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

PETITION NO. 63 OF 2013

IN THE MATTER OF:

ANNUAL REVENUE REQUIREMENT

FILED BY THE PUNJAB STATE POWER CORPORATION LIMITED

FOR THE FINANCIAL YEAR 2014-15

PRESENT : Ms. Romila Dubey, Chairperson
Er. Virinder Singh, Member
Er. Gurinder Jit Singh, Member

Date of Order: August 22, 2014

ORDER

The Punjab State Electricity Regulatory Commission (Commission), in exercise of powers vested in it under the Electricity Act, 2003 (Act) passes this 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 2014-15. The ARR filed by PSPCL, facts presented by 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, Chandigarh, Jalandhar and Bathinda, the response of the PSPCL to these 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 eleven Tariff Orders determined tariff in pursuance of the ARRs and Tariff Applications submitted by erstwhile Punjab State Electricity Board (the Board) for the Financial Years (FYs) 2002-03 to 2006-07, 2008-09 to 2010-11 and Punjab State Power Corporation Limited

(PSPCL) for FYs 2011-12 to 2013-14. Tariff Order for the FY 2007-08 had been passed by the Commission in suomotu proceedings.

1.2 ARR for the year 2014-15

PSPCL has filed the ARR for FY 2014-15 on 29.11.2013. In this Petition, PSPCL has submitted that it is one of the 'Successor Companies' of the erstwhile Board, duly constituted under the Companies Act, 1956 on 16.04.2010 after restructuring of the Board by Government of Punjab vide notification no.1/9/08-EB(PR)/196 dated 16.04.2010, under the "Punjab Power Sector Reforms Transfer Scheme" (Transfer Scheme).

As per the Transfer Scheme, the erstwhile Punjab State Electricity Board (the predecessor) has been unbundled into two entities i.e. POWERCOM and TRANSCO. The POWERCOM has been named as Punjab State Power Corporation Limited (PSPCL) and the TRANSCO has been named as Punjab State Transmission Corporation Limited (PSTCL).

As per the Transfer Scheme, the Government of Punjab has segregated the "transmission business of erstwhile Punjab State Electricity Board". The relevant content of the Transfer Scheme is reproduced below:

"The transmission undertaking shall comprise of all assets, liabilities and proceedings, belonging to the Punjab State Electricity Board, concerning the transmission of electricity and the State Load Dispatch Centre (SLDC) function".

Hence, the PSPCL is left with the Distribution, Generation and allied activities of the erstwhile PSEB. As per the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2005, [Regulation–1(3)(k)], PSPCL is considered as an integrated utility since it is currently engaged in multiple functions namely Generation, Trading and Distribution of electricity.

First Amendment in Transfer Scheme notified by Government of Punjab:

On 24th December 2012, Government of Punjab amended the Transfer Scheme vide notification number 1/4/04EB (PR)/620 known as Punjab Power Sector Reforms Transfer (First Amendment) Scheme, 2012.

Following are the salient features of the aforesaid amendment:

i) As per the transfer scheme, the funding of the Terminal Benefit Trusts in respect of pension, gratuity and leave encashment of the personnel, shall be a charge on the tariff of Powercom and Transco, respectively, on yearly basis, as may be decided by the Punjab State Electricity Regulatory Commission.

ii) The Terminal Benefit Trusts in respect of pension, gratuity and leave encashment, shall be progressively funded by the Powercom and Transco, as decided by the Punjab State Electricity Regulatory Commission, in the ratio of 88.64:11.36, over a period of 15 Financial Years commencing from 1st April, 2014. The terminal benefits liability accruing during the period of progressive funding, and thereafter, shall be shared in the same ratio by both corporations. Thus, funding shall continue even after the absorption of personnel in Transco and the trust shall be administered jointly by the said Powercom and Transco.

iii) It is also mentioned that the actual amount of pension, gratuity and leave encashment paid / to be paid on and with effect from 16th April, 2010 to 31st March, 2014, shall be shared by the Powercom and Transco, in the ratio of 88.64:11.36 on yearly basis.

iv) The General Provident Fund Trust, shall be funded by Powercom and Transco both, as per the apportionment made in the Opening Balance Sheet, on and with effect from 16th April, 2010, and the same shall be funded over a period of ten years commencing on and with effect from 1st April, 2013, along with interest as applicable.

v) Also provided that for the period commencing from 16th April, 2010 to 31st March, 2013, the Powercom and Transco shall be liable to pay interest on the apportioned General Provident Fund liability, at the rate as applicable for the respective financial years.

vi) The Powercom and Transco, shall be liable to pay interest, as applicable to General Provident Fund from time to time, on the net accruals (on monthly basis) of the General Provident Fund amount on and with effect from 16th April, 2010, to the date of issuance of this notification, and thereafter all the General Provident Fund matters, shall be settled through trust.

vii) Until otherwise directed by the State Government, Powercom and Transco shall maintain common Trust for pension, gratuity and other terminal benefit liabilities and General Provident Fund, instead of individual trusts for each of the companies and all the contributions shall be made to such Trusts in the aforesaid manner.

viii) The Government of Punjab notified the final Opening Balance Sheets for Powercom and Transco as on the 16th April, 2010.

Based on the Opening Balance Sheet notified by the Government of Punjab vide the Amendment in Transfer scheme and the provisions of Regulation 13 of the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 and in compliance to the directives of the Commission on the matter, PSPCL has filed this petition for approval of ARR and Determination of Tariff for FY 2014-15, revised ARR estimate for FY 2013-14 and Audited Annual Accounts for FY 2011-12 and FY 2010-11 for final truing up.

The petitioner has made the prayers to the Commission to:

a) Consider the submissions and approve the final true up of expenses for FY 2010-11 and FY 2011-12, and Revised Estimates for FY 2013-14;

b) Finalize the true up for FY 2012-13 along with the ARR and Tariff determination exercise for FY 2015-16 when the Audited Annual Accounts for the year are available;

c) Approve the Aggregate Revenue Requirement for FY 2014-15;

d) Treat the filing as complete in view of substantial compliance as also the specific requests for waivers with justification placed on record.

e) Examine the proposal submitted by the petitioner for a favourable dispensation as detailed in the enclosed proposal;

f) Condone any inadvertent omissions/errors/shortcomings and permit PSPCL to add/change/modify/alter this filing and make further submissions as may be required at a future date;

g) Pass such further order, as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

On scrutiny, it was noticed by the Commission that the ARR was deficient in some respects and the same were communicated to PSPCL vide No.10043 dated 04.12.2013. PSPCL furnished its reply vide its letter No.2928/CC/DTR/Dy.CAO/241/Deficiency dated 10.12.2013. The Commission took the ARR Petition on record on 18.12.2013. The Commission sought additional information which was supplied by PSPCL vide letter

No.2946/CC/DTR/116/Vol.3/238/Main dated 31.12.2013 and vide subsequent submissions.

The Annual Revenue Requirement determined by the Commission in this Tariff Order is based on the petition filed by PSPCL, operating as a Utility performing functions of Generation, Distribution and Trading of electricity. The ARR determination by the Commission is based on the Audited Annual Accounts for FYs 2010-11 & 2011-12, revised estimates of FY 2013-14 and projections of FY 2014-15 as submitted by PSPCL.

1.3 Objections and Public Hearings

A public notice was published by PSPCL in the The Tribune, The Hindustan Times, Dainik Bhaskar, Jagbani Punjabi and Daily Ajit on 22.12.2013 inviting objections from the general public on the ARR filed by PSPCL. Copies of the ARR were made available on the website of 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, Mohali and also in the offices of all the Chief Engineers (Operation) and all the Superintending Engineers (Operation) of PSPCL. In the public notice, objectors were advised to file their objections with the Secretary of the Commission within 30 days of the publication of the notice i.e. by 21.01.2014, with an advance copy to 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 twelve written objections by due date i.e. 21.01.2014 and thirty two written objections after due date. 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:

Sr. No.	Category	No. of Objections
I	**II**	**III**
1.	Chambers of Commerce	3
2.	Industrial Associations	14
3.	Industry	9
4.	Railways	1
5.	PSEB Engineers' Association	1
6.	Individuals	4
7.	Govt. of Punjab (GoP)	1
8.	Others	11
9.	**Total**	**44**

The list of objectors is given in Annexure-III, Volume-II to this Tariff Order. The PSPCL submitted its comments on the objections which were made available to the respective objectors.

The Commission decided to hold public hearings at Ludhiana, Chandigarh, Jalandhar and Bathinda. A public notice to this effect was published on 18.01.2014 in various news papers i.e. Hindustan Times, Indian Express, The Tribune, Amar Ujala and Punjabi Tribune as well as uploaded on the website of the Commission and also informed the individual objectors in this respect, as per details hereunder:

<table>
<tr><th>Venue</th><th>Date & time of public hearing</th><th>Category of consumers to be heard</th></tr>
<tr><td><u>LUDHIANA</u>
Multi Purpose Hall, Power Colony, PSPCL, Opposite PAU, Ferozepur Road, Ludhiana.</td><td><u>February 03, 2014</u>
11.30 AM to 1.30 PM. (To be continued in the afternoon, if necessary)</td><td>All consumers/organizations of the area.</td></tr>
<tr><td rowspan="2"><u>CHANDIGARH</u>
Commission’s office i.e. SCO 220-221, Sector 34-A, Chandigarh.</td><td><u>February 05, 2014</u>
11.00 AM to 1.30 PM</td><td>Industry.</td></tr>
<tr><td>3.00 P.M. onwards</td><td>Agricultural consumers and their unions.</td></tr>
<tr><td><u>JALANDHAR</u>
Conference Room, Office of Chief Engineer/Operation (North), PSPCL, Shakti Sadan, GT Road, Near Layallpur Khalsa College, Jalandhar.</td><td><u>February 06, 2014</u>
11.30 AM to 1.30 PM (To be continued in the afternoon, if necessary)</td><td>All consumers/organizations of the area.</td></tr>
<tr><td rowspan="2"><u>CHANDIGARH</u>
Commission’s office i.e. SCO 220-221, Sector 34-A, Chandigarh.</td><td><u>February 07, 2014</u>
11.00 AM to 1.30 PM</td><td>All consumers except Industry and Agricultural consumers.</td></tr>
<tr><td>3.00 P.M. onwards</td><td>Officers’ /Staff Associations of PSPCL and PSTCL and other Organizations.</td></tr>
<tr><td><u>BATHINDA</u>
Conference Room, Guest House, Thermal Colony, PSPCL, Bathinda.</td><td><u>February 13, 2014</u>
11.30 AM to 1.30 PM. (To be continued in the afternoon, if necessary)</td><td>All consumers/organizations of the area.</td></tr>
</table>

Through this public notice, it was also intimated that the Commission will conduct a public hearing at Chandigarh on February 19, 2014 in which 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 PSPCL were heard by the Commission. A summary of the issues raised in the objections, the response of the PSPCL and the views of the Commission are contained in Annexure-IV, Volume-II of this Tariff Order.

1.4 The Government was approached by the Commission through DO letter no. 10044 dated 04.12.2013 seeking its views on the ARR to which the Government responded vide its letter no. 1/1/2014-EB(PR)/372 dated 23.05.2014. 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 17.02.2014. The minutes of the meeting of the State Advisory Committee are enclosed as Appendix-I, Volume-I 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 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 PSPCL in the public interest. A summary of directives issued during previous years, status of compliance along with comments and Directives of the Commission for FY 2014-15 is given in Chapter 8 of this Tariff Order.

Chapter 2
True-up for FY 2010-11

2.1 Background

The Commission approved the ARR and Tariff for FY 2010-11 in its Tariff Order dated 23.04.2010, which was based on the costs and revenues estimated by the erstwhile Punjab State Electricity Board (Board). The Punjab State Power Corporation Limited (PSPCL), one of the successor entities of the integrated Board after its unbundling on 16.04.2010, had furnished revised estimates for FY 2010-11 during the determination of ARR and Tariff for FY 2011-12, in which there were major differences in certain items of costs as well as projected revenues both in the revised estimates furnished by PSPCL and the approvals granted by the Commission. The Commission, in its Tariff Order of FY 2011-12, reviewed its earlier approvals and re-determined the same based on the revised estimates made available by PSPCL. 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 in the Tariff Order for FY 2012-13 decided 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 were likely to be made available. PSPCL in its ARR for FY 2013-14 again submitted that the Provisional Truing up for FY 2010-11 may be carried out based on provisional accounts. However, as per provisions under Tariff Regulations, True up can be undertaken only after the Audited Annual Accounts are made available. As such, the Commission had decided to undertake the True up for FY 2010-11 along with the ARR Petition of PSPCL for FY 2014-15, when the Audited Annual Accounts for FY 2010-11 were likely to be made available.

PSPCL furnished the Audited Annual Statement of Accounts (Audited Annual Accounts) in the ARR for FY 2014-15 for FY 2010-11 for the composite Board upto 16.04.2010 and for PSPCL from 16.04.2010 to 31.03.2011. The Audited Annual Accounts of PSPCL for FY 2010-11 did not contain the audited figures of energy sales, generation and power purchase. PSPCL was directed vide Commission's letter no. 10044 dated 04.12.2013 to furnish the audited figures of energy sales, generation and power purchase, or alternatively, to supply these figures duly certified by the Board of Directors of PSPCL. PSPCL vide its letter no. 2928 dated 10.12.2013 submitted that as per the duties of Statutory Auditors laid down under section 227 of Companies Act, 1956, auditing of energy sales, generation and power purchase figures is over and above the preview of this Section. Hence, the Statutory Audit report did not include an assurance on these issues. These figures stood already approved by the Whole Time Directors (WTDs) of the Company and also these figures were duly signed by the Chief Engineer/ARR & TR who was duly authorized by the corporation for preparing the ARR petition and disclosing the information to the Commission. Further, the ARR had been duly approved by the WTDs. PSPCL further submitted that as the figures of ARR were duly approved by the WTDs, which indicate that the figures of energy sales were also approved by the WTDs. In view of the submissions made by PSPCL, the Commission decides to take the energy sales, generation and power purchase figures as submitted by PSPCL in the ARR petition for FY 2014-15 into consideration for true up of FY 2010-11. However, PSPCL is directed to get these figures audited in future.

The figures supplied by PSPCL vary in parts with the figures taken into account in the Review for FY 2010-11 by the Commission. This Chapter contains a final true-up of FY 2010-11, based on the Audited Annual Accounts of the composite Board upto 16.04.2010 and energy sales, generation and power purchase figures from 16.04.2010 to 31.03.2011, as submitted by PSPCL in the ARR for FY 2014-15.

2.2 Energy Demand (Sales)

2.2.1 The sales projected by the Board during the determination of ARR for FY 2010-11, sales approved by the Commission in the Tariff Order of FY 2010-11, revised estimates furnished by PSPCL during determination of ARR of FY 2011-12, sales approved by the Commission in review and sales figures now given by the PSPCL are summarized in Table 2.1.

Table 2.1: Energy Sales – FY 2010-11

(MU)

Sr. No.	Category	Projected by Board during determination of ARR FY 2010-11	Approved by the Commission in T.O. FY 2010-11	Revised Estimates by PSPCL during determination of ARR FY 2011-12	Approved by the Commission in Review	Energy Sales as in ARR of FY 2014-15	Now approved by the Commission
I	II	III	IV	V	VI	VII	VIII
1.	Domestic	7894	7865	8161	8162	8169	8169
2.	Non-Residential	2355	2405	2401	2401	2472	2472
3.	Small Power	784	759	814	813	840	840
4.	Medium Supply	1639	1541	1709	1709	1770	1770
5.	Large Supply	9212	9093	8072	9307	8538	8538
6.	Public Lighting	157	136	134	134	132	132
7.	Bulk Supply	508	496	523	523	525	525
8.	Railway Traction	155	138	161	162	144	144
9.	**Total metered Sales (within the State)**	**22704**	**22433**	**21977**	**23211**	**22590**	**22590**
10.	Common Pool	302	302	303	303	303	303
11.	Outside State sales	125	53	254	129	438	362
12.	**Total metered Sales (9+10+11)**	**23131**	**22788**	**22534**	**23643**	**23331**	**23255**
13.	AP consumption	11245	10305	10898	10327	10152	9656
14.	**Total Sales (12+13)**	**34376**	**33093**	**33432**	**33970**	**33483**	**32911**

PSPCL has furnished the total sales at 33483 MU for FY 2010-11 as per ARR for FY 2014-15, which are as per column VII of Table 2.1.

2.2.2 Metered Sales

The Commission estimates sales for FY 2010-11 on the basis of sales figures supplied by PSPCL, in the ARR for FY 2014-15, in view of the submissions made by PSPCL in its letter no. 2928 dated 10.12.2013 as brought out in para 2.1 above. The Commission, thus, approves metered sales within the State at 22590 MU.

Further, PSPCL has submitted 438 MU of energy sales under the head "Outside State sale" which consist of 280 MU of sales to other States (other than power exchange), 29 MU of sales to other States through power exchange, 76 MU as free share of Himachal Pradesh (HP) in RSD and 53 MU as royalty of HP in Shanan. The Commission considers the Outside State sale of 362 MU (438-76) only as per the practice being followed in past Tariff Orders. The free share of HP in RSD has been taken into account while determining net generation from PSPCL's own hydel generating stations. Further, the Commission considers common pool sale of 303 MU on the basis of figures as given in the ARR for FY 2014-15.

Total metered sales now approved by the Commission are 23255 MU as shown in column VIII, Sr. No. 12 of Table 2.1.

2.2.3 **AP Consumption**

As against 11245 MU AP consumption projected by PSPCL in its ARR for FY 2010-11, the Commission, in its Tariff Order for FY 2010-11, approved AP consumption of 10305 MU after applying an increase of 5% over the consumption of 9814 MU approved by the Commission for FY 2009-10 in the Tariff Order for FY 2010-11. In the ARR petition for FY 2011-12, PSPCL had revised the estimate of AP consumption to 10898 MU for FY 2010-11. The Commission approved the revised AP consumption of 10327 MU for FY 2010-11, in the Tariff Order for FY 2011-12. PSPCL has now submitted the energy sale to AP category as 10152 MU, in the ARR for FY 2014-15.

The Commission had estimated the AP consumption for FY 2010-11, in the review of FY 2010-11 in the Tariff Order for FY 2011-12, by deducting 4.03% from the AP consumption (based upon sample meters) during first half of FY 2010-11 as reported by PSPCL in the ARR for FY 2011-12, and adding to it AP consumption approved by the Commission for the second half of FY 2009-10, after applying 5% increase to it.

The Commission, in the Tariff order for FY 2013-14, while working out the AP consumption from the monthly AP data submitted by PSPCL to the Commission, on the basis of load of AP connections and supply hours, observed that in many cases, the AP consumption recorded by the sample meters is almost the same as worked out on the basis of load of AP connections and supply hours. This indicated that the readings of the sample meters were not recorded correctly. Further, the energy pumped shown in AMR data submitted by PSPCL every month for 25 number AP feeders per circle of PSPCL showed considerable difference when compared with the AP consumption calculated by PSPCL on the basis of AP factor, which in turn was calculated by PSPCL on the basis of sample meter readings. In order to further examine the authenticity of the sample meters data, the Commission asked PSPCL to supply the details of energy pumped for AP supply during FY 2012-13. PSPCL supplied the information regarding month wise and division wise details of number of feeders, energy pumped and load, incorporating the details regarding the number of feeders and energy pumped, giving separate figures for AP 3-phase 3-wire, AP 3-phase 4-wire and Kandi area feeders feeding AP load. On the basis of the information supplied by PSPCL, the Commission estimated AP consumption during FY 2012-13 in the Tariff Order for FY 2013-14.

Similar information was called from PSPCL for FY 2010-11 and FY 2011-12. Further, Chief Engineer/ARR&TR, PSPCL vide its letter no. 2944/CC/DTR-121/Vol.II/TR-II dated 23.12.2013 requested the Commission to consider 45% of the total pumped energy of mixed kandi area feeders for assessing the AP consumption of AP consumers being fed from mixed kandi area feeders (instead of 30% as taken by the Commission for assessing AP consumption in the Tariff Order for FY 2013-14), on the plea that although the percentage of sanctioned load of AP consumers fed from mixed kandi area feeders is around 30% but the billed energy of the consumers is around 45% of the total pumped energy. The above reasoning submitted by PSPCL was not found convincing by the Commission, and PSPCL was accordingly asked to submit comments on the observations of the Commission in the matter vide letter no. 702/PSERC/DTJ/105 dated 20.01.2014. PSPCL has not submitted its comments and presuming that PSPCL has nothing more to say in the matter, the Commission has estimated the AP consumption as 9656 MU during FY 2010-11, on the basis of information supplied by PSPCL in the ARR for FY 2014-15, as worked out in Table 2.2.

Table 2.2: AP Consumption for FY 2010-11

(MU)

Sr. No.	Description	Energy
(i)	Energy pumped during April, 2010 to Mar., 2011 in case of 3-phase 3-wire AP feeders	10738.60
(ii)	Energy pumped during April, 2010 to Mar., 2011 in case of 3-phase 4-wire AP feeders	112.90 [a]
(iii)	Energy pumped during April, 2010 to Mar., 2011 in case of Kandi area feeders feeding AP load	362.38 [b]
(iv)	Total energy pumped during FY 2010-11 for AP supply {(i)+ (ii)+ (iii)}	11213.88
(v)	Less losses @14.81% (20-(2.5+15% of 17.95)) {(iv)x14.81%}	1660.78 [c]
(vi)	Net AP consumption for FY 2012-13 {(iv) - (v)}	9553.10
(vii)	AP consumption for load of 82.44 [d] MW running on Urban Feeders [not included above at Sr.No.(vi)] {(vi)x 82.44/7646.51}	103.00 [e]
(viii)	**Total AP consumption for FY 2010-11 {(vi)+ (vii)}**	**9656.10**

(a) *Calculated by multiplying the number of 3-phase 4-wire AP feeders for each month with AP consumption per feeder for that month in case of 3-phase 3-wire AP feeders.*

(b) *Calculated by assuming the AP load on Kandi area feeders feeding AP load as 30%.*

(c) *The loss @14.81% (11kV and below) for FY 2010-11 has been computed from Tariff Order for FY 2010-11.*

(d) *As per Annexure-2/7A of PSPCL letter no. 2646 dated 31.12.2013.*

(e) *AP load running on 3-phase 3-wire, 3-phase 4-wire and Kandi Area feeders is 7646.51 MW ending March, 2011 as per information supplied by PSPCL in monthly data vide letter no. 2245 dated 16.05.2011.*

Thus, the Commission approves the AP Consumption of 9656.10 MU (say 9656 MU) for FY 2010-11.

2.3 Transmission and Distribution Losses (T&D Losses)

The Board, in its ARR Petition for FY 2010-11, projected the T&D losses of 18%. The Commission, however, after considering the whole issue, fixed the T&D losses at 20% for FY 2010-11 in its Tariff Order for FY 2010-11.

PSPCL, in its ARR Petition for FY 2011-12, projected the T&D losses for FY 2010-11 at 18%, considering AP consumption of 10898 MU for FY 2010-11. Since, post unbundling, the functions of transmission and distribution have been entrusted to separate entities, i.e., PSTCL and PSPCL, respectively, the Commission was of the view that T&D losses reported should be segregated into transmission losses and distribution losses. Further, PSPCL, during the processing of ARR and Tariff Petition for FY 2011-12, submitted that since the intra-state boundary metering between the assets of PSPCL and PSTCL was not complete, and in such a situation segregation of transmission losses and distribution losses was not possible for the time being. The Commission while reviewing FY 2010-11, took note of the practical difficulties for segregation of transmission losses and distribution losses. The Commission further decided that since the Board was unbundled into separate entities, transmission losses and distribution losses were to be separately considered and approved for these entities. Considering this as a transition phase, the Commission decided to stipulate only target T&D losses, with segregation into transmission loss and distribution loss within the overall target, pending final adjustments between PSTCL and PSPCL based on actual data at a later stage. Keeping the overall T&D loss level of 20% as approved for FY 2010-11 in the Tariff Order for FY 2010-11 and based on the provisionally approved Transmission loss of 2.5% for PSTCL for FY 2010-11 in Tariff Order for PSTCL for FY 2011-12, the target distribution loss (66 kV and below) for PSPCL for FY 2010-11 was worked out to 17.95%, which the Commission approved provisionally. The Commission, however, further decided to revisit the distribution losses of PSPCL during the Truing-up for FY 2010-11.

PSPCL in its ARR for FY 2014-15 has now intimated the transmission and distribution losses for FY 2010-11 at 17.98%, arrived at in accordance with the actual energy sales, energy purchased and own generation. PSPCL has submitted that loss reduction has been achieved despite lower than expected sales to the large supply industrial category, who are amongst the highest paying consumers of PSPCL with the lowest T&D/AT&C loss levels, and therefore, their (large supply industrial consumers) moving out of PSPCL's ambit had an adverse impact on the overall T&D loss levels of PSPCL. PSPCL has claimed that the over achievement of T&D loss target by PSPCL, despite the lower than approved large supply industrial category sales, is an indication of the significant technical and operational efficiency efforts initiated by it to reduce losses in LT networks/consumer categories. PSPCL has further submitted that the Commission, in the past, disallowed sales pertaining to AP category and adds such disallowed sales to the T&D losses. The combined impact of both disallowances in AP consumption and T&D losses, being higher, after reworking by the Commission, is passed on as an ultimate disallowance in the power purchase cost. PSPCL has submitted that actual AP sales during FY 2010-11 are 10152 MU, which are lower than the approved AP sales of 10327 MU. PSPCL has been prayed that the actual AP sales which are in accordance with the Audited Annual Accounts of PSPCL be approved in the final true up for the year, and in light of the above, audited T&D losses at 17.98% as per actual for FY 2010-11 be also approved.

Keeping the overall T&D loss level of 20% as approved for FY 2010-11 in the Tariff Order for FY 2010-11 and based on the approved transmission loss of 2.5% for PSTCL for FY 2010-11 in Tariff Order for PSTCL for FY 2014-15, the targeted distribution loss (66 kV and below) for PSPCL for FY 2010-11 has been worked out as 17.95%, which the Commission approves.

2.4 PSEB'S Own Generation

2.4.1 **Thermal Generation:** The station-wise generation projected by the Board during the determination of ARR by the Commission for FY 2010-11, generation approved by the Commission in the Tariff Order, revised estimates furnished by PSPCL during determination of ARR of FY 2011-12, generation approved by the Commission in the review, figures now supplied by PSPCL in the ARR for FY 2014-15 and generation now approved by the Commission are given in Table 2.3.

Table 2.3: Thermal Generation – FY 2010-11

(MU)

Sr. No.	Thermal station	Projected by the Board during determination of ARR FY 2010-11		Approved by the Commission in T.O. FY 2010-11		Revised Estimates by PSPCL during determination of ARR FY 2011-12		Approved by the Commission in Review		Generation as submitted by PSPCL in ARR of FY 2014-15		Now approved by the Commission	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
1A.	GNDTP Unit I & II	2280	2016	2509	2233	1818	1607	1395	1242	1346	1188	1346	1198
1B.	GNDTP Unit III & IV							420	374	429	378	429	382
2.	GGSSTP	9500	8692	10254	9382	9500	8707	9638	8819	9718	8930	9718	8892
3.	GHTP	6565	5974	7276	6621	6659	6083	6705	6102	6833	6281	6833	6252
	Total	**18345**	**16682**	**20039**	**18236**	**17977**	**16397**	**18158**	**16537**	**18326**	**16777**	**18326**	**16724**

Plant-wise generation figures supplied by PSPCL in the ARR for FY 2014-15 and the generation figures validated by the Commission have been taken into account.

Accordingly, the Commission approves gross thermal generation for FY 2010-11 at 18326 MU.

Auxiliary Consumption

The auxiliary consumption projected by the Board during determination of ARR by the Commission for FY 2010-11, auxiliary consumption approved by the Commission in the Tariff Order, revised estimates furnished during determination of ARR of FY 2011-12, auxiliary consumption approved by the Commission in the review, generation figures supplied by PSPCL with the ARR for FY 2014-15 and auxiliary consumption now approved by the Commission are given in Table 2.4.

Table 2.4: Auxiliary Consumption – FY 2010-11

Sr. No.	Thermal station	Projected by the Board during determination of ARR FY 2010-11	Approved by the Commission in T.O. FY 2010-11	Revised Estimates by PSPCL during determination of ARR FY 2011-12	Approved by the Commission in Review	Submitted in ARR of FY 2014-15	Now approved by the Commission
I	II	III	IV	V	VI	VII	VIII
1.	GNDTP	11.60%	11.00%	11.55%	11.00%	11.78%	11.00%
2.	GGSSTP	8.50%	8.50%	8.65%	8.50%	8.11%	8.50%
3.	GHTP	9.00%	9.00%	8.35%	9.00%	8.08%	8.50%

It is observed that actual auxiliary consumption now reported by PSPCL is marginally higher for GNDTP and lower for GGSSTP and GHTP than the approved levels. The Commission observes that the auxiliary consumption of

GGSSTP has been approved on normative basis. The Commission notes that Units I and II of GNDTP have been put on commercial operation on 31.05.2007 and 19.01.2006 respectively, after completion of Renovation and Modernisation (R&M) works. PSPCL has furnished the actual auxiliary consumption of GNDTP as 11.78% and now requested for approval of the same. However, the Commission finds no justification in allowing auxiliary consumption after R&M works of Units I & II in excess of the pre R&M value and approves auxiliary consumption for all 4 units of GNDTP at 11%.

In review for FY 2011-12, the Commission in para 3.5.1 of the Tariff Order for FY 2012-13 observed, with regard to auxiliary consumption, as under:

"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."

In view of para 3.5.1 of the Tariff Order of FY 2012-13 as brought out above, the Commission decides to re-fix the auxiliary consumption of 8.50% for GHTP for FY 2010-11.

In view of the above, the Commission approves the auxiliary consumption of 11.00%, 8.50% and 8.50% for GNDTP, GGSSTP and GHTP respectively.

The net thermal generation on this basis works out to 16724 MU as shown in column XIV of Table 2.3.

The Commission further observes that PSPCL has not been able to achieve gross and net thermal generation originally approved in the Tariff Order for

FY 2010-11. PSPCL has under-achieved the target by 1713 MU (20039-18326) gross and 1512 MU (18236-16724) net as compared to generation originally approved, as shown in Table 2.3. The Commission takes into account the loss in thermal generation of 1713 MU gross (1512 MU net) and disapproves consequential additional power purchase to that extent. This is discussed further in para 2.10.

2.4.2 **Hydel Generation:** The station-wise generation submitted by the Board to the Commission during determination of ARR and Tariff for FY 2010-11, generation approved by the Commission in the Tariff Order, revised estimates furnished by PSPCL during determination of ARR of FY 2011-12, generation approved by the Commission in review and generation figures now furnished by PSPCL and those accepted by the Commission are given in Table 2.5.

Table 2.5: Hydel Generation – FY 2010-11

(MU)

Sr. No.	Hydel Station	Projected by the Board during determination of ARR FY 2010-11	Approved by Commission in TO FY 2010-11	RE by PSPCL in ARR FY2011-12	Approved by Commission in TO FY 2011-12	Generation figures submitted by PSPCL in ARR FY 2014-15	Now approved by Commission
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**
1.	Shanan	522	523	565	565	598	598
2.	UBDC	384	384	395	414	410	410
3.	RSD	1564	1564	1575	1575	1738	1738
4.	MHP	1222	1222	1101	1101	1070	1070
5.	ASHP	688	688	680	680	742	742
6.	Micro hydel	8	8	9	9	10	10
7.	**Total own generation (Gross)**	**4388**	**4389**	**4325**	**4344**	**4568**	**4568**
8.	Auxiliary consumption and Transformation losses	46	108	48	161	47	38 *
9.	HP share in RSD (free)						76 **
11.	**Total own generation (Net)**	**4342**	**4281**	**4277**	**4183**	**4521**	**4454**
12.	**PSPCL share from BBMB**						
(a)	PSPCL share (Net)	4102	4102	4151	4151	4391	4391
(b)	Common pool share (Net)	302	302	303	303	303	303
13.	**Share from BBMB (Net)**	**4404**	**4404**	**4453**	**4454**	**4694**	**4694**
14.	**Total hydro (Net) (Own + BBMB)**	**8746**	**8685**	**8730**	**8637**	**9215**	**9148**

** Transformation losses @0.5% (23 MU), auxiliary consumption @0.5% for RSD generation of 1738 MU and UBDC stage-1 generation of 169 MU (having static exciters) and @0.2% for others (15 MU).*

*** HP share in RSD (76 MU).*

The actual gross hydel generation from the PSPCL's own hydel stations for FY 2010-11 is 4568 MU and the Commission accepts the same. While calculating the net generation, PSPCL has not deducted the free HP share in RSD. In line with the principle being followed in such sales, the Commission has worked out net hydel generation by deducting free HP share in RSD along with the auxiliary consumption and transformation losses. HP royalty from Shanan has been considered as Outside State sale in para 2.2. Net hydel generation for FY 2010-11, thus works out to 4454 MU. The actual net availability from BBMB is 4694 MU, including common pool share, which the Commission accepts.

The Commission, therefore, approves net hydel generation for FY 2010-11 at 4454 MU from PSPCL's own hydel generating stations and 4694 MU as net share from BBMB as shown in Table 2.5.

2.5 Power Purchase

The Commission in its Tariff Order of FY 2010-11 approved net power purchase of 14357 MU (net). During determination of ARR of FY 2011-12, the PSPCL furnished revised estimates for power purchase of 15521 MU (net). But, in review, the Commission determined the net power purchase of 17181 MU. PSPCL has now submitted power purchase during FY 2010-11 as 14668 MU (net), in the ARR for FY 2014-15. This matter is further discussed in para 2.8.

2.6 Energy Balance

2.6.1 The details of energy requirement and availability for FY 2010-11 approved by the Commission in review in the Tariff Order of FY 2011-12 and figures now furnished by PSPCL in the ARR are given in Table 2.6. The energy balance, including T&D losses along with sales and availability now approved by the Commission is depicted in column VI of Table 2.6.

Table 2.6: Energy Balance – FY 2010-11

(MU)

Sr. No.	Particulars	Approved by the Commission in T.O. FY2011-12	As per PSPCL in ARR FY 2014-15	Now approved by the Commission	Sales & actual T&D losses as per approved energy available
I	II	III	IV	V	VI
A) Energy Requirement					
1.	Metered Sales	23211	22590	22590	22590
2.	Sales to Agriculture Pumpsets	10327	10152	9656	9656
3.	Total Sales within the State	**33538**	**32742**	**32246**	**32246**
4.	Loss percentage	20.00%	17.98%	20.00%	19.13%
5.	T&D losses	8385	7177	8062	7629
6.	Sales to Common pool consumers	303	303	303	303
7.	Outside State Sales	129	438	362	362
8.	**Total requirement**	**42355**	**40660**	**40973**	**40540**
B) Energy Available					
9.	Own generation (Ex-bus)				
10.	Thermal	16537	16777	16724	16724
11.	Hydro(Including share from BBMB and common pool consumers)	8637	9215	9148	9148
12.	Purchase (net)	17181	14668	14668	14668
13.	**Total Available**	**42355**	**40660**	**40540**	**40540**

2.6.2 The total energy available with PSPCL works out to 40540 MU (net), considering all purchases and own generation (net). With this energy available, the Commission works out the T&D losses as 19.13%. Achievement of T&D losses lower than that approved by the Commission, has resulted in savings in net power purchase to the extent of 433 (8062 - 7629) MU. The matter is further discussed in para 2.9.

The Commission approves the total energy requirement for FY 2010-11 at 40973 MU after retaining T&D losses at 20%.

2.7 Fuel Cost

2.7.1 In its Tariff Order for FY 2010-11, the Commission approved the fuel cost as ₹3370.40 crore for a gross thermal generation of 20339 MU. In review, this cost was revised to ₹3254.01 crore for the then approved gross generation of 18158 MU. The details of approved fuel cost for FY 2010-11, in the Tariff Order for FY 2010-11 and in the Tariff Order for FY 2011-12 in review, are given in Table 2.7.

Table 2.7: Fuel Cost – FY 2010-11

Sr. No.	Station	As per T.O. FY 2010-11		As per Review in T.O. FY 2011-12	
		Gross Generation (MU)	Fuel Cost (₹ crore)	Gross Generation (MU)	Fuel Cost (₹ crore)
I	II	III	IV	V	VI
1.	GNDTP Unit I&II	1534	265.39	1395	277.83
2.	GNDTP Unit III&IV	975	183.54	420	91.77
3.	GGSSTP	10254	1734.92	9638	1708.89
4.	GHTP	7276	1186.55	6705	1175.52
5.	**Total**	**20039**	**3370.40**	**18158**	**3254.01**

2.7.2 PSPCL, in its ARR for FY 2014-15, has indicated the actual fuel cost for FY 2010-11 for a gross generation of 18326 MU as ₹3397.00 crore, whereas in the Audited Annual Accounts of the Board from 01.04.2010 to 16.04.2010, the total generation expenses are ₹149.80 crore and in the Audited Annual Accounts of PSPCL from 16.04.2010 to 31.03.2011, the total generation expenses are ₹3277.89 crore.

In the Audited Annual Accounts of the Board from 01.04.2010 to 16.04.2010, the total generation expenses comprise of ₹148.90 crore for coal and oil consumption, ₹0.20 crore for other fuel related costs, ₹0.65 crore for fuel related losses and ₹0.04 crore for other operating expenses such as cost of water, lubricants, consumable stores and station supplies. Out of these, ₹0.04 crore booked towards other operating expenses do not form part of the fuel cost and are being considered under repair and maintenance expenses in para 2.12. Thus, the net fuel cost for the period from 01.04.2010 to 16.04.2010 as per Audited Annual Accounts is taken as ₹149.76 (149.80–0.04) crore. Further, in the Audited Annual Accounts of PSPCL from 16.04.2010 to 31.03.2011, the total generation expenses comprise of ₹3195.50 crore for coal and oil consumption, ₹24.29 crore for other fuel related costs, ₹27.45 crore for fuel related losses and ₹30.64 crore for other operating expenses such as cost of water, lubricants, consumable stores and station supplies. Out of these, ₹30.64 crore booked towards other operating expenses do not form part of the fuel cost and are being considered under repair and maintenance expenses in para 2.12. Thus, the net fuel cost for the period from 16.04.2010 to 31.03.2011 as per Audited Annual Accounts is taken as ₹3247.25 (3277.89-30.64) crore. Thus, the total fuel cost as per Audited Annual Accounts is ₹3397.01 (3247.25+149.76) crore.

2.7.3 The actual fuel cost intimated by PSPCL for FY 2010-11 in its ARR for FY 2014-15 for a gross thermal generation of 18326 MU is based on calorific value and price of coal / oil as given in Table 2.7A.

Table 2.7A: Calorific Value and Price of Coal and Oil as submitted by PSPCL for FY 2010-11

Sr. No.	Station	As considered by PSPCL				
		Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (₹/KL)	Price of coal excluding transit loss (₹/MT)	Transit loss
I	II	III	IV	V	VI	VII
1.	GNDTP	3935	9400	35275	2766.00	(-) 0.15%
2.	GGSSTP	3951	10000	27211	2880.99	1.14%
3.	GHTP	3932	9500	34074	2747.25	1.33%

2.7.4 Fuel cost being a major item of expense, the Commission thought it prudent to get the same validated. The finally accepted values are indicated in Table 2.7B.

Table 2.7B: Calorific Value and Price of Coal and Oil as approved by the Commission for FY 2010-11

Sr. No.	Station	As accepted by the Commission				
		Gross Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (₹/KL)	Price of coal excluding transit loss (₹/MT)	Transit loss
I	II	III	IV	V	VI	VII
1.	GNDTP	3925	9553	35275	2764.98	(-)0.15%
2.	GGSSTP	3950	9789	27208	2881.21	1.14%
3.	GHTP	3973	9592	34074	2747.00	1.34%

2.7.5 Regarding Station Heat Rate (SHR), PSPCL has intimated the SHR for GNDTP as 2963.62 kCal/kWh, for GGSSTP as 2566.36 kCal/kWh and for GHTP as 2417.00 kCal/kWh as per audited data. PSPCL in its ARR has submitted excerpts from orders of Hon'ble APTEL and other Electricity Regulatory Commissions and has prayed that the technical performance of its stations at relaxed levels be allowed.

The Commission notes that the Regulation 37 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 states that the components of generation tariff shall be as laid down in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 as amended by the CERC from time to time. Regulation 26(ii)(B) of CERC (Terms and Conditions of Tariff) Regulations, 2009 states that the SHR of the New Thermal Generating Station achieving COD on or after 01.04.2009 shall be as per the formula (given in the clause). Further, as per fourth proviso to Regulation 26(ii)(B) of CERC

(Terms and Conditions of Tariff Regulations), 2009, states that if one or more units were declared under commercial operation prior to 01.04.2009, the heat rate norms for those units as well as units declared under commercial operation on or after 01.04.2009 shall be lower of the heat rate norms arrived at by above methodology and the norms as per Regulation 26 (ii) A (a). As such, same SHR, as worked out on the basis of formula given in Regulation 26 (ii) B of CERC Regulations, will be applicable for Unit III & Unit IV of GHTP, since units III and IV of GHTP were declared under commercial operation on 16.10.2008 and 25.01.2010 respectively. The Commission while processing the ARR of PSPCL has been allowing the Gross Station Heat Rate for all units of GHTP at 2500 kCal/ kWh.

The information/data regarding Unit III and Unit IV of GHTP was obtained from PSPCL vide Commission's letter no. 3382/3383 dated 16.07.2013 and PSPCL vide its letter no. 2665 dated 30.07.2013 submitted the data/information. As per information supplied by PSPCL, the maximum design Unit Heat Rate of Units III and IV of GHTP is 2279.85 kCal/kWh with 0% make and 33^{o}C Cooling Water (CW) temperature subject to 0.1% increase per month due to ageing.

As per Regulation 26(ii)(B) of CERC (Terms and Conditions of Tariff Regulations), 2009, the Station Heat Rate for new thermal generating stations achieving COD on or after 01.04.2009 i.e. Unit IV of GHTP, has been determined by the Commission as 2428.04 kCal/kWh (say 2428 kCal/kWh) (1.065 x 2279.85 kCal/ kWh). Further, as per fourth proviso to Regulation 26 (ii)(B) of CERC (Terms and Conditions of Tariff Regulations, 2009, SHR for Unit III, GHTP shall also be 2428 kCal/kWh, as explained above.

For Units I & II of GHTP as well as for GGSSTP and GNDTP, the Commission decides to allow the SHR as allowed earlier in the Tariff Order for FY 2010-11.

2.7.6 The Commission has now approved revised gross thermal generation of 18326 MU (1775 MU for GNDTP, 9718 MU for GGSSTP and 6833 MU for GHTP) as discussed in para 2.4.1. The fuel cost for different thermal generating stations corresponding to generation now approved has been worked out, based on the parameters adopted by the Commission in its Tariff Order of FY 2010-11, except for SHR in respect of GHTP units III and IV which has now been determined at 2428 kCal/kWh in para 2.7.5 above. Price and calorific value of coal and oil has been adopted as validated and accepted by the Commission.

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

2.7.8 On the above basis, fuel cost for FY 2010-11 for different thermal generating stations corresponding to actual generation is given in Table 2.8.

Table 2.8: Approved Fuel Cost FY 2010-11

Fuel Cost - FY 2010-11									
Sr. No.	**Item**	**Derivation**	**Unit**	**GNDTP (Unit I & II)**	**GNDTP (Unit III & IV)**	**GGSSTP**	**GHTP (Unit I & II)**	**GHTP (Unit III & IV)**	**Total**
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X**
1.	Generation	A	MU	1346	429	9718	3196	3637	**18326**
2.	Heat Rate	B	kCal/kWh	2825	3000	2500	2500	2428	
3.	Specific oil consumption	C	ml/kWh	1.00	3.50	1.00	1.00	1.00	
4.	Calorific value of oil	D	kCal/litre	9553	9553	9789	9592	9592	
5.	Calorific value of coal	E	kCal/kg	3925	3925	3950	3973	3973	
6.	Overall heat	F = (A x B)	Gcal	3802450	1287000	24295000	7990000	8830636	
7.	Heat from oil	G = (A x C x D) / 1000	Gcal	12858	14344	95130	30656	34886	
8.	Heat from coal	H = (F-G)	Gcal	3789592	1272656	24199870	7959344	8795750	
9.	Oil consumption	I=(Gx1000)/D	KL	1346	1502	9718	3196	3637	
10.	Transit loss of coal	J	(%)	2.00	2.00	2.00	2.00	2.00	
11.	Total coal consumption excluding transit loss	K=(H*1000)/E	MT	965501	324244	6126549	2003359	2213881	
12.	Quantity of PANEM coal	L	MT	685550	218500	3321519	1512384	1721070	
13.	Quantity of coal other than PANEM coal	M=K-L	MT	279951	105744	2805030	490975	492811	
14.	Quantity of coal other than PANEM coal including transit loss	N=M/(1-J/100)	MT	285664	107902	2862276	500995	502868	
15.	Total quantity of coal required	O=L+N	MT	971214	326402	6183795	2013379	2223938	
16.	Price of oil	P	₹ /KL	35275	35275	27208	34074	34074	
17.	Price of coal	Q	₹ /MT	2764.98	2764.98	2881.21	2747	2747	
18.	Total cost of oil	R=P x I / 107	₹ crore	4.75	5.3	26.44	10.89	12.39	59.77
19.	Total cost of coal	S=O x Q/107	₹ crore	268.54	90.25	1781.68	553.08	610.92	3304.47
20.	**Total Fuel cost**	**T=R+S**	₹ crore	**273.29**	**95.55**	**1808.12**	**563.97**	**623.31**	**3364.24**
21.	**Per unit Cost**	**U=T*10/A**	₹ /kWh	**2.03**	**2.23**	**1.86**	**1.76**	**1.71**	**1.84**

** Quantity of PANEM Coal where not given for different units of a plant has been considered on pro-rata basis of generation.*

The Commission, thus, approves the fuel cost at ₹3364.24 crore for gross generation of 18326 MU for FY 2010-11.

2.8 Power Purchase Cost

2.8.1 The Commission, in its Tariff Order for FY 2010-11, approved the power purchase cost of ₹3774.12 crore for purchase of 15070 MU (gross). In review, the Commission revised it to ₹5668.81 crore for the purchase of 18053 MU (gross), after adding the external transmission losses of 4.83% (17181 MU + external transmission losses of 872 MU).

2.8.2 The gross power purchase for FY 2010-11 now reported by PSPCL is 15428 MU (gross) including short term power purchase of 2492.71 MU and unscheduled interchange (UI) of 940.80 MU. The net power purchase after accounting for actual external losses of 4.93% is 14668 MU. The actual cost of power purchase for FY 2010-11 as per ARR for FY 2014-15 is ₹5895.11 crore, which includes ₹5493.14 crore as power purchase cost and ₹401.97 crore paid to PSTCL as transmission charges. The power purchase cost as per Audited Annual Accounts for FY 2010-11 is also ₹5895.11 crore, inclusive of transmission charges paid to PSTCL.

The Commission observes that as per previous practice, requirement of power purchase at the time of review is taken based only on the energy balance as determined in the Tariff Order for the relevant year and approved accordingly. However, at the time of true up, the actual quantum of power purchased has been allowed since it has been purchased by the Board/PSPCL and supplied to the consumers of different categories.

Regarding power purchase through traders and through UI, the Commission observed in the Tariff Order for FY 2010-11 as under:

"……..the average rate of power purchased through traders as also the UI power purchase rate is increasing every year. Additional power purchased through traders or UI at high cost and supplied in increasing quantities to any category of consumers is not commercially viable. In these circumstances, the Successor Entity has little option but to undertake Demand Side Management practices and effect power purchases in a judicious manner. Keeping in mind the escalating cost of power purchase in each successive year, the Commission deems it necessary that such purchases be kept within the costs approved. Accordingly, the Commission decides that the cost of power purchase from traders/UI, if required, will be admissible only at an average rate of realization per unit of 427.31 paise of 2010-11.

