</b>

## 6.7 Generation Tariff

6.7.1 The PSERC Tariff Regulations specify that the generation tariff will have the same components as laid down in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2004 as amended from time to time. CERC by its notification dated 19<sup>th</sup> January, 2009 issued the Tariff Regulations for generation and transmission projects for the period 2009-14 by repealing earlier Tariff Regulations, 2004.

6.7.2 As per CERC Regulations, generation tariff comprises of:

- (i) Annual Fixed Charges (AFC) which include interest, depreciation, return on equity, O&M expenses, interest on working capital and cost of secondary fuel and;
- (ii) Energy (variable) charges for recovery of primary fuel cost.

These charges are recoverable on the basis of norms for thermal plants and hydel plants and are specific for each power plant.



6.7.3 In the case of thermal plants, full AFC is payable on achievement of normative plant availability of 85%, whereas in the case of hydel stations, full AFC is payable on achievement of plant availability of 90%.

6.7.4 The Commission has assessed the plant wise AFC for FY 2012-13 on the basis of data provided by PSPCL, except cost of fuel (for which actuals as computed in Table 4.18 are taken) as reproduced at Annexure-VI whereas proportion of generation cost under each head is given in Annexure-VII. Accordingly, the total revenue requirement for each plant is computed and indicated in Annexure-VIII. The plant wise AFC approved for FY 2012-13 is given in Table 6.9.

**Table 6.9 - Annual Fixed Charges - Generation for FY 2012-13**

Sr.No	Plant	Annual Capacity/Fixed Charges (Rs.crore)	Net Generation (MU)	Fixed Charges (Paise/unit)
1	2	3	4	5
<b>A</b>	<b>Thermal Plants</b>	<b>2135.72</b>		
1	GNDTP	369.54	2271	162.72
2	GGSTP	790.54	9025	87.59
3	GHTP	975.63	6933	140.72
<b>B</b>	<b>Hydel Plants</b>	<b>1375.76</b>		
1	RSD	915.81	1283	713.80
2	Mukerian	107.54	1119	96.10
3	UBDC	56.22	365	154.01
4	Shanan	27.18	471	57.70
5	Anadpur Sahib	60.47	653	92.60
6	Micro Hydel	2.53	10	253.32
7	Bhakhra Left Bank Bhakhra Right Bank	77.10		*
8	Beas & Extension	128.93		*

\* AFC for hydel plants at Sr.No (B) 7 & 8 are determined by BBMB.

Accordingly, the total AFC recoverable in the case of thermal and hydel plants are:

- i) Thermal - Rs. 2135.72 crore
- ii) Hydel - Rs. 1375.76 crore

6.7.5 The AFC for both thermal and hydel plants will be payable on achievement of target availability as discussed in para 6.7.3.

#### 6.7.6 Variable (energy) charges for Thermal Plants

The variable (energy) charges for a thermal plant are the primary fuel cost to be paid to the generators and are computed as cost per unit of ex-bus energy (energy sent out). As per approved ARR for FY 2012-13, the total fuel cost, excluding the

cost of secondary fuel oil, for all the three thermal plants is Rs. 3753.80 crore. These costs have been worked out plant wise and the variable charges per unit of energy for each plant are given in Table 6.10.

**Table 6.10: Variable (Energy) Charges for FY 2012-13**

Sr. No.	Particulars	GNDTP	GGSTP	GHTP
1	2	3	4	5
1	Primary Fuel (Coal) cost (Crore Rs.)*	531.94	1881.50	1340.36
2	Net Generation (MU)	2271	9025	6933
3	Variable charge per unit sold (paise/kWh)	234.23	208.48	193.33

\* The plant wise fuel cost has been taken as approved by the Commission in para 4.7.3 of Chapter 4.

## 6.8 Total charges for Generating Plants

The total charges (fixed and variable) for generating plants as determined by the Commission are given in Table 6.11.

**Table 6.11: Total energy charges for FY 2012-13**

Sr. No.	Plant	Fixed Charges (Paise/unit)	Variable Charges (Paise/unit)	Total Charges (Paise/unit)
1	2	3	4	5 = (3+4)
<b>A</b>	<b>Thermal Plants</b>			
1	GNDTP	162.72	234.23	397
2	GGSTP	87.59	208.48	296
3	GHTP	140.72	193.33	334
<b>B</b>	<b>Hydel Plants</b>			
1	RSD	713.80	-	714
2	Mukerian	96.10	-	96
3	UBDC	154.01	-	154
4	Shanan	57.70	-	58
5	Anadpur Sahib	92.60	-	93
6	Micro Hydel	253.32	-	253

## 6.9 Distribution / Wheeling Charges

The revenue requirement for distribution for FY 2012-13 as per Table 6.8 is Rs. 5159.73 crore (excluding the power purchase cost and transmission charges). As per Tariff Regulations of the Commission, the distribution capacity for working out the wheeling charges shall be the sum of power imported at each interface point of exchange of power at electrical boundary of distribution licensee and generation from captive plants and cogeneration plants (to the extent fed into the distribution system) and plants injecting electricity generation from renewable sources of energy located in the area of such licensee. To a query from the

Commission, PSPCL submitted vide its letter dated 3.4.2012 that the total distribution capacity for working out the wheeling charges for FY 2012-13 is 10220.58 (10082.05+138.53) MWs. The transmission capacity of 10082.05 MWs has also been projected by PSTCL as discussed in para 5.2.2 of Tariff Order FY 2012-13 in respect of PSTCL. The Commission has worked out the total distribution capacity of PSPCL for FY 2012-13 as 9501.42 MWs (net of transformation losses and auxiliary consumption).

**Accordingly, the Commission determines wheeling charges as Rs. 452540 MW / Month.**

### **6.10 Open Access Charges**

6.10.1 As per the Open Access Regulations notified by the Commission, the wheeling charges for FY 2012-13 are Rs. 452540/MW/Month.

6.10.2 The energy requirement at the distribution periphery as per Table 4.5 of this Tariff Order for FY 2012-13 is 41515 MUs. On this basis, the wheeling charges for use of the distribution network are determined as 124 paise per unit.

As per clause 25(5) of PSERC (Open Access) Regulations, 2011 (amended on 4<sup>th</sup> May, 2012), short-term Open Access customers availing supply at 220 kV, 132 kV, 66 kV, 33 kV or 11 kV, in addition to transmission charges determined separately in Tariff Order for PSTCL for FY 2012-13, shall also be liable to pay wheeling charges (i.e. of 124 paise / unit) determined by the Commission as per Tariff Order applicable for the year. As per Order of the Commission dated July 11, 2012, the revised wheeling charges to short-term Open Access customers will be applicable with effect from May 07, 2012.

Wheeling charges for wheeling of NRSE power shall be governed as per provisions made in the PSERC (Open Access) Regulations, 2011.

For Long-term and Medium-term OA customers availing supply at 220 kV, 132 kV, 66 kV, 33 kV or 11 kV these charges shall be Rs.452540/MW/Month of the contracted capacity.

6.10.3 Wheeling charges payable by Open Access customers shall be as under:

Period	Voltage Level	Wheeling charges (paise/unit)
From 1.4.2012 to 6.5.2012	220 kV & 132 kV	0.0
	66 kV & 33 kV	18.6
	11 kV	37.2
From 7.5.2012 to 31.3.2013	220 kV & 132 kV	124.0
	66 kV & 33 kV	
	11 kV	

6.10.4 As per clause 30(2) of PSERC (Open Access) Regulations, 2011, the Open Access customers shall bear Transmission & Distribution losses as under:

- (i) OA customers at 132/220 kV                      2.5%
- (ii) OA customers at 66/33 kV                      15% of distribution losses (15.90%),  
which works out to 2.39%, in addition to  
Transmission Loss of 2.5%.
- (iii) OA customers at 11 kV                      40% of distribution losses (15.90%),  
which works out to 6.36%, in addition to  
Transmission Loss of 2.5%.

6.10.5 As per clause 26(2) of PSERC (Open Access) Regulations, 2011, the cross subsidy surcharge (paise / unit) for various categories of consumers, for FY 2012-13, shall be as under:

Large supply	-	88
Domestic supply	-	85
Non-Residential supply	-	107
Bulk supply	-	63
Railway traction	-	107

6.10.6 In addition, other charges such as additional surcharge, operation charges, UI charges, reactive energy charges, shall be levied as per the Open Access Regulations / Tariff Regulations notified by the Commission.

### 6.11 Cost of Supply and Cross Subsidy

The Hon'ble Appellate Tribunal for Electricity while delivering its judgment on January 11, 2012, in various Appeals has directed the Commission to determine the category-wise Cost of Supply. PSPCL, in the ARR Petition for FY 2012-13, has submitted that it has engaged an agency (TERI) on September 23, 2010 to conduct cost of supply study and TERI has submitted the draft report on methodology to arrive at cost of service which is to be finalized by the committee constituted by PSPCL for this purpose. **The Commission directs PSPCL to expedite finalization of the report and submit the findings of the study to the Commission at the earliest.** Thereafter, the Commission will consider and decide the issue.

### 6.12 Fuel Cost Adjustment (FCA)

PSPCL has submitted Petition No. 9 of 2012 for fuel cost adjustment for the 3<sup>rd</sup> quarter of FY 2011-12. The total of Rs. 128.25 crore claimed by PSPCL includes Rs. 65.88 crore as change in fuel cost of its own thermal stations and Rs. 62.37 crore as change in power purchase cost.

The Commission, in para 4.7 of the Tariff Order for FY 2011-12, had decided as under:

*“Fuel Cost Adjustment (FCA)*

*Any change in the fuel cost from the level approved by the Commission is to be passed on to the consumers as FCA. Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005 contain the FCA formula according to which any change in fuel cost would be passed on to the consumers with prior approval of the Commission”.*

In view of the above, the Commission worked out the Fuel cost adjustment for the 3<sup>rd</sup> quarter of FY 2011-12. To arrive at the change in fuel cost from the level approved by the Commission for own thermal stations of PSPCL, the fuel cost for actual generation during 3<sup>rd</sup> quarter has been worked out both with the parameters including prices and gross calorific value of coal and oil as contained in the Review of FY 2011-12 in Chapter 3 of this Order as well as with actual prices and gross calorific value of coal and oil as intimated by PSPCL in the petition, but keeping performance parameters as approved by the Commission in its Tariff Order for FY 2011-12. The fuel cost for the 3<sup>rd</sup> quarter has been worked out with parameters including price and gross calorific value of coal and oil as contained in the Review of FY 2011-12 in

Chapter-3 of this Order, instead of that as approved in the Tariff Order for FY 2011-12, since effect of these values have been considered for calculating the fuel cost for the second half of FY 2011-12 in the Review of FY 2011-12 in Chapter 3 of this Order. Accordingly, the fuel cost adjustment amount has been worked out as Rs. 7.64 (960.38-952.74) crore.

To arrive at the change in power purchase cost due to change in fuel cost alone for Central Generating Stations (as mentioned in FCA formula), the change in variable cost of NTPC and NPC stations for which the Commission has approved variable cost have been considered. The variable cost of NTPC and NPC stations for the actual quantum of power purchase during the quarter has been worked out both with the variable per unit cost as contained in the Review of FY 2011-12 in Chapter-3 of this Order, wherein power purchase cost from Central Generating Stations (including NTPC and NPC stations in respect of which revised cost has been sought in the petition ) and other sources for 2<sup>nd</sup> half of FY 2011-12 (3<sup>rd</sup> and 4<sup>th</sup> quarters of FY 2011-12) has been approved on proportionate basis on the basis of costs (including variable cost for NTPC and NPC stations) for 1<sup>st</sup> half of FY 2011-12, as well as with variable per unit cost as intimated by PSPCL for the 3<sup>rd</sup> quarter. Accordingly, the fuel cost adjustment amount on this account has been worked out as Rs. 25.58 crore. Thus, the total fuel cost adjustment amount during the 3<sup>rd</sup> quarter of FY 2011-12 works out to Rs. 33.22 (7.64+25.58) crore.

With the fuel cost adjustment amount of Rs. 33.22 crore, the FCA for the 3<sup>rd</sup> quarter of FY 2011-12 applicable w.e.f. April 01, 2012 onwards works out as under:

Metered category consumers  $FCA_M = 3.98$  paise/unit  
Rounded to 4 paise/unit.

Unmetered category (AP) consumers  $FCA_{HP} = \text{Rs. } 3.18/\text{kW}/\text{Month}$   
i.e.  $\text{Rs. } 2.37/\text{BHP}/\text{Month}$   
Rounded to  $\text{Rs. } 2/\text{BHP}/\text{Month}$

**Thus, the Commission decides that the FCA @ 4 paise/unit for metered categories and Rs. 2/BHP/Month for unmetered category (AP) shall also be leviable w.e.f. 01.04.2012 in addition to the tariff determined in Table 6.1.**

As per present policy of GoP, supply of power to AP consumers and 200 units per month to SC DS and Non-SC BPL DS consumers is given free of cost and PSPCL is compensated for the loss on this account by GoP. With the enforcement of fuel cost

adjustment w.e.f. 1.4.2012, the additional subsidy on this account will also become payable by GoP.

### **6.13 Payment Security Mechanism for Transmission Charges of PSTCL**

6.13.1 PSTCL, in para 4.18 of its ARR for FY 2012-13, has requested for creation of Payment Security Mechanism to ensure timely recovery of monthly transmission charges from PSPCL. It has proposed that PSPCL should open a monthly irrevocable revolving Letter of Credit (LC) for an amount equivalent to its monthly transmission charges. Further it has submitted that the LC be opened in a bank mutually agreed upon between PSPCL and PSTCL. PSTCL shall also have a default escrow mechanism with PSPCL for recovery of its monthly transmission charges within the due date and shall have first charge over the receivables of specified circle/area which shall flow into the escrow account. It has also requested that the LC shall be opened within 15 days from the date of the issue of the Tariff Order by the Commission.

6.13.2 In this regard, Central Electricity Regulatory Commission has notified CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010. As per clause 11.2 of these Regulations:

*“The bill for the use of the ISTS shall be raised by the CTU on the concerned Designated ISTS Customers. The SEB/STU may recover the transmission charges for the use of the ISTS from the distribution companies, generators and bulk customers connected to the transmission system owned by the SEB/STU/Intra-state Transmission Licensee in a manner approved by the Appropriate Commission.”*

Further, the definition of Designated ISTS Customers as per the above said Regulations is as under:

*“Designated ISTS Customers (‘DIC’s) mean the users of any segments/elements of the ISTS and shall include all generators, state transmission utilities, SEBs or load serving entities directly connected to the ISTS including Bulk Customer and any other entity/person.”*

6.13.3 Further, as per clause 15(1)(d) of the above said Regulations, the CTU (PGCIL) has drafted a procedure for billing and collection of charges by the PGCIL on behalf of

Transmission Licensee (Central) and redistribution of the same (including amounts over or under collected), which is yet to be approved by CERC.

6.13.4 The Commission had, in para 6.14.3 of the Tariff Order (PSPCL) of FY 2011-12, in this regard, directed PSPCL to make back to back arrangements with PSTCL for payment of Inter-State transmission charges as per the approved procedure by CERC, with effect from the commencement of applicability of the above mentioned Regulations. Further, any rebate availed or surcharge paid by PSTCL while paying Inter-State transmission charges to PGCIL under such back to back arrangement shall be passed on to PSPCL. This issue was also raised before the Hon'ble APTEL in Appeal No. 76 of 2011 by PSTCL. The Hon'ble APTEL in its judgment dated March 2, 2012 has held that the Commission in the impugned order (Tariff Order of FY 2011-12) has already directed the Appellant to make back to back arrangement with PSPCL to collect Inter-State transmission charges as per the CERC Regulations. Hon'ble APTEL has also observed that PSPCL has also confirmed that it will open LC for intra-state transmission charges payable to the Appellant.

Further, PSPCL while conveying its comments on ARR filing of PSTCL, vide its letter No. 384 dated March 15, 2012, has communicated its concurrence to provide LC to PSTCL towards transmission charges.

**In the light of the above, the Commission directs PSPCL to make back-to-back arrangements with PSTCL for payment of Inter-State Transmission Charges to PSTCL as per approved procedure of CERC.**

**Further, the Commission directs PSPCL to provide an irrevocable and revolving LC for Intra-State Transmission Charges as per PSPCL letter dated March 15, 2012.**

#### **6.14 Date of Effect**

The Commission notes that the ARR of PSPCL for FY 2012-13 covers the complete financial year. The recovery of tariff, therefore, has to be such that the total revenue requirement of PSPCL for FY 2012-13 is recovered in this period.

The Commission further notes that the fuel cost adjustment for the 3<sup>rd</sup> quarter of FY 2011-12 as determined in para 6.12 is also leviable as FCA with effect from April 01, 2012.



The Commission, therefore, decides to make the revised tariffs applicable from April 01, 2012 and the tariff structure determined above (along with FCA as determined from time to time) shall remain operative till March 31, 2013. The Commission further decides that the arrears on account of tariff revision and FCA with effect from April 01, 2012 shall be recovered by PSPCL in suitable installments.

This Order is signed and issued by the Punjab State Electricity Regulatory Commission on this day, the 16<sup>th</sup> day of July, 2012.

Date: July 16, 2012

Place: CHANDIGARH

Sd/-	Sd/-	Sd/-
_____ (GURINDERJIT SINGH) MEMBER	_____ (VIRINDER SINGH) MEMBER	_____ (ROMILA DUBEY) CHAIRPERSON

Certified

Sd/-  
Secretary

Punjab State Electricity Regulatory Commission  
Chandigarh.

**ANNEXURE - I**

**List of Objectors**

<b>Objection No.</b>	<b>Name and address of the Objector</b>
1	Sri Raghbir Singh Saini, H. No. 4424 Narindra colony, Ward No 2, Rupnagar.
2	Shri Amar Singh (Consultant), Mandi Gobindgarh Induction Furnace Association (Regd), C/o M/s Gain Castings Ltd, New Grain Market, Mandi Godindgarh.
3	Shri Angad Singh, Col. (Retd.), General Secretary, Consumer protection and Awareness Council (Regd), Regd office, H. No 831, Phase 3B – 1, Sector 60, SAS Nagar.
4	Shri Harinder Puri (Secretary), Steel Furnace Association of India (Punjab Chapter), C/o Upper India Steel Mfg & Engg. Co Ltd , Dhandari Industrial Focal point, Ludhiana – 141010
5	Shri Balbir Singh Kharbanda (General Secretary) And Shri Jaswant Singh Birdi (President) , M/s Cycle Trade Union (Regd), Kharbanda Complex, Gill Road, Miller Ganj, Ludhiana – 141003
6	Shri RK Atoliyo, Chief Electrical Distribution Engineer, Northern Railway, H.Q Office Baroda House, New Delhi.
7	Shri Gurnek Singh Brar, 1- Ranjit Bagh, Opp Modi Mandir, Patiala- 147001
8	Er. Bhupinder Singh (General Secretary), PSEB Engineer Association, 45-Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.
9	Shri Dalip Sharma (Regional Director), PHD Chamber of Commerce and Industry, PHD House, Sector 31 – A, Chandigarh – 160031
10	Shri Sandeep Jain, Partner, Ludhiana Steel Rolling Mills, G.T. Road, Opp. Dhandari Railway Station, Dhandari Kalan, Ludhiana – 141010
11	Director, Avani Textiles Limited, Sibian Road, Sangrur (Punjab).
12	Shri Sandeep Jain (Director), Antarctic Industries Ltd, C-44/47, Focal Point Ludhiana – 141010
13 (1)	M/s Mawana Sugars Ltd, Formerly Known as Siel Limited, 5 <sup>th</sup> Floor Kirti Mahal, 19, Rajendra Place, New Delhi – 110125
13 (2)	Shri Surinder Karnail, AGM Legal, Siel Chemical Complex, Rajpura Unit of Mawana Sugars Ltd, Village – Khadauli / Sardargarh , P. B No 52, Rajpura Dist Patiala 140401
14	Er Sukhninder Singh, 19769, Street 12, Ajit Road, Bathinda.
15	President, Rice Millers Association, Bathinda.
16	Mahashakti Energy Ltd, Corporate Office, A8, New Focal Point, Dabwali Road, Bathinda – 151001
17	Power Engineer Associates Office: 19707, Street No 10, Ajit Road, Bathinda – 151001
18	Shri Pishora Singh, Punjab President, Bharti Kisan union (S), Punjab.

19	Shri Gurnek Singh Brar,1- Ranjit Bagh, Opp. Modi Mandir, Patiala – 147001
20	Shri Kuldip Singh Grewal (Advisor), Bharti Kisan union (Sidhupur), Near Bus Stand, Gharuan – 140413, Dist – Mohali (Pb).
21	Shri Bhagwan Bansal (Member) Punjab Cotton Factories & Ginner's Association (Regd), CII, Northern Region (Chandigarh), Shop No 109, New Grain Market, Muktsar – 152026 (Pb).
22	The Bathinda Cotton Factories Association C/o Aggarwal Cotton Company, Gurusar Sehne Wala Village,Dist: Bathinda.
23	Shri Amarvir Singh (Secretary), Hotel & Restaurant Association of Punjab, Office: Hotel Natraj, Clock Tower Road, Ludhiana – 141008
24	Vice Chairman, Lovely International Trust, Jalandhar – Delhi, G.T Road (NH-1) Phagwara , Punjab – 144402
25	Registrar, Punjab Technical University, Jalandhar, Jalandhar – Kapurthala Highway, Near Science City, Kapurthala – 144601
26	Shri Deepak Mangal, Energy Controller, Indus Towers Ltd, Tower F, 3 <sup>rd</sup> Floor, DLF IT Park, Chandigarh – 160101 (Punjab).
27	Shri Gurnek Singh Brar, 1 Ranjit Bagh, Opp Moti Mandir, Patiala – 147001
28	Shri Joginder Kumar (President), The Ludhiana Electroplaters Association, E-312, Focal Point, Ludhiana – 141010
29	Shri Gursharan Singh (President), Federation of Jalandhar Industrial and Traders Associations, 21 - Dada Colony, Industrial Area, Jalandhar-144004.
30	Government of Punjab (Department of Power).

**Objection No. 1: Shri Raghbir Singh Saini, Rupnagar**

**Issue No. 1: The loss is increasing every year on account of adopting policies under pressure from State Government as below:**

- i) Releasing tube well connections since 2008 onwards under OYT, without any addition in generation capacity since 2008 onwards.
- ii) Purchasing electricity during paddy season at higher rate and supplying to AP consumers at subsidized rate.
- iii) PSPCL's failure to disconnect supply of AP sector, in case of default of advance payment from Government.
- iv) The tariff for FY 2012 –13 should be in conformity with guidelines for tariff revision.
- v) Power cuts on DS/NRS and industry consumers in the State during paddy season, which results in loss of revenue.

**Response of PSPCL**

- i) Although there has not been any capacity addition in the State sector, PSPCL is able to meet its power requirements partially, through own generation and partially, through allocation from central generating stations. The PSPCL also planned capacity addition in the State, the details of which are given in the Annexure – II A.
- ii) The power is purchased during paddy season to meet the demand of all the consumers viz, general, industrial as well as agriculture consumers.
- iii) As per the current policy of GOP, the supply to agriculture consumers is free. The disconnection of the AP consumers is not possible since the default is not on part of the consumers but on the part of the State government.
- iv) Tariff fixation is being done by the Commission.
- v) With Commissioning of one unit of 600 MWs of Talwandi Sabo Thermal Power plant in 2012-13 and increase in share of Punjab from the upcoming power plants from central sector during 2012-13, there will be adequate power which will help in reducing power cuts on general consumers as well as on industry.

**View of the Commission**

The Commission agrees with the response of the PSPCL. PSPCL is able to manage power supply to all consumers by meeting the demand from own generation, share from BBMB/Central Generating Stations and purchase of power from other sources except for a short time in summer when regulatory measures are adopted. The free power to agricultural consumers is compensated by the State Government by giving subsidy.

**Objection No. 2: Mandi Gobindgarh Induction furnace Association**

**Issue No. 1: Two Part Tariff**

- (i) The proposal of introduction of two part tariff by the erstwhile PSEB during the year 2004-05 was disallowed by the Commission on the ground that relevant data and basis was not put forth. Till now, the relevant data is not provided nor any research has been done for getting the same implemented.
- (ii) The utilization factor has no relevance to the expenditure and cost of the service. The grounds to introduce the two part tariff are arbitrary, unjust and unfair trade practice on the part of the corporation.
- (iii) There is no mathematical or logical base to impose the fixed charges. It can be imposed only if un-utilized capacity of generation and transmission is established before the Commission.
- (iv) It was rejected by the Commission during the year 2008-09.
- (v) The term revenue neutrality which is the key assumption is ambiguous and not clear as to how it is relevant for the introduction of two part tariff.
- (vi) The fixed charges are replacing MMC and services charges of the various categories of the consumers as per the assumption. These are the existing fixed charges and they have considered as emerged in the fixed charges. While MMC is adjusted

- against consumption and the fixed charges are in addition to the variable tariff charges, not in the interest of the consumers facing regularly scheduled power cuts.
- (vii) "Calculation of utilization factor" of the key assumptions, has no bearing on the fixed and variable expenditures of the utility. This assumption is absolutely wrong, and unjustified.
  - (viii) There is no reason given, why the public lighting and agricultural consumers are exempted from applicability of the two part tariff.
  - (ix) The fixed charges should be determined based on the fixed costs of utility.
  - (x) The proposal is, higher is the sale, higher the rate. This is against growth of the industry.
  - (xi) The approach to two part tariff should be on commercial foundation – meaning that greater the consumption, lesser should be the average rate, which is not the case in the tariff proposal submitted.
  - (xii) The tariff proposal is silent on the charges, if the consumption is zero.

#### **Response of PSPCL**

- (i) PSPCL had appointed M/s. Deloitte Touche Tohmatsu India (P) Ltd. as its consultant for undertaking a detailed study for introduction of two part tariff in the State. The relevant data relating to consumption, connected load / contract demand, revenue from sale of power and MMC etc. was provided to the consultant who had undertaken the study based on the same. The outcome of the study was presented to the Board of the PSPCL and specific recommendations were given by the consultants. Based on these recommendations the proposal for two-part tariff along with ARR and tariff petition was submitted for the perusal and approval of the same. An in-depth study for the two-part tariff proposal was undertaken and the same was also compared with neighbouring / other states and in the light of the same it is requested that the proposal be accepted by the Commission.
- (ii) The proposal for two-part tariff submitted by it as part of the ARR and tariff petition is only a breakup of the existing tariff applicable to a particular category into fixed and variable components. The average rate applicable in the two part tariff remains close to the currently applicable tariff. In a pure two-part tariff where there is a fixed charge, and the energy charge is applicable to all the units consumed by a consumer, the average per unit rate of a consumer goes down as his consumption increases. However this kind of tariff proposal would lead to different per unit rates applicable to the consumers within the same category and would lead to discrimination between consumers. Hence in order to avoid such discrimination and to bring about parity and fairness in the applicable tariff structure as submitted in the two-part tariff proposal was worked out. It should be noted that in respect of all categories of consumers, irrespective of the average utilization factor, per unit average rate would remain close to the currently applicable tariff (except in case of consumers who are currently being billed on MMC). Moreover, because there is not much variation of applicable per unit average rate in the proposed two-part tariff proposal from the current tariff rate, the condition of revenue neutrality is inherently built-in in the tariff structure.

In light of the above facts, the PSPCL prays the Commission to accept the proposal for two-part tariff submitted by PSPCL keeping in view the current power deficit situation in the State and financial health of the utility.

- (iii) The fixed and variable components at different utilization factors have been determined so as to ensure that irrespective of the utilization factor the average per unit rate remains close to the existing tariff.
- (iv) Same as point (i) above.
- (v) As explained above, the study for introduction of two-part tariff was undertaken so as to ensure a revenue neutral situation for PSPCL, meaning to say that the PSPCL neither benefits nor loses on account of introduction of two-part tariff. Accordingly, the PSPCL has proposed the two-part tariff structure which ensures that the average tariff in two-part structure is close to the current tariff, thereby ensuring a revenue

neutral situation. Essentially, the proposal of two-part tariff structure is only a break-up of the existing tariff into fixed and variable components.

- (vi) Covered in Para – (v) above.
- (vii) The fixed costs of PSPCL for FY 2009-10 as per the values approved by the Commission, account for roughly 37% of the total costs. If the fixed charges are recovered in proportion to the fixed costs of PSPCL, the rates for fixed charges would be very high thereby adversely impacting the consumers. Hence in the interest of the consumers, PSPCL has proposed lower fixed charges in its two-part tariff proposal to avoid the exorbitantly high fixed rates as compared to existing tariff keeping in view Two Part Tariff structure of other similar States.
- (viii) At present agriculture consumers are not metered 100% and, with the progress in metering, the Utility will consider AP consumers as well under the two part tariff regime.
- (ix) As explained in point (vii) above.
- (x) A uniform approach has been used while calculating the proposed two part tariff for each consumer category.
- (xi) As explained in point (vii) above.
- (xii) In case the consumption of a consumer is zero, only the fixed charges shall be recoverable from him. It is to be noted that the proposed fixed charges for all the categories are far less as compared to the current MMC and hence consumers having zero (or very small) consumption stand to benefit significantly through introduction of two-part tariff.

#### **View of the Commission**

PSPCL has again submitted the Two Part Tariff proposal in the ARR and Tariff Petition for FY 2012-13. The Commission has examined the proposal. In view of objections raised by a number of consumers and consumer organizations on the proposal of PSPCL, the Commission has directed PSPCL to resubmit the proposal addressing the objections raised by various consumers. The Commission has, therefore, decided not to introduce two part tariff during the FY 2012-13.

#### **Issue No. 2: Cross subsidy**

- (i) The total cross-subsidy is expected to be brought to the level of 20%. The commercial element of cross-subsidy is to be eliminated within ten years from the year 2005-06 as per Regulations. The pattern to achieve this object was to reduce the cross subsidy every year at the rate of 10% of the percentage cross-subsidy from the year 2005-06. Thus the target for the year 2011-12 is 60% reduction from the level of 2005-06.
- (ii) Based on the above, the projected cross-subsidy element for this year tariff shall be 8.64% for large supply.
- (iii) The adoption of cross subsidy at the level of 8.64% shall be in the interest of the adoption of the Regulations and in the interest of the consumers and hence the same may be considered at 9% for FY 2012-13 for LS consumers.
- (iv) A study of actual cost of supply to the LS consumer of HT or EHT supply may be undertaken to identify the element of technical cross subsidy.

#### **Response of PSPCL**

Clause 8.3 of Tariff Policy states as under:

##### ***"8.3 Tariff design: Linkage of tariffs to cost of service***

*2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within  $\pm 20$  % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy...."*

As given in the Tariff Policy, there has to be reduction in cross-subsidy but gradually, keeping the interest of Utility in view.

The component wise breakup of cross-subsidy into technical cross- subsidy and commercial cross subsidy lacks clarity, as even the Tariff policy stipulates only about cross-subsidy as a

whole and not as components of cross-subsidy as referred by the objector. However as regards the element of cross subsidy, the same has come down progressively over the years and for the year 2010-11 it was 14.4% which is within the limits specified by the tariff policy. Hence in light of the same it is requested that while determining the tariff in conjunction with the cross subsidy factor, the Hon'ble Commission has also to keep in mind the interests of PSPCL.

#### **View of the Commission**

The Commission has in its Regulations already specified the gradual reduction of cross subsidy, though the total elimination of the same is no longer envisaged in the Electricity Act 2003. A gradual reduction in cross subsidy in percentage terms has been effected in the previous years. The Commission has reduced the cross subsidy for various categories of consumers over the years and is now within  $\pm$  20% of average cost of supply, which meets the requirement of the Act/National Tariff Policy.

#### **Issue No3: T&D losses**

The reduction of T&D losses to the proposed level of 17% be accepted for determination of ARR of PSPCL.

#### **Response of PSPCL**

PSPCL has noted the appreciation of the objector and also ensures that similar performance will be continued in the future.

#### **View of the Commission**

The objection and the response are noted. However the Commission has approved T & D losses (PSPCL & PSTCL) at 18% as per trajectory approved in 2010-11.

#### **Issue No. 4: Agriculture consumption**

- (i) The assessment of agriculture consumption was done by the Commission in the year 2002-03 and it has remained at the same level even though 9 years have elapsed since then. The study carried out by Punjab Agriculture University, Ludhiana was not accepted by the Commission and the survey carried out by the utility was not reliable as the same had been carried out on only 5% of the total AP consumers.
- (ii) That M/s ABPS Infrastructure Pvt. Ltd was awarded the work for the agriculture consumption study and the study was conducted on much lesser no. of consumers as against the total no. of consumers. There was significant difference between the draft report submitted by the agency and its final report. It is stated that the report was not fair to the subsidizing category of consumers and that it is not yet clear whether the report was adopted or not.
- (iii) The outcome of the survey conducted by the utility was rejected mainly because the sample size was small and the sample size of the meters under survey has now reached a satisfactory level.
- (iv) The consumption in AP category is dependent primarily on the supply hours and the same should be properly declared by the utility and counterchecked by the Commission from the sample meters.
- (v) The figures of AP consumption as provided by PSPCL in the ARR and tariff petition are acceptable and the same may be considered while determining the ARR.

#### **Response of PSPCL**

- (i) PSPCL is providing reliable data on the basis of 107706 Nos. AP sample meters which constitute 9.40% of the total AP connections.
- (ii) On the report of M/s ABPS Infrastructure Pvt. Ltd, PSERC imposed a cut of 11.25%, 10.20% and 7.8% on the actual consumption calculated by PSEB/PSPCL for the FY 2007-2008, 2008-09 and 2009-2010 respectively.
- (iii) In Compliance of PSERC's directive, PSPCL has increased the AP sample meter size from 5% to 9.40% ending November, 2011.
- (iv) PSPCL is supplying stipulated hours of supply to AP motors regularly since 11/2010. Any abnormal consumption recorded by particular sample meter on the basis of supply hours, sanctioned load and motor efficiency etc. is excluded from the data for calculating

AP factor.

- (v) PSPCL agrees to the views of the objector and requests the Commission to accept the AP consumption projected by the PSPCL for the current year as well as the ensuing year.

#### **View of the Commission**

Refer to Para Nos. 3.2.2 and 4.1.3 of the Tariff Order. The Commission has arrived at the agricultural consumption based on sample metering etc. The consumption arrived at is fairly reasonable.

#### **Issue No. 5: Energy meters installation directives**

- (i) The Commission had already directed the PSPCL to install meters and PSPCL has been conveying its difficulty for installation of the meters and reading the consumption periodically.
- (ii) It is to refer to the submission made by PSPCL against Directive No.6 in its petition and stated that PSPCL intends to install AMR meters on 12.5 lac AP consumers. The details relating to installation cost of AMR meters and also of the cost involved in reading the AMR meters to establish the economic viability of the project has to be informed.
- (iii) A more economical approach for AP metering is as provided in the memo No 3885/88/DD/SR/29 dated 23-8-2011 initiated by the CMD of the utility to the Secretary Power. However PSPCL is adopting AMR metering instead. The copy of reply from Secretary Power / Government of Punjab is not provided in the petition.
- (iv) It will not be feasible to maintain and read all the AMR meters on annual basis without incurring a recurring cost.
- (v) Despite that a decade has passed but still a satisfactory level of metering of AP consumers has not been reached.

#### **Response of PSPCL**

- (i) As already explained in the ARR petition, all the agriculture consumers are spread across a large area in the entire State. Considering the limited manpower and severe cash crunch being faced by PSPCL, it is not possible to meter all these consumers and also to read them on a regular basis. Hence the AMR project is being evaluated to assess its relevance with regard to Punjab. However, evaluation of the AMR project would take time and hence for the immediate future, PSPCL has sought an exemption from the Commission for 100% metering in AP category. It is requested that the Commission may provide sufficient time for the same.
- (ii) As already discussed in the ARR petition in detail, the AMR project is still under the planning stage. As a first step, a pilot project at Mohali has been initiated by providing 50 meters and the same shall be progressively extended to other consumers. Once the pilot project is completed, only then PSPCL will be in a position to provide details relating to the expected costs associated with annual maintenance and reading of AMR meters. Subject to availability of funds, this pilot project shall be extended throughout the State in a phased manner.
- (iii) As already stated, at present PSPCL is facing a severe cash crunch and hence it is not in a position to spend such huge amounts on metering of AP consumers. PSPCL submits that it has not approved an investment of Rs.700 crores on the AMR project as appears to be the contention of the objector. The AMR project is only being evaluated and will be implemented only, if found financially viable.
- (iv) As stated above, it cannot be ascertained how much will be the maintenance and reading cost of the AMR system. The same can be estimated based on the outcome of the implemented project.
- (v) It is not clear whether the objector is satisfied with the level of metering in AP category or not. In the Issue 4 above, the objector has expressed his approval with the level of AP metering whereas in the current issue the objector has expressed his concern. Nevertheless, as already stated, PSPCL has achieved 9.40% metering in AP consumers and shall also submit its metering plan so as to convert all agriculture consumers into metered connections and the same is expected to be achieved in the near future.



### **View of the Commission**

The Electricity Act, 2003 provides for metering of all electric connections and accordingly, the Commission has directed PSPCL to ensure that the provisions of the Act are complied with. A directive to implement AMR along with LT capacitor installation at AP consumer end has also been given to PSPCL.

### **Issue No. 6: Energy balance**

While 6.9% growth in metered sales and 8.45% growth in AP consumption projected, the own generation increase is almost stagnant. High dependence is placed on power purchase at higher rates. This situation is causing higher power cuts for industry. So, it is suggested that the balance of load and availability of the power may be equalized to specifically keep the power cuts at a reasonable level.

### **Response of PSPCL**

Regarding increase of generation from Thermal Power Plants for the year 2012-13, it is submitted that as per Power purchase Agreement signed for 3X660 (1980 MWs) Talwandi Sabo Thermal Power Project, the scheduled commercial operation dates for the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> units are 31.08.2012, 31.12.2012 and 30.04.2013, respectively. However the developer has intimated that actual scheduled commercial operation dates will be 08.11.2012, 08.02.2013 and 10.06.2013, respectively. As per agreement, 100% power generated from this plant is to be given to State of Punjab.

Also, the power will be available from 4000 MWs Mundra UMPP in which Punjab's total share is 475 MWs. The COD of 1<sup>st</sup> unit is forecasted in 2/2012, 2<sup>nd</sup> unit in 5/2012, 3<sup>rd</sup> Unit in 9/2012, 4<sup>th</sup> Unit in 11/2012 and 5<sup>th</sup> unit in 2/2013.

### **View of the Commission**

PSPCL is making efforts to obtain power from private producers as mentioned in their response. The supply from these two sources and also additional power from central generating stations during FY 2012-13 / FY 2013-14 is expected to meet the demand to a large extent.

### **Issue No. 7: Power purchase**

The main reason for increased power purchase by PSPCL is the sale to agriculture consumers in the Kharif season. This power is sold to the AP at relatively lower rates. The power supply to a category should be increased only if the sale to this category is able to make up for the increased power purchase costs. Instead of supplying power to AP consumers, the increase in sale should be in industrial consumers which would boost the revenues of PSPCL and would impact the profitability of the corporation.

### **Response of PSPCL**

Considering the social responsibility of PSPCL to supply power to all consumer categories, it is not possible to discriminate between the consumer categories. Hence, although PSPCL agrees that in Kharif season power supply to agriculture consumers is increased by a small degree, these consumers cannot be denied this facility as Punjab is a chiefly agricultural State and the agriculture sector is the backbone of the economy. Denying power to agriculture consumers during their peak requirement is bound to adversely impact the economic condition of the State as a whole. However, as per details provided above, PSPCL is making every effort to increase power availability in the State in order to reduce the power cuts currently being imposed on the different consumer categories as a result of power shortage. With the commissioning (as per current commissioning schedule) of 4 No upcoming Thermal Plants, the expected power addition in the State is as under:-

2012-13	1320 MWs
2013-14	1900 MWs
2014-15	700 MWs
2015-16	660 MWs

### **View of the Commission**

Agriculture is an important sector and it substantially contributes to the economy of the state. PSPCL is trying its best to procure power from other sources to meet the demand of

agricultural sector and also other consumer categories. The additional capacity expected during the coming years will improve the position to a large extent when the demand of all consumers may be met.

#### **Issue No. 8: Interest and finance charges**

- i & ii. The Board had contained interest costs amounting to Rs. 8.57 crore in the year 2007-08 by consistent efforts by reducing the same from the year 2002-03 onwards. However interest cost has shown an increasing trend since 2009-10 and the same has registered consistent increase from Rs. 1612.54 crore in 2009-10, Rs. 1923.01 crore in 2010-11, Rs. 2300.09 crore in 2011-12 and is projected at Rs. 2571.68 crore at 2012-13. The growing interest cost is a concern and the same needs to be checked.
- iii. The gap in the ARR is also increasing every year and the same can be checked by not allowing any sale below the average cost of supply to consumers receiving subsidy.
- iv. The resultant burden of interest due to delay in payment of subsidy from GOP should not be passed on to the consumers.

#### **Response of PSPCL**

- i & ii. Several parts of the network and other infrastructure of PSPCL is ageing and in poor condition. In order to ensure that the infrastructure of the utility is in a good condition, it is necessary that capital works are carried out on a continuous basis. Over the last few years, PSPCL has increased its capital expenditure to improve its infrastructure. Moreover, as a result of APDRP and RGGVY initiatives from the State Government, several lac of consumers have been added on to the network of PSPCL. Several industries have also come up in the State. This has also led to need for expansion of generation facilities and also the network infrastructure. Hence PSPCL was forced to make capital investments in order to meet the increased demand. This is the main reason for the increased borrowings of PSPCL and as a consequence, there is increase in the interest and finance charges. However, it is to be noted that PSPCL has provided its capital investment plans to the Commission on a regular basis with its ARR & tariff petition and has sought its due approval. Even in the current tariff petition a detailed capital investment plan is provided and the interest costs relating the same are to be provided.

In light of the above facts, it is prayed that the Commission may approve the interest & finance as claimed by PSPCL.

- iii. The gap in ARR is arrived at based on the applicable tariff regulations. As regards the sale of electricity at approved tariff rate, the same is the prerogative of the Commission to fix the tariff.
- iv. PSPCL submits that untimely payment of subsidy and adjustment of subsidy against past loans/dues by GOP had been resulting in severe financial implications on PSPCL. Late/in-adequate payment of subsidy will lead to cash crunch at the utility level and it has to borrow short term loan which ultimately ends up in paying huge interest charges on these loans. In principle, the cost must not be borne by consumer and PSPCL would like to request Commission to apprise this position to the GOP on subsidy issues so as to ensure the financial viability of PSPCL as well to protect consumers interest.

#### **View of the Commission**

Interest is allowed to PSPCL on approved borrowings in line with PSERC Regulations. Refer paras 3.14 and 4.13 of the Tariff Order. Subsidy on account of free supply of power is being paid by and large by the Government of Punjab. Interest on delayed payment of subsidy is also being paid by the GoP. Refer para 3.15 of the Tariff Order.