The Successor Entity may, in case of purchases effected owing to emergent circumstances, approach the Commission for any relaxation when the costs of 2010-11 come up for review/true-up*".*

PSPCL in its ARR Petition for FY 2014-15 has shown power purchase of 3433.51 MU [2492.71 MU through traders (short term) + 940.80 MU through UI] at an average rate of 555.18 paise per unit. The additional cost of ₹439.04 crore incurred by the Board/PSPCL for purchase of 3433.51 MU of short term power through traders/UI at the excessive rate of 127.87 (555.18-427.31) paise per unit is disallowed.

On a query from the Commission, PSPCL in its letter no. 2946 dated 31.12.2013 has intimated the details of interest paid on delayed payments to UI account from FY 2010-11 to FY 2012-13. The Commission notes that PSPCL has paid ₹24.09 crore interest on delayed payments to UI account in FY 2010-11. The Commission disallows the same.

Accordingly, the Commission approves cost of ₹5030.01 (5493.14–439.04 –24.09) crore for net power purchase of 14668 MU (gross power purchase of 15428 MU).

2.9 Incentive on account of lower T&D losses

As discussed in para 2.6.2, the Board/PSPCL has over-achieved the T&D loss level vis-a-vis the target approved by the Commission. As per the PSERC Tariff Regulations, the entire gain on account of overachievement of T&D losses vis-a-vis the target set by the Commission is to be retained by the licensee. As brought out in the afore-mentioned para, T&D loss level lower than that approved by the Commission has resulted in decrease in power purchase to the extent of 433 MU (net), the pro-rata cost of which based on power purchase cost approved in para 2.8.2, works out to ₹148.49 (5030.01x433/ 14668) crore.

The Commission, therefore, allows incentive to the extent of ₹148.49 crore on account of lower T&D losses.

The effect of this is reflected at Sr. No. 14 of Table 2.16.

2.10 Disincentive on account of lower thermal generation

The Commission has noted that there is lower thermal generation to the extent of 1713 MU gross (1512 MU net) and consequent increase in power purchase as discussed in para 2.4.1. The station wise decrease in gross generation compared to the generation approved in the Tariff Order for FY 2010-11 is 734 (2509-1775)

MU for GNDTP, 536 (10254-9718) MU for GGSSTP and 443 (7276-6833) MU for GHTP. The Commission further notes that for GNDTP Units I & II, there is less generation of 188 (1534-1346) MU and for GNDTP Units III & IV, there is less generation of 546 (975-429) MU.

The net saving in fuel cost for different stations corresponding to this variation in generation based on cost now approved works out to ₹336.48 crore as given in Table 2.9.

Table 2.9: Saving in Fuel Cost due to lower Generation during FY 2010-11

Sr. No.	Station	Now Approved by the Commission		Increase/Decrease in fuel cost due to less generation	
		Generation (MU)	Fuel Cost (₹crore)	Increase/ Decrease in Generation (+)/(-) (MU)	Increase/ Decrease in Fuel Cost (+)/(-) (₹crore)
1a.	GNDTP Unit I &II	1346	273.29	(-) 188	(-) 38.17
1b.	GNDTP Unit III &IV	429	95.55	(-) 546	(-) 121.61
2.	GGSSTP	9718	1808.12	(-) 536	(-) 99.73
3.	GHTP	6833	1187.28	(-) 443	(-) 76.97
4.	**Total**			**(-) 1713**	**(-) 336.48**

The increase in power purchase on account of lower generation is 1512 MU net. The cost of 1512 MU (net) based on power purchase cost approved as per para 2.8 works out to ₹518.50 crore (5030.01x1512/14668). Accordingly, the net increase in power purchase cost is ₹182.02 (518.50-336.48) crore.

The Commission therefore determines an amount of ₹182.02 crore as disincentive on account of lower thermal generation.

The effect of this is reflected at Sr. No. 15 of Table 2.16.

2.11 Employee Cost

2.11.1 In the ARR Petition for FY 2010-11, the Board claimed employee cost of ₹3,566.57 crore inclusive of ₹525.00 crore as arrears of pay revision for FY 2010-11, against which the Commission approved a sum of ₹2,989.83 crore in the Tariff Order for FY 2010-11. The approved employee cost segregated for generation and distribution business of PSPCL in the Tariff Order for FY 2010-11 was ₹2,737.19 crore**.**

2.11.2 In the ARR Petition for FY 2011-12, PSPCL revised the claim of employee cost to ₹3487.71 crore (net of capitalization of ₹120.00 crore) for generation and distribution business of PSPCL for FY 2010-11. This was revised to ₹3193.67

crore during process of tariff determination by PSPCL. The Commission approved employee cost of ₹2482.37 crore in the review of FY 2010-11.

2.11.3 In the ARR Petition for FY 2014-15, PSPCL has revised the claim of employee cost to ₹3181.39 crore, net of capitalization of ₹115.06 crore for FY 2010-11, based on Audited Annual Accounts of the Board/PSPCL. This includes employee cost of ₹191.21 crore for the period 01.04.2010 to 16.04.2010 and ₹2990.18 crore for the period 16.04.2010 to 31.03.2011. The claim is also inclusive of ₹1117.71 (329.69+788.02) crore on account of terminal benefits and ₹79.91 crore as BBMB share. The Commission observes that as per Audit Note annexed to Audited Annual Accounts for the period 01.04.2010 to 16.04.2010, employee cost has been understated by ₹2.77 crore. Thus the total employee cost of the erstwhile Board and PSPCL for FY 2010-11 works out to ₹3184.16 crore (net).

2.11.4 The Commission notes that some steps have been initiated by the utility to limit and reduce the employee cost besides reducing T&D losses. However, the utility has a long way to go to achieve the benefits of such initiatives. PSERC vide notification dated 17.09.2012 has amended Regulation 28(2)(a) of PSERC (Terms and Condition for Determination of Tariff) Regulations, 2005 and as per amended Regulation 'O&M expenses as approved by the Commission for the year 2011-12 (True-up) shall be considered as base O&M expenses for determination of O&M expenses for subsequent years'. As regulations do not provide for change in base O&M expenses (which includes employee cost) for FY 2010-11 hence its impact is being considered w.e.f. FY 2011-12 as discussed at length in para 3.11 of this Tariff Order. 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.

2.11.5 The provisions of Regulation 28(3) of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 provide for determination of employee cost as under:

- Terminal benefits including BBMB share on actual basis.
- Increase in other employee expenses limited to average increase in Wholesale Price Index.
- Exceptional increase in employee cost on account of pay revision etc. to be considered separately by the Commission.

2.11.6 In the ARR Petition, PSPCL has claimed net employee cost of ₹3181.39 crore for FY 2010-11 inclusive of terminal benefits of ₹1117.71 (329.69+788.02) crore and BBMB share of ₹79.91 crore. PSPCL's claim of ₹788.02 crore includes ₹95.29 crore towards 'Any other expense' under the head pension payments. With reference to a query from the Commission, PSPCL has informed that figures of LTA/LTC and staff welfare expenses shown under this sub head may be considered as 'Other Employee Cost'. Accordingly, the amount of ₹38.06 crore (₹0.74 crore towards Leave Travel Assistance, ₹4.88 crore of Leave Travel Concession and ₹32.44 crore towards Staff Welfare expenses), which are not in the nature of pension payments, is not being considered as terminal benefits. Also, figure of terminal benefits has been revised from ₹329.69 crore to ₹329.76 crore vide letter No. Spl. 1/Camp Chandigarh dated 03.01.2014. As such, amount of Terminal benefits work out to ₹1079.72 (329.76+788.02-38.06) crore. Accordingly, **terminal benefits of ₹1079.72 crore are allowed on actual basis.**

PSPCL has also clarified that an adjustment of ₹77.09 crore pertaining to employee cost of BBMB has wrongly been omitted. Further PSPCL vide letter No. Spl. 1/Camp Chandigarh dated 03.01.2014 has revised the share of expenditure of PSPCL in the total expenditure of BBMB to ₹157.00 crore by reducing the claim under basic pay from ₹1303.53 crore to ₹1226.44 crore and the claim of other employee cost is reduced to ₹1944.67 crore against the original claim of ₹1983.77 crore. As BBMB share of expenditure is allowable on actual basis, **the Commission approves ₹157.00 crore as BBMB share of expenditure.**

2.11.7 As per Regulations, increase in other employee cost is to be limited to average Wholesale Price Index (WPI). The allowable other employee cost of the Board for FY 2009-10 is ₹1,375.93 crore. For approving the other employee expenses of PSPCL for FY 2010-11, the Commission had bifurcated the allowable other employee expenses of the erstwhile Board in proportion to the average number of employees of PSPCL and PSTCL in para No 3.10.4 of Tariff Order of PSPCL for FY 2011-12. Thus the other employee cost of PSPCL for FY 2009-10 was ascertained as ₹1,283.88 crore which is adopted as the base for determining employee cost for the subsequent year. The percent increase in Wholesale Price Index (WPI) for 2010-11 is ascertained as 9.56%. Applying the WPI increase of 9.56% for FY 2010-11, **the other employee cost of PSPCL works out to ₹1,406.62 crore. Thus, Commission approves employee cost on account of terminal benefits, share of BBMB expenditure and 'other employee cost' at ₹2643.34 (1079.72+157.00+1406.62) crore.**

2.11.8 Regulation 28(8)(b) of Tariff Regulations also provides for consideration of any exceptional increase such as pay revision. The Commission observes that PSPCL has not claimed any amount on account of Pay revision arrears separately for FY 2010-11. However, PSPCL (consequent upon implementation of the Pay Commission report) has paid revised salary to its employees with effect from November, 2009 onwards. In reply to a query, PSPCL vide letter 2902/CC/DTR/Dy.CAO/241 dated 04.12.2013 informed the impact of revision of pay scales for FY 2010-11 as ₹299.64 crore. In reply to a further query, PSPCL vide letter No 9/A&R/A-44 dated 16.01.2014 has supplied the basis of calculations of impact of pay revision for FY 2010-11. Based on the revised data furnished by PSPCL, impact of pay revision for FY 2010-11 works out as ₹279.16 crore.

Keeping in view the order of Hon'ble APTEL in appeal No. 7, 46 & 122 of 2011 and decision of the Commission dated 07.01.2013 in Petition No. 57/2012(Suo-motu), **an amount of ₹279.16 crore is allowed to PSPCL for FY 2010-11 on account of impact of pay revision.**

Thus, the Commission approves a total employee cost of ₹2,922.50 (2643.34+279.16) crore to PSPCL for FY 2010-11.

2.12 Repair & Maintenance (R&M) Expenses

2.12.1 In the ARR Petition for FY 2010-11, the Board projected R&M expenses at ₹429.24 crore against which, the Commission approved ₹373.24 crore. The approved R&M expenses segregated for generation and distribution business of PSPCL in the Tariff Order for FY 2010-11 were ₹332.22 crore.

2.12.2 In the ARR Petition for FY 2011-12, PSPCL revised R&M expenses to ₹362.12 crore, net of capitalisation of ₹0.44 crore and inclusive of prior period expenses of ₹1.85 crore against which the Commission approved ₹360.28 crore as R&M expenses for FY 2010-11.

2.12.3 In the ARR Petition for FY 2014-15, PSPCL has claimed an amount of ₹396.75 crore (net of capitalization of ₹1.31 crore) including ₹30.68 crore as other operating expenses such as cost of water, lubricants, consumables stores and water supplies which do not form part of fuel cost (as discussed in para 2.7 of this tariff order) and ₹10.00 crore paid to GoP as 3% maintenance charges on account of generation from Ranjit Sagar Dam (RSD), as per the Audited Annual Accounts for FY 2010-11. The R&M expenses include an amount of ₹24.44 crore for the period 01.04.2010 to 16.04.2010 and ₹372.31 crore for the period

16.04.2010 to 31.03.2011. By excluding ₹10.00 crore paid to GoP as 3% maintenance charges on account of generation from RSDP, net R&M expenses work out to ₹386.75 crore. The Commission also observes that as per Audit Note annexed to Audited Annual Accounts for the period 01.04.2010 to 16.04.2010, R&M expenses have been overstated by ₹0.76 crore due to meters issued for new connections wrongly charged to 'Repair and Maintenance' instead of capitalization. Thus the R&M expenses of the erstwhile Board and PSPCL for FY 2010-11 work out to ₹385.99 (386.75-0.76) crore.

2.12.4 Regulation 28 (4) (a) of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent years. The WPI for FY 2010-11 is determined at 9.56% which is adopted for purposes of calculation of allowable R&M expenses.

2.12.5 The base R&M expense for FY 2010-11 for Generation and Distribution business is ₹372.84 crore. Applying the increase in WPI of 9.56% for FY 2010-11, the allowable R&M expenses for FY 2010-11 work out to ₹408.48 crore for Generation and Distribution business.

PSPCL has capitalised assets worth ₹1604.01 (₹808.25 during the period 01.04.2010 to 16.04.2010 and ₹795.76 during the period 16.04.2010 to 31.03.2011) crore during FY 2010-11. The dates of commissioning of assets amounting to ₹1604.01 crore are neither available in the Audited Annual Accounts nor in the ARR Petition of the PSPCL. Therefore, R&M expenses for these assets added during the year are being considered assuming that these assets remained in service of the PSEB/PSPCL for 7.5 days (for PSEB from 01.04.2010 to 15.04.2010) and for 175 days (for PSPCL from 16.04.2010 to 31.03.2011) on an average during FY 2010-11. The R&M expenses work out to ₹16.79 (408.48x15/365) crore for the period 01.04.2010 to 15.04.2010 and ₹391.69 (408.48x350/365) crore for the period 16.04.2010 to 31.03.2011. The average percentage rate of R&M expenses of ₹16.79 crore for assets of ₹20446.25 crore as on 01.04.2010 work out to be 0.08% (16.79/20446.25x100). By applying the average rate of 0.08% on addition of assets of ₹808.25 crore for 7.5 days for the period 01.04.2010 to 15.04.2010, the allowable R&M expenses for the fixed assets added during the period 01.04.2010 to 15.04.2010 work out to ₹0.01 crore. The average percentage rate of R&M expenses of ₹391.69 crore for assets of ₹37638.21 crore as on 16.04.2010 (as per transfer scheme dated 24.12.2012) work out to 1.04% (391.69/37638.21x100). By applying the average rate of 1.04%

on addition of assets of ₹795.76 crore for the period 16.04.2010 to 31.03.2011, the allowable R&M expenses for the fixed assets added during the period 16.04.2010 to 31.03.2011 work out to ₹3.97 crore. Thus, allowable R&M expenses for FY 2010-11 work out to ₹412.46 (408.48+0.01+3.97) crore as against claim of PSPCL of R&M expenses of ₹385.99 crore.

2.12.6 Section 61 of Electricity Act, 2003 states that the appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff and in doing so shall be guided by 'safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner'.

Moreover Hon'ble APTEL in case of NTPC Limited v/s CERC & Others 2010 ELR (APTEL) 833 admitted that consumers interest should be safeguarded and Tariff should be so determined that it is cheapest at the consumers end.

2.12.7 Regulations are thus to be framed/interpreted by State Commission in such a way that purpose of the Electricity Act, 2003 is not forfeited. Section 61(d), as discussed above, lays down that the Commission shall safeguard consumers' interest & at the same time ensures recovery of cost of electricity in a reasonable manner meaning thereby that expenses incurred should be limited to the extent of its reasonableness.

In the light of the aforementioned provisions of the Electricity Act, 2003 and judgment of the APTEL**, the Commission approves R&M expenses of ₹385.99 crore for FY 2010-11 to PSPCL for Generation and Distribution business on actual basis.**

2.13 Administrative and General (A&G) Expenses

2.13.1 In the ARR Petition for FY 2010-11, the Board projected A&G expenses at ₹79.75 crore, which were approved by the Commission in the Tariff Order for FY 2010-11. The approved A&G expenses segregated for generation and distribution business of PSPCL in the Tariff Order for FY 2010-11 were ₹65.27 crore.

2.13.2 In the ARR Petition for FY 2011-12, PSPCL revised the A&G expenses for FY 2010-11 at ₹81.92 crore, net of capitalisation of ₹16.93 crore including prior period expenses of ₹1.23 crore against which the Commission approved ₹79.80 crore as A&G expenses for FY 2010-11. In the Tariff Petition for FY 2014-15, PSPCL has claimed an amount of ₹84.44 crore (net of capitalization of ₹19.27 crore) as per the Audited Annual Accounts for FY 2010-11. This includes A&G

expenses of ₹6.09 crore for the period 01.04.2010 to 16.04.2010 and of ₹78.35 crore for the period 16.04.2010 to 31.03.2011.

2.13.3 Regulation 28 (4) (a) of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent years. The WPI for FY 2010-11 is determined at 9.56% which is adopted for purposes of calculation of allowable A&G expenses.

2.13.4 The base A&G expenses for FY 2010-11 for Generation and Distribution business is worked out by the Commission as ₹85.74 crore. Applying the increase in WPI of 9.56% for FY 2010-11, the allowable A&G expenses work out to ₹93.94 crore for Generation and Distribution business for FY 2010-11.

2.13.5 PSPCL has capitalised assets worth ₹1604.01 (₹808.25 during the period 01.04.2010 to 16.04.2010 and ₹795.76 during the period 16.04.2010 to 31.03.2011) crore during FY 2010-11. The dates of commissioning of assets amounting to ₹1604.01 crore are neither available in the Audited Annual Accounts nor in the ARR Petition of the PSPCL. Therefore, A&G expenses for these assets added during the year are being considered assuming that these assets remained in service of the PSEB/PSPCL for 7.5 days (for PSEB from 01.04.2010 to 15.04.2010) and for 175 days (for PSPCL from 16.04.2010 to 31.03.2011) on an average during FY 2010-11. The A&G expenses work out to ₹3.86 (93.94x15/365) crore for the period 01.04.2010 to 15.04.2010 and ₹90.08 (93.94x350/365) crore for the period 16.04.2010 to 31.03.2011. The average percentage rate of A&G expenses of ₹3.86 crore for assets of ₹20446.25 crore as on 01.04.2010 work out to be 0.02% (3.86/20446.25x100). By applying the average rate of 0.02% on addition of assets of ₹808.25 crore for 7.5 days for the period 01.04.2010 to 15.04.2010, the allowable A&G expenses for the fixed assets added during the period 01.04.2010 to 15.04.2010 work out to ₹0.00 crore. The average percentage rate of A&G expenses of ₹90.08 crore for assets of ₹37638.21 crore as on 16.04.2010 (as per transfer scheme dated 24.12.2012) work out to 0.24% (90.08/37638.21x100). By applying the average rate of 0.24% on addition of assets of ₹795.76 crore for the period 16.04.2010 to 31.03.2011, the allowable A&G expenses for the fixed assets added during the period 16.04.2010 to 31.03.2011 works out to ₹0.92 crore. Thus, allowable A&G expenses for FY 2010-11 work out to ₹94.86 (93.94+0.00+0.92) crore as against claim of PSPCL of A&G expenses of ₹84.44 crore.

In the light of the provisions of the Electricity Act, 2003 and judgment of the APTEL as discussed in para 2.12.6 and para 2.12.7 of this Tariff Order, **the Commission approves A&G expenses of ₹84.44 crore for FY 2010-11 to PSPCL for Generation and Distribution business on actual basis**.

2.14 Depreciation Charges

2.14.1 The Board projected depreciation charges at ₹952.44 crore in the ARR Petition for FY 2010-11, against which the Commission approved depreciation charges of ₹863.68 crore in the Tariff Order for FY 2010-11. The approved depreciation charges segregated for generation and distribution business of PSPCL, in the Tariff Order for FY 2010-11, was ₹740.61 crore.

2.14.2 In the ARR Petition for FY 2011-12, PSPCL had revised the estimates of depreciation charges to ₹802.27 crore for FY 2010-11 for assets valued at ₹18,329.39 crore as on 1st April, 2010. The Commission approved depreciation charges of ₹801.45 crore for FY 2010-11 in Tariff Order for FY 2011-12.

2.14.3 In the ARR Petition for FY 2014-15, PSPCL has claimed depreciation charges of ₹727.25 crore on the basis of Audited Annual Accounts of which ₹45.31 crore relate to the period 01.04.2010 to 16.04.2010 and balance of ₹681.94 crore relate to period 16.04.2010 to 31.03.2011.

PSPCL also provided a sub-head-wise breakup of assets and depreciation for the period from 16.04.2010 to 31.03.2011. A perusal and analysis of this information showed certain anomalies such as negative balances and depreciation charged in excess of 90% of original cost of assets. PSERC vide memo no. PSERC/Tariff/6851-53 dated 23.10.2013, advised PSPCL to clarify the aforementioned anomalies. PSPCL vide memo no. 18/CC/DTR-241 dated 08.01.2014 has intimated as under:

> *"The misclassification of depreciation of ₹1032.00 crore against ₹897.05 crore which was on account of parking of depreciation mainly under Group Head 12.200, 12.400, 12.500, 12.600 and 12.710 has now been set right by charging the amount to the proper heads of account."*

2.14.4 The statements of details of Fixed Assets and its depreciation provided by PSPCL was discussed in various meetings with officers of PSPCL. The PSPCL prepared a revised statement of assets/depreciation claimed on assets for the purpose of determination of Tariff and furnished necessary evidence in the form of Journal Vouchers. An examination of the submission clearly indicates that PSPCL has been unable to explain misclassification amounting to ₹35.12 crore.

2.14.5 Regulation 27 (1) (d) of PSERC (Terms and Conditions for Determination of tariff) Regulations, 2005 provides:

> *"Depreciation for generation and Transmission assets shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time.*
>
> *Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost.*
>
> *Depreciation for distribution and other assets not covered by CERC shall be as per Government of India norms of 1994 as may be revised by the Commission from time to time".*

2.14.6 The Commission as per past practice allows ₹45.31 crore (after capitalization of ₹0.04 crore) as depreciation provided by PSEB for the period 1/4/2010 to 16.04.2010 based on the Audited Annual Accounts.

However, for the period 16.04.2010 to 31.03.2011, from the information provided by PSPCL, the Commission determines excess claim of depreciation of ₹35.12 crore i.e. more than 90% of the original cost of assets as on 16.04.2010. The Commission accordingly disallows ₹35.12 crore from the claim of depreciation. On further analysis, the Commission observes that the depreciation on the assets which have already been over charged has also been claimed by the petitioner. It has also been observed that in some asset sub-heads PSPCL's claim of depreciation is not in line with the rates specified by CERC. The Commission has reworked the depreciation for the period 16.04.2010 to 31.03.2011 on the basis of sub head wise details of assets provided by PSPCL, which works out to ₹651.09 crore.

Accordingly, the Commission approves ₹661.28 (651.09+45.31-35.12) crore as depreciation charges for PSPCL for FY 2010-11.

2.15 Interest and Finance Charges

2.15.1 The Board claimed Interest and Finance charges of ₹1923.01 crore for FY 2010-11 in the ARR and Tariff Petition for FY 2010-11, against which the Commission approved an amount of ₹972.57 crore in the Tariff Order for FY 2010-11. The approved interest and finance charges segregated for generation and distribution business of PSPCL in the Tariff Order for FY 2010-11 were ₹862.18 crore. The

Commission approved net Interest and Finance charges of ₹1086.34 crore for FY 2010-11 in the Tariff Order for FY 2011-12.

2.15.2 In the ARR Petition for FY 2014-15, PSPCL has claimed Interest and Finance charges of ₹1664.69 crore for FY 2010-11 as per Audited Annual Accounts as detailed in Table 2.10.

Table 2.10 Interest & Finance Charges claimed by PSPCL – FY 2010-11

(₹ crore)

Sr. No.	Description	Interest as depicted in ARR Petition
I	II	III
1.	Interest on Institutional Loans	796.77
2.	Interest on GPF	144.69
3.	Interest to Consumers	88.31
4.	**Sub-Total(1 to 3)**	1029.77
5.	Interest on WCL	772.38
6.	Finance Charges for Loans	52.44
7.	**Total (4+5+6)**	1854.59
8.	Less: Capitalisation	189.90
9.	Net Interest and Finance Charges (7-8)	1664.69

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

2.15.3 **Investment Plan**

The Commission, in its Tariff Order for FY 2010-11, approved an Investment Plan of ₹2500.00 crore for the composite Board. In the ARR Petition for FY 2011-12, PSPCL submitted a revised investment plan of ₹2595.07 crore for FY 2010-11 against which the Commission approved an investment plan of ₹700.00 crore for FY 2010-11 on the basis of capital expenditure actually incurred upto Jan, 2011.

In the ARR Petition for FY 2014-15, PSPCL has submitted the investment plan for FY 2010-11 as ₹1911.95 based on Audited Annual Accounts. The Commission notes that the Audited Annual Accounts exhibit a receipt of subsidies of ₹0.37 crore towards cost of capital assets. Besides, PSPCL has also received consumer contribution amounting to ₹164.02 crore during FY 2010-11. Thus, the PSPCL's actual capital loan requirement is reduced to ₹1747.56 (₹1911.95-₹164.02-₹0.37) crore. However, PSPCL has claimed ₹1590.88 crore as loan (other than WCL, GP Fund and GoP loans) in the ARR & Tariff Petition for FY 2014-15 based on Audited Annual Accounts for FY 2010-11. Accordingly, the

Commission shall consider the actual loan of ₹1590.88 crore for purposes of calculation of allowable interest.

2.15.4 In the ARR Petition for FY 2014-15, interest on institutional loans availed by the PSPCL for FY 2010-11 is depicted as ₹796.77 crore out of which ₹17.12 crore relates to R-APDRP schemes. The Commission observes that the loan amounting to ₹81.85 crore of R-APDRP-Part A scheme are to be converted into grants once the establishment of required system is achieved and verified by an independent agency appointed by the Ministry of Power. The Commission further observes that no interest in respect of R-APDRP– Part A scheme is being paid by PSPCL while interest liability is being provisioned in the books of PSPCL. The Commission, therefore, decides to disallow the principle amount of loan and interest thereon for the purpose of determination of Tariff. Accordingly, the opening balance of loans of ₹6949.96 crore is revised to ₹6868.11 crore after reducing an amount of ₹81.85 crore on account of R-APDRP- Part A loan. Thus, the interest on allowable loans (other than WCL, GP Fund and GoP loans) is determined as ₹787.46 crore as in Table 2.11.

Table 2.11: Interest on Loans (Other than WCL, GP Fund and GoP Loans)

(₹ crore)

Sr. No.	Particulars	Loans as on April 1, 2010	Receipt of Loans during FY 2010-11	Repay-ment of Loans during FY 2010-11	Loan transfer to PSTCL as per FRP	Loans as on March 31, 2011	Amount of Interest
I	II	III	IV	V	VI	VII	VIII
1.	As per data furnished in ARR Petition (other than WCL and GoP Loans)	6949.96	1590.88	587.77	887.06	7066.01	796.77
2.	Approved by the Commission (other than WCL ,GP Fund and GoP Loans)	6868.11	1590.88	587.77	887.06	6984.16	787.46

2.15.5 **Interest on GoP Loans**

In the Tariff Order for FY 2010-11, the Commission approved interest expenses of ₹68.65 crore on GoP loan of ₹520.09 crore payable by the Board/PSPCL. GoP vide letter dated 15.04.2010 informed that the loan of ₹520.07 crore has been adjusted by the GoP against unpaid subsidy.

In the ARR Petition for FY 2014-15, PSPCL has not claimed any interest on GoP loan stating that there was no outstanding State Govt. Loan as on April 16, 2010 and no fresh loan from State Govt. has been received during the year 2010-11.

As such interest on this account is considered as NIL.

2.15.6 **Interest on G.P. Fund**

PSPCL has claimed interest of ₹144.69 crore on GP Fund accumulations based on Audited Annual Accounts for FY 2010-11**. The interest of ₹144.69 crore on GP Fund, being statutory payment, is allowed as claimed by PSPCL.**

2.15.7 **Interest on loans taken to replace re-called GoP Loans**

The interest on loans of ₹3022.10 crore raised to replace re-called GoP loans is allowed at weighted average rate of 8.55% per annum for short term loans. **Thus, interest of ₹258.38 crore is approved on this account.**

2.15.8 **Finance Charges**

In its Tariff Order for FY 2010-11, the Commission allowed finance charges of ₹6.63 crore applying a rate of 0.31% on the total borrowing requirement of ₹2137.35 crore. In the ARR & Tariff Petition for FY 2011-12, PSPCL had claimed Finance charges of ₹20.00 crore for fresh borrowings of ₹2595.07 crore. The Commission had approved finance charges of ₹4.51 crore for FY 2010-11 on net loan requirement of ₹585.11 crore.

In the ARR Petition for FY 2014-15, PSPCL has claimed ₹52.44 crore as finance charges including ₹49.00 crore as guarantee fees during FY 2010-11 as per Audited Annual Accounts which works out to 3.30 % of actual loans of ₹1590.88 crore. Since, allowable capital loans approved by the Commission is also ₹1590.88 crore, the allowable Finance charges come to ₹52.44 crore. **Accordingly, Finance charges of ₹52.44 crore are approved for FY 2010-11.**

2.15.9 **Interest on Consumer Security Deposits**

In the Tariff Order of FY 2010-11, interest on consumer deposits was not allowed for FY 2010-11 as the same was payable after 31.03.11. In the Tariff Order of FY 2011-12, PSPCL had claimed ₹176.64 crore towards interest on consumer security for FY 2010-11, against which the Commission allowed ₹82.06 crore on this account.

In the ARR Petition for FY 2014-15, PSPCL has claimed ₹88.31 crore as interest on consumer security deposits as per Audited Annual Accounts for FY 2010-11. **The Commission allows the interest of ₹88.31 crore on Consumer Security Deposits based on Audited Annual Accounts of FY 2010-11.**

2.15.10 **Capitalization of Interest and Finance Charges**

The Commission had capitalized interest and finance charges of ₹45.76 crore for FY 2010-11 in the ratio of net works in progress to total capital expenditure in Tariff Order of FY 2011-12.

In the ARR Petition for FY 2014-15, PSPCL has claimed capitalization of interest and finance charges of ₹189.90 crore based on Audited Annual Accounts for FY 2010-11. The Commission, as per past practice, capitalizes the interest excluding interest on working capital, as per Audited Annual Accounts.

Accordingly, the Commission approves capitalization of interest of ₹189.90 crore for FY 2010-11 based on the Audited Annual Accounts.

2.15.11 **Interest on Working Capital**

In the Tariff Order for FY 2010-11, the Commission approved working capital of ₹1679.56 crore with interest cost of ₹205.75 crore. In the Tariff Order for FY 2011-12, the Commission approved revised working capital of ₹1696.64 crore with interest cost of ₹199.36 crore.

The working capital requirement as per Regulations work out to ₹1771.57 crore and interest thereon comes to ₹208.16 crore by applying State Bank of India advance rate of interest as on 01.04.2010 @11.75%. The details of working capital requirement as per Regulation 30 and allowable interest thereon are depicted in Table 2.12.

Table 2.12: Interest on Working Capital Requirement - FY 2010-11

(₹ crore)

Sr. No	Particulars	Approved by the Commission
I	II	III
1.	Two months Fuel Cost	560.71
2.	One month Power Purchase Cost	419.17
3.	One month Employee Cost	243.54
5.	One month R&M Cost	32.17
4.	One month A&G Cost	7.04
6.	Maintenance Spare @15% of O&M expense	508.94
7.	Total Working Capital Required	1771.57
8.	State Bank of India advance rate of interest	11.75 %
9.	Interest on Working Capital Loan	208.16

Accordingly, the Commission approves interest of ₹208.16 crore on working capital requirement for FY 2010-11.

2.15.12 **Diversion of Capital Funds**

In the Tariff Order of FY 2010-11, the Commission had re-determined the diversion of capital funds for revenue purposes at ₹2458.56 crore based on the Board's Audited Annual Accounts for FY 2009-10. Of this amount, ₹1821.21 crore was treated as the net diversion carrying interest bearing liability. Interest @13.20% (being average rate of interest on GoP loans in FY 2009-10) on diverted funds of ₹1821.21 crore worked out to ₹240.40 crore for FY 2010-11 and was disallowed from the interest cost for FY 2010-11. The share of PSPCL out of ₹240.40 crore worked out to ₹215.63 crore based on the ratio of fixed assets of PSPCL and PSTCL as on April 01, 2010. In Tariff Order of FY 2011-12, the Commission retained its decision to disallow interest of ₹89.70 crore of PSPCL based on the ratio of disallowance in FY 2009-10. Balance disallowance of ₹125.93 crore was made to the account of GoP.

The Commission has re-determined the diversion of capital funds for revenue purposes at ₹1677.49 crore for the period 01.04.2010 to 16.04.2010, based on the Board's Audited Annual Accounts as given in Table 2.13. Applying a rate 13.50% (being average rate of Interest of GoP) interest on diverted funds of ₹1677.49 crore for 15 days works out to ₹9.31 crore. This amount is not considered for the purpose of calculation of allowable interest.

Table 2.13: Diversion of Capital Funds - FY 2010-11
[01.04.2010 to 16.04.2010]

(₹ crore)

Sr. No.	Particulars	Amount
I	II	III
1.	Net Fixed Assets	12328.52
2.	Capital Work in Progress	2021.34 *
3.	Inventory at Construction Stores	171.11
4.	Total	14520.97
5.	Less: Consumer Contribution, Grants & subsidy towards cost of capital asset	3741.35
6.	Balance Capital Base (4-5)	10779.62
7.	Requirement of Loan + Equity	10779.62
8.	Average GoP Loan for the Financial Year	225.10
9.	Other Loans	7029.62
10.	Equity	2946.11
11.	RBI Bonds	637.34
12.	GPF Utilised by Board	1618.94
13.	Actual Loans + Equity (8+9+10+11+12)	12457.11
14.	Less: Capital Base	10779.62
15.	Amount Diverted	1677.49
16.	Interest @13.50% per annum (for 15 days)	9.31

**This figure is worked out as ₹2021.34 (2226.22-204.88) crore after taking into account the Audit notes of FY 2009-10 i.e. assets of ₹204.88 crore related to Irrigation Department of Shahpur Kandi.*

The Commission retains its decision to disallow interest of ₹3.88 crore of PSPCL based on the ratio of a similar disallowance in FY 2009-10. Balance disallowance of ₹5.43 crore is to the account of GoP.

The Audited Annual Accounts for FY 2010-11 (16.04.2010 to 31.03.2011) have also been received and have been examined and analyzed to re-determine diversion of capital funds for FY 2010-11. The Commission observes that there is no diversion of capital funds for revenue purposes by PSPCL for the period 16.04.2010 to 31.03.2011.

In the view of above, Interest and Finance charges for FY 2010-11 are allowed as per Table 2.14.

Table 2.14: Interest and Finance Charges – FY 2010-11

(₹ crore)

Sr. No.	Particulars	Loans as on April 01, 2010	Receipt of Loans	Repayment of Loans and transferred to PSTCL	Loans as on March 31, 2011	Interest Approved by the Commission
I	II	III	IV	V	VI	VII
1.	Approved by the Commission (Other than WCL and GoP Loans)	6868.11	1590.88	587.77 (repayment) +887.06 (transferred to PSTCL) = 1474.83	6984.16	787.46
2.	Interest on Loans taken to replace GoP loans of ₹3022.10 crore					258.38
3.	Interest on GPF					144.69
4.	Total(1+2+3)					**1190.53**
5.	Add: Finance Charges					52.44
6.	Add: Interest on Consumer Security Deposits					88.31
7.	Gross Interest and Finance Charges (4+5+6)					**1331.28**
8.	Less: Capitalization					189.90
9.	Net Interest and Finance Charges (7-8)					**1141.38**
10.	Add: Interest on Working Capital					208.16
11.	Total Interest (9+10)					**1349.54**
12.	Less: Disallowance on account of diversion a) Board/PSPCL ₹3.88 crore b) GoP ₹5.43 crore					9.31
13.	**Net Interest and Finance Charges (11-12)**					**1340.23**

Accordingly, the Commission approves net Interest and Finance charges of ₹1340.23 crore for FY 2010-11.

2.16 Return on Equity

2.16.1 Erstwhile PSEB in its ARR for FY 2010-11 had claimed RoE @15.5% (pre-tax) to be grossed up to 23.48%, as per provisions of CERC (Terms and Conditions of Tariff) Regulations, 2009. However, the Commission had allowed the RoE of ₹412.46 crore @14% to the Successor Entities. The approved RoE segregated for generation and distribution business of PSPCL in the Tariff Order for FY 2010-11 was ₹366.47 crore.

2.16.2 In the ARR and Tariff Petition for FY 2011-12, PSPCL claimed the return on equity of ₹598.86 @15.5% (pre-tax) to be grossed up to 22.88% as provided in CERC Tariff Regulations, 2009 which was subsequently revised to ₹607.54 crore by PSPCL vide letter dated 02.02.2011. However, the Commission as in the past, allowed RoE of ₹366.47 crore on an equity of ₹2617.61 crore to PSPCL.

2.16.3 In the ARR and Tariff Petition for FY 2014-15, PSPCL has claimed RoE of ₹942.62 crore for FY 2010-11 at 15.5% on the equity capital of ₹6081.43 crore as per notification dated 24.12.2012 issued by the GoP vesting an equity capital of ₹6081.43 crore in PSPCL. Consequent upon amendment of PSERC (Terms and Condition for Determination of Tariff) Regulations, 2005 vide Notification dated 17.09.2012 the utility is to be allowed RoE @15.5% on the equity employed in creation of assets. As per Order dated 18.10.2012 of Hon'ble APTEL in Appeal No. 7, 46 and 122 of 2011 against the Tariff Orders of PSEB/PSPCL for FY 2009-10, 2010-11 and 2011-12, the Commission allowed RoE @15.5% to PSPCL for FY 2009-10. This is discussed in para 4.16 of the Tariff Order of PSPCL for FY 2013-14.

2.16.4 In accordance with the PSERC Tariff Regulations and order dated 18.10.2012 of Hon'ble APTEL in Appeal No. 7, 46 and 122 of 2011, the Commission decides that the Return on Equity of 15.5% be allowed on the actual equity employed in the creation of assets i.e. ₹6081.43 crore for the period 16.04.2010 to 31.03.2011 and on equity of ₹2946.11 crore for the period 01.04.2010 to 15.04.2010. Accordingly, RoE on equity @15.5% of ₹2946.11 crore for the period 01.04.2010 to 15.04.2010 works out to ₹18.77 crore and RoE on equity of ₹6081.43 crore @15.5% for the period 16.04.2010 to 31.03.2011 works out to ₹903.88 crore. Thus, the total RoE for FY 2010-11 works out to ₹922.65 (18.77+903.88) crore.

The Commission, thus, approves RoE of ₹922.65 crore to PSPCL for FY 2010-11.

2.17 Charges Payable to GoP on account of Power from Ranjit Sagar Dam (RSD)

2.17.1 In the ARR Petition of FY 2011-12, PSPCL had claimed ₹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 capital works of RSD which would be deposited in the Punjab Treasury for FY 2010-11. The Commission had approved this claim of ₹10.99 crore in the review.

2.17.2 In the ARR Petition of FY 2014-15, PSPCL has claimed an amount of ₹10.00 crore as maintenance charges payable to GoP for its share of power from RSD **Accordingly, the Commission allows ₹10.00 crore on this account to PSPCL for FY 2010-11.**

2.18 Subsidy Payable by GoP

2.18.1 As per the Audited Annual Accounts for FY 2010-11, total subsidy of ₹3341.34 crore has been booked by the Board/PSPCL. However, GoP has paid subsidy of ₹3375.55 crore during FY 2010-11 to PSPCL. The subsidy payable by GoP is now trued up as under:

AP Consumption: The Commission has considered AP consumption at 9656 MU on which revenue @320 paise per unit works out to ₹3089.92 crore. The consumers were not billed any amount on this account. Thus, ₹3098.54 crore (inclusive of meter rentals and service charges of ₹8.62 crore) were payable by GoP as AP subsidy. GoP vide its decision dated 22.01.2010 decided to charge ₹50/BHP/Month from AP consumers. Thereafter, GoP vide its decision dated 03.11.2010 discontinued charging the same from AP consumers. PSPCL has booked an amount of ₹419.52 crore during FY 2010-11 on account of revenue from AP Consumers on this account. Since ₹419.52 crore is the revenue which has accrued to PSPCL because of levy of such charges, **the net subsidy payable by GoP on account of AP consumption works out to ₹2679.02 (3098.54-419.52) crore.**

Scheduled Castes (SC) Domestic Supply (DS) Consumers: The Commission notes that as per the earlier decision of GoP, Scheduled Castes DS consumers with a connected load up-to 1,000 watts were to be given free power up to 200 units per month. However, as per decision dated 22.01.2010 of GoP, subsidy was reduced to 100 units per month for this category of consumer. PSPCL has claimed subsidy of ₹246.11 crore besides meter rentals and service charges of ₹14.07 crore on this account. **Thus, ₹260.18 crore (inclusive of meter rentals and service charges of ₹14.07 crore) is computed by the Commission as subsidy on this account.**

Non-SC Below Poverty Line (BPL) DS Consumers: GoP had also decided to give free supply of power upto 200 units per month to Non-SC BPL DS consumers with connected load upto 1,000 watts. However, as per decision dated 22.01.2010 of GoP, subsidy was reduced to 100 units per month for this category of consumers also. PSPCL has claimed subsidy of ₹9.10 crore inclusive of meter rentals and service charges of ₹0.66 crore on this account. **Thus, ₹9.10 crore (inclusive of meter rentals and service charges of ₹0.66 crore) is computed by the Commission as subsidy on this account.**

2.18.2 **Refund on account of rollback of tariff:** Keeping in view the Cabinet decision dated 22.01.2010, PSPCL, in its ARR Petition for FY 2011-12, has claimed an amount of ₹333.85 crore, on account of refund due to rollback of tariff increase ordered by the Commission in the Tariff Order of FY 2009-10. The decision regarding refund on account of rollback of the tariff increase for the period from 1st April, 2009 to 8th September, 2009, was conveyed to the Commission in GoP letter dated 26.03.2010. This amount was to be refunded to consumers in six equated monthly installments starting from April, 2010. **Thus, the amount of subsidy receivable from GoP on account of rollback of tariff is determined at ₹333.85 crore.**

2.18.3 **Subsidy on account of waiver of bills of DS consumers of flood affected villages:** PSPCL has claimed an amount of ₹1.63 crore as subsidy on account of waiver of bills of DS consumers of flood affected villages and this subsidy has also been booked in the Audited Annual Accounts of PSPCL for FY 2010-11. PSPCL was asked to submit documentary evidence to substantiate its claim of subsidy on account of waiver of bills of DS consumers of flood affected villages. PSPCL vide memo no. 360/DTR/Dy.CAO/241/Vol-II dated 26.02.2014 has supplied only copies of letters written by PSPCL to GoP regarding grant of subsidy on account of waiver of bills of DS consumers of flood affected villages. However, no documentary evidence regarding sanction of government for the same has been made available by PSPCL. As such, no subsidy on account of waiver of bills of DS consumers of flood affected villages is allowed for FY 2010-11.

Thus, subsidy of ₹3282.15 (2679.02+260.18+9.10+333.85) crore is now determined as payable by GoP to PSPCL for FY 2010-11, against subsidy of ₹3375.55 crore already paid.

2.19 Interest on Delayed Payment of Subsidy: The GoP has paid subsidy due to PSPCL in FY 2010-11 initially by adjusting a loan amount of ₹520.07 crore and ED of ₹269.78 crore and subsequently in staggered installments. The Commission observes that there has been delay in payment of subsidy to PSPCL in FY 2010-11. In accordance with past practice, the Commission, with a view to compensating PSPCL on this account, levies interest on the delayed payment of subsidy @8.55% (effective interest on working capital loans as per the ARR of PSPCL) which works out to ₹12.42 crore for FY 2010-11.

Accordingly, the subsidy payable for FY 2010-11, inclusive of interest on delayed payment of subsidy, determined as payable by the GoP to PSPCL is ₹3294.57 (3282.15 + 12.42) crore.

However, total amount paid toward subsidy by GoP in FY 2010-11 is ₹3375.55 crore. Accordingly there is an excess payment of ₹80.98 (3375.55-3294.57) crore on this account.

The Commission in para 2.18.2 of Tariff Order FY 2011-12 had determined the excess subsidy payment of ₹193.55 crore upto FY 2009-10. Thus the total amount of subsidy paid in excess upto FY 2010-11 works out to ₹274.53 (193.55+80.98) crore. This has been carried forward to para 9.4.

Besides this, GoP is liable to pay an amount of ₹206.01 crore (as discussed in para 2.18.2 of Tariff Order for FY 2011-12) on account of non-refund of excess interest paid by PSPCL to GoP. Also as per para 2.15.12, the amount payable by GoP to PSPCL on account of share of disallowance for diversion of capital funds for revenue purposes has been worked out to ₹5.43 crore. Thus the total amount payable to PSPCL by GoP works out to ₹211.44 (206.01+5.43) crore. This is carried forward to para 9.4.

2.20 Prior Period Expenses

2.20.1 In its ARR Petition for FY 2014-15, PSPCL has claimed prior period expenses of ₹384.43 crore (₹20.87 crore as prior period income and ₹405.30 crore as prior period expenses) being payments pertaining to the previous years but made during FY 2010-11. This includes ₹305.17 crore (₹7.50 crore as prior period income and ₹312.67 crore as prior period expenses) pertaining to the period

01.04.2010 to 16.04.2010 and ₹79.26 (₹13.37 crore as prior period income and ₹92.63 crore as prior period expenses) crore for the period 16.04.2010 to 31.03.2011.

2.20.2 Prior period income includes sale of power of (-) ₹16.90 crore, interest income of ₹0.27 crore, excess provision for depreciation of ₹1.75 crore, excess provision for interest and finance charges of ₹2.83 crore, other excess provision of ₹13.52 crore and other income of ₹19.40 crore.

2.20.3 Prior period expenses include purchase of power of ₹358.01 crore, fuel related losses and expenses of ₹3.70 crore, operating expenses of ₹2.53 crore, employee costs of ₹8.09 crore, depreciation un-provided in previous years of ₹27.72 crore, interest and finance charges of ₹3.56 crore, Administrative expenses of ₹1.46 crore and freight and other purchase related expenses of ₹0.23 crore.

2.20.4 As regards sale of power amounting to (-) ₹16.90 crore is concerned, PSPCL has supplied the division wise detail of amount booked under this head but the period to which this income pertains has not been indicated. As such, Commission finds no merit in the claim of PSPCL and no amount is allowed on this account as prior period income.

2.20.5 As regards 'other excess provision' of ₹13.52 crore and 'other income' of ₹19.40 crore is concerned, PSPCL has not provided any details. As Commission is allowing 'other income' as per the Audited Annual Accounts of PSPCL, it decides to treat 'other excess provision' of ₹13.52 crore and 'other income' of ₹19.40 crore as prior period income. Thus, total receipts on account of prior period work out to ₹32.92 (13.52+19.40) crore which the Commission approves as prior period income.

2.20.6 As regards interest income for prior period of ₹0.27 crore, excess provision for interest and finance charges of ₹2.83 crore and interest and finance charges of ₹3.56 crore is concerned, the Commission is of the view that it has been allowing interest and finance charges based on the investment plan approved by the Commission. Further, PSPCL has not submitted any detail regarding interest income/expenses and the period to which these pertain. As such, Commission finds no merit in the claim of PSPCL and no amount is allowed on this account as prior period income.

2.20.7 As regard excess provision of depreciation of ₹1.75 crore and depreciation un-provided in previous years of ₹27.72 crore is concerned, the Commission is of the view that it has allowed depreciation on the sub-head wise assets and also disallowed the depreciation provided in excess of 90% of original cost of assets. Further, PSPCL has not submitted any detail regarding excess provision for depreciation and depreciation un-provided for previous years and the period to which this depreciation pertains. As such, Commission finds no merit in the claim of PSPCL and no amount is allowed on this account.