#### **Issue No. 9: Carrying cost of gaps**

The carrying cost of gap is the result of the policies of the owners of PSPCL and the same may be borne by the owners of PSPCL and not by consumers.

#### **Response of PSPCL**

PSPCL is seeking recovery of carrying cost of gaps in order to avoid a tariff shock to consumers. Commission had allowed a revenue gap to PSPCL and created Regulatory

Assets in its previous Tariff Order. As per the applicable regulations, the same is to be recovered over a period of three years. The carrying cost is also allowed as per the tariff regulations and is a common practice being followed in all states across the country. In light of the same, it is prayed to the Commission to allow the carrying cost of gaps as claimed by PSPCL.

#### **View of the Commission**

Carrying cost is allowed on the Revenue gap as per Regulations.

#### **Issue No. 10: Aggregate Revenue Requirement**

- (i) The projected short fall of the revenue for the year FY 2012-13 is Rs.3960.73 crore as reflected in the Table 68 (page 85). The total gap at the existing tariff is projected at Rs. 8983.97 crore.
- (ii) The financial health of the utility is a cause of concern for the consumers as well looking at increasing trend in gap in ARR. The industrial consumers are already paying higher tariff as compared to average cost of supply and that the technical cross subsidy is not being taken into consideration.
- (iii) The outstanding amount of subsidy from GOP and overdue payments from departments need to be recovered through special drives.

#### **Response of PSPCL**

- (i) Objector has merely reproduced data from ARR petition and no specific reply sought.
- (ii) The increase in gap is because of many reasons beyond the control of PSPCL such as huge disallowances made by the Commission, approval of expenses on normative basis rather than actual basis, untimely payment of subsidy and adjustment of loan/ interests/past dues out of subsidy amount by GOP etc. PSPCL agrees with the view of objector that increase in gap shows deterioration in the financial viability of the Utility. The National tariff policy has stated to bring the cross subsidy to the level of  $\pm 20\%$  of the cost of supply. PSPCL has already kicked off a study to arrive at CoS for different categories of consumers and is actively working towards its finalization at an early date.
- iii. The PSPCL is making every effort to recover dues outstanding against government connections and the details of the same have already been provided in the main petition as part of the directives. As regards the recovery of subsidy from the State Government, the same is regularly taken up by PSPCL.

#### **View of the Commission**

The Commission processes the ARR according to the notified Regulations, determines the cumulative revenue gap based on prudent check of the expenses and accordingly revises the tariff for various categories of consumers, to recover the same. PSPCL through directives has been advised to improve its performance, reduce costs and recover dues outstanding against Government connections and others.

#### **Issue No. 11: Tariff Revision**

The LS consumers are already paying higher than the average cost of supply and that the tariff for this category should not be increased.

#### **Response of PSPCL**

The tariff increase is the prerogative of the Commission.

#### **View of the Commission**

The Commission, in its Regulations, already provided for the gradual reduction of cross subsidy. A gradual reduction in cross subsidy in percentage terms has been effected so as to see that the tariff for Large Supply is not unduly increased. Reference Table 6.5 of this Tariff Order, the cross subsidy provided by LS consumers is now within  $\pm 20\%$  as laid down by the Act/National Tariff Policy.

### **Objection No. 3: Consumer Protection and Awareness Council (Regd.) SAS Nagar**

#### **Issue No. 1: Generation**

The basic requirement for the success of the Open Access Model is that the generation and the transmission capacity should be 1.5 to 2 times the actual requirement. In case of Punjab, it is 60 to 80 percent of the actual requirement. No additional generating plants have been installed since PSERC started functioning.

#### **Issue No 2: Thermal Power Plants**

There is hardly any progress on installation of new thermal plant. There is need for a time bound plan for generation capacity addition in the State and a time bound accountability for execution of the same.

#### **Response of PSPCL for Issues 1 & 2**

The generation capacity addition is a process with a long lead time. PSPCL has signed power purchase agreements with several developers. The details of the same are attached as Annexure – II A.

#### **View of the Commission on Issues 1 & 2**

The Commission notes that GHTP stage-II having capacity of 2x250 MWs has been commissioned in the year 2008 & 2010 and State Government has already planned setting up of private Thermal Plants in the State for which PSPCL has signed PPA besides enhancement of its share from Central Generating Stations.

PSPCL should make all efforts to see that the time schedule given in Annexure-IIA is maintained.

PSTCL/PSPCL are also putting up additional transmission/sub-transmission capacity to evacuate/disperse power from additional generating capacity.

#### **Issue No. 3: Updation of old thermal plants**

The old thermal plants need to be up-dated for better utilization.

#### **Response of PSPCL**

PSPCL undertakes regular renovation and modernization works in all its thermal plants. Even now Unit III and IV of GNDTP Bhatinda are undergoing R&M work after which the capacity of both the units is expected to increase by 10 MWs.

#### **View of the Commission**

The Commission is satisfied with the response of the PSPCL. PSPCL is taking up R&M of old thermal plants.

#### **Issue No. 4: Transmission Losses**

The transmission losses in Punjab are still very high. There is need to reduce them to "National" acceptable level.

#### **Response of PSPCL**

The transmission function in the State has been separated and transmission loss is the responsibility of PSTCL.

#### **View of the Commission**

Refer Paras 3.3 and 4.2 of the Tariff Order.

#### **Issue No. 5 Biomass Plants**

In the light of the power crisis in Punjab, Biomass based generation plants may be installed as Punjab has huge agricultural waste and they are eco friendly.

#### **Response of PSPCL**

Though they are eco friendly, the Bio mass plants cannot be the solution for meeting the huge requirement of the State. The raw material for the plant is also not available round the year and even in the seasons, its availability at the plant cannot be guaranteed, thereby making bio mass plants unreliable for continuous power supply.

### **View of the Commission**

Primarily the issue does not pertain to the ARR. However, the Commission notes that GOP notifies its New and Renewable Sources of Energy Policy (NRSE Policy) every five years to promote generation of Electricity from such sources wherein PSPCL is required to purchase all RE power offered to it by the RE generators. Further, the Commission under Section 86 (1)(e) of the Electricity Act 2003 is mandated to promote generation of electricity from Renewable Sources and also specify a percentage of total consumption of Electricity to be purchased from such sources. To that effect, the Commission determines preferential Tariffs for various renewable energy technologies every year and has also specified the minimum quantum of energy in percentage terms to be purchased from renewable sources in the PSERC (Renewable Purchase Obligation and its compliance) Regulations, 2011.

### **Issue No 6: New Technology to Reduce Tripping**

New technology needed to be introduced to reduce moisture of fog in the system to reduce trippings, which is caused due to ingress of moisture of fog.

#### **Response of PSPCL**

PSPCL has noted down the recommendation of the objector and will keep the same in mind

#### **View of the Commission**

The Commission expects the utility to implement this recommendation of the objector.

### **Issue No. 7: Subsidy**

The ARR has not accounted for the subsidy from Punjab Government, wherein the gap could be reduced by half.

#### **Response of PSPCL**

For the ensuring year 2012-13, the subsidy has not been considered, as the same has not been committed by the State Government. Based on the gap approved by the Commission the State Government shall announce the subsidy.

#### **View of the Commission**

The subsidy required to be paid by GoP is determined by the Commission as discussed in para 6.4 of the Tariff Order.

### **Issue No. 8: New Transmission Company**

A new transmission company is said to be being planned, which will lead to increase in overhead expenses. Hence it should not be allowed.

#### **Response of PSPCL**

A new transmission company has already been created with effect from 16-04-2010. The separation of transmission function was in line with objective of Electricity Act 2003.

#### **View of the Commission**

A new transmission company, PSTCL, has already been formed as an independent entity as per the Act and it is functioning.

### **Issue No. 9: Manpower**

The ratio of manpower to transmission capacity is more as compared to other States and the same needs to be reduced.

#### **Response of PSPCL**

In order to streamline the manpower planning and requirement of PSPCL a study was got conducted by M/s PWC India Limited. The recommendations of the report are still under deliberation. Suitable action will be taken, after the recommendations are approved / accepted.

#### **View of the Commission**

PSPCL and PSTCL have been directed to take early action on M/s PWC report and reduce manpower costs.

**Issue No. 10: Administrative Expenditure**

The administrative charges are almost equal to the fuel charges which is very high and needs to be reduced.

**Response of PSPCL**

The administrative expenditure approved by the Commission is in line with the regulations. All the administrative expenses incurred by PSPCL are well accounted for. As soon as the opening balance sheets of PSPCL and PSTCL are finalized, PSPCL would also get its accounts audited.

**View of the Commission**

The Commission approves A&G expenses as per notified Regulations. Refer paras 3.12 and 4.11 of Tariff Order.

**Issue No. 11: Receipt of Subsidy**

The Government should give subsidy to PSPCL in cash instead of book transaction.

**Response of PSPCL**

It is the prerogative of the Commission to give suitable directions to the Government in this regard.

**View of the Commission**

Subsidy is being paid, by and large, by GoP along with interest on delayed payment of subsidy. Refer Para 3.15 of the Tariff Order.

**Issue No. 12: Accountability**

There is no accountability and responsibility in power distribution, accounting, billing and receipts. These should be properly laid down.

**Response of PSPCL**

The aforementioned issue does not fall within the preview of present tariff determination exercise, which is being undertaken for the determination of ARR and tariff for FY 2012-13.

**View of the Commission**

The matter does not pertain strictly to the ARR. However, in public interest, PSPCL need to fix accountability and responsibility at each level to improve the performance of the utility.

**Issue No. 13: Saving of Power**

The use of CFLs and LED for lighting save energy but these should be provided at subsidized rates, considering their high cost.

**Response of PSPCL**

BEE, Ministry of Power Government of India, launched "Bachat Lamp Yojana (BLY)" which aims at large scale replacement of incandescent lamps by CFLs in households. PSPCL, decided to implement this scheme in phased manner, 28 lac consumers of 13 circles are covered in phase-I and 20 lac consumers under phase – II. CFLs are being provided at Rs. 15/- per CFL and upto 3 incandescent lamps of each domestic consumer. They are being replaced by CFLs.

**View of the Commission**

The response of the PSPCL is noted. PSPCL has taken up replacement of incandescent lamps with CFLs. This is being pursued by the Commission.

**Objection No. 4: Steel Furnace Association of India (SFAI)****Issue No. 1: National Tariff Policy**

The National Tariff Policy stipulates that Tariff of Subsidized class of consumers including agriculture sector be increased suitably to bring their Tariff in the range of 20% of combined average cost of supply in the next 2 years i.e. by 2011. Hence, the same should be done in the current tariff order.

**Response of PSPCL**

Clause – 8.3 of Tariff Policy States as under

For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a time limit that latest by the end of year 2010-11 tariffs are within  $\pm 20\%$  of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.

As given in the Tariff Policy, there has to be reduction in cross-subsidy gradually but keeping the interest of Utility in view.

PSPCL requests the Commission to keep the interests and financial viability of the Utility in view while addressing the concern of objector.

#### **View of the Commission**

The National Tariff Policy is kept in view while finalizing the tariffs. The tariffs for various categories are now within  $\pm 20\%$  of average cost of supply.

#### **Issue No. 2: Separate Balance Sheet based on Costs approved by the Commission**

The Board should be directed to file a separate income and expenditure account along with Balance sheet, based on the costs as approved by the Commission from year to year so that a clear picture may emerge and a comparison may be drawn between the actual expenditure and approved expenditure of Board.

#### **Response of PSPCL**

As far as the Annual Accounts for the year 2010-11 are concerned, the same have not been audited as of now due to non-finalization of the opening balances of PSPCL and PSTCL. The same will be submitted to the Commission as and when the audit exercise is completed. The un-audited annual accounts for the year 2010-11 have been provided by PSPCL along with the current ARR & Tariff petition.

#### **View of the Commission**

PSPCL is required to file its Audited Accounts annually. These accounts are the basis of the True up exercise undertaken by the Commission every year. The Audited Accounts of FY 2010-11, however, have not been submitted with the ARR for 2012-13 for processing by the Commission. The utility has been directed to submit the Annual Audited Accounts at the earliest.

#### **Issue No. 3: Estimation of Revenue Requirement for FY 2010-11 & FY 2011-12**

We have been continuously contesting the expenditure claimed by PSEB in its ARRs in terms of interest cost, depreciation and return on investment on excess allocation of expenditure to power segment on account of RSD project, undisbursed subsidy from the State Government & revenue deficit of PSEB. However, while estimating the revenue requirement for FY 2010-11 (True up) and FY 2011-12 (RE), they have considered the PSERC approved norms as per PSERC Tariff Orders of the related year and accordingly the revenue requirement has been reworked.

#### **Response of PSPCL**

The ARR Petition for FY 2012-13 is in accordance with 'The Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005' and the data in the formats as stipulated by the Commission. However, PSPCL cannot comment as no calculation or any specific observation about the ARR Petition has been submitted by the objector.

#### **View of the Commission**

Tariff is determined by the Commission on the basis of provisions of Electricity Act 2003 and Commission's tariff regulations framed thereunder. Costs permitted by the Commission for FY 2010-11 will be reviewed under 'True up' with audited actuals and gains / losses are adjusted and carried forward.

#### **Issue No. 4: Capping the Agriculture Consumption**

Power supplied to AP sector is growing consistently at a very high rate at subsidized rate which is far less than actual power purchase rate. SFAI submitted that it is imperative to cap the maximum amount of power year wise and approved by the Commission which can be

supplied to agriculture sector at subsidized rate, inclusive of additional connections projected in a year.

#### **Response of PSPCL**

The proposed mechanism would be easier to implement for metered AP consumers. However, in the present circumstances for unmetered AP Tubewells, it may not be possible to ascertain the level of consumption by each of the agricultural consumer over and above the approved quantum. Moreover, the billing and collection infrastructure may require further enhancements as currently the entire collection against the agricultural consumption is recovered in the form of subsidy from the Government.

Further, the sale to a particular category of consumers for the ensuing year (2012-13 in this case) is based on assumptions and is likely to vary from the actual consumption. The same applies to all categories of consumers and not particularly to the agricultural consumers only. Charging the consumers for such deviation based on the marginal pricing essentially means that only the agricultural consumers are contributing to the peak demand which may not be the case.

However, PSPCL requests that the Commission may consider the suggestions keeping in view the aforementioned issues and other ground realities.

#### **View of the Commission**

It does not appear practicable to limit the quantum of free supply to agricultural pumpsets to certain level and after which high rates would become applicable. This aspect has been discussed by the Commission in para 6.6 of the FY of 2007-08. This may be possible only if 100% AP consumers are metered and energy is charged as per metered consumption. This is not the case at present.

#### **Issue No. 5: Diversion of Capital Funds for Revenue Purposes**

The Commission should ensure that the funds raised for capital purpose are not diverted towards meeting revenue requirement of the Board. In the past, the Commission has been disapproving certain amount on this account. A detailed investigation in this regard is required to work out the exact amount of diversion to be disallowed for ARR purpose to safeguard the interest of the consumers.

#### **Response of PSPCL**

Diversion of funds was done to meet the cash crunch. The amount disallowed by the Commission on account of diversion of funds every year has affected financial viability of the Utility. PSPCL requests the Commission to allow interest on outstanding loans this year.

#### **View of the Commission**

The Commission disallows the interest cost on the capital funds diverted for revenue purposes. Refer paras 3.14.11 and 4.13.11. This amount is bifurcated between PSPCL, PSTCL and GoP based on the principle adopted in previous Tariff Orders.

#### **Issue No.6: T&D Losses**

Achieving 18.49% T&D losses, with 10150 MUs of AP consumption for FY 2010-11 against the approved 20% losses is appreciable. The same shall go a long way in improving the functioning of the utility.

#### **Response of PSPCL**

PSPCL would strive to continue to improve its performance over time.

#### **View of the Commission**

The comments of the objector and the response of PSPCL are noted. The directives given by the Commission (Annexure-IV) aim at improving PSPCL performance, and reduce losses and cut expenses.

#### **Issue No. 7: Head wise Expenses**

PSPCL has claimed excess revenue requirement over that approved by the Commission for FY 2010-11, not adhering to the regulations. Such expenses do not deserve to be revisited as no additional facts have been given by the Board except that such expenses are on actual basis and are not controllable. The following are some of such items:



- i) In employee cost, regulations provide for increase in WPI whereas PSPCL has claimed the same on actual basis.
- ii) In case of RoE, only 14% RoE is allowed by the regulations whereas PSPCL has claimed 23%.
- iii) In the case of interest and finance charges, borrowing of short term loans are objectionable.
- iv) The prior period expenses, which have not contributed in any way towards the electricity supplied to consumer in the year 2010-11 cannot be a part of the ARR.

#### **Response of PSPCL**

As per the tariff determination exercise, in accordance with the "Terms and conditions of tariff regulations 2005", PSPCL is required to submit the details of the actual costs incurred by it in the last year, revised estimates for the current year and projections for the ensuing year. The projections and revised estimates are to be prepared based on the applicable regulations whereas the actuals for the last year are to be claimed as per annual accounts.

- i) Hence in accordance with the above stated principle, the employee cost as per actuals has been claimed by PSPCL
- ii) The Commission has been referring to the CERC Tariff Regulations while approving many of the normative parameters. For the purpose of allowing returns to utilities, the CERC in its Tariff Regulations for the period 2009-14 has approved a base rate of 15.50% (pre-tax) to be grossed up with the tax rate applicable to the utility.
- iii) PSPCL is forced to take short term borrowings from market to meet its day-to-day expenses. It is prayed that the same is not under the control of the PSPCL and requested the Commission to allow genuine costs incurred by the PSPCL so as to ensure minimal short term borrowings in the subsequent years.
- iv) The Prior Period items are defined as those items which arise on account of correction of error in accounts of prior periods, shortages or excess provision made in previous years. As per the books of accounts for 2010-11, there is a net expense of Rs. 368.98 crore under this category. PSPCL requested the Commission to allow actual prior period expenses of Rs. 368.98 crore.

#### **View of the Commission**

The expenses are allowed by the Commission on the basis of notified Regulations by the Commission. Expenses are examined during the true up exercise after receipt of Audited Annual Account.

#### **Issue No. 8: Under Recovery of Subsidy due on Agriculture Supply**

PSPCL has underestimated the subsidy recoverable from the State Government for FY 2010-11 by Rs.358.70 crore and the Commission may seek clarification from PSPCL and has to be recovered from the Government as a part of subsidy due.

#### **Response of PSPCL**

There is no underestimation of subsidy on the part of PSPCL against AP consumers as PSPCL has requested the Commission in the reply to deficiencies, to allow the stated amount of Rs.358.71 crore.

#### **View of the Commission**

The True up for FY 2010-11 has not been taken up by the Commission in the absence of Audited Annual Accounts. Actual details of subsidy based on consumption will be considered in the true up exercise for FY 2010 -11 & FY 2011-12.

#### **Issue No. 9: Revised Estimates for FY 2011-12 on Higher Side**

The PSPCL has upwardly revised its estimates for the year 2011-12 under the various cost heads like employee cost, interest cost and return on equity resulting in an overall increase in the aggregate revenue requirement by Rs. 2068.36 crore as against the approved level. Since the reasons cited for increase in such expenses are not satisfactory, the same should not be allowed by the Commission.

Although the fuel cost of PSPCL has gone up (Rs.3595.49 crore) as against the approved value (Rs. 3588.17 crore), the actual generation has gone down as against the approved

value by the Commission by almost 1521 MUs. Although all the stations have under-performed on several performance parameters and produced lesser units as compared to the approved generation from these units but still the fuel cost has gone up. In light of the same, the Commission should further investigate the reasons for the same and allow only judicious costs to be allowed to be passed on the consumers.

#### **Response of PSPCL**

The increase in fuel cost is due to several reasons like increase in coal prices, increase in freight and other charges by railways etc. As such, coal prices have witnessed significant increase over the past year and hence are much higher as compared to the approved values. Furthermore, as regards the approved and actual performance parameters of the generation plants, out of six units in the Ropar Thermal Station, two units of the plant are around 25 years old. Similarly, in case of GNDTP Bathinda, despite regular maintenance the performance of individual machinery / components of the stations is bound to deteriorate because almost all the units are more than 35 years old and have outlived their useful life which thus leads to breakdowns.

PSPCL has already submitted a petition to the Commission regarding the vintage of the plant and other constraints.

In the same petition several instances have been cited wherein the Appellate Tribunal of Electricity had ruled in favour for notifying achievable targets for old plants. Several examples were also provided of the relaxations allowed by the various State electricity regulatory Commissions in specific instances of old vintage plants.

Considering the vintage of the plants of PSPCL, it is prayed that the Commission may approve the actual performance parameters and the associated fuel expenses and not consider the approved values for revised estimates.

#### **View of the Commission**

Expenses under various heads are allowed by Commission in line with notified Regulations and after prudence check. Refer to para 3.8 of Tariff Order wherein the performance of the generating plant and the fuel costs are discussed.

#### **Issue No. 10: High Cost of Power Purchase**

As a result of lower sales and lower T&D losses as compared to the approved values, the Board could have saved 1876 MUs for FY 2011-12. However, owing to the shortfall due to reduction in own generation, as compared to the approved levels, the PSPCL has to purchase additional power from outside State. Even the rate of this purchased power was higher at Rs.3.46 as compared to Rs.3.11 approved by the Commission and the same needs to be investigated and only prudent power costs need to be allowed by the Commission.

#### **Response of PSPCL**

The power purchase from central generating stations is done based on the rates determined by the CERC. In the last Tariff Order, the Commission had approved the power purchase rate based on certain assumptions. However the actual rates as approved by the CERC were higher as compared to the rates assumed by the Commission in the last Tariff Order. Hence the increase in average power purchase cost is not on account of PSPCL but on account of increase in the rates of the sources of power for PSPCL (except own generation) which is not in the control of PSPCL.

#### **View of the Commission**

Refer para 3.9 of the Tariff Order wherein the power purchase costs are discussed.

#### **Issue No. 11: High R&M Expenses**

The PSPCL has claimed R&M expenses for FY 2011-12 at higher levels as compared to the approved levels. Although the Commission had allowed Rs. 376.22 crore for FY 2011-12, PSPCL has claimed Rs. 506.68 crore for the year. The same should not be allowed.

#### **Response of PSPCL**

As per the tariff determination exercise, while approving the costs for a particular year, the approvals are made by the Commission based on certain norms and assumptions. However

while filing the ARR for the subsequent year the utility is required to submit the actual expenses for the last year, revised estimates for the current year and the projections for the next year. PSPCL is following the same approach. The amount of Rs. 376.22 crore was approved for FY 2011-12 by the Commission in the last year whereas PSPCL has submitted the revised estimate of Rs.506.68 crore against the approved cost. These costs are revised based on the costs actually incurred by PSPCL in the first half of the current year and accordingly it is prayed that the same be allowed by the Commission.

**View of the Commission**

The Commission approves R&M expenses as per Regulations. Refer to Para 3.11 of Tariff Order, wherein the issue is discussed in detail. The expenses under various heads will also be re-examined during true up of FY 2011-12 which will be based on Audited Annual Accounts of the relevant year.

**Issue No. 12: Interest on Short Term Loan (Revised Estimates of FY 2011-12)**

The PSPCL makes short term borrowings to meet its fund shortage. The fund shortage is due to reasons like delay in subsidy receipt from GoP, disallowances in ARR etc. The interest on such loans should not be passed on to the consumers. The interest on delay in subsidy should be chargeable to the State government and interest on only those short term loans should be allowed which are for the daily working requirements and that too should be determined in accordance with the tariff regulations.

**Response of PSPCL**

The sudden adjustment of anticipated revenue subsidies from the GoP against the outstanding loans in the last year has pushed the PSPCL into deep financial crisis. Thus PSPCL has no alternative but to meet the cash deficit through short-term borrowings. PSPCL thus prays to the Commission to allow the interest on the above bridging loans for the year 2011-12 and 2012-13 as well.

**View of the Commission**

The Commission allows interest on approved loans in line with notified Regulations. The Commission also charges interest on delayed payment of subsidy by GoP. Refer to paras 3.14 and 4.13 of the Tariff Order wherein the interest on short term loans is discussed. The Commission also disallows interest on capital diverted for revenue purpose which is to the account of utility as well as GoP.

**Issue No. 13: Over Estimation of Loan Requirement**

Looking at the past trend, the projected capital expenditure plan submitted by PSPCL is on a higher side and the same needs to be realistically evaluated for FY 2012-13

**Response of PSPCL**

In view of the massive expansion of the distribution network under APDRP and RGGVY projects, PSPCL has prepared its Capex plan. The same has been made after deliberations and detailed planning by the officials of PSPCL and it is prayed that the Commission may approve the same so as to ensure power availability to all the consumers in the State.

**View of the Commission**

The Commission evaluates the loan requirement based on actual capital expenditure incurred by the utility in the past as well as during the current year.

**Issue No. 14: Interest on Diversion of Funds**

The interest costs claimed by PSPCL are much exaggerated and the exercise carried out by the Commission for determining the extent of diversion of funds should be carried out this year as well and the interest cost claimed by PSPCL should be evaluated on prudent basis.

**Response of PSPCL**

The above point is not under the purview of PSPCL and same needs to be decided by the Commission.

### **View of the Commission**

The Commission disallows the interest cost on the capital funds diverted for revenue purposes. Refer paras 3.14.11 and 4.13.11. This amount is bifurcated between PSPCL, PSTCL and GoP based on the principle adopted in previous Tariff Orders.

### **Issue No. 15: High Employee Cost**

Based on the comparison of the employee cost, claimed by the PSPCL (as per actuals), and that allowed by the Commission, the employee cost has been continuously increasing and PSPCL has not cited any new reasons for the same which were not detailed out in previous tariff petitions. Since these arguments of PSPCL were not accepted in the last Tariff Order, they should be rejected this year as well and the employee costs should be capped at the approved levels.

### **Response of PSPCL**

The employee cost is a parameter which cannot be controlled to a great extent by PSPCL. However PSPCL is making constant efforts to reduce the burden of employee cost in its ARR. PSPCL has started working towards this in the erstwhile PSEB itself and the steps taken towards the objective are as under:

- PSEB had frozen fresh recruitments against retirement/death cases since 1999. It is only in FY 2007-08 that PSEB has recruited additional 250 engineers, in order to meet the shortfall in the Technical Cadre taking into consideration the requirement of technical personnel for the Lehra Mohabbat Stage – II, Units – III & IV and also to ensure that PSEB's plant and system performance is not affected on account of lack of adequately trained personnel succeeding the retired employees. PSEB was able to save nearly Rs.1800 crore on employee cost over a period of six years (FY 2003 to FY 2009) on account of retirements.
- The Board had withdrawn the compassionate employment to dependents of deceased employees by providing solatium benefits, thus reducing the manpower and saving on long-term liability.
- Computerization of cash collection centers resulted in overcoming the shortage of cashiers, improvement in customer services, improvement in employee productivity, better Data Management.
- Reduction in Generation incentive by 10% has been implemented by PSEB since March, 2003. PSEB saved approximately Rs. 19.78 crore on account of reduction in the incentive from FY 2003 to FY 2008.
- After unbundling, PSPCL had engaged the services of a consultant, M/s PWC for carrying out a manpower study and the key recommendations of the consultant which are being taken up by PSPCL for implementation are provided below:
  - a) Over 6000 Class IV technical and non-technical posts are being abolished and the incumbents deployed in these posts will be redeployed into other posts thereby reducing the total sanctioned strength requirement.
  - b) Only in cases where reemployment is not feasible, the employee will continue against the current post until retirement after which the post will be abolished.
  - c) In addition, the activities carried out by various Class III and Class IV, technical and non-technical staff, which constitute over 14000 sanctioned posts (of which about 7500 posts are filled) are planned to be outsourced in a phased manner. Wherever possible, incumbents will be redeployed against other vacancies after suitable training. This would result in significant reduction in employee cost.
  - d) In spite of the above planned reduction, only about 1000 posts of AE / JE and certain non-technical officer level posts are planned for immediate recruitment which is reflective of the actual need of PSPCL.

As can be seen from the above measures, PSPCL is making every effort to downsize its workforce and improve employee productivity and consequently reduce the employee costs. Hence it is prayed that the Commission considers and approves the employee cost projected by PSPCL for 2011-12 and 2012-13.

### **View of the Commission**

The Commission approves employee expenses as per notified Regulations. Refer to paras 3.10, 4.9 and Directive 7 (Annexure–IV) of Tariff Order wherein employee cost has been discussed at length.

### **Issue No. 16: High R&M Cost for FY 2012-13**

The R&M expenses claimed by PSPCL at Rs. 562.15 crore for FY 2012-13 are higher than that allowed as per the regulations. The objector has further stated that in the last tariff petition, PSPCL had cited the vintage of the plants for claiming higher R&M costs. However, the Commission had ruled out the same stating that the modernization work of all plants has been completed and higher R&M costs cannot be allowed. On the same grounds the high R&M costs being claimed by PSPCL not be allowed.

### **Reply of PSPCL**

As per the tariff determination exercise, while approving the costs for a particular year, the approvals are made by the Commission based on certain norms and assumptions. While filing the ARR for the subsequent year, the utility is required to submit the actual expenses for the last year, revised estimates for the current year and the projections for the next year. PSPCL is following the same approach. The amount of Rs. 376.22 crore was approved for FY 2011-12 by the Commission in the Tariff Order whereas PSPCL has submitted the revised estimate of Rs.506.68 crore against the approved cost. These costs are revised based on the costs actually incurred by PSPCL in the first half of the current year and accordingly it is prayed that the same be allowed by the Commission.

As regards high R&M cost in generating stations, in view of the vintage of the plants and machinery, the expected R&M is more.

### **View of the Commission**

The Commission approves the R&M expenses as per Regulations and after prudent check. Refer to para 4.10 of Tariff Order wherein R&M costs are discussed. The same issue has been discussed in reply to Objection No.4 Issue No.11.

### **Issue No. 17: Return on Equity**

The regulations allow for RoE to be claimed at the rate of 14% whereas the PSPCL has claimed higher RoE at 15.5% grossed up to 23.48% as per CERC regulations. Since this was not accepted by the PSERC in the last Tariff Order, it has been contended that the same should also be rejected this time.

### **Reply of PSPCL**

As already detailed out in the ARR petition, the rates are determined based on CERC norms, duly considering that the PSPCL is facing immense cash crunch due to untimely subsidy payments from the GoP and huge disallowances against actual expenses being incurred by it. In order to achieve the desired operational and financial outcomes/efficiencies, as discussed by the Commission, it is essential for the PSPCL to make necessary investments in the Generation as well as the Distribution business on a year on year basis. In the light of the same, the PSPCL prays the Commission to reconsider its approach on allowing Return on Equity to the PSPCL and approve the same at the proposed value of Rs.607.55 crore.

### **View of the Commission**

Refer para 3.16 and 4.14 of the Tariff Order

### **Issue No. 18: Cross Subsidy given by Consumers**

National Tariff Policy mandates that the tariff should progressively reflect the average cost of supply and the same should be with a limit of 20% (plus or minus) from the cost of supply. Despite repeated directives by the Commission, PSPCL has not been able to provide the category wise cost of supply. Since PSPCL has not been able to provide the category wise cost of supply, it is requested that the Commission shall determine the same. PSERC has determined the CoS. The burden of cross subsidy should be reduced.

### **Response of PSPCL**

M/s The Energy and Resources Institute (TERI), New Delhi has been appointed as consultant to conduct cost of supply study. They earlier submitted draft report on methodology to arrive at cost of service was shared with the Commission during presentation on 8, August 2011. Based on comments of the Commission, consultants have asked for additional data. Data is being arranged from field. A CoS model is being prepared by the Consultants and would be finalized by April 2012.

As far as reduction of the burden of cross subsidy from LS consumers is concerned, the same is the prerogative of the Commission.

### **View of the Commission**

The Act/National Tariff Policy is kept in view while finalizing the tariffs. The tariffs of different categories are now within  $\pm 20\%$  of average cost of supply which meet the requirements of the Act/National Tariff Policy. The Commission has directed PSPCL to submit Cost of Supply study.

### **Issue No. 19: High Station Heat Rate Claimed by PSPCL**

The reasons cited by PSPCL for high SHR, namely, vintage of the plants, should not be accepted as the same was not accepted by the Commission in the last Tariff Order. Accordingly the approved value of SHR should be considered while approving the fuel requirements.

### **Response of PSPCL**

As per the tariff determination exercise, while approving the costs for a particular year, the approvals are made by the Commission based on certain norms and assumptions. However while filing the ARR for the subsequent year, the utility is required to submit the actual expenses for the last year, revised estimates for the current year and the projections for the next year. PSPCL is following the same approach. The amount of Rs. 376.22 crore was approved for FY 2011-12 by the Commission in the last year whereas PSPCL has submitted the revised estimate of Rs.506.68 crore against the same cost. These costs are revised based on the costs actually incurred by PSPCL in the first half of the current year and accordingly it is prayed that the same be allowed by the Commission.

### **View of the Commission**

The response of PSPCL is not relevant to the objection. The SHR of various generating units is approved as per CERC norms as discussed in para 4.7.3 of this Tariff Order.

### **Issue No. 20: Maintenance Charges Payable to GoP for RSD**

The 3% revenue collected from sale of power of RSD is not justified as all the costs are reflected in the cost of supply. RSD is already overcapitalized and the burden of this over capitalization should not be passed on to the consumers.

### **Response of PSPCL**

Deposit of 3% of revenue collected from the sale of RSD power is as per the decision of standing committee of the Ranjit Sagar Dam Construction Board taken in its 46<sup>th</sup> meeting on 19.02.2009.

### **View of the Commission**

The Commission has discussed the issue at length in paras 3.18 and 4.17 of Tariff Order for FY 2011-12. Also refer to para 3.18 and para 4.16 of this Tariff Order.

### **Issue No. 21: Power Factor Surcharge / Incentive**

In case of LS consumers, if a consumer maintains a high power factor the entire system of PSPCL is benefited as a better power factor results in reduced T&D losses and improved system voltage. Against this, for consumers consuming power only from PSPCL the power factor surcharge/incentive is calculated on the entire consumption and the same is passed on to the consumer in his monthly bill. But on the other hand, if a consumer uses power under open access, the benefit of power factor incentive is given only on the units consumed from PSPCL. In such a scenario, although the consumer is continuously providing the benefit of high power factor to PSPCL, he is not getting benefited on his entire consumption.

In light of the same it is prayed that the Commission should pass on the entire benefit of the better PF to the consumer.

#### **Response of PSPCL**

In case a consumer is not able to maintain the requisite limit of power factor and he is also purchasing power from outside State under open access, the surcharge levied on the consumer is limited to the energy purchased from PSPCL and not on his entire consumption, as would be an obvious corollary of the proposition of the objector. Furthermore, claiming benefit of power factor incentive even for energy not purchased from PSPCL is like claiming benefits under power factor incentive mechanism even though a person is not a consumer of PSPCL. In a hypothetical scenario, if we accept the proposition of the objector, in case a consumer does not purchase any power from PSPCL but meets his entire requirement through open access and at the same time he maintains a power factor of 0.99 he will become entitled to incentive from PSPCL although he has not purchased even a single unit from PSPCL. This would not be justified. Accordingly it is prayed that the Commission should not accept the proposal of the objector.

#### **View of the Commission**

The matter does not strictly pertain to ARR. The objector is, however, free to approach the Commission through Petition.

#### **Issue No. 22: Two part Tariff**

With respect to the two-part tariff proposal submitted by PSPCL, it is noted as under:

- a) It has been observed that the PSPCL has proposed Rs. 240 per kVA as fixed charges for large supply consumers with a demand of more than 1 MVA against Rs. 120 per kVA for LS consumers with a demand of less than 1 MVA. Considering that the fixed charges incurred by PSPCL for serving both the above categories of consumers are the same there is no rationale for charging differently from these consumers.
- b) The variable costs are directly related to the total electricity produced and it decreases with increase in quantum of production. But in the proposal submitted by PSPCL, the energy charges increase with increase in consumption. Better utilization factor of a consumer benefits by improving the loading factor of the generator as well as the transmission system. Hence the consumers with higher utilization factor should be incentivized but the proposal benefits industries which have a low utilization factor and punishes those having higher utilization factor.
- c) The utilization factor accounts for full 8760 working hours in a year but due to scheduled outages of generation plants and other factors the actual billing hours in a year are less than this and hence the same should be examined by the Commission.
- d) The proposal does not differentiate between HT and EHT consumers and that EHT consumers should be benefited as the investment made by such consumers is more.
- e) The proposal is also silent about energy rates during peak load, off-peak load, night time etc. and use of power during night time should be incentivized.
- f) The proposed charges of 10 paise per unit on continuous process industry are against section 61 of the Electricity Act 2003.

#### **Response of PSPCL**

- a) In order to supply to consumer with a demand of more than 1 MVA a greater transmission and generation capacity needs to be blocked, thereby increasing the fixed costs that need to be incurred to cater to these consumers. In light of the same a higher fixed charge has been proposed for these consumers. Further, it needs to be noticed that the energy rates for these consumers are relatively less for the same utilization factor thereby compensating for the high fixed charges. Also, whatever be the utilization factor (except for consumers with a very low utilization currently being billed on MMC), the average per unit rate that a consumer shall have to pay will remain close to the existing rate of Rs. 4.95 per unit and hence no consumer is actually being disadvantaged.
- b) It is to point out that unlike, as pointed out by the objector, the energy charges are the same irrespective of the energy produced / consumed. Also, whatever be the utilization

- factor (except for consumers with a very low utilization currently being billed on MMC), the average per unit rate that a consumer shall have to pay will remain close to the existing rate of Rs.4.95 per unit and hence no consumer is actually being disadvantaged.
- c) The figure of 8760 has been considered just for identification of the limits on the utilization factor. It is a one-time activity and shall not be used in the monthly billing of the consumers. Hence the rate applicable to a consumer would essentially be dependent only on his consumption in a particular month and his contract demand and nothing else. Hence the apprehension of the consumer that the actual supply hours are different from 8760 hours is misleading.
  - d) The suggestion of the objector has been noted.
  - e) The aforementioned issue does not fall within purview of the two-part tariff proposal.
  - f) The charge of 10 paise per unit is due to the reasons that continuous uninterrupted power is supplied to such industries and on several occasions in situations of power shortage PSPCL is forced to purchase power from costly sources to supply to continuous process industry. In light of the same, an additional charge has been proposed. Furthermore, Section 62 allows the utility to differentiate on the basis of the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. Hence the Act allows the utility to charge continuous process consumers and does not forbid as claimed by the objector.

#### **View of the Commission**

The Commission has directed the PSPCL to submit revised proposal for Two Part Tariff taking into consideration the objections raised by various consumer organizations. The Commission has taken a decision not to introduce the two part tariff during FY 2012-13 regarding charges of 10 paise/unit on Continuous Process Industry, refer to para 5.2 of this Tariff Order.

### **Objection No. 5: Cycle Trade Union, Ludhiana**

#### **Issue No.1: The Advertisement method of public notice**

The advertisement method is wrong and incomplete process not in the interest of public / consumers of PSPCL.

#### **Response of PSPCL**

The Advertisement given in leading newspapers was in accordance with the guidelines of the Commission.

#### **View of the Commission**

The public notice is issued to draw attention to the ARR petition, which is otherwise, available on the website and in the offices of PSPCL. The process is in line with the nation-wide practice followed by Regulatory Commissions. Under section 64 (2) of the Electricity Act, every applicant shall publish the application, in such abridged form and manner as specified by the Commission. Publishing of notice in newspapers gives wide publicity.

#### **Issue No.2: Not mentioning the proposed Tariff in the Public Notice**

The PSPCL has not provided the proposed tariff rates as compared to the existing rates.

#### **Response of PSPCL**

The submissions made by PSPCL in the ARR for the various parameters are based on past trend observed etc. However, the allowances made by the Commission are based on yardstick/ norms, which are different from those proposed by the PSPCL. Hence, the Commission will decide the tariff proposal, based on the actual gap approved.

#### **View of the Commission**

The ARR petition should include specific tariff proposals as well. However, increase in tariff is to be effected to cover the gap between projected revenue and expenditure of PSPCL. An



estimation of the tariff increase is, therefore, possible even if the ARR does not specify the proposed tariff increase.

The Commission processes the ARR according to its notified Regulations, determines the cumulative revenue gap and accordingly revises the tariff for various categories of consumers to recover the same. However, PSPCL is advised to submit tariff proposals along with ARR proposals.

## **Objection No.6: Northern Railway**

### **Issue No.1: Traction tariff**

The existing tariff rates @Rs.5.78 per unit for traction is not justified as projected cost of power purchase for PSPCL for FY 2011-12 is only Rs 3.95 per unit. Existing traction tariff @ Rs 5.78 per unit is much higher than industrial HT Tariff @ Rs 4.95 per unit. Northern Railways has been making timely payment, drawing uninterrupted power supply round the clock, and is contributing negligible T&D losses into the system. The proposed two-part tariff (Rs.300 FC and 3.80 EC) is also on a higher side as compared to other States. The charges being levied in other States like Delhi, Haryana, Uttarakhand and U.P are less. The fixed charges proposed are the highest tariff in case of PSPCL as compared to other States. The railways also pay fuel adjustment charges @8 paise per unit. In light of all these facts, the proposed fixed charges are very high and need to be fixed at a lower level.

### **Issue No. 2: Discriminatory treatment to railways**

There is a discriminatory treatment to Railway Traction as compared to Industrial (HT) category despite of the advisory circular of Ministry of Power, Government of India dated 1.5.1991 which emphasises on the importance of providing electricity for Railway Traction Tariff at reasonable price.

### **Issue No. 6: Disproportionate traction tariff as compared to CGS rates:**

The Traction Tariff should be based on either the cost of generation or cost of purchase from Central generating Stations of NTPC, NHPC etc. with reasonable additional charges for wheeling of power etc. PSPCL may be appropriately directed to set right this abnormal distortion in the Traction Tariff.

### **Response of PSPCL for Issues 1, 2 and 6:**

The Single-Part Tariff is applicable in the State of Punjab whereas two-part Tariff is prevalent in Haryana, Delhi, UP and Uttarakhand. However, the same should be done by taking into account the financial health of the Utility and its inability to meet its ARR with the existing tariffs as submitted in Tariff Petition. A comparison of traction Tariff with other States would reveal that when the fixed component of that tariff applicable in other States is added to the variable charges, per unit tariff would arrive at levels comparable to those applicable in PSPCL. Therefore, the total amount payable would be equal or higher as it would include fixed charges as well. Moreover, Railways obtain continuous power supply as compared to other industrial consumers as no peak load restrictions, weekly-off days or power-cuts are imposed in their case. Moreover, Railways traction load fluctuates considerably and generates harmonics which affect the system of PSPCL.

As regards the two-part tariff proposal, PSPCL submits that in the proposal the existing tariff has been broken up into fixed and variable components. The effective average tariff of railway traction would remain at the existing level. The two-part tariff proposal has been designed on a revenue neutral approach meaning that in the existing single part as well as two-part tariff structures the annual billing of all railway connections would remain the same. It is further to submit that it has to pay for transmission losses and charges in Northern Region in addition to bearing transmission and distribution losses in its own system. The other administrative, operational and maintenance costs have to be added to the cost of its own generation or purchase of power from Central Generating Stations.