2.20.8 As regard purchase of power amounting to ₹358.01 crore is concerned, PSPCL has provided the year wise & plant wise detail of expenses booked under prior period and stated that the amount booked relates to bills received during FY 2010-11, but pertains to the period prior to FY 2010-11 due to issuance of CERC order 2004-09 and 2009-14. Considering the detail, the Commission allows an amount of ₹358.01 crore under the head prior period expenses relating to purchase of power.

2.20.9 As regards fuel related losses and expenses amounting to ₹3.70 crore is concerned, these expenses are disallowed as the Commission has allowed the fuel cost for the preceding years on normative basis.

2.20.10 As regards employee cost amounting to ₹8.09 crore is concerned, PSPCL has not intimated the period to which the expenses on account of employee cost pertain. These expenses are disallowed assuming that these expenses pertain to the period during which the employee cost of the Board remained capped.

2.20.11 As regard operating expenses of ₹2.53 crore, Administrative Expenses of ₹1.46 crore and freight and other purchase related expenses amounting to ₹0.23 crore booked under prior period expenses is concerned, PSPCL has not intimated the period to which these expenses pertain. These expenses are disallowed assuming that these expenses pertain to the period during which the R&M and A&G expenses of the Board were allowed on normative basis.

Accordingly, the Commission approves net prior period expenses of ₹325.09 (358.01-32.92) crore for FY 2010-11.

2.21 Other Debits and extraordinary items

2.21.1 The Audited Annual Accounts of the erstwhile Board and PSPCL for FY 2010-11 show ‘other debits and extraordinary items’ at ₹41.49 crore (₹16.63 crore for period 01.04.10 to 16.04.2010 and ₹24.86 crore for the period 16.04.2010 to 31.03.2011). However, as per Audit Note appended to the Annual Statement of Accounts for the period 01.04.2010 to 16.04.2010, these are understated by

₹9.14 crore. Thus, the total Other Debits and Extraordinary Items work out to ₹50.63 (41.49+9.14) crore.

Therefore, the Commission allows other debits and extraordinary items of ₹50.63 crore for FY 2010-11 on this account.

2.22 Transmission Charges payable to PSTCL

The Commission in its Order dated 09.05.2011, passed on the ARR of PSTCL for FY 2010-11 has determined ₹401.97 crore as the Transmission charges payable to PSTCL by PSPCL. Accordingly, this is being included in the ARR of PSPCL for FY 2010-11.

2.23 Non-Tariff Income

2.23.1 In the Tariff Order for FY 2010-11, the Commission approved Non-Tariff income of ₹448.66 crore. This was increased to ₹565.95 crore in the review for FY 2010-11 by the Commission based on the revised estimates of the PSPCL.

2.23.2 In ARR & Tariff Petition for FY 2014-15, PSPCL has shown Non-Tariff Income of ₹562.95 crore for FY 2010-11 as per the Audited Annual Accounts. This includes an amount of ₹142.74 crore on account of late payment surcharge. In the petition, PSPCL has prayed that the late payment surcharge be not treated as part of the Non-Tariff Income as PSPCL's working capital requirements are being determined as per norms and there is no compensation to the PSPCL on account of interest accrued on delayed payments against bills issued and including the Late Payment Surcharge in Non-Tariff/ Other Income adversely impacts the cash flow position of the PSPCL. The Commission observes that receipts on account of Late Payment Surcharge are to be treated as Non-Tariff Income as per Regulation 34 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Moreover, interest on working capital is allowed to the utility on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on normative basis. So the plea of the utility not to treat the late payment surcharge as part of the Non-Tariff Income finds no merit.

2.23.3 The Commission also observes that as per Audit Note annexed to Audited Annual Accounts for the period 01.04.2010 to 16.04.2010, other income has been understated by ₹29.97 crore being deposits received under Self Finance Scheme (SFS)-1990 relating to the period prior to March 2000 which were refundable after 5 years. The claimant did not lodge any claim for refund till date even after completion of work. Thus the total Non-Tariff Income of the erstwhile Board and

PSPCL for FY 2010-11 works out to ₹592.92 (562.95+29.97) crore. In addition, the subsidy of ₹8.62 Crore for AP Consumers (as revised in the reply to deficiencies by the PSPCL) and ₹14.73 Crore for SC and Non-SC BPL Domestic Supply Consumers has been received from GoP on account of Meter Rentals and Service Charges which also forms part of Non-Tariff income for FY 2010-11. Taking these receipts into account, the Non-Tariff income of PSPCL for FY 2010-11 works out to ₹616.27 (592.92+8.62+14.73) crore.

The Commission accordingly, approves Non-Tariff Income of ₹616.27 crore for FY 2010-11.

2.24 Revenue from sale of power

2.24.1 The Commission approved the Revenue from tariff at ₹12740.82 crore in the Tariff Order 2010-11. In the review, the revenue from sale of power was revised to ₹13992.74 crore inclusive of GoP Subsidy.

2.24.2 As per ARR Petition for FY 2014-15, net revenue from sale of power is ₹9760.90 crore. Besides this, the PSPCL had received subsidy of ₹3341.34 crore. As such, total amount works out to ₹13102.24 (9760.90+3341.34) crore.

2.24.3 However, Commission observed that there was a mis-match of revenue between the revenue figures approved by the Commission in the review and the actual revenue realised during FY 2010-11 as per the Audited Annual Accounts. The PSPCL was asked to explain the reasons for the mis-match in revenue. PSPCL vide letter no. 358/DTR/Dy.CAO/241/Vol-II dated 25.02.2014 has explained the mis-match in revenue as under:

1. *"It has come to the notice that the AP subsidy in the accounts has been under-stated by ₹105.41 crore. While projecting the receivable from AP consumers, the amount has been considered as ₹520.60 crore based on the provisional accounts, whereas the actual figure received was ₹415.19 crore. Accordingly the subsidy from GoP for FY 2010-11 works out to ₹3446.75 crore instead of ₹3341.34 crore. The revised format no. 35 has already been submitted vide this office memo no. 350/DTR/Dy.CAO/241/Vol-II dated 24.02.2014.*
2. *Power factor incentives are being given to consumers. Similarly, power factor surcharge is being charged from the consumers. Further, demand surcharge/ voltage surcharge etc. are also being charged from the consumers. The net payment on these accounts comes to ₹22.90 crore. This is also one of the reasons for mismatch in the revenue.*

3. *Against theft units of 508 MU revenue of ₹61.16 crore only is accounted for, whereas the actual revenue at an average rate of ₹4.00 works out to approximately ₹200.00 crore. Difference of ₹139.00 (200.00-61.00) crore is due to the reason that amounts are challenged by various categories of consumers and some consumers may have deposited only 1/3rd of the assessed amount. It is further submitted that Hon'ble PSERC considers the units on account of theft of energy for calculating the T&D losses. It is further submitted that this principle is consistently being adopted/ followed by the Hon'ble PSERC from year to year in the past.*
4. *As revenue from MMC has been shown under approved revenue which includes some amount of MMC with units, therefore, the net units consumed against MMC are required to be deducted category wise to compare the approved sale & actual sales. Therefore an adjustment is required with regard to incremental MMC units of 286.38 MU to compare the mis-match.*
5. *There is a security deposit from consumers outstanding as on 31.03.2011 amounting to ₹1581.45 crore as per Audited Accounts of FY 2010-11. The interest payable to the consumers comes to ₹183.79 crore. It is submitted that interest on security deposit is given to the consumers at the first instance by giving credit in the energy bills and thereafter making adjustment by debit to interest on security and credit to Revenue Account. However, interest on security is given to the consumers through energy bills and in some of the cases the possibility of non-debit of interest on security account per contra credit to revenue cannot be ruled out as there are about 600 No. DS sub-divisions in PSPCL and 100% accuracy cannot be assured. This fact can be verified to some extent where interest payable to consumers comes to the tune of Rs.183.79 crore and the interest paid on security comes to Rs.88.31 crore as per audited P&L a/c of PSPCL for FY 2010-11."*

The Commission has considered the submission of the utility and the observations of the Commission on the issues raised are detailed below:-

1. The Commission is of the view that the PSPCL has taken ₹419.52 crore in the revenue from SOP in the actual revenue received from AP consumers during the year 2010-11. As such, the plea of the utility that an amount of ₹520.60 crore has been considered as revenue from AP consumers instead of ₹419.52 crore, is not acceptable.

2. The Commission accepts the plea of PSPCL that a mis-match of ₹22.90 crore is on account of deduction of said amount from revenue from SOP in the actual revenue received on account of power factor incentives, power factor surcharge and demand surcharge/ voltage surcharge.
3. The Commission finds no logic in the plea of PSPCL that amounts are challenged by the various categories of consumers and some consumers may have deposited only 1/3rd of the assessed amount as PSPCL may be recovering the remaining 2/3rd amount in subsequent years. Moreover assessment & recovery is a continuous process. So, the plea of the utility is not acceptable.
4. The Commission accepts the plea of PSPCL and decides that the incremental MMC amount of ₹123.28 crore is deductable from assessed revenue from sale of power.
5. The Commission accepts the plea of PSPCL that interest on security is to be given to the consumers through energy bills. But in some of cases the possibility of non debit of interest on security account per contra credit to revenue cannot be ruled out. However, it does not effect the revenue from sale of Power assessed by the Commission

Thus, PSPCL has been able to explain the mis-match of revenue to the extent of ₹146.18 (22.90+ 123.28) crore.

The Commission, approves the revenue from sale of power as ₹13415.32 crore for energy sales of 32911 MU for FY 2010-11 as detailed in Table 2.15.

Table 2.15: Revenue from Sale of Power for FY 2010-11

Sr. No.	Description	Actual as per Audited Annual Accounts		As approved by the Commission		
		Energy Sale (MU)	Revenue (₹crore)	Energy Sale (MU)	Tariff Rate (Paise/Unit)	Revenue (₹crore)
I	II	III	IV	V	VI	VII
1.	Domestic					
a)	0-100 units			4561	311	1418.47
b)	101-300 units			2383	452	1077.12
c)	Above 300 units			1225	478	585.55
	Sub-total	**8169**	**2584.10**	**8169**		**3081.14**
2.	Non-Residential Supply	2472	1157.69	2472	519	1282.97
3.	Public Lighting	132	82.35	132	510	67.32
4.	Industrial Consumers					
a)	Small Power	840	312.66	840	414	347.76
b)	Medium Supply	1770	741.82	1770	458	810.66
c)	Large Supply	8538	3512.84	8538	458	3910.40
5.	Bulk Supply & Grid Supply					
a)	HT	486.85		487	461	224.51
b)	LT	38.15		38	489	18.58
	Sub-total	**525**	**235.85**	**525**		**243.09**
6.	Railway Traction	144	63.73	144	541	77.90
7.	Common Pool	303	111.16	303		111.16
8.	Outside State	438	87.41	362		87.41
9.	AP	10152	419.52	9656	320	3089.92 *
10.	Add: PLEC & MMC		451.77			451.77
11.	**Total**	**33483**	**9760.90**	**32911**		**13561.50**
12.	Add: Subsidy accrued during the FY 2010-11 as per Audited Annual Accounts for the year.		3341.34			
13.	Effect on revenue as per reply of PSPCL determined in para 2.24.3 of this Tariff Order.					-146.18
14.	**Grand Total**	**33483**	**13102.24**	**32911**		**13415.32**

** Includes ₹419.52 crore as revenue from AP consumers received by PSPCL.*

2.25 Carrying over of Cumulative deficit

As per Tariff Order for FY 2011-12, there is a consolidated gap of ₹2162.89 crore upto FY 2009-10. As per Audited Annual Accounts of Erstwhile Board for the period upto 31.03.2010, there was a revenue deficit of ₹9712.75 crore, which was increased to ₹10180.35 crore upto 16.04.2010 i.e. the date of unbundling of the Board. However in the Punjab Power Sector Reforms Transfer Scheme, 2010 notified by GoP on 16.04.2010, which was further amended vide notification dated 24.12.2012, the cumulative revenue deficit of ₹10180.35 crore of Erstwhile Board, at the time of re-vesting of assets and liabilities of the Board by GoP, has been shown as nil as per the Opening Balance Sheets of the successor companies i.e. PSPCL and PSTCL. It indicates that the revenue deficit of ₹10180.35 crore has been written off as per notification of Punjab Power Sector Reforms Transfer Scheme, 2010. As the entire deficit of the Erstwhile Board upto the date of unbundling i.e. 16.04.2010 has been written off, so the Commission finds no justification in carrying forward the cumulative deficit of ₹2162.89 crore determined upto FY 2009-10 in the Tariff Order for FY 2011-12 which is a part of the revenue deficit of ₹10180.35 crore. So, the Commission is not carrying forward the cumulative deficit of ₹2162.89 crore to the subsequent years.

2.26 True up of ARR for FY 2010-11

In view of the above analysis, the trued up revenue requirement for FY 2010-11 is as per details given in Table 2.16.

Table 2.16: Revenue Requirement - FY 2010-11

(₹ crore)

Sr. No.	Item of Expense	Proposed by PSPCL in Revised Estimates	Approved by the Commission in the Review	Actual as per Audited Annual Accounts	Finally approved by the Commission
I	II	III	IV	V	VI
1.	Cost of fuel	3457.92	3254.01	3397.00	3364.24
2.	Cost of power purchase	5427.36	5668.81	5493.14	5030.01
3.	Employee cost	3487.71	2482.37	3181.39	2922.50
4.	R&M expenses	362.12	360.28	396.75	385.99
5.	Admin & General Expenses	81.92	79.80	84.44	84.44
6.	Depreciation	802.27	801.45	727.25	661.28
7.	Interest charges	1803.47	1086.34	1664.69	1340.23
8.	Return on Equity	598.86	366.47	942.62	922.65
9.	Transmission charges payable to PSTCL	647.30	401.97	401.97	401.97
10.	Charges payable to GoP on Power from RSD	10.99	10.99	0.00	10.00
11.	Prior period expenses/(Income)			384.43	325.09
12.	Other Debits and Extraordinary items			41.49	50.63
13.	**Total Revenue Requirement**	**16679.93**	**14512.49**	**16715.18**	**15499.03**
14.	Add: Incentive on account of lower T&D losses			0.00	148.49
15.	Less: Disincentive on account of lower thermal generation			0.00	182.02
16.	Gross Revenue Requirement				15465.50
17.	Less: Non-Tariff Income	492.07	565.95	562.95	616.27
18.	**Net Revenue Requirement**	**16187.86**	**13946.54**	**16152.23**	**14849.23**
19.	Less : Revenue from Existing Tariff	12742.19	13992.74	13102.24	13415.32
20.	**Gap : Surplus (+)/ Deficit (-) for FY 2010-11**	**(-) 3445.67**	**(+) 46.20**	**(-)3049.99**	**(-) 1433.91**
21.	Add: Consolidated Gap: Surplus (+)/ Deficit (-) upto FY 2009-10	(-) 1978.05	(-) 2162.89	(-)2162.89	0.00
22.	Carrying cost on gaps			433.33	0.00
23.	**Net Gap: Surplus (+) / Deficit (-)**	**(-) 5423.72**	**(-) 2116.69**	**(-) 5646.21**	**(-) 1433.91**

True up for the FY 2010-11 indicates a revenue gap of ₹1433.91 crore. This deficit is being carried forward to the next financial year.

Chapter 3
True-up for FY 2011-12

3.1 Background

The Commission approved the ARR and Tariff for FY 2011-12 in its Tariff Order dated 09.05.2011, which was based on the costs and revenues estimated by the Punjab State Power Corporation Limited (PSPCL). PSPCL had furnished revised estimates for FY 2011-12 during the determination of ARR and Tariff for FY 2012-13, in which there were major differences in certain items of costs as well as projected revenues both in the revised estimates furnished by PSPCL and the approvals granted by the Commission. The Commission, in its Tariff Order of FY 2012-13, reviewed its earlier approvals and re-determined the same based on the revised estimates made available by PSPCL. PSPCL, in its ARR Petition for FY 2013-14, prayed for 'Provisional True up' for FY 2011-12 as per Provisional Annual Accounts of the year. However, as per provisions under Tariff Regulations, True up can be undertaken only after the Audited Annual Accounts are made available. As such, the Commission had decided to undertake the True up for FY 2011-12 along with the PSPCL ARR Petition for FY 2014-15, when the Audited Annual Accounts for FY 2011-12 were likely to be made available.

PSPCL furnished the Audited Annual Statement of Accounts (Audited Annual Accounts) for FY 2011-12 in the ARR for FY 2014-15. The Audited Annual Accounts of PSPCL for FY 2011-12 did not contain the audited figures of energy sales, generation and power purchase. As discussed in para 2.1 of this Tariff Order, the Commission decides to take the energy sales, generation and power purchase figures as submitted by PSPCL in the ARR petition for FY 2014-15 into consideration for true up of FY 2011-12.

The figures supplied by PSPCL again vary in parts with the figures taken into account in the Review for FY 2011-12 by the Commission. This Chapter contains a final true-up of FY 2011-12, based on the Audited Annual Accounts and energy sales, generation and power purchase figures as submitted by PSPCL in the ARR for FY 2014-15.

3.2 Energy Demand (Sales)

3.2.1 The sales projected by PSPCL during the determination of ARR for FY 2011-12, sales approved by the Commission in the Tariff Order of FY 2011-12, revised estimates furnished by PSPCL during determination of ARR of FY 2012-13, sales approved by the Commission in review and sales figures now given by the PSPCL are summarized in Table 3.1.

Table 3.1: Energy Sales – FY 2011-12

(MU)

Sr. No.	Category	Projected by PSPCL during determination of ARR FY 2011-12	Approved by the Commission in T.O. FY 2011-12	Revised Estimates by PSPCL during determination of ARR FY 2012-13	Approved by the Commission in Review	Energy Sales as in ARR of FY 2014-15	Now approved by the Commission
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**
1.	Domestic	8836	8854	8945	8934	8828	8828
2.	Non-Residential	2618	2623	2728	2634	2689	2689
3.	Small Power	835	835	899	863	883	883
4.	Medium Supply	1752	1755	1847	1768	1822	1822
5.	Large Supply	8600	9607	7920	7920	8994	8994
6.	Public Lighting	136	137	132	137	140	140
7.	Bulk Supply	537	539	562	544	550	550
8.	Railway Traction	181	181	144	163	138	138
9.	**Total metered Sales (within the State)**	**23494**	**24531**	**23177**	**22963**	**24044**	**24044**
10.	Common Pool	302	302	313	313	299	299
11.	Outside State sales	116	0	367	238	445	359
12.	**Total metered Sales (9+10+11)**	**23912**	**24833**	**23857**	**23514**	**24788**	**24702**
13.	AP consumption	12253	10843	10993	10479	10256	9455
14.	**Total Sales (12+13)**	**36165**	**35676**	**34850**	**33993**	**35044**	**34157**

PSPCL has furnished the total sales at 35044 MU for FY 2011-12 as per ARR for FY 2014-15, which are as per column VII of Table 3.1.

3.2.2 **Metered Sales:**

The Commission estimates sales for FY 2011-12 on the basis of sales figures supplied by PSPCL. The Commission, thus, approves metered sales within the State at 24044 MU.

Further, PSPCL has submitted 445 MU of energy sales under the head "Outside State sale" which consist of 306 MU of sale through power exchange, 86 MU as free share of Himachal Pradesh (HP) in RSD and 53 MU as royalty of HP in

Shanan. The Commission considers the Outside State sale of 359 MU (445-86) only as per the practice being followed in past Tariff Orders. The free share of HP in RSD has been taken into account while determining net generation from PSPCL's own hydel generating stations. Further, the Commission considers common pool sale of 299 MU on the basis of figures as given in the ARR for FY 2014-15.

Metered sales now approved by the Commission are as shown in column VIII of Table 3.1.

3.2.3 AP Consumption

As against 12253 MU AP consumption projected by PSPCL in its ARR for FY 2011-12, the Commission, in its Tariff Order for FY 2011-12, approved AP consumption of 10843 MU after applying an increase of 5% over the consumption of 10327 MU approved by the Commission for FY 2010-11 in the Tariff Order for FY 2011-12. In the ARR petition for FY 2012-13, PSPCL had revised the estimate of AP consumption to 10993 MU for FY 2011-12. The Commission approved the revised AP consumption of 10479 MU for FY 2011-12, in the Tariff Order for FY 2012-13. PSPCL has now submitted the energy sale to AP category as 10256 MU, in the ARR for FY 2014-15.

As discussed in para 2.2.3 of this Tariff Order, the Commission decides to estimate the AP consumption on the basis of energy pumped for AP supply during FY 2011-12. On the basis of the information supplied by PSPCL in the ARR for FY 2014-15, the Commission has estimated AP consumption during FY 2011-12, as 9455 MU, as worked out in Table 3.2.

Table 3.2: AP Consumption for FY 2011-12

(MU)

Sr. No.	Description	Energy
(i)	Energy pumped during April, 2011 to Mar., 2012 in case of 3-phase 3-wire AP feeders	10396.42
(ii)	Energy pumped during April, 2011 to Mar., 2012 in case of 3-phase 4-wire AP feeders	89.00 [a]
(iii)	Energy pumped during April, 2011 to Mar., 2012 in case of Kandi area feeders feeding AP load	388.11 [b]
(iv)	Total energy pumped during FY 2011-12 for AP supply {(i)+ (ii)+ (iii)}	10873.53
(v)	Less losses @13.96% (19-2.5-(15% of 16.92)) MU {(iv)x13.96%}	1517.94 [c]
(vi)	Net AP consumption for FY 2011-12 {(iv) - (v)}	9355.59
(vii)	AP consumption for load of 83.19 [d] MW running on Urban Feeders [not included above at Sr.No.(vi)] {(vi)x 83.19/7841.09}	99.26 [e]
(viii)	**Total AP consumption for FY 2011-12 {(vi)+ (vii)}**	**9454.85**

(a) *Calculated by multiplying the number of 3-phase 4-wire AP feeders for each month with AP consumption per feeder for that month in case of 3-phase 3-wire AP feeders.*
(b) *Calculated by assuming the AP load on Kandi area feeders feeding AP load as 30%.*
(c) *The loss @13.96% (11kV and below)for FY 2011-12 has been computed from Tariff Order for FY 2011-12.*
(d) *As per Annexure 2/7 A of PSPCL's letter no. 2946 dated 31.12.2013.*
(e) *Total Load of AP unmetered connections is 7841.09 MW ending March 2012 as per information supplied by PSPCL in monthly data vide letter no. 2430 dated 08.06.2012.*

Thus, the Commission approves the AP Consumption of 9454.85 MU (say 9455 MU) for FY 2011-12.

3.3 Transmission and Distribution Losses (T&D Losses)

PSPCL in its ARR Petition for FY 2011-12, projected the Transmission and Distribution (T&D) losses of 17%. In the Tariff Order for FY 2010-11, the Commission has fixed the T&D losses at 19% for FY 2011-12. The Commission 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.

PSPCL, in its ARR Petition for FY 2012-13, projected the T&D losses for FY 2011-12 at 17.50%, considering AP consumption of 10993 MU for FY 2011-12. PSPCL, in its ARR & Tariff Petition for FY 2012-13, had submitted that the losses for FY 2011-12 had 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 was further submitted by PSPCL that though the investment outlay considered was sufficient for the purpose to achieve the set target, however, since the investment had recently taken place, the capital works would need time to achieve the desired results. PSPCL had also submitted the details of the initiatives taken to reduce the T&D losses in the form of compliance to the directives given by the Commission in the Tariff Order for FY 2011-12. However, the Commission decided to retain T&D losses at 19.00% as fixed in the Tariff Order for FY 2011-12, in the review of FY 2011-12 carried out in the Tariff Order for FY 2012-13.

PSPCL, in its ARR for FY 2014-15, has now intimated the transmission and distribution losses for FY 2011-12 at 17.25%, arrived at in accordance with the actual energy sales, energy purchased and own generation. PSPCL has submitted that the T&D losses target for FY 2011-12 has been over achieved by 1.75%, by achieving the loss level of 17.25% as against the target of 19.00% fixed by the Commission. PSPCL has stated that the loss reduction achieved is on account of various loss reduction measures initiated by PSPCL. It has claimed that it was an indication of the significant technical and operational efficiency efforts initiated by it to reduce losses in the LT networks/ consumer categories.

Keeping the overall T&D loss level of 19% as approved for FY 2011-12 in the Tariff Order for FY 2011-12 and based on the approved transmission loss of 2.5% for PSTCL for FY 2011-12 in Tariff Order for PSTCL for FY 2014-15, the targetted distribution loss (66 kV and below) for PSPCL for FY 2011-12 has been worked out to 16.92%, which the Commission approves.

3.4 PSEB'S Own Generation

3.4.1 **Thermal Generation:** The station-wise generation projected by PSPCL during the determination of ARR by the Commission for FY 2011-12, generation approved by the Commission in the Tariff Order, revised estimates furnished by PSPCL during determination of ARR of FY 2012-13, generation approved by the Commission in the review, figures now supplied by PSPCL in the ARR for FY 2014-15 and generation now approved by the Commission are given in Table 3.3.

Table 3.3: Thermal Generation – FY 2011-12

(MU)

Sr. No.	Thermal Station	Projected by PSPCL during determination of ARR FY 2011-12		Approved by the Commission in T.O. FY 2011-12		Revised Estimates by PSPCL during determination of ARR FY 2012-13		Approved by the Commission in Review		Generation as submitted by PSPCL in ARR of FY 2014-15		Now approved by the Commission	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
1A.	GNDTP Unit I & II	2296	2043	2332	2075	1403	1244	1572.34	1399	1883	1673	1883	1676
1B.	GNDTP Unit III & IV					478	417	294.21	262				
2.	GGSSTP	9750	8921	9959	9112	9300	8509	9653.06	8833	9564	8757	9564	8751
3.	GHTP	7035	6402	7628	6941	7044	6437	7386.07	6758	7621	7021	7621	6973
	Total	**19081**	**17366**	**19919**	**18128**	**18225**	**16607**	**18905.68**	**17252**	**19068**	**17451**	**19068**	**17400**

Plant-wise generation figures supplied by PSPCL in the ARR for FY 2014-15 and the generation figures validated by the Commission have been taken into account.

Accordingly, the Commission approves gross thermal generation for FY 2011-12 at 19068 MU.

Auxiliary Consumption

The auxiliary consumption projected by PSPCL during determination of ARR by the Commission for FY 2011-12, auxiliary consumption approved by the

Commission in the Tariff Order, revised estimates furnished during determination of ARR of FY 2012-13, auxiliary consumption approved by the Commission in the review, figures supplied by PSPCL with the ARR for FY 2014-15 and auxiliary consumption now approved by the Commission are given in Table 3.4.

Table 3.4: Auxiliary Consumption – FY 2011-12

Sr. No.	Thermal Station	Projected by PSPCL during determination of ARR FY 2011-12	Approved by the Commission in T.O. FY 2011-12	Revised Estimates by PSPCL during determination of ARR FY 2012-13	Approved by the Commission in Review	Given in ARR of FY 2014-15	Now approved by the Commission
I	II	III	IV	V	VI	VII	VIII
1.	GNDTP	11.00%	11.00%	11.70%	11.00%	11.16%	11.00%
2.	GGSSTP	8.50%	8.50%	8.50%	8.50%	8.44%	8.50%
3.	GHTP	9.00%	9.00%	8.62%	8.50%	7.87%	8.50%

It is observed that actual auxiliary consumption now reported by PSPCL is marginally higher for GNDTP and lower for GGSSTP and GHTP than the approved levels. The Commission observes that the auxiliary consumption of GGSSTP and GHTP has been approved on normative basis. Regarding auxiliary consumption at GNDTP, PSPCL has submitted that it has deployed all possible means to reduce the auxiliary consumption of the plant, which have resulted in reduction of auxiliary consumption from 11.78% in FY 2010-11 to 11.16% in FY 2011-12. PSPCL has prayed that considering the fact that GNDTP in an old generating station whose units have already out-lived their useful life of 25 years, the auxiliary consumption at the actual at 11.16% may be approved. PSPCL has further submitted that the various factors contributing to higher auxiliary consumption of GNDTP and relaxations provided by other SERCs in similar situations based on ground realities as detailed for True-up for FY 2010-11 may be taken into consideration while deciding the issue. As discussed in para 2.4.1 of this Tariff Order, the Commission finds no justification in fixing auxiliary consumption higher than 11.00%.

In view of the above, the Commission approves the auxiliary consumption of 11.00%, 8.50% and 8.50% for GNDTP, GGSSTP and GHTP respectively for FY 2011-12.

The net thermal generation on this basis works out to 17400 MU as shown in column XIV of Table 3.3.

The Commission further observes that PSPCL has not been able to achieve gross and net thermal generation originally approved in the Tariff Order for FY

2011-12 in case of GNDTP, GGSSTP and GHTP. This is discussed further in para 3.10.

3.4.2 **Hydel Generation:** The station-wise generation submitted by PSPCL to the Commission during determination of ARR and Tariff for FY 2011-12, generation approved by the Commission in the Tariff Order, revised estimates furnished by PSPCL during determination of ARR of FY 2012-13, generation approved by the Commission in review and generation figures now furnished by PSPCL and those accepted by the Commission are given in Table 3.5.

Table 3.5: Hydel Generation – FY 2011-12

(MU)

Sr. No.	Station	Projected by PSPCL during determination of ARR FY 2011-12	Approved by the Commission in T.O. FY 2011-12	Revised Estimates by PSPCL during determination of ARR FY 2012-13	Approved by the Commission in Review	Generation as submitted by PSPCL in ARR FY 2014-15	Now approved by the Commission
I	II	III	IV	V	VI	VII	VIII
1.	Shanan	527	528	520	521	517	517
2.	UBDCI Stage I	368	368	172	147	146	146
	UBDCI Stage II			190	151	149	149
3.	RSD	1360	1360	1643	1845	1928	1928
4.	MHP	1127	1127	1202	1321	1358	1358
5.	ASHP	658	658	772	760	807	807
6.	Micro hydel	10	10	8	**5**	4	4
7.	**Total own generation (Gross)**	**4050**	**4051**	**4507**	**4752**	**4909**	**4909**
8.	Auxiliary consumption and Transformation losses	47	149	168	177	48	41*
9.	HP share in RSD					-	86**
10.	**Total own generation (Net)**	**4003**	**3902**	**4339**	**4575**	**4861**	**4782**
11.	**PSPCL share from BBMB**						
(a)	PSPCL share (Net)	4047	4047	4487	4487	4749	4749
(b)	Common pool share (Net)	303	302	313	313	299	299
12.	**Share from BBMB (Net)**	**4350**	**4349**	**4800**	**4800**	**5048**	**5048**
13.	**Total hydro (Net) (Own + BBMB)**	**8352**	**8251**	**9139**	**9375**	**9909**	**9830**

* *Transformation losses @0.5% (25 MU), auxiliary consumption @0.5% for RSD generation of 1928 MU and UBDC stage -1 generation of 146 MU (having static exciters) and @0.2% for others (16 MU).*

** *Free HP share in RSD (86 MU).*

The actual gross hydel generation from PSPCL's own hydel stations for FY 2011-12 is 4909 MU and the Commission accepts the same. While calculating the net generation, PSPCL has not deducted the free HP share in RSD. In line with the principle being followed in such sales, the Commission has worked out net hydel generation by deducting free HP share in RSD along with the auxiliary consumption and transformation losses. HP royalty from Shanan has been considered as Outside State sale in para 3.2. Net hydel generation for FY 2011-12, thus works out to 4782 MU. The actual net availability from BBMB is 5048 MU, including common pool share, which the Commission accepts.

The Commission, therefore, approves net hydel generation for FY 2011-12 at 4782 MU from PSPCL's own generating stations and 5048 MU as net share from BBMB as shown in Table 3.5.

3.5 Power Purchase

The Commission in its Tariff Order of FY 2011-12 approved net power purchase of 17595 MU (net). During determination of ARR of FY 2012-13, PSPCL furnished revised estimates for power purchase of 16228 MU (net). But, in review, the Commission determined the net power purchase of 15210 MU. PSPCL has now submitted power purchase during FY 2011-12 as 14835 MU (net), in the ARR for FY 2014-15. This matter is further discussed in para 3.8.

3.6 Energy Balance

3.6.1 The details of energy requirement and availability for FY 2011-12 approved by the Commission in review in the Tariff Order of FY 2012-13 and figures now furnished by PSPCL in the ARR are given in Table 3.6. The energy balance, including T&D losses along with sales and availability now approved by the Commission is depicted in column VI of Table 3.6.

Table 3.6: Energy Balance – FY 2011-12

(MU)

Sr. No.	Particulars	Approved by the Commission in T.O. FY 2012-13	As per PSPCL in ARR FY 2014-15	Now approved by the Commission	Sales & actual T&D losses as per approved energy available
I	**II**	**III**	**IV**	**V**	**VI**
A) Energy Requirement					
1.	Metered Sales	22963	24044	24044	24044
2.	Sales to Agriculture Pumpsets	10479	10256	9455	9455
3.	Total Sales within the State	**33442**	**34300**	**33499**	**33499**
4.	Loss percentage	19.00%	17.25%	19.00%	19.10%
5.	T&D losses	7844	7151	7858	7908
6.	Sales to Common pool consumers	313	299	299	299
7.	Outside State Sales	238	445	359	359
8.	**Total requirement**	**41837**	**42195**	**42015**	**42065**
B) Energy Available					
9.	Own generation (Ex-bus)				
10.	Thermal	17252	17451	17400	17400
11.	Hydro(Including share from BBMB and common pool consumers	9375	9909	9830	9830
12.	Purchase net	15210	14835	14835	14835
13.	**Total Available**	**41837**	**42195**	**42065**	**42065**

3.6.2 The total energy available with PSPCL works out to 42065 MU (net), considering all purchases and own generation (net). With this energy available, the Commission works out the T&D losses as 19.10%. The difference of 50 MU (net) between energy requirement and energy availability is owing to the underachievement of T&D loss target as discussed in para 3.3 and depicted in column V & VI of Table 3.6. Higher T&D loss over and above the level approved by the Commission has resulted in increased net power purchase to the extent of 50 (7908-7858) MU. The matter is further discussed in para 3.9.

The Commission approves the total energy requirement for FY 2011-12 at 42015 MU after retaining T&D losses at 19%.

3.7 Fuel Cost

3.7.1 In its Tariff Order for FY 2011-12, the Commission approved the fuel cost as ₹3588.17 crore for a gross thermal generation of 19919 MU. In review, this cost was revised to ₹3614.09 crore for the then approved gross generation of 18905.68 MU. Details of approved fuel cost for FY 2011-12, in the Tariff Order for FY 2011-12 and in the Tariff Order of FY 2012-13 in review are given in Table 3.7.

Table 3.7: Fuel Cost – FY 2011-12

Sr. No.	Station	As per T.O. FY 2011-12		As per Review in T.O. FY 2012-13	
		Gross Generation (MU)	Fuel Cost (₹crore)	Gross Generation (MU)	Fuel Cost (₹crore)
I	II	III	IV	V	VI
1.	GNDTP Unit I&II	1425	284.88	1572.34	332.69
2.	GNDTP Unit III&IV	907	198.85	294.21	68.12
3.	GGSSTP	9959	1765.83	9653.06	1876.10
4.	GHTP	7628	1338.61	7386.07	1337.17
5.	**Total**	**19919**	**3588.17**	**18905.68**	**3614.09**

3.7.2 PSPCL in its ARR for FY 2014-15 has indicated the actual fuel cost for FY 2011-12 for a gross generation of 19068 MU as ₹3590.68 crore, whereas in the Audited Annual Accounts of PSPCL for FY 2011-12, the total generation expenses are ₹3609.64 crore.

In the Audited Annual Accounts of PSPCL for FY 2011-12, the total generation expenses comprise of ₹3539.96 crore for coal and oil consumption, ₹22.60 crore for other fuel related costs, ₹28.12 crore for fuel related losses and ₹18.96 crore for other operating expenses such as cost of water, lubricants, consumable stores and station supplies. Out of these, ₹18.96 crore booked towards other operating expenses do not form part of the fuel cost and are being considered under repair and maintenance expenses in para 3.12. Thus, the net fuel cost for FY 2011-12 as per Audited Annual Accounts is taken as ₹3590.68 (3609.64-18.96) crore.

3.7.3 The actual fuel cost intimated by PSPCL for FY 2011-12 in its ARR for FY 2014-15 for a gross thermal generation of 19068 MU is based on calorific value and price of coal / oil as given in Table 3.7A.

Table 3.7A: Calorific Value and Price of Coal and Oil as submitted by PSPCL for FY 2011-12

Station	As considered by PSPCL				
	Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (₹/KL)	Price of coal excluding transit loss (₹/MT)	Transit loss
I	II	III	IV	V	VI
GNDTP	3929	9400	36857	2884	0.96%
GGSSTP	3949	10000	35650	2964	0.79%
GHTP	4028	9500	38940	2870	1.46%

3.7.4 Fuel cost being a major item of expense, the Commission thought it prudent to get the same validated. The finally accepted values are indicated in Table 3.7B.

Table 3.7B: Calorific Value and Price of Coal and Oil as accepted by the Commission for FY 2011-12

Station	As accepted by the Commission				
	Gross Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (₹/KL)	Price of coal excluding transit loss (₹MT)	Transit loss
I	II	II	IV	V	VI
GNDTP	3929	9532	36686	2885.00	0.96%
GGSSTP	3949	9765	35648	2964.70	0.79%
GHTP	4028	9597	38910	2868.00	1.46%

3.7.5 Regarding Station Heat Rate (SHR), PSPCL has intimated the SHR for GNDTP as 2914 kCal/kWh, for GGSSTP as 2564 kCal/kWh and for GHTP as 2402 kCal/kWh. PSPCL in its ARR has submitted that the technical parameters including specific oil consumption and coal transit loss for FY 2011-12 are within the limits set by the Commission.

The Commission while processing the ARR of PSPCL has been allowing the Gross Station Heat Rate for all units of GHTP at 2500 kCal/ kWh. Unit-III and Unit IV of GHTP have been put on commercial operation on 16.10.2008 and 25.01.2010 respectively. The matter has been discussed in detail at para 2.7.5 of this Tariff Order. As such, the Commission decides to allow SHR for GHTP Units III & IV as 2428 kCal/kWh. For Unit I & Unit II of GHTP as well as for GGSSTP and GNDTP, the Commission decides to allow the SHR as allowed earlier.

3.7.6 The Commission has now approved revised gross thermal generation of 19068 MU (1883 MU for GNDTP, 9564 MU for GGSSTP and 7621 MU for GHTP) as discussed in para 3.4.1. The fuel cost for different thermal stations corresponding to generation now approved has been worked out, based on the parameters/ norms adopted by the Commission in its Tariff Order for FY 2011-12, except for SHR in respect of units III and IV of GHTP, which has been considered as 2428 kCal/kWh as discussed in para 3.7.5 above. Price and calorific value of coal and oil has been adopted as validated and accepted by the Commission.

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

3.7.8 On the above basis, fuel cost for FY 2011-12 for different thermal stations corresponding to actual generation is given in Table 3.8.

Table 3.8: Approved Fuel Cost FY 2011-12

Fuel Cost - FY 2011-12									
Sr. No.	**Item**	**Derivation**	**Unit**	**GNDTP (Unit I & II)**	**GNDTP (Unit III & IV)**	**GGSSTP**	**GHTP (Unit I & II)**	**GHTP (Unit III & IV)**	**Total**
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X**
1.	Generation	A	MU	1589	294	9564	3562	4059	**19068**
2.	Heat Rate	B	kCal/kWh	2825	3000	2500	2500	2428	
3.	Specific oil consumption	C	ml/kWh	1.00	3.50	1.00	1.00	1.00	
4.	Calorific value of oil	D	kCal/litre	9532	9532	9765	9597	9597	
5.	Calorific value of coal	E	kCal/kg	3929	3929	3949	4028	4028	
6.	Overall heat	F = (A x B)	Gcal	4488925	882000	23910000	8905000	9855252	
7.	Heat from oil	G = (A x C x D) / 1000	Gcal	15146	9808	93392	34185	38954	
8.	Heat from coal	H = (F-G)	Gcal	4473779	872192	23816608	8870815	9816298	
9.	Oil consumption	I=(Gx1000)/D	KL	1589	1029	9564	3562	4059	
10.	Transit loss of coal	J	(%)	2.00	2.00	2.00	2.00	2.00	
11.	Total coal consumption excluding transit loss	K=(H*1000)/E	MT	1138656	221988	6031048	2202288	2437015	
12.	Quantity of PANEM coal	L	MT	919383	170106	3803413	1641666	1870725	
13.	Quantity of coal other than PANEM coal	M=K-L	MT	219273	51882	2227635	560622	566290	
14.	Quantity of coal other than PANEM coal including transit loss	N=M/(1-J/100)	MT	223748	52941	2273097	572063	577847	
15.	Total quantity of coal required	O=L+N	MT	1143131	223047	6076510	2213729	2448572	
16.	Price of oil	P	₹/KL	36686	36686	35648	38910	38910	
17.	Price of coal	Q	₹/MT	2885	2885	2964.70	2868	2868	
18.	Total cost of oil	R=P x I / 107	₹crore	5.83	3.77	34.09	13.86	15.79	73.34
19.	Total cost of coal	S=O x Q/107	₹crore	329.79	64.35	1801.50	634.90	702.25	3532.79
20.	**Total Fuel cost**	**T=R+S**	**₹crore**	**335.62**	**68.12**	**1835.59**	**648.76**	**718.04**	**3606.13**
21.	**Per unit Cost**	**U=T*10/A**	**₹/kWh**	**2.11**	**2.32**	**1.92**	**1.82**	**1.77**	**1.89**

** Quantity of PANEM Coal where not given for different units of a plant has been considered on pro-rata basis of generation.*

The Commission, thus, approves the fuel cost at ₹3606.13 crore for gross generation of 19068 MU for FY 2011-12.

3.8 Power Purchase Cost

3.8.1 The Commission, in its Tariff Order for FY 2011-12, approved the power purchase cost of ₹5751.28 crore for purchase of 18488 MU (gross). In review, the Commission revised it to ₹5110.76 crore for the purchase of 15947 MU (gross), after adding the external losses of 4.62% (15210 MU + external losses of 737 MU).

3.8.2 The gross power purchase for FY 2011-12 now reported by PSPCL is 15357 MU (gross), including short term power purchase of 2613 MU and unscheduled interchange (UI) of (-)582 MU. The net power purchase after accounting for external losses of 3.40% is 14835 MU. The actual cost of power purchase for FY 2011-12 as per ARR for FY 2014-15 is ₹5890.10 crore, which includes ₹5398.65 crore as power purchase cost and ₹491.45 crore paid to PSTCL as transmission charges. The power purchase cost as per Audited Annual Accounts for FY 2011-12 is also ₹5890.10 crore (inclusive of transmission charges of ₹468.10 crore and SLDC charges of ₹23.35 crore paid to PSTCL).

The Commission observes that as per previous practice, requirement of power purchase at the time of review is taken based only on the energy balance as determined in the Tariff Order for the relevant year and approved accordingly. However, at the time of true up, the actual quantum of power purchased has been allowed since it has been procured by PSPCL and supplied to the consumers of different categories.

Regarding power purchase through traders and through UI, the Commission observed in the Tariff Order for FY 2011-12 as under:

"……..The *additional power purchase through traders or UI at high cost and supplying to any consumer category is not commercially viable. Hence, PSPCL should focus on demand side management and effect power purchases in a judicious manner. For the purpose of approving the rate for short-term power purchase, the Commission has analysed 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, 2010 to January, 2011 as 485 paise per unit, which the Commission observes 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 the rate of 485 paise per unit for FY 2011-12. On this basis, for the purchase of 2077 MU on short-term basis, the Commission works out the additional power purchase cost of ₹1007.35 crore for FY 2011-12. Further, any power purchase in excess of approved quantum will be admissible only at the above mentioned ceiling rate of 485 paise per unit for FY 2011-12.*

The Commission reiterates that PSPCL needs to purchase power in a judicious and economic manner and also resort to demand side management practices, if necessary, to maintain its commercial viability".

PSPCL in its ARR Petition for FY 2014-15 has shown power purchase of 2031 MU [2613 through traders (short term) and (-)582 MU through UI] at an average rate of 457 paise per unit during FY 2011-12, which is within the ceiling rate of 485 paise per unit fixed for FY 2011-12 by the Commission in the Tariff Order for FY 2011-12.

However, the Commission decides not to allow additional UI charges leviable/ paid under CERC's UI Regulations for over-drawal of power when frequency is below 49.5 Hz. On a query from the Commission, PSPCL in its letter no. 2946 dated 31.12.2013 has intimated that the additional amount paid for UI drawl below frequency of 49.5 Hz for FY 2011-12 as ₹23.56 crore, which the Commission disallows. Further, PSPCL in its letter no. 2646 dated 31.12.2013 has also intimated the details of interest on delayed payments to UI account from FY 2010-11 to FY 2012-13. The Commission notes that PSPCL has paid ₹17.37 crore interest on delayed payments to UI account in FY 2011-12. The Commission disallows the same.

Accordingly, the Commission approves cost of ₹5357.72 (5398.65–23.56–17.37) crore for power purchase of 14835 MU (net).

3.9 Disincentive on account of higher T&D losses

As discussed in para 3.6.2, PSPCL has underachieved the T&D loss level vis-a-vis the target approved by the Commission. As per the PSERC Tariff Regulations, the entire loss on account of failure to achieve T&D losses target set by the Commission is to be borne by the licensee. As brought out in afore-mentioned para, T&D loss level higher than that approved by the Commission has resulted in increase in power purchase to the extent of 50 MU (net), the pro-rata cost of which based on power purchase cost approved in para 3.8.2, works out to ₹18.06 (5357.72 x 50/14835) crore.

The Commission, therefore, determines an amount of ₹18.06 crore as disincentive on account of higher T&D losses.

The effect of this is reflected at Sr. No. 14 of Table 3.16.

3.10 Disincentive on account of lower thermal generation

The Commission has noted that there is lower thermal generation to the extent of 851 MU gross (728 MU net) and consequent increase in power purchase as discussed in para 3.4.1. The station wise decrease in gross generation compared to the generation approved in the Tariff Order of FY 2011-12 is 449 (2332-1883) MU for GNDTP, 395 (9959-9564) MU for GGSSTP and 7 (7628-7621) MU for GHTP. The Commission further notes that for GNDTP Units I & II, there is excess generation of 164 (1589-1425) MU and for GNDTP Units III & IV, there is less generation of 613 (907-294) MU.

The net saving in fuel cost for different stations corresponding to this variation in generation based on cost now approved works out to ₹184.46 crore as given in Table 3.9.

Table 3.9: Saving in Fuel Cost due to lower Generation during FY 2011-12

Sr. No.	Station	Now Approved by the Commission		Increase/Decrease in fuel cost due to less generation	
		Generation (MU)	Fuel Cost (₹crore)	Increase/ Decrease in Generation (+)/(-) (MU)	Increase/ Decrease in Fuel Cost (+)/(-) (₹crore)
1a.	GNDTP Unit I &II	1589	335.62	(+) 164	(+) 34.64
1b.	GNDTP Unit III &IV	294	68.12	(-) 613	(-) 142.03
2.	GGSSTP	9564	1835.59	(-) 395	(-) 75.81
3.	GHTP	7621	1366.80	(-) 7	(-) 1.26
4.	**Total**			**(-) 851**	**(-) 184.46**

The increase in power purchase on account of lower generation is 728 MU (net). The cost of 728 MU (net) based on power purchase cost approved as per para 3.8 works out to ₹262.92 (5357.72x728/14835) crore. Accordingly, the net increase in power purchase cost is ₹78.46 (262.92-184.46) crore.

The Commission therefore determines an amount of ₹78.46 crore as disincentive on account of lower thermal generation.

The effect of this is reflected at Sr. No. 15 of Table 3.16.

3.11 Employee Cost

3.11.1 In the ARR Petition for FY 2011-12, PSPCL claimed employee cost of ₹3607.75 crore against which Commission approved a sum of ₹2916.98 crore in the Tariff Order for FY 2011-12. In the ARR Petition for FY 2012-13, PSPCL revised employee cost to ₹3629.54 crore for FY 2011-12 against which Commission approved a sum of ₹3213.77 crore in the review.