Taking these factors into consideration, there is merit in charging higher Tariff to Railways as compared to other consumers.

#### **View of the Commission**

The quality of service rendered to the Railways is far better as compared to other consumers of the PSPCL as neither peak load restrictions nor weekly off days/normal power cuts are applicable to Railway Traction. Moreover, the load of Railways is unbalanced & fluctuates considerably and also generates harmonics, which adversely affects the system. Tariff of railway traction is determined by taking all the above factors into consideration.

Tariff fixation is governed by stipulations in the Electricity Act, 2003 and in doing so, Regulatory Commissions are required to be guided by the provisions of the National Electricity Policy and the Tariff Policy. Significantly none of these make any reference to the need for a preferential Tariff for Railways or for fixing it at levels which are at par or lower than those applicable to industrial/bulk consumers.

#### **Issue No. 3: Cost of supply**

In the ARR Petition for FY 2012-13, PSPCL has not given the category wise/ voltage wise cost of supply. The Appellate Tribunal, in its judgment dated 26.05.2006 (para 119) in appeal no. 4 of 2005, directed PSERC that "the Commission should determine the cost of supply of electricity to different classes & categories of consumers". The Commission has not done the same till date. If the category-wise cost of supply is worked out, Railways' cost of supply would be the lowest as Railways purchase power at 132/220 kV. The cost of supply to Railways should be worked out & traction tariff should be linked to the cost of supply as the provisions of EA 2003 mandate that the Tariff should progressively reflect the cost of supply of electricity by gradual reduction in cross-subsidy.

#### **Response of PSPCL**

As per directive of the Commission, PSPCL (earlier PSEB) had got the COS determined through a consultant but report was rejected as it was full of unrealistic assumptions. PSPCL has now again appointed consultants to conduct 'Cost of Supply' study. Their draft report on methodology to arrive at cost of service was shared with Hon'ble Commission during presentation on 8, August, 2011. Based on comments of the Commission, consultant asked for additional data, which has been submitted. A CoS model is being prepared by M/S TERI and same is expected to be finalized by April, 2012.

#### **View of the Commission**

The PSPCL should ensure that the finalised CoS model is submitted to the Commission at the earliest.

#### **Issue No. 4: T&D losses**

The PSPCL has proposed to achieve T & D loss level of 17% for FY 2012-13. The targets should be 16.5% in accordance with the Abraham Committee Report. Further all unmetered AP consumers should be metered to correctly determine T&D loss levels. PSPCL should make extra efforts to reduce the losses & benefits should be passed on to the consumers by way of reduction in Tariff.

#### **Response of PSPCL**

Abraham Committee Recommendations have been referred while proposing targets for loss reduction in FY 2011-12 and FY 2012-13 in which it is clearly mentioned that the target of T & D losses may be reduced by 1% if the existing loss level is below 20%. However for the year 2012-13 a reduction of only 0.5% has been proposed considering the huge geographical spread of a utility of the size of PSPCL. PSPCL submits that at the existing levels, reduction in losses becomes very difficult and a reduction of even 0.5% would require huge capital expenditure, which would be disproportionate to the target achieved. Accordingly a reduction of 0.5% has been proposed. It is prayed that the Commission to approve the proposed loss reduction targets.

#### **View of the Commission**

Refer paras 3.3 and 4.2 of Tariff Order.

The Commission is fully concerned to contain T&D losses and had given suitable directives in this regard. Implementation of the directives will be closely monitored by the Commission. T&D loss level of 18% is fixed for FY 2012-13 in the Tariff Order.

#### **Issue No. 5: Additional charges for exceeding maximum contract demand**

Due to natural calamities or reasons not in the control of the railways, sometimes bunching of trains happens at certain lines leading to contract demand exceeding the sanctioned demand for a short duration. In such a scenario it is not justified that the railways be charged penal charges and accordingly, it has been prayed that an additional demand usage of 10% should be allowed over and above the sanctioned contract demand.

#### **Response of PSPCL**

The issue has already been decided by the Commission vide Order dated 19-1-2011 on petition No. 7 of 2007 in which the commission has decided that where the maximum contract demand of traction is exceeded on account of failure of electricity supply attributable to PSPCL and for this it is not reasonable to expect PSPCL to consider such waiver in any other circumstances which is beyond the control of PSPCL. Further the Commission has decided that PSPCL will consider waiving load violation surcharges only in case of said eventualities and the consumers (Railways) will submit a comprehensive proposal to PSPCL claiming waiver of the load violation surcharge and PSPCL will decide the claim within a period of 25 days and adjust the same in subsequent bills.

#### **View of the Commission**

The response of PSPCL is noted which is inline with the orders already issued by the Commission.

#### **Issue No. 6: Covered along with issue Nos. 1 & 2**

#### **Issue No. 7: Time bound revision of demand**

A time-bound schedule for the revision of contracted demand for Railways' traction loads is to be formulated. The contracted demand may be revised by PSPCL within 30 days from the date of application by Railways.

#### **Response of PSPCL**

The Commission, in the matter of re-determination of Tariff for FY 2008-09 (Petition No. 5 of 2008), has already ruled as under:

#### *"4. Revision of Contract Demand*

*The Commission has specified a time frame for the release of new connections and approval of additional load/ contract demand in its Electricity Supply Code and Related Matters Regulations, 2007. In view thereof, the Railways' concern that applications for enhancement in CD require to be addressed in a specified period has already been addressed."*

PSPCL understands that revision of contracted demand may require system strengthening at times. In case system strengthening is not required for revising Contract Demand as per request of the consumer, the suggested schedule can be implemented. However, where system strengthening is required the request of the consumer for increase in Contract Demand could be accepted only after the completion of works and the time frame cannot be committed in advance.

#### **View of the Commission**

The issue has been addressed by the Commission in the PSERC (Electricity Supply Code and Related Matters), Regulations, 2007 and Conditions of Supply effective from April 1, 2010.

#### **Issue No. 8: Surcharge for low PF & incentive for high PF**

The incentive for higher power factor is 0.25% on consumption charges for each 0.01 increase in power factor above 0.90, for Large Supply & Medium Supply and 0.95 for Railway Traction. The discrimination is being done to Railways by providing Rebate only above 0.95 instead of 0.90 as applicable to large supply consumers. The rebate for railways

should be increased to 0.5% for every 0.01 increase in power factor above 0.90 as is the case in neighboring States like Haryana.

#### **Response of PSPCL**

The objection raised by the objector has already been discussed by the Commission in the Order in the matter of Re-determination of Tariff for FY 2008-09 (Petition No.5 of 2008) as under:

##### *“5. Power Factor Incentive/ Rebate*

*A power factor incentive is already available to all Large Supply (general industry), Medium Supply, Bulk Supply and Domestic Supply/ Non-Residential Supply Consumers with loads exceeding 100 kW and catered at 11 kV or higher voltages. Presently, this incentive @ 0.25% on the bill amount for each 0.01 rise in power factor above 0.90 will be when the monthly average power factor exceeds 0.90. The threshold for allowing power factor incentive in the case of Power Intensive Units, Arc Furnaces and Railways Traction has been fixed as 0.95. This distinction has been kept since basic characteristics of this category ensure a higher power factor. In the circumstances; the Commission has always held that incentive should be made available for actual improvement in system conditions and not just for maintaining the status quo. It is evident that there is neither any discrimination only in respect of Railways while determining a higher threshold limit for power factor incentive but there is ample justification for maintaining that distinction. The Commission accordingly finds no merit in the contention of Railways for lowering the threshold limit for power factor incentive from 0.95 to 0.90 and for allowing higher power factor rebate at the rate of 0.5% for every increase of 0.01 in power factor.”*

Therefore, PSPCL requests the Commission not to consider the request of the Railways.

#### **View of the Commission**

In the Tariff Order FY 2004-05 the Commission had, after detailed discussion, besides fixing the threshold limit for power factor for incentive as 0.90 in respect of Large Supply (General Industry) and Medium Supply and 0.95 in respect of Power Intensive Units (PIUs) & Arc Furnaces and Railway Traction also allowed incentive for high power factor @ 0.25% on consumption charges for each 0.01 increase in power factor above 0.90 for Large Supply (General Industry) and Medium Supply and 0.95 for PIUs & Arc Furnaces and Railway Traction. The Commission holds the same view at present.

#### **Issue No. 9: Revenue gap**

The cumulative revenue gap of Rs. 8983.97 estimated by PSPCL for FY 2012-13 should be supported by Government Subsidy and that the tariffs of genuine consumers like Railways should not be hiked to cover this Revenue gap. Several issues like high T&D losses, wage bill, unmetered connections, high O&M cost etc. are causing burden to be passed on to consumers which should not be allowed.

#### **Response of PSPCL**

The revenue gap of Rs.8983.97 crore as submitted in the Petition is the projected cumulative revenue gap for FY 2010-11, FY 2011-12 and FY 2012-13. As regards the proposal to bridge this revenue gap, PSPCL would like to submit that the revenue gap is finally determined by the Hon'ble Commission by applying its own yardsticks/ norms and it gets changed from what is projected by PSPCL. PSPCL on its part is doing its best in reducing T&D losses and its various expenses.

#### **View of the Commission**

The Commission processes the ARR according to its notified Regulations and after a prudent check of all expenses, determines the cumulative revenue gap and accordingly revises the tariff for various categories of consumers to recover the same.

#### **Issue No. 10: Simultaneous metering of maximum demand**

In case of Rajasthan State Electricity Board, the RERC had ruled as under:

*“Maximum Demand should be charged based on integrated maximum demand of all the eight substations being fed by RSEB to Western Railways.”*

In light of the same, the simultaneous maximum demand should be considered while determining the billing of Northern railways and not the demand of individual points of connection.

#### **Response of PSPCL**

Metering & billing of Railways is carried out for each supply point separately and provision at each individual supply point is made to serve Contract Demand at that supply point. PSPCL network is not robust enough to supply entire load to the consumer from any supply point. However, Commission vide its order dated 19-01-2011 has desired to separately go into the matter and decide the same after hearing both the Railways and PSPCL.

#### **View of the Commission:**

This issue stands disposed off by the Commission vide its Order dated 6.1.2011 in Petition No. 19 of 2010.

#### **Issue No. 11: Incentive for Timely payment**

It is requested that the Commission to adopt practices like incentive for timely payment so as to encourage the consumers for making timely payment voluntarily.

#### **Response of PSPCL**

PSPCL is following "Punjab State Electricity Regulatory Commission (Electricity Supply Code and Related Matters), Regulations, 2007" in matter of billing consumers. The said Regulations do not provide for any discount to timely payment of bills.

Moreover, the Commission in matter of redetermination of Tariff for FY 2008-09 (Petition No. 5 of 2008) already ruled as under:

#### *"7. Timely payments*

*The Commission is inclined to agree with PSPCL that every consumer is expected to make timely payment of bills and while a surcharge is leviable when payment is delayed, there is at present no rebate offered when it is affected in time. Rebates for timely payment is a common issue effecting all consumers and the Commission deems it prudent to continue with the present system."*

#### **View of the Commission**

Response of PSPCL is based on Commission's recent order on the issue and hence, the Commission tends to agree with the same.

#### **Issue No. 12: Special consideration by RSERC, KSEB**

Special considerations have been adopted by RERC (5 % rebate for five years in '05 order for new traction lines) and KSEB (demand charges of Rs.116/kVA and energy charges of Rs.1.12/unit for the period 1.04.99 to 31.3.02) for newly electrified lines. Accordingly, reasonable traction tariff may be considered in such cases.

#### **Response of PSPCL**

The Commission in the matter of redetermination of Tariff for the year 2008-09 (Petition No. 5 of 2008) has ruled as under:

#### *"8. Rebate on newly electrified routes*

*The Commission is at a loss to comprehend the logic of rebates sought on newly electrified routes. The Railways is the Largest Public Sector enterprise with vast resources, dedicated income and receiving occasional budgetary support from the Govt. of India. That it should seek to obtain a contribution from electricity consumers in any State towards the cost of improving its system appears completely unreasonable and unjustified."*

Therefore, PSPCL requests the Commission to not allow any such rebate for Railways.

#### **View of the Commission**

The Commission agrees with the response of PSPCL. The Commission does not see any reason to change its earlier decision.

#### **Issue No. 13: Implementation of MYT framework**

As per Tariff Policy, MYT Regime is to be adopted from April 1, 2006 & review after 3 years in FY 2009-10 and it is requested the Commission to direct PSPCL to take necessary steps in this direction without any further delay.

### **Response of PSPCL**

The Commission had already invited comments/ suggestions on the draft MYT Regulations for the first Control Period notified on its website. After finalization of MYT Regulations by the Hon'ble Commission, PSPCL would submit the MYT Petition in accordance with MYT Regulations.

### **View of the Commission**

Multi Year Tariff Regulations are under process with the Commission and MYT regime will be implemented after issue of MYT Regulations.

### **Issue No. 14: Alternative arrangement for supply to railway traction and levy of load violation charges**

In case of failure of TSS (Traction sub-station) in neighboring stations the power from PSPCL is fed to the adjacent State network and vice versa. In such cases the demand is exceeded by the railways and the load violation charges have to be paid by it. It is proposed that this load violation charge should not be applied for the period of supply failure.

### **Response of PSPCL**

It is ensured that the cases of failure of TSS supplying power to railway traction are minimized. However in case there are still any such cases of failure, the same are restored at the earliest. As regards feeding of power by the railways to adjacent TSS which lies in neighbouring States, PSPCL would like to submit that in such cases PSPCL has to bear the brunt of the increased demand from the Railways. The load of PSPCLs consumers in other categories is required to be shed or additional costly power purchased by PSPCL to meet the increased load requirement of the Railways which is ultimately fed into the network of the neighbouring State. As such, demand of the objector for not levying load violation charges is not reasonable.

### **View of the Commission**

The Commission agrees with the response of PSPCL

### **Issue 15: Payment of ACD (Advance Consumer Deposit)/Security deposit**

The security deposit should be acceptable in the form of bank guarantee as against cash currently accepted by the PSPCL.

### **Response of PSPCL**

This matter is not under the purview of PSPCL but comes under the jurisdiction of the PSERC.

### **View of the Commission**

All the consumers without exception are required to deposit Security Consumption earlier named ACD as per PSERC (Electricity Supply Code & Related Matters) Regulations, 2007.

### **Issue No. 16: Proper maintenance of power lines crossing over railway tracks by PSTCL**

The PSTCL does not carry out proper maintenance of its network crossing over the railway tracks which had led to disruption of railway services on a particular line on two occasions in the past.

### **Response of PSPCL**

The event stated above is due to wear-and-tear of the overhead conductor, ageing of the conductors and likewise. However, many a time crossing over can result from other factors like tension of the wire, speed of the train etc. Incorrect tension, combined with the wrong speed of a train, will cause the overhead wire to start bouncing. An electric arc occurs with each bounce and a pan and wire will soon both become worn under such conditions. Such conditions are beyond the control of PSPCL. However, PSPCL would like to appreciate the concern of the objector and assure that PSPCL will take every possible action to minimize such events which may occur on account of PSPCL.

### **View of the Commission**

The response of PSPCL on the issue appears to be not much relevant. The matter should however be discussed by the Railways with PSTCL/PSPCL and sort out the issue in the interest of everyone so that such occurrence may not happen in future.

### **Issue 17: Remedies required for Non-traction electric supply**

Rebate of 15% be provided to railways over total energy bill towards maintenance and operation of Distribution Network, Metering, Billing, Financial Recovery and Distribution Losses as provided by DVB and JVVNL.

- (i) Consolidated single bill should be issued incorporating the consumption of all the connections under one Xen.
- (ii) Minimum time should be fixed for Release/Enhancement of the connections.
- (iii) No meter testing charges should be levied for new connections and enhancement of the load.
- (iv) The proposed tariff (Energy Charges) increase may be kept at minimum for Railway Domestic, Non-domestic/Commercial Loads during 2012-13 instead of increase (Approx).
- (v) Tariff for year 2012-13 should be single part tariff with the same rate of 2011-12.

### **Response of PSPCL**

There is no response from PSPCL

### **View of the Commission**

- (i) PSPCL in its comments to similar objection at the time of processing of ARR and Tariff Petition for FY 2011-12 had submitted as under:  
“PSPCL understands that undertaking the O & M of distribution network, metering and billing of consumers in its premises represent a common set of activities for any BST consumer. No specific rebate is allowed to any BST consumer for undertaking such activities under the tariff schedule approved by the Commission.”  
The Commission in its views on the issue, in the Tariff Order for FY 2011-12, has agreed with the response of PSPCL. However, PSPCL was asked to examine the rationale of concession provided by utilities cited by the Railways. The Commission holds the same view and at the same time directs PSPCL to examine the rationale of concession provided by the utilities cited by the Railways.
- (ii) Supply to bulk supply electric connections of Railways is through different supply points having its distinct account number for the purpose of meter reading and billing and as such issuance of consolidated bill is not feasible.
- (iii) The Electricity Supply Code and Related Matters Regulations, 2007 prescribe the maximum limit for release of connections and enhancement of load etc. which needs to be strictly adhered to by PSPCL.
- (iv) Various charges including meter testing charges are leviable as per approved General Conditions of Tariff and Schedule of General Charges etc. approved by the Commission.
- (v) Tariff for different consumer categories is revised by the Commission after determining the cumulative revenue gap and in accordance with its Regulations.
- (vi) In view of the objections raised by a number of consumers and consumer organizations on the proposal of PSPCL, the Commission has directed the PSPCL to resubmit the proposal addressing the objections raised by various consumers. The Commission has, therefore, decided not to introduce Two Part Tariff during FY 2012-13.

### **Objection No.7: Gurnek Singh Brar**

#### **Issue No. 1: Subsidy**

The following recommendations are made with regard to subsidy:

- (a) The subsidy amount should be limited to budgetary provisions as prescribed in the National Electricity Policy

- (b) Quarterly advance payment schedule as decided by the Commission in its Tariff Order of 13-09-2007 should be followed.
- (c) Commission may specify that advance payment of subsidy should not be linked or adjusted against any other payment/dues.
- (d) Commission may specify in T.O that in case there is default in payment of subsidy or part of GoP, then from next month the PSPCL is authorized to charge full AP tariff etc. as determined by the Commission.
- (e) A commitment/ undertaking may be obtained from GoP that it will not make any adjustment/book adjustments against subsidy amount committed. If such adjustments are made then it should result in levy of full tariff from next month.
- (f) Commitment must be obtained from GoP under affidavit.

**Response of PSPCL**

PSPCL agrees with the objector on the above mentioned issues as non-fulfillment of the same is leading to the deterioration of financial health of the utility. PSPCL therefore humbly requests the Commission to issue suitable directives in the Tariff order to address the issues.

**View of the Commission**

The Government of Punjab has by and large been paying subsidy in a manner prescribed by the Commission. In case of delay, interest on delayed payment of subsidy is charged and paid by GoP.

**Issue No. 2: Power Purchase**

It is observed that:

- (a) The PSPCL should be required to restrict its power purchase at capped rate of max Rs.4 per unit.
- (b) In case GoP requires PSPCL to purchase additional power so as to mitigate power cuts, then the GoP should be required to make additional funds available to PSPCL for making extra power purchase.

**Response of PSPCL**

- (a) The power is purchased under short term to bridge/plug gap between demand and supply and is being done in a judicious manner through competitive and transparent bidding process.
- (b) Electricity being a merit good it is the responsibility of PSPCL to cater to the needs of its consumers. Therefore many a time PSPCL has to purchase power at higher rate to avoid load shedding/power cuts. In the light of above PSPCL agrees with the opinion of objector that GoP should provide necessary funds to PSPCL in the event wherein PSPCL has purchased power at unduly high cost to avoid power cuts.

**View of the Commission**

Refer paras 3.9 and 4.8.5 wherein power purchase cost for FY 2011-12 and FY 2012-13 is discussed. PSPCL is generally following the directive of the Commission for judicious purchase of power.

**Issue No. 3: Regarding UI**

With regard to power purchased in UI the following observations are made.

- (i) The position regarding UI for the period April 2011 upto 25 December 2011 is analysed. It has been observed that although Punjab was continuously under-drawing, in the same months in which Punjab was purchasing short term power through traders. The same may be clarified.
- (ii) During December 2011 the UI overdrawal was at a relatively high rate of Rs.5.89 per unit to Rs.7.13 per unit. Why power cuts were not imposed by PSPCL in order to avoid high costs.
- (iii) During the above stated period Punjab has incurred a total UI bill of Rs.20.966 crore.
- (iv) The Commission should direct the PSPCL to strictly avoid over drawal below 49.5 Hz. Only under contingency conditions of outage of generation capacity, overdrawal of 15-30 minutes should be allowed.



- (v) Sustained overdrawal at low frequency is also a violation of the grid code and that in a recent adjudication CERC had imposed a fine of Rs.11 lac on PSPCL and hence in light of the same overdrawal in low frequency conditions should be avoided.

#### **Response of PSPCL**

- (i) This situation arises due to excessive and unpredictable import by the industry through Open Access. The quantum being purchased by the industry through Open Access from April 11 till date has varied from zero LU per day to approx. 150 LU per day. In such circumstances, no effective Power regulation is possible as the quantum under Open Access varies from 0 to 750 MWs approx. on hour to hour basis.
- (ii) The irregular/unpredictable quantum imported by the Industry through Open Access has resulted into excessive UI rate.
- (iii) In the dynamic demand availability scenario, whenever the frequency falls below 49.5 Hz, PSPCL always endeavour to restrict its load so that there is no over drawal. However it takes 20 to 25 minutes for managing/controlling the over drawal effectively and during this period over drawal may happen. In a fast changing scenario, PSPCL has no control over system frequency (NEW grid, which is the frequency of Indian Power System except SR region).
- (iv) This is the prerogative of the Commission.
- (v) The fine of Rs. 11 lac imposed on PSPCL by CERC relates to period April-2010. The fine has been imposed on other States also. There were sudden and excessive heat wave conditions all over Northern India during the month of April, 2010 and the demand of power shot up. Erstwhile PSEB was in the process of being unbundled and there was a call for strike by some employee's organizations also. PSEB took all power regulatory measures to control/manage the demand but many times the over drawal of power from Grid was unavoidable.

#### **View of the Commission**

The response of PSPCL is noted. PSPCL should procure power in judicious manner and avoid overdrawal under UI at high cost. Grid discipline should be ensured.

#### **Objection No.8: PSEB Engineer's Association**

##### **Issue No. 1: Financial position of PSPCL**

The key aim for restructuring of the Electricity Boards was to ensure the commercial viability of the unbundled utilities. Further, the state government should ensure a clean balance sheet to the unbundled utilities. However in case of PSPCL, it has been burdened with a liability of around Rs.15000 crore at the time of unbundling. Also the adjustment of outstanding loans of approximately Rs.5000 crore against subsidy has also led to the financial crunch being faced by PSPCL.

The Commission should allow recovery of actual expenditure for 2012-13 without any disallowances till GoP is ready with a financial restructuring plan so as to ensure PSPCL is not forced to borrow from the market.

##### **Response of PSPCL**

PSPCL appreciates the concern of the objector that GoP should ensure a clean balance sheet to PSPCL. Besides the reasons explained by the objector there are other factors like disallowances made by the Commission on the actual expenses incurred by PSPCL also contributing to deterioration of financial health of the utility. PSPCL thus prays the Commission to approve the expenses on actual basis as also requested by the objector.

##### **View of the Commission**

Government of Punjab and PSPCL need to ponder over the rising debt and accumulated loans of PSPCL and decide upon measures necessary to contain the deteriorating financial health of PSPCL. Providing a clean balance sheet is an issue that fall within the ambit of GoP. The Commission reiterates that expenses under various heads are allowed as per notified Regulations.

### **Issue No. 2: State share in Generation capacity**

The allocation from the generation in the state is approximately 50% and in light of the plants to be commissioned in the near future the same shall go down to approximately 20%. It has been contended that once the private sector plants become operational in the state, the private players would be interested in maximizing profits through higher generation. This would put the burden on the consumers.

Punjab has not witnessed any capacity addition in state sector thermal generation in more than a decade. This has been claimed as the single biggest reason for the debt of Rs.20000 crore. The Commission is requested to direct the state government and the PSPCL to expedite the work on the Mukerian power plant and to further explore the expansion of the existing thermal plants.

#### **Response of PSPCL**

The generation capacity addition is a process with a long lead time. Looking at the power shortage being faced by the state, PSPCL has signed power purchase agreements with several developers who are developing power plants within the state. The details of the same are as per Annexure II A.

All these projects are expected to boost the power situation in the state significantly.

As far as profiteering by private players is concerned, the tariff of the same shall be regulated by the Commission in accordance with the PSERC terms and conditions of tariff regulations 2005 and any amendments to the same thereof.

#### **View of the Commission**

The Commission agrees with the response of the PSPCL. Though there is no capacity addition within the State, PSPCL is able to manage power supply to all consumers by meeting the demand, through own generation, share from BBMB/central generating stations and purchase of power from other sources except for a short time in summer. The State Government has decided to set up 2x660 MWs thermal plant at Mukerian. PSPCL may overcome the problem of shortages with additional generation coming up under central sector and projects coming up in the State.

### **Issue No. 3: Employee cost**

The continuous disallowances on account of employee cost are causing financial troubles for PSPCL. The same need to be allowed on actuals. PSPCL has taken several initiatives for improving productivity. There has been observed a reduction in the number of employees and at the same time the services have been improved in all areas like consumer services, network augmentation, revenue wing etc. Due to implementation of R-APDRP and SAP, the manpower requirement is expected to go down further. The PSPCL should be directed to increase productivity of its employees and avoid expenditure on outsourcing of regular jobs.

#### **Response of PSPCL**

PSPCL agrees with the views of the objector that the employee expenses should be allowed by the Commission on actuals.

As is evident from the trend of reduction in the number of employees over the last decade, the PSPCL has not been adding employees and has rather handled the increased volume of business/ network maintenance through increase in productivity levels. Additionally, the PSPCL has inherited the large employee base from the erstwhile PSEB under the restructuring undertaken by the Government of Punjab and neither has control over the number of employees nor the salaries which are governed as per the rules and notifications of the State Government. Therefore, any disallowance in the employee cost will only worsen the financial position of the PSPCL and prevent it from making prudent/ necessary expenses for serving its customers.

As far as outsourcing is concerned, PSPCL resorts to outsourcing in order to reduce its employee costs. Furthermore, outsourcing is looked upon as an option only in cases where the regular employee strength of PSPCL is not able to meet the total manpower requirement. It is always the endeavor of PSPCL that the outsourcing costs as well as manpower costs are reduced progressively. The details of the efforts being made by PSPCL in this regard have already been explained in the ARR and tariff petition.

### **View of the Commission**

The Commission has noted the steps taken by PSPCL to reduce the staff and improve productivity parameters. PSPCL should strive to bring down the employee cost at par with other well managed utilities in the country. Employee cost is allowed as per the provisions of PSERC Tariff Regulations. Refer to paras 3.10 and 4.9 of the Tariff Order wherein the employee cost is discussed.

### **Issue No. 4: T&D loss**

By adopting several low cost strategies like shifting of meters outside homes, PSPCL has been able to achieve significant reduction in losses which is evident in the actual T&D loss levels achieved. However the meter shifting drive needs to be extended to all consumers in the entire state.

### **Response of PSPCL**

PSPCL has taken note of the appreciation and recommendations of the objector.

### **View of the Commission**

Commission agrees with the objector and the response of PSPCL. The T&D loss for PSPCL is approved at 18% for FY 2012-13. This is required to be reduced further.

### **Issue No. 5: Efficiency in business operations**

The objector has stated that PSPCL should be directed to effect cost cutting in generation by improving the SHR of the existing plants and further in the long run introducing new technologies. In distribution, the AT&C losses should be further reduced and the number of employees should be reduced. Expenditure on outsourcing O&M operations should also be reduced.

### **Response of PSPCL**

To improve station heat rate and life extension of GNDTP units, R&M of the units has been taken up in a phased manner. R&M of Unit-1&2 has already been completed which has resulted in considerable improvement in heat rate and plant availability. R&M of Unit 3&4 is underway, which will also improve the station heat rate. Apart from this, heat rate study of units 1&2 has been got carried out by M/s CPRI, Bangalore, the final report of which stands submitted to the Commission. The recommendations of the report shall be implemented in a phased manner to further improve the heat rate.

GGSSSTP units are now quite old, average life of GGSSTP unit is already more than 23 years, against the normal life of 25 years. With the passage of time the de-gradation of the units is bound to take place which reflects in higher heat rate. For life extension of stage-1 units, residual life assessment study has already been conducted, NTPC was consultant for the same. In the scarce power scenario, units cannot be afforded to be stopped for a longer period to carry out the R&M of these units. Major R&M of units will be carried out when the power position in the state will be comfortable, which could afford the stoppage of units for a longer period. However, SHR study of all the 6 units has been got conducted. Report has been received and submitted to Commission. Recommendations of the report shall be implemented in phased manner to further improve the heat rate.

It is hereby intimated that different R&M schemes are being executed from time to time for the improvement in the system and to overcome the obsolescence, all out efforts are being made to improve the SHR on regular basis.

### **View of the Commission**

The Commission agrees with the response of the PSPCL. PSPCL shall endeavour to achieve the norms approved by the Commission. PSPCL shall also take effective steps to improve the overall performance of its generating stations. It should also implement the other cost cutting measures suggested by the Objector.

### **Issue no. 6: Auxiliary Consumption of GNDTP for FY 2010-11**

The energy consumed in R&M of GNDTP unit-3 which remained under shutdown for the entire year should not be booked to the R&M estimate and should also not be included in the auxiliary consumption of the operating units.

**Response of PSPCL**

PSPCL submits that, construction power to M/s BHEL for R&M activities of Unit-3 is not being taken from station auxiliary power system. All construction power is being given from 11 kV separate plant feeders which are not part of station auxiliary power system. Energy cost on this account is already being booked to the R&M estimates of GNDTP.

**View of the Commission**

The Commission agrees with the response of the PSPCL.

**Issue 7: Short term loans for FY 2010-11**

The effective interest paid by PSPCL was 73.8%. Furthermore the total short and medium term loan increased from Rs. 6715 to Rs. 9706 crore pointing to the increasing debt problem of PSPCL.

**Response of PSPCL**

While calculating the effective interest rate of 73.8% on short term loan, the objector has not considered the amount of interest to be paid on the opening balance of the loan for the year. However, PSPCL agrees that short term loan amount has increased from Rs. 6715 to 9707 crore. The main reason attributing to such an increase is late payment of subsidy by GoP, subsidy received for paddy season is not proportionate to actual AP consumption, adjustment of loan against subsidy, disallowance made by the Commission on actual expenses incurred. PSPCL submits that said issues are not in the Utility's control.

**View of the Commission**

The payment of subsidy by GoP is regularly monitored by the Commission. The Commission in its order dated 27/05/2008, has also observed that the issue of adjustment of GoP loan against subsidy is mutual to GoP and the utility. However the State Government should pay the subsidy amount in advance as per provisions of the Electricity Act, 2003.

**Issue 8: Interest on Govt. of Punjab loans for FY 2010-11**

The adjustment of subsidy against loans received from the government of Punjab is against the provisions of the Electricity Act 2003. The denied subsidy by GoP amounting to Rs.519.82 crore is also against the provisions of the order of the Commission.

The detailed break-up of the prior period expenses should be provided by PSPCL as the same might relate to power purchased from central stations for which the tariff revision must have been done retrospectively.

The book adjustment of subsidy of Rs.520.07 crore is being considered as received subsidy. This has to be clarified.

**Response of PSPCL**

PSPCL agrees with the objector on the issues of subsidy as non-fulfilment of the same is leading to the deterioration of financial health of the utility. PSPCL therefore humbly request Hon'ble Commission to issue suitable directives in the Tariff Order to address the issues.

The detail of prior period expenses of Rs. 325.04 crore. is as per Annexure- II B.

PSPCL submits that the adjustment of Rs. 520.07 crore against Govt. Loan tantamount to receipt of subsidy and repayment of loan.

**View of the Commission**

Same as under issue No. 7

**Issue No. 9: Return on Equity (FY 2010-11)**

The RoE should be allowed on the equity as appearing in the provisional balance sheets and not on Rs.2617.61 crore as claimed by PSPCL and the same may be finally tried up based on the actual balance sheet.

**Response of PSPCL**

PSPCL submits that Rs 15101 crore of equity is appearing in the provisional balance sheet. Since at this stage the books of account are not being audited. PSPCL has not claimed RoE on the base figure of Rs. 15101. However, once the book of account is audited, PSPCL shall claim the same. PSPCL has already made request to the Commission in this regard in ARR.

### **View of the Commission**

The Commission cannot allow ROE based on a provisional balance sheet. However, the issue will be considered at the time of truing up for FY 2010-11 after the Audited Annual Accounts are made available and final transfer scheme is notified by the GoP.

### **Issue 10: Agriculture consumption for FY 2011-12 and FY 2012-13**

The agriculture consumption should be allowed as claimed.

#### **Response of PSPCL**

PSPCL agrees with the views of the objector in this regard.

#### **View of the Commission**

Refer paras 3.2.2 and 4.1.3 for FY 2011-12 and FY 2012-13. Since the agricultural consumption is not metered, the Commission is considering the AP consumption based on sample metering which is considered fairly reasonable.

### **Issue No. 11: Own generation**

The projected generation from own stations is much on a higher side to a tune of 500 MUs. Although the higher projected own generation will imply lower power purchase cost but higher fuel costs. In light of the same the projections are proposed to be revised.

#### **Response of PSPCL**

Unit wise rationale for projected generation figures for GNDTP thermal plant is as below:

Unit-3: At the time of submitting ARR information for 2<sup>nd</sup> half of 2011-12 and full year 2012-13 in October, 2011, the R&M shutdown of Unit-3 was scheduled to be completed by 31.12.2011. Accordingly, the generation targets/fuel cost was projected. Now as per meeting taken by Joint secretary (Thermal), Ministry of Power, GoI on 05.01.2012, the unit is rescheduled to be commissioned/ stabilized by 31.03.2012.

Unit-4: At the time of submitting ARR information the R&M of Unit-4 was scheduled to be carried out from 08.11.2011 to 07.07.2012. Accordingly, the generation targets were projected. The unit was actually shutdown on 05.11.2011 for 8 month period as per work order. Now, as per above mentioned meeting, the shutdown has been revised to be completed by 30.11.2012.

Due to rescheduling of R&M work of Unit-3&4, the projected generation for the 2<sup>nd</sup> half of 2011-12 and full year 2012-13 shall get revised to 918 MUs (instead of 964 MUs) and 2552 MUs (instead of 2815 MUs) respectively. Also the fuel cost shall get revised to 208.49 crore (instead of Rs 218.94 crore) and Rs. 603.70 crore (instead of Rs. 665.89 crore).

#### **View of the Commission**

Refer paras 3.5.1 & 4.4.1 of this Tariff Order. PSPCL should generate maximum power from its own generators instead of purchasing power at high costs through traders etc.

### **Issue No. 12: Hydro generation availability**

It may be clarified whether PSPCL has objected to the revision of allocation from BBMB and whether the tariff revision of BBMB affected by CERC was also challenged by PSPCL.

#### **Response of PSPCL**

Regarding Supreme Court decision on reduced allocation of BBMB energy to Punjab, Govt. of Punjab has already filed a review petition in Supreme Court of India.

Regarding CERC order dated 15.9.2011 for determination of tariff for BBMB generating stations and transmission system, BBMB as 1st appellant and PSPCL along with other partner states as co-appellants have filed an appeal against CERC order in Appellate Tribunal for Electricity, New Delhi (APTEL). Case proceedings in APTEL are going on.

#### **View of the Commission**

The response of PSPCL is noted.

### **Issue No. 13: Power from new projects**

The power from several sources provided in table 45 of the ARR petition would be delayed and the same should be corrected. The details of power traded through traders in terms of MU, rate and the name of the trader, are to be sought from PSPCL.

### **Response of PSPCL**

The commissioning of new power projects for the year 2012-13 has been taken as per data available in the CEA website at the time of preparing ARR. However, if the commissioning schedule of new power projects changes, the same will be accounted for at the time of review.

The details (Quantum, Rate & Trader) regarding the short term power purchase for 2011-12 are available on the website of PSPCL.

### **View of the Commission**

The Commission agrees with the response of PSPCL. PSPCL will have additional power from central sector stations likely to be commissioned during FY 2012-13. In view of this, Commission has not considered purchase of high cost power from traders.

### **Issue No. 14: Energy balance**

The energy balance needs to be revised in accordance with the following:

- (a) Reduced thermal generation from GNDTP as pointed out earlier
- (b) Reduced availability from the new projects pointed above
- (c) Increase in power purchase due to the above two reasons mentioned above

### **Response of PSPCL**

It has already revised the projections of generation of GNDTP and submitted the same to the Commission in the presentation given before the commission on 22.2.2012.

### **View of the Commission**

Refer paras 3.7 and 4.6, where in energy balance for FY 2011-12 and FY 2012-13 is discussed.

### **Issue 15: Key assumptions for power purchase**

The landed cost of coal for PSPCL from CIL and the landed cost of imported coal in case of NTPC is compared. The GCV of both the qualities of coal has also been compared. Based on own calculations the projected increase in power purchase cost from NTPC at 5% is on a lower side and an increase of 30-35 paise per unit should be considered while determining the ARR. In addition to the above points the following should be considered:

- The actual bid rate for first year should be considered and not the levelised tariff in case of Mundra and Talwandi Sabo
- Competitive bidding may be adopted for short term power and the rate should be kept lower than 485 paise per unit.
- The transmission charges should be as per the filing of the PSTCL and not as per the filing of PSPCL.

### **Response of PSPCL**

Considering Sept 2011 variable rates as base, 5% increase of NTPC and NPCIL plants have been assumed for FY 2012-13 in ARR petition. Actual rise in fuel cost shall be covered in fuel cost adjustment petition separately filed by PSPCL every quarter.

The levelised tariff has been assumed for working out cost estimates of Mundra UMPP and Talwandi Sabo Power plant. Actual rise in fuel cost shall be covered in fuel cost adjustment petition separately filed by PSPCL every quarter.

The average rate for short term power through traders have been assumed @ 485 p/unit which is the rate approved by PSERC in the last Tariff Order for FY 2011-12.

PSTCL charges as approved by Hon'ble PSERC for FY 2012-13 will be reflected in Tariff Order of PSPCL also.

### **View of the Commission**

Refer paras 3.9 & 4.8.5, wherein power purchase cost for FY 2011-12 and FY 2012-13 is discussed in detail.

### **Issue 16: Capital expenditure**

PSPCL should provide the details of following capital Expenditure:

- Plan/ Schedule of construction of Shahpur Kandi Project along with year wise Capex.
- Plan for 1320 MWs Mukerian Thermal Project along with year wise Capex.

- Proposed Capex on R&M of Bathinda unit -4.
- Clarification about R&M of Bhakra Power Houses
- Details about Capex incurred on 66 kV S/S and lines during FY 2010-11 and FY 2011-12

#### **Response of PSPCL**

The scheme-wise capital expenditure has already been submitted to the Commission. A copy of the revised plan of PSPCL for the year 2011-12 is enclosed as Annexure II 'C'.

#### **View of the Commission**

PSPCL has furnished details of capital expenditure up to December, 2011 during processing of ARR.

#### **Issue 17: Depreciation**

PSPCL shall clarify the details of gross value of assets (66 kV and 33 kV transmission and substation assets), its accumulated depreciation and net fixed assets of PSPCL provided in the petition. It is also to be clarified, whether the depreciation charges recovered through tariff has been retained by PSTCL or by PSPCL.

#### **Response of PSPCL**

The detailed break-up of individual asset wise depreciation is calculated at business unit level. The same is summed up and sent to the head office for compilation. As a result the details sought by the objector are not readily available with PSPCL. However if the Commission requires, the same shall be furnished in subsequent ARR & tariff petitions.

#### **View of the Commission**

Depreciation is arrived at based on asset classification generation (thermal, hydro), transmission, distribution, buildings etc as per Regulations. Amount realised through depreciation is normally utilised for repayment of loans.

#### **Issue 18: Return on Equity**

It may be clarified, why PSPCL is not considering the revised value of cost of Land in its tariff petition.

#### **Response of PSPCL**

Response same as under issue No. 9 above.

#### **View of the Commission**

This will be considered when final transfer scheme is approved and notified by the Government.

#### **Issue 19: Interest Charges**

(a) The interest charges are increasing YoY and increased interest charge projections for FY 2012-13 may be clarified.

(b) The Commission is requested to direct GoP to implement its order dated 9.5.2011 to make the refund of Rs. 453.65 crore to PSPCL.

(c) The Rs. 981.93 crore pertaining to RBI bonds has been adjusted against subsidy by GoP, the action is totally unilateral and against the tripartite agreement.

(d) According to Shunglu Committee report, issued in December 2011 stated following points:

(i) Outstanding loans of SEBs towards bank should be purchased by specially created SPV with the precondition that state govt./ DISCOMS would take specified corrective measure which include increase of tariffs on regular basis and reduction of T&D losses.

(ii) The GoP by unilaterally breaking the tripartite agreement of 2001 between GoP, Gol and RBI has created a situation whereby the financial bail-out package may not be offered to Punjab.

(iii) That state govt has agreed for regular tariff increase so that utilities will be able to meet their expenditure including interest charges on all loans outstanding.

(iv) The bank must not write off the loans to SEB, the utilities have to be allowed sufficient increase in tariff to meet interest charges whether or not they are able to pay back principal amount.

### **Response of PSPCL**

(a) Due to the various disallowances by the Commission and delay in disbursement of subsidy by the government, PSPCL is forced to borrow from the market. Further, the recent adjustment of subsidy against outstanding loans from state government has further worsened the situation of PSPCL. These are the key reasons for the deteriorating financial condition and increasing debt of PSPCL.

However, objector's statement that the amount of interest paid is more than the amount of loan taken in 2011-12 is incorrect. Objector has not considered the opening balance of loan (on which PSPCL has to pay interest) while making the said observation.

(b) Issuing directive to GoP is prerogative of the Commission. However, PSPCL has already taken up the matter by writing letter to GoP. The response is awaited.

(c) During the presentation on ARR for FY 2012-13 on 22.2.2012 it has been intimated by Secy./Power, Govt. of Punjab that based on constant perusal of the case by PSPCL the matter has already been taken up with the Deptt. of Finance not to adjust Rs. 981.93 crore on account of RBI bonds against subsidy and the same shall be paid upto 31.3.2012 and further that if the same is not paid upto 31.3.2012 the same shall be shown as payable to PSPCL.

(d) Recommendations of Shunglu Committee may be given due consideration by the Commission while deciding tariff hike as these have direct impact on financial health of the utility.

### **View of the Commission**

The interest charges are allowed as per notified Regulations. The issue of adjustment of RBI Bonds is mutual between the utility and Government of Punjab. Shunglu Committee Report is only in the nature of a recommendation to the Govt. Policy decision in this regard is solely within the ambit of the Government.

### **Issue No. 20: Regulatory Assets**

The regulatory assets for FY 2011-12, if created, can be recovered in 1/3<sup>rd</sup> instalments during FY 2012-13, FY 2013-14 and FY 2014-15. No further regulatory assets can be created till the earlier assets are recovered.

### **Response of PSPCL**

As per the applicable regulations, the amortization of regulatory assets should be done within three years of creation of the regulatory asset and without any precondition as this much gap is already approved by the Commission in T.O. 2011-12. However the quantum of recovery in each of the three years is to be decided by the Commission. Regulatory assets are created by the Commission so as not to pass on a tariff shock to consumers. Accordingly its recovery is also done in a phased manner to prevent the tariff shock.

### **View of the Commission**

Regulatory Asset was created to avoid tariff shock to consumers. The Regulatory Asset will be amortized in line with the notified Regulations.

### **Issue No. 21: Power Purchase**

The Commission should fix the cap/ ceiling on the average Power Purchase at the rate lower than Rs 4.85 per unit. The Commission should give direction to the DISCOM to avoid power purchase under UI below 49.5 Hz/ 49.2Hz.

### **Response of PSPCL**

UI purchase is not a planned purchase. It is an incidental expense and it depends on the demand-supply mismatch. In times of shortfall in supply due to various reasons PSPCL is forced to purchase power in UI to meet its supply obligation. However steps are being taken to keep the average cost of power purchase to the most economical one by restricting UI purchase by planning purchase of power through short term sources. Even the average short term power purchase rate of PSPCL has come down as compared to previous years.

Further, in the dynamic demand availability scenario, whenever the frequency falls below 49.5 Hz, PSPCL always endeavour to restrict its load so that there is no over drawal. However it takes 20 to 25 minutes for managing/controlling the over drawal effectively and



during this period over drawal may happen. In a fast changing scenario, PSPCL has no control over system frequency (NEW grid, which is the frequency of Indian Power System except SR region).

#### **View of the Commission**

Refer paras 3.9 and 4.8, where in power purchase cost is discussed. If action is taken in advance, the purchase of high cost power could be avoided, PSPCL has to plan in advance for procurement of power and avoid drawal of power under UI during low frequency conditions. Time period for managing / controlling the overdrawal should be reduced.

#### **Issue No. 22: Overloading of Substation**

PSPCL shall provide the details of 66 kV Substations which are expected to be overloaded during the paddy season of 2012 and action plan of the DISCOM.

#### **Response of PSPCL**

This point does not relate to the current exercise of ARR & tariff determination. However the information sought by objector has been sought from concerned office which shall be shared with objector as and when received.

#### **View of the Commission**

The response of PSPCL is noted. The list should be loaded on website of PSPCL.

#### **Issue no. 23: Fuel Cost**

When the average coal cost of PSPCL is compared with that of other generating stations, the cost of coal procured for PSPCL is lower as compared to central sector generation stations in the case of most of the CGS. Hence even if the SHR of the PSPCL stations is slightly higher allowing the fuel costs on actuals would be justified when compared with NTPC stations. Furthermore, it has been contended that the revised method of GCV based pricing is bound to increase the average coal cost in the coming year. Hence it is requested that the Commission should direct the PSPCL to provide coal cost incurred in January 2012 as compared with the coal cost incurred in Dec 11 and accordingly the fuel charges should be determined by the Commission.

#### **Response of PSPCL**

PSPCL agrees with the contention of objector in respect of average coal cost of PSPCL compared to that of CGSs.

Regarding new system of pricing of coal, M/s Coal India for charging the higher rate of coal has issued the fresh rates, which are still on the basis of GCV against the UHV being adopted since now. The impact on coal price during the year 2011-12 shall be around Rs. 48 crore and during 2012-13 shall be around Rs. 217 crore. This has also been intimated to the Commission in the presentation given by the PSPCL on 22.2.2012.

#### **View of the Commission**

There is no justification to allow higher SHR just because the cost of coal for PSPCL is lower than CGS stations. The objective is to keep the cost of generation lowest. The Commission has initiated Fuel Audit of PSPCL thermal generating stations through CPRI, Bangalore. The final report of CPRI is expected to cut fuel cost further.

#### **Issue 24: Discrepancies in ARR format**

The PSPCL has submitted the information in wrong format on page 128 and 129 of the petition. We seek clarification on the information given in Format 24 and Format 27-A and the revenue is not matching with the average rate and units sold.

#### **Response of PSPCL**

It has submitted the correct format which was wrongly put in page no. 128 and 129 while replying for data gaps received from the Commission. The said format is also available on the PSPCL's website.

Regarding format 27-A, there was a minor computational error for deriving average rate. The revised rates are provided in Annexure- II D.

Regarding format 24 the month wise forecasting of Cash-flow is not possible due to various reasons which include high seasonal variation leading to unpredictable month wise generation cost or power purchase cost, untimely receipts of subsidy etc.

**View of the Commission**

The response of the PSPCL is noted.

**Issue No. 25: Details of BBMB employees**

PSPCL shall provide the details specific to BBMB employees like share of PSPCL employees in BBMB in different categories, No. of PSPCL employees actually posted in different categories and action plan of PSPCL to fill the quota in BBMB.

**Response of PSPCL**

PSPCL has quota of 153 posts in category A & B against which 95 No. Employees have been posted in BBMB. Against the posts of 891 in category 'C' 454 No. employees have been posted. Against the posts of 334 in category 'D' 56 No. employees have been posted. After new recruitment posts will be filled up.

**View of the Commission**

The response of PSPCL is noted. However, PSPCL should ensure to fill its share of posts in BBMB.

**Issue No. 26: Details of Assets**

The PSPCL should provide the details of assets and its depreciation of 66 kV assets.

**Response of PSPCL**

Response same as provided under issue 17above.

**View of the Commission**

Details of assets are not provided to the Commission. The Commission has directed the utility to maintain a Fixed Asset Register (FAR) which, as per submission of PSPCL, is in the process of finalization.

**Issue 27: Capital investment Plan**

The PSPCL should provide the details of following capital investment Plan:

- a. R&M of Bhakra Power Houses to be added in FY 2012-13
- b. Justification of Rs 150 crore for release of Tubewell connections.
- c. Details of investment proposed under APDRP

**Response of PSPCL**

a to c:- The capital investment plan for the FY 2012-13 is under review.

**View of the Commission**

The Commission has examined the capital investment plan proposed in the tariff petition by PSPCL and actual CAPEX incurred in the previous year and approved the investment plan accordingly. Refer to Para 3.14.2 & Para 4.13.2

**Issue No. 28: Projection of cash flows**

The PSPCL should provide the estimated figures of cash flows in the format 24 of the petition. Further in format 25, the cost of 66 kV lines and substations be included. In format 27 the average billing rate is not matching the revenue figures for various categories.

**Response of PSPCL**

A major amount of the revenue of PSPCL comes from the subsidy that it receives from the GoP and the receipt of subsidy cannot be projected. Hence the cash flows of PSPCL cannot be projected in advance. Accordingly the said format has not been submitted by PSPCL. PSPCL further submits that an amount of Rs.375 crore has already been included in the annual plan of PSPCL for the year 2011-12 for transmission (PSPCL) works. The average billing rate in format 27 is not matching due to rounding effect.

**View of the Commission**

PSPCL is required to furnish information in the format notified by the Commission. The Commission has directed the utility to maintain a Fixed Asset Register (FAR) which is in the

process of finalization. All information provided by the utility in the ARR is examined by the Commission before finalization the Tariff Order.

### **Issue No. 29: Subsidy**

The Commission shall include the following points in the Tariff order for FY 2012-13:

- Quarterly advance payment of Subsidy
- Adjustment against Subsidy payable or default of Subsidy payment, if any.

### **Response of PSPCL**

PSPCL agrees with the objector on the above mentioned issues as non-fulfillment of the same is leading to the deterioration of financial health of the utility. PSPCL, therefore, humbly requests Commission to issue suitable directives in the Tariff order to address the issues.

### **View of the Commission**

The Government of Punjab has by and large been paying subsidy in a manner prescribed by the Commission. In case of delay interest on delayed payment of subsidy is charged and paid by GoP.

### **Objection No. 9: PHD Chamber of Commerce**

#### **Issue No 1: Bringing cross subsidy down to ( $\pm$ ) 20% of cost of supply**

According to the National Tariff Policy, Tariff for subsidized class of consumers including agriculture sector and other subsidized domestic consumers be increased suitably to bring their Tariff in the range of 20% of combined average cost of supply in next 2 year, i.e. by 2011.

#### **Response of PSPCL:**

The Clause-8.3 of Tariff Policy states as under:

#### ***"8.3 Tariff design: Linkage of tariffs to cost of service***

*2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within  $\pm$  20 % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy...."*

As given in the Tariff Policy, there has to be reduction in cross-subsidy but gradually keeping the interest of Utility in view.

PSPCL requests the Commission to keep the interests and financial viability of the Utility in view while addressing the concern of objector.

#### **View of the Commission**

The Commission has in its Regulations already specified the gradual reduction of cross subsidy, though the total elimination of the same is no longer envisaged in the Electricity Act 2003. A gradual reduction in cross subsidy in percentage terms has been effected in the previous years. The Commission has reduced the cross subsidy over the years and is now within  $\pm$  20% of average cost of supply.

#### **Issue No 2: Capping of free power supplied to agriculture**

Power supplied to AP Sector is growing consistently at a very high rate at subsidized rate which is far less than actual power purchase rate. It is imperative to cap the maximum amount of power year wise & approved by the Commission that can be supplied to agriculture sector at subsidized rate inclusive of additional connections projected in a year.

#### **Response of PSPCL:**

The proposed mechanism would be easier to implement for metered AP consumers. However, in the current circumstances for unmetered AP Tubewells, it may not be possible to ascertain the level of consumption by each agricultural consumer over and above the approved quantum. Moreover, the billing and collection infrastructure may require further enhancements as currently the entire collection against the agricultural consumption is recovered in the form of subsidy from the Government.

Further, the sale to a particular category of consumers for the ensuing year (2012-13 in this case) is based on assumptions and is likely to vary from the actual consumption. The same applies to all categories of consumers and not particularly to the agricultural consumers only. Charging the consumers for such deviation based on the marginal pricing essentially means that only the agricultural consumers are contributing to the peak demand which may not be the case.

However, PSPCL requests that the Commission may consider the suggestions keeping into account the aforementioned issues and other ground realities.

#### **View of the Commission**

Refer to the Commission's view on issue No. 4 of Objection No. 4

#### **Issue No. 3: T&D losses for FY 2010-11**

The higher achievement in T&D losses as against the target set by the Commission is appreciable and the same shall go a long way in improving the functioning of the utility.

#### **Response of PSPCL**

PSPCL has noted the appreciation of the objector and would strive to continue to improve its performance over time.

#### **View of the Commission**

The comments of the objector and the response of PSPCL are noted. PSPCL need to continue its drive for improvement & implement directives given by the Commission at Annexure-IV.

#### **Issue No.4: Head wise expenses for FY 2010-11**

The head-wise expenses as claimed by the PSPCL against those approved by the Commission are compared. The expenses have not been claimed in accordance with the tariff regulations and hence such expenses do not need to be revisited as no additional facts have been submitted by PSPCL as mentioned below:

- (i) In employee cost regulations provide for increase in WPI whereas PSPCL has claimed the same on actual basis.
- (ii) In case of RoE, only 14% RoE is allowed by the regulations whereas PSPCL has claimed 23%.
- (iii) The interests and finance charges, the objector has objected to borrowing of short term loans.
- (iv) The objector has stated that prior period expenses should not be allowed by the Commission.

#### **Response of PSPCL**

As per the tariff determination exercise in accordance with the "Terms and conditions of tariff regulations 2005", PSPCL is required to submit the details of the actual costs incurred by it in the last year, revised estimates for the current year and projections for the ensuing year. The projections and revised estimates are to be prepared based on the applicable regulations whereas the actuals for the last year are to be as per annual accounts.

- (i) Hence in accordance with the above stated principle, the employee cost as per actuals has been claimed by PSPCL. Employee cost is a genuine expenditure and Commission has been prayed to allow it as per actual.
- (ii) The Commission has been referring to the CERC Tariff Regulations while approving many of the normative parameters. For the purpose of allowing returns to utilities, the CERC in its Tariff Regulations for the period 2009-14 has approved a base rate of 15.50% (pre-tax) to be grossed up with the tax rate applicable to the utility.
- (iii) PSPCL is forced to take short term borrowings from market to meet its day-to-day expenses. It is prayed that the same is not under the control of the PSPCL and the Commission is requested to allow genuine costs incurred by the PSPCL so as to ensure minimal short term borrowing in the subsequent years.
- (iv) The Prior Period items are defined as those items which arise on account of

correction of error in accounts of prior periods, shortages or excess provision made in previous years. As per the books of accounts for 2010-11, there is a net expense under this category of Rs.368.98 crore. PSPCL requests the Commission to allow actual prior period expenses of Rs.368.98 crore.

**View of the Commission**

The expenses are allowed by the Commission on the basis of notified Regulations and after a prudent check. Also, 'True –up' for FY 2010-11 shall be carried out after receipt of Audited Annual Accounts.

**Issue No. 5: Under recovery of subsidy due on agriculture supply for FY 2010-11**

PSPCL has underestimated the subsidy recoverable from the state government by Rs.358.71 crore and the Commission is requested to seek clarification from PSPCL regarding the same.

**Response of PSPCL**

There is no underestimation of subsidy on part of PSPCL against AP consumers as PSPCL has requested the Commission in the reply to deficiencies to allow the stated amount of Rs.358.71 crore.

**View of the Commission**

The Government of Punjab has by and large been paying subsidy in the manner prescribed by the Commission. In case of delay, interest on delayed payment of subsidy is charged and paid by GoP.

**Issue No. 6: Upward Revision of Estimates for FY 2011-12 (Revised Estimate)**

The PSPCL has upwardly revised its estimates for the year 2011-12 under the various cost heads like employee cost, interest cost and return on equity resulting in an overall increase in the aggregate revenue requirement by Rs. 2068.36 crore as against the approved level. Since the reasons cited for increase in such expenses are not satisfactory, the same should not be allowed by the Commission.

**Response of PSPCL:**

As per the tariff determination exercise in accordance with the "Terms and conditions of tariff regulations 2005", PSPCL is required to submit the details of the actual costs incurred by it in the last year, revised estimates for the current year and projections for the ensuing year. The projections and revised estimates are to be prepared based on the applicable regulations whereas the actuals for the last year are to be claimed as per annual accounts.

**View of the Commission**

Expenses claimed by the utility are examined and allowed as per notified Regulations. The true up for FY 2011-12 will be done after the audited annual accounts are made available and allowability of claim shall be revised accordingly.

**Issue No. 7: High power purchase cost for FY 2011-12 (Revised Estimate)**

As a result of lower sales and lower T&D losses as compared to the approved values the Board could have saved 1876 MUs. However, owing to the shortfall due to reduction in own generation as compared to the approved levels, the PSPCL has to purchase additional power from outside state. Even the rate of this purchased power was higher at Rs.3.46 as compared to Rs.3.11 approved by the Commission and the same needs to be investigated and only prudent power costs need to be allowed by the Commission.

**Response of PSPCL:**

As far as the shortfall due to outage of plants of PSPCL is concerned, the reasons have already been explained above and are not due to inefficient operations on part of PSPCL. However, the concern of the objector that the rate of power purchased from outside the state being higher as compared to the approved rate, PSPCL hereby submits that the power purchase from central generating stations is done based on the rates determined by the CERC. In the last Tariff Order, the Commission had approved the power purchase rate based on certain assumptions. However the actual rates as approved by the CERC were higher as compared to the rates assumed by the Commission in the last Tariff Order. Hence

the increase in average power purchase cost is not on account of PSPCL but on account of increase in the rates for all sources of power for PSPCL (except own generation) which is not in the control of PSPCL.

**View of the Commission**

Refer para 3.9 of the Tariff Order wherein the power purchase costs for FY 2011-12 are discussed.

**Issue No. 8: Interest on short term loans for FY 2011-12 (Revised Estimates)**

PSPCL makes short term borrowing to meet its fund shortage. The fund shortage is due to reasons like delay in subsidy receipt from GOP, disallowances in ARR etc. The interest on such loans should not be passed on to the consumers. The interest on delay in subsidy should be chargeable to the State Government and interest on only those short term loans should be allowed which are for the daily working requirements and that too should be determined in accordance with the tariff regulations.

**Response of PSPCL**

The sudden adjustment of anticipated revenue subsidies from the GOP against the outstanding loans in the last year has pushed the PSPCL into deep financial crisis. Thus PSPCL has no alternative but to meet the cash deficit through short-term borrowings. PSPCL thus prays to the Commission to allow the interest on the above bridging loans for the year 2011-12 and 2012-13 as well.

**View of the Commission**

Interest is allowed to PSPCL on approved borrowing in line with PSERC Regulations. Refer paras 3.14 and 4.13 of the Tariff Order. Subsidy on account of free supply of power is being paid by and large by Government of Punjab. Interest on delayed payment of subsidy is also being paid by the GoP. Refer to para 3.15 of the Tariff Order.

**Issue No. 9: Overestimation of loan requirement**

Looking at the past trend, the projected capital expenditure plan submitted by PSPCL is on a higher side and the same needs to be realistically evaluated.

**Response of PSPCL:**

In view of the massive expansion of the distribution network under RAPDRP and RGGVY projects, PSPCL has prepared its Capex plan. The same has been made after deliberations and detailed planning by the officials of PSPCL and it is prayed that the Commission approve the same so as to ensure power availability to all the consumers in the State.

**View of the Commission**

Interest is allowed to PSPCL on approved borrowing in line with PSERC Regulations. Refer paras 3.14 and 4.13 of the Tariff Order. The Commission evaluates the loan requirement based on actual capital expenditure incurred by the utility in the past as well as during the current year.

**Issue No. 10: Interest on diversion of funds during FY 2011-12 (Revised Estimate)**

Based on the comparison of the interest cost claimed by PSPCL and that allowed by the Commission, the interest costs claimed by PSPCL are much exaggerated and the exercise carried out by the Commission for determining the extent of diversion of funds should be carried out this year as well and the interest cost claimed by PSPCL should be evaluated on prudent basis.

**Response of PSPCL**

The above point is not under the purview of PSPCL and same needs to be decided by the Commission.

**View of the Commission**

Refer to para 4.13 of Tariff Order wherein the interest charges are discussed. Only those interest charges which are allowable are considered for approval.

**Issue No. 11: High Employee cost**

Based on the comparison of the employee costs as claimed by the PSPCL (as per actuals)

and that allowed by the Commission, the employee cost has been continuously increasing and PSPCL has not cited any new reasons for the same which were already detailed out in previous tariff petitions. Since these arguments of PSPCL were not accepted in the last Tariff Order, they should be rejected this year as well and the employee costs should be capped at the approved levels.

### **Response of PSPCL**

The employee cost is a parameter which cannot be controlled to a great extent by PSPCL. However PSPCL is making constant efforts to reduce the burden of employee cost in its ARR. PSPCL has started working towards this in the erstwhile PSEB itself and the steps taken towards the objective are as under:

- PSEB had frozen fresh recruitments against retirement/death cases since 1999. It is only in FY 2007-08 that PSEB has recruited additional 250 engineers, in order to meet the shortfall in the Technical Cadre taking into consideration the requirement of technical personnel for the Lehra Mohabbat Stage-II, Units —III & IV and also to ensure that PSEB's plant and system performance is not affected on account of lack of adequately trained personnel succeeding the retired employees. PSEB was able to save nearly Rs. 1800 crore on Employee cost over a period of six years (FY 2003 to FY 2009) on account of retirements.  
The Board had withdrawn the compassionate employment to dependents of deceased employees by providing solatium benefits, thus reducing the manpower and saving on long-term liability.
- Computerization of cash collection centers resulted in overcoming the shortage of cashiers. Improvement in customer services, improvement in employee productivity, better Data Management.
- Reduction in Generation incentive by 10% has been implemented by PSEB since March, 2003. PSEB saved approximately Rs.19.78 crore on account of reduction in the incentive from FY 2003 to FY 2008.

On the directions of PSERC, erstwhile PSEB had appointed M/S PWC as Consultant to carry out the detailed staffing study of man-power on 10.8.07. M/S PWC carried out the studies and submitted report in February, 2010. Subsequently due to un-bundling of PSEB into two Companies i.e. PSPCL and PSTCL, M/S PWC reviewed this report and submitted separate report for PSPCL and PSTCL. The report of PSPCL was put up to BODs for approval for which a Committee was constituted by BODs in its meeting held on 13.4.2011 to study and submit final recommendations. The Committee is likely to submit its report for consideration of BODs by mid March, 2012. A copy of the draft report has already been submitted to Hon'ble Commission in September, 2011. The key recommendations of the Consultant which are being taken by PSPCL are as under:-

- a) Class-IV technical and non-technical posts which are lying vacant are being reviewed and shall be abolished.
- b) Certain Class-IV technical and non-technical posts which are not required shall be abolished and wherever possible the employees shall be re-deployed and wherever re-deployment is not possible the employee will continue against the current post until retirement after which the post will be abolished.
- c) In addition the activities being carried out by certain Class III & IV employee shall be outsourced in a phased manner which will result in significant reduction in employee cost.
- d) In the coming year number of employees are retiring and employees' strength of the Company shall come down drastically. The present average age of employee in PSPCL is about 50 year and there is need to induct fresh young employees in certain categories for enhancing the efficiency. PSPCL is already in the process of recruiting 1450 posts of AEs/JEs at certain non-technical Officer/Supervisor level. Similarly in future PSPCL shall recruit about 800 employees for inducing the fresh man-power to counter certain number of requirement. It is pointed out that recommended strength of PSPCL as indicated by M/S PWC shall be attained in the year 2015.

As can be seen from the above measures, PSPCL is making every effort to downsize its workforce and improve employee productivity and consequently reduce the employee costs. Hence it is prayed that the Hon'ble Commission considers and approves the employee cost projected by PSPCL for 2011-12 and 2012-13

#### **View of the Commission**

The Commission approves employee expenses as per notified Regulations. Refer to paras 3.10, 4.9 and Annexure–IV (Directive 7) of Tariff Order wherein employee cost has been discussed at length.

#### **Issue No. 12: Return on equity**

The regulations allow for RoE to be claimed at the rate of 14% whereas the PSPCL has claimed higher RoE at 15.5% grossed up to 23.48% as per CERC regulations. Since this was not accepted by the PSERC in the last Tariff Order, it has been contended that the same should also be rejected this time.

#### **Response of PSPCL:**

As already detailed out in the ARR petition, the rates are determined based on CERC norms. Considering that the PSPCL is facing immense cash crunch due to untimely subsidy payments from the GoP and huge disallowances against actual expenses being incurred by it. In order to achieve the desired operational and financial outcomes/efficiencies that the Hon'ble Commission has directed the PSPCL to achieve, it is essential for the PSPCL to make necessary investments in the Generation as well as the Distribution business on a year to year basis. In light of the same the PSPCL prays to the Commission to reconsider its approach on allowing Return on Equity to the PSPCL and approve the same at the proposed value of Rs.607.55 crore as shown in the table above

#### **View of the Commission**

Refer para 3.16 and 4.14 of the Tariff Order where in the return on equity is discussed for FY 2011-12 and FY 2012-13.

#### **Issue No. 13: Cross subsidy given by the consumers**

The National Tariff Policy stipulates that the tariff should progressively reflect the average cost of supply and the same should be with a limit of 20% (plus or minus) from the cost of supply. The objector has stated that despite repeated directives by the Commission, PSPCL has not been able to provide the category wise cost of supply. Since PSPCL has not been able to provide the category wise cost of supply, the Commission has to determine the same. PERC has determined the category wise COS. The burden of cross subsidy to LS consumers should be reduced.

#### **Response of PSPCL**

The Energy and Resources Institute (TERI), New Delhi has been appointed as consultant for cost of supply study. They earlier submitted draft report on methodology to arrive at cost of service which was shared with Hon'ble Commission during presentation on 8, August, 2011. Based on comments of the commission most of the additional data has been furnished to consultant. A COS model is being prepared by the consultants which is expected to be finalized by April, 2012.

As far as reduction of the burden of cross subsidy from LS consumers is concerned, the same is the prerogative of the Commission.

#### **View of the Commission**

The Commission in its Regulations already provided for the gradual reduction of cross subsidy. A gradual reduction in cross subsidy in percentage terms has been effected in previous year. Also refer Table 6.5 of this Tariff Order.

#### **Issue No. 14: Power factor surcharge/incentive**

In case of LS consumers, if a consumer maintains a high power factor the entire system of PSPCL is benefited as a better power factor results in reduced T&D losses and improved system voltage. Against this, for consumers consuming power only from PSPCL the power factor surcharge/incentive is calculated on the entire consumption and the



same is passed on to the consumer in his monthly bill. But, on the other hand, if a consumer uses power under open access, the benefit of power factor incentive is given only on the units consumed from PSPCL. In such a scenario, although the consumer is continuously providing the benefit of high power factor to PSPCL, he is not getting benefited on his entire consumption. In light of the same the objector has prayed that the Commission should pass on the entire benefit of the better PF to the consumer.

#### **Response of PSPCL**

In case a consumer is not able to maintain the requisite limit of power factor and he is also purchasing power from outside state under open access, the surcharge levied on the consumer is limited to the energy purchased from PSPCL and not on his entire consumption, which would be an obvious corollary of the proposition of the objector. Claiming benefit of power factor incentive even for energy not purchased from PSPCL is like claiming benefits under power factor incentive mechanism even though a person is not a consumer of PSPCL. In a hypothetical scenario, if we accept the proposition of the objector, in case a consumer does not purchase any power from PSPCL but meets his entire requirement through open access and at the same time he maintains a power factor of 0.99 he will become entitled to incentive from PSPCL although he has not purchased even a single unit from PSPCL. This would not be justified. Accordingly it is prayed that the Commission should not accept the proposal of the objector.

#### **View of the Commission**

The matter does not strictly pertain to ARR. The objector is however; free to approach the Commission through Petition.

#### **Issue No. 15: Two part tariff**

With respect to the two-part tariff proposal submitted by PSPCL, it is noted as under:

- (a) It has been observed that the PSPCL has proposed Rs.240 per kVA as fixed charges for Large Supply consumers with a demand of more than 1 MVA against Rs.120 per kVA for LS consumers with a demand of less than 1 MVA. Considering that the fixed charges incurred by PSPCL for serving both the above categories of consumers are the same, there is no rational for charging differently from these consumers.
- (b) The variable costs are directly related to the total electricity produced and it decreases with increase in quantum of production. But in the proposal submitted by PSPCL the energy charges increase with increase in consumption. The objector has stated that better utilization factor of a consumer benefits by improving the loading factor of the generator as well as the transmission system. Hence the consumers with higher utilization factor should be incentivized but the proposal benefits industries which have a low utilization factor and punishes those having higher utilization factor.
- (c) The utilization factor accounts for full 8760 working hours in a year but due to scheduled outages of generating plants and other factors, the actual billing hours in a year are less than this and hence the same should be examined by the Commission.
- (d) The proposal does not differentiate between HT and EHT consumers and that EHT consumers should be benefited as the investment made by such consumers is more.
- (e) The proposal is silent about energy rates during peak load, off-peak load, night time etc. and use of power during night time should be incentivized.
- (f) The proposed charges of 10 paise per unit on continuous process industry is not justified and the same is against section 61 of the Electricity Act 2003.

#### **Response of PSPCL**

- (a) In order to supply to consumer with a demand of more than 1 MVA a greater transmission and generation capacity needs to be blocked thereby increasing the fixed costs that need to be incurred to cater to these consumers. In light of the same, a higher fixed charge has been proposed for these consumers. Further, it needs to be noticed that the energy rates for these consumers are relatively less

for the same utilization factor thereby compensating for the high fixed charges. Also, whatever be the utilization factor (except for consumers with a very low utilization currently being billed on MMC), the average per unit rate that a consumer shall have to pay will remain close to the existing rate of Rs.4.95 per unit and hence no consumer is actually being disadvantaged.

- (b) Unlike as pointed out by the objector the energy charges are the same irrespective of the energy produced/consumed. Also, PSPCL would like to submit whatever be the utilization factor (except for consumers with a very low utilization currently being billed on MMC), the average per unit rate that a consumer shall have to pay will remain close to the existing rate of Rs.4.95 per unit and hence no consumer is actually at a disadvantage.
- (c) The figure of 8760 has been considered just for identification of the limits on the utilization factor. It is a one-time activity and shall not be used in the monthly billing of the consumers. Hence the rate applicable to a consumer would essentially be dependent only on his consumption in a particular month and his contract demand. Hence the apprehension of the consumer that the actual supply hours are different from 8760 hours is misleading.
- (d) The suggestion of the objector may be considered by the Commission while introducing Two Part Tariff.
- (e) The aforementioned issue does not fall within purview of the two-part tariff proposal.
- (f) The charge of 10 paise per unit is due to the reasons that continuous uninterrupted power is supplied to such industries and on several occasions in situations of power shortage PSPCL is forced to purchase power from costly sources to supply to continuous process industry. In light of the same an additional charge has been proposed. Furthermore, Section 62 allows the utility to differentiate on the basis of the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. Hence the Act allows the utility to charge continuous process consumers and does not forbid as claimed by the objector.

#### **View of the Commission**

Refer to the views given under objection No.2, issue No.1. The Commission has taken a decision not to introduce the two part tariff during FY 2012-13.

#### **Objection No. 10: Ludhiana Steel Rolling Mills, Ludhiana**

##### **Issue No.1: Two part tariff**

The move for PSPCL of introducing Two-Part tariff is not correct. It will result into a very high tariff per kWh as the existing tariff structure is in place for PIU industries. The sample calculations are given.

##### **Response of PSPCL:**

The contract demand of a consumer is directly mapped to the infrastructure to be maintained by a utility. Irrespective of the actual consumption by the consumer, PSPCL has to reserve its capacity to fulfil demand of consumer to the tune of contracted demand agreed with consumer. Since access to electricity is the exclusive right for every citizen of this nation it is unjustifiable to block the facilities for consumer who has stated exaggerated demand which results into the deprivation of access to electricity to other consumer groups. The proposed two part tariff structure would keep a check on the signed contracted demand of the consumers. As the lower utilization factor would inherently penalizes the consumer by bringing up their consumption per unit rate of kWh. This mechanism would ensure that every consumer will quote their actual demand to maintain high utilisation factor. This will hence ensure the better system utilization and wider access of electricity to the citizen of State. In the light of above, the proposed tariff structure would benefit both consumers and utility.

### **View of the Commission**

Please refer to the views of the Commission under Objection No. 2 issue No.1. Commission has taken a decision not to introduce the two part tariff during FY 2012-13.

### **Issue No.2: Recommended conditions in Two part Tariff**

- (i) Demand charges should be on MDI and not on the contract demand.
- (ii) Maximum chargeable rate per kWh may be introduced

### **Response of PSPCL**

- (i) The demand charges are levied to recover cost of infrastructure set-up maintained to fulfil the contracted demand of the consumer. MDI is subjected to change every month and it is not practical to maintain the infrastructure as per monthly fluctuation of demand. The prudent way to assess the demand is only through contract demand which is an indication of demand to be fulfilled in a longer horizon and the infrastructure to be maintained thereof. Keeping the feasibility of matter in view, PSPCL prays to the Commission to allow PSPCL to recover demand charges through contract demand only.
- (ii) PSPCL would like to appreciate the concern of objector to put a cap on the rate chargeable per kWh so that there should be no wide variation of tariff among different class of consumers. But PSPCL also submits that it will bring unnecessary complications in the tariff structure. Also as one of the many principles laid down in National tariff Policy, it has directed to keep the tariff structure as simple as practically possible. Further, the study for introduction of two-part tariff was undertaken so as to ensure a revenue neutral situation for PSPCL, i.e to say that the PSPCL neither benefits nor loses on account of introduction of two-part tariff. Accordingly the PSPCL has proposed the two-part tariff structure which ensures that the average tariff in two-part structure is close to the current tariff thereby ensuring a revenue neutral situation. Essentially, the proposal of two-part tariff is only a break-up of the existing tariff into fixed and variable components. Hence, it is remotely unlikely that there would be any wide variation in tariff among different consumer categories within PSPCL.

### **View of the Commission**

PSPCL may consider the suggestions of the objector while revising the proposal for two part tariff.

### **Issue No.3: kVAh based tariff**

kW metering may be shifted to kVA metering to encourage consumers to work on unity power factor.

### **Response of PSPCL:**

The study on kVAh based tariff is already being carried out by the M/s Deloitte on LS consumer having Contract demand of 100 kW and above. However, PSPCL would like to appreciate the concern of objector to improve the overall system efficiency through demand side management and PSPCL is actively working in that direction.

### **View of the Commission**

PSPCL is already directed to submit the proposal for kVAh based tariff in place of kWh tariff. This is being pursued by the Commission.

### **Issue No.4: Cost of Supply**

PSPCL must have to determine cost of supply at different voltages & for different categories of consumers before making petition for tariff revision.

### **Response of PSPCL**

M/s The Energy and Resources Institute (TERI), New Delhi has been appointed as consultant to conduct cost of supply study. They have submitted draft report on methodology to arrive at cost of service. A presentation on the methodology to be adopted for this study was made before Commission on 8, August, 2011. Based on inputs during presentation, additional information sought by consultants has been submitted.

A COS model is being prepared by the consultant and is likely to be finalised by 04/2012.

### **View of the Commission**

PSPCL should ensure that the finalised CoS model is submitted to the Commission at the earliest.

### **Issue No.5: Reduction of Cross Subsidy**

As per Electricity Act the cross subsidy was to be reduced gradually but PSERC has not addressed the issue, which results into higher tariff.

#### **Response of PSPCL:**

PSPCL would like to submit that Clause-8.3 of Tariff Policy States as under:

#### **“8.3 Tariff design: Linkage of tariffs to cost of service**

*2.For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within ± 20 % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy....”*

As given in the Tariff Policy, there has to be reduction in cross-subsidy but gradually keeping the interest of Utility in view.

PSPCL requests the Commission to keep the interests and financial viability of the Utility in view while addressing the concern of objector. Refer Table 6.5 of this Tariff Order.

### **View of the Commission**

A road map for reduction of Cross Subsidy already stands provided and the Commission is gradually moving towards that objective.

### **Objection No. 11: Avani Textiles Limited, Sangrur**

#### **Issue No.1: Utilization factor in Two Part Tariff**

Utilization factor does not reflect the actual usage as the factor which is sensitive to the number of days in a month. A revised formula for Utilization factor which is stated as under may be considered

$$\text{Utilization factor (\%)} = \frac{\text{Consumption of the month X100}}{(\text{Sanctioned CD*0.9 or Sanctioned Load}) \text{ X No. of days in month X 24}}$$

#### **Response of PSPCL**

The proposal for two-part tariff submitted by it as part of the ARR and tariff petition is only a breakup of the existing tariff applicable to a particular category into fixed and variable components. The average rate applicable in the two part tariff is approximately the same as the currently applicable tariff. In a pure two-part tariff there is a fixed charge and energy charge applicable to all the units consumed by a consumer, the average per unit rate of a consumer goes down as his consumption increases. However this kind of tariff proposal would lead to different per unit rates applicable to the consumers within the same category and would lead to discrimination between consumers. Hence in order to avoid such discrimination and to bring about parity and fairness in the applicable tariff rates, the tariff structure as submitted in the two-part tariff proposal was worked out. It should be noted that in all categories of consumers, irrespective of the average utilization factor, per unit average rate would come down to approximately the same values as the currently applicable tariff (except in case of consumers who are currently being billed on MMC).

Further, to minimize the complications in the billing process an uniform approach has been adopted for calculating the utilization factor.

The above may be given due consideration by the Commission while introducing Two Part Tariff.

### **View of the Commission**

In view of the objections raised by a number of consumers and consumer organizations, PSPCL is directed to submit revised proposals on two part tariff addressing the issues raised by various consumer organisations and consumers. The Commission has taken a decision not to introduce two part tariff during FY 2012-13.

**Issue No.2: Revenue neutrality in Two Part Tariff**

The entire exercise of introduction of two-part tariff is revolved around revenue neutrality for the PSPCL as a whole. However, it is utmost important that revenue neutrality is established consumer category wise.

**Response of PSPCL:**

As already stated in response to above issue, two-part tariff submitted is only a breakup of the existing tariff applicable to a particular category into fixed and variable components. The average rate applicable in the two part tariff is approximately the same as the currently applicable tariff. Since, the applicable per unit average rate in the proposed two-part tariff proposal for each category is more or less the same as the current applicable tariff, hence the condition of revenue neutrality is inherently built-in in the tariff structure.

**View of the Commission:**

The views of the Commission given in issue No. 1, Objection No.11 may be referred.

**Issue No.3: Regulations for Two part Tariff**

The commission should first notify regulation for determination of two part tariff after inviting comments from stake holders and holding public hearing and then the proposal for fixing two part tariff should be placed before the stake holders for debate.

**Response of PSPCL:**

PSPCL humbly submits that Issue cited above by the objector is prerogative of the Commission.

**View of the Commission:**

Commission takes note of the suggestion of the objector and will take appropriate decision.

**Issue No.4: Tariff for LS consumers**

PSPCL should determine the tariff of LS consumer based on the supply voltage.

**Response of PSPCL:**

The determination of the tariff for LS consumer based on the supply voltage is prerogative of the Commission. However, it is brought out that PSPCL is already in the process of getting the 'Cost of Supply' study conducted through a consultant, which is expected to be completed by April, 2012.

**View of the Commission**

Refer Commission's view for the issue no.4 of objection no. 10.

**Issue No.5: No justification for high fixed charges for LS consumers and additional 10Ps/unit on continuous process industries**

- (i) The fixed charges levied on LS consumer are exorbitantly high when compared with DS/NRS.
- (ii) Levying of additional 10 paisa per unit proposed on continuous process industry has no rationale.

**Response of PSPCL:**

- (a) The fixed charges are levied to recover the cost of infrastructure and for its maintenance. It will be prudent to recover the cost on the basis of such resources to be used for particular category of consumer. The dedicated resources required to cater LS consumer category are significantly more than that of the DS/NRS consumers. Hence recovery of higher fixed charges from the consumer categories which are utilizing the system infrastructure more is justified.

Moreover, PSPCL likes to clarify that despite of high recovery of fixed charges the overall tariff for each consumer category will remain nearly close to the existing tariff for that consumer group.

- (b) Due to nature of Continuous Process Industry it has to be fed with continuous power supply. To fulfil its obligation towards Continuous Process industries under the power shortage scenario, PSPCL will have to procure power at higher cost to cater the demand. Additional 10 paisa proposed to be levied on continuous process consumer is to account for such extra cost.

### **View of the Commission**

In regard to fixed charges under two part tariff, PSPCL is directed to submit revised proposal for two part tariff taking into consideration the objections/suggestions from various consumers / consumer organisations.

Regarding additional charges of paisa 10 / unit for continuous process industries, the Commission agrees with the response of PSPCL.

### **Objection No. 12: Antarctic Industries Ltd.**

#### **Issue No.1: Two part tariff**

The move of PSPCL for introducing Two-Part tariff is not correct. It will result into very high tariff per kWh as the existing tariff structure in place for PIU industries. The sample calculations are given.

#### **Response of PSPCL**

The contract demand of a consumer is directly mapped to the infrastructure to be maintained by a utility. Irrespective of the actual consumption by the consumer, PSPCL has to reserve its capacity to fulfil demand of consumer to the tune of contracted demand agreed with consumer. Since access to electricity is exclusive right for the citizen of this nation it is unjustifiable to block the facilities for consumer who has Stated exaggerated demand which results into the deprivation of access to electricity to other consumer groups. The proposed two part tariff structure would keep a check on the signed contracted demand of the consumers. As the lower utilization factor inherently penalizes the consumer by bringing up their per unit rate of kWh, this mechanism would ensure that every consumer will quote their actual demand to maintain high utilisation factor. This will ensure the better system utilization and wider access of electricity to the citizen of State.

In the light of above, the proposed tariff structure would benefit both consumers and utility.

#### **View of the Commission**

The issue is raised by a number of consumers / consumer organizations. The views of the Commission are already given on the issue under various objections. The Commission has however taken a decision not to introduce two part tariff during FY 2012-13.

#### **Issue No.2: Recommended conditions in Two part Tariff**

- (i) Demand charges should be on MDI and not on the contract demand.
- (ii) Maximum chargeable rate per kWh, to be introduced

#### **Response of PSPCL**

- (i) The demand charges are levied to recover cost of infrastructure setup maintained to fulfill the contracted demand of the consumer. MDI is subjected to change every month and it is not practical to maintain the infrastructure as per monthly fluctuation of demand. The prudent way to assess the demand is only through contract demand which is an indication of demand to be fulfilled in a longer horizon and the infrastructure to be maintained thereof. Keeping the feasibility of proposal in view, PSPCL prays to the Commission to allow PSPCL to recover demand charges through contract demand only.
- (ii) PSPCL would like to appreciate the concern of objector to put a cap on the rate chargeable per kWh so that there should be no wide variation of tariff among different class of consumers. But PSPCL also submits that it will bring unnecessary complications in the tariff structure. As one of the many principles laid down in National tariff Policy, it was directed to keep the tariff structure as simple as practically possible.

Further, the study for introduction of two-part tariff was undertaken so as to ensure a revenue neutral situation for PSPCL, meaning to say that the PSPCL neither benefits nor loses on account of introduction of two-part tariff. Accordingly, the PSPCL has proposed the two-part tariff structure which ensures that the average tariff in two-part structure is close to the current tariff thereby ensuring a revenue neutral situation. Essentially, the proposal of two-part tariff is only a break-up of the existing tariff into fixed and variable components. Hence, it is unlikely that there would be any wide variation in tariff among different consumer categories within PSPCL.

### **View of the Commission**

PSPCL may consider the suggestions given by the objector while revising the proposal for two part tariff.

### **Issue No.3: kVAh based Tariff**

kW metering may be shifted to kVA metering to encourage consumers to work on unity power factor.

#### **Response of PSPCL**

The study on kVAh based tariff is already being carried out by the M/s Deloitte on LS consumer having Contract demand of 100 kW and above. However, PSPCL would like to appreciate the concern of objector to improve the overall system efficiency through demand side management and PSPCL is actively working in that direction.

### **View of the Commission**

As already directed, the PSPCL should submit their comprehensive proposal for introducing kVAh tariff as it is already delayed. The Commission will take a view in the matter. Also refer Annexure IV, Directive No. 5.

### **Issue No.4: Cost of Supply at different voltages**

PSPCL must have to determine cost of supply at different voltages & for different categories of consumers before making petition for tariff revision.

#### **Response of PSPCL**

The Energy and Resources Institute (TERI), New Delhi has been appointed as consultant to conduct cost of supply study. They have submitted draft report on methodology to arrive at cost of service. A presentation on the methodology to be adopted for this study was made before Commission on 8, August, 2011. Based on inputs during presentation, additional information sought by consultants has been submitted. A CoS model is being prepared by the consultant and is likely to be finalized by 04/2012.

### **View of the Commission**

Refer view of the Commission for the Issue No. 4 of objection no. 10. PSPCL has already been directed to submit the study report on COS and the proposal at an early date.