3.11.2 In the ARR Petition for FY 2014-15, PSPCL has revised the claim of employee cost to ₹3700.67 crore, net of capitalization of ₹108.41 crore for FY 2011-12, based on Audited Annual Accounts of PSPCL. The claim is also inclusive of ₹1127.21 (282.07+845.14) crore on account of terminal benefits and ₹191.67 crore as BBMB share.

3.11.3 The provisions of the amended Regulation 28(3) of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 provide for determination of employee cost as under:

- Terminal benefits including BBMB share on actual basis.
- Increase in other employee expenses limited to average increase in Wholesale Price Index.
- Exceptional increase in employee cost on account of pay revision etc. to be considered separately by the Commission.

In the ARR Petition, PSPCL has claimed net employee cost of ₹3700.67 crore for FY 2011-12 inclusive of terminal benefits of ₹1127.21 (282.07+845.14) crore and BBMB share of ₹191.67 crore. As terminal benefits and BBMB share of expenditure is allowable on actual basis, the **Commission approves ₹1318.88 (1127.21+191.67) crore as terminal benefits and BBMB share of expenditure**.

3.11.4 The Commission observes that some steps have been initiated by the Utility to enhance employee productivity and attain reduction in T&D loss level to 19.13% and 19.10% against a target of 20% and 19% fixed by the Commission for FY 2010-11 & FY 2011-12 respectively. PSPCL in its ARR Petition has stated in para 2.11.5 that following measures to improve productivity have been undertaken:

- *"Stopping of fresh recruitments against retirement/death cases since 1999 except for induction of very specific need based technical manpower.*
- *Ban on creation of new posts/charges.*
- *Reduction in generation incentive by 10% since 3/2003.*
- *Computerization of cash collection centers.*
- *Current and new expansion projects were and are getting executed through the existing man power. It is worth mentioning that number of*

employees has decreased from 87066 No. in 2001-02 to 66403 No. in 2009-10, whereas number of consumers has increased from 3.8 million to 6.92 million in the corresponding years. Over this period the Employee Productivity parameters have almost doubled as is evident from the data tabulated below:

Employee Productivity Parameter

Sr. No.	***Description***	***FY 2001-02***	***FY 2010-11***
I	***II***	***III***	***IV***
1.	*Employees per MU of energy sold*	*4.39*	*1.60*
2.	*Employees per 1000 connections*	*16.32*	*7.17*
3.	*Share of employee cost in total cost*	*20.82 %*	*19.70 %*
4.	*Employee per circuit kM of LT line*	*0.55*	*0.385*
5.	*Employee per circuit kM of 11 kV line*	*0.88*	*0.399*
6.	*Employees per D/T*	*0.47*	*0.159*
7.	*Employees per MU generated*	*3.94*	*2.61*

- *Technical personnel had been inducted to the bare minimum only to ensure that the employee productivity is maintained at high standards.*
- *The Petitioner had initiated "Functional Model of Distribution Offices" in Urban/Rural areas on a pilot basis in one of the Divisions.* ***After getting encouraging results, this model has been planned to be rolled out in entire State within two year****. Presently model stands implemented in Patiala, Nabha, Amritsar, Jalandhar & Bathinda Divisions. Project involves reorganization of distribution staff under a refined two tier system. Existing staff will be redeployed on functional basis for urban areas to handle technical and commercial functions separately. Project does not involve any additional financial liability and only involves redeployment of existing staff. Under this model, when fully implemented, a reduction of around 10-12% of the revenue Staff is envisaged. It is emphasized that Petitioner itself is a newly created entity and is under stabilization & reorganization process. It will take some time for rationalizing manpower cost.*
- *Further, the Petitioner has got conducted Man Power Study from M/s PwC (P) Ltd. Report of the consultants was submitted to Board of Directors (BoD) of the Petitioner Company. At the time of start of the manpower study by PwC in 2007-08, the manpower strength of erstwhile PSEB was approximately 65718 (as per PwC report); the figure came*

down to approximately 59276 (PSPCL-55411 & PSTCL-3865) in year 2010-11 & current strength for PSPCL is approximately 48269.

- *The reasons for such sharp decline have been the high rate of superannuation in the recent years, non-recruitment / insufficient recruitment (to meet the vacuum created by superannuation) and the non-uniformly distributed manpower across the organization. Being a Govt. undertaking it may not be possible for PSPCL to further reduce its present manpower through retrenchment. But, various efforts are being made for rationalization of the existing manpower. Furthermore, PSPCL has also been recruiting bare minimum manpower to ensure smooth functioning of the organization, as such further reduction in manpower will not be good for the health of the organization in the short as well as long term.*
- *Further, it is a humble submission before PSERC that every power sector utility is different and operates in altogether a different business environment as the following components play a critical role in the business environment:*
  - *Condition of existing network assets and investment made over past periods.*
  - *Consumer mix, organizational maturity and culture of the organization in imbibing latest technological developments and outsourcing.*
  - *Age, qualification and experience of staff engaged etc.*
  - *Other employment opportunities available in the state – it dictates success of VRS schemes.*
- *The PwC had held series of interactions with employees and detailed deliberations with the management of PSPCL for developing proposed practically workable model of the organization. The BoD of the Petitioner has formed a committee of Directors including the Director (Distribution), Director (Finance), Director (Administration) and Director (HR) for examining the report. Memorandum No. 12/DDH-24 dated 01.03.2012 was submitted to BoD for considering the report alongwith comments and recommendations of aforesaid committee and is under the consideration of BoD. It is submitted that the issue of manpower*

rationalization and employee cost reduction cannot be effected over-night or in a drastic manner. The Petitioner will, however, implement firm measures which can control the manpower costs on medium to long term basis once the PWC report is accepted.

- *Moreover, the increase in employee costs can also be attributed to increase in expenditure towards pension in a major way, which is due to legacy of recruitment done in past, and as such this expenditure has to be incurred by PSPCL.*
- *Implementation of IT under various Schemes".*

With the initiation of these measures, some productivity parameters of the utility have improved. Number of employees has decreased to 66403 in FY 2009-10 against 87066 in FY 2001-02. **The Commission has noted that actual deployment of employees in PSPCL as on 31.03.2012 was 48417 against manpower requirement of 48767 assessed in PwC report.**

3.11.5 In order dated 18.10.2012 of Hon'ble APTEL in Appeal Nos. 7, 46 and 122 of 2011 against the Tariff Orders of PSEB/PSPCL for FY 2009-10, 2010-11 and 2011-12 regarding employee cost, it has been observed as under:

> *'In the case of the employees of the PSPCL, they are regular staff of the Corporation and it being a Govt. company, they are to be governed by the rules and regulations of the Govt…..*
>
> *…..Our findings on this issue is the same plus the observation that in course of true-up in respect of the Tariff Order for 2011-2012 the Commission will review the matter. The issue is answered in favour of the appellant.'*

The Hon'ble APTEL also relied upon the decision of the Apex court in the case of West Bengal Electricity Regulatory Commission versus Central Electricity Regulatory Commission (2002) 8 SCC 715 wherein it has been held that when the utility needs to comply with lawful agreements entered into with the employees the same cannot be avoided and wriggled out. The Apex Court has decided as under:

"We are in agreement with this finding of the High Court. Since it is not disputed that the payments made to the employees are governed by the terms of the settlement from which it will not be possible for the Company to wriggle out

during the currency of the settlement, therefore, for the year 2000-01 the actual amounts spent by the Company as employees' costs will have to be allowed".

3.11.6 PSERC vide notification dated 17.09.2012 has amended the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Regulation 28(2)(a) of the amended regulations provides as under:

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

Considering the above, the Commission considers it appropriates to approve 'Other Employee Cost' of ₹1760.37 crore of PSPCL for FY 2011-12 as per Audited Annual Accounts as a one time measure. This approved amount shall be considered as part of base O&M expenses for determination of O&M expenses for subsequent years. However, the same is subject to the condition that the utility shall make consistent improvement in productivity, keeps on optimizing its employee cost, implement PwC Report /'Functional Model of Distribution' offices as committed by it in its ARR Petition and reduce T&D losses. **So, the Commission approves ₹1760.37 crore as 'Other Employee Cost' to PSPCL for FY 2011-12.**

3.11.7 Regulation 28(8)(b) of the amended Tariff Regulations also provides for consideration of any exceptional increase such as pay revision. The Commission observes that PSPCL has not claimed any amount on account of Pay revision separately for FY 2011-12. However, PSPCL (consequent upon implementation of the Pay Commission report) has paid revised salary to its employees with effect from November, 2009 onwards. In reply to query from the Commission, PSPCL vide letter 2902/CC/DTR/Dy.CAO/241 dated 04.12.2013 has informed that the impact of revision of pay scales for FY 2011-12 is to the tune of ₹338.70 crore.

3.11.8 Keeping in view the order of Hon'ble APTEL and decision of the Commission as discussed in para 2.11 of this Tariff Order, **an amount of ₹338.70 crore is allowed to PSPCL for FY 2011-12 on account of impact of pay revision.**

3.11.9 PSPCL has not claimed arrears on account of pay revision separately. On a query from the Commission, PSPCL vide letter no. 2977/DTR/Dy.CAO/ 241/Deficiency dated 26.12.2013 has intimated the impact of arrears on account of pay revision as ₹282.72 crore and stated that impact of arrears on account of pay revision has been included in the basic pay.

Keeping in view the observations of Hon'ble APTEL as discussed at para 2.11 of this Tariff Order, **the Commission allows the claim of arrears of pay revision of ₹282.72 crore to PSPCL for FY 2011-12.**

Thus, the Commission approves a total employee cost of ₹3700.67 (1318.88+1760.37+338.70+282.72) crore to PSPCL for FY 2011-12.

3.12 Repair & Maintenance (R&M) Expenses

3.12.1 In the ARR Petition for FY 2011-12, PSPCL projected R&M expenses at ₹414.74 crore against which the Commission approved ₹376.22 crore in the Tariff Order for FY 2011-12. In the ARR Petition for FY 2012-13, PSPCL revised R&M expenses to ₹506.68 crore including prior period expenses of ₹0.11 crore against which the Commission approved ₹410.12 crore in the review.

3.12.2 In the ARR Petition for FY 2014-15, PSPCL has claimed an amount of ₹320.67 crore (net of capitalization of ₹4.55 crore) as R&M expenses as per the Audited Annual Accounts for FY 2011-12. This includes ₹18.96 crore as other operating expenses such as cost of water, lubricants, consumables stores and water supplies which do not form part of fuel cost (as discussed in para 3.7 of this tariff order).

3.12.3 Regulation 28 (4) (a) of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent years. The WPI for FY 2011-12 is determined at 8.94% which is adopted for purposes of calculation of allowable R&M expenses.

3.12.4 The Commission has ascertained the allowable R&M expenses of ₹416.44 crore for FY 2010-11 as discussed in para 2.12.5 of this Tariff Order, which are adopted as base for FY 2011-12. The base R&M expenses of ₹416.44 crore, include allowable R&M expenses of ₹408.48 crore for FY 2010-11 and an amount of ₹7.96 crore being R&M expenses allowable on fixed assets added during the year 2010-11. Applying an increase in WPI of 8.94% to the base A&G expenses of ₹416.44 crore for FY 2011-12, the allowable R&M expenses for FY 2011-12 work out to ₹453.67 crore for PSPCL.

3.12.5 According to Regulation 28 (6) of the PSERC Tariff Regulations, R&M expenses for fixed assets added during the year are to be considered on pro-rata basis from the date of commissioning. PSPCL has capitalised assets worth ₹781.92 crore during FY 2011-12. The dates of commissioning of assets amounting to ₹781.92

crore are neither available in the Audited Annual Accounts nor in the ARR Petition of the PSPCL. Therefore, R&M expenses for these assets added during the year are being considered assuming that these assets remained in service of the PSPCL for six months on an average during FY 2011-12. The average percentage rate of R&M expenses of ₹453.67 crore for assets of ₹38433.97 crore as on 01.04.2011 work out to be 1.18% (453.67/38433.97x100). By applying the average rate of 1.18% on addition of assets of ₹781.92 crore for six months on an average basis, the allowable R&M expenses for the fixed assets added during the year work out to ₹4.61 crore. Thus, R&M expenses for FY 2011-12 are determined as ₹458.28 (453.67+4.61) crore as against claim of PSPCL of R&M expenses of ₹320.67 crore.

3.12.6 In the light of the provisions of the Electricity Act, 2003 and judgment of the APTEL as discussed in para 2.12.6 of this Tariff Order, **the Commission approves R&M expenses of ₹320.67 crore for FY 2011-12 on actual basis as reflected in the Audited Annual Accounts.**

3.13 Administrative and General (A&G) Expenses

3.13.1 In the ARR Petition for FY 2011-12, PSPCL projected A&G expenses of ₹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 ₹98.84 crore for FY 2011-12 net of capitalization of ₹19.30 crore but including prior period expenses of ₹0.19 crore against which the Commission approved ₹95.88 crore in the review.

3.13.2 In the Tariff Petition for FY 2014-15, PSPCL has claimed an amount of ₹97.12 crore (net of capitalization of ₹19.35 crore) as per the Audited Annual Accounts for FY 2011-12.

3.13.3 Regulation 28 (4) (a) of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent years. The WPI for FY 2011-12 is determined at 8.94% which is adopted for purposes of calculation of allowable A&G expenses.

3.13.4 The Commission has ascertained the allowable A&G expenses of ₹95.78 crore for FY 2010-11 which are adopted as base A&G for FY 2011-12. The base A&G expenses of ₹95.78 crore, include allowable A&G expenses of ₹93.94 crore for FY 2010-11 and an amount of ₹1.84 crore being A&G expenses allowable on fixed assets added during the year 2010-11. Applying the increase in WPI of

8.94% to the base A&G expenses of ₹95.78 crore for FY 2011-12, the allowable A&G expenses for FY 2011-12 work out to ₹104.34 crore for PSPCL.

3.13.5 According to Regulation 28 (6) of the PSERC Tariff Regulations, A&G expenses for fixed assets added during the year are to be considered on pro-rata basis from the date of commissioning. PSPCL has capitalised assets worth ₹781.92 crore during FY 2011-12. The dates of commissioning of assets amounting to ₹781.92 crore are neither available in the Audited Annual Accounts nor in the ARR Petition of the PSPCL. Therefore, A&G expenses for these assets added during the year are being considered assuming that these assets remained in service of PSPCL for six months on an average during FY 2011-12. The average percentage rate of A&G expenses of ₹104.34 crore for assets of ₹38433.97 crore as on 01.04.2011 work out to be 0.27% (104.34/38433.97x100). By applying the average rate of 0.27% on addition of assets of ₹781.92 crore for six months on an average basis, the allowable A&G expenses for the fixed assets added during the year work out to ₹1.06 crore. Thus, A&G expenses for FY 2011-12 are determined as ₹105.40 (104.34+1.06) crore as against claim of PSPCL of A&G expenses of ₹97.12 crore.

3.13.6 In the light of the provisions of the Electricity Act, 2003 and judgment of the APTEL as discussed in para 2.12.6 of this Tariff Order, **the Commission approves A&G expenses of ₹97.12 crore for FY 2011-12 on actual basis as reflected in Audited Annual Accounts.**

3.14 Depreciation Charges

3.14.1 In the ARR Petition for FY 2011-12, PSPCL projected depreciation charges of ₹891.92 crore against which Commission approved depreciation charges of ₹841.04 crore. In the ARR Petition of FY 2012-13, PSPCL had claimed depreciation charges of ₹723.34 crore on assets valued at ₹19430.05 crore against which the Commission approved depreciation charges of ₹712.91 crore for FY 2011-12.

3.14.2 In the ARR Petition for FY 2014-15, PSPCL has claimed ₹716.19 crore (net of capitalization of ₹0.35 crore) as depreciation charges. However, PSPCL vide letter No. 18 dated 18.01.2014 has submitted the sub head wise details of assets showing claim of depreciation of ₹670.94 crore during FY 2011-12. On examination of the information, the Commission observes that the depreciation on the assets which has already been over charged has also been claimed by the petitioner. It has also been observed that in some asset sub-heads PSPCL's claim of depreciation is not in line with the rates specified by CERC. The Commission re-determines the depreciation for FY 2011-12 which works out to ₹661.65 crore as detailed in Table 3.10.

Table 3.10: Depreciation Charges for FY 2011-12

(₹ crore)

Sr. No	Item	Depreciation Charges of PSPCL	Depreciation charges approved by the Commission
I	II	III	IV
1.	Land & Land Rights	0.00	0.00
2.	Buildings	42.84	42.62
3.	Hydraulic Works	211.28	210.00
4.	Other Civil Works	3.48	2.94
5.	Plant & Machinery	230.90	225.10
6.	Lines, Cables, Networks etc.	177.89	176.60
7.	Vehicles	0.16	0.16
8.	Furniture & Fixtures	0.44	0.44
9.	Office Equipments	3.95	3.79
10.	**Total**	**670.94**	**661.65**
11.	Less capitalization		0.35
12.	**Net Amount**		**661.30**

The Commission approves the depreciation charges as ₹661.30 crore after capitalization of ₹0.35 crore for FY 2011-12.

3.15 Interest and Finance Charges

3.15.1 In the ARR Petition for FY 2011-12, PSPCL claimed Interest and Finance Charges of ₹2203.27 crore (net) against which the Commission approved an amount of ₹1066.86 crore for FY 2011-12. In the ARR Petition for FY 2012-13, PSPCL had revised the interest and finance charges for FY 2011-12 to ₹2300.09 crore inclusive of finance charges of ₹51.53 crore and the Commission had approved the interest and finance charges of ₹1423.52 crore for PSPCL for FY 2011-12.

3.15.2 In the ARR Petition for FY 2014-15, PSPCL has claimed the interest and finance charges of ₹1970.37 crore for FY 2011-12 based on Audited Annual Accounts, as detailed in Table 3.11.

Table 3.11: Interest & Finance Charges claimed by PSPCL for FY 2011-12

(₹ crore)

Sr. No.	**Description**	**Interest as depicted in ARR Petition**
I	**II**	**III**
1.	Interest on Institutional Loans	806.40
2.	Interest on GoP Loans	24.21
3.	Interest on GPF	155.27
4.	Interest to Consumers	90.57
5.	**Sub – Total (1+2+3)**	**1076.45**
6.	Interest on Working Capital Loan (WCL)	1129.76
7.	Finance Charges for Loans	31.87
8.	**Total (4+5+6)**	**2238.08**
9.	Less: Capitalization	267.71
10.	**Net Interest and Finance Charges**	**1970.37**

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

3.15.3 **Investment Plan**

The Commission in its Tariff Order for FY 2011-12 approved an Investment Plan of ₹1000.00 crore. In the ARR Petition for FY 2012-13, the Commission approved the capital investment of ₹1868.00 crore as claimed by PSPCL.

In ARR Petition for FY 2014-15, PSPCL has submitted an investment plan of ₹1552.11 crore based on Audited Annual Accounts for FY 2011-12. In addition, PSPCL has received consumer contribution, grants and subsidies of ₹249.05 crore during FY 2011-12. Accordingly, actual loan requirement for the level of investment works out to ₹1303.06 (1552.11-249.05) crore.

However, PSPCL has claimed ₹1601.55 crore as loan (other than WCL, GP Fund and GoP loans) in the ARR Petition for FY 2014-15 based on Audited Annual Accounts. The Commission in Table 2.11 of this Tariff Order has approved closing balance of ₹6984.16 crore as loans as on 31.03.2011 (other than WCL, GP Fund and GoP loans). The Commission observes that the loan of ₹59.76 crore raised during FY 2011-12 for R-APDRP - Part A scheme is to be converted into grants once the establishment of required system is achieved and verified by an independent agency appointed by the Ministry of Power. The Commission further observes that no interest in respect of R-APDRP– Part A scheme is being paid by PSPCL while interest liability is being provisioned in the books of PSPCL. Thus the claim of PSPCL of loan of ₹1601.55 crore is reduced to ₹1541.79 crore (1601.55-59.76) crore. The Commission, however, considers the actual loan requirement of ₹1303.06 crore against claim of loans by PSPCL of ₹1541.79 crore (other than WCL, GP Fund, GoP loan and R-APDRP Part-A loan) for determination of tariff. Considering the opening balance of ₹6984.16 crore for FY 2011-12, the interest on loans (other than WCL, GP Fund and GoP) works out to ₹781.52 crore in Table 3.12.

Table 3.12: Interest on Loans (Other than WCL and GoP Loans) for FY 2011-12

(₹ crore)

Sr. No.	Particulars	Loans as on April 01, 2011	Receipt of Loans during FY 2011-12	Repayment of Loans during FY 2011-12	Loans as on March 31, 2012	Amount of Interest
I	II	III	IV	V	VI	VII
1.	As per data furnished in ARR Petition (other than WCL and GoP Loans)	7066.01	1601.55	751.40	7916.16	806.40
2.	Approved by the Commission (other than WCL, GP Fund and GoP Loans)	6984.16	1303.06	751.40	7535.82	781.52

3.15.4 **Interest on Loan taken to replace re-called GoP Loans**

The interest on loans of ₹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 10.67% per annum for short term and medium-term loans. **Thus, interest of ₹322.46 crore is approved on this account.**

3.15.5 **Interest on GoP Loans**

In the ARR Petition of 2014-15, PSPCL has claimed ₹24.21 crore as interest on account of GoP loans. On a query from the Commission, PSPCL informed vide memo no. 225/DTR/Dy.CAO/241/Vol-II dated 30.01.2014 that the Interest of ₹24.21 crore relates to RBI bonds charged by Government as interest and adjusted against subsidy for FY 2012-13. Thus, there are no GoP loans and consequently no interest liability on account of GoP loans. Also interest on loans taken in lieu of adjustment of ₹981.93 crore for FY 2011-12 is being separately allowed as interest on bridge loan. **Accordingly, claim of interest of ₹24.21 crore is not allowed.**

3.15.6 **Interest on Bridge Loan**

In Tariff Order for FY 2012-13 the Commission had approved ₹109.17 crore towards interest on loans taken in lieu of adjustment of ₹981.93 crore for FY

2011-12. In the ARR Petition for FY 2014-15, PSPCL has pleaded that interest on this amount of ₹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 and considers it appropriate to allow interest on ₹981.93 crore at an average rate of 10.67% per annum for short term and medium-term loans for FY 2011-12. The amount of ₹981.93 crore was adjusted against subsidy on May 24, 2011. As such, allowable interest for 313 days works out to ₹89.60 crore.

The Commission approves ₹89.60 crore towards interest on loans taken in lieu of adjustment of ₹981.93 crore for FY 2011-12.

3.15.7 **Interest on General Provident Fund (GPF)**

PSPCL has claimed interest of ₹155.27 crore on GPF accumulations based on Audited Annual Accounts for FY 2011-12. **The Interest of ₹155.27 crore on GP Fund, being a statutory payment, is allowed as claimed by PSPCL for FY 2011-12.**

3.15.8 **Finance Charges**

PSPCL has claimed finance charge of ₹31.87 crore which include guarantee fee of ₹28.55 crore based on Audited Annual Accounts for FY 2011-12. The finance charges work out to 1.99 % of the estimated borrowings of ₹1601.55 crore. The Commission has approved loan requirement of ₹1303.06 crore for FY 2011-12. Accordingly, **the Commission approves the finance charges of ₹25.93 crore @1.99% for the loan requirement of ₹1303.06 crore for FY 2011-12.**

3.15.9 **Interest on Consumer Security Deposits**

In ARR Petition for FY 2014-15, PSPCL has claimed ₹90.57 crore towards interest on consumer security deposits on the basis of Audited Annual Accounts for FY 2011-12. **The Commission allows the interest of ₹90.57 crore on Consumer Security Deposits based on Audited Annual Accounts of FY 2011-12.**

3.15.10 **Capitalization of Interest Charges**

In ARR Petition for FY 2014-15, PSPCL has claimed ₹267.71 crore towards capitalization of interest charges based on Audited Annual Accounts for FY 2011-12. **The Commission, as per past practice, approves capitalization of interest of ₹267.71 crore for FY 2011-12 based on Audited Annual Accounts.**

3.15.11 **Interest on Working Capital**

In the Tariff Order for FY 2011-12, the Commission approved working capital of ₹1866.23 crore with interest cost of ₹219.28 crore. In the Tariff Order for FY 2012-13, the Commission approved interest on working capital of ₹246.49 crore.

The Commission has determined the working capital requirement of ₹2008.47 crore, in accordance with PSERC Tariff Regulations. By applying the Rate of 13% (Advance Rate of SBI as on 1st April, 2011), the interest thereon is worked out to ₹261.10 crore. The details of working capital requirement as per Regulation 30 and allowable interest thereon are depicted in Table 3.13.

Table 3.13: Interest on Working Capital Requirement for FY 2011-12

(₹ crore)

Sr. No	Particulars	Amount
I	II	III
1.	Two months Fuel Cost	601.02
2.	One month Power Purchase Cost	446.48
3.	One month Employee Cost	308.39
5.	One month R & M Cost	26.72
6.	One month A & G Cost	8.09
7.	Maintenance Spares @15% of O&M expenses	617.77
8.	**Total Working Capital Required**	**2008.47**
9.	State Bank Advance Rate as on April 1, 2011	13.00%
10.	**Interest on Working Capital Loan**	**261.10**

The Commission, accordingly, approves interest of ₹261.10 crore on Working Capital Requirements for FY 2011-12.

3.15.12 **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 ₹2458.56 crore based on the Board's Audited Annual Accounts for FY 2009-10. The amount of diverted funds carrying interest liability was worked out to ₹1821.21 crore. In the Tariff Order for FY 2012-13, amount of the diverted funds of ₹1821.21 crore, based on the Audited Annual Accounts for FY 2009-10 as determined in the Tariff Order of FY 2011-12, was considered for FY 2011-12. The interest on these diverted funds @13% being SBI advance rate as on 1st April, 2011 worked out to ₹236.76 crore. Of this amount, interest of ₹212.37 crore was considered in the Tariff Order for PSPCL and the balance amount of ₹24.39 crore was considered in the Tariff Order for PSTCL.

The Audited Annual Accounts for FY 2011-12 have now been received and have been examined and analysed to re-determine diversion of capital funds for FY

2011-12. The Commission observes that there is no diversion of capital funds for revenue purposes by PSPCL for FY 2011-12.

In view of above, the interest and finance charges are approved as detailed in Table 3.14.

Table 3.14: Interest and Finance Charges for FY 2011-12

(₹ crore)

Sr. No.	Particulars	Loans as on April 01, 2011	Receipt of Loans	Re-payment of Loans	Loans as on March 31, 2012	Interest Approved by Commission
I	II	III	IV	V	VI	VII
1.	Approved by the Commission (Other than WCL and GoP Loans	6984.16	1303.06	751.40	7535.82	781.52
2.	Interest on:					
a)	Loans taken to replace GoP loans					322.46
b)	Interest on Bridge Loan					89.60
3.	Interest on GPF					155.27
4.	**Total (1+2+3)**					1348.85
5.	Add: Finance Charges					25.93
6.	Add: Interest on Consumer Security Deposits					90.57
7.	**Gross Interest and Finance Charges (4+5+6)**					**1465.35**
8.	Less: Capitalization					267.71
9.	**Net Interest and Finance Charges (7-8)**					**1197.64**
10.	Add: Interest on Working Capital					261.10
11.	**Total Interest**					**1458.74**

The Commission, accordingly, approves the interest and finance charges of ₹1458.74 crore for PSPCL for FY 2011-12.

3.16 Return on Equity

3.16.1 In the ARR Petition for FY 2011-12, the Board claimed RoE @15.5 % (pre-tax) to be grossed up to 22.88% as per CERC Tariff Regulations against which the Commission approved the Return of Equity of ₹366.47 crore for FY 2011-12 @14% on the equity amount of ₹2617.61 crore.

3.16.2 In the ARR Petition for FY 2012-13, PSPCL has claimed ₹607.55 crore as RoE @15.5% (pre-tax) to be grossed up to 23.21% on the opening equity of ₹2617.61 crore based on amended CERC Regulations against which the Commission approved the Return of Equity of ₹405.73 crore for FY 2011-12 @15.5% on the equity amount of ₹2617.61 crore.

3.16.3 In the ARR Petition for FY 2014-15, PSPCL has claimed RoE of ₹942.62 crore for FY 2011-12 @15.5% on the equity base of ₹6081.43 crore. Consequent upon amendment of PSERC (Terms and Condition for Determination of Tariff) Regulations, 2005 vide Notification dated 17.09.2012, the utility is to be allowed RoE of 15.5% on the equity employed in creation of assets as per Order dated 18.10.2012 of Hon'ble APTEL in Appeal No. 7, 46 and 122 of 2011 against the Tariff Orders of PSEB/PSPCL for FY 2009-10, 2010-11 and 2011-12.

3.16.4 In accordance with the PSERC Tariff Regulations and order dated 18.10.2012 of Hon'ble APTEL in Appeal No. 7, 46 and 122 of 2011, the Commission decides that the Return on Equity of 15.5% be allowed on the actual equity employed in the creation of assets i.e. ₹6081.43 for FY 2011-12. Accordingly, RoE on equity @15.5% of ₹6081.43 crore for FY 2011-12 works out as ₹942.62 crore.

The Commission, thus, approves RoE of ₹942.62 crore to PSPCL for FY 2011-12.

3.17 Charges Payable to GoP on account of Power from Ranjit Sagar Dam (RSD)

3.17.2 In the ARR Petition for FY 2011-12, PSPCL had claimed ₹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 ₹10.99 crore. In the ARR Petition of FY 2012-13, PSPCL had claimed ₹11.20 crore on this account which was allowed by the Commission.

In the ARR Petition for FY 2014-15, PSPCL has not claimed any amount under this head and hence not allowed.

3.18 Subsidy Payable by GoP

3.18.1 As per the Audited Annual Accounts for FY 2011-12, total subsidy of ₹4103.99 crore has been booked by the PSPCL. However, GoP has paid subsidy of ₹4182.00 crore during FY 2011-12 to PSPCL. The subsidy payable by GoP is now trued up as under:

AP Consumption: The Commission has considered AP consumption at 9,455 MU on which revenue @365 paise (Inclusive of FCA @8 paise per unit levied with effect from 01.04.2011) per unit works out to ₹3451.08 crore. The consumers were not billed any amount on this account. Thus, ₹3460.08 crore (inclusive of meter rentals and service charges of ₹9.00 crore) was payable by GoP as AP subsidy. PSPCL has booked an amount of ₹3.80 crore during

FY 2011-12 on account of revenue from AP Consumers. So, the net subsidy payable by GoP on account of AP consumption works out to ₹3456.28 (3460.08-3.80) crore.

Scheduled Castes (SC) Domestic Supply (DS) Consumers: The Commission notes that as per the decision of GoP Scheduled Castes DS consumers with a connected load of up to 1,000 watts were to be given free power up to 100 units per month. However, as per decision of GoP dated 16.12.2011, free power has been increased to 200 units per month for this category of consumers w.e.f. 01.12.2011. PSPCL has claimed subsidy of ₹312.10 crore besides meter rentals and service charges of ₹15.66 crore on this account. Thus, ₹327.76 crore (inclusive of meter rentals and service charges of ₹15.66 crore) is computed by the Commission as subsidy on this account.

Non-SC Below Poverty Line (BPL) DS Consumers: GoP had also decided to give free supply of power upto 100 units per month to Non-SC BPL DS consumers with connected load upto 1,000 watts. However, as per decision of GoP dated 16.12.2011, free power has been increased to 200 units per month for this category of consumers w.e.f 01.12.2011. PSPCL has claimed subsidy of ₹16.94 crore inclusive of meter rentals and service charges of ₹0.97 crore on this account. Thus, ₹16.94 crore (inclusive of meter rentals and service charges of ₹0.97 crore) is computed by the Commission as subsidy on this account.

3.18.2 **Subsidy on account of waiver of bills of DS consumers of flood affected villages**: PSPCL has claimed an amount of ₹9.54 crore as subsidy on account of waiver of bills of DS consumers of flood affected villages and this subsidy has also been booked in the Audited Annual Accounts of PSPCL for FY 2011-12. PSPCL was asked to submit documentary evidence to substantiate its claim of subsidy on account of waiver of bills of DS consumers of flood affected villages. PSPCL vide memo no. 360/DTR/Dy.CAO/241/Vol-II dated 26.02.2014 has supplied only copies of letters written by PSPCL to GoP regarding grant of subsidy on account of waiver of bills of DS consumers of flood affected villages. However, no documentary evidence regarding sanction of government for the same has been made available by PSPCL. As such, no subsidy on account of waiver of bills of DS consumers of flood affected villages is allowed for FY 2011-12.

Thus, subsidy of ₹3800.98 (3456.28+327.76+16.94) crore is now determined as payable by GoP to PSPCL for FY 2011-12, against subsidy of ₹4182.00 crore already paid. Accordingly, there is an excess payment of ₹381.02 (4182.00-3800.98) crore on this account. This has been carried forward to para 9.4.

3.19 Prior Period Expenses

3.19.1 In its ARR Petition for FY 2014-15, PSPCL has claimed prior period expenses of ₹317.15 crore (₹30.38 crore as prior period income and ₹347.53 crore as prior period expenses) being payments pertaining to the previous years but made during FY 2011-12.

3.19.2 Prior period income includes sale of power of ₹4.36 crore, excess provision for depreciation of ₹2.61 crore, excess provision for interest and finance charges of ₹9.80 crore, other excess provision of ₹0.58 crore and other income of ₹13.03 crore.

3.19.3 Prior period expenses include purchase of power of ₹333.23 crore, fuel related losses and expenses of ₹0.13 crore, operating expenses of ₹0.55 crore, employee costs of ₹9.46 crore, depreciation un-provided in previous years of ₹1.14 crore, interest and finance charges of ₹2.59 crore and administrative expenses of ₹0.43 crore.

3.19.4 PSPCL has not provided any details regarding sale of power amounting to ₹4.36 crore, other excess provision amounting to ₹0.58 crore and other income ₹13.03 crore. In the absence of detailed information, the Commission finds no merit in the claim of PSPCL for ₹4.36 crore on account of sale of power. However, as Commission is allowing other income as per the Audited Annual Accounts of PSPCL, so Commission decides to treat other excess provision of ₹0.58 crore and other income of ₹13.03 crore as prior period income. Thus total receipts on account of prior period works out to ₹13.61 [0.58+13.03] crore which the Commission approves as prior period income.

3.19.5 As regards income from excess provision for interest and finance charges of ₹9.80 crore and interest and finance charges of ₹2.59 crore is concerned, the Commission is of the view that it has been allowing interest and finance charges based on the investment plan approved by the Commission based on actual capital expenditure incurred by utility. Further, PSPCL has not submitted any detail regarding interest income/ expenses and the period to which these pertain.

As such, Commission finds no merit in the claim of PSPCL and hence no amount is allowed on this account.

3.19.6 As regards purchase of power amounting to ₹333.23 crore is concerned, PSPCL has provided the year wise & plant wise detail of expenses booked under prior period and stated that the amount booked relates to bills received during FY 2011-12, but pertains to the period prior to FY 2011-12 due to issuance of CERC order. Considering the details, the Commission allows an amount of ₹333.23 crore under the head prior period expenses relating to purchase of power.

3.19.7 As regards fuel related losses and expenses amounting to ₹0.13 crore are concerned, these expenses also are disallowed as the Commission has allowed the fuel cost for the preceding years on normative basis.

3.19.8 As regards employee cost amounting to ₹9.46 crore is concerned, PSPCL has intimated vide letter no. 18/CC/DTR-241 dated 08.01.2014 that during the year FY 2011-12 an amount of ₹7.24 crore has been misclassified by Grid Maintenance Division, Ropar under group head 83.5 (Prior Period Employee Cost) but actually the expenditure pertains to group head 83.6 (prior period depreciation) pertaining to the period 1991-92 to 2011-12. As such the employee cost under prior period shall decrease to ₹2.22 (9.46-7.24) crore. However, PSPCL has not intimated the period to which the expenses on account of employee cost pertain. These expenses are disallowed assuming that these expenses pertain to the period during which the employee cost of the Board/PSPCL remained capped.

3.19.9 As stated in para 3.19.8, an amount of ₹7.24 crore has been misclassified by Grid Maintenance Division, Ropar under group head 83.5 (Prior Period Employee Cost) but actually the expenditure pertains to group head 83.6 (prior period depreciation) pertaining to the period 1991-92 to 2011-12. As such, the claim of PSPCL for depreciation un-provided in previous years is increased from ₹1.14 crore to ₹8.38 (7.24+1.14) crore.

As regards excess provision for depreciation of ₹2.61 crore and depreciation un-provided in previous years amounting to ₹8.38 crore is concerned, the Commission is of the view that it has allowed depreciation on the sub-head wise assets and also disallowed the depreciation provided in excess of 90% of original cost of fixed assets in the previous year. As such, Commission finds no merit in the claim of PSPCL and hence no amount is allowed on this account.

3.19.10 Regarding operating expenses of ₹0.55 crore and administrative expenses of ₹0.43 crore booked under prior period expenses is concerned, PSPCL has not intimated the period to which these expenses pertain. These expenses are disallowed assuming that these expenses pertain to the period during which the R&M and A&G expenses of the Board were allowed on normative basis.

Accordingly, the Commission approves net prior period expenses of ₹319.62 (333.23-13.61) crore for FY 2011-12.

3.20 Other Debits and Extraordinary Items

The Audited Annual Accounts of PSPCL for FY 2011-12 show 'other debits and extraordinary items' at ₹20.22 crore.

Therefore, the Commission allows other debits and extraordinary items of ₹20.22 crore for FY 2011-12 on this account.

3.21 Non-Tariff Income

3.21.1 In the Tariff Order for FY 2011-12, the Commission had approved Non-Tariff Income of ₹579.11 crore. In the ARR Petition for FY 2012-13, PSPCL submitted a revised estimate of Non-Tariff Income of ₹666.81 crore against which the Commission approved ₹846.71 crore as Non-Tariff Income for FY 2011-12.

3.21.2 In ARR Petition for FY 2014-15, PSPCL has shown Non-Tariff Income of ₹726.93 crore for FY 2011-12 as per the Audited Annual Accounts. This includes an amount of ₹163.74 crore on account of late payment surcharge. In the Petition, PSPCL has prayed that the late payment surcharge be not treated as part of the Non-Tariff Income as PSPCL's working capital requirements are being determined as per norms and there is no compensation to the PSPCL on account of interest accrued on delayed payments against bills issued and including the Late Payment Surcharge in Non-Tariff/ Other Income adversely impacts the cash flow position of the PSPCL. The Commission observes that receipts on account of Late Payment Surcharge are to be treated as Non-Tariff Income as per Regulation 34 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Moreover, interest on working capital is allowed to the utility on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on normative basis. So the plea of the utility not to treat the late payment surcharge as part of the Non-Tariff Income finds no merit.

3.21.3 The Commission observes that C&AG of India on the Audited Annual Accounts of PSPCL for FY 2011-12 on the statement of profit and loss has observed that accrued interest on the loan and advances transferred to PSTCL by PSPCL was adjusted/deducted from the interest paid/payable on the working capital loans. Adjustment of accrued interest income from the interest expenses instead of showing as interest income separately has resulted in understatement of other income and interest expenses by ₹77.00 crore. The Commission is allowing interest on working capital on normative basis notwithstanding that the licensee (s) has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures. As such, an amount of ₹77.00 crore on account of understatement of other income is considered as miscellaneous income under Non-Tariff Income.

3.21.4 The Commission also observes that the subsidy of ₹9.00 crore for AP Consumers (as revised in the reply to deficiencies by the PSPCL) and ₹16.63 Crore for SC and Non-SC BPL Domestic Supply Consumers has been received from GoP on account of Meter Rentals and Service Charges which also forms part of Non-Tariff Income for FY 2011-12. Taking these receipts into account, the Non-Tariff Income of PSPCL for FY 2011-12 works out to ₹829.56 (726.93+77.00+9.00+ 16.63) crore.

The Commission accordingly, approves Non-Tariff Income of ₹829.56 crore for FY 2011-12.

3.22 Transmission charges payable to PSTCL

The Commission, in its Order dated 09.05.2011 passed on the ARR of PSTCL for FY 2011-12, had determined ₹491.45 crore as the transmission charges payable to PSTCL by PSPCL. Accordingly, the amount of ₹491.45 crore is included in the ARR of PSPCL for FY 2011-12.

3.23 Revenue From Sale of Power

3.23.1 The Commission approved the Revenue from tariff at ₹14682.03 crore in the Tariff Order 2011-12. In the review, the revenue from sale of power was revised to ₹15394.50 crore inclusive of GoP Subsidy.

3.23.2 As per ARR Petition for FY 2014-15, net revenue from sale of power for FY 2011-12 is ₹11255.23 crore. Besides this, the PSPCL had added subsidy of ₹4103.99 crore. As such, total amount works out to ₹15359.22 crore.

3.23.3 However, Commission observed that there was a mis-match of revenue between the revenue figures approved by the Commission in the review and the actual revenue realised during FY 2011-12 as per the Audited Annual Accounts. The

PSPCL was asked to explain the reasons for the mis-match in revenue. PSPCL vide letter no. 387/DTR/Dy.CAO/ 241 / Vol-II dated 28.02.2014 has explained the mis-match in revenue as under:

1. *"Power factor incentives are being given to consumers. Similarly, power factor surcharge is being charged from the consumers. Further, demand surcharge/voltage surcharge etc. are also being charged from the consumers. The net payment on these accounts comes to ₹25.06 crore. This is one of the reasons for mismatch in the revenue.*
2. *Against theft units of 494 MU, revenue of ₹38.40 crore only is accounted for, whereas the actual revenue at an average approved rate of ₹4.53 works out to approx. ₹224.00 crore. Difference of ₹186.00 (224.00-38.40) crore is due to the reason that amounts are challenged by various categories of consumers and some consumers may have deposited only 1/3rd of the assessed amount. It is further submitted that Hon'ble PSERC considers the units on account of theft of energy for calculating the T&D losses. It is further submitted that this principle is consistently being adopted/followed by the Hon'ble PSERC from year to year in the past.*
3. *As revenue from MMC has been shown under approved revenue, which includes some amount of MMC with units, therefore, the net units consumed against MMC are required to be deducted category wise to compare the approved sale & actual sales. Therefore, an adjustment is required with regard to incremental MMC units of 173.20 MU to compare the mismatch.*
4. *There is a security deposit from consumers outstanding as on 31.03.2012 amounting to ₹1915.53 crore as per Audited Accounts of FY 2011-12. The interest payable to the consumers comes out to be ₹179.53 crore. It is submitted that interest on security deposit is given to the consumers at the first instance by giving credit in the energy bills and thereafter making adjustment by debit to interest on security and credit to Revenue Account. However, interest on security is given to the consumers through energy bills and in some of the cases the possibility of non-debit of interest on security account per contra credit to revenue cannot be ruled out as there are about 500 No. DS sub- divisions in PSPCL and 100% accuracy cannot be assured. This fact can be verified to some extent where interest payable to consumers comes to the tune of ₹179.53 crore and the interest paid on security comes out to ₹90.57 crore as per audited P&L A/C of PSPCL for FY 2011-12."*

The Commission has considered the submission of the utility and the observations of the Commission on the issues raised are detailed below:

1. The Commission accepts the plea of PSPCL that a mismatch of ₹25.06 crore is on account of deduction of said amount from revenue from SOP in the actual revenue received on account of power factor incentives, power factor surcharge and demand surcharge/ voltage surcharge.
2. The Commission finds no logic in the plea of PSPCL that amounts are challenged by the various categories of consumers and some consumers may have deposited only 1/3rd of the assessed amount as PSPCL may be recovering the remaining 2/3rd amount in subsequent years. Moreover assessment & recovery is a continuous process. So, the plea of the utility is not acceptable.
3. The Commission accepts the plea of PSPCL and decides that the incremental MMC amount of ₹79.39 crore is deductable from assessed revenue from sale of power.
4. The Commission accepts the plea of PSPCL that interest on security is to be given to the consumers through energy bills. But in some cases the possibility of non debit of interest on security account per contra credit to revenue cannot be ruled out. However, it does not effect the revenue from sale of power assessed by the Commission.

Thus, PSPCL has been able to explain the mismatch of revenue to the extent of ₹104.45 (25.06+79.39) crore.

The Commission approves the revenue from sale of power as ₹15537.78 crore for energy sales of 34157 MU for FY 2011-12 as detailed in Table 3.15.

Table 3.15: Revenue from Sale of Power for FY 2011-12

Sr. No.	Description	Actual as per Audited Annual Accounts		As determined by the Commission		
		Energy Sale (MU)	Revenue (₹crore)	Energy Sale (MU)	Tariff Rate *(Paise/Unit)	Revenue (₹crore)
I	II	III	IV	V	VI	VII
1.	Domestic					
a)	0-100 units			4699	356	1672.84
b)	101-300 units			2700	496	1339.20
c)	Above 300 units			1429	523	747.37
	Sub-total	**8828**	**3309.70**	**8828**		**3759.41**
2.	Non-Residential Supply	2689	1458.76	2689	564	1516.60
3.	Public Lighting	140	86.13	140	555	77.70
4.	Industrial Consumers					
a)	Small Power	883	381.05	883	455	401.77
b)	Medium Supply	1822	884.00	1822	503	916.47
c)	Large Supply	8994	4146.77	8994	503	4523.98
5.	Bulk Supply & Grid Supply					
a)	HT			516	506	261.10
b)	LT			34	534	18.16
	Sub-total	***550***	***278.92***	**550**		**279.26**
6.	Railway Traction	138	71.01	138	586	80.87
7.	Common Pool	299	118.87	299		118.87
8.	Outside State	445	73.11	359		73.11
9.	AP	10256	3.80	9455	365	3451.08**
10.	Add: PLEC & MMC		443.11			443.11
11.	**Total**	**35044**	**11255.23**	**34157**		**15642.23**
12.	Add: Subsidy during FY 2011-12		4103.99			
13.	Effect on revenue as per reply of PSPCL determined in para 3.23 of this Tariff Order.					-104.45
14.	**Grand Total**	**35044**	**15359.22**	**34157**		**15537.78**

**The rates include the fuel surcharge of 8 paise per unit.*
***This includes ₹3.80 crore received from AP consumers by PSPCL.*

3.24 True up of ARR for FY 2011-12

In view of the above analysis, the trued up revenue requirement for FY 2011-12 as per details given in Table 3.16.

Table 3.16: Revenue Requirement for FY 2011-12

(₹ crore)

Sr. No.	Items of Expenses	Approved in the Tariff Order for FY 2011-12	Proposed by PSPCL in Revised Estimates	Approved by the Commission in the Review	As per Audited Annual Accounts	Finally approved by the Commission
I	II	III	IV	V	VI	VII
1.	Cost of Fuel	3588.17	3595.49	3614.09	3590.68	3606.13
2.	Cost of power purchase	5751.26	5608.22	5110.76	5398.65	5357.72
3.	Employee Cost	2916.98	3629.54	3213.17	3700.67	3700.67
4.	R & M expenses	376.22	506.68	410.12	320.67	320.67
5.	A & G expenses	87.95	98.84	95.88	97.12	97.12
6.	Depreciation	841.04	723.34	712.91	716.19	661.30
7.	Interest charges	1066.86	2300.09	1423.52	1970.37	1458.74
8.	Return on Equity	366.47	607.55	405.73	942.62	942.62
9.	Transmission charges payable to PSTCL	491.45	491.52	491.45	491.45	491.45
10.	Charges payable to GoP on Power from RSD	17.71	11.20	11.20	0.00	0.00
11.	Prior Period Expenses / Income				317.15	319.62
12.	Other Debits and Extra Ordinary Items				20.22	20.22
13.	**Total Revenue Requirement**	**15504.11**	**17572.47**	**15488.83**	**17565.79**	**16976.26**
14.	Less: Disincentive on account of higher T&D losses					18.06
15.	Less: Disincentive on account of lower thermal generation					78.46
16.	**Gross Revenue Requirement**					**16879.74**
17.	Less: Non-Tariff Income	579.11	666.81	846.71	726.93	829.56
18.	**Net Revenue Requirement**	**14925.00**	**16905.66**	**14642.12**	**16838.86**	**16050.18**
19.	Less: Revenue from Existing Tariff	14682.03	15293.20	15394.50	15359.22	15537.78
20.	**Gap: Surplus (+)/Deficit (-) for FY 2011-12**	**(-)242.97**	**(-)1612.46**	**(+)752.38**	**(-)1479.64**	**(-)512.40**
21.	Add: Consolidated Gap: Surplus (+)/ Deficit (-) upto FY 2010-11	(-)2116.69	(-)2559.14	(-) 2116.69	(-)5646.21	(-)1433.91
22.	Add: Carrying cost on gaps	(-)291.85	(-) 526.75	**(-)** 291.85	**(-)830.18**	*
23.	**Total gap: Surplus(+)/ Deficit (-) upto FY 2011-12**	**(-)2651.51**	**(-) 4698.36**	**(-) 1656.16**	**(-)7956.03**	**(-) 1946.31**

** See para 6.23*

FY 2011-12 indicates that there is now a deficit of ₹512.40 crore for FY 2011-12. After taking into account the cumulative gap (deficit) of ₹1433.91 crore for FY 2010-11, total gap (deficit) works out to ₹1946.31 crore at the end of FY 2011-12. This deficit is being carried forward to Table 5.23 of this Tariff Order.

Chapter 4
True-up for FY 2012-13

4.1 Background

The Commission had approved the ARR and Tariff for FY 2012-13 in its Tariff Order dated 16.07.2012, which was based on costs and revenue estimated by PSPCL for its Generation and Distribution functions.

PSPCL in its ARR for FY 2013-14 had submitted the revised estimates of costs and revenue for FY 2012-13. The Commission considered it appropriate and fair to revisit and review the approvals granted by it for FY 2012-13 with reference to the revised estimates made available by PSPCL and accordingly approved the revised ARR for FY 2012-13 in the Review.

4.2 True up for FY 2012-13

PSPCL in its ARR for FY 2014-15, has prayed that the truing up of costs and revenue for FY 2012-13 may be undertaken by the Commission after the finalization of the Audited Annual Accounts for the year.

PSPCL has further submitted that the audit of accounts for FY 2012-13 is under process and is likely to be completed before filing of next ARR & Tariff Petition, and as such has requested that the True up of costs and revenue for FY 2012-13 be undertaken alongwith ARR petition of PSPCL for FY 2015-16, when the Audited Annual Accounts for FY 2012-13 are likely to be made available.

As per provision under Tariff Regulations, True up can be undertaken only after the Audited Annual Accounts are made available. Hence, the Commission decides to undertake the True up for FY 2012-13 alongwith ARR petition of PSPCL for FY 2015-16, when the Audited Annual Accounts for FY 2012-13 are made available by PSPCL to the Commission.

Chapter 5

Review for FY 2013-14

5.1 Background

PSPCL, in its petition relating to Review for FY 2013-14, has estimated the energy sales, operating parameters, generation, expenditure for generation & distribution and revenue for FY 2013-14, based on actual energy sales, generation, expenditure and revenue for the first half (April 2013 to September 2013) of FY 2013-14 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 2013-14.

The performance of FY 2013-14 (revised estimate) is compared with the ARR for FY 2013-14 approved vide Commission's order dated 10.04.2013.

The Commission has analyzed the energy sales, energy generation and components of expenditure and revenue in the Review for FY 2013-14 in this chapter.

5.2 Energy Demand (Sales)

5.2.1 Metered Energy Sales

The Commission in the Tariff Order for FY 2013-14 approved metered energy sales within the State at 27461 MU as projected by PSPCL. PSPCL, in the ARR petition for FY 2014-15, has re-estimated the metered energy sales for FY 2013-14 at 26709 MU.

PSPCL has estimated energy sales of metered categories for FY 2013-14 on the basis of actuals for the first six months (April 2013 to September 2013) and by applying category-wise half-yearly 3 year compounded annual growth rate (CAGR) of second half of the period from FY 2009-10 to FY 2012-13, to the corresponding actual category-wise energy sales in the second half of FY 2012-13. PSPCL has further submitted that in addition to above, with the introduction of Time of Day (ToD) tariff for six months (October to March) of the year, it was estimated that the demand during off peak period would increase by approximate 10-15% for this consumer category. The PSPCL has stated that the average demand during this period (October to March) for large supply consumers without

ToD tariff has been approx. 1290 MU as per the past trends. It has further added that with the introduction of ToD Tariff from October 2013 onwards, it is expected that the average demand during this period for Large Supply industrial consumers would increase at least by 10% i.e. 129 MU, besides the normal growth envisaged by the trend in CAGR for previous years.

The Commission has estimated sales to metered categories on the basis of actual sales for the first six months of FY 2013-14 (April 2013 to September 2013) and by applying category-wise half-yearly CAGR of second half of the period from FY 2009-10 (actual) to FY 2012-13 (actual, but unaudited) to the corresponding category wise sales of second half for FY 2012-13. Further, the Commission agrees with the plea of PSPCL that with the introduction of ToD Tariff for Large Supply consumer category, the sales to this consumer category would increase and also accepts the expected growth as projected by PSPCL i.e. 129 MU. Accordingly, the Commission has worked out the estimated sales to metered categories as 26646 MU for FY 2013-14, as detailed in Table 5.1.

Table 5.1: Estimated Metered Energy Sales for FY 2013-14

(MU)

Sr. No.	Category	Sales during 2nd half of FY 2009-10 (Actual)	Sales during 2nd half of 2012-13 (Actual)	3 year CAGR during 2nd half of FY 2009-10 to 2nd half of FY 2012-13	Sales during 1st half of FY 2013-14 (Actual)	Estimated sales during 2nd half of FY 2013-14 (IV+IV*V)	Estimated sales for FY 2013-14 (VI+VII)
I	II	III	IV	V	VI	VII	VIII
1.	Domestic	3639	4433	6.80%	5679	4734	10413
2.	Non-Residential	1070	1288	6.38%	1611	1370	2981
3.	Small Power	398	450	4.18%	463	469	932
4.	Medium Supply	842	925	3.18%	961	954	1915
5.	Large Supply	4638	4726	0.63%	4628	4756	9513*
6.	Public Lighting	75	83	3.44%	80	86	166
7.	Bulk Supply	255	280	3.17%	303	289	592
8.	Railway Traction	75	66	-4.17%	71	63	134
9.	**Total Metered sales**	**10992**	**12251**		**13796**	**12721**	**26646**

** Includes 129 MU of energy sales due to introduction of ToD tariff.*

The Commission has retained sales to common pool consumers at 289 MU as projected by PSPCL. PSPCL has projected Outside State sale during FY 2013-14 as 153 MU. The Commission notes that this includes free share of Himachal Pradesh (HP) in RSD (77 MU) and HP royalty in Shanan (53 MU). The free share of HP in RSD is required to be excluded from the Outside State sale as the same has been taken into consideration while working out net hydel generation in para 5.5.2. Therefore, the Commission considers the Outside State sale as 76 MU and Common Pool sale as 289 MU.

The metered energy sales projected by PSPCL during determination of ARR for FY 2013-14, approved by the Commission in the Tariff Order for FY 2013-14, the revised estimates furnished by PSPCL and now approved by the Commission for FY 2013-14 are given in Table 5.2.

Table 5.2: Metered Energy Sales approved for FY 2013-14

(MU)

Sr. No.	Category	Projected by PSPCL in ARR for FY 2013-14	Approved by the Commission in T.O. for FY 2013-14	Revised Estimates of PSPCL in ARR for FY 2014-15	Now approved by the Commission
I	**II**	**III**	**IV**	**V**	**VI**
1.	Domestic	10452	10452	10413	10413
2.	Non-Residential	3218	3218	2982	2981
3.	Small Power	972	972	932	932
4.	Medium Supply	1953	1953	1916	1915
5.	Large Supply	9956	9957	9574	9513
6.	Public Lighting	143	143	166	166
7.	Bulk Supply	622	623	592	592
8.	Railway Traction	145	143	134	134
9.	**Total Metered sales within the State**	**27461**	**27461**	**26709**	**26646**
10.	Common Pool sale	304	304	289	289
11.	Outside State sale	117	53	153	76
12.	**Total sales (9+10+11)**	**27882**	**27818**	**27151**	**27011**

Accordingly, the metered sales of 26646 MU within the State, Common Pool sale of 289 MU and Outside State sale as 76 MU are now approved by the Commission as per details shown in Table 5.2.

5.2.2 AP Consumption

As against 12029 MU AP consumption projected by PSPCL in its ARR of 2013-14, the Commission, in its Tariff Order for FY 2013-14, approved AP consumption of 11221 MU after applying an increase of 5% over the consumption of 10687 MU approved by the Commission for FY 2012-13 in the Tariff Order for FY 2013-14. In the ARR petition for FY 2014-15, PSPCL has revised the estimate of AP consumption to 11034 MU for FY 2013-14.

In ARR for FY 2014-15, PSPCL has revised the AP consumption for FY 2013-14 based on the assessed AP consumption during the first half of FY 2013-14 (April 2013 to September 2013) and estimation for second half of FY 2013-14. PSPCL has assessed the AP consumption for the first half of FY 2013-14 as 7732 MU. The AP consumption for the 2nd half of FY 2013-14 has been assessed by PSPCL by increasing actual sales of 2nd half of FY 2012-13 by 5%. PSPCL has intimated actual sales for 2nd half of FY 2012-13 as 3145 MU and AP consumption for 2nd half of FY 2013-14 has accordingly been projected at 3302 MU. PSPCL has submitted that estimated increase of 2.2% in AP consumption in FY 2013-14 over 10794 MU during FY 2011-12 is due to good monsoon during the year.

The Commission estimated the AP consumption for FY 2012-13 in the Tariff Order for FY 2013-14 on the basis of energy pumped for AP supply. Further, the Commission has estimated the AP consumption for FY 2010-11 and FY 2011-12 in paras 2.2.3 and para 3.2.3 respectively on the basis of energy pumped for AP supply. The Commission, continuing the same methodology, decides to estimate the AP consumption during FY 2013-14 on the basis of energy pumped for AP supply.

PSPCL submitted the month wise data of energy pumped for AP supply upto September, 2013 in ARR for FY 2014-15. Further, PSPCL vide Director/ Distribution e-mail dated 31.12.2013 submitted the data of energy pumped for AP supply from April 2013 to November 2013, and then CE/ARR vide e-mail dated 20.01.2014 submitted the data of energy pumped for AP supply for December 2013. The total load of unmetered AP consumers as per monthly data ending September 2013 submitted by CE/ARR vide letter no. 2906 dated 27.11.2013 is 8175.938 MW and load of AP metered connections (running on urban feeders) as per CE/ARR letter no. 2946 dated 31.12.2013 is 82.778 MW.

On the basis of the information submitted in the ARR for FY 2014-15 by PSPCL and subsequent information submitted by PSPCL as mentioned in above para, the Commission has estimated AP consumption during FY 2013-14 as 9726 MU, as worked out in Table 5.3.

Table 5.3: AP Consumption for FY 2013-14

(MU)

Sr. No.	**Description**	**Energy**
(i)	Energy pumped during April, 2013 to Dec., 2013 in case of 3-phase 3-wire AP feeders	9115.22
(ii)	Energy pumped during April, 2013 to Dec., 2013 in case of 3-phase 4-wire AP feeders	68.51 [a]
(iii)	Energy pumped during April, 2013 to Dec., 2013 in case of Kandi area feeders feeding AP load	368.28 [b]
(iv)	Total energy pumped during April, 2013 to Dec., 2013 for AP supply {(i)+ (ii)+ (iii)}	9552.01
(v)	Estimated energy pumped for AP supply from Jan., 2014 to March, 2014	1416.56 [c]
(vi)	Total estimated energy pumped for AP supply during FY 2013-14 {(iv)+ (v)}	10968.57
(vii)	Less losses @12.217% (17-(2.5+15% of 15.22)) MU {(vi) x12.217%}	1340.03 [d]
(viii)	Net estimated AP consumption for FY 2013-14 {(vi) - (vii)}	9628.54
(ix)	AP consumption estimated for load of 82.778 MW running on Urban Feeders [not included above at Sr.No.(viii)] {(viii)x 82.778/8175.938}	97.48 [e]
(x)	**Total AP consumption estimated for FY 2013-14 {(viii)+ (ix)}**	**9726.02**

(a) Calculated by multiplying the number of 3-phase 4-wire AP feeders for each month with AP consumption per feeder for that month in case of 3-phase 3-wire AP feeders.

(b) Calculated by assuming the AP load on Kandi area feeders feeding AP load as 30%.

(c) Calculated by multiplying the total energy pumped (as worked out at Sr. No. (iv)) with 14.83% (average of the percentages of AP consumption during the last three months to the first nine months of FY 2010-11, FY 2011-12 and 2012-13).

(d) The loss @12.217% (11 kV and below) for FY 2013-14 has been computed from para 5.4.

(e) AP load running on 3-phase 3-wire, 3-phase 4-wire and Kandi Area feeders is 8175.938 MW ending September 2013 and load of AP metered connections (running on urban feeders) is 82.778 MW.

Thus, the Commission approves the AP Consumption of 9726.02 MU (say 9726 MU) for FY 2013-14, against 11034 MU projected by PSPCL.

5.2.3 Total Energy Sales for FY 2013-14

The total energy sales as per Revised Estimates (RE) projected by PSPCL in its ARR Petition and now approved by the Commission for FY 2013-14 are given in Table 5.4.

Table 5.4: Total Energy Sales for FY 2013-14

(MU)

Sr. No.	**Particulars**	**Energy sales (RE) by PSPCL for FY 2013-14**	**Energy sales approved by the Commission for FY 2013-14**
I	**II**	**III**	**IV**
1.	Metered sales	26709	26646
2.	AP consumption	11034	9726
3.	Total sales within State	**37743**	36372
4.	Common pool sale	289	289
5.	Outside State sale	153	76
6.	**Total**	**38185**	**36737**

The Commission approves the total energy sales at 36737 MU for FY 2013-14.

5.3 Transmission and Distribution Losses (T&D Losses)

In its ARR petition for FY 2013-14, PSPCL had projected Transmission and Distribution losses at 16.5% for FY 2013-14 (a reduction of 0.5% from the loss level of 17% projected for FY 2012-13). The Commission, however, fixed the T&D losses at 17% for FY 2013-14 in the Tariff Order for FY 2013-14, after considering the submissions made by PSPCL in the ARR for FY 2013-14, AP consumption approved by the Commission for FY 2013-14 and the recommendations contained in the Abraham Committee Report.

PSPCL has submitted in the ARR for FY 2014-15 that it has worked out the T & D losses occurring in its network on the basis of actual power purchase and sales data available for FY 2012-13, revised estimates of sales and power purchase for FY 2013-14 and projections for FY 2014-15. Accordingly, a reduction of 0.2% from the distribution losses assessed for FY 2012-13 has been estimated in FY 2013-14 by PSPCL. Further, another 0.4% reduction has been projected during FY 2014-15 over the revised estimate of losses for FY 2013-14.

PSPCL has submitted that steps are being taken to reduce the distribution loss through various loss reduction and network planning initiatives. PSPCL has stated that considering the geographical spread of the service area and consumer base of PSPCL, loss level of 16.63% has been achieved during FY 2012-13, while losses are estimated at 16.44% and 16.00% during FY 2013-14 and FY 2014-15, respectively. It has been further submitted by PSPCL that in view of the existing loss level of 16.63% already achieved by PSPCL during FY 2012-13, the proposed improvements in FY 2013-14 and FY 2014-15 are justifiable since PSPCL would still comply/overachieve the regulatory loss targets given for the respective years.

Keeping the overall T&D loss level of 17.00% as approved for FY 2013-14 in the Tariff Order for that year and based on the provisionally approved transmission loss of 2.5% for PSTCL for FY 2013-14 in the Tariff Order for PSTCL for FY 2014-15, the target distribution loss (66kV and below) for PSPCL for FY 2013-14 works out to 15.22%, which the Commission approves. The Commission will revisit the distribution loss of PSPCL while undertaking the True up for FY 2013-14.

5.4 Energy Requirement

5.4.1 The total energy requirement to meet the demand of the system is the sum of estimated metered sales including Common Pool and Outside State sales, estimated AP consumption and T&D losses. The total energy requirement for FY 2013-14 projected in the ARR for FY 2013-14, approved by the Commission in the Tariff Order, revised estimates furnished by PSPCL in the ARR for FY 2014-15 and now approved by the Commission are given in Table 5.5.

Table 5.5: Energy Requirement for FY 2013-14

(MU)

Sr. No.	Particulars	Projected by PSPCL in ARR for FY 2013-14	Approved by the Commission in T.O. for FY 2013-14	Revised Estimates by PSPCL for FY 2013-14 in ARR Petition FY 2014-15	Now approved by the Commission for FY 2013-14
I	II	III	IV	V	VI
1.	Metered sales within the State	27461	27461	26709	26646
2.	AP consumption	12029	11221	11034	9726
3.	**Total sales within the State (1+2)**	39490	38682	37743	**36372**
4.	Common pool sale	304	304	289	289
5.	Outside State sale	117	53	153	76
6.	**Total sales (3+4+5)**	39911	39039	38185	**36737**
7(a).	T&D losses on Sr.No.3 (%)	16.50%	17.00%	16.44%	17.00%
7(b).	T&D losses on Sr. No.3	7803	7923	7426	7450
8.	**Total energy input required [6+7(b)]**	47714	46962	45611	**44187**
9.	**Energy at transmission periphery to be sold within the State (8-4-5)**		46605		**43822**
10(a).	Transmission loss (%)		2.50%		2.50%
10(b).	Transmission loss		1165		1096
11.	Energy available to PSPCL (9-10 (b) – Sales at 132kV and above level *)		44800		41748
12(a).	Distribution loss (7(b)-10(b))		6758		6354
12(b).	Distribution loss (%)		15.08%		15.22%
13.	**Energy available for sale to consumers within the State** [11-12 (a) **+** Sales at 132kV and above level *]		38682		**36372**

** 640 MU (estimate sale projected by PSPCL in ARR for FY 2013-14) and 978 MU (revised estimated sale projected by PSPCL in ARR for FY 2014-15).*

5.4.2 The revised energy requirement for FY 2013-14 with T&D losses of 17.00% is determined as 44187 MU, which has to be met from PSPCL's own generation (thermal and hydel) including share from BBMB, purchase from Central Generating Stations and other sources.

5.5 PSPCL's own generation

5.5.1 Thermal Generation

PSPCL has estimated the revised gross generation of GNDTP, GGSSTP and GHTP for FY 2013-14 based on actual generation of the respective plants up to September, 2013 and estimating the generation for the second half of FY 2013-14 on the basis of planned and forced outages of the respective plants.

The Commission has, however, obtained the actual generation of different thermal generating stations from April, 2013 to December, 2013 and the projected generation from January, 2014 to March, 2014. The actual gross generation from April, 2013 to December, 2013 and the generation projected from January, 2014 to March, 2014 by PSPCL in the ARR for FY 2014-15 vide letter no. 92 dated 20.01.2014 is summarized in Table 5.6.

Table 5.6: Actual & Projected Gross Thermal Generation for FY 2013-14

(MU)

Sr. No.	Station	Actual gross generation from April 2013 to December 2013	Projected gross generation from January 2014 to March 2014	Total gross generation (III+IV)
I	II	III	IV	V
1.	GNDTP	1345	508	1853
2.	GGSSTP	6278	2195	8473
3.	GHTP	4999	1808	6807
4.	**Total**	**12622**	**4511**	**17133**

PSPCL has submitted in the ARR petition for FY 2014-15 that Unit 3 of GNDTP will be available for entire year during FY 2013-14 after completion of its R&M and its entire generation and fuel cost has been included in the projections for FY 2013-14. Unit 4 of GNDTP is expected to be under R&M upto 01.04.2014. Further, unit 4 is expected to be under trial run during the period January 2014 to March 2014. The expected generation during 3 months period is 145 MU, which has not been included in the projections for FY 2013-14. The cost of fuel consumed during trial & stabilization of Unit 4 has also been excluded while calculating the fuel cost. The Commission accepts the same as it is not sure when unit 4 of GNDTP will be under trial run and when it will be actually commissioned.

The plant availability of GHTP and GGSSTP for second half of FY 2013-14 are based on the actual plant availability figures attained till H1 of FY 2013-14 and the planned maintenance schedule. Plant availability of GGSSTP and GHTP for H1 of FY 2013-14 is above 85%.

Plant availability for H2 of FY 2013-14 has been estimated to be above 85% for all the plants except GNDTP.

In view of the above, the Commission approves thermal generation of 17133 MU as worked out in Table 5.6.

Auxiliary energy consumption and net generation: The plant-wise auxiliary energy consumption projected by PSPCL during determination of ARR for FY 2013-14, auxiliary energy consumption approved by the Commission in the Tariff Order for FY 2013-14, the revised figures projected by PSPCL in the ARR petition for FY 2014-15, and now approved by the Commission are given in Table 5.7.

Table 5.7: Auxiliary energy consumption for FY 2013-14

Sr. No.	Station	Projected by PSPCL in ARR for FY 2013-14	Approved by the Commission in T.O. for FY 2013-14	RE by PSPCL in ARR for FY 2014-15	Now approved by the Commission
I	II	III	IV	V	VI
1.	GNDTP	11.00 %	11.00 %	April 13-Dec 13 (11.44 %) Jan 14-Mar 14 (11.21%)	11.00 %
2.	GGSSTP	8.50 %	8.50 %	April 13-Dec 13 (8.46 %) Jan 14-Mar 14 (8.50%)	8.50 %
3.	GHTP	8.50 %	8.50 %	April 13-Dec 13 (8.34 %) Jan 14-Mar 14 (8.50%)	8.50 %

In the Tariff Order for FY 2013-14, 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 5.4.1 of the Tariff Order for FY 2013-14, and accordingly fixed the auxiliary energy consumption for FY 2013-14 at 11%, 8.50% and 8.50% for GNDTP, GGSSTP and GHTP respectively.

The Commission, therefore, approves auxiliary consumption for GNDTP, GGSSTP and GHTP at the level already approved in the Tariff Order for FY 2013-14 i.e. at 11%, 8.50% and 8.50% respectively.

The station-wise generation projected by PSPCL during determination of ARR for FY 2013-14, generation approved by the Commission in its Tariff Order for that year, revised estimates supplied by PSPCL in the ARR for FY 2014-15 & vide letter dated 20.01.2014 and the generation now approved by the Commission are given in Table 5.8.

Table 5.8: Thermal Generation for FY 2013-14

(MU)

Sr. No.	Station	Projected by PSPCL in ARR for FY 2013-14		Approved by the Commission in T.O. for FY 2013-14		Revised Estimates as per ARR for FY 2014-15 & vide letter dated 20.01.2014		Now approved by the Commission	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	GNDTP	3018	2686	3077	2739	1853	1646	1853	1649
2.	GGSSTP	9300	8509	9865	9026	8473	7755	8473	7753
3.	GHTP	7238	6623	7724	7067	6807	6236	6807	6228
4.	**Total**	**19556**	**17818**	**20666**	**18832**	**17133**	**15637**	**17133**	**15630**

The Commission approves gross and net thermal generation for FY 2013-14 at 17133 MU and 15630 MU respectively.

5.5.2 **Hydel Generation**

PSPCL, in the ARR petition for FY 2013-14, projected the net hydel generation including BBMB share at 8519.56 MU for FY 2013-14. The Commission, in its Tariff Order for FY 2013-14, approved the net hydel generation including BBMB share at 8657 MU. PSPCL, in its ARR petition for FY 2014-15, has submitted the revised net hydel generation at 8975 MU for FY 2013-14.

PSPCL has submitted in the ARR for FY 2014-15 that the availability from hydel plants for FY 2013-14 has been re-estimated on the basis of the actual generation during the first half of FY 2013-14 and the revised generation target estimated for the respective hydel plants for the second half of FY 2013-14 are based upon last three years average for FY 2010-11 to FY 2012-13 for the corresponding months.

The Commission has, however, obtained actual generation figures from PSPCL from April, 2013 to December, 2013 and projections from January, 2014 to March, 2014 vide PSPCL letter no. 92 dated 20.01.2014, as summarized in Table 5.9.

Table 5.9: Actual Gross Hydel Generation from April 2013 to December 2013 and projected Hydel Generation from January 2014 to March 2014

(MU)

Sr. No.	Station	Actual gross generation from April 2013 to December 2013	Projected gross generation from January 2014 to March 2014	Total gross generation
I	II	III	IV	V
1.	Shanan	301	67	368
2.	UBDC	312	53	365
3.	RSD	1376	324	1700
4.	MHP	862	353	1215
5.	ASHP	586	153	739
6.	Micro Hydel	8	3	11
7.	**Gross own hydro**	**3445**	**953**	**4398**

The Commission has worked out net hydel generation for FY 2013-14 by deducting the auxiliary consumption, transformation losses and free HP share in RSD as indicated in Table 5.10. HP royalty in Shanan has not been deducted from the gross hydel generation as the same has been considered as Outside State sale in para 5.2.1, since some revenue is earned from this sale.

The total availability of station-wise hydel generation as projected by PSPCL in the ARR for FY 2013-14, generation approved by the Commission in the Tariff Order for FY 2013-14, the revised estimate submitted by PSPCL in the ARR for FY 2014-15 & vide letter dated 20.01.2014 and now approved by the Commission are given in Table 5.10.

Table 5.10: Hydel Generation for FY 2013-14

(MU)

Sr. No.	Station	Projected by PSPCL in ARR for FY 2013-14	Approved by the Commission in T.O. for FY 2013-14	Revised Estimates as per ARR for FY 2014-15 & vide letter dated 20.01.2014	Now Approved by the Commission
I	II	III	IV	V	VI
1.	Shanan	514.08	542	368	368
2.	(a) UBDC Stage I	160.39	152	365	365
	(b) UBDC Stage II	187.18	195		
3.	RSD	1511.17	1578	1700	1700
4.	MHP	1204.49	1204	1215	1215
5.	ASHP	714.35	708	739	739
6.	Micro Hydel	9.06	9	11	11
7.	**Total own generation (Gross)**	**4300.72**	**4388**	**4398**	**4398**
8.	Less Auxiliary consumption and transformation loss	41.35	36	36	36*
9.	Less HP share in RSD	117.43	73	78	78**
10.	Less HP Royalty in Shanan			53	
11.	**Total own generation (Net) (7-8-9-10)**	**4141.94**	**4279**	**4231**	**4284**
12.	**PSPCL share from BBMB**				
(a)	PSPCL share excluding common pool share (Net)	4073.82	4074	4418	4418
(b)	Add Common pool share	303.80	304	289	289
13.	**Net share from BBMB**	**4377.62**	**4378**	**4707**	**4707**
14.	**Total hydro availability (Net) (Own+BBMB) (11+13)**	**8519.56**	**8657**	**8938**	**8991**

** Transformation loss @0.5% (22 MU), Auxiliary consumption @0.5% for RSD generation of 1700 MU and UBDC stage-I generation of 156 MU (having static exciters) and @0.2% for others (14 MU).*

*** HP share @4.6% in RSD (78 MU).*

The Commission, thus, approves revised hydel generation for FY 2013-14 at 4284 MU (net) from own hydel stations and 4707 MU (net) as share from BBMB, as shown in Table 5.10.

5.5.3 The gross and net availability of thermal and hydel generation approved for FY 2013-14 is depicted in Table 5.11.

Table 5.11: Gross and Net availability of Thermal and Hydel Generation approved for FY 2013-14

(MU)

Sr. No.	Thermal and Hydel Generation	Gross Generation	Net Generation
I	**II**	**III**	**IV**
1.	Thermal	17133	15630
2.	Hydel		
(a)	Own generation	4398	4284
(b)	Share from BBMB (including Common Pool share)	4707	4707
(c)	Total Hydel (Own + BBMB)	9105	8991
3.	**Total (Thermal + Hydel) availability**	**26238**	**24621**

5.6 Power Purchase

To meet the energy requirement, PSPCL had projected power purchase at 21259 MU (net) in the ARR for FY 2013-14. The Commission, in its Tariff Order for FY 2013-14, approved power purchase at 19473 MU (net) for FY 2013-14. PSPCL has now furnished revised estimates of power purchase for FY 2013-14 at 20042 MU (net) in its ARR petition for FY 2014-15. The approved total energy requirement during FY 2013-14 including Common Pool sale and Outside State sale and T&D losses are determined as 44187 MU as discussed in para 5.4. The energy available from PSPCL's own generating stations including its share from BBMB is 24621 MU (15630 MU of thermal generation and 8991 MU of hydel generation including share from BBMB) as approved in para 5.5. The balance energy requirement works out to 19566 MU (net) which has to be met through purchases from Central Generating Stations and other sources.

PSPCL in its ARR for FY 2014-15 has submitted that in order to optimize the cost of power procured, PSPCL has scheduled its procurement from various central generating stations on merit order principle. The power purchase expenses as determined through such optimal merit order dispatch after due consideration for contractual obligations, technical constraints and load profile during various seasons have been proposed for approval by PSPCL in the ARR for FY 2014-15. The projected energy availability from central thermal generating stations with allocated share for PSPCL for FY 2013-14 has been taken same as the energy for the previous year i.e. FY 2012-13 and from central hydro generating stations based upon the average of the energy for the last three years i.e. FYs 2010-11, 2011-12 and 2012-13. Further, in the case of upcoming private power plants in

Punjab, the energy availability has been projected based on the date of commissioning, availability based on stabilization period and the normative plant load factor. In the case of Talwandi Sabo TPS, Rajpura TPS and Goindwal Sahib TPS, the projections by PSPCL are based upon availability of 50% for FY 2013-14 considering the stabilization period after commissioning of the plants and plant load factor of 80%.

PSPCL has further submitted that during second half of FY 2013-14, PSPCL shall be having surplus energy available from tied up sources from central generating stations and from the upcoming IPPs in the State of Punjab. In order to manage demand and maintain energy balance, the surplus energy during second half of FY 2013-14 has been surrendered. The surrendering has been done as per merit order of power purchase from the existing thermal and gas plants. The merit order is based upon the variable rates of Sept, 2013. After surrender of energy, annual variable charges have been reduced and fixed/other charges have been retained as the same. The impact of fixed charges borne due to surrender of surplus power of 1186 MU has been projected as ₹175.596 crore during FY 2013-14. PSPCL has submitted that the projections of power availability as submitted in the long term plan of PSPCL differ from the projections submitted in the ARR on annual basis due to difference in demand forecast based on restricted and unrestricted demand. The Commission has not taken into consideration the projected impact of surrendering the surplus power by PSPCL as the projections made by PSPCL in the ARR for restricted and unrestricted demand are entirely different without any proper explanation. Further, the demand and supply may vary in actual during the second half of FY 2013-14. However, the actual impact of surrendering of power will be taken care of at the time of true up, for which PSPCL will make detailed submissions along with the reasons there-of, to the satisfaction of the Commission.

The Commission, accordingly, approves the revised power purchase at 19566 MU (net) for FY 2013-14.

5.7 Energy Balance

Details of energy requirement and energy availability projected by PSPCL in its ARR petition for FY 2013-14, approved by the Commission in its Tariff Order for FY 2013-14, revised estimates supplied by PSPCL in the ARR petition for FY 2014-15 and now approved by the Commission are given in Table 5.12.

Table 5.12: Energy Balance for FY 2013-14

(MU)

Sr. No.	Particulars	Projected by PSPCL in ARR for FY 2013-14	Approved by the Commission in Tariff Order for FY 2013-14	Revised Estimates by PSPCL in ARR for FY 2013-14	Now approved by the Commission for FY 2013-14
I	II	III	IV	V	VI
(A)	**Energy Requirement**				
1.	Metered Sales	27461	27461	26709	26646
2.	Sales to Agriculture	12029	11221	11034	9726
3.	**Total Sales within the State**	**39490**	**8682**	**37743**	**36372**
4.	T&D Losses (%)	16.5%	17.00%	16.44%	17.00%
5.	T & D Losses	7803	7923	7426	7450
6.	Sale to Common Pool consumers	304	304	289	289
7.	Outside State Sale	117	53	153	76
8.	**Total Requirement**	**47714**	**46962**	**45611**	**44187**
(B)	**Energy Available**				
9.	Own generation (Ex-bus)				
(a)	Thermal	17818	18832	16464	15630
(b)	Hydel	4259	4279	4398	4284
10.	Share from BBMB (incl. share of common pool consumers)	4378	4378	4707	4707
11.	Purchase (net)	21259	19473	20042	19566
12.	**Total Availability**	**47714**	**46962**	**45611**	**44187**

5.8 Fuel Cost

5.8.1 PSPCL in the ARR petition for FY 2013-14 had projected fuel cost of ₹4905.80 crore for gross generation of 19556 MU. The Commission, in the Tariff Order for FY 2013-14, approved fuel cost of ₹4440.20 crore for gross thermal generation of 20666 MU. PSPCL, in the ARR petition for FY 2014-15, has revised the estimates of fuel cost to ₹4511.13 crore for gross thermal generation of 18048 MU, based on calorific value and price of coal / oil, transit loss of coal, station heat rate of thermal generating stations and specific oil consumption for FY 2013-14, as given in Table 5.13. PSPCL has submitted that techno-commercial parameters have been estimated on the basis of historical data and norms. Further, the weighted average price and calorific value for coal and oil is estimated to remain as actual for first half of FY 2013-14, and any variation in fuel price and GCV is pass through as per the recovery of energy charges and capacity charges provided in

PSERC Tariff Regulations, 2005, as amended from time to time and in reference with CERC Tariff Regulations, 2009.

Table 5.13: Calorific Value and Price of Coal & Oil, Transit loss of coal, Specific Oil consumption and Station Heat Rate as submitted by PSPCL for FY 2013-14

Sr. No.	Station	Period	As submitted by PSPCL						
			Gross Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (₹/ KL)	Price of coal excluding transit loss (₹/MT)	Transit Loss (%)	Station Heat Rate (kCal/ kWh)	Specific Oil Consumption (ml/kWh)
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	GNDTP	H1	4073	9400	50043	3610	3.54	2783	1.47
	GNDTP	H2	4073	9400	50043	3610	3.00	2825	1.50
2.	GGSSTP	H1	4145	9700	45605	4233	(-)0.38	2553	0.67
	GGSSTP	H2	4145	9700	45605	4233	1.00	2668	1.00
3.	GHTP	H1	4020	9500	47704	3644	0.50	2399	0.39
	GHTP	H2	4020	9500	47704	3644	1.50	2500	1.00

H1: April 2013 to September, 2013 & H2: October, 2013 to March, 2014.

Fuel cost being a major item of expense, the Commission thought it prudent to get the same validated. The calorific value of oil & coal, the price of oil & coal and transit loss of coal validated by the Commission are indicated in Table 5.14. The Commission had decided in the Tariff Order for FY 2013-14 to adopt the GCV of receipted coal minus maximum permissible drop of 150 kCal/kg in GCV as per the order of the Commission dated 08.10.2012, for working out the fuel cost from November, 2012 to March, 2013, FY 2013-14 and onwards. The calorific value (GCV) as shown under column III of Table 5.14 has accordingly been worked out. The validated values are based on data from April 2013 to September 2013.

Table 5.14: Calorific Value and Price of Coal & Oil and Transit loss of coal as validated by the Commission for FY 2013-14

Sr. No.	Station	As validated by the Commission				
		Calorific value of coal (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (₹/KL)	Price of coal (₹/MT) (Excluding Transit Loss)	Transit Loss
I	II	III	IV	V	VI	VII
1.	GNDTP	4073	9511	48059	3512	3.54%
2.	GGSSTP	4165	9700	45605	4101	(-)0.38%
3.	GHTP	4022	9800	47708	3548	0.53%

5.8.2 Substantial quantity of coal received from the captive coal mine of PSPCL has been used during FY 2013-14. The Commission has taken the coal quantity received from PANEM (PSPCL's captive coal mine) as submitted by PSPCL. The price of coal and corresponding calorific values given in the ARR petition of PSPCL and those validated by the Commission [Table 5.14] are weighted average values of coal for the months from April 2013 to September 2013, including PANEM coal.

5.8.3 The gross generation considered by the Commission in the estimation of fuel cost for FY 2013-14 is 17133 MU. 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 the Tariff Order for FY 2013-14, except SHR of GHTP Units III & IV, which has now been determined as 2428 kcal/kWh in para 2.7.5. Table 5.15 details the fuel cost based on calorific value & price of coal & oil as mentioned in Table 5.14.

5.8.4 No transit loss has been allowed for PANEM 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 PANEM coal, transit loss of 1.0% has been allowed by the Commission, which shall be trued up at actuals, subject to a maximum of 1.0%.

Table 5.15: Fuel Cost for FY 2013-14

Sr. No.	Item	Derivation	Unit	GNDTP	GGSSTP	GHTP (Unit I & II)	GHTP (Unit III & IV)	Total
I	II	III	IV	V	VII	VIII	VIII	IX
1.	Generation	A	MU	1853	8473	2969*	3838*	**17133**
2.	Heat Rate	B	Kcal/kWh	2825	2500	2500	2428	
3.	Specific Oil consumption	C	ml/kWh	1	1	1	1	
4.	Calorific value of oil	D	kcal/litre	9511	9700	9800	9800	
5.	Calorific value of coal	E	kcal/kg	4073	4165	4022	4022	
6.	Overall heat	F=(AxB)	Gcal	5234725	21182500	7422500	9318664	
7.	Heat from oil	G=(AxCxD)/1000	Gcal	17624	82188	29096	37612	
8.	Heat from coal	H=(F-G)	Gcal	5217101	21100312	7393404	9281052	
9.	Oil consumption	I=(Gx1000)/D	KL	1853	8473	2969	3838	
10.	Transit loss of Coal	J	(%)	1	1	1	1	
11.	Total coal consumption excluding transit loss	K=(H*1000)/E	MT	1280899	5066101	1838241	2307571	
12.	Quantity of PANEM coal	L	MT	867806	2828135	1267497	1638481	
13.	Quantity of coal other than PANEM coal	M=K-L	MT	413093	2237966	570744	669090	
14.	Quantity of coal other than PANEM coal including transit loss	N=M/(1-J/100)	MT	417266	2260572	576509	675848	
15.	Total quantity of coal required	O=L+N	MT	1285072	5088707	1844006#	2314329 #	
16.	Price of oil	P	₹/KL	48059	45605	47708	47708	
17.	Price of coal	Q	₹//MT	3512	4101	3548	3548	
18.	Total cost of oil	R=P x I / 107	₹ crore	8.91	38.64	14.16	18.31	80.02
19.	Total cost of coal	S=O x Q / 107	₹ crore	451.32	2086.88	654.25	821.12	4013.57
20.	**Total Fuel cost**	**T=R+S**	**$ crore**	**460.23**	**2125.52**	**668.41**	**839.43**	**4093.59**
21.	**Per Unit Cost**	**U=T *10 / A**	**₹ / kWh**	**2.48**	**2.51**	**2.25**	**2.19**	**2.39**

** As intimated by PSPCL.*
 # Worked out on proportionate basis in proportion to generation.

The Commission, therefore, approves the revised fuel cost at ₹4093.59 crore for gross thermal generation of 17133 MU.

5.9 Power Purchase Cost

5.9.1 The Commission, in the Tariff Order for FY 2013-14, approved the power purchase cost of ₹7818.98 crore, comprising of ₹7468.41 crore for purchase of 20337 MU (gross), ₹250.57 crore payable to NHPC towards water usage charges for generation of electricity, along with license fee, in respect of Salal, Uri, Dulhasti and Sewa-II hydel stations falling in the state of J & K and ₹100.00 crore to meet the shortfall in RPO compliance through purchase of RE power from outside the State of Punjab and new projects coming up in the State of Punjab or through purchase of RECs. PSPCL, in its ARR petition for FY 2014-15, has given revised estimates of ₹7705.40 crore (exclusive of PSTCL transmission charges of ₹1269.64 crore) for purchase of 20671.96 MU (gross) for FY 2013-14. This amount includes inter-state transmission charges (payable to PGCIL) of ₹697.70 crore and ₹141.00 crore for purchase of RECs for FY 2013-14.

5.9.2 As discussed in para 5.6, the requirement of 19566 MU (net) is to be met through purchase from central generating stations and other sources. The transmission loss external to PSTCL system has to be added to arrive at the quantum of gross energy to be purchased. The Commission in the Tariff Order for FY 2013-14 has considered external losses of 4.25% as against 4.15% proposed by PSPCL. PSPCL has intimated the overall weighted average of actual external losses in the first six months of FY 2013-14 at 2.51%. From October 2013 to December 2013, PSPCL has projected overall weighted average of external losses at 3.28% and from January 2014 to March 2014 of 3.46%. For full FY 2013-14, the Commission has determined the overall weighted average external losses at 2.86%, to compute the power purchase cost. The Commission provisionally approves the external losses at 2.86%, subject to true up. After adding 2.86% external losses, the gross energy required to be purchased works out to be 20142 MU (19566 MU + external losses of 576 MU).

PSPCL in the ARR for FY 2014-15 has shown power purchase of 14924.70 MU at a total cost of ₹5247.40 crore for the first half of FY 2013-14, including ₹89.88 crore payable to NHPC towards water usage charges for generation of electricity, along with license fee, in respect of Salal, Uri, Dulhasti and Sewa-II hydel stations falling in the state of J&K. The Commission provisionally approves ₹5157.52 crore (excluding water usage charges) for power purchase of 14924.70 MU for the first half of FY 2013-14. Further, the Commission decides to determine the power purchase cost for balance requirement of 5217.30 MU (20142 – 14924.70) on pro-rata basis, based on the cost provisionally approved by the Commission for the first half of FY 2013-14. Accordingly, the pro-rata amount for purchase of 5217.30 MU works out to ₹1802.94 crore (5157.52 x 5217.30/14924.70), excluding water usage charges payable to NHPC. Therefore, the total power purchase cost for FY 2013-14 works out to ₹6960.46 (5157.52+1802.94) crore for purchase of 20142 MU (gross).

5.9.3 The Commission has noted that PSPCL has paid ₹89.88 crore and ₹32.28 crore as water usage charges to NHPC for first half and second half of FY 2012-13 respectively. Further, PSPCL has paid ₹86.53 crore for first half of FY 2013-14 as water usage charges to NHPC. On pro-rata basis, the amount payable to NHPC as water usage charges for second half of FY 2013-14 comes out to be ₹30.25 crore (86.53 x 5217.30/14924.70). The total amount payable by PSPCL to NHPC for water usage charges works out to ₹116.78 (86.53+30.25) crore, which the Commission approves provisionally.

5.9.4 PSPCL vide memo no. 799/805 dated 23.05.2014 intimated the power purchase/generation from renewable energy sources during FY 2013-14 as 1065.42 MU [1020.67 MU (Non-Solar) + 44.75 MU (Solar)]. Further, vide memo no. 782 dated 19.05.2014 PSPCL intimated purchase of 483333 Non-Solar RECs equivalent to 483.33 MU during FY 2013-14. Thus, total power purchase/generation from renewable energy sources including RECs during FY 2013-14 comes to 1548.75 MU [1504 MU (Non-Solar) + 44.75 MU (Solar)]. PSPCL has submitted that out of this, 140.60 MU [114.80 MU (Non-Solar) and 25.80 MU (Solar)] have been utilized for meeting the shortfall in RPO compliance for FY 2011-12 and FY 2012-13 allowed by the Commission to be carried forward to FY 2013-14 and the remaining 1408.15 MU [1389.20 MU (Non-Solar) and 18.95 MU (Solar)] were available for RPO compliance for FY 2013-14. Accordingly, on the basis of energy available to PSPCL for consumption in its area of distribution of electricity as 42726 MU (41748 MU + 978 MU), the shortfall in power from renewable energy sources for complying with the RPO specified by the Commission for FY 2013-14 i.e. 3.5% (1495.41 MU) [3.37% (1439.87 MU) (Non-Solar) and 0.13% (55.54 MU) (Solar)] comes to 87.26 MU [50.67 MU (Non-Solar) and 36.59 MU (Solar)].

The Commission notes that in the Tariff Order for FY 2013-14, the Commission had provisionally approved the amount of ₹100 crore, as proposed by PSPCL in its ARR petition for that year, to meet the shortfall in RPO compliance through purchase of renewable energy or RECs, to be purchased after exhausting all resources for arranging power from renewable energy sources. Now, in the ARR petition for FY 2014-15, PSPCL has proposed an amount of ₹141.00 crore for purchase of RECs to meet the shortfall in RPO for FY 2013-14. The Commission notes with concern that four Micro-Hydel Plants of PSPCL at Daudhar, Nidampur, Rohti and Thuhi (total capacity 3.9 MW) are non-functional since long and another 18 (2x9) MW MHP Stage-II project in district Hoshiarpur has been delayed considerably. These projects, otherwise, were likely to have contributed renewable energy to the tune of 90 MU annually. **In view of this, the Commission disallows ₹14.00 crore (approximately) required for purchasing**

Non-Solar RECs at the Floor Price of ₹1500 per REC in lieu of non-availability of the said energy. Accordingly, keeping in view the aforementioned disallowance and the shortfall in RPO, the Commission provisionally approves an amount of ₹127.00 crore to meet the shortfall in RPO compliance preferably through purchase of power from renewable energy sources outside the State of Punjab and new projects coming up in the State of Punjab or RECs in case of non-availability of such power. However, PSPCL is directed to make a judicious choice between the options of procuring power from conventional sources/non-conventional sources at APPC combined with purchase of RECs vis-a-vis purchase of power from renewable energy sources at preferential tariff, whichever is economical, so as to safeguard the consumer interest.

The Commission, therefore, approves the revised power purchase cost of ₹7204.24 crore, comprising of ₹6960.46 crore for now determined power purchase of 20142 MU (gross), ₹116.78 crore as water uses charges payable to NHPC and ₹127.00 crore for purchase of power from RE Sources/RECs.

5.10 Employee Cost

5.10.1 In the ARR Petition for FY 2013-14, PSPCL had projected employee expenses of ₹4370.34 crore, net of capitalization of ₹120.00 crore for FY 2013-14. Consequent upon the GoP notification dated 24.12.2012, PSPCL submitted a revised projection of employee cost of ₹4261.09 crore against which the Commission approved an amount of ₹3797.85 crore as employee cost.

5.10.2 In the ARR Petition for FY 2014-15, PSPCL has claimed ₹4306.93 crore on account of employee cost. This includes an amount of ₹1492.57 (299.00+1193.57) crore on account of Terminal Benefits and ₹204.26 crore as BBMB share.

5.10.3 The provisions of the PSERC Tariff Regulations provide for determination of employee cost, as under:

- Terminal benefits and BBMB expenses on actual basis
- Increase in other expenses limited to average increase in WPI
- Exceptional increase in employee cost on account of pay revision etc. to be considered separately by the Commission.

PSPCL has claimed terminal benefits of ₹1492.57 crore and ₹204.26 crore as BBMB share for FY 2013-14. Since terminal benefits and BBMB share are to be allowed on actual basis as per amended Regulation 28(3)(a)(ii), **the Commission allows ₹1696.83 crore (terminal benefits of ₹1492.57 crore and BBMB share ₹204.26 crore) for FY 2013-14 to PSPCL.**

5.10.4 PSERC vide notification dated 17.09.2012 has amended the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Regulation 28 (2) (a) of the amended regulations provides as under:

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

In the true up for FY 2011-12, Commission has allowed ₹2381.79 crore as other employee cost to PSPCL. This includes the impact of pay revision of ₹338.70 crore and ₹282.72 crore on account of arrears of pay revision. After deducting arrears of pay revision, 'other employee cost' for PSPCL works out to ₹2099.07 (2381.79-282.72) crore which is adopted as base for calculating allowable other employee cost for subsequent years for PSPCL.