### **Issue No.5: Reduction of Cross Subsidy**

Objector has submitted that as per Electricity Act the cross subsidy was to be reduced gradually but PSERC has not addressed the issue, which results into higher tariff.

#### **Response of PSPCL:**

PSPCL would like to submit that Clause-8.3 of Tariff Policy States as under:

#### ***“8.3 Tariff design: Linkage of tariffs to cost of service***

*2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within  $\pm 20$  % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy....”*

As given in the Tariff Policy, there has to be reduction in cross-subsidy but gradually keeping the interest of Utility in view.

PSPCL requests the Commission to keep the interests and financial viability of the Utility in view while addressing the concern of objector.

### **View of the Commission**

The Commission has in its Regulations already specified the gradual reduction of cross subsidy, though the total elimination of the same is no longer envisaged in the Electricity Act 2003. A gradual reduction in cross subsidy in percentage terms has been effected in the previous years. The Commission has reduced the cross subsidy over the years and is now within  $\pm 20$ % of average cost of supply.

### **Issue No.6: Cross Subsidy Under Open Access**

The cross subsidy is being charged under open access of power under two part tariff system. This has to be abolished.

#### **Response of PSPCL**

Irrespective of the tariff structures, cross subsidy surcharges are to be recovered from open access consumer. During tariff determination exercise, cross subsidy is being decided based on average tariff. Since open access consumers are subsidizing category to the subsidized group of consumers as per the open access regulation, such surcharges are to be recovered from them.

However, PSPCL notes that cross subsidy has to come down over the period of time but it is the prerogative of the Commission.

#### **View of the Commission**

The various charges including Cross Subsidy Surcharge for open access consumers are leviable as per Commission's Regulations and the provisions of the Act. The level of cross subsidy surcharge will be decided by the Commission on year to year basis.

### **Objection No. 13: Mawana Sugars Limited**

#### **Issue No. 1: Tariff for LS consumers based on supply voltage**

PSPCL should determine the tariff of LS consumers based on the supply voltage.

#### **Response of PSPCL**

M/s The Energy and Resources Institute (TERI), New Delhi has been appointed as consultant to conduct cost of supply study. They have submitted draft report on methodology to arrive at cost of service. A presentation on the methodology to be adopted for this study was made before Hon'ble Commission on 8 August, 2011.

A CoS model is being prepared by the consultant and is likely to be finalized by 04/2012.

#### **View of the Commission**

PSPCL has been directed to submit the study report on the proposal for introduction of COS to various categories of consumers.

#### **Issue No. 2: Utilisation factor in Two Part Tariff**

Utilization factor does not reflect the actual usage as the factor is sensitive to the number of days in a month. A revised formula for Utilization factor which is stated as under may be considered:

$$\text{Utilization factor (\%)} = \frac{\text{Consumption of the month X100}}{(\text{Sanctioned CD*0.9 or Sanctioned Load}) \text{ X No. of days in month X 24}}$$

#### **Response of PSPCL**

The proposal for two-part tariff submitted by it as part of the ARR and tariff petition is only a breakup of the existing tariff applicable to a particular category into fixed and variable components. The average per unit rate applicable in the proposed two part tariff structure will remain close to the currently applicable tariff. In a two-part tariff where the energy charge applicable to the units consumed by a consumer, the average per unit rate of a consumer goes down as his consumption increases. However this kind of tariff proposal would lead to different per unit rates applicable to the consumers within the same category and would lead to discrimination between consumers. Hence in order to avoid such discrimination and to bring about parity and fairness in the applicable tariff rates, the tariff structure as submitted in the two-part tariff proposal was worked out. It should be noted that in all categories of consumers, irrespective of the average utilization factor, per unit average rate would remain close to the currently applicable tariff (except in case of consumers who are currently being billed on MMC). Further, to minimize the complications in the billing process a uniform approach has to be adopted for calculating the utilization factor. The above may be given due consideration by the Hon'ble Commission while introducing two part tariff.



### **View of the Commission**

Similar objections / suggestions are given by a number of consumers / consumer organizations. PSPCL may consider the suggestion while revising the proposal for two part tariff.

### **Issue No. 3: Revenue neutrality in Two Part Tariff**

The entire exercise of introduction of two part tariff is revolved around revenue neutrality for the PSPCL as a whole. However, it is utmost important that revenue neutrality is established consumer category wise.

#### **Response of PSPCL**

As already stated in response to above issue, two-part tariff submitted is only a breakup of the existing tariff applicable to a particular category into fixed and variable components. The average rate applicable in the two part tariff will remain close to the currently applicable tariff. Since the applicable per unit average rate in the proposed two-part tariff proposal for each category is the same as the current applicable tariff, the condition of revenue neutrality is inherently built-in in the tariff structure.

#### **View of the Commission**

As mentioned earlier under similar objections, PSPCL has been directed to submit revised proposal for two part tariff considering the objections / suggestions by various consumers / consumer organizations.

### **Issue No. 4: Lack of transparency in the Two Part Tariff proposed**

The ARR and Tariff petition lack transparency as the basis for Fixed and variable charges have been arrived at has not been elaborated

#### **Response of PSPCL**

Ideally fixed charges should be recovered on account of fixed cost incurred for providing a particular service and variable cost be recovered on account of variable cost incurred for providing that service. PSPCL has done the exercise to separate out all the expenses as under fixed and variable cost. The fixed cost thus arrived was 40% of total cost. Recovering such magnitude of cost from only fixed charge would lead to exorbitantly high fixed charges. Therefore, PSPCL has compared the category wise fixed charges recovered by utilities in other states and kept the fixed charges around them.

Further, the two part tariff has been designed in such a way that the average per unit cost will remain close to the existing tariff for each category of consumers.

#### **View of the Commission**

PSPCL has been directed to submit revised proposal addressing the concerns of various stake holders on two part tariff. Commission will take decision on introduction of two part tariff on receipt of revised proposal on two part tariff from PSPCL.

### **Issue No. 5: High fixed charges for LS consumers**

The fixed charges levied on LS consumer are exorbitantly high when compared with DS/NRS.

#### **Response of the PSPCL**

The fixed charges are levied to recover the cost of infrastructure and for its maintenance. It will be prudent to recover the cost on the basis of such resources to be used for particular category of consumer. The dedicated resources required to cater LS consumer category are significantly more than that of the DS/NRS consumers. Hence recovery of higher fixed charges from the consumer categories which are utilizing the system infrastructure more is justified.

Moreover, despite of high recovery of fixed charges, the overall tariff for each consumer category will remain nearly close to the existing tariff for that consumer group.

#### **View of the Commission**

Please refer to the views of the Commission on issue No. 4 above.

**Issue No. 6: Fixed charges on entire contract demand**

The proposed fixed charges are being sought to be imposed on the entire contract demand of the consumer even if the consumer may be obtaining power from open access. It is an attempt to beat open access but also by doing so; the consumer who avails open access will be doubly burdened in as much as under the open access regulation also the consumer has to pay wheeling charges towards fixed cost.

**Response of PSPCL**

The fixed charges are recovered on account of dedicated infrastructure being maintained by utility to serve the interest of consumers. Contract demand is an indicator of potential of energy requirement by a particular consumer. To fulfill that potential demand, PSPCL has to build infrastructure and put proper system in place to cater to the demand for the purpose of achieving consumer satisfaction. Therefore it is prudent to recover fixed charges based on the contract demand.

Further, in the two part tariff structure, it has been proposed to reduce the energy charges for open access consumer.

**View of the Commission**

Please refer to the Commission's view on issue No. 4 above.

**Issue No. 7: Levying of 10P per unit for continuous process industry**

Levying of additional 10 paise per unit proposed on continuous process industry has no rationale.

**Response of PSPCL**

Due to its nature of Continuous Process Industry has to be fed with continuous power supply. To fulfill its obligation towards Continuous Process industries under the power shortage scenario, PSPCL will have to procure power at higher cost to cater the demand. Additional 10 paise is proposed to be levied on continuous process consumer to account for such extra cost.

**View of the Commission**

As stated by PSPCL, power has to be purchased at high cost to maintain continuous power supply to continuous process industries. Levy of additional charge of 10 paise / unit is justified (refer para 5.2).

**Objection No. 14: Er. Sukhinder Singh****Issue 1: Subsidy payment by Government**

(i) In the Commission's order dated 13.09.2007 the following provision has been made:

- a) Annual subsidy should be paid in advance in quarterly installments.
- b) Subsidy is not to be adjusted against loan.

(ii) Commission's order of 13.09.2007 is still in force and has not been modified / reviewed / amended.

(iii) In previous years, the GoP had requested for allowing monthly advance installment of subsidy instead of quarterly advance installment and commission had allowed this relaxation while issuing the tariff order. However, Commission has not amended or modified the basic order of 13.09.2007.

**Response of PSPCL**

PSPCL keeps similar views as that of objector. Any utility needs cash to undertake its day-to-day activities. Subsidy being a part of revenue for the utility, if paid in advance, will have double-edged benefits. Firstly, cash-crunched utility will have sufficient liquidity to perform its activities by having sufficient working capital in hand. Secondly, and most importantly the utility would be escaped from coming under the debt-trap. To fulfill its day-to-day requirements, utility needs cash in hand, otherwise it has to borrow a short term loan on prevailing interest rate. In due course of time interest component of loan becomes considerable and to pay-out only interest on the loan, it has to borrow money from the market to avoid further into a debt trap.

In the light of above, the advance payment of subsidy is crucial to keep the financial health

of a utility in a sound condition. Therefore, PSPCL requests the Commission to exercise its power to issue directive to GoP for the compliance pertaining to advance payment of subsidy.

#### **View of the Commission**

The Government of Punjab has by and large been paying subsidy in a manner prescribed by the Commission. In case of delay, interest on delayed payment of subsidy is charged and paid by GoP.

Adjustment of subsidy against loan is mutual between the utility and Government of Punjab.

#### **Issue No. 2: Provision in EA 2003, regarding subsidy**

There is a provision in section 65 of Electricity Act 2003 regarding subsidy as:

- a) Subsidy has to be paid in advance in a manner as specified by SERC.
- b) Direction of state government on subsidy shall not be operative if the advance payment of subsidy is not made as specified by the SERC.
- c) In case of default in advance payment of subsidy, the full tariff as decided by SERC shall be applicable.
- d) Even if government issues directions under section 108 of the Electricity Act 2003, such direction cannot override the provision of section 65 of the Act.

#### **Response of PSPCL**

PSPCL agrees with the objector on the above mentioned issues as non-fulfillment of the same is leading to the deterioration of financial health of the utility. PSPCL therefore requests the Commission to issue suitable directives in the Tariff Order to address the issues.

#### **View of the Commission**

Refer Commission's view on Issue No.1 of the Objector.

#### **Issue No 3: To charge full tariff, if subsidy not paid in time**

In case of dishonouring of subsidy payment by GOP, Hon'ble Commission shall authorize PSPCL to charge the full (unsubsidized) tariff in case the period of default exceeds 10 days.

#### **Response of PSPCL**

As already highlighted in reply to issue 1.(iv) above, dishonouring of subsidy payment leads to deterioration of financial health of PSPCL, Therefore, Commission is requested to consider the objectors suggestion or some other suitable measure to check dishonouring of subsidy on the part of GoP.

#### **View of the Commission**

Refer Commission's view on Issue No.1 of the Objector.

#### **Issue No. 4: No adjustment of subsidy against loan**

The Commission shall pass an order in consonance with its own order dated 13.09.2007 declaring the adjustment of loan against subsidy as null and void and illegal and should direct GOP to pay the amount in cash to PSPCL.

#### **Response of PSPCL**

The Commission is requested to issue suitable directives in the Tariff Order to address the issues.

#### **View of the Commission**

This issue is mutual between Government of Punjab and Utility.

#### **Issue No. 5: Affidavit to be obtained from GOP regarding subsidy payment**

The Commission should obtain the commitment of GOP regarding subsidy on affidavit to be signed by the Chief Secretary, Punjab State Government or Principal Secretary/Power, Punjab State Government with the following commitment.

- a) Subsidy would be paid in cash and in advance in quarterly - installments
- b) There would be no book adjustment against subsidy payments.
- c) In case of delay or default by GOP in the payment of subsidy, then in terms of section 65 of the Electricity Act 2003, the direction of GOP for subsidy would become automatically

inoperative, null and void and Govt. would unconditionally accept the levy of full (unsubsidized) tariff.

d) Once a default in the payment of subsidy occurs, then the levy of full tariff for the recovery of past arrears would be justified and accepted without any dispute or demur on the part of Government.

e) In case of default resulting in the charging of full tariff, the default would be considered as cured only if the current quarter's subsidy is paid in full and in advance payment for the next quarter is ensured. If these two conditions are not complied, the levy of full tariff would be continued.

#### **Response of PSPCL**

PSPCL keeps similar views as that of objector. However, the above matter is under the prerogative of the Commission.

#### **View of the Commission**

The Government of Punjab gives a commitment for payment of subsidy before issue of Tariff Order. A copy of the letter forms a part of the Tariff Order. The Govt. of Punjab by and large stands by its commitment to pay subsidy.

#### **Issue No. 6: To seek remedy in the court of law**

In case the above stated points based on section 65 of Electricity act 2003 and based on Commission order dated 13/09/2007 are not adequately addressed in the Tariff Order to be issued by the Commission, the objector would be left with no alternative except to seek remedy through the Court of law.

#### **Response of PSPCL**

The matter is under the prerogative of the Commission.

#### **View of the Commission**

The payment of subsidy by GOP is regularly monitored by the Commission. The Commission, in its Order dated 27/05/2008, has also observed that the issue of adjustment of GoP loan against subsidy is mutual to GOP and utility. The Commission would prevail on the State Government to pay the subsidy in advance as per Section 65 of the Act and stipulation of the Commission.

#### **Objection No. 15: Rice Mills Association**

##### **Issue : Fixed charges for Rice Mills**

Levying of fixed rate of Rs. 250/kVA for off-seasonal factories like cotton factories and rice mills is not correct. Rice industry is a seasonal industry and that the raw material which it uses is not available throughout the year. Therefore levying of such a high tariff throughout the year will darken the future of such industries.

#### **Response of PSPCL**

Fixed charges are recovered to compensate for the cost of infrastructure, its maintenance and fixed cost of power purchase. Irrespective of consumption, PSPCL has to bear certain cost which has no functional relationship with units consumed/ supplied. To recover such fixed costs, fixed charges are necessary and justified as far as financial viability of the utility is concerned.

Further, approval of fixed charges in the proposed tariff structure is the prerogative of Commission.

#### **View of the Commission**

It is understood that the issue raised is with reference to the proposal of PSPCL for two part tariff. In view of number of objections raised by various consumers / consumer organizations, PSPCL is directed to submit revised proposals considering the objections raised. A decision on 'Introduction of two part tariff' will be taken after the revised proposal of PSPCL is received and examined.

## **Objection No 16: Mahashakti Energy Ltd.**

### **Issue No 1: Continuous Power Supply**

The Industry wants continuity of power supply without imposition of cut as use of generators do not meet with the requirement of power by industry.

#### **Response of PSPCL**

PSPCL agrees with the objector that continuity of power is vital ingredient for the prosperity of industries. However, Punjab is currently an energy deficit State and PSPCL has to purchase power from various sources such as central generating stations, traders. etc. Further, withdrawal of power is dependent on grid conditions. Regulations don't allow power withdrawal from grid if it is operating at the threshold frequency allowed therein. Thus, at such event, power cut/load shedding is the only alternative available with the PSPCL as a remedial measure to match the demand and supply of electricity.

PSPCL is building new generating capacity within the State which will add to the total generating capacity of Punjab in the near future. Continuity of power is most likely to be achieved under that scenario.

#### **View of Commission**

PSPCL needs to take all steps possible to procure power at reasonable rates with a view to minimize duration of power cuts.

### **Issue No 2: Removing Peak Load Restrictions**

The industry may be allowed to use power during peak load hours at higher tariff as a lot of time is wasted to seek exemptions from PSPCL offices

#### **Response of PSPCL**

Providing any exemption/relaxation to normal rules/guidelines to be followed by is the prerogative of the Commission.

#### **View of Commission**

Restrictions on power supply during peak hours are necessary to operate the system within permissible parameters and to avoid cascade trippings. However, PSPCL is advised to streamline the process for grant of PLEC.

### **Issue No 3: Subsidies at the Cost of Industry**

Subsidies are being allowed by Govt. at the cost of industry. The tariff for industry is enhanced to compensate the loss caused due to subsidy. The Govt. may allow subsidy to agriculture & weaker sections of society by arranging funds from other sources and not at the cost of industry by increasing the tariff of industrial consumers.

#### **Response of PSPCL**

Clause-8.3 of Tariff Policy states as under: "**8.3 Tariff design: Linkage of tariffs to cost of service**

*2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within  $\pm 20$  % of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy...".*

At present, certain consumer categories are defined as subsidizing categories and others as subsidized categories. Industrial consumer comes under the subsidizing category. As given in the Tariff Policy, there has to be reduction in cross-subsidy but gradually, keeping the interest of utility in view.

Therefore, it is the prerogative of the Commission to fix the tariff for various Consumer categories and to take decisions on cross subsidies as pointed out by the objector through interaction with GOP.

#### **View of Commission**

A gradual reduction in cross-subsidy in percentage terms has been affected in the previous years. Refer to table 6.5 of this Tariff Order. The Commission has brought cross subsidy of all categories within  $\pm 20$ % of average cost of supply as per National Tariff Policy.

## **Objection No 17: Power Engineers Association**

### **Issue No 1: Abolition of MMC for DS/NRS/PL Consumers**

Abolishing of MMC for DS/NRS/PL consumers is in national interest as it will discourage the consumers to conserve electricity. Moreover, a consumer starts wasting of precious electricity just to meet MMC. Also a poor consumer who runs welding/repair shops whose business is highly intermittent feels uneasy about MMC.

#### **Response of PSPCL**

MMC is recovered to compensate for the cost of infrastructure and its maintenance. Irrespective of consumption, PSPCL has to bear certain cost which has no functional relationship with units consumed. To recover such fixed cost, MMC is necessary and justified as far as financial viability of the utility is concerned.

#### **View of Commission**

The Commission has in its Order FY 2004-05 observed that a substantial portion of the Board's (now PSPCL) costs are fixed in nature and do not undergo change with fluctuations in actual energy consumption. Ideally, therefore, all such fixed costs need to be recovered through fixed charges whereas the PSPCL recovers only a small fraction of this cost through MMC. The Commission holds the same view at present. It is also relevant to mention that in deference to consumer sentiments in this respect, rates of MMC were reduced by 10% in the Tariff Order for FY 2004-05.

### **Issue No 2: Minimum load limit for 3 phase connection**

The limit of 10 kW of connected load at DS consumer premises shall be narrowed down to 6 kW for enabling him to get 3-phase connection.

#### **Response of PSPCL**

PSPCL is filing a petition before PSERC for decreasing the load for three phase connection from 10 kW.

#### **View of Commission**

PSPCL shall examine the petition for reduction of load for 3 phase supply and take appropriate decision.

### **Issue 3: Load of a booth area**

The load of a booth of area upto 20 sq. yard should be fixed as 6 kW instead of 10/30 kW.

#### **Response of PSPCL**

As per note below clause no 36.8 (c) of Electricity Supply Instruction Manual, the load of 10 kW/30 kW is to be used only for planning purposes. In actual practice, the load of a consumer shall be computed as per clause no. 9 of conditions of supply.

#### **View of Commission**

Commission agrees with the response given by PSPCL.

## **Objection No 18: Bharati Kisan Union**

### **Issue No 1: Help promised by Centre for Segregation of Companies.**

When the Electricity Board was segregated into companies then, as per press reports centre has made a promise to pay Rs 30,000 crore. If that amount is received, then there is no need to increase tariff.

#### **Response of PSPCL**

No amount has been received from center. As such above mentioned issue does not have any bearing on current exercise of tariff revision.

#### **View of Commission**

Commission agrees with the reply of PSPCL.

**Issue No 2: No justification for increase in Generation Costs**

Neither rates of coal etc. have increased significantly nor nature has increased the cost of river water. Hence expenditure on generation has not increased.

**Response of PSPCL**

CERC vide its notification no. Eco 1/2011-CERC dated 31 March 2011 has allowed Y-o-Y escalation at 6.6% on coal prices. Same rate has been used for calculating the expenditure on generation.

Further the power cannot be produced only through coal and water. There are many other cost heads involved for thermal generation such as fuel oil, O & M expenses, A & G expenses, Depreciation, Interest and finance charges etc. Hence merely stating the fact that expenditure on generation has not increased doesn't change the ground realities.

Therefore, PSPCL would like to request the Commission to allow actual increase in the cost of generation.

**View of Commission**

The coal prices have been going up over the years. The Commission considers all genuine expenses while deciding the tariffs.

**Issue No 3: AP consumption shown higher**

There is no instrument to measure the electricity being given to farmers, theft and losses. Expenses are booked on account of farmers and appreciation is being collected by PSPCL but in reality the electricity provided is less.

**Response of PSPCL**

The estimation of AP sales is done through data received from sample meters installed for the purpose of recording AP consumption. Therefore contention of objector is not correct.

**View of Commission**

The objective of the Commission is to make more accurate estimation of AP consumption and towards that end the Commission is working in consultation with the PSPCL (erstwhile PSEB). The Commission has been repeatedly emphasizing the need for instituting regular energy audits at distribution level. Putting in place such a system in respect of AP feeders would be another step that will provide a useful cross check of AP consumption estimated through reading of sample meters. AP consumption is primarily to be estimated on sample meter reading and AP factor worked out on the basis of connected load. To the extent that there are aberrations in the reporting of data by PSPCL, consumption has to be suitably curtailed. In addition, the Commission has already directed PSPCL to ensure that the provisions of the Electricity Act 2003 regarding metering of all electric connections be complied with.

**Issue No 4: Amounts not spent for Infrastructure development**

In the name of increasing load, crores of rupees have been collected from consumers but neither line nor transformers have been changed anywhere. With this, neither line expenditure has decreased nor, any relief has been given to consumers.

**Response of PSPCL**

The objector has merely stated his assumption based out of his intuition without any background data to support his assumption.

**View of Commission**

PSPCL has been adding additional lines and transformers to meet the demand and improve the system. PSPCL has been furnishing the details of the implementation status of various schemes.

**Issue No 5 & 6: Number of Employees**

The number of employees be made equivalent to Haryana, Gujarat, TN as per number of consumers. Expenditure on salary and allowances to employees shall be made equal to other States on the basis of 1% of total income.

### **Response of PSPCL**

M/s PwC, Consultant on Manpower Study submitted its report which was discussed in the meeting of BoDs held on 13/04/2011. A Committee of Director/Finance, Director/Distribution, and Director/HR was constituted for further examining the report and putting up to the Board. The Committee is likely to submit its report for consideration of Board of Directors by mid March, 2012. The productivity of employee has also increased year over year as already depicted in the ARR petition of FY 12-13.

### **View of Commission**

The Commission has been curtailing the manpower costs over the years in line with notified Regulations. Such directives have been upheld time and again by Hon'ble APTEL. PSPCL has got the manpower study done and should take action on the report.

### **Issue No 7: Energy Audit**

Audit shall be made in respect of generation of electricity and electricity actually received by the customers to know actual distribution expenses and theft and corrective steps be taken.

### **Response of PSPCL**

While issuing a Tariff Order, the Commission verifies the authenticity and veracity of each and every data submitted by PSPCL to it.

### **View of Commission**

A directive is issued to PSPCL for Energy Audit and T & D loss reduction, (Annexure-IV, Directive No.1), which is being monitored.

### **Issue No 8: Higher Tariff in Punjab compared to Chandigarh**

Chandigarh is a rich city but the rates of electricity are less than Punjab. Why are the rates being increased in Punjab?

### **Response of PSPCL**

Tariff is not function of paying capacity of any city. Tariff is a reflective of expenses incurred to serve the electricity to consumers.

Further, PSPCL would like to submit that Tariff revision is under the prerogative of the Commission.

### **View of Commission**

Commission agrees to the reply of PSPCL.

### **Objection No.19: Sh. Gurnek Singh Brar**

#### **Issue No. 1: Overdrawal at low frequency**

Over drawl at low frequency is also a violation of the grid code and that in a recent adjudication CERC had imposed a fine of Rs.1 lac/violation on PSPCL and hence in light of the same over drawl in low frequency conditions should be avoided. The objector has stated that in 11 specific cases/ instances PSEB had disregarded NRLDC messages to curb over drawl. The details of instruction/corrective action taken to ensure that such instances do not repeat, in future, may be provided.

### **Response of PSPCL**

The reasons for over-drawl during period in question were forced outage of various units of State Generating Stations, outages of Central Sector Generating Stations, extreme temperature, low availability from BBMB Hydro stations, obligation for supply of minimum quantum to other utilities as per banking arrangements and requirement of uninterrupted supply during the World Cup Kabbadi hosted by the State of Punjab. For the month of April, 2010, banking arrangements were made in advance and as per the obligations in agreements, some minimum quantum had to be supplied to the other utilities. Besides, the erstwhile PSEB was unbundled in April, 2010 and extraordinary measures were undertaken to maintain uninterrupted supply of power during this period.

### **View of the Commission**

PSPCL should take necessary steps to avoid such overdrawls in future.



**Issue No. 2: UI drawals**

During October to December 2011, the UI overdrawl was at a relatively high rate of Rs.5.89 per unit to Rs.7.13 per unit. Such overdrawl has occurred after paddy season and is therefore not justified. The extra UI charges are to be recovered from GOP.

**Response of PSPCL**

PSPCL was not overdrawing (based on SCADA) from the grid and there has been wide variation between SEM & SCADA data from Oct. 2011 onwards and the matter has already been taken up with PSTCL, NRDLC & NRPC for rectifying this discrepancy.

**View of the Commission**

PSPCL should inform the Commission on obtaining clarifications on the discrepancy. PSPCL should take appropriate action to maintain grid discipline to avoid extra UI charges.

**Issue No. 3: Over drawal during under frequency**

Due to overdrawl below 49.5 Hz, an amount of additional 40% over and above the rate of Rs. 8.73 per unit, while in case of over drawl below 49.2 Hz, the additional UI is charged at 100% over and above Rs. 8.73 per unit. The amount charged as additional UI charges for the period 1.4.2011 up to 20.01.2012 was 22.43 crore. The Commission may direct PSPCL to observe grid discipline to avoid extra UI charges.

**Response of PSPCL**

PSPCL always endeavors to maintain grid discipline and to avoid incurring additional UI charges but sometimes the system frequency changes abruptly and even after instructions for load shedding for some period, additional UI cannot be avoided. It is also pointed out that as explained in reply to para no. 2 above the deviation between SEM & SCADA data particularly for the months of Oct. 2011 onwards has also resulted in increase of additional UI amount as strictly enforced under-drawl based on SCADA were turning out to be over-drawl as per SEM data.

**View of the Commission**

PSPCL should take all steps to avoid overdrawl particularly during under frequency and should maintain grid discipline.

**Issue No. 4: Training of personnel of thermal plant**

The details of implementation of the statutory requirement of training of O&M personnel of thermal power plant under the Indian Electricity Rule, Rule 3(2) A. are sought as under:

- a) No. of personnel
- b) No. of personnel given prescribed training
- c) Action plan to give training to balance number of personnel.

**Response of PSPCL**

The information sought by the objector does not fall in the current exercise of ARR. However, it is intimated that training cells headed by an officer of the rank of Superintending Engineer have already been set up at each Thermal Plant of PSPCL. These training cells have been conducting various trainings including those relating to safety and electricity supply.

**View of the Commission**

The response of PSPCL is noted. The specific information sought should be given to the objector by PSPCL.

**Issue No. 5: Information on utilization and commissioning of power transformers**

The information regarding the utilization and commissioning of 66/11 kV power transformers purchased by PSPCL/PSTCL during the period 10.05.2010 to 16.08.11 may be furnished.

**Response of PSPCL**

PSPCL submits that the information sought by the objector does not fall in the current exercise of ARR.

**View of the Commission**

PSPCL should supply information to objector though it may not affect the Tariff for financial year 2012-13.

## **Objection No 20: Sh. Kuldeep Singh Grewal**

### **Issue No 1: Wastage due to free power to Agriculture.**

- Due to free power to Agriculture, there is wastage of water and water table is going down.
- Due to lack of meters on the Pumpsets, all the theft and unjustified expenses incurred in the distribution of electricity is loaded on this category.
- Beneficiaries of this policy are the big farmers, as they consume as much electricity, as they want.
- GOP is purchasing the crops on fixed rates and the farmers are looted by the low rates.
- The Agriculture Pumpset meters, and Agriculture feeders shall be metered to ascertain how much is actually consumed and how much is lost due to theft etc.
- Only about 800 to 900 units per month should be supplied free and balance should be charged on justified basis. This will restrict the wastage of power.

### **Response of PSPCL**

The supply of free electricity to farmers in the State is a policy decision of the Government of Punjab. As per the Electricity Act, 2003, the respective State Governments are at liberty to provide subsidy to specific categories in accordance with the provisions of the Act, subject to the condition that the distribution utility is suitably compensated for the same.

As far as the loading of theft and unjustified expenses to agriculture consumers, PSPCL hereby submits that in order to accurately determine the supply to agriculture consumers, the Commission had directed the PSPCL to install meters on 10% of the total agriculture pump sets connections. In compliance to the same, PSPCL has already installed meters on 9.41% of the total agriculture consumers. In addition, PSPCL has also installed AMR based meters on 3239 agriculture feeders at the grid level. These measures have helped in accurate determination of agriculture consumption and also the T & D losses in agriculture feeders. Hence, PSPCL submits that it does not load the losses/theft to agriculture category but always determines the agriculture consumption based on the readings of the sample consumer meters installed.

The Supply to all the agriculture consumers is also regulated and it is ensured by PSPCL that the minimum supply hours are ensured for the category. During paddy season, PSPCL also purchase costly power to meet the enhanced requirement of agriculture consumers because it understands the importance of power supply during this peak seasons to agriculture consumers.

As per the recommendation of the objector, metering of all the agriculture consumers and feeders would require substantial capital investments and also manpower for deployment of all these meters. Such huge capital investment will in turn increase the expenses of PSPCL and the same shall be ultimately passed on to the consumers through tariff hike. Hence as per the directive of the Commission, PSPCL has installed meters on a sample set of agriculture consumers and proposes to undertake the metering of the remaining agriculture consumers in a phased manner in subsequent years.

With regard to the suggestion that the farmers should be supplied approximately 800 to 900 units per month free of cost and those consuming more than this should be charged on justified basis, this matter is not under the purview of PSPCL. As already mentioned above, provision of subsidy is a prerogative of the Government of Punjab and tariff determination is a prerogative of the Commission.

### **View of Commission**

The objective of the Commission is to make more accurate estimation of AP consumption and towards that end the Commission is working in consultation with the PSPCL (erstwhile PSEB). The Commission has been repeatedly emphasizing the need of instituting regular energy audits at distribution level. Putting in place such a system in respect of AP feeders would be another step that will provide a useful cross check of AP consumption estimated through reading of sample meters. AP consumption is primarily to be estimated on sample meter reading and AP factor worked out on the basis of connected load. To the extent that

there are aberrations in the reporting of data by PSPCL, consumption has to be suitably curtailed. In addition, the Commission has already directed PSPCL to ensure that the provisions of the Electricity Act 2003 for 100% metering of all electric connections are complied with.

### **Objection No 21: Punjab Cotton Factories & Ginnery Association (Regd)**

#### **Issue: Levying of fixed charges for off Seasonal factories**

It is not correct to levy fixed charges for off – seasonal factories under proposed two part tariff regime. The cotton industry is a seasonal industry and that the raw material which it uses is not available throughout the year. Therefore levying of such a high tariff throughout the year will darken the future of such industries. It is requested that the Commission may have a joint meeting or conference either at Bathinda or Chandigarh to hear the grievances of representative of industry.

#### **Response of PSPCL**

PSPCL submits that fixed charges are recovered to compensate for the cost of infrastructure, its maintenance and fixed cost of power purchase. Irrespective of consumption, PSPCL has to bear certain cost which has no functional relationship with units consumed/supplied. To recover such fixed costs, fixed charges are necessary and justified as far as financial viability of the utility is concerned.

Further, approval of fixed charges in the proposed Two Part Tariff structure is prerogative of Commission. Holding any joint meeting with industry's representative is under the prerogative of Commission.

#### **View of Commission**

PSPCL is directed to submit revised proposal for two part tariff taking into consideration the objections raised. PSPCL may take this objection also into consideration.

### **Objection No 22: The Bathinda Cotton Factories Association**

#### **Issue: Levying of fixed charges for off seasonal factories**

It is not correct to levy fixed charges for off – seasonal factories under proposed two part tariff regime. The cotton industry is a seasonal industry and that the raw material which it uses is not available throughout the year. Therefore levying of such a high tariff through-out the year will darken the future of such industries.

MMC was introduced to check the theft but the utility has made it as earning factor by changing the name as fixed charges.

#### **Response of PSPCL**

The fixed charges are recovered to compensate for the cost of infrastructure, its maintenance and fixed cost of power purchase. Irrespective of consumption, PSPCL has to bear certain cost which has no functional relationship with units consumed/supplied. To recover such fixed costs, fixed charges are necessary and justified as far as financial viability of the utility is concerned. Approval of fixed charges in the proposed Two Part Tariff structure is prerogative of the Commission. The MMC/fixed charges are meant to recover the fixed charges only which the utility is incurring while meeting the demand of consumers.

#### **View of Commission**

PSPCL is directed to submit revised proposal for two part tariff taking into consideration the objections raised. PSPCL may take this objection also into consideration.

### **Objection No. 23: Hotel & Restaurant Association of Punjab**

#### **Issue**

The Hotel & Restaurant business has been declared as industry in the year 1996. However, commercial tariff is being charged instead of industrial. Objector has requested that PSERC instead of revising the tariff shall charge industrial tariff on hotel and restaurant business instead of commercial.

### **Response of PSPCL**

As per Schedule of Tariff for Non Residential Supply (NRS) Availability Clause SV.1.1 Hotels/Motels, Guest Houses and Restaurant are covered under NRS category and accordingly NRS tariff is being charged from such consumers. However, any further amendment in the Availability Clause of Tariff comes under the purview of PSERC.

### **View of the Commission**

Hotels cannot be considered as industry for supply of electricity. It has been put under NRS category.

### **Objection No. 24: Lovely International Trust**

#### **Issue No.1: Reduction of Bulk Supply Tariff for education institutions**

Objector has contended that existing Bulk supply tariff for educational institutions is on the higher side and it should be reduced suitably.

#### **Response of PSPCL**

PSPCL submits that category wise tariff determination is the prerogative of the commission.

#### **View of the Commission**

The Commission determines the Tariff for all categories of consumers after taking all relevant factors into consideration.

#### **Issue 2: CD limit under 11kV**

Objector has requested to increase the existing limit of contract demand of 4000 kVA to 12000 kVA in respect of DS/NRS/BS consumer getting power at supply voltage of 11 kV.

#### **Response of PSPCL**

PSPCL submits that the issue raised by objector does not have any bearing on the current exercise of ARR determination and tariff revision. However the concern of the objector is being sent to CE/Commercial, PSPCL, Patiala for taking necessary action.

#### **View of the Commission**

The consumer may refer to Conditions of supply approved by the Commission. However, if any change is required, he should approach the Commission through Petition.

#### **Issue No. 3: Waival for the requirement of N.O.C for increase in CD**

It is requested to waive the requirement of submitting N.O.C. from competent authority in respect of existing consumers requesting for extension in load/extension in contract demand.

#### **Response of PSPCL**

PSPCL submits that the issue raised by objector does not have any bearing on the current exercise of ARR determination and tariff revision. However the concern of the objector is being sent to CE/Commercial, PSPCL, Patiala for taking necessary action.

#### **View of the Commission**

The consumer may approach PSPCL. PSPCL may consider the request and take appropriate decision.

### **Objection No. 25: Punjab Technical University**

#### **Issue No.1: Reduction of Bulk Supply Tariff for education institutions**

Objector has contended that existing Bulk supply tariff for educational institutions is on the higher side and it should be reduced suitably.

#### **Response of PSPCL**

PSPCL submits that category wise tariff determination is the prerogative of the commission.

#### **View of the Commission**

The Commission determines the Tariff for all categories of consumers after taking all relevant factors into consideration.

**Issue 2: CD limit under 11kV**

Objector has requested to increase the existing limit of contract demand of 4000 kVA to 12000 kVA in respect of DS/NRS/BS consumer getting power at supply voltage of 11 kV.

**Response of PSPCL**

PSPCL submits that the issue raised by objector does not have any bearing on the current exercise of ARR determination and tariff revision. However the concern of the objector is being sent to CE/Commercial, PSPCL, Patiala for taking necessary action.

**View of the Commission**

The consumer may refer to Conditions of supply approved by the Commission. However, if any change is required, he should approach the Commission through Petition.

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**Response of PSPCL**

PSPCL submits that the issue raised by objector does not have any bearing on the current exercise of ARR determination and tariff revision. However the concern of the objector is being sent to CE/Commercial, PSPCL, Patiala for taking necessary action.

**View of the Commission**

Consumer may approach PSPCL. PSPCL may examine the request and take appropriate decision.

**Objection No. 26: M/s Indus Towers Ltd.****Issue No. 1: Higher tariff as compared to other states for telecom towers**

Telecom towers are categorized under NRS in Punjab. The monthly electricity cost per tower is found to be more in Punjab, when compared to other States like J&K, Haryana, Uttarakhand, HP, Chattisgarh and Jharkhand. The tariff shall also be fixed within ( $\pm$ ) 20% of average cost of supply, as per National Tariff Policy.

**Response of PSPCL**

it is not pertinent to compare the tariff applicable to NRS category in other states with the tariff applicable to NRS category in Punjab. Each state has a different consumer mix which determines the element of cross subsidy and the tariff for each category. Also the costs incurred by different States are different. As an example, some States have lower power purchase costs due to higher allocation from hydel/cheaper sources whereas others have to purchase relatively costlier power. In view of all the above facts, it is not judicious to compare the tariff of a category in different states.

As far as the comparison of average cost of supply and tariff for different categories is concerned, it is to be noted that by the objector's own admission the difference has been reducing over the years. PSPCL has appointed M/s TERI for undertaking the category- wise cost of supply study and once the findings of the same are finalized, comparison of tariff of each category with the CoS for that category shall be put forward for the review of the Hon'ble Commission.

**View of the Commission**

The Commission has determined the tariff to this category after taking all factors into consideration.

**Issue No. 2: Introduction of new sub-category for telecom towers**

Based on the nature of the activities undertaken by the specific consumers, several states have notified separate subcategories within the NRS category e.g. MP, Jharkhand, AP and Uttarakhand. Apart from sub-categories based on connected load a special subcategory for telecom towers should also be introduced by the Commission in the state of Punjab. The nature of consumption witnessed in telecom towers and the consumption profile of these towers is very beneficial for PSPCL because telecom towers do not contribute to peak demand and witness a more or less flat load profile and hence do not contribute to peak

power purchase costs of PSPCL.

The telecom towers are covered by a universal service obligation as defined in the amended Telecom Act, 1885 and all telecom operators have to provide services to consumers in rural and urban areas alike. In light of the same it is prayed that a separate sub-category for telecom towers would be beneficial to the telecom industry.

**Response of PSPCL**

The telecom tower business is purely commercial in nature and is currently under NRS category. It is prayed that the Commission should not accept the proposal of the objector and should continue with the current system of categorization of consumers.

**View of the Commission**

The Commission has determined the tariff to this category after considering all factors.

**Issue No. 3: Implementation of consolidated billing and roll out of AMR meters**

The Commission should direct the PSPCL to compulsorily install AMR meters on the telecom tower installations. The consolidated billing for all the telecom towers of M/s Indus Tower Ltd. should be initiated by PSPCL.

**Response of PSPCL**

PSPCL would like to submit that the telecom towers of any particular company are spread over the entire state and fall under different sub-divisions. Accordingly the day-to-day operations relating to the different towers are handled by different officials. Each subdivision undertakes the meter reading, billing and bill dispatch for towers falling' under its jurisdiction. Also the meter reading and billing dates of all the towers are different. In light of all the above practical problems, at this point of time it is not possible to provide consolidated billing for all the telecom towers belonging to Indus Towers in the state of Punjab.

As far as roll out of AMR is considered, PSPCL is undertaking AMR implementation for high end HT consumers on a priority. In due course of time the same shall be extended to other.

**View of the Commission**

The Commission agrees with the response of PSPCL. It may be possible to provide consolidated bill when AMR is introduced.

**Objection No.27: Gurnek Singh Brar**

**Issue No. 1: Replacement of electro mechanical meters with electronic meters**

It is suggested that the electromechanical meters may be replaced with electronic meters so as to retrieve the PF of the consumer. In case of low PF the surcharge of low power factor should be levied.

**Response of PSPCL**

100% electronic meters have been provided for LS & MS category consumers and 98.09% in case of SP and three phase DS/NRS consumers (ending 11/2011). Single phase DS/NRS consumers have 75% electronic meters. PSPCL plans to replace balance electro mechanical meters for SP/three phase DS/NRS consumers by 31.5.2012 and that of single phase DS/NRS consumers by 31.12.2013. PSPCL is getting a study done through consultants for introduction of kVAh based tariff as per the directive of the Commission. Once same is finalized the report would be submitted to Commission for consideration and introduction of kVAh tariff which will address the concern of objector to a large extent.

**View of the Commission**

The Commission is satisfied with the response of the PSPCL. PSPCL shall ensure that the target dates mentioned are adhered to.

**Issue No. 2: Electronic meters for tube well connections**

Electronic meters may be installed for the tube well connections so as to retrieve the average PF of the consumer. In case of low PF, the surcharge of low power factor shall be levied and the same to be recovered from GOP as subsidy.

### **Response of PSPCL**

PSPCL agrees with the concern and suggestion of objector but same is not implementable because 90% of AP consumers are unmetered. PSPCL has, however, initiated steps to provide 100% metering of AP consumers through AMR in phased manner as this exercise will require huge funds. Further, PSPCL is also regularly making addition to shunt capacitors on 11 kV feeders for improvement of power factor.

### **View of the Commission**

The Commission agrees with the response of the PSPCL.

### **Issue No. 3: UI overdrawal and purchase**

During FY 10-11 the UI overdrawal was at a relatively high rate of Rs.5.63 per unit. Similarly UI purchase was made at Rs. 3-4 per unit during FY 11-12. Such a high cost of power purchase is not in the public interest. The Commission should intervene in the stated issue.

### **Response of PSPCL**

UI purchase is not a planned purchase. It is an incidental expense and it depends on the demand-supply mismatch. In times of shortfall in supply due to various reasons, PSPCL is forced to purchase power in UI to meet its supply obligation. However steps are being taken to minimize UI purchase by planning purchase of power through short term sources. Even the average short term power purchase rate of PSPCL has come down as compared to previous years.

### **View of the Commission**

As stated under objection 19, PSPCL should avoid UI purchase under low frequency conditions at high cost.