5.10.5 In the true-up for FY 2011-12, the Commission has allowed 'other employee cost' to PSPCL on actual basis based on the Audited Annual Accounts. The same was allowed subject to the condition that the utility shall make consistent improvement in productivity, optimize its employee cost, implement PwC Report /'Functional Model of Distribution Offices' as committed by it in its ARR Petition and reduce T&D losses. As PSPCL has failed to meet aforesaid goals as discussed in the true up for FY 2011-12, the Commission is unable to accept the revised estimates of employee cost and considers it appropriate to determine 'other employee cost' as per its Regulations.

As per PSERC Tariff Regulations, increase in 'other employee cost' is to be limited to average increase in WPI which works out to 7.35% for FY 2012-13. Applying the WPI increase of 7.35% to the base figure of ₹2099.07 crore, the 'other employee cost' of PSPCL works out to ₹2253.35 crore for FY 2012-13. However, the average annual WPI increase for FY 2013-14 would only be available next year. Accordingly, based on the WPI available for 8 months (April 2013 to November 2013), the Commission has calculated the average WPI increase of 5.29% which is adopted for purposes of calculation of allowable employee cost for FY 2013-14. The allowable 'other employee cost' as calculated above for FY 2012-13 is ₹2253.35 crore for PSPCL. **After applying the WPI increase of 5.29%, the 'other employee cost' for PSPCL works out to**

₹2372.55 crore for FY 2013-14.

5.10.6 PSPCL has also claimed pay revision arrears of ₹211.82 crore for FY 2013-14. Keeping in view the judgment of Hon'ble APTEL as discussed in para no. 2.11.8 of this Tariff Order, **the Commission allows the claim of arrears of pay revision of ₹211.82 crore for FY 2013-14 to PSPCL.**

Thus, the Commission approves the total employee cost of ₹4281.20 (1696.83 +2372.55+211.82) crore for PSPCL for FY 2013-14.

5.11 Repair & Maintenance (R&M) Expenses

5.11.1 In the ARR Petition for FY 2013-14, PSPCL had projected the R&M expenses of ₹504.11 crore (which includes R&M expenses of ₹14.53 crore for assets likely to be added during the year) against which the Commission approved an amount of ₹595.39 crore as R&M expenses for PSPCL for FY 2013-14.

5.11.2 In the ARR Petition for FY 2014-15, PSPCL has claimed R&M expenses of ₹408.10 crore (net of capitalisation of ₹4.21 crore) but including R&M expenses of ₹18.90 crore for assets likely to be added during the year.

PSERC vide notification dated 17.09.2012 has amended the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Regulation 28 (2) (a) of the amended regulations provides as under:

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

5.11.3 In the true up for FY 2011-12, Commission has allowed ₹320.67 crore as R&M expenses to PSPCL which is adopted as base for calculating allowable R&M expenses for subsequent years for PSPCL.

Amended Regulation 28 (2) (b) of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent years. The WPI for FY 2012-13 works out to 7.35%. Applying the WPI increase of 7.35% to the base figure of ₹320.67 crore, the allowable R&M expenses for PSPCL works out to ₹344.24 crore for FY 2012-13.

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 for six months on an average during the year. In the absence of Audited Annual Accounts for FY 2012-13, it is not possible to determine assets added during the year. So, Commission finds it appropriate to take the figure of assets proposed to be added during FY 2012-13 as determined in the T.O. for FY 2013-14 for the purpose of calculation of allowable R&M expenses for FY 2012-13.

5.11.4 The Commission ascertained capitalization of assets worth ₹1215.25 crore during FY 2012-13 in the Tariff Order for FY 2013-14. These are being taken for calculating allowable R&M expenses for FY 2012-13. R&M expenses for these assets added during the year are being considered assuming that these assets remained in service for six months on an average during FY 2012-13. The average percentage rate of R&M expenses of ₹344.24 crore for assets of ₹39215.89 crore as on 01.04.2012 work out to 0.88% (344.24/39215.89x100) for PSPCL. By applying the average rate of 0.88% on addition of assets of ₹1215.25 crore for half year, the base R&M expenses for the fixed assets added during the year work out to ₹5.35 crore. Thus, allowable R&M expenses for FY 2012-13 for PSPCL work out to ₹349.59 (344.24+5.35) crore.

5.11.5 The Commission adopts R&M expenses of ₹354.94 crore (₹344.24 crore as determined above being allowable R&M expenses of PSPCL for FY 2012-13 and ₹10.70 crore being R&M expenses allowed on asset addition during the entire year) of FY 2012-13 as base expenses for calculating R&M expenses for FY 2013-14.

The average annual WPI increase for FY 2013-14 would only be available next year. Accordingly, based on the WPI available for 8 months (April 2013 to November 2013), the Commission has calculated the average WPI increase of 5.29% which is adopted for purposes of calculation of allowable R&M expenses for FY 2013-14. The base R&M expenses as calculated above for FY 2013-14 are ₹354.94 crore for PSPCL. After applying the WPI increase of 5.29%, the R&M expenses work out to ₹373.72 crore for PSPCL for FY 2013-14.

5.11.6 In the ARR Petition for FY 2014-15, PSPCL has claimed an amount of ₹18.90 crore as R&M expenses for assets added during the year 2013-14. PSPCL has proposed to capitalize assets to the extent of ₹2256.00 crore in the RE for FY 2013-14 against the proposed capital expenditure of ₹1950.57 crore. However, based on the capital expenditure actually incurred up to December 2013, the Commission has approved the investment outlay of ₹1450.00 crore for FY 2013-

14 in para 5.14.3 of this Order. Accordingly, capitalization works out to ₹1928.97 crore for FY 2013-14.

5.11.7 In accordance with Regulation 28 (6) of the PSERC Tariff Regulations, the R&M expenses are allowable for assets added during the year on pro-rata basis from the date of commissioning of assets. The percentage of approved R&M expenses of ₹373.72 crore vis-a-vis the Opening Gross Fixed Assets (GFA) of ₹40431.14 crore works out to 0.92%. Accordingly, the additional R&M expenses on the asset addition of ₹1928.97 crore work out to ₹8.87 crore, considering the asset addition for six months, on an average during the year. Thus total R&M expenses allowable to PSPCL work out as ₹382.59 (373.72+8.87) crore for FY 2013-14.

Thus, the Commission approves the R&M expenses of ₹382.59 crore for PSPCL for FY 2013-14.

5.12 Administrative and General (A&G) Expenses

5.12.1 In the ARR Petition of FY 2013-14, PSPCL had projected the A&G expenses of ₹119.60 crore (which includes A&G expenses of ₹3.45 crore for assets likely to be added during the year) against which the Commission approved an amount of ₹136.89 crore as A&G expenses for PSPCL for FY 2013-14.

5.12.2 In the ARR Petition for FY 2014-15, PSPCL has claimed A&G expenses of ₹161.06 crore (net of capitalisation of ₹21.80 crore) but including A&G expenses of ₹6.94 crore for assets likely to be added during the year. This also includes an amount of ₹25.00 crore as donation made to Cancer & Drug Addiction Treatment Infrastructure Fund.

5.12.3 PSERC vide notification dated 17.09.2012 has amended the PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Regulation 28 (2) (a) of the amended regulations provides as under:

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

In the true up for FY 2011-12, Commission has allowed ₹97.12 crore as A&G expenses to PSPCL which is adopted as base for calculating allowable A&G expenses for subsequent years for PSPCL.

Amended Regulation 28 (2) (b) of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent years. The

WPI for FY 2012-13 works out to 7.35%. Applying the WPI increase of 7.35% to the base figure of ₹97.12 crore, the allowable A&G expenses for PSPCL work out to ₹104.26 crore for FY 2012-13.

5.12.4 In accordance with Regulation 28 (6) of the PSERC Tariff Regulations, the A&G 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 for six months on an average during the year. In the absence of Audited Annual Accounts for FY 2012-13, it is not possible to determine assets added during the year. So, Commission finds it appropriate to take the figure of assets proposed to be added during FY 2012-13 as determined in the T.O. for FY 2013-14 for the purpose of calculation of allowable A&G expenses for FY 2012-13.

5.12.5 The Commission has ascertained capitalization of assets worth ₹1215.25 crore during FY 2012-13 in the Tariff order for FY 2013-14. These are being taken for calculating allowable A&G expenses for FY 2012-13. A&G expenses for these assets added during the year are being considered assuming that these assets remained in service for six months on an average during FY 2012-13. The average percentage rate of A&G expenses of ₹104.26 crore for assets of ₹39215.89 crore as on 01.04.2012 work out to 0.27% (104.26/39215.89x100) for PSPCL. By applying the average rate of 0.27% on addition of assets of ₹1215.25 crore for half year, the allowable A&G expenses for the fixed assets added during the year work out to ₹1.64 crore. Thus, allowable A&G expenses for FY 2012-13 for PSPCL work out to ₹105.90 (104.26+1.64) crore.

5.12.6 The Commission adopts A&G expenses of ₹107.54 crore (₹104.26 crore as determined above being allowable A&G expenses of PSPCL for FY 2012-13 and ₹3.28 crore being A&G expenses allowed on asset addition during the entire year) of FY 2012-13 as base expenses for calculating A&G expenses for FY 2013-14.

The average annual WPI increase for FY 2013-14 would only be available next year. Accordingly, based on the WPI available for 8 months (April 2013 to November 2013), the Commission has calculated the average WPI increase of 5.29% which is adopted for purposes of calculation of allowable A&G expenses for FY 2013-14. The base A&G expenses as calculated above for FY 2013-14 is ₹107.54 crore for PSPCL. After applying the WPI increase of 5.29%, the A&G expenses work out to ₹113.23 crore for PSPCL for FY 2013-14.

5.12.7 In the ARR Petition for FY 2014-15, PSPCL has claimed an amount of ₹6.94 crore as A&G expenses for assets added during the year 2013-14. PSPCL has proposed to capitalize assets to the extent of ₹2256.00 crore in the RE for FY 2013-14 against the proposed capital expenditure of ₹1950.57 crore. However, based on the capital expenditure actually incurred up to December 2013, the Commission has approved the investment outlay of ₹1450.00 crore for FY 2013-14 in para 5.14.3 of this Order. Accordingly, capitalization work out to ₹1928.97 crore for FY 2013-14.

5.12.8 In accordance with Regulation 28 (6) of the PSERC Tariff Regulations, the A&G expenses are allowable for assets added during the year on pro-rata basis from the date of commissioning of assets. The percentage of approved A&G expenses of ₹113.23 crore vis-a-vis the Opening Gross Fixed Assets (GFA) of ₹40431.14 (₹39215.89 crore assets as on 31.03.2012 plus ₹1215.25 crore taken for FY 2012-13) crore works out to 0.28%. Accordingly, the additional A&G expenses on the asset addition of ₹1928.97 crore work out to ₹2.70 crore, considering the asset addition for six months, on an average during the year. Thus total A&G expenses allowable to PSPCL works out as ₹115.93 (113.23+2.70) crore for FY 2013-14.

5.12.9 PSPCL also submitted that the A&G expenses also include an amount of ₹5.08 crore paid to the Commission as Annual License fee for FY 2013-14. Further amount to be paid as Tariff filing fees for determination of ARR & Tariff Petition should also be allowed on actual basis as per clause 2 (b) of the amended Tariff Regulation 28. Regulation 28 (2)(b) of PSERC (Terms and Conditions for Determination of Tariff) Second Amendment Regulations, 2012 provides as under:-

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

5.12.10 As per above regulation, Annual License fee amounting to ₹5.08 crore and fees for determination of tariff amounting to ₹5.74 crore is also allowable to PSPCL in addition to the A&G expenses as worked out above.

5.12.11 As Commission is allowing A&G expenses as per PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005, so amount of ₹25.00 crore claimed by PSPCL as donation made to Cancer & Drug Addiction Treatment Infrastructure Fund should be meted out of profit earned by PSPCL during FY 2013-14 and not passed on to the consumers. Accordingly, this donation is not being allowed over & above the A&G expenses allowed on a normative basis in line with the regulations.

Thus, the Commission approves the A&G expenses of ₹126.75 (115.93+5.08+5.74) crore for PSPCL for FY 2013-14.

5.13 Depreciation Charges

5.13.1 In the ARR Petition for FY 2013-14, PSPCL projected the depreciation charges at ₹814.45 crore for FY 2013-14 against which the Commission approved the depreciation charges of ₹813.20 crore. In the ARR Petition for FY 2014-15, PSPCL has revised its claim of depreciation charges to ₹813.59 crore on assets valued at ₹40470.33 crore. PSPCL has submitted that depreciation charges for FY 2013-14 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.

The Commission has approved the depreciation charges of ₹661.65 crore for FY 2011-12 in para 3.14 of this Tariff Order on the assets of ₹20244.36 crore (net of land and land rights). In the absence of Audited Annual Accounts for FY 2012-13, the Commission adopts the addition of assets of ₹1215.25 crore during FY 2012-13 as determined in Tariff Order for FY 2013-14 and determines the depreciation charges as ₹701.37 crore on assets of ₹21459.61 crore.

5.13.2 The Commission considers no depreciation on assets added during the FY 2013-14 as the utility has not submitted Audited Annual Accounts for FY 2012-13 and subhead wise details of assets. However, depreciation on assets added during FY 2013-14 shall be considered during True Up

The Commission, accordingly, approves the depreciation charges of ₹701.37 crore.

5.14 Interest and Finance Charges

5.14.1 In the ARR Petition for FY 2013-14, PSPCL had claimed Interest and Finance Charges of ₹2656.86 crore (net) against which the Commission had approved an amount of ₹1767.18 crore for FY 2013-14. In the ARR Petition for FY 2014-15, PSPCL has revised the Interest and Finance Charges for FY 2013-14 to

₹2508.50 crore inclusive of finance charges of ₹65.00 crore as given in Table 5.16.

Table 5.16: Interest and Finance Charges claimed by PSPCL for FY 2013-14 (RE)

(₹ crore)

Sr. No.	Description	Interest as depicted in ARR Petition
I	II	III
1.	Interest on Institutional Loans	1005.07
2.	Interest on GoP Loans	13.37
3.	Interest on GPF	193.49
4.	Interest to Consumers	150.00
5.	**Sub - Totals(1+2+3+4)**	**1361.93**
6.	Interest on Working Capital Loan (WCL)	1301.57
7.	Finance Charges	65.00
8.	**Total(5+6+7)**	2728.50
9.	Less: Capitalization	220.00
10.	**Net Interest and Finance Charges**	**2508.50**

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

5.14.2 **Investment Plan**

The Commission in its Tariff Order for FY 2013-14 approved an Investment Plan of ₹1450.00 crore against projected capital expenditure of ₹2200.00 crore for FY 2013-14. In the ARR Petition for FY 2014-15, PSPCL has submitted a revised Investment Plan of ₹1950.57 crore for FY 2013-14 as summarized in Table 5.17.

Table 5.17: Summary of Capital Expenditure planned by PSPCL

(₹ crore)

Sr. No.	Particulars	FY 2013-14 (RE)
I	II	III
(a)	Generation	499.07
(b)	Transmission	200.00
(c)	Distribution	1251.50
	Total	**1950.57**

The Utility has submitted that capital expenditure is planned on Generation activities mainly for the R&M activities and on Transmission & Distribution activities for improvement projects for network up to 66 kV, construction of new sub stations and mini grid substations along with associated Transmission lines. The Commission has reviewed the capital expenditure planned by utility for FY 2013-14 for different functions of Generation, Transmission and Distribution.

(a) Generation

For FY 2013-14, PSPCL has proposed expenditure on major schemes namely, Bhakra left bank and Dehar PH (₹47.38 crore), Mukerian HEP-II (₹79.58 crore), ShahpurKandi HEP (₹110.00crore), GNDTP works based on RLA Study (₹90.73 crore), R&M of GNDTP (₹35.03 crore), GGSSTP (₹47.67crore), GHTP Stage-I & Stage II (₹30.97crore) and for R&M of HEP's and other works ₹57.71 crore.

(b) Transmission

PSPCL has also submitted that capital expenditure of ₹200.00 crore has been planned for network capacity addition, improvement projects for network up to 66 kV, construction of new substations and mini grid substations along with associated transmission lines during FY 2013-14.

(c) Distribution

PSPCL has further submitted that distribution function requires regular capital expenditure for network capacity addition and system improvement works. The proposed expenditure is mainly envisaged for normal development works including System Improvement schemes (₹400.00 crore), works relating to APDRP-II part-A and B (₹270.00 crore), release of Tubewell connections (₹200.00 crore) and shifting of meters out of consumer premises (₹240.00 crore) and for other works (₹141.50 crore).

5.14.3 Commission observes that the actual capital expenditure incurred by PSPCL during FY 2013-14 is ₹1089.36 crore upto December, 2013 (except the capital expenditure on APDRP Part-A Schemes) and the investment proposed by PSPCL for FY 2013-14 at ₹1950.57 crore is on the higher side. The Commission has considered the claim for investment of the utility in view of the growing load demand, need of Transmission network expansion and improvement in Distribution system. **Keeping in view the importance of the schemes under execution, the Commission approves the capital investment of ₹1450.00 crore for FY 2013-14 against ₹1950.57 crore proposed by the utility for FY 2013-14.** However, increase/decrease if any, in actual capital investment will be considered during True up.

5.14.4 The Commission observes that the loan of ₹141.61 crore raised upto March, 2013 and ₹13.50 crore raised during FY 2013-14 of R-APDRP - Part A scheme is to be converted into grants once the establishment of required system is achieved and verified by an independent agency appointed by the Ministry of

Power, Govt. of India. In addition, PSPCL has received consumer contribution of ₹269.03 crore upto December, 2013 and after increasing it proportionately, estimated receipts on this account become ₹358.71 crore. Accordingly, actual loan requirement for the level of investment works out to ₹1077.79 (1450.00-358.71-13.50) crore. **This loan requirement of ₹1077.79 crore is taken into consideration for computation of Interest Charges.**

5.14.5 PSPCL has proposed to capitalize assets to the extent of ₹2256.00 crore for FY 2013-14 against the proposed Investment Plan of ₹1950.57 crore. However, capitalization of assets is determined as ₹1928.97 crore in the ratio of opening capital works-in-progress (CWIP) and capital expenditure during the year to sum of CWIP and estimated capital expenditure of PSPCL as approved by the Commission.

5.14.6 In the ARR Petition for FY 2014-15, the opening balance of loans for FY 2013-14 (other than working capital loan & GP Fund) is shown as ₹7799.32 crore against ₹7043.57 crore ascertained in Table 3.22 of the Tariff Order for FY 2013-14 and interest on loans availed by PSPCL is depicted as ₹1005.07 crore. The Commission observes that the loan of ₹141.61 crore raised upto March, 2013 for R-APDRP - Part A schemes are to be reduced from opening balance of loans. The Commission further observes that no interest in respect of R-APDRP– Part A scheme is being paid by PSPCL while interest liability is being provisioned in the books of PSPCL. Thus the claim of PSPCL of loan of ₹7799.32 crore is reduced to ₹6901.96 (7043.57-141.61) crore. The Commission, however, considers the actual loan requirement of ₹1077.79 crore against the proposal of PSPCL of ₹2386.50 crore (other than WCL, GP Fund, GoP loan and R-APDRP-A loan) for determination of tariff. Considering the opening balance of ₹6901.96 crore for FY 2013-14, the interest on loans (other than WCL, GP Fund and GoP) works out to ₹821.31 crore in Table 5.18.

Table 5.18: Interest on Loans (other than working capital loans for FY 2013-14)

(₹ crore)

Sr. No.	Particulars	Loans as on April 1, 2013	Receipt of loans during FY 2013-14	Repayment of loans during FY 2013-14	Loans as on March 31, 2014	Amount of Interest
I	II	III	IV	V	VI	VII
1.	As per data furnished in ARR Petition (other than WCL)	7799.32	2400.00	950.93	9248.39	1005.07
2.	Approved by the Commission(other than WCL)	6901.96	1077.79	950.93	7028.82	821.31

5.14.7 **Interest on GoP Loans**

In the ARR Petition of 2014-15, PSPCL has claimed ₹13.37 crore as interest on account of GoP loans. On a query from the Commission, PSPCL informed vide memo no. 2928/CC/DTR/Dy.CAO/241/Deficiency Dated 10.12.2013 and no. 225/DTR/Dy.CAO/241/Vol-II dated 30.01.2014 that the Interest of ₹13.37 crore relates to RBI bonds charged by Government as interest and adjusted against subsidy. Thus, there are no GoP loans and consequently no interest liability on account of GoP loans. Also interest on loans taken in lieu of adjustment of ₹981.93 crore during FY 2011-12 is being separately allowed as interest on bridge loan. **Accordingly, claim of interest of ₹13.37 crore is not allowed.**

5.14.8 **Interest on Loans taken to replace re-called GoP Loans**

The interest on loans of ₹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 interest rate of 11.24% per annum being the average rate of interest actually paid/payable by the utility on the loans availed by it. **Thus, interest of ₹339.68 crore is approved on this account.**

5.14.9 **Interest on Bridge Loan**

In the ARR Petition for FY 2012-13, PSPCL had submitted that GoP had adjusted an amount of ₹981.93 crore against subsidy payable for FY 2011-12. This amount related to RBI bonds issued under a tripartite agreement between CPSUs, GoI and GoP. PSPCL had pleaded that interest on the amount of ₹981.93 crore be allowed as the utility had to raise short term loans to bridge the cash shortage on account of such adjustment. This plea has been accepted by the Commission and an interest of ₹89.60 crore (@10.67% average rate of interest for FY 2011-12) has been allowed on this account in FY 2011-12 in this Tariff Order. Based on the same principle, the **Commission approves an interest of ₹110.37 crore @11.24% being the average rate of interest, in lieu of adjustment of ₹981.93 crore for FY 2013-14**.

5.14.10 **Interest on Loans raised on account of non-refund of interest by GoP**

In the Tariff Order for FY 2012-13, the Commission determined ₹451.35 crore as the amount of interest payable by GoP to the utility on account of diversion of capital funds for revenue purpose. PSPCL, in its ARR Petition has submitted that this amount has so far not been refunded to PSPCL. PSPCL has further submitted that the amount of ₹451.35 crore be treated as a bridge loan and interest be allowed on this account. The Commission, based on Audited Annual Accounts for FY 2010-11 and FY 2011-12, observed that there is no diversion of capital funds for revenue purpose by PSPCL. Thus, the Commission is of the view that no interest is allowable on this account to PSPCL. As such, **no interest on this account is allowed to PSPCL.**

5.14.11 **Interest on General Provident Fund (GPF)**

In the ARR Petition for FY 2014-15, PSPCL has claimed interest of ₹193.49 crore on GPF accumulations for FY 2013-14.**The interest of ₹193.49 crore on GPF, being a statutory payment is allowed as claimed by PSPCL.**

5.14.12 **Finance Charges**

PSPCL in its ARR Petition for FY 2014-15 has claimed finance charges of ₹65.00 crore for FY 2013-14 (RE). The Commission sought clarification on this issue. In reply to which PSPCL vide Endst. no.187/L&D dated 25.02.2014 has clarified that guarantee fee of ₹30.00 crore on the working capital loans raised during FY 2013-14 has been included in the finance charges and ₹35.00 crore on account of long term loans of ₹2400.00 crore.

Regulation 26 (6) of PSERC Tariff Regulations provides for allowing finance charges (including guarantee fee payable to GoP) on loans other than Working Capital Loans. The Regulation separately provides for allowing interest on Working Capital Loans on normative basis as detailed in Regulation 30 of PSERC Tariff Regulations. Thus, the Commission in line with Regulation 30 does not allow guarantee fee on Working Capital Loans of ₹30.00 crore as claimed by PSPCL.

The finance charges of ₹35.00 crore work out 1.46% of the estimated borrowing of ₹2400.00 crore. The Commission has approved loan requirement of ₹1077.79 crore for FY 2013-14. **Accordingly, Commission approves the finance charges of ₹15.72 crore on the loan requirement of ₹1077.79 crore for FY 2013-14.**

5.14.13 **Interest on Consumer Security Deposit**

PSPCL has claimed ₹150.00 crore towards interest to consumers in the FY 2013-14. As per PSERC (Electricity Supply Code and Related Matters) Regulations, 2007, interest is payable to consumers on the security deposits. Though the Audited Annual Accounts of the utility for FY 2012-13 has not been submitted to the Commission, the interest to the consumers amounting to ₹150.00 crore on security deposits, being a mandatory payment is allowed as claimed in the ARR Petition for FY 2014-15. Accordingly, **the Commission allowed interest of ₹150.00 crore on Consumer security deposits for FY 2013-14.** However, the issue will be reconsidered on receipt of Audited Annual Accounts of FY 2013-14.

5.14.14 **Capitalization of Interest Charges**

PSPCL has claimed ₹220.00 crore towards capitalization of interest charges. The Commission has determined the capitalization of interest charges of ₹34.44 crore in the ratio of closing works in progress to the total capital expenditure. **The Commission, accordingly, approves capitalization of interest charges of ₹34.44 crore for FY 2013-14.**

5.14.15 **Interest on Working Capital**

In the Tariff Order for FY 2013-14, the Commission approved working capital of ₹3540.91 crore with interest cost of ₹397.99 crore. In the ARR Petition of FY 2014-15, PSPCL has submitted total working capital loan of ₹11841.43 crore (opening balance) with an interest liability of ₹1301.57 crore.

The Commission has determined the working capital requirement of ₹2990.60 crore in accordance with PSERC Tariff Regulations, as per the PSERC Tariff Regulations, the rate of interest on working capital shall be equal to the actual rate of interest paid/ payable on loans by the licensee(s) or the State Bank of India Advance Rate (SBAR) as on 1st April of the relevant year, whichever is lower. The rate of 11.24% being the weighted average rate of interest has been used for calculation of interest on working capital loan. The interest on working capital loan is worked out as ₹336.14 crore. The detail of working capital requirement as per Regulation 30 and allowable interest thereon is depicted in Table 5.19.

Table 5.19: Interest on Working Capital Requirement for FY 2013-14

(₹ crore)

Sr. No.	Particulars	Amount
I	**II**	**III**
1.	Fuel Cost for two months	682.27
2.	O & M expenses for one month	399.21
3.	Receivables for two months	3482.54
4.	Maintenance Spares@15% of O&M expenses	718.58
5.	Less: Consumer security deposit	2292.00
6.	**Total Working Capital Required**	**2990.60**
7.	Interest rate (calculated on weighted average)	11.24 %
8.	**Interest on Working Capital Loan**	**336.14**

The Commission accordingly approves revised interest of ₹336.14 crore on working capital requirements of ₹2990.60 crore for FY 2013-14.

5.14.16 **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 ₹2458.56 crore based on the PSEB's Audited Annual Accounts for FY 2009-10. The amount of diverted funds carrying interest liability was worked out to ₹1821.21 crore. The Audited Annual Accounts for FY 2010-11 & FY 2011-12 had not been made available to the Commission by PSPCL at the time of Tariff Order for FY 2013-14, therefore, the amount of diverted funds of ₹1821.21 crore, based on the Audited Annual Accounts for FY 2009-10 as determined in the Tariff Order of FY 2011-12, was considered for FY 2012-13. The interest on these diverted funds @13% being SBI Advance Rate as on 1st April, 2011 works out to ₹236.76 crore. Of this amount, interest of ₹212.37 crore was considered in the Tariff Order for PSPCL and the balance amount of ₹24.39 crore was considered in the Tariff Order for PSTCL.

Retaining the ratio of disallowance of interest on diverted funds between PSPCL and GoP, the Commission disallowed interest amount of ₹89.70 crore to PSPCL on account of deficiencies in its functioning and the balance amount of ₹122.67 crore to the account of GoP.

The Audited Annual Accounts for FY 2011-12 have now been received and have been examined and analyzed to re-determine diversion of capital funds for FY 2011-12. The Commission observes that there is no diversion of capital funds for revenue purposes by PSPCL for FY 2011-12 in para 3.15.12 of this Tariff Order.

The Audited Annual Accounts for FY 2012-13 have not been made available to the Commission by PSPCL. Based on the Audited Annual Accounts for FY 2011-12, the Commission is of the view that the diversion of capital funds for revenue purpose for FY 2013-14 may be considered as Nil. However, the amount of diversion and interest thereon will be reconsidered by the Commission in the true up after receipt of Audited Annual Accounts for FY 2013-14.

In view of above, the interest and finance charges are approved as detailed in Table 5.20.

Table 5.20: Interest and Finance Charges for FY 2013-14

(₹ crore)

Sr. No.	Particulars	Loans as on April 1, 2013	Receipt of loans	Repayment of loans	Loans as on March 31,2014	Interest approved by Commission
I	II	III	IV	V	VI	VII
1.	Approved by the Commission (other than WCL)	6901.96	1077.79	950.93	7028.82	821.31
2.	Interest on					
a)	Loans taken to replace recalled GoP loans					339.68
b)	Bridge Loan					110.37
c)	Loan raised on account of non refund of interest by GoP					0.00
3.	Interest on GPF					193.49
4.	**Total (1+2+3)**	**6901.96**	**1077.79**	**950.93**	**7028.82**	**1464.85**
5.	Add: Finance Charges					15.72
6.	Add: Interest on Consumer Security Deposits					150.00
7.	**Gross Interest and Finance Charges (4+5+6)**					**1630.57**
8.	Less: Capitalization					34.44
9.	**Net interest and Finance Charges (7-8)**					**1596.13**
10.	Add: interest on Working Capital					336.14
11.	**Total (9+10)**					**1932.27**

The Commission, accordingly, approves the interest and finance charges of ₹1932.27 crore for PSPCL for FY 2013-14.

5.15 Return on Equity

5.15.1 In the ARR Petition for FY 2013-14, PSPCL had claimed ₹607.55 crore towards RoE at 23.21% grossed up rate assuming the equity base of ₹2617.61 crore. However, PSPCL in its letter dated 08.01.2013, revised its claim for RoE to ₹1411.50 crore worked out @23.21% of the revised equity of ₹6081.43 crore based on GoP Transfer Scheme Notification dated 24.12.2012 against which the Commission, allowed RoE of ₹942.62 crore on an equity of ₹6081.43 crore.

5.15.2 In the ARR Petition for FY 2014-15, PSPCL has claimed RoE of ₹942.62 crore for FY 2013-14 @15.5% on the equity base of ₹6081.43 crore. Consequent upon amendment of PSERC (Terms and Condition for Determination of Tariff) Regulations, 2005 vide Notification dated 17.09.2012, the utility is to be allowed RoE of 15.5% on the equity employed in creation of assets. Accordingly, RoE @15.5% on an equity of ₹6081.43 crore for FY 2013-14 works out as ₹942.62 crore.

The Commission, thus, approves RoE of ₹942.62 crore to PSPCL for FY 2013-14.

5.16 Charges Payable to GoP on account of Power from Ranjit Sagar Dam (RSD)

5.16.1 In the ARR Petition for FY 2013-14, PSPCL has not claimed any expenditure 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. However, the Commission approved an amount of ₹10.50 crore on this account for FY 2013-14.

5.16.2 In the ARR Petition for FY 2014-15, PSPCL had claimed ₹31.44 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 during FY 2013-14. Consequent upon amendment of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 vide Notification dated 17.09.2012, the utility is to be allowed these charges as per Regulation 29A. **Accordingly, the Commission approves an amount of ₹31.44 crore on this account for FY 2013-14.**

5.17 Demand Side Management (DSM) Fund

In the ARR Petition for FY 2014-15**,** PSPCL has claimed ₹37.74 crore towards creation of DSM Fund for FY 2013-14 by levying charge of one paisa on each unit of energy sold to all consumer categories.

The Commission observes that as per DSM Regulations notified by the Commission on 16.03.2012, PSPCL was required to carry out load / market research to determine the saving potential within six months and get a DSM Plan approved from the Commission within one year from the date of notification of the Regulations. In this regard Clause 15 of the DSM Regulations provides as under:

> "*In order to qualify for cost recovery, each DSM Programme must be approved by the Commission prior to implementation and implemented in accordance with approved DSM plan".*

PSPCL was directed in the Tariff Order for FY 2013-14 to submit the Technical Potential Report for DSM latest by 30.06.2013 but PSPCL failed to even appoint consultants to carry out load / market research to establish technical potential for DSM in the State. As per directive issued in Tariff Order for FY 2013-14, the Commission fixed a modest energy saving target of 250 MU during 2013-14. PSPCL was also allowed to carry out some DSM activities with the approval of the Commission for which funds can be allocated after evaluating the cost effectiveness of the programme. However, PSPCL has neither submitted technical potential report / DSM plan nor executed any DSM activity which qualify for cost recovery as per DSM Regulations. **So the Commission approves nil amount for DSM activities for FY 2013-14.**

5.18 Subsidy Payable by GoP

5.18.1 In para 6.4.1 of the Tariff Order for FY 2013-14, the requirement of subsidy for FY 2013-14 was determined at ₹5607.42 crore for AP consumers, SC Domestic and Non-SC BPL Domestic consumers. The subsidy for FY 2013-14 is revised based on the sales approved for FY 2013-14 as under:

AP Consumption: PSPCL, in its ARR Petition for FY 2014-15, has reported AP consumption for FY 2013-14 at 11034 MU on which subsidy of ₹4728.00 crore inclusive of Meter rental and Service charges of ₹9.00 crore is claimed for FY 2013-14. The Commission has, however, revised AP consumption for FY 2013-14 to 9726 MU as discussed in para 5.2.2 of this Order. Subsidy on account of AP consumption of 9726 MU @425 paise per kWh inclusive of meter rentals and service charges, works out to ₹4142.55 crore (₹4133.55 crore towards subsidy on account of energy charges and ₹9.00 crore towards subsidy on account of meter rentals, service charges etc.).

PSPCL has also claimed subsidy on account of additional revenue assessed through levy of FCA on AP Consumers. PSPCL vide letter no. 2070/ CC/DTR-119/Vol. 21 dated 30.01.2014 has intimated that PSPCL has levied FCA for first quarter of FY 2013-14 @₹11/BHP/Month for unmetered supply w.e.f. 01.10.2013 to 31.12.2013 which works out to ₹34.57 crore. Similarly, PSPCL also levied FCA for second quarter of FY 2013-14 @₹18/BHP /Month for unmetered supply w.e.f. 01.01.2014 to 31.03.2014 which works out to ₹59.60 crore. As such, total subsidy for AP consumers for FY 2013-14 works out as 4236.72 (4142.55+34.57+59.60) crore.

Scheduled Castes (SC) Domestic Supply (DS) consumers: PSPCL in the ARR of FY 2014-15 has claimed subsidy of ₹797.00 crore inclusive of meter rentals and service charges of ₹83.00 crore. However, in reply to deficiencies, PSPCL has revised the claim of meter rentals and service charges in respect of SC DS consumers to ₹18.76 crore. The Commission observes that average monthly consumption of SC DS category consumer during FY 2011-12 was 74 units. The Commission considers it appropriate to increase the consumption of 74 units per month of FY 2011-12 by 5% for FY 2012-13 and further by 5% for FY 2013-14. Thus, the average consumption per month of SC DS consumer works out to 82 units for FY 2013-14. By multiplying the consumers for FY 2013-14 i.e. 1150410 number with 82 units per month per consumer for 12 months, the consumption works out to 1132 MU. By multiplying the rate of tariff for first 100 units i.e. 456 paise per unit, subsidy for SC DS category works out to ₹516.19 crore.

Accordingly, the Commission determines subsidy of ₹534.95 crore inclusive of meter rentals and service charges ₹18.76 crore for SC DS Consumers for FY 2013-14.

However, the amount of subsidy will be re-determined based on actual consumption after the availability of the Audited Annual Accounts for the year.

Non-SC Below Poverty Line (BPL) DS consumers: PSPCL in the ARR of FY 2014-15 has claimed subsidy of ₹42.83 crore inclusive of meter rentals and service charges of ₹1.57 crore. The Commission observes that average monthly consumption for Non-SC BPL DS category consumer during FY 2011-12 was 61 units. The Commission considers it appropriate to increase the consumption of 61 units per month of FY 2011-12 by 5% for FY 2012-13 and further by 5% for FY 2013-14. Thus, the average consumption per month for Non-SC BPL DS consumer works out to 67 unit for FY 2013-14. By multiplying the consumers for FY 2013-14 i.e. 85933 number with 67 units per month per consumer for 12 months, the consumption works out to 69.09 MU. By multiplying the rate of tariff for first 100 units i.e. 456 paise per unit, subsidy for Non-SC BPL DS category works out to ₹31.51 crore.

Accordingly, the Commission determines subsidy of ₹33.08 crore inclusive of meter rentals and service charges of ₹1.57 crore for Non-SC BPO DS Consumers for FY 2013-14.

However, the amount of subsidy will be re-determined based on actual consumption after the availability of the Audited Annual Accounts for the year.

Accordingly, the subsidy payable for FY 2013-14 has been determined at ₹4804.75 (4236.72+534.95+33.08) crore.

5.19 **Interest on Delayed Payment of Subsidy:** The GoP has paid subsidy due to PSPCL in FY 2013-14 in staggered installments. The Commission observes that there has been delay in payment of subsidy to PSPCL in FY 2013-14. In accordance with past practice, the Commission, with a view to compensating PSPCL on this account, levies interest on the delayed payment of subsidy @11.24% (effective interest on working capital loans as per the ARR of PSPCL) which works out to ₹95.15 crore for FY 2013-14.

Accordingly, the subsidy payable for FY 2013-14, inclusive of interest on delayed payment of subsidy, determined as payable by the GoP to PSPCL is ₹4899.90 (4804.75+95.15) crore.

However, total amount paid toward subsidy by GoP in FY 2013-14 is ₹4815.00 crore. Accordingly, there is short payment of ₹84.90 (4899.90-4815.00) on this account. This has been carried forward to para 9.4.

5.20 **Transmission Charges payable to PSTCL**

The Commission, in Tariff Order dated 10.04.2013, passed on the ARR of PSTCL for FY 2013-14, had determined ₹1269.64 crore (for Transmission & SLDC business including revenue gap carried forward upto FY 2012-13 and carrying cost on revenue gap) as the transmission charges payable to PSTCL by PSPCL. **Accordingly an amount of ₹1269.64 crore is included in the ARR of PSPCL for FY 2013-14.**

5.21 **Non-Tariff Income**

5.21.1 PSPCL had projected Non-Tariff income of ₹906.36 crore inclusive of ₹156 crore on account of Open Access charges in the ARR Petition for FY 2013-14. In the ARR & Tariff Petition for FY 2014-15, PSPCL has submitted that it has projected Non-Tariff income by considering an annual year on year escalation of 5% on the Non-Tariff income for the previous year. This growth has been envisaged based on the increase of sales assumed and the historical trend.

5.21.2 In the ARR Petition for FY 2014-15, PSPCL has projected Non-Tariff income of ₹779.58 crore. PSPCL has prayed that the late payment surcharge be not treated as part of the Non-Tariff Income as PSPCL's working capital requirements are being determined as per norms and there is no compensation to the PSPCL on account of interest accrued on delayed payments against bills issued and including the Late Payment Surcharge in Non-Tariff/Other Income adversely impacts the cash flow position of the PSPCL. The Commission observes that receipts on account of Late Payment Surcharge are to be treated as Non-Tariff Income as per Regulation 34 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Moreover, interest on working capital is allowed to the utility on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on normative basis. So the plea of the utility not to treat the late payment surcharge as part of the Non-Tariff Income finds no merit. It is noted that PSPCL has not taken into account the receipt on account of Late Payment Surcharge in the Non-Tariff Income. On a query from the Commission, PSPCL vide letter No. 340/DTR/Dy. CAO/241/ Vol-II dated 20.02.2014 has stated that receipt on account of Late Payment Surcharge upto 12/2013 was ₹174.46 crore. As such, receipt on account of Late Payment Surcharge for full year works out to ₹232.61 crore.

5.21.3 Besides, meter rentals and service charges of ₹29.33 crore of subsidized categories as projected by PSPCL in the ARR are also to be added to Non-Tariff income for FY 2013-14.

The Commission, therefore, approves the Non-Tariff income at ₹1041.52 (779.58 + 232.61+29.33) crore for PSPCL for FY 2013-14.

5.22 Revenue from Existing Tariff for FY 2013-14

5.22.1 In the ARR Petition for FY 2014-15, revenue from existing tariff proposed by PSPCL for FY 2013-14 is ₹21133.89 crore, including revenue from AP consumers. PSPCL has estimated revenue from PLEC and MMC at ₹494.21 crore for FY 2013-14. On a query from the Commission, PSPCL vide letter No. 340/DTR/Dy. CAO/241/ Vol-II dated 20.02.2014 has stated that receipt on account of MMC upto 12/2013 was ₹266.70 crore and from PLEC ₹188.16 crore. As such, receipt on account of MMC and PLEC for full year works out to ₹606.48 crore. Accordingly, an amount of ₹606.48 crore is added to the revenue received from tariff for FY 2013-14 on account of MMC and PLEC charges. PSPCL vide letter No. 2070/CC/DTR-119/Vol.21 dated 30.01.2014 has intimated that it has levied Fuel Surcharge @9 paise/unit on metered supply and @₹11/BHP/Month for unmetered supply for the quarter 01.10.2013 to 31.12.2013 and PSPCL would receive an amount of ₹89.74 crore on this account. Further, PSPCL has levied Fuel Surcharge @12 paise/unit on metered supply and @₹18/BHP/Month for unmetered supply for the quarter 01.01.2014 to 31.03.2014 & PSPCL would receive an amount of ₹155.16 crore on this account. Thus, the expected revenue from the existing tariff on the basis of sales approved by the Commission works out to ₹20895.25 crore as shown in Table 5.21.

Table 5.21: Revenue from Existing Tariff for FY 2013-14

Sr. No.	Category of consumers	Revised Estimate by PSPCL			Approved by the Commission in the Review		
		Energy sales (MU)	Avg. Billing Rate (paise/unit)	Revenue (₹in crore)	Energy sales (MU)	Avg. Billing Rate (paise/unit)	Revenue (₹in crore)
I	II	III	IV	V	VI	VII	VIII
1.	Domestic						
	0-100 units	5814			5813	456	2650.73
	101-300 units	3038			3038	602	1828.88
	above 300 units	1562			1562	644	1005.93
	Total	10414	527	5485.99	10413		5485.54
2.	Non-Residential Supply						
	Upto 100 units	1070	645	690.15	1070	645	690.15
	Above 100 units	1912	658	1258.10	1911	658	1257.44
	Total	2982		1948.25	2981		1947.59
3.	Small Power	932	574	534.89	932	574	534.97
4.	Medium Supply	1916	626	1199.11	1915	626	1198.79
5.	Large Supply	9574	633	6060.18	9513	633	6021.73
6.	Public Lighting	166	658	109.17	166	658	109.23
7.	Bulk Supply and Grid Supply						
	HT	558	628	350.98	558	629	350.98
	LT	34	657	22.34	34	657	22.34
	Total	592		373.32	592		373.32
8.	Railway Traction	134	658	88.34	134	658	88.17
	Sub-total metered sales within State	**26709**		**15799.25**	**26646**		**15759.34**
9.	Agriculture	11034	425	4689.45	9726	425	4133.55
10.	Common Pool	289	467	134.97	289		134.97
11.	Outside State	153	104	16.01	76		16.01
12.	Add: PLEC & MMC			494.21			606.48
	Total	**38186**		**21133.89**	**36737**		**20650.35**
	Add:- Revenue recoverable on a/c of FCA for 1st Quarter of FY 2013-14 levied by PSPCL w.e.f 1.10.2013 to 31.12.2013						89.74
	Add:- Revenue recoverable on a/c of FCA for 2nd Quarter of FY 2013-14 levied by PSPCL w.e.f 1.1.2014 to 31.03.2014						155.16
	Grand Total						**20895.25**

5.23 Rebate to consumers catered at higher voltages

The Commission in para 5.2 of the Tariff Order for FY 2013-14 had decided to adopt 'Cost of Supply' study (Methodology-II) and observed in para 4.21 of the Tariff Order for FY 2013-14 that cost to serve at higher voltages is lesser than the cost to serve at lower voltages. The Commission, accordingly, decided to approve rebate of 30 paise/unit to consumers catered at 220/132 kV voltage, 25 paise/unit at 66/33 kV voltage and 20 paise/unit to DS, NRS, MS and AP/AP High-Tech categories at 11 kV voltage, and assessed the impact of this voltage rebate at ₹103.63 crore on the basis of energy sales data supplied by PSPCL.

The Commission has now assessed the impact of voltage rebate at ₹107.17 crore on the basis of energy sales data supplied by PSPCL in the ARR for FY 2014-15. The revenue from tariff on existing rates has accordingly been reduced to this extent. The actual revenue impact will be adjusted at the time of true up.

5.24 Disallowance due to non-achievement of milestones as set out in the directives issued by the Commission.

National Electricity Policy (NEP) recognizes electricity as the basic human need and a critical infrastructure for economic development of the country. Availability of adequate, reliable electricity at affordable rates to give impetus to overall development has been the ultimate goal of power sector in the state. Commission has been issuing various directives to PSPCL as part of its various Tariff Orders to enable the utility to achieve various performance parameters in a time bound manner to attain the aforesaid goal. However, PSPCL failed to implement various directives which directly impacted consumer service and performance of the utility. Commission, therefore, decides to impose disallowances totalling to ₹107.27 crore during the review of FY 2013-14 on PSPCL on account of its negligence and failure to achieve the milestones set out in the critical directives as briefed below:-

5.24.1 **Delay in shifting meters outside consumer premises**

During FY 2010-11, PSPCL started its flagship programme to shift consumer meters in Non -APDRP areas numbering 32.14 lac and fed from non-AP feeders supplying power to rural areas of Punjab. A loan of ₹627.614 crore was sanctioned by REC to PSPCL for implementing this programme under 19 no. schemes.

During processing of ARR for FY 2012-13, PSPCL informed that out of 32.14 lac meters, only 20.69 lac meters could be covered for shifting outside in the pillar boxes under the budget for non APDRP scheme. Out of these 20.69 lac meters, 16.76 lac meters were shifted upto 31.03.2012 and it was assured that balance shall be shifted by 31.12.2012. It was also informed that DPRs for balance 11.45 lac meters covered in Phase II of non-APDRP schemes were under preparation.

The Commission while taking a serious view of the delay in execution of work, directed PSPCL to ensure completion of the job as per the revised target date of 31.12.2012.

During processing of ARR for FY 2013-14, PSPCL intimated that upto 28.02.2013, it could shift 19.22 lac meters out of 20.81 lac (revised from 20.69 lac meters under Phase I) and assured that the balance 1.59 lac meters of Phase I will be shifted by 31.03.2013. PSPCL also intimated that under non-APDRP scheme, the figure of consumer meters to be shifted outside was revised upwards to 38.01 lac (revised from 32.14 lac consumer meters) and out of balance 17.20 lac meters, 5 lac meters will be shifted by 30.06.2013. The Commission again took a serious view of the PSPCL's failure to achieve the targets and directed it to complete the job as per revised targets. The Commission also directed PSPCL that work of balance 12.20 lac meters under Phase II shall be completed by 31.03.2014.

However, as per the latest status report, PSPCL is yet to shift meters of 17.14 lac consumers out of 38.01 lac consumers in non APDRP areas. As per latest data supplied by PSPCL, under Phase-I, the no. of meters shifted were 7.30, 7.76, 3.49 and 2.20 lac during 2010-11, 2011-12, 2012-13 and 2013-14 respectively. This indicates that the progress of execution of Non-APDRP Phase-I program during 2012-13 and 2013-14 was very slow. Besides, the execution of Non-APDRP program Phase II was inordinately delayed.

It is clear from the tardy execution of the Non-APDRP Program that PSPCL is responsible for an avoidable delay in controlling AT&C losses. On account of this failure of PSPCL, one time disallowance of ₹10 crore is made on account of not achieving the committed milestones regarding shifting of meters outside premises in non-APDRP (rural areas).

5.24.2 **Non-implementation of DSM Regulations**

The Commission notified DSM Regulations on 16.03.2010. The Commission in the Tariff Order for FY 2013-14 issued directive to PSPCL to submit 'Technical Potential Report' as per DSM Regulations notified by the Commission latest by 30.06.2013 failing which the Technical Potential Estimate as per the data and information available with the Commission shall be declared after 30.06.2013 and PSPCL shall be required to achieve atleast 10% of energy saving in potential declared by the Commission during the year 2013-14. In view of the failure of

PSPCL to carry out any technical potential study, the Commission fixed a modest energy saving target of 250 MU for 2013-14 and 500 MU for 2014-15.