### **Issue No. 4: Adjustment by GOP against subsidy**

The adjustment of Rs. 981.93 crore by GOP against subsidy is contrary to the Electricity Act section 65 and against the commitment given by GOP to Commission. The Commission should issue suitable directives for GOP regarding payment of subsidy to be made in cash.

### **Response of PSPCL**

During the presentation on ARR for FY 2012-13 on 22.2.2012 it has been intimated by Secy/Power, Govt. of Punjab that based on constant perusal of the case by PSPCL the matter has already been taken up with the Deptt. of Finance not to adjust Rs. 981.93 crore on account of RBI bonds against subsidy and the same shall be paid upto 31.3.2012 and that if the same is not paid upto 31.3.2012 the same shall be shown as payable to PSPCL.

### **View of the Commission**

This issue is mutual to the utility and Government of Punjab.

### **Issue No. 5: Recovery of amount from GoP as per Commission's Order**

As per Commission's order dated 9-5-2011, (para 6.4.4), it was directed to pay Rs. 453.65 crore to PSPCL. If the said amount is still not recovered from the GoP then it would constitute a noncompliance of the commission's order. Therefore necessary action is to be taken in this regard.

### **Response of PSPCL**

The amount of Rs. 453.65 crore remains due to PSPCL by the GoP in lieu of the cumulative interest to be refunded by GoP. The PSPCL had approached the Commission vide letter number 4272/73 dated September 12, 2011 to revise the amount of interest refundable by GoP from Rs. 453.65 crore to Rs. 651.69 crore. The Commission, however, directed PSPCL (vide letter No. 6567/PSERC/Dir. M&F dated 31.10.2011) to take up the issue directly with GoP. PSPCL accordingly took matter with GoP vide memo No. 61 dated 10.01.2012. But so far GoP has not refunded the said amount. The Commission is, therefore, again requested to consider this issue sympathetically and issue necessary directions to the Government of Punjab for its payment to the PSPCL at the earliest.

### **View of the Commission**

The matter has been taken by the utility with the Government of Punjab as advised by the Commission. The utility has been advised to pursue the matter at their end.

## **Objection No. 28: Ludhiana Electroplaters Association**

### **Issue: Unjustified Two Part Tariff**

The objector has stated that the fixed charges proposed by PSPCL are not justified against the existing monthly minimum charges. The objector has also stated that the PSPCL has demanded a hike of 54% in tariff which is unjustified. The PSPCL should try to control its losses and theft and also reduce their administrative costs instead of demanding such hike. Unlike the neighbouring states where industry has grown over the last few years, Punjab has witnessed a decline and if the proposed fixed charges and tariff hike are accepted by the Commission then the industry would collapse. Accordingly the same should not be allowed by the Commission.

### **Response of PSPCL**

As already stated in the proposal for two part tariff, PSPCL would like to submit that there are certain fixed costs which are incurred by PSPCL every year irrespective of the total quantum of energy sold by it. Further, the two part tariff is a balanced approach for recovery of revenues which ensures the protection of the interests of the consumer as well as the utility. Accordingly two-part tariff has been proposed by the PSPCL wherein fixed charges have been proposed for most categories.

Furthermore, PSPCL has only converted the existing single part tariff into two part tariff. Regarding tariff hike, it is submitted that same is the prerogative of the Commission. As far as the reduction of costs is concerned, PSPCL is making every effort to reduce its administrative and other costs and T&D losses as well. The current T&D losses of PSPCL are one of the lowest in the country and are better than those approved by the Commission. Considering all the above points, it is prayed the Commission to provide tariff hike as deemed fit to bridge the gap proposed by PSPCL.

### **View of the Commission**

As stated under similar objections above, PSPCL has been directed to submit revised proposal considering the objections raised by various consumers and consumer organizations. The Commission would examine the revised proposal and take appropriate decision on two part tariff later. However, Commission has taken a decision not to introduce two part tariff during FY 2012-13.

## **Objection No. 29: Federation of Jalandhar Industrial & Traders Association**

### **Issue: Increase of tariff for industries**

It is understood that the PSERC is planning to increase tariff of industrial category. The industry in Punjab is going through a bad phase and they are not in a position to bear any increase in tariff.

We put forth the following suggestions and demands to the Commission:

- (i) The burden of free electricity to Agriculture category of consumers is being passed on to the industrial consumers. The free power for agriculture purpose is being misused for domestic purposes as well and this misuse of power needs to be stopped.
- (ii) The PSPCL should reduce transmission losses and for the same new sub-stations should be built.
- (iii) The industrial consumers are already bearing the impact of the security deposit charged by PSPCL for 45 days of billing in advance. Being already burdened, it would not be possible to bear the impact of any hike in tariff.
- (iv) It has been suggested that VDS should be implemented by PSPCL.
- (v) The load limit for SP category should be increased to 50 kW and for MS category it should be increased to 200 kW.

### **Response of PSPCL**

- (i) PSPCL would like to submit that the supply of free electricity to agriculture consumers is a decision of the State Government and the same is not under the purview of the PSPCL. Against the free electricity supplied to agriculture consumers, PSPCL received subsidy from the State Government. Hence it would not be correct to state that industrial consumers are bearing the burden of free electricity to agriculture consumers. Although



industrial consumers provide the required element of cross subsidy, the same is distributed in all the subsidized categories and not on agriculture alone. As far as the misuse of free agriculture power for domestic purposes is concerned, PSPCL releases separate connections for domestic and agriculture pump-sets and it is ensured that the electricity supplied for agriculture pump-sets is not being used for domestic purposes. The vigilance and field teams of PSPCL ensure that the electricity supplied to any consumers is not used for a purpose other than that mentioned by the consumer at the time of release of connection. In light of all the above facts, the assertions of the objector are not well founded.

- (ii) Creation of new substations would help in reduction of transmission losses only in cases where there is overloading of network. Hence it would not be judicious to create new sub-stations at random. However, PSPCL undertakes a continuous monitoring of its network infrastructure and ensures that suitable measures like bifurcation/trifurcation of feeders, installation of additional DTs, creation of new substations etc. are taken up wherever there is overloading of network.
- (iii) The security deposit charged from the consumers is in accordance with the provisions as notified and approved by the Commission. Further, the security deposit is not a burden on the consumer as they are paid an interest on the same every year. The consumer should not consider the security deposit as a burden but only as an asset which shall be refunded to him/her whenever the connection is surrendered.
- (iv) PSPCL notifies Voluntary Disclosure Schemes for different consumer categories from time to time whenever the need is felt. Whenever any VDS is not in place, the consumers can also apply for increase/enhancement of their contract load/demand by contacting the sub-divisional office with which their connection is listed.
- (v) As per the applicable terms and conditions of tariff notified in "General conditions of tariff and schedules of tariff" by the Commission, connections in Small Power (SP) category are to be released in single phase and three phase but only at Low Tension (LT). Hence this category is primarily intended for those small consumers who have very small workshops/machine tools and do not operate on large commercial scale. Hence increasing the limit of load for SP category to levels as suggested by the objector would not be justified as industrial consumers with loads of upto 50kW will benefit to a great extent through reduced tariff. Similarly, in case the load limit of MS category is increased, several consumers currently operating in LS Category would also be benefitted and this would also impact the financial health of PSPCL. Moreover, the tariff for SP, MS and LS categories is decided based on the network infrastructure requirement of consumers falling under these categories. A consumer falling in LS Category (load more than 100 kW) blocks significant network and hence it is justified that they should be charged higher. In light of all the above arguments, PSPCL requests the Commission to continue with the current load limits in the larger interest of the power sector in the State.

#### **View of the Commission**

Commission agrees with response of PSPCL. General Conditions of Tariff and Schedule of Tariff are approved by the Commission. If any change is required, the consumer should file a Petition with the Commission.

#### **Objection No.30: Government of Punjab**

Department of Power, GoP has conveyed its observations on the ARR of PSPCL in its letter dated 13.6.2012 which are summarized hereunder, along with the view of the Commission.

#### **Issue No. 1: Disallowances**

The commission has been making some disallowances which have now accumulated to over Rs.8500 crore by 2011-12. These have been mainly due to disallowances related to employee costs, interest charges and also on account of non-achieving of various norms, performance parameters and targets fixed by the Commission. These disallowances have impaired the financial health of the PSPCL (erstwhile PSEB), and has eroded its capacity to

purchase power and make investments that would help it provide quality and affordable power to the consumers in the State. This has in some ways also had an impact on the economic growth of the State. These disallowances seem to be a major reason for the accumulated commercial losses and Short-Term Loans of the PSPCL. While, there have been improvements in the performance/working of PSPCL, we do believe that there is still a lot that needs to be achieved, if PSPCL is provided the requisite support in the performance of its commercial operations.

#### **View of the Commission**

The Commission all through its Tariff Orders since 2002-03 has been stressing the need for improvement in the working of PSPCL (erstwhile PSEB) by reducing its work-force, upgrading performance parameters and exercising economy. The Commission has been determining tariff in compliance to the various guidelines provided in section 61 of the Electricity Act, 2003. The Commission has been allowing only the justified costs to the utility, thus safe-guarding the consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner has been ensured. The utility has been rewarded for its efficient performance also. In this regard, the Commission has been following consistently the terms and conditions of determination of Tariff provided in the PSERC Tariff Regulations. It is well known fact that the utility has accumulated losses for a number of years now. According to the guidelines provided for un-bundling of the erstwhile Board, the Govt. was required to provide clean balance sheet to the Successor Entities. The Financial Restructuring Plan (FRP) of the Successor Entities has not been finalized by the Govt. as yet. As has also been observed by the Govt., the Commission is also of the view that the utility should improve its performance through efficiency measures and achieve various parameters fixed by the Commission.

#### **Issue No. 2: Road Map for improving financial health of utility.**

Presently, the financial health of PSPCL is very critical as brought out in the instant ARR Petition. PSPCL has depicted a total revenue gap of approximately Rs.8983.97 crore, which has increased by approximately Rs.4285.62 crore (i.e. from Rs.4698.35 to Rs.8983.97 crore). The major component of increase in this gap is as below: -

		(Rs. in crore)
i)	Fuel Cost	= 565.00
ii)	Power Purchase	= 1456.00
iii)	Employee Cost	= 918.00
iv)	R&M Expenses	= 186.00
v)	A&G Expenses	= 23.50
vi)	Interest & Finance Charges	= 399.8
vii)	Royalty Charges payable to Punjab Government	= 6.72
on account of RSDP		

Apart from it, previous gap of Rs.5017.25 crore approx. has also been carried forward this year.

From the above, it is very clear that increase in this gap is mainly because of increase in Fuel Cost, Power Purchase Cost, Employee Cost and Interest & Finance Charges. It is a statutory duty of the State Government to promote the Financial, Operational and Technical viability of PSPCL. Hence, in terms of Section 86 of the Electricity Act, 2003, the Commission in pursuance to its duties is requested to suggest a road map to meet this goal.

### **View of the Commission**

In addition to the view of the Commission at Objection No.30 Issue No.1, the Govt. is expected to provide clean slate to the Successor Entities through Financial Restructuring Plan (FRP) so that the new entities may be able to start afresh. While the Successor Entities are expected to improve upon its functioning through efficiency measures and adopting economy in expenditure, the Commission is of the view that the accumulated losses of the erstwhile Board need to be wiped out through FRP and revaluation of all the assets of the erstwhile Board besides providing financial package, if necessary. At its end, the Commission has been fixing Tariff of the utility after determining the gap as per Regulations. Besides, the Commission has been laying down a road map for improving the financial health of PSPCL through Directives in each Tariff Order aiming at improving its technical, managerial & financial parameters.

### **Issue No. 3: Power Purchase Cost**

PSPCL undertakes Power Purchase, as a measure to cover the demand-supply gap so that industrial and agricultural growth is not adversely affected in the State and efforts are being made by PSPCL to purchase power at competitive prices, till cheaper power from the power plants being installed in the State is available. Needless to say that, reduction in Power Purchase Cost is very important so as to promote the financial viability of PSPCL. To reduce this Power Purchase cost, the Government is closely monitoring the progress of various IPPs under construction so that cheaper power from them is available in shortest possible time. Till that time the Commission is requested to allow actual Power Purchase Cost to the PSPCL.

#### **View of the Commission**

The Commission has been allowing the entire power purchase cost upto 2008-09. However, taking into account the injudicious purchase of power by the erstwhile Board in the past, the Commission has now allowed power purchase upto the extent required as per the projections of the PSPCL but the cost of short term power purchase beyond that level has been capped to the average cost of supply/weighted average price of short term bilateral transactions for the previous year. This has helped utility to bring down the per unit cost of power purchased.

### **Issue No. 4: Employee Cost**

The Commission has been consistently disallowing the Employee Cost to the Utility, which can in no way be reduced, since neither can the employees be retrenched nor can the terms and conditions of an employee once recruited cannot be changed to his disadvantage during the course of his service. However, the Government has been impressing upon PSPCL to bring about efficiency in the functioning of its employees and re-engineer its manpower deployment. We are informed that PSPCL has hired the services of a reputed consultancy organization to help them in this regard. Till then, the Employee Cost, which is a genuine cost of Utility and must be passed on to the end consumers on an actual basis.

#### **View of the Commission**

The matter of allowing employee cost has been continuously discussed extensively by the Commission in its successive Tariff Orders year after year. The Commission has been consistently stressing the utility to take efficient steps to contain employee cost which is one of the highest in the country. The Commission noted that the utility has initiated some efforts to enhance employee productivity through various management techniques and rationalization of manpower for which a study has been instituted but still the utility needs to go a long way to contain employee cost. The Commission has been allowing employee cost of the utility in accordance with the PSERC Tariff Regulations which have been notified after consultation with all the stakeholders.

### **Issue No. 5: Fuel Cost**

Assured and cheap supply of fuel is an essential pre-requisite for electricity generation. Of late, there has been severe shortage in supply of coal, which has resulted in high volatility in

coal pricing. The utilities need to be insulated from these shocks. It is requested to link Fuel Cost with the prevailing market prices, so as to insulate the utility from the price shocks.

#### **View of the Commission**

Any change in the fuel cost from the level approved by the Commission is to be passed on to the consumers as FCA in line with FCA formula specified in Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005. According to this stipulation, any change in fuel cost would be passed on to the consumers on quarterly basis with the prior approval of the Commission. But PSPCL must ensure that utmost economy in use of fuel is observed. The Commission has got Fuel Audit conducted through CPRI Bangalore for PSPCL thermal plants recently and after finalization of this Report, PSPCL shall be directed to implement steps to economise in use of fuel.

#### **Issue No. 6: T&D Losses**

The State Government feels that although the desirability to bring down the T&D Losses is beyond question, the approach adopted by the Commission has not yielded any positive results in the last several years. This approach is rather counter-productive because instead of bringing improvements, it impairs financial health of the utility and badly affects its ability to arrange funds for taking up T&D loss reduction works and for upgrading the Transmission and Distribution System, which is also essential to reduce T&D losses.

It would therefore be appropriate that the Commission should reset the T&D loss reduction trajectory by taking into consideration the actual T&D losses that may be determined by the Commission for 2007-08 based on approved AP consumption and to achieve the ultimate T&D loss target of 15% by 2015-16 as per the guidelines of Ministry of Power, Government of India.

Further, it is again reiterated that accuracy in measuring AP consumption be improved, as there appears to be a direct correlation between AP consumption and T&D loss pattern. It is also in line with the State Government's stand of going in for 100% metering of AP connections regarding which PSERC has earlier been intimated and has been agreed upon by the Commission.

It is also requested that the request of PSPCL to implement Two Part Tariff may be examined on merits.

#### **View of the Commission**

Observing the consistent inability of the Board to achieve levels of T&D loss as prescribed by the Commission, the entire issue was reconsidered during processing of ARR for the year 2009-10. Taking note of the fact that actual losses on the basis of AP consumption at the end of 2008-09 was 24.07%, the Commission prescribed the loss level to be achieved during 2009-10 at 22%. Going by the recommendations of the Abraham Committee, the Commission has determined the loss trajectory at 20% for the year 2010-11, 19% for 2011-12 and 18% for the year 2012-13. Part implementation of Commission's Directives on T&D losses and low cost maintenance measures has enabled PSPCL to reduce its T&D losses below the target fixed for 2011-12. Full implementation of these Directives again given in this Tariff Order at Annexure -IV may enable PSPCL to reduce T&D losses faster than the road map of MoP.

In the absence of any other reliable mechanism, AP consumption is primarily estimated on sample meter readings submitted by PSPCL. The Commission has given directive to PSPCL to supply monthly sent out energy on each 11 kV AP feeder based on AMR data to assess the AP consumption more accurately. Further, reference Directive No. 6, Metering Plan (Annexure-IV), PSPCL has been asked to implement 100% metering of each AP consumer through AMR and dovetail it with installation and upkeep of LT capacitors by leasing out the project. Combined with AMR on AP feeders, it will provide an economical and efficient solution to 100% AP metering.

Summarizing, Commission's approach on T&D losses has been positive, productive and based on out of box thinking.

**Issue No. 7: Commercial viability of the Distribution Licensees and Consumers' interests**

While, it is not disputed that the utilities need to bring efficiency in their operations, it is also imperative to ensure that financial health of the utility doesn't suffer due to disallowance of expenditure, which the utility is unable to avoid due to historical reasons or due to other constraints. It is pertinent to mention here that till date approximately Rs.8500 crore has been disallowed by the PSERC towards various expenditure/cost demanded by the Board in their earlier ARR Petitions.

It would be appreciated that financially strong and commercially viable power utility is ultimately in the Long-Term Interest of the Consumers and the State. The National Tariff Policy also provides that "the Regulatory Commission needs to strike the right balance between the requirements of Commercial viability of the Distribution Licensees and Consumers' interests". Thus the Commission is requested to balance the interest of all the stakeholders and in the long run to provide for a vibrant power sector.

**View of the Commission**

Please refer to views of the Commission on Objection No.30, Issue No.2 above

**Issue No.8: Subsidy**

The State Government shall continue with its earlier policy of providing free power to the AP sector and the weaker sections of the society. The Commission may note that the State Government vide Order dated 16.12.2011 had increased the number of free units from 100 to 200 to SC & BPL consumers upto connected load of 1 kW. The Commission may inform the State Government the quantum of total subsidy amount to be paid by the State Government to the PSPCL on account of its policy of providing free power to various categories of consumers as notified earlier.

**View of the Commission**

The Commission has intimated the details of subsidy payable by Government of Punjab and also sought Government's commitment towards payment of subsidy to PSPCL for financial year 2012-13.

**Issue No. 9: Open Access**

The Commission should also ensure compliance of letter No. 23/1/2008-R&R (Vol.IV) dated 30.11.2011 of Ministry of Power, Government of India vide which Ministry has directed that consumers with connected load of 1 MW and above may be deemed to be Open Access consumers and in finalization of Tariff bilateral arrangement shall have to be worked out with no role of PSERC.

**View of the Commission**

The interpretation of the Act given by the Ministry of Power in consultation with Ministry of Law, Government of India is not in line with the judgment of the Hon'ble Appellate Tribunal dated 11<sup>th</sup> July, 2006 in Appeal No. 1 of 2006. However, PSPCL, on the basis of MoP letter had issued notices to all consumers having load exceeding 1 MW. A number of consumers /consumer Associations have petitioned with the Commission and prayed for quashing the notices. The matter is subjudice.

**REPLY TO PETITION FOR ARR AND DETERMIATION OF TARIFF BY PSPCL FOR THE YEAR 2012-13 – OBJECTION NO-3:-**

**1. Point at Sr. No. 2 “Generation”**

This office is looking after the work of following additional generating power plants:-

**(A) Thermal Power Plants being developed in Punjab**

- (i) 3 x 660 (1980 MWs) Coal based Talwandi Sabo Thermal Power Project. As per Power Purchase Agreement, the Scheduled Commercial Operation Dates for the 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> units are 31/08/2012, 31/12/2012 and 30/04/2013 respectively. However, the developer has intimated that actual Scheduled Commercial Operation Dates will be 08/11/2012, 08/02/2013 and 10/06/2013, respectively. As per Agreement, 100 % power generated from this plant will be given to State of Punjab.
- (ii) 2 x 700 (1400 MWs) Coal based Rajpura Thermal Power Project. As per Power Purchase Agreement, the scheduled Commercial Operation Date for the 1<sup>st</sup> & 2<sup>nd</sup> units are 17/01/2014 & 17/05/2014 respectively. As per Agreement, 100 % power generated from this plant will be given to State of Punjab.
- (iii) 2 x 270 (540 MWs) Coal based Goindwal Sahib Thermal Power Project. As per Power Purchase Agreement, 100% power generated from this plant will be given to State of Punjab. Scheduled commercial operation date for the 1<sup>st</sup> and 2<sup>nd</sup> Units is 20.5.2013 and 20.11.2013 respectively.
- (iv) 700 MWs Extension Unit of 1400 MWs Rajpura Thermal Power Project:-MOU has been signed and PPA is yet to be signed.
- (v) 1320 MWs (2x660 MWs) Phase – II of Goindwal Sahib Thermal Power Project:-MOU has been signed and PPA is yet to be signed.
- (vi) 1320 MWs (2x660 MWs) Thermal Power Project by M/s India bulls Power Ltd: - MOU has been signed & PPA is yet to be signed.
- (vii) 1320 MWs Kot Shamir Thermal Power Project by Lanco Infratech Ltd.:- MOU has been signed and PPA is yet to be signed.
- (viii) 500 MWs Gas based Thermal Power Project by M/s Jay Polychem India Ltd. New Delhi. MOU has been signed and PPA is yet to be signed.
- (ix) 1320 MWs (2x660 MWs) Thermal Power in State Sector. Approval in principle for setting up Power Plant has been received from Govt of Punjab. Preliminary work regarding site identification, appointment of consultant etc. has been started. Commissioning schedule will be decided after appointment of consultant.
- (x) 2640 MWs (4 x 660 MWs) Gidderbaha Thermal Power Projects. As per Power Purchase Agreement, the schedule Commercial Operation Date for the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> units are 31/03/2015, 30/09/2015, 31/03/2016 & 30/09/2016 respectively. As per Agreement, 50% power generated from this plant will be given to State of Punjab.

**(B) Power from Ultra Mega Power Projects (UMPP)**

- (i) 4000 MWs Munda UMPP – The Punjab share from this UMPP is 475 MWs COD of 1<sup>st</sup> unit is forecasted in 2/2012, 2<sup>nd</sup> Unit in 5/2012, 3<sup>rd</sup> Unit in 9/2012, 4<sup>th</sup> unit in 11/2012, 5<sup>th</sup> unit in 2/2013
- (ii) 400 MWs Sasan UMPP – The Punjab share from this UMPP is 558.36 MWs. COD of 1<sup>st</sup> unit is expected by 13/01/2013, 2<sup>nd</sup> in 4/2013, 3<sup>rd</sup> in 7/2013, 4<sup>th</sup> in 11/2013, 5<sup>th</sup> in 2/2014, 6<sup>th</sup> in 6/2014.

- (iii) 4000 MWs Orisa UMPP – The Punjab share from this UMPP is 500 MWs. PPA is yet to be signed.
- (iv) 4000 MWs Orisa – 1 UMPP – The Punjab share from this UMPP is 120 MWs. PPA is yet to be signed.
- (v) 4000 MWs Tilaiya UMPP - The Punjab share from this UMPP is 418.77 MWs. COD for the 1<sup>st</sup> Unit is forecasted in 5/2015, 2<sup>nd</sup> in 11/2015, 3<sup>rd</sup> in 3/2016, 4<sup>th</sup> in 8/2016, 5<sup>th</sup> in 1/2017, 6<sup>th</sup> in 5/2017.
- (vi) 4000 MWs Cheyyur – The Punjab share from this UMPP is 200 MWs. PPA is yet to be signed.

**Annexure – II B**

(Amount in Rs. lac)

<b>Year-wise detail of prior period expenditure for year 2010-11 (As per ARR)</b>						
<b>Sr.No.</b>	<b>Particular</b>	<b>Upto</b>	<b>2007-08</b>	<b>2002-09</b>	<b>2009-10</b>	<b>Total</b>
1	Anta		164.27	-398.82	865.99	631.44
2	Auriya		906.25	-616.59	-214.13	75.53
3	Dadri		690.57	-1590.66	1428.30	528.21
4	Unchahar-I		161.61	-561.54	224.25	-175.68
5	Unchahar-II		9.61	73.35	260.91	343.87
6	Unchahar III		140.11	218.54	346.28	704.93
7	Frakka		181.09	-41.72	-206.29	-66.92
8	Kahelgaon I		-6.37	-630.69	187.76	-449.30
9	Kahelgaon II		0.00	428.03	844.06	1272.09
10	Rihand I		686.72	-1722.23	1516.97	481.46
11	Rihand II		439.60	187.29	266.35	893.24
12	Singrauli		1112.41	-488.17	2201.80	2826.04
13	Talchar		0.00	0.00	-69.97	-69.97
14	TOTAL NTPC		4485.87	-5143.21	7652.28	6994.94
15	Bairasule		0.00	1.59	2034.41	2036.00
16	Salal		-9.34	-0.82	1359.73	1349.57
17	Tanakpur		2.33	1.32	834.30	837.95
18	Chamera I		9.79	8.07	1397.45	1415.31
19	Uri		-0.21	0.07	3958.72	3958.58
20	Chamera II		-48.63	7.42	46.16	-9.89
21	Dhauliganga		3.28	8.07	1875.57	1886.92
22	Dulhasti		0.97	68.47	3363.20	3432.64
23	TOTAL NHPC		-41.81	79.35	14869.54	14907.08
24	Tehri Hydro		0.00	0.00	146.94	146.94
25	SJVNL		1100.33	0.00	-343.16	757.17
26	NAPP		2.08	0.00	2.27	4.35
27	RAPP		0.00	0.00	381.63	381.63
28	PGCIL		622.48	1452.44	7571.28	9646.20
29	U.1,		0.00	0.00	-760.06	-760.06
30	PTC		426.18	0.00	0.00	426.18
<b>31</b>	<b>Grand Total</b>		<b>6595.13</b>	<b>-3611.42</b>	<b>29520.721</b>	<b>32504.43</b>





**Annexure - II C**

**Punjab State Electricity Corporation Limited  
Revised Internal Plan funds allocation for Annual Plan 2011-12**

(Rs. in lac)

Sr. No.	Name of scheme / Project	Outlay approved by PSPCL & PSTCL for 2011-12	Revised outlay approved by PSPCL	Remarks
1	2	3	4	5
<b>Generation</b>				
1	Shahpurkandi HEP CE/Hydel projects	21417.00	3500.00	
2	Mukerian HEP-II CE/Hydel projects CE/Civil Design & Const.	2900 2000	3413.00	
3	GHTP Stage-II, Lehra Mohabbat CE/GHTP (Const. Wing) CE/Thermal Designs	2000 3891	3615.00	
4	Gas based TP at Ropar CE/Thermal Designs	7.00	0.00	
5	R&M of Thermal Projects			
i	GNDTP, Phase-II, Bathinda			
ii	GNDTP Unit-I & II based on RLA Study report	665.00		
iii	GNDTP Unit-III & IV based on RLA Study report	12000.00		
iv	Additional works (not included in already approved R&M project report based on RLA studies)			
v	Raising of Ash Dyke at GNDTP			
vi (a)	Capital works other than R&M works; Replacement of CTs, PTs & replacement / addition of 3 phase 4 wire energy meters at GNDTP	4871.00	11605.15	
(b)	Procurement and installation of 2nd "In motion weighing system" at GNDTP			
vii	Others works of GNDTP			
viii	Aug. of fire protection system of GNDTP CE / GNDTP			
ix(a)	GGSSSTP Ropar Scheme - I	7387.20	4600.00	
(b)	GGSSSTP Ropar Scheme - II			
(c)	T&P items for GGSSTP, Ropar			
(d)	Strengthening of Micro & Hydel channel			
(e)	Const. of 3 No. HTP & ETP			
(f)	Others works of GGSSTP CE/GGSSTP, Ropar			
x	GHTP, Stage-I CE/O&M,	1017.55	1100.00	

6	R&M of BBMB Hydel projects Special Secy. / BBMB	8000.00	5000.00	
7	R&M of hydel projects			
i	Shanan	963.25	235.5	
ii	UBDC I & II	222.00	548.51	
iii	MHP - I	500.00	282.72	
iv	ASHP	123.00	127.00	
v	RSD	468.00	200.00	
vi	Micro Hydel Projects CE / Hydel projects	-	4.20	
	Total generation	68432.00	34231.08	
B	Distribution			
(a)	Normal development works including SI Schemes	40000.00*	63100.00*	* Rs. 12620 lac for each zone
(b)	Shifting of meters out of consumer premises All CEs/Op. zones	20000.00	11000.00	Rs. 2200 lac for each zone
ii	Comprehensive T&D losses reduction Plan HVDS project for conversion of LT lines of AP feeders to 11 kV HT for 34 No. schemes CE/RE&APDRP	15000.00	12000.00	
iii	Release of tubewell connections			
(a)	For general connection All CE/Op. zones		9000.00	
(b)	For SEM affected area connections CE/RE&APDRP	16458.00		
iv	Urban pattern supply to villages conversion of 3 phase 4 wire system to 3 phase 3 wire system and to connect to rural water works with UPS feeder and providing UPS to villages & Dhanis CE/RE&APDRP	6500.00	1000.00	
v	For providing energy efficient lighting fixtures for PSPCL works CE/TA&I	185.00	0.00	
vi	Providing 11kV manual operative switched capacitors on 11 kV lines CE/RE&APDRP	425.00	425.00	
vii	RGVY: Single point connection to BPL families CE/RE&APDRP	-	7000.00	
	Works of R-APDRP-II Part-A CE Metering	20000.00	7500.00	
	Works of R-APDRP-II Part-B CE /RE& APDRP	15000.00	3000.00	
	IT works CE/Metering	-	946.00	
	Total Distribution	133568	114971.00	

	Miscellaneous	1000.00		
	For renovation of TTI Complex and auditorium	-	25.00	
	For construction of institute of power Management, Patiala (IPMP)	-	75.00	
	CE/HRD/CE/Civil Design & Const.			
	Total		100.00	
	Transmission (PSPCL)	27000	37500.00	
	Total	230000	186802.08	
	Total transmission (PSTCL)	100000		
	TOTAL (PSPCL & PSTCL)	330000		

Under distribution, additional requirement of funds during 2011-12 for approved works / scheme under capital head like for construction of customer care centers, extension in buildings of 33/66 kV Grid Substation., construction of rooms for installation of bill payment machines & other such approved works may be met from the funds already allocated to their respective zones under "Normal Development works including SI schemes".



**Annexure-II D**

<b>PUNJAB STATE POWER CORPORATION LIMITED</b>				
<b>ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2012-13</b>				
<b>Revenue from Existing Tariff Year 2011-12 H1 (Apr 11 – Sep 11)</b>				
(Rs. in crore)				
<b>Sr. No.</b>	<b>Category of consumers</b>	<b>Energy sales (MU)</b>	<b>Avg Billing Rate (p/unit)</b>	<b>Revenue (Rs. In crores)</b>
1	Domestic (Inc. Others)	4657	327.03	1523
	<i>0-100</i>			
	<i>101-300</i>			
	<i>above 300</i>			
2	Non-Residential Supply	1405	493.95	694
3	Small Power	442	404.98	179
4	Medium Supply	910	434.07	395
5	Large Supply (Including PLEC)	4129	410.51	1695
6	Public Lighting	59	491.53	29
7	Bulk Supply & Grid Supply	276	438.41	121
8	Railway Traction	68	529.41	36
	<b>Sub-total metered sales within State</b>	<b>11946</b>	<b>391.09</b>	<b>4672</b>
9	Agriculture	6630	0	0.00
10	Common Pool	162	339.51	55
11	Outside State*	333	180.18	60
	<b>GRAND TOTAL</b>	<b>19071</b>	<b>251</b>	<b>4787</b>
* including Shanan royalty of 36.45 MUs and share of HP from RSDP 52.73 MUs				



**Minutes of the Meeting of State Advisory Committee of the Punjab State  
Electricity Regulatory Commission held on February 14, 2012.**

The meeting of the State Advisory Committee was held in the office of the Commission at Chandigarh on February 14, 2012. The following were present:

- |     |                                                                                                                                          |                        |
|-----|------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1.  | Mrs. Romila Dubey<br>Chairperson, PSERC                                                                                                  | Ex-officio-Chairperson |
| 2.  | Er. Virinder Singh,<br>Member, PSERC                                                                                                     | Ex-officio-Member      |
| 3.  | Er. Gurinderjit Singh<br>Member, PSERC                                                                                                   | Ex-officio-Member      |
| 4.  | Sh. S.S.Randhawa, Asstt. Labour Commissioner<br>On behalf of Labour Commissioner,<br>Govt. of Punjab, Chandigarh                         | Member                 |
| 5.  | Sh. D.L.Sharma Convenor, CII,<br>On behalf of Chairperson, CII,<br>Punjab State Council, Sec-31, Chd.                                    | Member                 |
| 6.  | Shri R.S.Sachdeva, Co-Chairman<br>PHDCCI, Punjab Committee<br>Sector-31-A, Chandigarh                                                    | Member                 |
| 7.  | Shri H.K.Sharma, Senior Electrical Engineer<br>On behalf of Chief Electrical Engineer<br>Northern Railway, Baroda House, N.Delhi- 110001 | Member                 |
| 8.  | Shri Aishyaraya Sharma, Asstt. Engineer-II<br>On behalf of Director Agriculture,<br>Deptt. of Agriculture, GoP, Chandigarh               | Member                 |
| 9.  | Sh. U.K.Panda,<br>Director/Finance & Commercial<br>PSTCL, The Mall, Patiala                                                              | Member                 |
| 10. | Er. Arun Kumar Verma<br>Director/Distribution,<br>PSPCL, The Mall, Patiala                                                               | Member                 |
| 11. | Er. N.S.Matharu,<br>Chief Engineer/ARR & TR, PSPCL<br>F-4,Shakti Vihar, Near 22 No. Fatak<br>Patiala.                                    | Member                 |



- |     |                                                                                                                                                                 |           |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 12. | Er. S.K.Anand<br>(Ex-Member, PSEB)<br>68, Ajit Nagar, Patiala                                                                                                   | Member    |
| 13. | Er. Suresh Gupta<br>(Ex-member, PSEB)<br>1, Mayur Enclave, Near Kaintal School,<br>Bhupendra Road, Patiala                                                      | Member    |
| 14. | Shri G.S.Bhati, Zonal Manager<br>On behalf of Chief Project Manager,<br>Rural Electrification Corporation Ltd.,<br>REC Project office Bay 7-8, Sec-2, Panchkula | Member    |
| 15. | Shri Bhagwan Bansal<br>Punjab Cotton Factory, Ginners Association Regd.<br>Shop No.109, New Grain Market, Muktsar.                                              | Member    |
| 16. | Shri Jagtar Singh<br>Director, Social Work & Rural Development Centre<br>VPO Nurpur Bedi, Distt. Ropar                                                          | Member    |
| 17. | Shri Gurmeet Singh Palahi,<br>Secretary, National Rural Development Society,<br>218, Guru Hargobind Nagar, Phagwara Distt.. Kpt.                                | Member    |
| 18. | Shri T.P.S.Sidhu<br>Chief Executive Officer,<br>PEDA, Plot No.1, Sector-33-D, Chandigarh                                                                        | Member    |
| 19. | Er. P.S.Jindal,<br>Secretary, PSERC                                                                                                                             | Secretary |

**Special Invitee**

1. Shri Pishora Singh,  
Bhartiya Kisan Union (Ekta)  
Vill. Sidhupur P.O. Malko Majra,  
Teh. Sirhind Distt. Fatehgarh Sahib.
2. Shri Amrik Singh,  
Khalilpur, Dera Baba Nanak,  
Distt. Gurdaspur (Punjab)

The Chairperson, Punjab State Electricity Regulatory Commission (PSERC), welcomed the members of the State Advisory Committee. Thereafter, she requested the members to offer their valuable suggestions on the issues emerging from the Annual Revenue Requirement (ARR) of PSPCL and PSTCL for FY 2012-13.

- 1. Shri T.P.S. Sidhu, Chief Executive, PEDA** suggested that the ARR filed by PSPCL should include firm proposals to comply with its Renewable Purchase Obligation (RPO) prescribed by the Commission in Punjab State Electricity Regulatory Commission (Renewable Purchase Obligation and its compliance) Regulations, 2011. Concurring with the same, Chairperson, PSERC desired that PSPCL also needs to indicate source-wise and technology-wise RE power purchase in the ARR under a separate sub-head of Generation/Purchase of electricity from Renewable Energy Sources. Chairperson advised Director/Tariff to call for the requisite information from PSPCL so as to include the same in the Tariff Order of FY 2012-13.

Shri R.S. Sachdeva, from PHDCCI informed that the Indian Institute of Technology, New Delhi had developed a solar energy based water pump for tube-wells and suggested that this be considered for installation to bring down the consumption of electricity by the agriculture sector. Chief Executive, PEDA informed the house that such pumps have already been tried out at three places in Punjab on experimental basis but the proposal was not financially viable due to low water table. He further informed that Govt. of India offers a subsidy of only 30% against the actual installation cost of Rs.6 lac for running a 7.5 H.P. motor on solar energy. However, he stated that the matter has been taken up with the Ministry of New & Renewable Energy, Govt. of India for increasing the subsidy besides requesting the GoP of Punjab to consider giving a matching subsidy.

- 2. Shri D.L. Sharma, Convener, CII** observed that the impact of cross subsidy was higher on the industrial sector viz- a- viz other sectors/categories. He also pointed out that PSPCL in the ARR had projected expenses which were in excess of admissible norms by almost Rs. 2000/- crore. He made the following suggestions:

- As per National Tariff Policy, cost of supply needs to be determined and the tariffs need to be set in such a way that cross subsidy levels are within  $\pm 20\%$  of average cost of supply by 2011. He was of the view that cost of supply should be determined for all categories of consumers.
- Appropriate/justified costs should only be allowed.

Shri D.L.Sharma was of the view that there is discrimination in the Two Part Tariff proposal. He pointed out that Two Part Tariff should be designed on more consumption less cost per unit methodology whereas the proposal was otherwise. It was his apprehension that the Two Part Tariff proposal would discourage industrial consumers from obtaining power through open access.

The Chairperson informed the house that the Two Part Tariff proposal submitted by PSPCL would be examined by the Commission before initiating process of implementation.

Er. Arun Kumar Verma, Director/Distribution, PSPCL informed the house that the proposal regarding cost of supply would be submitted by May, 2012.

Besides above views given in the meeting, Sh. D.L. Sharma of CII also submitted detailed written comments which are annexed as annexure-A.

3. **Mr. R.S. Sachdeva, PHDCCI** requested that industry's view point as represented through various objections should be taken cognizance of while finalizing the Tariff Order for FY 2012-13. He appreciated the initiative to reduce T& D losses through the process of remote metering of large supply consumers. He, however, pointed out that expenses claimed in the ARR for FY 2010-11 and FY 2011-12 were on the higher side and should not be allowed.

He also made the following suggestions:

- Cross subsidization should be reduced.
- AP consumption should be capped.
- Power cuts should be imposed instead of buying power at higher rates. Charges on continuous process industries should be limited to the period of power cut and not for full month.
- RoE should not be more than 3% if the company shows loss, whereas PSPCL is claiming RoE @ 23%.
- The proposal regarding Two Part Tariff is not logical and should not be considered.
- No new thermal plant should be allowed in the State of Punjab. Instead pit head thermal plants or hydel generation should be considered.
- The category wise cost of supply should be determined at the earliest and the tariff order should be issued after such determination.

4. **Mr. Anurag Puri**, present on behalf of PHDCCI observed that no tariff proposal has been submitted by PSEB/PSPCL in its ARR during the last 2/3 years.

He was of the view that various norms set by PSERC should be closely monitored. He also suggested that at the time of review/True up, PSPCL must not submit the expenses beyond norms. He asserted the need to cap AP consumption as a result of which industry was forced to go for open access. He opined that there was no need

to switch over to Two Part Tariff (TPT) and the Commission should wait for cost of supply study report before introduction of Two Part Tariff. Further, he suggested that following points be kept in view while examining the ARR /Two Part Tariff proposal of the Corporation:

- Staggering of cost should be on fixed cost and not on energy charges in TPT proposal.
- TPT should be based on load curve and not on utilization factor.
- Continuous Industry is drawing power during peak load hours and paying PLEC. So, additional 10 paise/unit is not justified.
- Two Part Tariff proposal is a camouflage to discourage open access.
- Third unit of GNDTP Bathinda is under shutdown for almost two years. Fourth unit of GNDTP Bathinda is also closed due to some pollution problem as a result of which there is loss of generation of around Rs. 200 crore.
- Power purchase is essentially on account of AP consumers.

Er. N.S. Matharu, CE/ARR&TR clarified that the Two Part Tariff proposal submitted by PSPCL is not for FY 2012-13. Moreover, it is designed to be revenue neutral with reference to already approved tariff for the year 2011-12.

Er. Arun Kumar Verma, Director/Distribution clarified that third unit of GNDTP has been shut down due to R&M and it was planned to be commissioned on 1.1.2012 but the commissioning was delayed and the unit was now expected to be commissioned in April 2012. He also informed that the fourth unit of GNDTP Bathinda is closed for R&M. A majority of Members of the Advisory Committee were of the view that there is need to expedite the commissioning of the said units.

**5. Er. Suresh Gupta, Ex Member, PSEB** offered the following suggestions:

- In paddy season, the AP losses should be separately considered as these are on higher side. This factor should be considered while determining the Cost of Supply to AP.
- Connected load concept for DS consumers in TPT proposal should be avoided.

**6. Er. S.K. Anand, Ex-Member, PSEB** appreciated the fact that T&D losses in the State of Punjab were one of the lowest in the country despite the fact that AP/paddy load has doubled during the last 10 years due to water level going down, use of submersible pump sets & release of new tubewell connections.

He offered the following suggestions:

- GoP should be asked to pay AP subsidy at Cost of Supply tariff like Haryana.
  - Drastic measures were needed to improve the financial health of the Corporations.
  - Employee strength in the distribution sub divisions is only 60% of the sanctioned strength as a result of which work is suffering and this needs to be looked into.
- **Mr. Pishora Singh, BKU** informed the house that Cost of distribution transformers had increased from Rs. 33000/35000/- to 55000/- and the transformers of consumers were not being passed/cleared by the distribution licensee. He was of the view that VDS for AP category should not be closed and should continue throughout the year as the farmers can ascertain loads required for motors due to reduced water tables during its operation only. Also, the capacity of the motor should be properly checked by the checking staff at rated voltage only so that AP consumers are not unnecessarily harassed by declaring higher capacity.

Director/Distribution clarified that AP consumers can install their own transformers but these have to meet the specifications laid down by PSPCL. He informed the house that many transformers installed by AP consumers do not pass the specifications laid down by the Utility.

- **Er. H.K. Sharma, Sr. Elect. Engineer, NR, Delhi** made the following observations/suggestions.
  - That Railways are laying electrification system for 400 kilometer line in Mukerian for which they will require additional connection and requested for tariff as for HT industry category.
  - Tariff to railways is more than as for HT industry. Railways must get a reasonable tariff.
  - T&D losses affect the consumers and need to be controlled.
  - Cumulative revenue gap should be reduced by taking effective steps.
  - Security deposit in the shape of bank guarantee instead of cash should be accepted from railways.
  - Two Part Tariff should have the provision of charging the demand/fixed charges as per actual CD instead of sanctioned CD.
  - Proper maintenance of electricity system crossing the railway lines should be carried out to avoid snapping of conductors leading to accidents/disruption in running of trains.

9. **Mr. Bhagwan Bansal, Pb. Cotton Factory Ginners Assn.** stressed that Two Part Tariff should not be implemented for Cotton Ginning Industry since 60 to 70% Cotton Ginning Industry consumers were not consuming the power equivalent to MMC. Most of the industries were in fact not getting enough raw materials to run the industry even to cover up the Monthly Minimum Charges. He was also of the view that no off season charges should be levied.
10. **Shri G.S. Bhati, Zonal Manager, REC** appreciated the reduction in T & D losses shown by the Utility. He also appreciated the coal planning of PSPCL thermal station vis-a-vis the state of deficit of coal in various other States. He, however pointed out that inspite of good performance by the PSPCL, PSPCL is in financial straits and suggested that the Commission may use a rational approach while determining the ARR/Tariff.
11. **Mr. U.K. Panda, Director/Finance & Commercial, PSTCL** offered the following comments:
- Suo Motu proceedings on amendment to Tariff Regulations should be taken up by PSERC.
  - There is no provision in the Companies Act for 3% Return on Equity (ROE). CERC Regulations allow 23%, so claimed accordingly.
  - SLDC should not be trued up. Surplus should be used for upgrading/introduction of better IT system of SLDC.
  - While disallowing the expenses, the Commission must keep in view the ground reality of the Utility.

Besides above views given in the meeting, Sh. U.K. Panda submitted detailed written comments which are annexed as annexure-B.

12. **Er. Arun K. Verma, Director Distribution, PSPCL** apprised the Members of the State Advisory Committee about the various measures taken by PSPCL for reduction of losses and ensuring better quality of supply to its consumers. Among the various measures, the following were highlighted by him:
- Deloading of feeders.
  - Deloading of distribution transformers.
  - Segregation of AP feeders.
  - Replacement of old conductor.
  - Losses in Patiala town brought down by 5%.

- Addition of line capacitors.
- Shifting of meters outside the premises.

Er. Arun Kumar Verma also requested the Commission to review the disallowances in expenditure being made by the Commission.

The Chairperson thanked the members of the State Advisory Committee for sparing their valuable time to offer suggestions and assured the house that their suggestions would be considered during the course of finalization of tariff.

**CII comments on ARR/TP for FY 2012-13**

PSERC has invited objections/suggestions on the PSEB's ARR and Tariff Application for 2012-13 and True up for 2009-10 on actual basis and for 2010-11 on revised estimate bases.

PSEB in its ARR 2012-13 has projected the cumulative revenue gap of FY 10-11, FY 11-12, FY 2012-13 at Rs. 8983.97 crore (Rs. 2559.14 cr for FY 09-10, Rs. 1612.46 cr for FY 11-12 and Rs. 3966.73 cr for FY 12-13 and Rs. 845.65 crore as carrying cost on previous year gap/regulatory assets. Some of the major issues are flagged below:

The Board is regularly filing its revised revenue requirement based on actual Balance Sheet figures without excluding the portion of expenditure disallowed by the Commission based on certain provisions of the Act while passing Tariff Order. Therefore, the Board should be directed to file a separate Income and Expenditure Account along with balance sheet based on costs as approved by the Commission from year to year so that a clear picture may emerge and a comparison may be drawn between the actual expenditure and approved expenditure of the Board.

The power supplied to agriculture sector has been growing consistently at very high rate. Providing the power at the subsidized rate which is far less than the actual cost of power purchase (as high as Rs.5/unit- Rs. 6/unit) will lead to serious financial crises for the Board and ultimately seriously affects the interest of industrial consumers in the State, which are already reeling under recession. Therefore, it is imperative to cap the maximum amount of power year-wise and approved by the Commission that can be supplied to agriculture sector at subsidized rate inclusive of additional connection projected in a year.

We have compared the head-wise expenses claimed by the Board for FY 2010-11 on actual basis with the approved expenses for the same period. While carrying out this exercise, we have followed the norms/guidelines followed by the Commission in the relevant Tariff Order as well as the PSERC's Regulations for Tariff Determination. It is found that the Board has claimed expenses on actual basis and not on the norms prescribed/followed by the Commission for approving expenses for various heads. If the expenses are based on approved norms, there would be almost no to negligible deficit will be there requiring no increase in tariff. At the most, some increase in subsidized class of consumers can help in meeting the deficit.

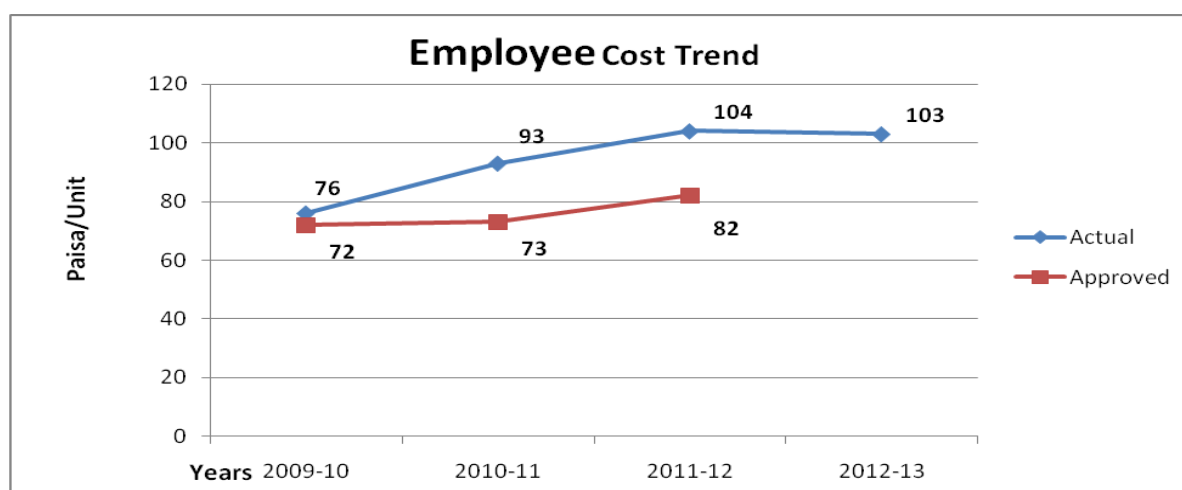


Table 1: Excess expenses claimed by the Board in FY 2010-11 (Rs. Crore)			
	Approved	Claimed	Excess claimed
Employee Cost	2482.37	3102.09	620.00
Return on Equity	366.47	607.55	241.00
Interest charges	1086.00	1674.03	588.00
Prior period expenses	0.00	368.98	369.00
Total	3934.84	5752.65	1818.00
Total ARR	14512.49	16378.00	1866.00
%age share of above in total excess claimed expenses			97%

Source: Table 35 of ARR for FY 2012-13, page 40.

### High Employee Cost for 2012-13

The analysis of ARR reveals that at most of places the Board has simply repeated its inability to control expenses like employee cost year after year and no new argument has been forwarded to revise the various component of employee cost upwardly. However, most of these arguments have been already considered by the Commission in its previous Tariff Order. The following chart reveals the employee cost per unit, which has been growing year after year and also capture the difference between the employee cost approved by the Commission and claimed by the Board. Therefore, increase in expenses asked by the Board should not be entertained and employee cost should be capped at approved level, however, if the same is to be increased it should be increased to cover the increase in terminal benefits and WPI.



### **Cross Subsidy given by the L.S. consumers**

National tariff policy stipulates that tariff progressively reflects the cost of supply of electricity and tariff should be within plus/minus 20% of the average cost of supply by FY 2010-11. Therefore, the tariff of the subsidized class of consumers including agriculture sector and selected domestic subsidized categories (who are receiving subsidy) should be increased in such a way to reach in the range of 20% of combined average cost of supply in the current tariff order.

It is submitted that category wise cost of supply should also be worked out. It is pertinent that despite of repeated directions from the Commission from 2003 onwards, the Board has not complied with the directions or may not be doing so willfully.

We have been submitting to the Hon'ble Commission that category wise cost of supply need to be worked out to determine the cost of supply for different categories of consumers and level of cross subsidy should be calculated accordingly. As the Board has not been able to provide the necessary details for calculation of category wise cost of supply, we submit to the Hon'ble Commission to determine the cost of supply based on the available information. In this regard, we would like to submit that even in the absence of complete information from Board, Himachal Pradesh Electricity Regulatory Commission had determined category wise cost of supply for LS consumers, which is 60% of the average cost of supply. Therefore, to reduce the cross subsidy burden on LS consumers and fix the tariff based on category wise cost of supply, tariff of the LS consumers may be rationalized and tariff for subsidized class may be increased.

### **Two Part Tariff**

PSPCL has submitted a proposal for implementation of two part tariff for approval of Hon'ble PSERC. This tariff structure is designed to account for:-

- Capacity charge (usually based on fixed costs) which is priced at Rs./kVA and
- The energy charge (usually based on the variable costs) which is priced at Rs./kWh.

There are some issues that need to be addressed prior to implementation and approval of Hon'ble Commission. These are summarized below:-

- a. Fixed costs are associated with the capacity tariff and include wages, operation & maintenance, depreciation, return etc. These costs do not change with the amount of energy produced. The Board has proposed very high charges for the large supply (power intensive unit/continuous process industry), which is Rs.240/kVA against Rs.120/kVA for power intensive units having contract demand less than 1 MVA.

There is no rationale in charging higher fixed charges from former category of consumer.

- b. Variable costs are directly related to the amount of electricity produced and transmitted to companies and include fuel costs. This cost per kWh decreases with increase in the quantum of electricity production. PSPCL has adopted the utilization factor for levying billing rate on the entire consumption. In the PSPCL proposal the energy charges increase with increase in utilization factor. For example, for large supply general industry power intensive and continuous process industry, the energy charges are 312 paise per kWh for utilization factor upto 21% and paise 452/Unit for utilization factor above 82%. The proposal needs review as the reduction in production cost with increase in electricity production should accordingly benefit the consumer as electricity cannot be stored. It is better utilization factor of the consumer installation resulting in improved loading factor of the generator and transmission system. The proposal benefits industries having low utilization factors and punishes those who run the factories round the clock. In other words the consumer should be given incentive for improving load factor of his installation.

The Board has proposed to charge 10 paise per unit on continuous process industry consumers. In over view, charging such addition charge is against the accepted principle of tariff determination as well as against the section 61 of the Electricity Act, 2003 which stress upon non discrimination among different category of consumer. We strongly plead to the Hon'ble Commission to not to accept such tariff proposal from the utility.

### **Promote Open Access**

The two part tariff is de\signed in such a way to discourage open access consumers. By proposing high fixed charges, the Board has ensured that the fixed cost burden on the open access consumer would increase and therefore power under open access would not be attractive for him. It is submitted that the open access should be promoted in the State.

14-2-2012

Sd/-  
(D.L. Sharma)  
Convener, CII

**Comments by Shri U.K. Panda, Director, Finance and Commercial.**

1. The FRP will which include opening balance sheet as on 16-4-2010 and the business plan of both the successor utilities are yet to be finalized. The principle adopted in the Transfer Scheme for writing off the cumulative loss of PSEB to enable the successor utilities to start with a clean slate and the issues regarding funding for terminal liabilities are to be addressed by the State Govt. while finalizing the FRP.
2. Adoption of norms as per Tariff Regulations for allowing O&M expenses by the Hon'ble Commission has affected the financial position of the utility. In so far as PSTCL is concerned, the norms of allowing increase on the basis of WPI, as contained in the Tariff Regulations, are not applicable and Hon'ble Commission may consider O&M expenses as submitted by PSTCL.
3. There are no provisions under the Companies Act, 1956 to allow 3% Return of Equity to the Companies. This 3% return was applicable to the Board. PSTCL is entitled to Return on Equity as per the PSERC Regulations and CERC Regulations.
4. Hon'ble Commission in the last Tariff Order had allowed capital expenditure by extrapolating the actual expenditure incurred up to 31<sup>st</sup> December. The revised proposal and capital expenditure proposed for FY 2011-12 and the 2012-13 is based on the expected targets of 400 kV systems for evacuation of power from Talwandi Sabo and Rajpura generating stations which may be allowed by the Hon'ble Commission.
5. PSTCL has proposed creation of SLDC Fund which is in line with CERC Regulations and the practice being followed by other State Regulatory Commissions. Any surplus revenue of SLDC may be allowed to be transferred to SLDC fund which will be utilized for capital expenditure by SLDC with the prior approval of the Hon'ble Commission.

Sd/-  
(U.K. Panda)  
Director/Fin. & Comm, PSTCL



## PSERC DIRECTIVES

A. An overview of the Directives issued to the Board and its successor entities in the Tariff Orders 2010-11 and 2011-12.

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
1.	Energy Audit and T&D Loss Reduction	<p><b>Directive of T.O. 2010-11</b></p> <p>The Commission notes that the Board has quantified the specific steps that it proposes to take in 2010-11 with a view to reducing T&amp;D losses. Commission expects that the Successor Entities would put in every effort to see that quantitative targets and Time-lines are achieved. It is also crucial to ensure that IT plan is initiated at the earliest and implemented in the scheduled 18 months. In addition to capital intensive measures proposed by the Board, sustained low cost technical interventions such as reduction in earthing resistance, tightening of joints and balancing of loads needs also to be considered.</p> <p><b>Directives of T.O. 2011-12 T &amp; D Loss Reduction</b></p> <p>a) The Commission observes with satisfaction that some progress has been made regarding installation of capacitors on 11 kV feeders &amp; conversion of LVDS system to HVDS. PSPCL is directed to prepare technically and financially viable schemes to convert all AP connections to HVDS and a report be sent to the Commission. As far as possible, HVDS scope be extended to</p>	<p><b>T&amp;D Loss Reduction</b></p> <p><b>i) Bachat Lamp Yojna:</b></p> <p>PSPCL's already approved scheme named "Bachat Lamp Yojna" to replace present inefficient incandescent lamps with CFLs of 49 Lac domestic consumers in a phased manner. 13 circles, covering 28 lac consumers, are to be covered under phase-I and balance 7 No. under phase-II. Under two bilateral agreements signed with C-Quest Malaysia for 13 (5&amp;8) No. circles, CPAs for 7nos. circles were registered with UNFCCC on 30.11.2011. Remaining CPAs are under preparation. In 5 no. circles 5,66,642 CFLs (1,82,302 house holds) stand distributed by 31.03.2012. Balance are likely to be distributed by 31.12.2012. For balance 7 No. circles, EESL had earlier been allotted the work. Due to cancellation of agreement, fresh EOI was issued. Due to no bid received on 8.11.2011, 21.12.2011, 08.02.2012, 21.03.2012 and 30.04.2012 case put up to the higher authorities to decide further course of action.</p> <p><b>ii) Replacement of Electro-mechanical meters:</b></p> <p>Work for replacement of Electro-mechanical meters by electronic meters is being done side by side while shifting meters outside. <u>Ending 3/2012 status of balance E/M is as under :-</u></p> <p>a)3-<math>\phi</math> meters: SP/DS/NRS .....6,597 No. AP .....42,169 No. (sample meters)</p>	<p><b>i) Bachat Lamp Yojna:</b></p> <p>The implementation of BLY Project needs to be expedited for completion during 2012-13 by PSPCL. The audited report of savings accrued on account of the implementation of this project may be submitted by PSPCL to the Commission on quarterly basis.</p> <p><b>ii) Replacement of Electro-mechanical meters:</b></p> <p>The Commission is concerned about the slippages in time lines of initiatives like shifting of meters, replacement of E/M meters (1 <math>\phi</math> meters and 3 <math>\phi</math> meters). PSPCL should ensure that during 2012-13 all these works are completed.</p>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
		<p>Urban and Suburban consumers as well. The 11 kV line capacitors be installed as per standard practice while ensuring that it does not cause leading Power Factor (resulting into increase in losses). The 11 kV line capacitors installations also need to be prioritised with higher priority on feeders carrying more inductive load.</p> <p><b>b)</b> The Commission is concerned about the slippages in time lines of IT Implementation project. The GIS work needs to be executed at a fast track to match Commissioning of IT implementation project on 28.10.2011. Establishment/ verification of baseline data also needs to be expedited.</p> <p><b>c)</b> A time bound plan to reduce the earth resistance of all distribution and grid substations of PSPCL as per standard laid down in IEEE Earthing Guide 80 be made in general and specifically to save costly equipments to be erected under IT implementation project and SCADA.</p> <p><b>d)</b> An annual exercise (from Oct to May) to tighten loose joints and nuts/bolts of all equipments and conductors be done to save losses due to high resistance appearing at these points.</p> <p><b>e)</b> Load balancing at all the distribution transformers be attained and certified annually. Certificates in respect of (d) &amp; (e) above be</p>	<p>b)1-<math>\phi</math> meters (DS/NRS) .....14,20,135 No.</p> <p>The work shall be got completed by 31.12.2013.</p> <p><b>iii) Loss Reduction Schemes:</b></p> <ul style="list-style-type: none"> <li>● <b>Conversion of LVDS to HVDS:</b> Out of 9.5 lac existing/old AP connections fed on LT feeders, 1,80,066 No. LVDS connections converted to HVDS up to 31.03.2012.</li> </ul> <p>Instead of converting all AP tube-wells from LVDS to HVDS only 33,000 AP tube wells of high loss feeders will be converted into HVDS. 4 no DPRs have been sanctioned by REC for this purpose. As per the decision taken the conversion will be done under modified HVDS scheme allowing LT line upto 200 mt and installing higher rating DT's of 25 &amp; 63 kVA, DPRs are being revised.</p> <ul style="list-style-type: none"> <li>● <b>Installation of Capacitors on 11kV feeders:</b> Out of total 2700 MVAR, 2249.222 MVAR (2196.143</li> </ul>	<p><b>iii) Loss Reduction Schemes:</b> PSPCL need to implement loss reduction schemes on high loss feeders/areas at first priority.</p> <ul style="list-style-type: none"> <li>● <b>Conversion of LVDS to HVDS:</b> <b>a)</b> The Commission does not agree with the reversal of HVDS proposal by PSPCL. World over, HVDS is the order of the day in urban, sub-urban and rural areas. The proposal of PSPCL to install higher rating DT's and feed AP connections through LT line up to 200 meters may be counter productive, result into higher line losses and induce incentive for theft of power. PSPCL should re-examine its decision in the light of the current worldwide practice of supplying power at consumer end through HVDS. As directed earlier in T.O. 2011-12, PSPCL is directed to prepare technically and financially viable schemes to convert all AP connections to HVDS and a report be sent to the Commission. Besides, as far as possible, HVDS scope be extended to Urban and Suburban consumers as well.</li> <li><b>b)</b> "Agricultural Feeders Loss Reduction Scheme" aiming at reducing the length of 11kV &amp; LT lines, sparing 11kV poles by re-routing the AP feeders besides replacement of conductor and addition of AP transformers may be prepared and implemented parallelly with LVDS conversion to HVDS.</li> </ul> <ul style="list-style-type: none"> <li>● <b>Installation of Capacitors on 11kV feeders:</b> The Commission notes the status of implementation of</li> </ul>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
		<p>obtained from junior engineer incharge (feeder-wise).</p> <p><b>f)</b> Initiatives on the lines of NDPL be undertaken to bring down the transformer damage rate. A blue print in this regard be prepared and submitted to the Commission by September 2011.</p> <p><b>g)</b> Suitable measures of power factor correction to compensate for reduction in power factor, if any, due to installation of CFLs installed under BLY scheme covering 49 lac domestic consumers, may be undertaken by PSPCL.</p>	<p>MVAR on lines and 53.079 MVAR on sub stations) has been installed up to 31.03.2012. Balance shall be installed by 30.09.2012.</p> <p><b>● Shifting of meters outside consumer premises:</b></p> <p><b>a)</b> Out of 32.14 lac meters covered under budget for non-APDRP scheme, only 20.69 lac meters could be covered for shifting outside in the pillar boxes. Out of these 20.69 lac meters, 16.76 lac meters have been shifted up to 31.03.2012 and balance shall be shifted by 31.12.2012 DPR's for balance 11.45 lac meters covered in non-APDRP scheme are under preparation.</p> <p><b>b)</b> Under R-APDRP scheme (for 47 towns) 18.74 lac meters are to be shifted. Out of it, works allotted to 5 No. firms for shifting 5.55 lac meters out of which 1.25 lac meters stand shifted by 31.03.2012 and balance to be shifted by 30.09.2012 (in 15 No. towns covered under R-APDRP part-B: line losses more than 20%).</p> <p><b>● Baseline data progress:</b></p> <p>All the meters for Ring fencing and Boundary Metering have already been installed and have been put-up to PFC for establishment/verification of baseline data. For this purpose, PFC the Nodal agency in this case has appointed WAPCOS as third party independent evaluating</p>	<p>capacitors on 11kV lines and at substations. The installation of 2700 MVAR is expected to be completed by 30/09/2012. The Commission expects that the installation of 11 kV line capacitors is being executed by PSPCL as per standard practice ensuring maximum improvement in the power factor.</p> <p><b>● Shifting of meters outside consumer premises:</b></p> <p>The Commission views the slippage in shifting the meters outside consumer premises as serious since it directly affects the line losses reduction program. PSPCL should re-double its efforts to expedite this work on top priority during 2012-13. The Commission is of the view that containing T&amp;D losses would not only improve productivity parameters and efficiency of utility but would also serve as a money saving mechanism. The Commission, therefore, advises the utility to ensure that revised target dates are met.</p> <p><b>● Baseline data progress:</b></p> <p>PSPCL is directed to complete the baseline data including its verification as per the target fixed now.</p>



Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
			<p>agency (TPIEA). Out of total eligible 47 no. towns, ring fencing data of 42 towns &amp; baseline data of 28 No. towns has been cleared by WAPCOS as on 31.03.2012. The work of verification of data of balance towns is in progress. Baseline data is likely to be finalized by 31.07.2012.</p> <p><b>● Implementation of R-APDRP Scheme:</b> R-APDRP is centrally sponsored scheme with an objective to reduce AT&amp;C losses to 15% level in urban areas of Punjab by investing in Sub-Transmission and Distribution sector.</p> <p>As per Restructured APDRP (Part-B), MoP/Gol has sanctioned grant/loan for strengthening of existing sub transmission and distribution system and for reduction of AT&amp;C losses level to 15%. PFC has been appointed by Gol as Nodal Agency. Basic qualifying criteria is that the population of the town as per census of year 2001 should be more than 30,000 and AT&amp;C losses should be more than 15%. Further, as per specific guidelines of PFC, the sanctioned schemes under APDRP (Part-B) can only be operated after verification of Base Line data i.e. existing losses by Third Party Independent Evaluation Agency (TPIEA). As per these criteria only 45 no. towns (Nawashehar &amp; Mohali-Ajitgarh have to be taken out due to AT &amp; C losses less than 15%) qualify for the scheme, all the schemes amounting to Rs.1550 crore were submitted to PFC and out of these 42 no. schemes (for 42 town) amounting to Rs.1495 crore were sanctioned and loan of Rs.216.20 crore was released as on 31.03.2012. In March, 2011 the MoP/Gol decided that Part-B work of those towns which have AT&amp;C Losses more than 20% be</p>	<p><b>● Implementation of R-APDRP Scheme:</b> The R-APDRP scheme should be implemented by PSPCL within the given time frame as fixed by MoP/Gol/PFC so that the 50% grant under the scheme is fully availed.</p>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
			<p>started immediately.</p> <p>Work of 15 no. towns for shifting meters outside into pillar boxes is under progress (total 5.55 lac meters, 1.25 lac meters shifted upto 31.03.2012, balance by 30.09.2012). Installation of L.T. shunt capacitors on distribution transformers is also in progress in those 15 no. towns, to be completed by 30.09.2012.</p> <p>The work of 42 no. towns under the schemes is to be completed over a period of three years from the date of sanction of schemes (target date of completion of work in 15 towns 31.03.2014 &amp; in 27 towns 31.07.2014). Out of DPRs of 27 no. towns sanctioned, loss of 25 no. towns is more than 20%, and the verification of base line data is under process by TPIEA. For implementation of 27 No, schemes &amp; remaining work of 15 No. schemes NIT has been floated.</p> <p>The balance 3No. schemes (for 3 No. towns) have been submitted to PFC for sanction.</p> <p><b>iv) Implementation of IT Plan:</b></p> <p>Pilot at Patiala has gone live w.e.f 30.12.2011.</p> <p>Building/Infrastructure completed on 12.4.2011. DRC servers have been installed &amp; application software loading is in progress, target date of completion is 31.05.2012.</p> <p>CCC Ludhiana has already been completed.</p> <p>Hardware installation has been completed in data centre. DGPS Survey &amp; Consumer indexing in Pilot town Patiala has been completed. Out of 30,000 No. D/T meters for all 47 towns, 24,238 have been installed out of 30,000 modems &amp; DCUs 8,646 no. modems &amp;</p>	<p><b>iv) Implementation of IT Plan:</b></p> <p>The Commission directs PSPCL to implement its IT plan across the state of Punjab on priority ensuring that the grant component in R-APDRP Part-A scheme (Rs.272.85 crore) is fully availed by the State.</p>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
			<p>DCUs have been installed. Balance work to be completed by 31.07.2012.</p> <p>DGPS survey completed in 36 towns out of 47 towns &amp; is in progress in 10 towns and likely to be completed by 30.06.2012. Consumer survey completed in 18 towns and is in progress in 22 towns. This work is likely to be completed by 31.07.2012.</p> <p>Complete IT plan across all 47 R-APDRP towns of Punjab is likely to be Commissioned by 31.12.2012.</p> <p><b>v) Low Cost Measures:</b></p> <p><b>• Earthing of DT's and sub-stations:</b> PSPCL has examined the issue. Presently there are about 4.25 lac D/Ts which may require re-earthing with 2 earthing points per D/T. Exercise requires huge funds. It has been decided to provide water level earthing to approx. 80,000 DTs feeding to GSC and ISC load. Total cost of project is Rs.72.00 crore and work will be completed by June, 2012 subject to availability of funds. PSPCL has also drawn plan for re-earthing of Grid S/Stns where ever required. Earth resistance has been checked and found earth resistance of 93 no. grid sub-stations was more than permissible limit at 580 sub-stations (out of 625 substations). The strengthening of earthing of grids where values have been found beyond permissible limit will be completed by 30.06.2012.</p> <p><b>• Tightening of loose joints and nuts/bolts:</b> Instructions have been issued to all HOD's of Distribution Wing</p>	<p><b>v) Low Cost Measures:</b></p> <p><b>• Earthing of DT's and sub-stations:</b> The re-earthing work as per standard laid in IEEE Guide 80 need to be done at all DTs and sub-stations of PSPCL in phased manner over next two years. The present Earthing Guidelines need to be suitably amended to align with IEEE Guide 80.</p> <p>Re-earthing using Bentonite (as implemented in utilities of Andhra, Karnataka and Maharashtra) as against water level earthing need to be considered due to variation in water level in Punjab thereby implementing an optimum techno-economic and lasting solution.</p> <p>PSPCL need to monitor earth resistance at its installations (including DTs) using Clamp-on type earth resistance testers (capable of measuring earth resistance as well as leakage current flowing through the neutral of transformer) on annual basis from April to June &amp; submit a certified statement to the Commission every year.</p> <p><b>• Tightening of loose joints and nuts/bolts:</b> The Commission notes that PSPCL has started</p>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
			<p>to comply with these directives meticulously. As per road map prepared the tightening of nuts/bolts works has been completed.</p> <p>● <b>Load balancing at DS transformers:</b></p> <p>This work will be started w.e.f. 01.05.2012.</p> <p>● <b>Reduction in Transformer damage rate:</b></p> <p>PSPCL has planned to bring the loading of all DTs feeding GSC and industrial load up to 70% and bring down the damage rate to &lt; 1% in urban area and &lt;4% in rural area. De loading of overloaded transformers has given good result reducing the damage rate to 5.27 % during 2011-12 as compared to 5.83% in 2010-11.</p> <p>● <b>Power factor correction on account of installation of CFLs:</b></p> <p>As per specifications of CFLs covered in BLY, the high power factor CFLs (minimum 0.85) are going to be distributed to the domestic consumers in the state. So, there will not be any power factor reduction due to CFL distribution under BLY Scheme.</p>	<p>implementing the action plan on ground for tightening of loose joints and nuts/bolts. It may be ensured that this exercise is carried out each year from November onwards and completed by 31<sup>st</sup> May of next year. A certificate for completion of this task may be sent by PSPCL to the Commission every year.</p> <p>● <b>Load balancing at DS transformers:</b></p> <p>The load balancing at all distribution transformers needs to be conducted in summer season annually and the unbalancing on each transformer may be recorded through AMR or physically to ensure that neutral current flowing through the neutral is brought nearly to zero. A certified statement in this regard may be submitted to the Commission annually.</p> <p>● <b>Reduction in Transformer damage rate:</b></p> <p>PSPCL efforts to bring down transformer damage rates, de-loading of DTs, replacement of conductors (specially in Patiala town) are appreciable, these efforts should continue with more vigour and cover the whole of the State. The Commission may get an audit conducted on the implementation of low cost measures in PSPCL.</p> <p>● <b>Power factor correction on account of installation of CFLs:</b></p> <p>Noted</p>

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		<p><b>Energy Audit</b></p> <p>Circle-wise energy audit needs to be done across PSPCL. Time bound program to train sufficient number of PSPCL engineers to acquire BEE certification to work as Energy Auditors be chalked out. These engineers be posted to conduct internal energy audit in distribution system and generating stations in addition to their duties. Energy audit (including inventory management) of all the three thermal plants be conducted as per rules laid by BEE and Energy Conservation Act, 2001. Steps to improve energy efficiency be identified and implemented. The impact of these steps be measured and intimated to the Commission.</p>	<p>● <b>Energy Audit of Distribution System:</b></p> <p>Policy in this regard is being framed.</p> <p>● <b>Energy audit of Thermal Generating Stations:</b></p> <p><b>RTP:</b> To get the energy audit done regularly after every three years, W.O. No.196/5.4.2011 was placed on M/s CPRI, Bangalore for study on station heat rate which includes energy audit. Present status: SHR Study Reports by CPRI stands submitted to PSERC vide memo no. 2154 dated 28.02.2012.</p> <p><b>GNDTP:</b> <b>Unit-1 &amp; 2:</b> For SHR study, W.O. No.02/ 27.4.2011 was issued on CPRI, Bangalore. Present Status: SHR Study reports finalized by CPRI stand submitted to PSERC vide memo no. 2159 dated 28.02.2012. <b>Unit-3&amp;4:</b> Both units are under R&amp;M w.e.f 14.01.2011 and 05.11.2011, respectively. <b>GHTP:</b> <b>Unit-1:</b> Energy audit was got conducted (8.7.2008-16.12.2009) from TERI and action was taken where ever required. <b>Unit-2:</b> Energy audit has been got conducted (7.8.11-31.12.11) from TERI. Firm submitted report on 24.01.2012 &amp; is under study. Expected date of completion is 15.03.2012.</p>	<p>● <b>Energy Audit of Distribution System:</b></p> <p>As already directed, Circle wise energy audit of PSPCL distribution system may be conducted. It may be possible to do it easily with Commissioning of AMR meters on all DTs. Responsibility in this regard may be fixed with the Superintending Engineer in-charge of the circle and a duly certified statement in this regard may be submitted to the Commission by PSPCL.</p> <p>● <b>Energy audit of Thermal Generating Stations:</b></p> <p>As already directed, the energy audit (including inventory management) of all the PSPCL thermal stations be conducted as per rules laid by BEE and Energy Conservation Act, 2001. The impact of implementing energy conservation steps be measured and intimated to the Commission by PSPCL duly certified.</p>

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			<p><b>Unit-3&amp;4:</b> Performance Guarantee Tests have been conducted by BHEL (9.1.2009-17.1.2009 and 6.3.2010-17.3.2010, respectively). It is also mentioned that Schneider Electric India Pvt. has conducted base line energy audit of all the units from BEE from 11.7.2011 to 21.7.2011. Report has been received. No recommendations have been given by firm. Above shows that energy audit for GHTP units is being got done regularly once in three years.</p> <p>Further, at present no energy auditor is accredited by BEE. Once the accreditation process is got completed by BEE, the tenders shall be called with the approval of competent authority and next schedule shall be intimated to Hon'ble Commission.</p> <p>● <b>Energy Audit of Hydro Generating Stations:</b> It is not mandatory to conduct energy audit at hydro generating stations as per Energy Conservation Act-2001.</p>	<p>● <b>Energy Audit of Hydro Generating Stations:</b> Although not mandatory as per Act, every unit saved shall earn extra revenue for PSPCL. A study may be got conducted to draw a road map to reduce energy consumption at PSPCL hydro stations to the minimum and comparable to the NHPC hydro generating stations.</p>
2.	Agricultural Consumption	<p><b>Directive of T.O. 2010-11</b> The Commission notes that Board has agreed to restrict the number of faulty meters to 10% of the total installed and to increase the sample meters to 10% of total AP connections. As regards furnishing monthly/ division-wise consumption recorded by sample meters, Board has indicated that it might take some more</p>	<p>● Percentage of faulty/Non-functional meters ending March 2012 is 7.74%. Effective sample size has increased from 77,192 Nos i.e.7.05% (ending 4/2010) to 1,00,830 Nos. i.e. 9.23% (ending 03/2012). No. of AP sample meters have been increased from 83,603 Nos (7.36%) for total 10,95,027 No. connections ending April, 2010 to 1,09,290 Nos. (9.50%) for total 11,50,316 T/W connections ending March, 2011. Efforts are being made to</p>	<p>● The Commission notes the action taken. Sample size of 10% shall be achieved by September 2012. PSPCL shall report on status within three months of this Tariff Order.</p>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
		<p>time to streamline its reporting system and make the information available. Taking this into account. The Commission directs that the Successor Entities may begin to supply this information by 1.6.2010. The same would apply also to division-wise information on connected load, AP factor, increase/decrease in sample meter loads and data on actual AP supply hours. In the case of supply hours, information could be restricted, for the moment, to data as maintained by the supplying sub-station. In view of the Board's contention that consumption of motors of the same capacity and rating could vary for a variety of reasons, the Commission observes that one or combination of such factors could at best have limited effect on consumption. The Commission, reiterates that monthly details of meters recording consumption in excess of what can possibly be consumed be furnished where the variation is in excess of 10%. The Commission would like that AMR system should also be installed on a priority basis.</p> <p><b>Directive of T.O. 2011-12</b> The Commission notes the steps taken by PSPCL to bring the percentage of nonfunctional/faulty meters to 8.7%. But sample size of 10% in case of AP connections</p>	<p>achieve 10% sample size. However all new AP tube well connections under ARTC scheme will be released by providing meters.</p> <ul style="list-style-type: none"> <li>Presently, 650 No. grids are in the scope of M/s Easun Reyrolle, for providing AMR scheme for 3857 No. AP feeders (including AP 4 wire, AP 3 wire, AP IP feeders). Out of these AMR compatible meters on 3239 No. AP feeders have been installed, balance will be installed by 31.12.2012 (including balance grid sub-stations falling under the scope of Spanco Ltd. / Secure Ltd. Under R-APDRP).</li> </ul>	<ul style="list-style-type: none"> <li>The Commission has taken note of the action taken for installation and commissioning of AMR system on AP feeders. The date on which AMR on all AP feeders should be completed and reported by 01.01.2013.</li> </ul> <p>AMR data complete in all respects, has not been received by the Commission. The utility is advised to ensure that AMR data, complete in all respects, be sent to the Commission on a monthly basis during 2012-13.</p>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
		is still not achieved. The Commission also notes the steps initiated by PSPCL for installation of AMR system. The Commission directs the Utility to ensure 100% installation and Commissioning of AMR system on AP feeders as per timelines submitted and supply consolidated data to the Commission.		
3.	Improvement in Quality of Service	The Commission sees no reason why the Successor Entities should not be able to place the Reliability Indices on the Web-site as directed. Final compliance may be intimated to the Commission by 30.06.2010.	Monthly reliability indices ending 02/2012 is available on PSPCL website i.e. <a href="http://www.pspcl.in">www.pspcl.in</a>	The Commission notes the compliance and advises the utility to ensure regular updation of reliability indices.
4.	Two Part Tariff	<p>Comprehensive proposal for Two Part Tariff and ToD Tariff as desired by the Commission is still awaited and should be furnished within two months of issue of Tariff Order.</p> <p><b>Directive of T.O. 2011-12</b></p> <p>The Commission notes with concern that the comprehensive proposal for two part and ToD Tariff required to be submitted by June, 2010 has been unduly delayed. PSPCL is directed to expedite the proposal.</p>	<p>Proposal for Two Part Tariff submitted to Commission along with ARR (FY 2012-13).</p> <p>TOD Tariff proposed will be submitted to the Commission by 31.08.2012.</p>	The Two Part Tariff proposal given by PSPCL in its ARR for 2012-13 was discussed in the State Advisory Committee but elicited a significant number of objections. The utility is advised to take cognizance of observations made in this Tariff Order (Chapters) and submit a revised proposal on Two part & ToD tariff within three months of issuance of this Tariff Order.
5.	kVAh Tariff	The Commission reiterates its direction that the Successor Entities examine the implications of introduction of such tariff and submit requisite details at the earliest.	Preliminary report received from consultant is under study. Report is expected to be submitted to Commission after finalization by 08/2012.	The Commission observes that although a preliminary proposal was put forth in presentations in Sep./Oct. 2011, the advised parameter clarification has not been effected. The utility is advised to submit a final proposal within three months of



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		<p><b>Directive of T.O. 2011-12</b> The Commission notes with concern that the directive has not been complied with. The proposal be expedited.</p>		issuance of this Tariff Order.
6.	Metering Plan	<p>The Successor Entity is directed to comply with the requirements of the Electricity Act, 2003 without any further delay as it is mandatory to have 100 % metering of all connections including AP.</p> <p><b>Directive of T.O. 2011-12</b></p> <p>The AMR of AP feeders may give an idea of AP consumption including distribution losses in feeders and transformers but the requirement of Electricity Act, 2003 mandates 100% metering of all connections including AP.</p>	<p><b>100% AP Metering Plan:</b> A pilot project with 52 no. meters, with inbuilt modems for remote metering has been made operational and revenue model is under study.</p>	<p>The Commission draws attention of the utility to the Electricity Act, 2003 which mandates 100% metering. The Commission in a meeting on Directives in Sept. 2011 had emphasized the need for 100% metering and had advised the utility to prepare a plan to implement the mandate.</p> <p>The pilot project to measure AP consumption of each AP consumer through AMR system undertaken in Ajitgarh (Mohali) circle of PSPCL may be got implemented on lease/rental basis covering installation, maintenance and up keep of AMR meters. In addition this project may also include installation, maintenance and up keep of LT capacitors at each AP consumer end on lease/rental basis. This may prove to be a least cost and efficient solution to the 100% AP metering and improving AP power factor.</p> <p>The utility is advised to furnish a plan to the Commission for implementing 100% metering and AP power factor correction within two months of this Tariff Order.</p>
7.	Employee Cost	<p>The Commission directs the Successor Entities to ensure that the study is completed and the action plan in the light of its findings finalized by 31.3.2011. The successor Entities should also, as a part of the manpower study or otherwise finalize its views on the</p>	<p>M/s PwC, Consultant on Manpower Study, submitted report in March, 2011 which was discussed in the meeting of BoDs held on 13.4.2011. A committee of Director/Finance, Director/Distribution, and Director/HR was constituted for further examining the report and putting up to the Board.</p>	<p>The Commission observes with concern that the Directive for submitting implementation Action Plan on PwC Study Report on manpower rationalization has not been implemented by the utility. The PwC Manpower Study Report is lying with PSPCL for more than a year need to be implemented on priority. The problem of employee cost which is one of</p>