PSPCL was asked to submit the quantum of energy saving achieved during 2013-14 through implementation of DSM measures in accordance with DSM Regulations.

PSPCL has claimed an energy saving of about 90 MU through implementation of Bachat Lamp Yojna, installation of four star AP motors by new consumers, discontinuation of incandescent lamps in Govt. buildings and replacement of AC's at GGSSTP, Ropar. Assuming 90 MU energy saving during 2013-14 as correct (subject to verification by third party), the shortfall in energy saving target by PSPCL comes out to be 160 MU during 2013-14. Taking into account the Intra-state and Inter-state losses into account, a disallowance of 201 MU on power purchase is made at the average power purchase cost of ₹3.59 per Unit resulting in a total disallowance of ₹72.27 crore (approx.) on this account.

5.24.3 **Non achievement of 100% metering**

Section 55 of the Electricity Act 2003 mandates 100% metering and accordingly PSPCL was directed to provide correct meters on all consumer premises including AP upto March, 2007. The directive to achieve 100 % metering was reiterated in all the subsequent Tariff Orders. During the processing of ARR for FY 2012-13, PSPCL informed the Commission that for AP metering a pilot project with 52 number meters with inbuilt modems for remote metering has been made operational. The Commission while reiterating the directive to achieve 100% metering further directed PSPCL to furnish a plan to implement an up-graded Automatic Meter Reading (AMR) model by including installation, maintenance and up keep of LT shunt capacitors on each AP consumer's end on lease/rental basis to provide least cost and efficient solution to attain 100% AP metering thereby meeting the requirement of the Act without recruiting manpower to read more than 12.12 lac AP meters. Commission worked out that the cost of providing AMR & LT capacitors on AP consumers shall be compensated by improved power factor of AP consumer thereby reducing load on AP feeders. This would have results into lower T&D losses on AP feeders. In the Tariff Order for FY 2013-14 PSPCL was directed to cover 10% AP feeders under this scheme during 2013-14 and 30% in each subsequent years so as complete the project by 2016-17. However, PSPCL has not only failed to implement the directions of the Commission but also spurned it by rejecting this out of box solution in its Board of

Directors meeting dated 23.10.2013. The Commission, thus, decides that a disallowance of ₹5.00 crore is made on this account during 2013-14 which shall continue till PSPCL achieve 100% metering and its reliable reading as mandated under the Electricity Act, 2003.

5.24.4 **Employee Cost**

Employee cost remained a much discussed & focused area in all Tariff Orders with repeated directions to the utility to bring down employee cost. PSPCL in its ARR petition for FY 2011-12 stated as under:

"it has made concrete action plan to implement recommendations from the manpower study conducted by M/s PwC Ltd" (para 4.9.6, ARR for FY 2011-12)".

Besides in its ARR for FY 2014-15 (para 2.11.5 relating to true up for FY 2010-11), PSPCL has admitted that the Functional Model of Distribution offices was planned to be rolled out in entire state within two years (refer para 3.11.4 of this order). The Commission had directed the utility in Tariff Order for FY 2010-11 to finalize action plan for implementation of PwC Report on manpower study by 31.03.2011 but till date no decision on implementation of staffing study report has been taken by PSPCL. PSPCL was also directed to restructure its various wings on functional basis in Tariff Order of 2010-11.

PSPCL did rationalisation of distribution set up through functional restructuring of Patiala town & Nabha division during 2010-11. The Commission in the Tariff Order for FY 2011-12, directed PSPCL to replicate the model across the whole State. PSPCL in its meeting with Commission on 30.04.2012, committed to roll out this model all over the State of Punjab by June, 2013. During processing of Tariff Order for FY 2012-13, the Commission directed PSPCL that re-organisation of distribution set up be expedited in order to complete all R-APDRP towns by December, 2013 & remaining towns by March, 2014. But till now, only city areas of Patiala, Jalandhar and Amritsar circles and five divisions of Nabha, Bathinda, Budhlada, Samana and Rajpura have been restructured on functional lines.

Similarly, the various directives given to automate its functioning to reduce manpower cost by implementing IT plan, unmanned substations, Automatic Meter Reading (AMR) etc. have not been implemented by the utility. PSPCL has thus failed to meet the target for implementing initiatives for rationalisation of employee cost and to increase employees' productivity by implementation of PwC report, restructuring of distribution set up on functional lines and introduce automation for optimizing manpower output & efficiency. Thus, a disallowance of ₹20.00 crore is made on this account during FY 2013-14 which shall continue annually on renewal basis till PSPCL implements all these steps to modernize its functioning.

5.25 Impact of Commission's Order dated 07.01.2013

The Commission in its Order dated 07.01.2013 in Petition no. 57 of 2012 (suo motu) passed in compliance to the Hon'ble APTEL judgment dated 18.10.2012 in the matter of PSPCL Appeal nos. 7, 46 & 122 of 2011 against the Tariff Orders for FY 2009-10, FY 2010-11 and FY 2011-12, has ordered that the costs allowed/dis-allowed in respect of various issues be given effect in the ensuing Tariff Order for FY 2013-14. Table 5.22 below shows the net impact of the order of the Commission passed in compliance to the Hon'ble APTEL judgment dated 18.10.2012.

Table 5.22: Impact of Commission's Order dated 07.01.2013 passed in compliance of Hon'ble APTEL judgment dated 18.10.2012 in the matter of Petition No. 57 of 2012 (suo motu)

(₹ crore)

Sr. No.	Issues	Year	Amount to be allowed	Impact of Carrying Cost	Total Impact on PSPCL allowable (+)/ recoverable(-)
I	II	III	IV	V	VI
1.	Return on Equity	2009-10	44.19	23.42	(+) 67.61
2.	Interest on SPV	2007-08	3.48	0.38	(+) 3.86
3.	Interest on SPV	2008-09	32.87	3.64	(+) 36.51
4.	Non-Tariff Income	2007-08	16.40	1.81	(+) 18.21
5.	Interest and Finance Charges	2008-09	49.45	32.27	(+) 81.72
6.	Total allowed		146.39	61.52	(+) 207.91
7.	Impact of Carrying cost recoverable				(-) 248.36
8.	Impact of recoverable Carrying cost levied in Commission Order dt.7-1-2013 on excess carrying cost allowed earlier				(-) 118.68
9.	**Total amount recoverable**				**(-) 367.04**
10.	**Amount allowable as per Commission's Order dated 07.01.2013**				**(+) 207.91**
11.	**Net amount recoverable**				**(-) 159.13**

However, aggrieved by decisions of the Commission contained in its order dated 07.01.2013, PSPCL had filed a review petition No. 10 of 2013 before the Commission. The Commission while deciding the review petition vide its order dated 28.03.2013, has re-determined the excess carrying cost for revenue gaps at ₹242.65 crore in place of ₹248.36 crore and has accordingly revised the recoverable interest charges on this amount to ₹117.03 crore in place of ₹118.68

crore. Thus, the net amount recoverable from the utility is revised to ₹151.77 crore**. Therefore, the Commission approves the net amount of ₹151.77 crore recoverable from the utility which is to be adjusted against the ARR determined by the Commission for FY 2013-14.**

5.26 Revenue Requirement for FY 2013-14

A summary of the Aggregate Revenue Requirement of PSPCL for FY 2013-14 as discussed in the preceding paragraphs is given in Table 5.23.

Table 5.23: Revenue Requirement for FY 2013-14

(₹ crore)

Sr. No.	Items of Expenses	Proposed by PSPCL	Approved by Commission in Tariff Order for FY 2013-14	Proposed by PSPCL in the Review	Approved by Commission in the Review
I	II	III	IV	V	VI
1.	Cost of Fuel	4905.80	4440.20	4511.13	4093.59
2.	Cost of power purchase	8680.57	7818.98	7705.40	7204.24
3.	Employee Cost	4370.34	3797.85	4306.93	4281.20
4.	R & M expenses	504.11	595.39	408.10	382.59
5.	A & G expenses	119.60	136.89	161.06	126.75
6.	Depreciation	814.45	813.20	813.59	701.37
7.	Interest charges	2656.86	1767.18	2508.50	1932.27
8.	Return on Equity	607.55	942.62	942.62	942.62
9.	Provision for DSM Fund	39.49	0.00	37.74	0.00
10.	Transmission and SLDC charges payable to PSTCL	890.84	1269.64	1269.64	1269.64
11.	Royalty charges payable to GoP on power from RSD	0.00	10.50	31.44	31.44
12.	**Total Revenue Requirement**	**23589.60**	**21592.45**	**22696.15**	**20965.71**
13.	Less: Non-Tariff Income	906.36	779.57	779.58	1041.52
14.	**Net Revenue Requirement**	**22683.24**	**20812.88**	**21916.57**	**19924.19**
15.	Revenue from existing tariff	20570.91	19992.73	21133.89	20895.25
16.	Less: On account of rebate to various consumer categories	--	103.63	0.00	107.17
17.	Net Revenue from Existing Tariff	20570.91	19889.10	21133.89	20788.08
18.	Less: Disallowances due to non-achievement of mile-stones				107.27
19.	**Surplus(+)/Gap (-) for FY 2013-14**	**(-) 2112.33**	**(-) 923.78**	**(-) 782.68**	**(+)971.16**
20.	Add: Cumulative Gap upto FY 2011-12	(-) 9258.26	(-) 1010.49	(-)9823.64	(-) 1946.31
21.	Less: Surplus for FY 2012-13 (as per Tariff Order FY 2013-14)				(+) 645.67
22.	Add: Carrying cost on previous year gap	(-) 682.80	0.00	(-)1476.06	*
23.	**Total Surplus(+)/Gap(-)**	**(-) 12053.39**	**(-) 1934.27**	**(-)12082.38**	**(-) 329.48**
24.	Adjustment of the Impact of Commission's Orders dated 07.01.2013 and 28.03.2013 (Recovery)		(+) 151.77		(+) 151.77
25.	**Total Net Surplus(+)/Gap(-) upto FY 2013-14**		**(-) 1782.50**		**(-) 177.71**
26.	**Energy Sales (MU)**		**39039**	**38186**	**36737**

** See para 6.23*

Review of FY 2013-14 indicates that there is now a surplus of ₹971.16 crore for FY 2013-14. After taking into account the cumulative gap (deficit) of ₹1946.31 crore upto FY 2011-12, surplus for FY 2012-13 (as per review in Tariff Order for FY 2013-14) ₹645.67 crore and adjustment of the impact of Commission's Orders dated 07.01.2013 and 28.03.2013 of ₹151.77 crore (recovery), total deficit works out to ₹177.71 crore at the end of FY 2013-14. This deficit is being carried forward to the next financial year i.e. FY 2014-15.

Chapter- 6
Annual Revenue Requirement for FY 2014-15

6.1 Energy Demand (Sales)

6.1.1 Metered Energy Sales

PSPCL has projected the metered energy sales for FY 2014-15 based on category-wise 3 years Compounded Annual Growth Rate (CAGR) from FY 2009-10 to FY 2012-13. PSPCL has submitted that it is expected from FY 2014-15 onwards, PSPCL shall become power surplus and thus will not need to resort to load shedding. PSPCL has further stated that it will be able to meet its entire energy requirements owing to additional power available from upcoming power stations in the State such as Talwandi Sabo TPS, Rajpura TPS, Goindwal Sahib TPS etc. and long term tie-ups with upcoming Central Generating Stations. **PSTCL and PSPCL have also submitted declarations on affidavit that their respective transmission and sub-transmission systems are capable of transferring whole of power to the consumers including surplus power.** For computation of CAGR for the projections for FY 2014-15, PSPCL has adjusted the energy sale units for FY 2012-13 with the load shedding units during that period. The category-wise 3 year CAGR has been applied on the revised estimates of metered energy sales of respective categories for FY 2013-14, to arrive at the category-wise metered energy sales projections for FY 2014-15. The details of PSPCL's actual metered energy sales for FY 2012-13, revised estimates of metered energy sales for FY 2013-14 (RE) and projections for FY 2014-15 are given in Table 6.1.

Table 6.1: Energy Sales of Metered Categories for FY 2012-13 (actual), FY 2013-14 (RE) and FY 2014-15 (Projections) as per ARR Petition for FY 2014-15

Sr. No.	Category	FY 2012-13 (Actual) (MU)	FY 2013-14 (RE) (MU)	FY 2014-15 (Proj.) (MU)	% Growth (FY 2013-14)	% Growth (FY 2014-15)
I	II	III	IV	V	VI	VII
1.	Domestic	9503	10413	11683	9.58%	12.19%
2.	Non-Residential	2790	2982	3347	6.88%	12.25%
3.	Public Lighting	148	166	170	12.10%	2.69%
4.	Industrial Supply					
a	Small Power	903	932	981	3.20%	5.26%
b	Medium Supply	1833	1916	1998	4.50%	4.29%
c	Large Supply	9563	9574	10248	0.11%	7.05%
5.	Bulk Supply	570	592	619	3.85%	4.54%
6.	Railway Traction	135	134	130	-0.55%	-3.01%
7.	**Total Metered Sales**	**25445**	**26709**	**29176**	**4.97%**	**9.24%**

The 3 year CAGR (without load shedding hours) as submitted by PSPCL in the ARR for FY 2014-15 and as calculated by the Commission are given in Table 6.1 (A).

Table 6.1 (A): 3 Year CAGR (with actual sales figures) & Estimated Energy Sales within the State for FY 2014-15

Sr. No.	Category	Energy Sales during FY 2009-10 (Actual) (MU)	Energy Sales during FY 2012-13 (actual but unaudited) (MU)	3 year CAGR submitted by PSPCL (FY 2009-10 to FY 2012-13 (with actual sales figures))	3 year CAGR calculated by the Commission (FY 2009-10 to FY 2012-13 (actual))	Energy Sales now approved for FY 2013-14 (MU)	Estimated Energy Sales for FY 2014-15 after applying CAGR of Col- VI (MU)
I	II	III	IV	V	VI	VII	VIII
1.	Domestic	7310	9503	9.16%	9.14%	10413	11365
2.	Non-Residential	2147	2790	9.23%	9.12%	2981	3253
3.	Small Power	775	903	5.26%	5.23%	932	981
4.	Medium Supply	1619	1833	4.29%	4.22%	1915	1996
5.	Large Supply	8795	9563	2.92%	2.83%	9513	9782
6.	Public Lighting	137	148	2.68%	2.61%	166	170
7.	Bulk Supply	499	570	4.54%	4.53%	592	619
8.	Railway Traction	148	135	-3.01%	-3.02%	134	130
9.	**Total metered sales (within the State)**	**21430**	**25445**			**26646**	**28296**

The 3 year CAGR, (after adjusting the load shedding hours), as submitted by PSPCL in the ARR for FY 2014-15 and as calculated by the Commission are given in Table 6.1 (B).

Table 6.1 (B): 3 Year CAGR (with sales figures after adjustment of load shedding units) & Estimated Energy Sales within the State for FY 2014-15

Sr. No.	Category	Energy Sales during FY 2009-10 (Actual) (MU)	Energy Sales during FY 2012-13 (after adjustment of load shedding hrs) (MU)	3 year CAGR submitted by PSPCL (FY 2009-10 to FY 2012-13 (after adjustment of load shedding hrs))	3 year CAGR calculated by the Commission (FY 2009-10 to FY 2012-13 (adjusted figures))	Energy Sales now approved for FY 2013-14 (MU)	Estimated Energy Sales for FY 2014-15 after applying CAGR of Col- VI (MU)
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**
1.	Domestic	7310	10202	12.19%	11.75%	10413	11637
2.	Non-Residential	2147	2996	12.25%	11.75%	2981	3331
3.	Small Power	775	903	5.26%	5.23%	932	981
4.	Medium Supply	1619	1833	4.29%	4.22%	1915	1996
5.	Large Supply	8795	10753	7.05%	6.93%	9513	10172
6.	Public Lighting	137	148	2.68%	2.61%	166	170
7.	Bulk Supply	499	570	4.54%	4.53%	592	619
8.	Railway Traction	148	135	-3.01%	-3.02%	134	130
9.	**Total metered sales (within the State)**	**21430**	**27540 ***			**26646**	**29036**

** Against 27541 submitted by PSPCL in the ARR for FY 2014-15.*

The Commission has noted that with the commissioning of upcoming power stations in the State such as Talwandi Sabo TPS, Rajpura TPS, Goindwal Sahib TPS etc. and long term tie-ups with upcoming Central Generating Stations, the scenario of position of power will be different and from power deficit State, the State shall become the power surplus State. The Commission agrees with the submission of PSPCL that from FY 2014-15 onwards, PSPCL may not need to resort to load shedding. As such, the Commission accepts the PSPCL's submissions for projecting the metered energy sales within the State after adjustment of energy sales for FY 2012-13 with the load shedding hours during that period. Further, PSPCL in the ARR has mentioned that the projections for metered energy sales for FY 2014-15 are based on category-wise 3 years Compounded Annual Growth Rate (CAGR) from FY 2009-10 to FY 2012-13, but the Commission observed that the projections are actually based on the average of percentage annual growth from FY 2009-10 to FY 2012-13. The Commission has however estimated the metered energy sales on 3 year CAGR from 2009-10 to FY 2012-13 basis, which are as per column VIII of Table 6.1(B) and **the Commission approves the same.**

6.1.2 Energy Sales to Common Pool Consumers and Outside State Sale

PSPCL has projected energy sale to Common Pool consumers and Outside State energy sale for FY 2014-15 as below:

Category	FY 2013-14 (RE) (MU)	FY 2014-15 (Projections) (MU)
I	II	III
Common Pool Consumers	289	289
Outside State Sale	153	129

PSPCL has submitted that the energy sale to Common Pool consumers for FY 2014-15 is based on the actual figures of energy sale to Common Pool consumers for FY 2012-13 and envisaged changes due to other provisions.

The Commission notes that the Outside State sale of 129 MU, as projected by PSPCL, includes free share of Himachal Pradesh (HP) in RSD (75 MU) and HP royalty in Shanan (54 MU). The free share of HP in RSD is required to be excluded from the Outside State sale, and so the Outside State sale is considered as 54 MU. The Commission accepts the Common Pool sale of 289 MU as projected by PSPCL.

The Commission approves the Outside State sale at 54 MU and the energy sale of 289 MU to Common Pool consumers for FY 2014-15.

The total metered energy sales for FY 2014-15 estimated by PSPCL and approved by the Commission are given in Table 6.2.

Table 6.2: Metered Energy Sales for FY 2014-15

(MU)

Sr. No.	Category	Projected by PSPCL for FY 2014-15	Approved by the Commission
I	II	III	IV
1.	Domestic	11683	11637
2.	Non-Residential	3347	3331
3.	Small Power	981	981
4.	Medium Supply	1998	1996
5.	Large Supply	10248	10172
6.	Public Lighting	170	170
7.	Bulk Supply	619	619
8.	Railway Traction	130	130
9.	**Total Metered Sales**	**29176**	**29036**
10.	Common Pool	289	289
11.	Outside State sale	129	54
12.	**Total Sales**	**29594**	**29379**

The Commission, thus, approves metered sales at 29379 MU against 29594 MU projected by PSPCL.

6.1.3 AP Consumption

PSPCL has projected the AP consumption at 11586 MU for FY 2014-15 by applying growth of 5% over revised estimates of AP consumption of 11034 MU projected for FY 2013-14 in the ARR.

The Commission, during the Review for FY 2013-14 in Chapter 5, has approved the AP consumption at 9726 MU for FY 2013-14. The Commission has noted that the energy sale to AP consumers from FY 2010-11 to FY 2013-14 is almost constant and the CAGR from FY 2010-11 to FY 2013-14 is just 0.24%. The Commission finds no reason to estimate the AP consumption for FY 2014-15 by applying 5% increase over the AP consumption of 9726 MU approved by the Commission for FY 2013-14. Further, the Commission decides to estimate the AP consumption for FY 2014-15 by applying CAGR of 0.24% over the AP consumption of 9726 MU approved by the Commission for FY 2013-14. Thus, AP consumption for FY 2014-15 works out to 9749 MU. This will be reviewed on the basis of revised estimates in the next Tariff Order. The energy sales to AP consumers projected by PSPCL, AP consumption from FY 2010-11 to FY 2013-14, 3 year CAGR from FY 2010-11 to FY 2013-14 and AP consumption now approved for FY 2014-15 are given in Table 6.3.

Table 6.3: AP Consumption projected by PSPCL and approved by the Commission for FY 2014-15

(MU)

Category	Projected by PCPCL for FY 2014-15	AP Consumption		3 Yr CAGR from FY 2010-11 to FY 2013-14	Now Approved by the Commission for FY 2014-15
		FY 2010-11 (True-up)	FY 2013-14 (RE)		
I	II	III	IV	V	VI
AP Consumption	11586	9656	9726	0.24%	9749

The Commission, thus, approves the AP consumption at 9749 MU for FY 2014-15 against 11586 MU projected by PSPCL.

6.1.4 Total Energy Demand (Sales)

The total metered energy sales, AP consumption, Common Pool and Outside State energy sales projected by PSPCL and as approved by the Commission for FY 2014-15 are given in Table 6.4.

Table 6.4: Total Energy Sales for FY 2014-15

(MU)

Sr. No.	Category	Projected by PSPCL for FY 2014-15	Approved by the Commission
I	**II**	**III**	**IV**
1.	Total Metered sales	29176	29036
2.	AP Consumption	11586	9749
3.	**Total sales within the State (1+2)**	**40762**	**38785**
4.	Common Pool	289	289
5.	Outside State sale	129	54
6.	**Total sales**	**41180**	**39128**

The Commission, thus, approves total energy sales to different categories of consumers at 39128 MU, including Common Pool and Outside State energy sales.

6.2 Transmission and Distribution Losses (T&D Losses)

PSPCL has submitted that the T&D losses for FY 2014-15 have been projected after considering the expected improvement in the system as a result of planned capital works for distribution loss reduction programs. Accordingly, a reduction of over 0.2% with respect to the distribution losses of 16.63% assessed in the year 2012-13 has been proposed in the year 2013-14 and another subsequent 0.4% reduction in FY 2014-15. It has further been submitted that PSPCL has been taking steps to reduce the distribution loss through various loss reduction and network planning initiatives. PSPCL has claimed that considering the geographical spread of the service area and consumer base of PSPCL, loss level of 16.63% in FY 2012-13, 16.44% in FY 2013-14 & 16.00% as projected for FY 2014-15 is indicative of the efficiency performance of PSPCL. As per PSPCL, efforts to reduce losses below these levels would require huge investments and appropriate cost benefit analysis is essential as return in the form of loss reduction may not justify the investment in certain cases. PSPCL has further submitted that driven by the targets and directives given by the Hon'ble Commission, PSPCL is making concerted efforts to reduce and control the losses and is already recognized at par with some of the efficient utilities in the country. PSPCL has prayed to approve the T&D loss level for FY 2014-15 at 16.00% as projected in the ARR.

The Commission, in para 4.2 of the Tariff Order for FY 2013-14, had opined that reduction in losses should be attempted by PSPCL on the lines of South Korean Model of Distribution System through which South Korea has been able to reduce its losses from 40% to 4% over the last three decades. PSPCL has not indicated, in the ARR for 2014-15, any action taken by it in the matter of reduction in losses on the lines of South Korean Model of Distribution System. Rather, same submissions have been made as made in the ARR for FY 2013-14. PSPCL is again advised to study the South Korean Model of Distribution System and initiate action accordingly. If need be, this may be discussed with the Commission. Further, some meaningful audit of T&D losses in the areas of high T&D losses, e.g. Amritsar Sub-Urban and City Circles, Mukatsar Circle, Ferozepur Circle etc. be also carried out and action initiated accordingly for reduction of T&D losses. PSPCL is directed to submit action taken report in the matter within 3 months of issue of Tariff Order.

The Commission has decided to retain T&D losses of PSPCL for FY 2013-14 at 17.00% as fixed by the Commission in the Tariff Order for FY 2013-14 against the proposed loss level of 16.44% for FY 2013-14. The Abraham Committee envisaged a normative loss reduction of 1% annually where the losses in a particular entity are below 20%. Accordingly, the Commission fixes T&D loss target for FY 2014-15 at 16.00%.

As mentioned in para 3.3 of the 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 intra-state boundary metering and could not provide the required data to estimate losses for PSTCL system separately, the Commission decides to stipulate only overall 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 16% as the target set for FY 2014-15 and based on the provisionally approved Transmission Loss of 2.5% for PSTCL for FY 2014-15 in the Tariff Order for PSTCL for FY 2014-15, the target Distribution Loss (66 kV and below system) of PSPCL for FY 2014-15 works out to 14.17%, which the Commission approves provisionally. The Commission will revisit the Distribution Loss of PSPCL while undertaking the Review/True up for FY 2014-15.

6.3 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 2014-15 are given in Table 6.5.

Table 6.5: Energy Requirement for FY 2014-15

(MU)

Sr.No.	Category	Projected by PSPCL for FY 2014-15	Approved by the Commission
I	II	III	IV
1.	Metered sales within the State	29176	29036
2.	AP Consumption	11586	9749
3.	**Total sales within the State (1+2)**	**40762**	**38785**
4.	Common Pool sales	289	289
5.	Outside State sale	129	54
6.	**Total sales (3+4+5)**	**41180**	**39128**
7. (a)	T&D losses on Sr. No. 3 (%)	16.00%	16.00%
7. (b)	T&D losses on Sr. No. 3	7764	7388
8.	**Total energy input required [6+7(b)]**	**48944**	**46516**
9.	**Energy at Transmission periphery to be sold within the State (8-4-5)**		**46173**
10. (a)	Transmission Loss (%)		2.50%
10. (b)	Transmission Loss		1154
11.	Energy available to PSPCL [9-10(b)-1031*]		43988
12. (a)	Distribution Loss		6234
12. (b)	Distribution Loss (%)		14.17%
13.	**Energy available for Sale to consumers within the State [11-12(a)+1031*]**		**38785**

**Energy sale at 220/132 kV voltage level.*

6.4 PSPCL's own Generation

6.4.1 Thermal Generation

PSPCL has projected gross thermal generation for FY 2014-15 at 3172 MU for GNDTP, 9500 MU for GGSSTP and 6855 MU for GHTP.

Plant Availability

- The plant availability of GNDTP for FY 2014-15 has been projected at 90.89%, based on maintenance schedules. The maintenance is planned for unit-II for 30 days and unit-III for 30 days.

  PSPCL has submitted that Unit 4 of GNDTP is expected to remain under R&M upto 31.03.2014 (its COD after R&M is 01.04.2014) and it will be available for full year during FY 2014-15.

- The plant availability of GGSSTP for FY 2014-15 has been projected at

91.21%, based on maintenance schedules. The maintenance is planned for unit-II for 45 days, unit-III for 35 days and unit-V for 25 days.

- The plant availability for GHTP for FY 2014-15 has been projected at 90.42% based on maintenance schedules. The maintenance is planned for unit-I for 40 days, unit-II for 20 days and unit-III for 45 days.

The availability of GNDTP, GGSSTP and GHTP based on maintenance schedules (excluding forced outages) for FY 2014-15, has been determined by the Commission as 95.89%, 95.21% and 92.81% respectively.

The Commission has assessed availability and generation for GNDTP, GGSSTP and GHTP for FY 2014-15 based on average of actual availability and average of actual generation during FY 2010-11, FY 2011-12 and FY 2012-13. The availability based upon actual number of maintenance days (including periods of forced outages, if any) and actual generation of GNDTP, GGSSTP and GHTP as discussed above, along with average generation and availability have been worked out in Table 6.6.

Table 6.6: Availability and Generation for GNDTP, GGSSTP and GHTP

Sr.No.	Station	FY 2010-11	FY 2011-12	FY 2012-13	Average
I	II	III	IV	V	VI
1.	**GNDTP**				
	Generation (MU)	1775	1883	1632	1763
	Availability	58.58%	59.93%	54.65%	57.72%
2.	**GGSSTP**				
	Generation (MU)	9718	9564	9167	9483
	Availability	92.69%	91.36%	92.11%	92.05%
3.	**GHTP**				
	Generation (MU)	6833	7621	7215	7223
	Availability	88.10%	96.55%	93.84%	92.83%

Considering the projected availability in FY 2014-15 as worked out by the Commission above and the average availability and generation as worked out in Table 6.6, gross generation for FY 2014-15 for GNDTP, GGSSTP and GHTP has been computed in Table 6.7:

Table 6.7: Availability, Gross Generation and PLF of GNDTP, GGSSTP and GHTP for FY 2014-15

Sr. No.	Station	Three years average availability	Three years average generation (MU)	Computed by the Commission for FY 2014-15		
				Availability as per maintenance schedule for FY 2014-15	Generation (MU) ((IV*V)/III)	PLF (calculated)
I	II	III	IV	V	VI	VII
1.	GNDTP	57.72%	1763	95.89%	3062*	75.99%
2.	GGSSTP	92.05%	9483	95.21%	9808	88.86%
3.	GHTP	92.83%	7223	92.81%	7221	89.60%

** Generation for GNDTP worked out as 2929 (1763 x 95.89 / 57.72). However, in view of the submission by PSPCL that installed capacity of GNDTP Units III and IV is expected to increase from 110 MW to 120 MW each, as projected by PSPCL in the ARR for FY 2014-15, on the R&M works, the estimated generation for GNDTP worked out as 3062 MU (2929 x 460 /440).*

Total gross generation from the thermal generating plants during FY 2014-15 will, therefore, be as shown in Table 6.8:

Table 6.8: Gross Thermal Generation for FY 2014-15

(MU)

Sr. No.	Station	Approved generation
I	II	III
1.	GNDTP	3062
2.	GGSSTP	9808
3.	GHTP	7221
4.	**Total**	**20091**

Accordingly, the Commission assesses the total gross thermal generation for FY 2014-15 as 20091 MU against 19527 MU projected by PSPCL in the ARR for FY 2014-15.

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-1/144/2013/CERC dated 21.02.2014 has notified Terms and Conditions of Tariff Regulations, 2014 for electricity tariff for the five year period beginning from 01.04.2014, wherein operating norms for thermal plants have also been prescribed. The Commission decides to follow these norms for FY 2014-15. CERC, has, however, not specified any norms for 110/120 MW units and the Commission had, in the case of GNDTP, adopted the norms specified for Tanda Thermal Power Generating

Station of NTPC, which has 4 units of 110 MW each. The Commission notes that units I, II and III of GNDTP have achieved commercial operation on 31.05.2007, 19.01.2006 and 07.12.2012 respectively, after completion of renovation and modernization, and unit IV is likely to be operational in FY 2014-15 after completion of renovation and modernization. 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. CERC in its Tariff Regulations, 2014 has specified auxiliary energy consumption of 12% (same as specified in its Tariff Regulations, 2009) for Tanda Thermal Power Station, which has units of 110 MW capacity, similar to GNDTP. The Commission had considered 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 in subsequent Tariff Orders. Accordingly, the Commission decides to fix auxiliary consumption for GNDTP at 11.00%, for GGSSTP and GHTP at 8.50% for FY 2014-15. The same values have been projected by PSPCL for FY 2014-15 in the ARR Petition. Auxiliary consumption and net generation from the three thermal generating stations, as projected by PSPCL and as approved by the Commission for FY 2014-15 are given in Table 6.9.

Table 6.9: Generation and Auxiliary Consumption for Thermal Plants for FY 2014-15

(MU)

Sr. No.	Station	Projected by PSPCL			Approved by the Commission		
		Gross generation	Auxiliary consumption	Net generation	Gross generation	Auxiliary consumption	Net generation
I	II	III	IV	V	VI	VII	VIII
1.	GNDTP	3172	349 11.00%	2823	3062	337 11.00%	2725
2.	GGSSTP	9500	807 8.50%	8693	9808	834 8.50%	8974
3.	GHTP	6855	583 8.50%	6272	7221	614 8.50%	6607
4.	**Total**	**19527**	**1739**	**17788**	**20091**	**1785**	**18306**

Net thermal generation approved by the Commission for FY 2014-15 is 18306 MU, against 17788 MU projected by PSPCL.

6.4.2 Hydel Generation

In the ARR petition for FY 2014-15, PSPCL has projected hydel generation for FY 2014-15 from its own stations, based on average of last three years i.e. during FY 2010-11, FY 2011-12 and FY 2012-13. The Commission has also estimated the hydel generation, based on the average of three years i.e. FY 2010-11, FY 2011-12 and FY 2012-13. The generation projected by PSPCL and the generation approved by the Commission is given in Table 6.10.

Table 6.10: Own Hydel Generation for FY 2014-15

(MU)

Sr. No.	Station	Generation projected by PSPCL for FY 2014-15	Actual generation			Generation approved by the Commission (Based on 3 years average)
			FY 2010-11	FY 2011-12	FY 2012-13	
I	II	III	IV	V	VI	VII
1.	Shanan	451	598	517	439	518
2.	UBDC Stage 1	155	169	146	143	153
3.	UBDC Stage 2	179	241	149	176	189
4.	RSD	1716	1738	1928	1428	1698
5.	MHP	1323	1070	1358	1421	1362
6.	ASHP	741	742	807	639	729
7.	Micro Hydel	8	10	4	8	7
8.	**Total own hydel generation (gross)**	**4573**	**4568**	**4909**	**4254**	**4656**

*The commissioning schedule of new power plant *MHP stage-II with total installed capacity of 18 MW (2x9) has been shown as October 2014, but generation has not been shown separately for MHP stage-II in ARR. As such, generation as projected by PSPCL in the ARR has been considered against 1283 MU worked out on 3 years average basis for MHP.*

It has been brought out by the consultants, M/s ABPS Infrastructure Advisory Private Limited in its report on power purchase/sale/surrender of power along with drawl/sale under UI that Unit V (50 MW) of Shanan Hydro Electric Project was shut down for almost entire year on account of rehabilitation work and as a result of this 50% of the total generating capacity of the station was taken off-stream during FY 2012-13. This has resulted in less generation from this station, and thus increase in power purchase during FY 2012-13. Further, the generation from this station during FYs 2013-14 and 2014-15 has also been projected on the lower side in the ARR for FY 2014-15. PSPCL needs to investigate and explain the reasons for this loss of generation from Shanan Hydro Electric Project in its next ARR.

The Commission approves estimated gross generation of 4656 MU from PSPCL's own hydel stations. The Commission also approves PSPCL's share (net) from

BBMB at 4141 MU and Common Pool share at 289 MU as projected by PSPCL for FY 2014-15. The total hydel generation approved by the Commission is depicted in Table 6.11.

Table 6.11: Total Hydel Generation for FY 2014-15

(MU)

Sr. No.	Station	Projected by PSPCL for FY 2014-15	Approved by the Commission
I	II	III	IV
1.	Shanan	451	518
2.	UBDC Stage 1	155	153
3.	UBDC Stage 2	179	189
4.	RSD	1716	1698
5.	MHP	1323	1362
6.	ASHP	741	729
7.	Micro hydel	8	7
8.	**Total own generation (Gross)**	**4573**	**4656**
9.	Auxiliary consumption and transformation loss	42	38 *
10.	HP share in RSD	75	78**
11.	HP Royalty in Shanan	54	
12.	**Total own generation (Net)**	**4402**	**4540**
13.	**PSPCL share from BBMB**		
(a)	PSPCL share (Net)	4141	4141
(b)	Common pool share (Net)	289	289
14.	**Total from BBMB (Net)**	**4430**	**4430**
15.	**Total hydro (Net) (Own + BBMB)**	**8832**	**8970**

** Transformation losses @0.5% (23 MU), auxiliary consumption @0.5% for RSD generation of 1698 MU and UBDC stage-1 generation of 153 MU (having static exciters) and @0.2% for others (15 MU).*

*** HP share @4.6% in RSD (78 MU).*

The Commission, thus, approves net hydel generation of 8970 MU for FY 2014-15, against 8832 MU projected by PSPCL.

6.4.3 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 6.12.

Table 6.12: Net Own Generation and share from BBMB for FY 2014-15

(MU)

Sr. No.	Station	Energy available (ex-bus)
I	II	III
1.	Thermal stations	18306
2.	Hydel stations	4540
3.	Share from BBMB (including 289 MU share of Common Pool consumers)	4430
4.	**Total availability**	**27276**

The Commission approves the total energy availability from PSPCL's own generating stations (thermal and hydel) including share from BBMB as 27276 MU.

6.5 Purchase of Power

6.5.1 The total energy required to meet the demand during FY 2014-15 including Common Pool and Outside State sales is 46516 MU as discussed in para 6.3. The energy available from own generating stations of PSPCL including its share from BBMB is 27276 MU as approved in para 6.4.

6.5.2 The balance energy requirement of 19240 MU (net) has to be met through purchase from Central Generating Stations and other sources. This is against a requirement of 22195 MU (net) projected by PSPCL for FY 2014-15.

6.6 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 6.13.

Table 6.13: Energy Balance for FY 2014-15

(MU)

Sr. No.	Particulars	Projected by PSPCL for FY 2014-15	Approved by the Commission
I	II	III	IV
A) Energy Requirement			
1.	Metered Sales	29176	29036
2.	AP Consumption	11586	9749
3.	**Total Sales within the State**	**40762**	**38785**
4.	T & D Losses (%)	16.00%	16.00%
5.	T & D losses	7764	7388
6.	Sales to Common pool consumers	289	289
7.	Outside State Sale	129	54
8.	**Total Requirement**	**48944**	**46516**
B) Energy Available			
9.	Own generation (Ex-bus)		
(a)	Thermal	17788	18306
(b)	Hydro	4402 *	4540
10.	Share from BBMB (including share of Common Pool consumers)	4430	4430
11.	Purchase (net)	22324**	19240
12.	**Total Availability**	**48944**	**46516**

** Against wrongly worked out /shown figure of 4531 MU.*
*** Against wrongly worked out/shown figure of 22195 MU.*

6.7 Fuel Cost

6.7.1 Fuel Cost projected by PSPCL

PSPCL has projected fuel cost of ₹4997.60 crore for a total generation of 19527 MU during FY 2014-15 based on operational and cost parameters as detailed in Table 6.14.

Table 6.14: Operation and Cost Parameters projected by PSPCL for FY 2014-15

Sr. No.	Station	PLF (%)	Station heat rate (kCal/kWh)	Transit loss of coal (%)	Coal price excluding transit loss (₹/MT)	Calorific value of coal (kCal/Kg)	Price of oil (₹/kL)	Specific oil consumption (ml/kWh)	Calorific value of oil (kCal/lt)
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	GNDTP	78.72	2825	3.00	3610	4073	50043	1.50	9400
2.	GGSSTP	86.07	2549	1.00	4233	4145	45605	1.00	9700
3.	GHTP	85.06	2500	1.50	3644	4020	47704	1.00	9500

6.7.2 PSPCL has submitted that the weighted average price and calorific value of oil and coal for FY 2014-15 has been projected as same as actual for first half of FY 2013-14. PSPCL has further submitted that any variation in fuel price and GCV is pass through as per the recovery of energy and capacity charges provided in PSERC Tariff Regulations 2005 as amended from time to time and in reference with CERC Tariff Regulations, 2009.

6.7.3 Fuel Cost approved by the Commission

Gross Generation

The gross generation of thermal plants for FY 2014-15 has been discussed in para 6.4.1 and summarized in Table 6.8.

Station Heat Rate

The CERC has laid down norms of gross SHR for coal based thermal stations as given in Table 6.15.

Table 6.15: CERC Norms for Gross Station Heat Rate

Sr. No.	Capacity of Unit / Name of Plant	SHR norms (kCal/kWh)
I	II	III
1.	200/210/250 MW Sets	2450
2.	500 MW Sets (Sub-critical)	2375
3.	Talcher Thermal Power Station	2850
4.	Tanda Thermal Power Station	2750

On the above basis, the Commission approves SHR at 2450 kCal/kWh for GGSSTP and for GHTP Units I & II. The Commission noted in para 2.7.5 and para 3.7.5 that the Unit-III and Unit IV of GHTP have been put on commercial operation on 16.10.2008 and 25.01.2010 respectively and decided to approve SHR of 2428 kCal/kWh for FY 2010-11, FY 2011-12 and FY 2013-14. The Commission decides to allow SHR for GHTP Units III & IV at 2428 kCal/kWh for FY 2014-15 also, since same formulation has been specified by CERC in its Tariff Regulations, 2014, as specified in its Tariff Regulations, 2009. As CERC has not specified any norms for 110/120 MW units, the Commission decides to allow SHR of 2750 kCal/kWh for GNDTP units based on CERC norms for Tanda TPS (after its R&M), as specified in CERC Tariff Regulations, 2014.

Coal Transit Loss

PSPCL in its ARR for FY 2014-15 has projected transit loss of coal for FY 2014-15 at 3.00% for GNDTP, 1.00% for GGSSTP and for GHTP at 1.50%.

The Commission in its Tariff Order for FY 2012-13, after considering the whole issue of transit loss, decided to cap the maximum transit loss of coal at 1.0% for FY 2013-14 & onwards.

CERC, in its Tariff regulations, 2014, has specified the transit loss of 0.2% for pit-head thermal generating stations and 0.8% for non-pithead thermal generating stations.

In view of the above, the Commission approves the transit loss for all the thermal generating stations of PSPCL as per actual, subject to a maximum of 1.0%, for FY 2014-15. However, no such loss is permissible in the case of PANEM 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 2013-14 were validated and the results are given in Table 6.16.

Table 6.16: Validated Calorific Value and Price of Coal and Oil and Transit Loss of Coal for FY 2013-14

Sr. No.	Station	Gross calorific value of coal as received (kCal/kg)	Calorific Value of Oil (kCal/lt)	Price of Oil (₹/kL)	Price of coal (₹/MT) (Excluding Transit Loss)	Transit Loss (%)
I	II	III	IV	V	VI	VII
1.	GNDTP	4171.17	9511	48059	3512	3.54
2.	GGSSTP	4308.00	9700	45605	4101	(-)0.38
3.	GHTP	4128.00	9800	47708	3548	0.53

In working out the fuel cost for FY 2014-15, the Commission has considered the calorific value of oil & coal as validated for first six months of FY 2013-14, as given in Table 6.16. The price of coal and oil has been considered by increasing the above validated values by 5%, to account for change in price during FY 2014-15. In Tariff Order for FY 2013-14, the Commission had decided to consider the calorific value of coal as per Orders of the Commission dated 08.10.2012 & 27.02.2013, for working out the fuel cost from November, 2012 to March, 2013, FY 2013-14 and onwards, i.e. calorific value (GCV) of receipted coal minus maximum permissible drop of 150 kCal/kg in calorific value (GCV). In para 5.8.1of this Tariff Order, the Commission, while carrying out the Review of FY 2013-14, has considered the calorific value of coal as per Orders of the Commission dated 08.10.2012 & 27.02.2013, for working out the fuel cost for FY 2013-14. CERC in its Tariff Regulations, 2014 has considered the gross calorific value of coal as received, for working out the energy charges (fuel cost) in respect of coal based thermal stations. The Commission accordingly decides to consider the gross calorific value of received coal for working out the fuel cost for FY 2014-15. The figures of gross calorific value of coal as given in column III of Table 6.16 are gross calorific values of coal as received, as validated by the Commission for the period from April, 2013 to September, 2013. The price and calorific value of coal indicated above are the weighted average values of coal, including PANEM coal.

Specific oil consumption

PSPCL has projected specific oil consumption at GNDTP, GGSSTP and GHTP as 1.50, 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 Tariff Regulations, effective from 01.04.2014, the Commission approves 0.5 ml/kWh specific oil consumption for GNDTP, GGSSTP and GHTP.

Table 6.17: Fuel Cost (Coal and Oil) for FY 2014-15

Sr. No.	Item	Approved Fuel Cost for FY 2014-15						
		Derivation	**Unit**	**GNDTP**	**GGSSTP**	**GHTP Unit I & II**	**GHTP Unit III & IV**	**Total**
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**
1.	Generation	A	MU	3062	9808	3295*	3926*	**20091**
2.	Heat Rate	B	kcal/kWh	2750	2450	2450	2428	
3.	Specific oil consumption	C	ml/kwh	0.5	0.5	0.5	0.5	
4.	Calorific value of oil	D	kcal/litre	9511	9700	9800	9800	
5.	Calorific value of coal	E	kcal/kg	4171.17	4308.00	4128.00	4128.00	
6.	Overall heat	F = (A x B)	Gcal	8420500	24029600	8072750	9532328	
7.	Heat from oil	G = (A x C x D) / 1000	Gcal	14561	47569	16146	19237	
8.	Heat from coal	H = (F-G)	Gcal	8405939	23982031	8056604	9513091	
9.	Oil consumption	I=(Gx1000)/D	KL	1531	4904	1648	1963	
10.	Transit loss of coal	J	(%)	1	1	1	1	
11.	Total coal consumption excluding transit loss	K=(Hx1000)/E	MT	2015247	5566860	1951697	2304528	
12.	Quantity of PANEM coal	L	MT	1311202	2693250	1356241#	1615964#	
13.	Quantity of coal other than PANEM coal	M=K-L	MT	704045	2873610	595456	688564	
14.	Quantity of coal other than PANEM coal including transit loss	N=M/(1-J/100)	MT	711157	2902636	601471	695519	
15.	Total quantity of coal	O=L+N	MT	2022359	5595886	1957712	2311483	
16.	Price of oil	P	₹/KL	50461.95	47885.25	50093.40	50093.40	
17.	Price of coal	Q	₹/MT	3687.59	4306.04	3725.40	3725.40	
18.	Total cost of oil	$R=P \times I / 10^7$	₹crore	7.73	23.48	8.26	9.83	49.30
19.	Total cost of coal	$S=O \times Q/10^7$	₹crore	745.76	2409.61	729.33	861.12	4745.82
20.	**Total fuel cost**	**T=R+S**	**₹crore**	**753.49**	**2433.09**	**737.59**	**870.95**	**4795.12**
21.	**Per unit fuel cost**	**U=Tx10/A**	**₹/kWh**	**2.46**	**2.48**	**2.24**	**2.22**	**2.39**

** worked out on proportionate basis as per data provided by PSPCL in the ARR (Vol-II, Page 16).*
 # worked out on proportionate basis in proportion to generation.

Based on the generation and operational parameters approved by the Commission, cost of fuel for FY 2014-15 works out to ₹4795.12 crore for thermal generation of 20091 MU (gross) as detailed in Table 6.17, which the Commission approves.

6.7.4 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 as per Punjab State Electricity Regulatory Commission (Conduct of Business) (Second Amendment) Regulations, 2012.

6.8 Power Purchase

6.8.1 Projection by PSPCL: PSPCL has projected power purchase cost of ₹9247.95 crore (excluding intra state transmission & wheeling charges of ₹1333.12 crore payable to PSTCL) for purchase of 22927.12 MU (gross) and for purchase of RECs (₹134 crore) during FY 2014-15. PSPCL has submitted in the ARR and Tariff Petition that in order to optimize the cost of power procured, PSPCL has scheduled its power procurement from various central generating stations on the merit order principles. The power purchase expenses as determined through such optimal order dispatch after due consideration for contractual obligations, technical constraints and load profiles during various seasons, have been proposed for approval. The State of Punjab receives fixed allocation from central generating stations based on its allocation from respective stations. Moreover, the State also receives a quantum of power from the unallocated share in various central generating stations at different intervals during a year.

The following new power plants have also been considered by PSPCL for assessing energy availability during FY 2014-15, as given in Table 6.18.