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		<p>restructuring of various wings on a functional basis and prepare road map for its implementation by 31.3.2011. Simultaneously, the time frame to implement manpower saving technologies such as unmanned sub-stations, AMR of high end consumers, distribution SCADA etc. should also be considered and decided upon.</p> <p><b>Directive of T.O. 2011-12</b></p> <p>The Commission directs PSPCL to finalise the Work Study Report on Manpower and submit implementation Action Plan to the Commission. Pilot project of reorganisation/ functionalisation of Distribution Organisation executed at Patiala (urban model) and Nabha (rural model) be replicated across Punjab. A report detailing impact of this reorganization be prepared and submitted to the Commission along with PERT for implementation.</p> <p>The manpower saving technologies like AMR of high end consumers, distribution SCADA under implementation by PSPCL be expedited. Plan to implement unmanned substation be drawn and cost benefit analysis of unmanned sub-stations be submitted to the Commission along with a plan for their implementation.</p>	<p>Memorandum no. 12/DDH-24 dated 1.3.2012 was submitted to the BoD for considering the PwC report along with comments and recommendations of the aforesaid committee &amp; is under consideration of BoD.</p> <p>Total number of employees have been reduced from 87,066 in 2001-02 to 55,547 in 2010-11. Employees productivity parameters are as under:</p> <table border="1"> <thead> <tr> <th>Productivity Parameter</th> <th>Year 2001-02</th> <th>Year 2010-11</th> </tr> </thead> <tbody> <tr> <td>No. of Employees</td> <td>87066</td> <td>55547</td> </tr> <tr> <td>No. of Consumers (Lac)</td> <td>38</td> <td>73.2</td> </tr> <tr> <td>Employees per MU of energy sold</td> <td>4.39</td> <td>1.50</td> </tr> <tr> <td>Employees per 1000 consumers</td> <td>16.32</td> <td>7.59</td> </tr> <tr> <td>Employees/ circuit km of LT line</td> <td>0.55</td> <td>0.33</td> </tr> <tr> <td>Employees per Distribution Transformer</td> <td>0.47</td> <td>0.11</td> </tr> <tr> <td>Employees per MU generated</td> <td>3.94</td> <td>1.26</td> </tr> <tr> <td colspan="3">Share of employee cost in total cost (%age) 20.14 (2010-11)</td> </tr> </tbody> </table> <p>In the recruitment case of linemen, as desired by PSERC, a copy of this report was furnished to the Hon'ble Commission.</p> <p>Pilot Project for Urban and Rural areas is already in place. Keeping in view the positive results of the pilot project reorganization of two more Distribution Divisions (Bathinda, Budhlada) and city areas of three more DS Circles(Jalandhar, City Amritsar</p>	Productivity Parameter	Year 2001-02	Year 2010-11	No. of Employees	87066	55547	No. of Consumers (Lac)	38	73.2	Employees per MU of energy sold	4.39	1.50	Employees per 1000 consumers	16.32	7.59	Employees/ circuit km of LT line	0.55	0.33	Employees per Distribution Transformer	0.47	0.11	Employees per MU generated	3.94	1.26	Share of employee cost in total cost (%age) 20.14 (2010-11)			<p>the highest in the country, need to be tackled with much more seriousness by the utility.</p> <p>The pilot project for urban and rural distribution restructuring on functional basis successfully implemented at Patiala &amp; Nabha and extended in some other divisions/circles of PSPCL need to be expedited for implementation during 2012-13. The implementation of AMR for HT consumers should be completed by 31.12.2012 and reported.</p> <p>The target of completing distribution SCADA/DMS by 30.6.2013 must be met by PSPCL.</p> <p>PSPCL should come up with a plan to implement unmanned sub-stations on experimental basis and extend this project depending upon its overall financial viability.</p> <p>Although, some advised initiatives like application of management techniques and training of officers and staff have been undertaken to some extent and are appreciated, the utility has to go a long way in implementing these initiatives and come at par with progressive organizations like NTPC, NDPL etc. The PSEB Training Policy including development of complete training infrastructure already approved needs to be implemented in letter &amp; spirit. An action plan on these lines be prepared and submitted to the Commission during 2012-13.</p> <p>The Commission has taken note on the action taken on;</p> <p>(i) The establishment of dedicated cell to improve the performance of the employees / organisation.</p> <p>(ii) Implementation of concept of Quality control circles and</p>
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		<p>Adequate training to officers and staff be provided to meet the mandates of National Training Policy, erstwhile PSEB's approved Training Policy and provisions of Indian Electricity Rules, 1956 (as amended from time to time). Application of modern management techniques across PSPCL to optimise its functioning and efficiency be undertaken. HRD wing may establish a dedicated cell for this purpose. Implementation of quality circles, 5S, six sigma and Organisation Development (OD), etc be made in time bound manner to improve customer service, reduce costs, increase efficiency and optimize manpower output.</p>	<p>&amp; Sub urban Amritsar) has been done on functional basis recently. It shall be further rolled out in the state along with SAP project.</p> <p>As already committed to Hon'ble Commission, the re-organization of Distribution Wing is targeted to be completed by 6/2013.</p> <p>Work of AMR of high end consumers (all HT consumers 11,000 No.) has been taken up by M/s Secure, who are the meter data acquisition partner for this project with M/s Spanco Ltd. as System Integrator. AMR project of all H.T. consumers has been taken up across the State of Punjab.</p> <p>Entire work is scheduled/expected to be completed by 31.12.2012. The data of 400 no. H.T. consumers of Patiala, Ajitgarh(Mohali), Patti, Nakodar, Jaito, Nangal &amp; Gurdaspur has started coming to Patiala Data Center as on 31.03.2012.</p> <p><u>Distribution SCADA/DMS:</u> Work is to be carried out in 3 No. towns under R-APDRP, i.e Ludhiana, Jalandhar &amp; Amritsar. Work is expected to be completed by 30.6.2014.</p> <p>Unmanned substations are planned to be implemented in three towns Jalandhar, Amritsar &amp; Ludhiana when SCADA scheme is being implemented under R-APDRP.</p> <p><b>Training:</b> In pursuance to National Training Policy PSEB (Now PSPCL) has already framed its training policy which is being followed since year 2007-08 to the extent possible with the available infrastructure, During the year 2010-11, 76,350</p>	<p>establishment of the Quality Control Circle. (iii) Conduction of workshops on the subject. The status of working and attainments of these Quality Control Units shall be reported to the Commission by PSPCL within two months of issuance of this Tariff Order.</p>

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			<p>Training man-days were achieved. It has been planned to achieve a target of 80,000 training man-days during the year 2011-12. To achieve this comprehensive Annual Training Calendar (for both In-house and Out-sourced Training) was prepared till February, 2012. Approximately 93,660 man days of training has been imparted against a target of 80,000 man days.</p> <p>A dedicated cell named ODMD (Organizational Development &amp; Management Development) attached with CE/HRD has been established for introduction and implementation of Modern Management Techniques.</p> <p>Further, following important works have been initiated :</p> <ul style="list-style-type: none"> <li>• Executive Committee of CMD, Full Time Directors and all HODs constituted for strategic discussions and sharing of ideas for framing short term/long term plans. Meeting of committee was held in 11/2010.</li> <li>• The Vision, Mission Objectives and Core Values have been finalized by BoD and circulated across PSPCL. Ten no. half day workshops for dissemination of Vision, Mission &amp; Core Values were conducted at zonal level. Such workshops will be conducted throughout PSPCL.</li> <li>• For effective interaction with trade association, unions for maintaining cordial relations, Joint Productivity Council has been constituted.</li> <li>• 3 No. workshops were organized for Leaders of Associations/council &amp; Trade</li> </ul>	

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			<p>Union.</p> <ul style="list-style-type: none"> <li>• 13 No. workshops involving 338 officers of organizational Development have already been conducted during the year 2010-11.</li> <li>• Workshops are being continued in year 2011-12 also and it is planned to cover 500 Nos. officers.</li> <li>• PSPCL has in principal approved the implementation of concept of Quality Circle &amp; 5S. As a pilot project 14 No. Quality Circles have been established in PSPCL and training for the members and facilitators of these Quality Circles has already been conducted. This concept will be further replicated in due course of time.</li> <li>• Two nos. workshops named 'Ik Yatan' have been conducted to bring PSPCL &amp; Stake holders on common platform to understand the problems of each other &amp; found solutions. This concept will be further propagated.</li> <li>• Three No.1 day workshops were conducted for implementation of Quality Circles &amp; 5S by ODMD Cell at TTI Patiala and GGSSTP Ropar.</li> <li>• 2 No. in-house sessions for propagation of Vision, Mission &amp; Core Values conducted at TTI, Patiala.</li> </ul>							
8.	Receivables	The Commission notes that total receivables of the Board on 31.3.2009 stood at Rs.497.95 crore which have been reduced to Rs.478.13 crore on 30.9.2009 as per details brought out in Ann.P-1. Position in respect of outstanding dues of various	<p>Category wise Defaulting amount ending 03/2012 (Rs. in lac) is detailed as under :</p> <table border="1"> <thead> <tr> <th>Category</th> <th>End. March 2011(audited)</th> <th>Ending 3/2012 (un-audited) (Rs. in lac)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Category	End. March 2011(audited)	Ending 3/2012 (un-audited) (Rs. in lac)				The Commission observes that there is a decrease in the total receivables for the year ending 03/2012 as compared to the last year ending 3/2011. However, it is noted that ISC category has shown an increase in receivables. The utility is advised to make sustained efforts to reduce defaulting amount under this head. Also
Category	End. March 2011(audited)	Ending 3/2012 (un-audited) (Rs. in lac)								

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply			PSERC's Comments/ Directive for 2012-13													
		<p>departments of GoP. and other categories is by and large the same. Commission notes that DSC and PDCO cases are internally dealt with and it should be possible to reduce the pendency of such cases and thereby substantially reduce the outstanding arrears. On the other hand, latest data reveals that there has been a marginal increase in the out standings of both these Categories. Even with reduced receivables as on 30/09/2009, the recoverable amount stands at the same level as at the end of 2007-08 and the Successor Entities clearly needs to put in a far greater effort to bring down the receivables to the barest minimum.</p> <p><b>Directive of T.O. 2011-12</b> The Commission observes that there is substantial increase in receivables in all the categories except DSC cases. The defaulting amount of Rs.608.35 crore as on 30-9-2010 (audited) has increased to Rs. 655.26 crore as on 31-12-2010 (unaudited). Efforts need to be made to reduce the receivables.</p>	<table border="1"> <tr> <td>ISC</td> <td>18359.79</td> <td>23139.36</td> </tr> <tr> <td>GSC</td> <td>28773.87</td> <td>27303.44</td> </tr> <tr> <td>AP</td> <td>29208.23</td> <td>25250.19</td> </tr> <tr> <td>Other</td> <td>778.34</td> <td>425.84</td> </tr> <tr> <td>Total</td> <td>77120.23</td> <td>76118.83</td> </tr> </table>	ISC	18359.79	23139.36	GSC	28773.87	27303.44	AP	29208.23	25250.19	Other	778.34	425.84	Total	77120.23	76118.83	<p>the overall reduction is insignificant 1.30%. The utility is directed to make efforts to further reduce the defaulting amounts. PSPCL should take up with GoP for early clearance of dues of State Govt. departments.</p> <p>Earnest efforts are being made to recover the defaulting amount. Stringent instructions for liquidating the defaulting amount have been issued to all concerned offices.</p>
ISC	18359.79	23139.36																	
GSC	28773.87	27303.44																	
AP	29208.23	25250.19																	
Other	778.34	425.84																	
Total	77120.23	76118.83																	
9.	Management Information System (MIS)	<p>The Commission notes that development of MIS is a part of the IT plan to be rolled out shortly.</p> <p><b>Directive of T.O. 2011-12</b> The Commission notes that development of MIS is a part of IT implementation. Expeditious implementation of IT plan should therefore be</p>	IT implementation under R-APDRP (Part-A) for 47 No. towns as well as MIS package is in progress & MIS Reports of pilot town Patiala will be completed by 31.05.2012 & balance will be completed by 31.12.2012.	The Commission notes that development of MIS is a part of IT implementation. Therefore implementation of IT Plan should be done expeditiously & on priority basis. PSPCL is directed to include provisions of MIS for PSERC returns in its IT plan.															

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
10	Energy Conservation	<p>a priority.</p> <p>The Commission notes that the Board is taking a few random steps towards effecting energy conservation but has yet to draw a comprehensive DSM plan as earlier directed. The Commission would like the Successor Entities to submit such a plan within three months. At the same time, high priority needs to be assigned to complete the pilot project for improving the efficiency of AP pump sets and prepare a plan for its phased roll out in the state</p> <p><b>Directive of T.O. 2011-12</b></p> <p>The Commission notes that the utility had been advised to draw a comprehensive DSM plan by July, 2010. However, the Commission observes with concern the lack of compliance in this regard, which needs to be expedited. A time bound programme to replace 100 % AP sets with efficient pump sets across the State be laid down and implemented. Good progress of low cost DSM measure, has been attained. It needs to be kept up.</p>	<p>DSM plan is under preparation.</p> <p>Agricultural Demand Side Management Pilot Project covering 6 no. feeders of Mukatsar &amp; Tarn Taran Circles is being implemented. BEE has submitted DPR and PSPCL have decided to implement the project under Hybrid Mode. Despite repeated efforts, tenders to replace 1243 no. AP sets have not been received. Case has been put up to higher authorities to decide the further course of action.</p> <p>PSPCL has also decided and made it mandatory to release all new AP connections with energy efficient 4 star rated pump sets.</p> <p>Ending March 2012, following infrastructure improvement projects have been implemented:</p> <p>a) Out of 899, 3 phase 4 wire feeders, 853 have been converted to 3 phase 3 wire.</p> <p>b) All 979 overloaded 11kV feeders (250 Amp for urban, 200 Amp for rural) have been de-loaded ending July 2011.</p> <p>c) Against a target of replacing 6000 km worn out conductor, 6401 km conductor has been replaced.</p>	<p>The Commission observes with satisfaction that some DSM measures have been taken by the utility like conversion of 3 phase – 4 wire feeder into 3 phase 3 wire feeders, de-loading of over-loaded feeders as well as replacement of worn out conductors.</p> <p>The Commission, however, directs that a time bound programme to replace 100% AP sets with efficient pump sets over coming three to five years be prepared for implementation and submitted to the Commission.</p> <p>The Commission again directs PSPCL to ensure that periodical checking is made to determine that new tube well connections are released with 4 star rated ISI marked pump sets.</p> <p>The Commission directs that DSM Regulations be implemented and a comprehensive DSM plan be prepared and submitted to the Commission at the earliest.</p>
11	Details of Fixed Assets	<p>Details of Fixed assets added as well as written off during the particular year to be furnished.</p> <p><b>Directive of T.O. 2011-12</b></p> <p>All out efforts should be made to comply with the directive.</p>	<p>Consultants had been appointed for preparation of fixed assets registers (FAR), same have been prepared and are under active consideration of the committee constituted by PSPCL to finalize the report of consultant. This report is expected to be completed by</p>	<p>The Commission advises the utility to ensure the compliance of Directive at the earliest.</p>

Sr. No	Issues	PSERC's Directive in T.O.2010-11 & 2011-12.	PSPCL's Reply	PSERC's Comments/ Directive for 2012-13
			31.03.2013.	
12	Power purchase from Traders and through UI.	<p>The Commission reiterated that the successor entities needs to purchase power in judicious manner and also resort to demand side management practices, if necessary to maintain its commercial viability.</p> <p><b>Directive of T.O. 2011-12</b></p> <p>The Commission reiterates that such purchase be kept within the cost approved. Also, power be purchased in a judicious manner.</p>	<p>For 2012-13 Short Term Power Purchase has been tied up for 80% and for balance 20% to be arranged on day ahead basis from open market as per real time requirement.</p> <p>Monthly power purchase data is being furnished to Commission regularly.</p>	<p>The utility had been advised to purchase power judiciously at the rates within the cost approved. The Commission observes that PSPCL has been successful in bringing down the cost of power purchased which is a laudable effort.</p>
13	Cost of supply and Cross subsidy	<p>In the light of APTEL direction, the successor entities need to ensure that the process of engaging consultant for carrying out the proposed study is expedited and the finding of the study as well its own views thereon are submitted to the Commission as early as possible.</p> <p><b>Directive of T.O. 2011-12</b></p> <p>The Commission directs Utility to expedite the study and submit findings of the study to the Commission at the earliest.</p>	<p>The Energy and Resources Institute (TERI) New Delhi has been appointed as consultant to conduct cost of supply study. They have submitted draft report on methodology to arrive at cost of service.</p> <p>A presentation on the methodology to be adopted for this study was made before Hon'ble Commission on 8, August, 2011. However Commission has directed to complete and submit the study voltage wise also.</p> <p>Same is being prepared by the consultant and is to be finalized by 06/2012.</p>	<p>The Commission observes that after preliminary presentation in 2011, another presentation of the study was made before the Commission on 23.5.2012. The Commission has made observations on the study. PSPCL is advised to finalise the study at the earliest.</p>



**B. DIRECTIVES ISSUED IN TARIFF ORDER 2011-12**

Sr.No	Issues	Directives in Tariff Order FY 2011-12	PSPCL's Reply	PSERC's Comments
1	Payment of Transmission Charges	The Commission directs PSPCL to ensure that transmission charges (iner-State and Intra-State) (including SLDC charges) etc. are paid to PSTCL well in time.	PSPCL assures the Hon'ble Commission for timely payment of Transmission Charges to PSTCL.	The Commission observes compliance of the Directive.
2.	Maintenance of Category-wise details of fixed asset	The Commission directs PSPCL to maintain category-wise details of assets as per provisions of The Companies Act, 1956.	Consultants had been appointed for preparation of fixed assets registers (FAR), same have been prepared and are under active consideration of the committee constituted by PSPCL to finalize the report of consultant. This report is expected to be completed by 31.03.2013.	The Commission advises the utility to expedite the finalization of Fixed Assets Register (FAR).
3.	Adequacy of existing switchgears and earth mat at all 66 kV & 33 kV substations	The Commission directs that the short circuit studies be carried out to check adequacy of rupturing capacity of the existing switchgears installed & suitability of the existing earth mats to absorb the short circuit current. Replacement of switchgears and strengthening of earth mats be done wherever required and earthing parameters may be kept as per IEEE Earthing Guide 80. A report in this regard be submitted to the Commission.	PSPCL is in process for study of short circuit levels of the existing switch gears and adequacy of the existing earth mats.	The Commission observes with concern that the study on short circuit levels, adequacy of existing switch-gears and earth mat is pending and advises the utility to complete this task on priority. This study may be finalized and submitted to the Commission by September, 2012.

Sr.No	Issues	Directives in Tariff Order FY 2011-12	PSPCL's Reply	PSERC's Comments
4.	Loading status of PSPCL sub-transmission system (66 kV & 33 kV )	The list of overloaded sub-transmission lines/substations (66 kV and 33 kV) of PSPCL along with works planned and target dates to optimally load them be displayed on PSPCL website. Suitable addition of 66 kV and 33 kV substations and transmission lines to transfer additional power be ensured and intimated to the Commission.	253 No. 66 kV Grid Sub Stations were augmented, upgraded and newly added up to 30.4.11. This is an ongoing process under which 426 Nos. 66 kV and 33 kV Grid Sub Stations are planned to be augmented, upgraded and added during the year 2011-12. <b>List of 136 No. over-loaded sub stations along corrective action plan is available on website of PSPCL.</b>	The Commission observes that the list of overloaded sub-transmission lines/substations (66 kV and 33 kV) of PSPCL along with works planned and target dates to optimally load them be displayed on PSPCL website.  The augmentation, up-gradation and addition of new sub-stations may be planned for current Five Year Plan and submitted to the Commission.
5	Theft of Energy	Apportionment of theft of energy to each category of consumers may be done by PSPCL.	Apportionment of theft of energy to each category of consumers is being done by PSPCL in its accounts as under:  <ul style="list-style-type: none"> <li>● Theft of energy detected by Enforcement staff under Head GH – 23.721 to 23.728.</li> <li>● Theft of energy detected by operation staff under Head GH – 23.711 to 23.716 and 23.719 to 23.720</li> </ul> Monthly status of category-wise amount of theft detected by DS Organisation and Enforcement Wing upto February 2012 along with recoveries made has been submitted to the Hon'ble Commission.	The Commission has separately decided to treat the entire amount recovered on account of theft of energy as tariff income. The Commission, therefore, decides to drop this directive.

### C. NEW DIRECTIVES ISSUED IN TARIFF ORDER 2012-13

<b>Sr. No.</b>	<b>Issues</b>	<b>Directives in Tariff Order FY 2012-13</b>
1	Cost Audit of generating stations	Apart from the Energy Audit being conducted at various thermal generating stations, the PSPCL is directed to get 'Cost Audit' conducted, for each of the thermal generating stations to identify the area where efficiency could be improved and costs reduced. If such cost audit is already being conducted the cost audit report for FY 2009-10 and FY 2010-11 shall be submitted to the Commission along with the details of the action taken to improve the efficiency of the areas identified and reduce the costs.
2	AMR of consumers	PSPCL may launch pilot program of AMR [on lease basis on the pattern of AMR for AP consumers executed in Ajitgarh (Mohali) circle] for DS/NRS and other categories of consumers and compare with present metering system & prepare a road map for an efficient, accurate & cost effective AMR system for execution across the State of Punjab.
3	Coordinated planning of transmission and sub transmission works	PSPCL & PSTCL shall coordinate planning of transmission works (400, 220 & 132kV) and sub transmission works (66 & 33kV) so that there is no bottleneck in delivering power at the consumer end. A coordination committee of both companies may be notified and made responsible for compliance of this directive.

**Apportionment of Cost among various functions as per Board's Audited Accounts for FY 2009-10**

Sr.No	Particulars	Hydel	Thermal	Total Generation	Distribution	Total
<b>A - ASSETS</b>						
	Direct	5985.27	5686.28	11671.55	6521.11	18192.66
	Apportioned	40.3	38.28	78.58	43.91	122.49
	<b>Total (Amount)</b>	<b>6025.57</b>	<b>5724.56</b>	<b>11750.13</b>	<b>6565.02</b>	<b>18315.15</b>
	<b>Total (%)</b>	<b>32.90%</b>	<b>31.26%</b>	<b>64.16%</b>	<b>35.84%</b>	<b>100.00%</b>
<b>B - EXPENSES</b>						
<b>1</b>	<b>Power Purchase Cost</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4653.19</b>	<b>4653.19</b>
	<b>Power Purchase Cost - %</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>
<b>2</b>	Fuel Cost	0	3536.24	3536.24	0	3536.24
	Other Fuel Related Costs	0	48.26	48.26	0	48.26
	<b>Sub Total</b>	<b>0</b>	<b>3584.50</b>	<b>3584.50</b>	<b>0</b>	<b>3584.50</b>
	Addl Fuel Related Losses	0	37.36	37.36		37.36
	<b>Total</b>	<b>0</b>	<b>3621.86</b>	<b>3621.86</b>	<b>0</b>	<b>3621.86</b>
	<b>Total Fuel Cost (%)</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>
<b>3</b>	<b>Repair &amp; Maintenance</b>					
	Direct	69.01	135.78	204.79	84.13	288.92
	Apportioned	11.94	23.49	35.43	14.55	49.98
	Less: Capitalisation	0.43	0.84	1.27	0.52	1.79
	<b>Total (Amount)</b>	<b>80.52</b>	<b>158.43</b>	<b>238.95</b>	<b>98.16</b>	<b>337.11</b>
	<b>Total (%)</b>	<b>23.89%</b>	<b>47.00%</b>	<b>70.88%</b>	<b>29.12%</b>	<b>100.00%</b>
<b>4</b>	<b>Employee Cost</b>					
	Direct	90.39	252.96	343.35	1405.31	1748.66
	Apportioned	33.42	93.52	126.94	519.55	646.49
	Less: Capitalisation	5.58	15.61	21.19	86.73	107.92
	<b>Total (Amount)</b>	<b>118.23</b>	<b>330.87</b>	<b>449.1</b>	<b>1838.13</b>	<b>2287.23</b>
	<b>Total (%)</b>	<b>5.17%</b>	<b>14.47%</b>	<b>19.64%</b>	<b>80.36%</b>	<b>100.00%</b>
<b>5</b>	<b>Administration &amp; General</b>					
	Direct	3.26	4.25	7.51	47.66	55.17
	Apportioned	1.38	1.79	3.17	20.12	23.29
	Less: Capitalisation	0.98	1.28	2.26	14.38	16.64
	<b>Total (Amount)</b>	<b>3.66</b>	<b>4.76</b>	<b>8.42</b>	<b>53.4</b>	<b>61.82</b>
	<b>Total (%)</b>	<b>5.92%</b>	<b>7.70%</b>	<b>13.62%</b>	<b>86.38%</b>	<b>100.00%</b>
<b>6</b>	<b>Depreciation &amp; Related Debits (Net)</b>					
	Direct	136.31	223.59	359.9	331.67	691.57
	Apportioned	1.44	2.36	3.8	3.5	7.3
	Less: Capitalisation	0.32	0.53	0.85	0.78	1.63
	<b>Total (Amount)</b>	<b>137.43</b>	<b>225.42</b>	<b>362.85</b>	<b>334.39</b>	<b>697.24</b>
	<b>Total (%)</b>	<b>19.71%</b>	<b>32.33%</b>	<b>52.04%</b>	<b>47.96%</b>	<b>100.00%</b>

<b>Sr.No</b>	<b>Particulars</b>	<b>Hydel</b>	<b>Thermal</b>	<b>Total Generation</b>	<b>Distribution</b>	<b>Total</b>
<b>7</b>	<b>Interest &amp; Finance Charges</b>					
	Direct	587.33	344.92	932.25	491.69	1423.94
	Apportioned	1.25	0.74	1.99	1.05	3.04
	Less: Capitalisation	92.63	54.4	147.03	77.55	224.58
	<b>Total (Amount)</b>	<b>495.95</b>	<b>291.26</b>	<b>787.21</b>	<b>415.19</b>	<b>1202.4</b>
	<b>Total (%)</b>	<b>41.25%</b>	<b>24.22%</b>	<b>65.47%</b>	<b>34.53%</b>	<b>100.00%</b>
<b>8</b>	<b>Return on equity (in ratio of assets)</b>	<b>121.55</b>	<b>115.48</b>	<b>237.03</b>	<b>132.44</b>	<b>369.47</b>
	<b>Return on equity (%)</b>	<b>32.90%</b>	<b>31.26%</b>	<b>64.15%</b>	<b>35.85%</b>	<b>100.00%</b>

**Annexure - VI**

**Proportion of Plant-wise cost of Generation for FY 2009-10 (As per information submitted by PSPCL)**

Sr.No	Particulars	HYDEL										Units in MWh				Total (Rs. in lac)
		RSD	Mukerian Hydel	UBDC	UHL	Anadpur Sahib	Micro Hydel	L.Bank R.Bank	Beas & extn.	Total Hydro	GGSTP Ropar	GNDTP Bathinda	GHTP Mohabbat	Total Thermal		
1	2	3	4	5	6	7	8	9	10	11 = (3 to 10)	12	13	14	15 = (12 to 14)	16 = (11+15)	
1	MkWh generated during the year	1068.77	885.95	336.71	510.54	574.42	12.79	2160.19	1514.04	7063.41	10056.44	2723.35	7515.91	20295.7	27359.11	
2	MkWh use in auxiliaries	3.64	23.79	2.28	6.07	4.66	0	0	0	40.44	818.34	309.39	592.26	1719.99	1760.43	
3	MkWh sent out	1065.13	862.16	334.43	504.47	569.76	12.79	2160.19	1514.04	7022.97	9238.1	2413.96	6923.65	18575.71	25598.68	
4	Total depreciated capital cost of generating assets in use at the beginning of the year including share of G.E	360595	23711.04	8274.42	2107.67	10836.89	753.48	3818.63	10388.25	420485.79	33566.99	16812.27	151209.68	201588.94	622074.73	
5	Total capital expenditure on generation assets brought in use during the year with date of commissioning including share of G.E.	14.18	587.48	1362.64	6.83	0	0	0	2.06	1973.19	378.88	18917.11	110579.07	129875.06	131848.25	
<b>6</b>	<b>COST OF GENERATION</b>															
i	Fuel									0	211025.62	54117.77	97041.68	362185.07	362185.07	
ii	Oil, water & stores							0.6	17.81	18.41	1319.27	595.31	161.22	2075.80	2094.21	
iii	Salaries & wages including contribution made for pension Provident Superannuation of Officer/servants + Fringe benefit tax (FBT)	1175.73	2387.15	1815.68	1062.77	1701.36	0.01	1871	959.22	10972.92	16468.63	10872.85	5657.04	32998.52	43971.44	
iv	R&M expenses	53.53	106.62	106.45	88.8	186.9	40	1578.16	4725.25	6885.71	6796.45	2298.73	2486.23	11581.41	18467.12	

Sr.No	Particulars	HYDEL													Total
		RSD	Mukerian Hydel	UBDC	UHL	Anadpur Sahib	Micro Hydel	L.Bank R.Bank	Beas & extn.	Total Hydro	GGSTP Ropar	GNDTP Bathinda	GHTP Mohabbat	Total Thermal	
v	Adm. Charges attributable to generation	68.59	60.5	49.97	40.83	20.25	0	103.21	43.59	386.94	300.63	116.78	168.66	586.07	973.01
vi	Specified Depreciation including share of G.E.	10601.5	1085.55	355.01	152.55	356.32	20.74	537.92	503.61	13613.19	2671.66	2045.8	17655.04	22372.50	35985.69
vii	Interest	46371.6	3049.18	1064.07	271.04	1393.6	96.9	491.07	1335.9	54073.4	4316.63	2162.02	19445.18	25923.83	79997.23
	Total cost of Generation	58271	6689	3391.18	1615.99	3658.43	157.65	4581.96	7585.38	85950.57	242898.89	72209.26	142615.05	457723.20	543673.77
	Cost of Generation per kWh in paise	547.08	77.58	101.4	32.03	64.21	123.26	21.21	50.1	122.38	262.93	299.13	205.98	246.41	212.38

**Proportion of Plant-wise cost of Generation for FY 2009-10 (As per Annexure VI)**

(%)

S.No	Particulars	HYDEL									THERMAL			
		RSD	Mukerian Hydel	UBDC	UHL	Anadpur Sahib	Micro Hydel	L.Bank R.Bank	Beas & extn.	Total Hydro	GGSSSTP Ropar	GNDTP Bathinda	GHTP Mohabbat	Total Thermal
1	2	3	4	5	6	7	8	9	10	11 = (3 to 10)	12	13	14	15 = (12 to 14)
1	MkWh generated during the year	15.13%	12.54%	4.77%	7.23%	8.13%	0.18%	30.58%	21.43%	100.00%	49.55%	13.42%	37.03%	100.00%
2	MkWh use in auxiliaries	9.00%	58.83%	5.64%	15.01%	11.52%	0.00%	0.00%	0.00%	100.00%	47.58%	17.99%	34.43%	100.00%
3	MkWh sent out	15.17%	12.28%	4.76%	7.18%	8.11%	0.18%	30.76%	21.56%	100.00%	49.73%	13.00%	37.27%	100.00%
4	Net fixed asset	85.76%	5.64%	1.97%	0.50%	2.58%	0.18%	0.91%	2.47%	100.00%	16.65%	8.34%	75.01%	100.00%
5	Total capital expenditure on assets addition during the year	0.72%	29.77%	69.06%	0.35%	0.00%	0.00%	0.00%	0.10%	100.00%	0.29%	14.57%	85.14%	100.00%
<b>6</b>	<b>COST OF GENERATION</b>													
i	Fuel	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	58.26%	14.94%	26.79%	100.00%
ii	Oil, water & stores	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.26%	96.74%	100.00%	63.55%	28.68%	7.77%	100.00%
iii	Employee cost + FBT	10.71%	21.75%	16.55%	9.69%	15.51%	0.00%	17.05%	8.74%	100.00%	49.91%	32.95%	17.14%	100.00%
iv	R&M expenses	0.78%	1.55%	1.55%	1.29%	2.71%	0.58%	22.92%	68.62%	100.00%	58.68%	19.85%	21.47%	100.00%



S.No	Particulars	HYDEL									THERMAL			
		RSD	Mukerian Hydel	UBDC	UHL	Anadpur Sahib	Micro Hydel	L.Bank R.Bank	Beas & extn.	Total Hydro	GGSSSTP Ropar	GNDTP Bathinda	GHTP Mohabbat	Total Thermal
v	Admin & General Expenses	17.73%	15.64%	12.91%	10.55%	5.23%	0.00%	26.67%	11.27%	100.00%	51.30%	19.93%	28.78%	100.00%
vi	Other expenses including depreciation	77.88%	7.97%	2.61%	1.12%	2.62%	0.15%	3.95%	3.70%	100.00%	11.94%	9.14%	78.91%	100.00%
vii	Interest	85.76%	5.64%	1.97%	0.50%	2.58%	0.18%	0.91%	2.47%	100.00%	16.65%	8.34%	75.01%	100.00%
	Total cost of Generation	67.80%	7.78%	3.95%	1.88%	4.26%	0.18%	5.33%	8.83%	100.00%	53.07%	15.78%	31.16%	100.00%

**Annexure - VIII**

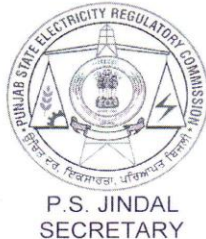
**Plant-wise Revenue Requirements for the FY 2012-13 (on the basis of Annexure VII)**

(Rs. in crore)

Sr.No	Item of expense	Hydel	RSD	MHP	UBDC	Shanan	ASHP	Micro Hydel	L.Bank R.Bank	Beas & extn.	Thermal *	GGSSSTP	GNDTP	GHTP	Basis of Apportionment (from Annexure VI)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Cost of fuel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3824.34	1913.39	540.76	1370.19	Fuel Cost*
2	Employee cost	172.73	18.50	37.57	28.59	16.74	26.79	--	29.45	15.10	483.44	241.28	159.29	82.86	Employee cost
3	R&M expenses	109.29	0.85	1.69	1.69	1.41	2.96	0.63	25.05	75.00	215.02	126.17	42.68	46.16	R & M expenses
4	A&G expenses	6.00	1.06	0.94	0.78	0.63	0.31	--	1.60	0.68	7.81	4.01	1.56	2.25	Rent, Rates, Taxes and Insurance
5	Depreciation	151.37	117.89	12.06	3.95	1.70	3.97	0.23	5.98	5.60	248.29	29.65	22.69	195.93	Net Fixed Assets
6	Interest Charges	651.89	559.06	36.77	12.84	3.26	16.82	1.17	5.93	16.10	382.76	63.73	31.92	287.11	Interest on Depreciated Cost of Generation
7	Return on Equity	133.49	114.48	7.53	2.63	0.67	3.44	0.24	1.21	3.30	126.83	21.12	10.58	95.14	Net Fixed Assets
8	Charges payable to GoP on Power from RSD	10.50	10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	
<b>9</b>	<b>Total Revenue Requirement</b>	<b>1235.28</b>	<b>822.35</b>	<b>96.56</b>	<b>50.48</b>	<b>24.40</b>	<b>54.29</b>	<b>2.27</b>	<b>69.23</b>	<b>115.77</b>	<b>5288.49</b>	<b>2399.35</b>	<b>809.48</b>	<b>2079.64</b>	

Sr.No	Item of expense	Hydel	RSD	MHP	UBDC	Shanan	ASHP	Micro Hydel	L.Bank R.Bank	Beas & extn.	Thermal *	GGSSSTP	GNDTP	GHTP	Basis of Apportionment (from Annexure VI)
10	Add: Consolidated Gap and carrying cost of gap for 2011-12	140.39	93.46	10.97	5.74	2.77	6.17	0.26	7.87	13.16	601.05	272.69	92.00	236.36	In proportion to Total Revenue Requirement
11	<b>Gross revenue requirement (9+10)</b>	<b>1375.67</b>	<b>915.81</b>	<b>107.54</b>	<b>56.22</b>	<b>27.18</b>	<b>60.47</b>	<b>2.53</b>	<b>77.10</b>	<b>128.93</b>	<b>5889.54</b>	<b>2672.04</b>	<b>901.48</b>	<b>2315.99</b>	

\*Fuel Cost as determined in para 4.7 of the Tariff Order.



D.O. No. 2396 / PSERC/M&amp;F-85

**Punjab State Electricity Regulatory Commission**  
S.C.O. No. 220-221, Sector-34-A,  
Chandigarh.  
Ph: (O) 0172-2648321, Fax: 0172-2664758

Dated 13 /6/2012

The Punjab State Power Corporation Limited (PSPCL) and the Punjab State Transmission Corporation Limited (PSTCL) had filed their Aggregate Revenue Requirements for the year 2012-13 with the Commission. The filing of PSPCL included proposal for provisional true-up for FY 2010-11 based on provisional figures and review for FY 2011-12 based on revised estimates of the revenue requirement for its generation and distribution business. The filing of PSTCL included a review for FY 2011-12 based on the revised estimates of revenue requirement for its transmission business. It has been intimated by both the Corporations i.e. PSPCL & PSTCL that since opening balance of both the Corporations have not been finally notified by GoP, as such Audited Annual Accounts for 2010-11 could not be submitted.

2. The Commission has decided to undertake true-up for FY 2010-11 in case of PSPCL and PSTCL along with their next ARR's petitions i.e. for FY 2013-14 when the Audited Annual Accounts for FY 2010-11 would be available. The Commission has finalized the Tariff Orders, both for PSPCL and PSTCL, after following the laid down procedure and completing all the requisite formalities. Combining the effect of determination of Annual Revenue Requirements for FY 2012-13 and reviews for FY 2011-12, (for both PSPCL & PSTCL), total revenue gap up to FY 2012-13 has been worked out at Rs.1899.32 crore which is inclusive of entire Regulatory asset of Rs. 1325.76 crore along with its carrying cost. In the Tariff Order for 2011-12, the Commission had decided to create a Regulatory asset for Rs.1325.76 crore and the

- 1 -

balance gap of Rs. 1325.75 crore was allowed to be covered through tariff revision. The Commission has decided to cover this revenue gap of Rs. 1899.32 crore through suitable hike in tariff. The Commission has also decided to increase the monthly minimum charges proportionately.

3. In the past, the State Govt. has been fully subsidizing Agriculture Pump set (AP) consumers and a section of SC Domestic Supply (DS) and also Non-SC BPL DS consumers up to specified energy consumption. The existing tariff and the revised tariff for FY 2012-13 of the categories being subsidized by GoP are as follows:

Category	Existing tariff (paise/unit)	Revised Tariff w.e.f. 01.04.12 (paise/unit)
1. Domestic		
a) Upto 100 units	356*	409
b) 101 – 300 units	496*	549
2. AP consumers	365*	418

\*Includes fuel surcharge @ 8 paise/unit

4. The requirement of subsidy in the current year will be as follows:

- For the year 2012-13, the Commission has determined AP consumption at 11003 MU. The revenue @ 418 paise/unit on estimated AP consumption of 11003 MU works out to Rs. 4599.25 crore (which translates to Rs.339/BHP/Month on an average connected load of 8423617 KW during the year 2012-13). After adding subsidy of Rs.9.00 crore on account of meter rentals and service charges in respect of AP consumers, total subsidy payable by GoP works out to Rs.4608.25 crore.
- Besides, subsidy of Rs. 178.82 crore based on GoP letter No. 11/68/2010/4175 dated 16-12-2011 sanctioning waiver of outstanding amount (Rs. 357.64 crore) against AP consumers payable by GoP in six equated instalments, of which three

-2 -

instalments are payable during 2012-13. Thus, total AP subsidy of Rs. 4787.07 (4608.25 + 178.82) crore is payable by GoP to PSPCL during the year.

- Further, subsidy amounting to Rs.724 crore inclusive of meter rentals and service charges is payable on account of free supply upto 200 units per month to SC DS and Non-SC BPL DS consumers with a connected load up to 1000 watts.
  - Accordingly, total subsidy inclusive of meter rentals and service charges for the AP sector, SC DS and Non-SC BPL DS consumers payable by GoP is estimated to be Rs. 5511.07 crore for the year 2012-13.
5. For the year 2011-12, the Commission determines total subsidy of Rs. 4455.88 crore as per Annexure P-1. Against this, GoP has paid/adjusted an amount of Rs.4182.00 crore during the year. Thus, the balance subsidy payable by GoP for the year 2011-12 works out to Rs.273.88 crore.

6. For the year 2010-11, the Commission will determine the payable subsidy after carrying out true-up for 2010-11 in the next Tariff Order by which time the Audited Annual Accounts of PSPCL for the year would become available.

The Commission, therefore, approves total subsidy of Rs. 5784.95 (5511.07 + 273.88) crore payable by GoP to PSPCL for the year 2012-13. The details are appended as Annexure-P1. The Govt. has already paid subsidy of Rs.800 crore upto the end of May 2012. The balance subsidy of Rs.4984.95 crore is required to be paid in advance in ten monthly instalments @ Rs. 581.95 crore per month from June 2012 to August 2012 and @ Rs.462.73 crore per month from September 2012 to March 2013.

7. Further, any change in the Fuel Cost from the level approved by the Commission is to be passed on to the consumers as FCA. Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005 stipulate the procedure in

- 3 -



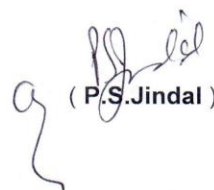


Appendix-7, according to which any change in fuel cost would be passed on to the consumers on quarterly basis with prior approval of the Commission. The subsidy payable by GoP on account of levy of Fuel Cost Adjustment Surcharge, if any, will be in addition to the amount worked out in para-6 above.

In case GoP is inclined to continue the present subsidy regime, it is requested that the commitment to pay the subsidy as detailed in the preceding paras and also the additional subsidy amount, if any, payable on account of Fuel Cost Adjustment during the year may kindly be conveyed. The Commission has determined subsidy payable during the years 2011-12 and 2012-13 as per the Punjab Government decisions dated December 16, 2011 and letter dated 13<sup>th</sup> June, 2012.

Yours sincerely,

Encl: Annexure P-1

  
( P.S. Jindal )

**Sh. Rakesh Singh, IAS,**  
Chief Secretary to Govt. of Punjab,  
Chandigarh.

CC: along with enclosures to:

NO. 2397/ ~~2397~~  
PSERC/MBE-85  
dt. 13-6  
2012  
Sh. Anirudh Tewari, IAS,  
Secretary to Govt. of Punjab,  
Department of Power,  
Secretariat - II, Sector-9, Chandigarh.

- 4 -

## Subsidy payable by Govt. of Punjab to PSPCL for the year 2012-13

(Rs. Crore)				
Subsidy payable by the GoP	AP + Meter rentals and service charges	SC DS + Meter rentals and service charges	Non-SC DS BPL + Meter rentals & service charges	Total
<b>FY 2012-13</b>				
a) Subsidy payable for AP consumption of 11003 MU @ 418 paise/unit and SC DS and Non-SC BPL DS consumers at the revised tariff.	4599.25 (+) 9.00 4608.25	672.89 (+) 15.08 687.97	35.08 (+) 0.95 36.03	
b) Add Subsidy based on GoP letter No. 11/68/2010/4175 dated December 16, 2011 sanctioning waiver off outstanding amount of Rs.357.64 crore against AP consumers to be paid by GoP in six equated instalments, of which three instalments are payable during 2012-13.	178.82			
<b>Total subsidy payable by GoP for FY 2012-13</b>	<b>4787.07</b>	<b>687.97</b>	<b>36.03</b>	<b>5511.07</b>
<b>FY 2011-12</b>				
a) Subsidy payable as determined by the Commission in para 3.15	3824.84 (+) 9.00 3833.84	396.66 (+) 15.08 411.74	30.53 (+) 0.95 31.48	
b) Add Subsidy based on GoP letter No. 11/68/2010/4175 dated December 16, 2011 sanctioning waiver off outstanding amount of Rs.357.64 crore against AP consumers to be paid by GoP in six equated instalments, of which three instalments were payable during 2011-12.	178.82 4012.66			4455.88
Total subsidy payable for FY 2011-12 as determined in para 3.15	4012.66	411.74	31.48	4455.88
Less subsidy paid/adjusted by GoP during FY 2011-12		i) Amount paid in Cash = 3200.07 ii) Adjusted against bonds and interest = 981.93 <b>Total: =4182.00</b>		
<b>Amount of subsidy short paid for FY 2011-12</b>	<b>4455.88 – 4182.00 = 273.88</b>			<b>273.88</b>
<b>Total subsidy and interest payable by GoP during FY 2012-13</b>	<b>5511.07 + 273.88= 5784.95</b>			<b>5784.95</b>





**GOVERNMENT OF PUNJAB  
DEPARTMENT OF POWER  
(ENERGY BRACH)**

Diary No. 782 To  
Date..... 11/7/12  
Pb State Elec. Regulatory  
Commission, Chandigarh.

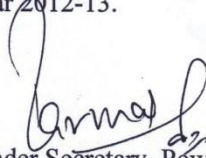
The Secretary,  
Punjab State Electricity Regulatory Commission,  
SCO No. 220-21, Sector-34A,  
Chandigarh.

Memo No.11/68/2010-PE2/ 1761  
Dated Chandigarh the 11/7/12

Subject:- Annual Revenue Requirement filed by PSPCL and  
PSTCL for 2012-13

Please refer to your D.O. letter No. 2396, dated  
13.6.2012 on the subject cited above.

The State Government has decided to continue its  
policy of providing subsidy to AP Consumers, SC/BPL DS  
consumers during financial year 2012-13 as decided by the Hon'ble  
Chief Minister of Punjab. The Concurrence of Finance Department  
has also been obtained vide this I.D. No. 7/1/44/2008-2रि.प्र.4/378  
dated 04.07.2012 in this regard, subsidy of Rs. 5784.95 crore has  
been sanctioned by the Government for the year 2012-13.

  
Under Secretary, Power  
e