Table 6.18: Details of New Power Plants

Sr. No.	Name of the plant	Plant Capacity (MW)	PSPCL share gross (MW)	Commissioning Schedule
1.	Uri-II HEP	60x4=240 MW	19.52	Oct 2013 (Unit 1 & 2) Apr 2014 (Unit 3 & 4)
2.	Koldam HEP	4x200=800 MW	111	Mar-15
3.	Pragati-III (Bawana)PPCL	750x2 = 1500 MW	150	Unit 1 (Already Commissioned) Apr-2014 (Unit 2)
4.	Parbati-III HEP	130x4=520 MW	80	Mar 2014 (Unit 1) Jun 2014 (Unit 2) Sept 2014 (Unit 3) Dec 2014 (Unit-4)
5.	Teesta-III	6x200=1200 MW	340	Mar-15
6.	Sasan Ultra Mega TPS	3960 MW (6 Unit)	558.36	(Unit-1) Already Commissioned Dec 2013 (Unit-2) Apr 2014 (Unit-3) Aug 2014 (Unit-4) Dec 2014 (Unit-5)
7.	Nagarjuna Udipi TPP (UPCL)	2x600 = 1200 MW	120	Mar-15
8.	Rampur HEP	6X68.7=412 MW	42	Jan 2014 (Unit-1,2,3) Apr 2014 (Unit-4,5,6)

9.	Budhil HEP	70 MW	70	Jan-14
10.	Raghunathpura TPS (DVC)	2x500+20%=1000 (1200) MW	300	Oct 2014 (Unit-1)
11.	Rajpura TPS	2x700 = 1400 MW	1320	15 Jan 2014 (Unit-1) Aug 2014 (Unit-2)
12.	Talwandi Sabo TPS	3x660 = 1980MW	1860	1 Jan 2014 (Unit-1) 15 Apr 2014 (Unit-2) Aug 2014 (Unit-3)
13.	Goindwal Sahib TPS	2x270 = 540 MW	540	Apr 2014 (Unit-1)
14.	Mukerian Hydel Project Stage-II	9x2 = 18 MW	18	Oct-14
15.	**Total**		**5528.88 MW**	

PSPCL has submitted that projected energy from all central thermal generating stations with allocated share to PSPCL for FY 2014-15 has been taken the same as the energy for the previous year i.e. FY 2012-13 and from central hydro generating stations the allocated share to PSPCL has been based upon the average of the energy for the last three years i.e. FY 2010-11 to FY 2012-13. In case of new projects in the central sector, projected energy has been calculated in accordance with the CEA regulations/designed energy as mentioned in the PPAs. In case of upcoming private power plants in the State, the energy availability has been projected based on the date of commissioning, availability based on stabilization period and normative plant load factor. The projections in respect of private power plants coming up in the State are based on the availability of 65% during the stabilization period after commissioning of plants and PLF of 80%.

PSPCL has further submitted that it shall be having surplus energy available from tied up sources from central generating stations and upcoming IPPs in the State. In order to manage demand and maintain energy balance, the surplus energy has been surrendered. Surrender of energy has been done as per the merit order of power purchase from the existing thermal and gas plants. The merit order has been based upon the variable rates assumed for FY 2014-15. After surrender of energy, only variable charges have been reduced and fixed/other charges have been assumed the same. The impact of fixed charges borne due to surrender of surplus power of 12994 MU (gross) has been projected as ₹1706 crore. PSPCL has further submitted that the projections of power availability as submitted in the long term plan of PSPCL differ from the projections submitted in the ARR on annual basis due to difference in the demand forecast based on restricted and unrestricted demand. The projections regarding energy availability, energy scheduled and energy surrendered from various sources, made by PSPCL in the ARR are as given in Table No. 6.19.

Table 6.19: Details of energy availability, energy scheduled and energy surrendered as per ARR for FY 2014-15

(MU)

Sr. No.	Name of Thermal Generating Station	Energy availability/ entitlement for purchase (gross)	Energy scheduled (gross)	Energy surrendered (gross)
1.	IGSTPS (APCPL), Jhajjar	130	0	130
2.	Farakka (ER)	129	0	129
3.	Dadri	406	0	406
4.	Auraiya	194	9	184
5.	Pragati – III Gas Plant, Bawana	1020	87	933
6.	Anta	213	34	179
7.	Dadri (NCTP)-2C	94	11	83
8.	Durgapur TPS (DVC)	1507	143	1364
9.	Kahalgaon-I (ER)	312	50	261
10.	Kahalgaon-2 (ER)	690	151	539
11.	Talwandi Sabo TPS	7301	1862	5438
12.	Rajpura TPS	5008	2662	2346
13.	Unchahar-I	230	176	54
14.	Unchahar-II	417	317	100
15.	Unchahar-III	117	91	26
16.	GVK Gobindwal Sahib TPS	1138	935	203
17.	Mundra UMPP	3261	2866	395
18.	Rihand-II	804	729	75
19.	Rihand-I	801	734	67
20.	Rihand-III	434	397	37
21.	Singrauli	1661	1617	44
22.	Sasan UMPP	2607	2607	0

PSPCL has further submitted that as per the current estimates being projected in the ARR, there is no deficit for short term power procurement and in case any requirement is assessed, it will be procured on day to day basis. Thus, no separate short term power procurement plan for FY 2014-15 has been prepared.

The quantum of power purchase projected by PSPCL from various plants for FY 2014-15 is given under column III of Table 6.22, which the Commission provisionally approves.

However, there may be increase in demand / consumption of various categories of consumers than as projected in the ARR on account of the following:

i) Increase in demand by various categories of consumers as there will be no power cuts during FY 2014-15 due to surplus power available with PSPCL.

ii) Increase in demand of AP category as a result of policy of Government/PSPCL to release additional AP connections.

iii) Increase in ToD period from October to March of the year to October to May of the year.

iv) Introduction of ToD for MS category and implementation of a more aggressive ToD policy for LS category.

v) Abolition of the practice of charging per kW/kVA charges for availing Peak Load Exemption and its replacement with higher tariff during peak load hours.

vi) Introduction of contract demand based tariff for MS category consumers.

vii) Allowing rebate on consumption more than a prescribed limit, as approved by the Commission in para 7.6.

viii) PSPCL is advised to accelerate the release of additional load/ demand and new connections, which will also result in more demand/consumption.

ix) PSPCL may consider accelerated release of AP connections for consumers who opt to take Metered AP connection at their cost and pay for power used at AP tariff fixed by the Commission from time to time.

Further, for the purpose of energy/power purchase balance, the Commission has approved sale of extra power available than as determined for energy balance in para 6.6. The actual impact of surrendering of power by PSPCL will be considered at the time of review/true up, for which PSPCL shall make detailed submissions along with reasons thereof, to the satisfaction of the Commission.

6.8.2 **Requirement of Energy through Purchase:** As discussed in para 6.5.2, the energy requirement of 19240 MU (net) has to be met through purchase from Central Generating Stations and other sources. The transmission loss external to PSTCL system has to be added to arrive at the total quantum of energy to be purchased**.**

6.8.3 **Transmission Loss external to PSTCL System:** For net purchase of 22195 MU, PSPCL has shown gross power purchase of 22927.12 MU after adding external transmission loss of 3.19%.

6.8.4 The Commission has considered the external loss at 2.87% as considered by it for review of FY 2013-14. The gross energy to be purchased, thus, works out to 19809 MU (19240 MU + external transmission loss of 569 MU).

6.8.5 Entitlement from Central Generating Stations: PSPCL meets its demand of power by procurement from Central Generating Stations and other external sources apart from State's own Generation. Major sources from which PSPCL procures power are Central Generating Stations viz NTPC, NHPC, NPC, SJVNL, THDC, DVC, Co-generation / NRSE Plants, Banking Arrangements, Traders and IPPs. PSPCL has submitted that in order to optimize the cost of power procured, PSPCL has scheduled its power procurement from various Central Generating Stations (CGSs) and other sources on the merit order principles. It has considered the load profile during various seasons, technical constraints and avoidable cost after giving due consideration to contractual obligations, for deciding the procurement/generation schedule. Source of power with the lowest per unit cost has been scheduled to be procured first (base load) and those with highest per unit cost at last (peak load). Sources with equal merit order have been considered together in proportion to their available capacity.

The Commission has determined the average of the actual energy purchased by PSPCL during the last three years (FY 2010-11, FY 2011-12 and FY 2012-13) from different NHPC & NPC generating stations under central sector, and compared it with the plant-wise figures projected by PSPCL in the ARR. In case of NTPC generating stations, comparison has been made of the actual energy purchased by PSPCL during FY 2012-13 with plant-wise figures projected by PSPCL in the ARR. The Commission observed that the PSPCL has projected less power purchase than firm allocation from many thermal generating stations of NTPC and other thermal generating stations in the Central & State sector. PSPCL in its ARR for FY 2014-15 has submitted that power has been scheduled on merit order principle and excess power available than the requirement has been proposed to be surrendered. The Commission, as such, approves the power purchase from NTPC, NHPC, NPC and other generating stations in the Central & State sector as projected by PSPCL in the ARR.

Based on above, the details of plant capacity, firm allocation, entitlement of power, power purchase proposed in the ARR by PSPCL and power purchase approved by the Commission from NTPC, NHPC and NPC stations are shown in Table 6.20(A), Table 6.20(B) and Table 6.20(C) respectively.

Table 6.20(A): Power Purchase from Thermal Generating Stations of NTPC for FY 2014-15

Sr. No.	Source	Capacity	Firm allocation to PSPCL		Entitlement of Power projected by PSPCL for FY 2014-15		Power Purchase and share projected by PSPCL for FY 2014-15 (after surrender as per Merit Order)		Power purchase and Share approved by the Commission for FY 2014-15	
		(MW)	(%)	(MW)	(MU)	(%)	(MU)	(%)*	(MU)	(%)#
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
NTPC										
1.	Anta	419	11.69	48.98	213	15.75	34.19	13.44	34.19	13.24
2.	Auraiya	663	12.52	83.01	194	15.33	9.37	13.73	9.37	13.59
3.	Dadri	830	15.90	131.97	406	17.79	0.00	16.72	0.00	16.62
4.	Singrauli	2000	10.00	200.00	1661	12.38	1617.05	11.66	1617.05	11.29
5.	Rihand-I	1000	11.00	110.00	801	13.37	734.46	12.65	734.46	12.28
6.	Rihand-II	1000	10.20	102.00	804	12.59	728.31	11.86	728.31	11.49
7.	Rihand- III	500	8.27	41.35	434	10.65	397.43	8.93	397.43	8.93
8.	Unchahar-I	420	8.57	35.99	230	9.33	176.95	9.09	176.95	8.98
9.	Unchahar-II	420	14.28	59.98	417	16.66	316.81	15.94	316.81	15.57
10.	Unchahar-III	210	8.10	17.01	117	10.45	90.33	9.73	90.33	9.36
11.	Farakka (ER)	1600	1.39	22.24	129	1.39	0.00	1.39	0.00	1.39
12.	Kahalgaon-I (ER)	840	6.07	50.99	312	6.07	50.46	6.07	50.46	6.07
13.	Kahalgaon-II(ER)	1500	8.02	120.30	690	8.02	150.77	8.02	150.77	8.02
14.	NCTPS- 2C (DADRI II)	980	un-allocated Share		94	2.38	11.39	1.52	11.39	1.28
15.	IGSTPS Jhajjar (NTPC JV)	500			130	2.05	0.00	0.78	0.00	0.78
16.	**Total (NTPC)**				**6632**		**4317.52**		**4317.52**	

**Projected by PSPCL in the ARR.*
#Actual for FY 2012-13.

Table 6.20(B): Power Purchase from Hydel Generating Stations of NHPC & NTPC for FY 2014-15

Sr. No.	Source	Capacity	Firm allocation to PSPCL		Power Purchase projected by PSPCL for FY 2014-15		Power purchase approved by the Commission for FY 2014-15	
		(MW)	(%)	(MW)	(MU)	(%)	(MU)	(%)
I	II	III	IV	V	VI	VII	VIII	IX
NHPC								
1.	Bairasuil	180	46.50	83.70	322.03	46.50	322.03	46.50
2.	Salal	690	26.60	183.54	872.18	26.60	872.18	26.60
3.	Tanakpur	94	17.93	16.85	68.30	17.93	68.30	17.93
4.	Chamera-I	540	10.20	55.08	253.60	10.20	253.60	10.20
5.	Chamera-II	300	10.00	30.00	186.00	12.08	186.00	12.09
6.	Chamera-III*	231	7.86	18.15	99.82	9.48	99.82	9.48
7.	Uri	480	13.75	66.00	385.24	13.75	385.24	13.75
8.	Uri – II*	240	16.25	39.00	91.39		91.39	
9.	Dhauliganga	280	10.00	28.00	115.60	11.75	115.60	11.75
10.	Dulhasti	390	8.28	32.29	221.44	10.03	221.44	10.03
11.	SEWA-II	120	8.33	10.00	51.02	10.15	51.02	10.16
12.	Parbati – III*	520	15.38	79.98	60.70		60.70	
NTPC								
13.	Koldam*	800	13.88	111.04	3.96		3.96	
14.	**Total**				**2731.28**		**2731.28**	

** Past generation data not available being new stations. Figures taken as projected in the ARR.*

Table 6.20(C): Power Purchase from NPC stations for FY 2014-15

Sr. No.	Source	Capacity	Firm allocation to PSPCL		Power Purchase projected by PSPCL for FY 2014-15	Power purchase & share approved by the Commission for FY 2014-15	
		(MW)	(%)	(MW)	(MU)	(MU)	(%)
I	II	III	IV	V	VI	VII	VIII
NPC							
1.	NAPP	440	11.59	51.00	297.61	297.61	12.89
2.	RAPP B	440	22.73	100.01	793.56	793.56	24.63
3.	RAPP C	440	10.41	45.80	431.97	431.97	12.45
4.	**Total**				**1523.14**	**1523.14**	

6.8.6 Cost of Power Purchase

(a) Central Generating Stations (CGSs)

PSPCL in the ARR petition for FY 2014-15 has submitted that since its power procurement plan is based on merit order principle, capacity charges payable on the basis of allocated share and contractual obligations have been considered in-spite of the fact that power procurement from various sources has been regulated on the basis of load demand vis-a vis per unit cost from the generating sources. PSPCL has further submitted that the capacity charges for CGSs have been considered as per the orders issued by CERC for the respective stations.

The Commission notes that the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for the period 2014-19 have been notified on 21.02.2014. CERC has not issued Tariff Orders for CGSs for the period 2014-19. However, CERC has issued provisional Tariff Orders for some stations and final Tariff Orders for some other stations for the period 2009-14. The Commission has decided to consider fixed charges as per respective Tariff Orders issued by CERC, and in cases where Tariff Order has not been issued, fixed charges have been considered as per bills for September 2013, and where bills for September 2013 are also not available, fixed charges have been taken as projected by PSPCL in the ARR.

NTPC Stations

Fixed Cost

As per CERC Tariff Regulations for the period 2014-19, 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 final tariff orders for the period 2009-14 for all NTPC stations except IGSTPS Jhajjar (a NTPC JV company) and Rihand-III. For IGSTPS Jhajjar and Rihand-III, provisional tariff orders have been issued by CERC for the period 2009-14. As the tariff orders for the period 2014-19 for all NTPC stations are yet to be issued, as such, the Annual Fixed Charges (AFC) in case of NTPC stations (Anta, Auraiya, Dadri, Singrauli, Rihand-I, Rihand-II, Unchahar-I, Unchahar-II, Unchahar-III, Farakka(ER), Kahalgaon-I, Kahalgaon-II, and NCTPS-2C (Dadri-II)) have been considered by the Commission as per AFC notified for FY 2013-14 in the Tariff Orders issued by CERC for the period 2009-14. For Rihand-III and IGSTPS Jhajjar, AFC have been considered as per AFC notified in the provisional Tariff Orders issued by CERC for the period 2009-14.

Variable Cost

PSPCL has considered variable charges for existing NTPC plants at 5% higher than those in the month of September, 2013, which the Commission provisionally approves.

Hydel Stations of NHPC & NTPC

Fixed Cost

CERC Tariff Regulations for the period 2014-19 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. Further, as per CERC Tariff Regulations for the period 2014-19, the capacity charge is payable inclusive of incentive and Free Energy for Home State, and as such capacity charge is to be worked out in proportion to the actual Plant Availability Factor achieved and also after taking into consideration Free Energy for Home State (12%). The actual Plant Availability Factor achieved by different NHPC stations during FY 2010-11, FY 2011-12 and FY 2012-13 and Normative Plant Availability Factor as per CERC Tariff Regulations is given in Table 6.21.

Table 6.21: Actual Plant Availability Factor and Normative Plant Availability Factor of NHPC stations

Sr. No.	Station	Plant Availability Factor during FY 2010-11	Plant Availability Factor during FY 2011-12	Plant Availability Factor during FY 2012-13	Average Plant Availability Factor	Normative Plant Availability Factor
		%	%	%	%	%
1.	Bairasuil	94.995	94.915	98.281	96.064	90.00
2.	Salal	63.102	63.715	65.792	64.203	60.00
3.	Tanakpur	62.586	64.831	64.639	64.019	55.00
4.	Chamera-I	99.171	87.272	97.772	94.738	90.00
5.	Chamera-II	94.986	96.735	96.739	96.153	90.00
6.	Chamera-III			94.594	94.594	85.00
7.	Uri	82.141	75.947	80.749	79.612	70.00
9.	Dhauliganga	92.011	93.832	93.761	93.201	90.00
10.	Dulhasti	92.87	96.15	85.427	91.482	90.00
11.	SEWA-II	90.7	85.337	81.898	85.978	85.00

PSPCL has submitted that final Tariff Orders for the period 2009-14 for all plants, except Chamera-III, Uri-II and Parbati-III, have been issued. As the Tariff Orders for the period 2014-19 for all NHPC stations are yet to be issued, as such, annual fixed cost in the case of NHPC stations (Bairasuil, Salal, Tanakpur, Chamera-I, Chamera-II, Uri, Dhauliganga, Dulhasti and Sewa-II) has been considered by the Commission as per AFC notified in the Tariff Orders issued by CERC for the period 2009-14 and also taking into consideration average Plant Availability Factor worked out in Table 6.21 and Free Energy for Home State (12%). For Chamera-III HEP, Annual fixed cost has been considered by the Commission as per provisional tariff order, dated 13.08.2012, issued by CERC and also taking into consideration Free Energy for Home State (12%).

PSPCL has not considered any fixed charges for new plants i.e. Uri-II and Parbati-III of NHPC and Koldam of NTPC and has considered only variable charges.

Variable Cost

PSPCL has calculated fixed charges and variable charges for existing NHPC plants as per applicable Annual Fixed Charges for FY 2013-14.

The Commission has considered variable cost for FY 2014-15 as per NHPC bills for September, 2013 for different central generating stations.

In case of Uri-II, Parbati-III and Koldam (new stations), PSPCL has assumed the energy charges with 5% escalation on average unit rate of new hydro plants during FY 2013-14 i.e. 448.82 paise/Unit (427.45 x 1.05), which the Commission provisionally approves.

Under the title of 'other charges', PSPCL has assumed the water usage charges same as actual billed for FY 2012-13, which the Commission provisionally approves.

NPC Stations

PSPCL has considered variable charges for existing NPC stations at 5% higher than those in the month of September 2013, which the Commission provisionally approves.

(b) Long-term Power Purchase from New and Renewable Sources of Energy (NRSE) within the State

Quantum and rate of Long-term power purchase from NRSE are provisionally approved as per PSPCL's projections in the ARR petition for FY 2014-15.

(c) Power Purchase from SJVNL, Tehri and other Central Sector Power Plants

(i) Hydel Stations

The energy entitlement and allocation from Nathpa Jhakri (SJVNL) and Tehri (THDC) have been taken as projected by PSPCL in the ARR.

For Koteshwar (THDC), energy entitlement has been taken as projected by PSPCL in the ARR petition for FY 2014-15.

For new hydel station i.e Rampur (SJVNL), energy entitlement has been taken as projected by PSPCL in the ARR petition for FY 2014-15.

For Nathpa Jhakri (SJVNL) and Tehri, generators are raising provisional bills as CERC orders for the period 2009-14 and 2014-19 are yet to be issued.

For Nathpa Jhakri (SJVNL), the annual fixed charges and variable charges have been considered as per bill for September, 2013. While determining the fixed charges, the average Plant Availability Factor (102.47%) for FY 2010-11, FY 2011-12 & FY 2012-13 and Normative Plant Availability Factor as per CERC Tariff Regulations, 2014 (90%) and Free Energy for Home State (12%) have been taken into consideration.

For Tehri, the annual fixed charges and variable charges have been considered as per bill for September, 2013. While determining the fixed charges, the average Plant Availability Factor (80.69%) for FY 2010-11, FY 2011-12 & FY 2012-13 and

Normative Plant Availability Factor as per CERC Tariff Regulations, 2014 (77%) and Free Energy for Home State (12%) have been taken into consideration.

Other charges for Nathpa Jhakri (SJVNL) and Tehri are provisionally approved as projected by PSPCL in the ARR Petition for FY 2014-15.

For Koteshwar HEP, the annual fixed charges and variable charges have been considered as per bill for September, 2013. While determining the fixed charges, the average Plant Availability Factor (75.68%) for FY 2011-12 & FY 2012-13 and Normative Plant Availability Factor as per CERC Tariff Regulations, 2014 (67%) and Free Energy for Home State (12%) have been taken into consideration.

For new plant i.e. Rampur HEP (SJVNL), PSPCL has not considered any fixed charges and has considered only variable charges. PSPCL has assumed the energy charges with 5% escalation on average unit rate of new hydro plants during FY 2013-14 i.e. 448.82 paise/Unit (427.45 x 1.05) , which the Commission provisionally approves.

(ii) Thermal Stations

PSPCL in its ARR for FY 2014-15 has shown the availability of power from Durgapur (DVC) as 1507 MU. PSPCL has further submitted in the ARR that the power from Durgapur (DVC) will be scheduled on merit order principle and has shown the power purchase from this source as 142.82 MU, which the Commission provisionally approves.

For new Thermal station i.e Raghunathpura TPS (DVC), energy entitlement has been taken as projected by PSPCL in the ARR petition for FY 2014-15.

For Durgapur TPS (DVC), PSPCL has considered the annual fixed charges as claimed by the generator in the bill for September, 2013, as the final tariff order is yet to be issued by CERC. PSPCL has assumed the variable charges to be 5% higher than those actually billed for September, 2013. The Commission has provisionally approved the fixed charges and variable charges as proposed by PSPCL.

For Raghunathpura TPS, PSPCL has assumed the variable charges with 5% escalation on per unit rate of Durgapur TPS (DVC) for September, 2013 i.e. 516.21 paise/unit (491.33 x 1.05) , which the Commission provisionally approves.

(d) Power Purchase and Sale under Banking

PSPCL has submitted the net of power purchase and sale under banking from HPSEB Ltd., Uttarakhand Power Corporation Limited (UPCL), J&K and banking through Traders as 149.27 MU of power sale. The Commission notes that the PSPCL has projected to purchase 2601.80 MU (gross) and to sell 2751.07 MU (gross) under Banking arrangements from/to HPSEB Ltd., UPCL, J&K and through Traders, during FY 2014-15. The Commission provisionally accepts the net power sale and its rate / cost under banking from HPSEB Ltd., UPCL, J&K and banking through Traders as per PSPCL's projections.

In addition, the Commission also approves the Open Access charges for Banked Energy at ₹69.29 crore for purchase of 2601.80 MU, as proposed by PSPCL in the ARR.

(e) Power Purchase from Traders and IPPs (Long Term Power)

(i) Hydel Stations

Quantum of power purchase from Tala HEP (PTC), Mallana-II HEP (PTC), Teesta-III HEP (PTC) and Budhill HEP (PTC) has been provisionally approved as projected by PSPCL in the ARR.

For Tala HEP (PTC), PSPCL has assumed variable charges as per September, 2013 bills, which the Commission provisionally approves.

For Mallana-II HEP (PTC), PSPCL has assumed power purchase rate of 363 paise/unit as per provisional tariff approved by PSERC. However, the Commission in its Order dated 27.11.2013 in Petition No. 54 of 2012 filed by the generator, has determined the Annual Fixed Cost amounting to ₹171.35 crore for FY 2013-14 as per PSERC (Terms & Conditions for Determination of Tariff) Regulations, 2005 (as amended). The generator has filed the petition for approval of annual fixed cost for FY 2014-15 on 12.06.2014 alongwith truing up of expenses for FYs 2012-13, 2013-14, which is under process. Accordingly, the Commission provisionally allows the Annual Fixed Cost of ₹171.35 crore determined for FY 2013-14 for FY 2014-15 as well and the capacity (fixed) charge and energy (variable) charge computed accordingly.

For new plants i.e. Teesta-III HEP (PTC), Budhill HEP (PTC), PSPCL has not considered any fixed charges and has considered only variable charges. PSPCL has assumed the energy charges with 5% escalation on average unit rate of new hydro plants during FY 2013-14 i.e. 448.82 paise/Unit (427.45 x 1.05), which the Commission provisionally approves.

(ii) Thermal Stations

PSPCL in its ARR for FY 2014-15 has shown the availability of power from Pragati-III Gas Plant Bawana (PPCL), Mundra UMPP (CGPL), Sasan UMPP (RPL) and Udipi TPS (UPCL) as 1020 MU, 3261 MU, 2606.87 MU and 66.07 MU respectively. PSPCL has further submitted in the ARR that the power from Pragati-III Gas Plant Bawana (PPCL) and Mundra UMPP (CGPL) will be scheduled on merit order principle and has projected power purchase from these sources as 86.60 MU and 2865.54 MU respectively, which the Commission provisionally approves. Further, the Commission provisionally approves the power purchase from Sasan UMPP (RPL) and Udipi TPS (UPCL) as 2606.87 MU and 66.07 MU respectively.

Quantum of power purchase from NVVNL Bundled Power (NTPC Thermal Power+Solar Power) has been provisionally approved as projected by PSPCL in the ARR.

For Pragati-III Gas Plant Bawana (PPCL), PSPCL has assumed annual fixed charges as per September, 2013 bill, which the Commission provisionally approves. PSPCL has projected in the ARR the variable charges to be 5% higher than those actually billed in September, 2013 i.e. 343.91 paise/unit (327.53 x 1.05), which the Commission provisionally approves.

For Mundra UMPP (CGPL), PSPCL has projected the fixed charges on pro-rata basis to those billed in first half of FY 2013-14. PSPCL has assumed the variable charges to be 5% higher than those actually billed in September, 2013 i.e. 167.86 paise/unit (159.87 x 1.05). The Commission provisionally approves the fixed charges & variable charges as projected by PSPCL in the ARR.

For Sasan UMPP (RPL), PSPCL has considered fixed charges as 12.60 paise/unit and variable charges as 57.60 paise/Unit, which the Commission provisionally approves and considers the total per unit charges of 70.20 paise/unit, for determining power purchase cost from this plant.

For Udipi TPS (UPCL), PSPCL has assumed the variable charges with 5% escalation on average unit rate of Durgapur TPS (DVC) for September, 2013 i.e. 516.21 paise/unit (491.63 x 1.05) , which the Commission provisionally approves.

For NVVNL Bundled Power (NTPC Thermal Power + Solar Power), PSPCL has projected in the ARR the variable charges to be 5% higher than the average rate of power purchase during the first half of FY 2013-14 from this source i.e. 496.17 paise/unit. (472.54 x 1.05), which the Commission provisionally approves.

(iii) IPPs within the State

PSPCL in its ARR for FY 2014-15 has shown the availability of power from Talwandi Sabo TPS (Sterlite), Rajpura TPS (L&T) and Goindwal Sahib TPS (GVK) as 7301 MU, 5008 MU and 1138 MU respectively. The projections of power availability from these plants by PSPCL are based on availability of 65% considering the stabilization period and PLF of 80%. PSPCL has submitted in ARR that the power from these plants will be scheduled on merit order principle and the power purchase from these sources has been taken as 1862.41 MU, 2661.69 MU and 934.41 MU respectively, which the Commission provisionally approves.

PSPCL has further submitted that fuel cost for the upcoming IPPs in the State has been considered based on linked sources of supply as per the Power Purchase Agreements (PPAs) and any change would be pass through as per appropriate Orders of the State Commission.

The Hon'ble APTEL in its Order dated 21.08.2013 in I.A. No.226 of 2013 in Appeal No.56 of 2013 & I.A. No.130 of 2013 in Appeal No.84 of 2013 in the matter of Talwandi Sabo Power Ltd. v/s PSPCL & PSERC and in I.A. No.227 of 2013 in Appeal No.68 of 2013 in the matter of Nabha Power Ltd. and L&T Power Development Ltd. v/s PSPCL & PSERC, has held that the Appellants may undertake a transparent competitive bidding process for procurement of imported coal or coal from alternative domestic sources for their projects to meet the expected shortfall in supply from linked sources in order to operate the Power Plants as per the terms and conditions of the PPA for a period of 12 months from the expected commencement of operation of the first unit of the project on coal and further made it clear that this interim order is to enable the Appellants to take advance action for procurement of coal from alternative sources and this will not give any right to the Appellants to raise any charges over and above that admissible to them as per the terms & conditions of the PPA. It was further held by Hon'ble APTEL that the actual procurement of coal from the alternative sources will be subject to the terms and conditions imposed by the State Commission. Subsequently, to seek further orders of PSERC on various issues, Nabha Power Ltd. (NPL) and Talwandi Sabo Power Ltd. (TSPL) filed Petition No.57 of 2013 and Petition No.60 of 2013 respectively. The Commission disposed of the above petitions vide Order dated 11.02.2014 (Petition No.60 of

2013) and Order dated 19.02.2014 (Petition No.57 of 2013). The Commission held that it appears that TSPL as well as NPL may not need to procure coal from alternative sources since the quantum of supply of coal during 12 months / build-up period is same as the Annual Contracted Quantity (ACQ) and their action to procure coal from alternative sources is based on apprehensions and is speculative in nature. The Commission further held that although under the Act, it is not mandated to approve procurement of material, yet taking a holistic view and considering that the competitive bidding process has been overseen by PSPCL and its representatives had signed the technical and price bids, it approves the competitive bidding process undertaken by NPL and TSPL for procurement of coal from alternative sources to operate the power plants as per terms and conditions of their respective PPA for a period of 12 months from the expected commencement of operation of Unit-I of the respective projects on coal subject to terms & conditions and modalities for passing through cost of this coal as laid down in the said Orders. Referring that both the Letter of Assurance (LoA) and Fuel Supply Agreement (FSA) provide a window for supply of imported coal, the Commission held that the cost of imported coal / coal procured from alternative sources would be a pass through in terms of the respective LoA / FSA / PPA for these projects. As a measure for smooth operation of the power plants and to avoid unnecessary litigation, the Commission appointed 'Standing Committee on TSPL Project' comprising of Secretary, Power/Govt. of Punjab, CMD/PSPCL and COO/TSPL and 'Standing Committee on NPL Project' comprising of Secretary, Power/Govt. of Punjab, CMD/PSPCL and Chief Executive/NPL to resolve day to day issues and held that the said respective Standing Committee shall also be the final authority to determine the additional cost of coal from alternative sources/imported coal procured by TSPL/NPL to meet the shortages in coal supplied by CIL or its subsidiaries.

In the ARR petition, PSPCL has considered the following first year (FY 2013-14) calculated tariff for the three IPPs:

Sr. No.	Plant	Variable Charges* (paise/unit)	Fixed Charges* (paise/unit)	Total Charges* (paise/unit)
1.	Talwandi Sabo TPS (Sterlite)	227	135	362
2.	Rajpura TPS (L&T)	215	122	337
3.	Goindwal Sahib TPS (GVK)	199	164	363

** Assuming generation as 7301 MU, 5008 MU and 1138 MU for Talwandi Sabo TPS, Rajpura TPS and Goindwal Sahib TPS respectively.*

For FY 2014-15, PSPCL has assumed 5% rise on fuel cost in the first year calculated tariff. The fixed charges have been projected by PSPCL same as for the first year i.e. FY 2013-14.

The Commission provisionally approves the fixed charges as projected by PSPCL for the first year i.e. FY 2013-14 and variable charges as projected by PSPCL for FY 2014-15 subject to revision/true up as per provisions in their respective LoA/PPA/FSA and Orders in the judicial proceedings, in case of Talwandi Sabo TPS and Rajpura TPS. As regards the tariff for Goindwal Sahib TPS, the same shall be trued up in terms of the tariff to be determined by the Commission on filing of petition in this regard by the generator.

(f) Power Purchase and Sale from Traders (Short-Term)

PSPCL has projected power purchase of 22927.12 MU (gross) from Central Generating Stations and other sources. PSPCL has not projected any short-term power purchase in the ARR. PSPCL has rather submitted that it shall have surplus energy available from tied up sources from Central Generating Staions and other sources, during FY 2014-15.

The gross power purchase requirement as worked out under para 6.8.4 is 19809 MU. As such, PSPCL shall have additional surplus power of 3118.12 MU, in comparison to that projected by PSPCL in the ARR.

The Commission, therefore, provisionally approves sale of 3118.12 MU of power at the average variable rate of surrendered power, for power purchase balance purpose only, since fixed/capacity charges have to be paid for the allocated share in any case.

The quantum and rate of sale of power approved by the Commission above is only for the purpose of power purchase and energy balance. **PSPCL need to carefully plan the best course available to deal with the surplus power i.e. whether it should or should not be scheduled or it should be sold in the market, after assessing its day to day requirement. The surrendering of power should be strictly as per merit order dispatch from all the thermal generating stations, including its own thermal generating stations. Further, any sale of surplus power by PSPCL shall be done at the best possible rate.** The endeavour of PSPCL should be to reduce the burden of fixed charges on the consumers of the State.

PSPCL has not submitted any requirement of short term power purchase for FY 2014-15 in this ARR and has submitted that in case any requirement of short term power purchase is assessed, it will procure on day to day basis. **The Commission reiterates that PSPCL needs to purchase power in a judicious and economical manner and also resort to Demand Side Management practices to maintain its commercial viability.**

(g) Inter-State Transmission Charges

PSPCL has stated in the ARR Petition that PGCIL charges have been calculated based upon the PoC slab rates of FY 2012-13, and existing and upcoming interstate plants have been considered for working out PGCIL charges. PSPCL has worked out PGCIL charges as ₹779.06 crore for FY 2014-15 based on these rates, which the Commission provisionally approves.

Based on the above, the cost of power purchase for FY 2014-15 has been worked out as ₹8283.06 crore for purchase of 19809 MU as detailed in Table 6.22.

Table 6.22: Power Purchase cost for FY 2014-15

Sr. No.	Source	Purchase (MU)	AFC (₹ crore)	PSPCL share (%)	Rate of VC (paise/ Unit)	FC (₹ crore)	VC (₹ crore)	Other Charges (₹ crore)	Total (₹ crore) (VII+VIII+ IX)
I	II	III	IV	V	VI	VII	VIII	IX	X
I	**<u>NTPC</u>**								
1.	Anta	34.19	211.86	13.24	342.09	28.05	11.70		39.75
2.	Auraiya	9.37	253.18	13.59	356.06	34.41	3.34		37.75
3.	Dadri	0.00	324.57	16.62	364.35	53.94	0		53.94
4.	Singrauli	1617.05	749.79	11.29	99.86	84.65	161.48		246.13
5.	Rihand-I	734.46	567.00	12.28	144.27	69.63	105.96		175.59
6.	Rihand-II	728.31	650.90	11.49	145.32	74.79	105.84		180.63
7.	Rihand- III	397.43	623.12	8.93	139.55	55.64	55.46		111.10
8.	Unchahar-I	176.95	250.07	8.98	215.67	22.46	38.16		60.62
9.	Unchahar-II	316.81	258.60	15.57	215.25	40.26	68.19		108.45
10.	Unchahar-III	90.33	198.12	9.36	215.25	18.54	19.44		37.98
11.	Farakka (ER)	0.00	941.58	1.39	374.64	13.09	0		13.09
12.	Kahalgaon-I (ER)	50.46	558.18	6.07	268.59	33.88	13.55		47.43
13.	Kahalgaon-II (ER)	150.77	1261.55	8.02	253.58	101.18	38.23		139.41
14.	NCTPS- 2C (DADRI II)	11.39	1089.12	1.28	312.06	13.94	3.55		17.49
15.	IGSTPS Jhajjar (NTPC JV)	0.00	1625.00	0.78	386.72	12.68	0		12.68
16.	Koldam HEP	3.96			448.82		1.78		1.78
	Sub Total (NTPC)	**4321.48**				**657.14**	**626.68**		**1283.82**

Sr. No.	Source	Purchase (MU)	AFC (₹ crore)	PSPCL share (%)	Rate of VC (paise/ Unit)	FC (₹ crore)	VC (₹ crore)	Other Charges (₹ crore)	Total (₹ crore) (VII+VIII+ IX)
II	**NHPC**								
17.	Bairasuil	322.03	105.87	46.50	78.00	29.86	25.12		54.98
18.	Salal	872.18	263.63	26.60	49.10	42.64	42.82	93.00	178.46
19.	Tanakpur	68.30	90.76	17.93	115.20	10.76	7.87		18.63
20.	Chamera-I	253.60	292.18	10.20	100.90	17.82	25.59		43.41
21.	Chamera-II	186.00	357.33	12.09	137.00	26.22	25.48		51.70
22.	Chamera-III	99.82	351.62	9.48	188.30	21.08	18.80		39.88
23.	Uri	385.24	363.47	13.75	80.80	32.30	31.13	18.00	81.43
24.	Uri - II	91.39			448.82		41.02		41.02
25.	Dhauliganga	115.60	287.98	11.75	146.00	19.91	16.88		36.79
26.	Dulhasti	221.44	1025.27	10.03	309.20	59.39	68.47	10.00	137.86
27.	SEWA-II	51.02	198.90	10.16	216.40	11.61	11.04	1.00	23.65
28.	Parbati - III	60.70			448.82		27.24		27.24
	Sub Total (NHPC)	**2727.32**				**271.59**	**341.46**	**122.00**	**735.05**
III	**NPC**								
29.	NAPP	297.61		12.89	261.02		77.68		77.68
30.	RAPP B	793.56		24.63	291.66		231.45		231.45
31.	RAPP C	431.97		12.45	360.49		155.72		155.72
	Sub Total (NPC)	**1,523.14**					**464.85**		**464.85**
IV	**NRSE Power (Punjab)**								
32.	Long-term NRSE Power	620.97			511.72		317.76		317.76
33.	Short-term NRSE Power	0.00							
	Sub Total (NRSE Power)	**620.97**					**317.76**		**317.76**
V	**Other Sources (Central Sector)**								
(i)	**Hydel Stations**								
34.	Nathpa Jhakri HEP (SJVNL)	848.25	1312.43	11.29	114.10	95.84	96.79	20.02	212.65
35.	Tehri HEP (THDC)	333.13	1108.43	8.86	227.90	58.47	75.92	15.12	149.51
36.	Koteshwer HEP (THDC)	102.87	390.94	7.45	210.70	18.71	21.67		40.38
37.	Rampur HEP (SJVNL)	180.41			448.82		80.97		80.97
(ii)	**Thermal Stations**								
38.	Durgapur TPS (DVC)	142.82	1380.55	20.00	286.97	276.11	40.99		317.10
39.	Raghunathpura TPS (DVC)	484.85			516.21		250.28		250.28
	Sub Total (Other Sources)	**2092.33**				**449.13**	**566.62**	**35.14**	**1050.89**
VI	**Net Banking**								
40.	Net Banking with HPSEB Ltd, UPCL, J&K and through Traders	-149.27			318.00		-47.47		-47.47
41.	Open Access Charges for Banking						69.29		69.29
	Sub Total (Net Banking)	**-149.27**					**21.82**		**21.82**

Sr. No.	Source	Purchase (MU)	AFC (₹ crore)	PSPCL share (%)	Rate of VC (paise/ Unit)	FC (₹ crore)	VC (₹ crore)	Other Charges (₹ crore)	Total (₹ crore) (VII+VIII+ IX)
VII	**TRADERS / IPPs (Long Term Power)**								
(i)	**Hydel Stations**								
42.	Tala HEP (PTC)	99.95			202.00		20.19		20.19
43.	Mallana-II HEP (PTC)	270.36	171.35	100.00	233.54	85.68	63.14		148.82
44.	Teesta-III HEP (PTC)	9.57			448.82		4.3		4.30
45.	Budhill HEP (PTC)	291.74			448.82		130.94		130.94
(ii)	**Thermal Stations**								
46.	Pragati-III Gas Plant Bawana (PPCL)	86.60	607.13	10.00	343.91	60.71	29.78		90.49
47.	Mundra UMPP (CGPL)	2865.54			167.86	319.02	481.01		800.03
48.	Sasan UMPP (RPL)	2606.87			70.20		183		183.00
49.	Udipi TPS (UPCL)	66.07			516.21		34.11		34.11
50.	NVVNL Bundled Power (NTPC Thermal Power + Solar Power)	35.94			496.17		17.83		17.83
(iii)	**IPPs with in the State**								
51.	Talwandi Sabo TPS (Sterlite)	1862.41			238.35	985.64	443.91		1429.55
52.	Rajpura TPS (L&T)	2661.69			225.75	610.98	600.88		1211.86
53.	Goindwal Sahib TPS (GVK)	934.41			208.95	186.63	195.24		381.87
	Sub Total (TRADERS / IPPs (Long Term Power))	**11791.15**				**2248.66**	**2204.33**		**4452.99**
VIII	**TRADERS (Short Term)**								
54.	Surrender of excess power for energy balance	-3118.12			264.00		-823.18		-823.18
	Sub Total (Short Term)	-3118.12					**-823.18**		**-823.18**
IX	**Other Charges**								
55.	PGCIL							779.06	779.06
	Sub Total (Other Charges)							**779.06**	**779.06**
	Total Power Purchase	**19809.00**				**3626.52**	**3720.34**	**936.20**	**8283.06**

6.8.7 Cost of purchase of RE power/RECs to meet shortfall in RPO compliance

In para 6.3, the Commission has approved the energy available to PSPCL for consumption in its area of distribution of electricity as 45019 MU (43988 MU+ 1031 MU) for FY 2014-15. The power purchase/generation from renewable energy sources during FY 2014-15 projected by PEDA in consultation with PSPCL in the data submitted vide letter dated 27.03.2014 is 1158.14 MU [1065.15 MU (Non-Solar) and 92.99 MU (Solar)]. Accordingly, the shortfall/

surplus in purchase/generation of renewable energy for complying with the specified RPO for FY 2014-15 is as under:

Description of item		(MU)
Energy input		45019
RPO specified	Non Solar (3.81%)	1715.22
	Solar (0.19%)	85.54
Available RE power	Non Solar (including own hydel)	1065.15
	Solar	92.99
Shortfall(-)/ Surplus (+)	Non Solar	(-) 650.07
	Solar	(+) 7.45

To meet the shortfall in compliance of RPO for FY 2014-15, PSPCL has proposed an amount of ₹134.00 crore in the ARR petition for FY 2014-15 for purchase of RECs. **Keeping in view the aforementioned shortfall, the Commission provisionally approves the amount of ₹98.00 crore to meet the shortfall in RPO compliance through firstly by purchase of power from renewable energy sources outside the State of Punjab and new projects coming up in the State of Punjab or RECs in case of non-availability of such power. However, PSPCL is directed to make a judicious choice between the options of procuring power from conventional sources/non-conventional sources at APPC combined with purchase of RECs vis-a-vis purchase of power from renewable energy sources at preferential tariff, whichever is economical, so as to safeguard consumer interest.**

The total power purchase amount, as such, has been worked out as ₹8381.06 crore for FY 2014-15, comprising of ₹8283.06 crore for purchase of 19809 MU during FY 2014-15 and ₹98.00 crore to meet the shortfall in RPO compliance through purchase of RE power from outside the State of Punjab and new projects coming up in the State of Punjab or through purchase of RECs, which the Commission provisionally approves.

6.9 Employee Cost

6.9.1 In the ARR Petition for FY 2014-15, PSPCL has projected an employee cost of ₹5350.89 crore (net of capitalization of ₹120.00 crore) for FY 2014-15 as detailed in Table 6.23.

Table 6.23: Employee Cost projected by PSPCL for FY 2014-15

(₹ crore)

Sr. No.	Particulars	FY 2014-15 (Projected)
I	**II**	**III**
1.	Basic Pay	1143.86
2.	Overtime	12.00
3.	Dearness Allowance	1210.53
4.	Fixed medical Allowance	26.50
5.	Other Allowances	221.23
6.	Bonus/ Generation Incentive	86.00
7.	Medical Expenses Reimbursement	20.00
8.	Workman's Compensation	0.10
9.	Leave Travel Assistance	0.84
10.	Leave Travel concession (Included encashment of EL and LTC)	3.20
11.	Staff Welfare Expenses	44.56
	Total (1 to 11)	**2768.82**
	Terminal Benefits	
12.	Earned Leave Encashment	119.00
13.	Gratuity	177.00
14.	Progressive Funding of Terminal Benefits	914.00
15.	**Total (12 to 14)**	**1210.00**
	Pension Payments	
16.	Basic Pension	1204.32
17.	Dearness pension	
18.	Dearness Allowance	
19.	Other Terminal Benefits	65.11
	Total (16 to 19)	**1269.43**
	Total Expenses	**5248.25**
20.	Less: Amount capitalised	120.00
21.	**Net amount**	5128.25
22.	Add: BBMB Share	222.64
23.	**Net Employee Cost**	**5350.89**

6.9.2 In the ARR Petition for FY 2014-15, PSPCL has submitted that it has taken into consideration the following assumptions in projecting the employee cost for FY 2014-15:

a) PSPCL has considered an escalation of 3% over the revised estimates for FY 2013-14 for projecting basic pay.

b) PSPCL has considered increase in Dearness Allowance of 16% (two instalments of 8% each).

6.9.3 The provisions of the amended Regulation 28 (3) of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005, 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 Wholesale Price Index (WPI).*

6.9.4 PSPCL has projected the terminal benefits and BBMB share amounting to ₹2702.07 (1210.00+1269.43+222.64) crore. PSPCL's projections include ₹914.00 crore on account of progressive funding of unfunded past Terminal liability of pension and gratuity based on the Transfer Scheme issued by Government of Punjab vide notification dated 24.12.2012.

The Commission observes that the terminal liability of ₹14346 crore has not been reflected in the Balance Sheet dated 16.04.2010 of erstwhile Punjab State Electricity Board as well as in the Opening Balance Sheets of the successor entities.

Sub-clause 8A of Clause 6 of Transfer Scheme dated 24.12.2012 provides that liability in respect of Pension, Gratuity and Leave Encashment of the personnel shall be a charge on the tariff which means that these expenses need to be routed through Profit and Loss account from FY 2014-15. However, debiting of such liability in Profit and Loss account is in contravention of Accounting Standard 5.

Para 16 of Accounting Standard 5 provides for debiting prior period expenses in the books. However, the term 'prior period items', as defined in this Standard, refers only to income or expenses which arise in the current period as a result of errors or omissions in the preparation of the financial statements of one or more prior periods. The terminal benefit liability of PSEB cannot be termed as a 'prior period item' as it is not a result of error or omission. Even if such a liability is treated as 'prior period item' the same cannot be charged to current profit or loss as per para 19 of the Accounting Standard 5. As such, charging of prior period Terminal Benefit liability to consumers of State is in contravention of Accounting Standard 5 notified by Ministry of Corporate Affairs, New Delhi.

Moreover, Transfer Scheme cannot override the subordinate legislation i.e. Regulation of the Commission (in the instant case Regulation 33 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005) which mandates as under:

> "33. *Unfunded liability of pension and gratuity;*
>
> *'With regard to unfunded past liabilities of pension and gratuity, the Commission will follow the principle of 'pay as you go'. The Commission shall not allow any other amount towards creating fund for meeting unfunded past liability of pension and gratuity.'*

The Commission observes that due to aforementioned reasons, the Terminal

Benefit liability as on 16.04.2010 cannot be a charge on tariff and passed on to the consumers. As such, the Commission shall only apply its Regulations while determining the Tariff.

Thus no amount is allowed on account of progressive funding of unfunded past liability of pension and gratuity to PSPCL for FY 2014-15.

After excluding an amount of ₹914.00 crore on account of progressive funding of unfunded past liabilities of pension and gratuity to PSPCL for FY 2014-15, net Terminal benefits including BBMB share works out as ₹1788.07 (2702.07-914.00) crore.

Thus, the Commission determines the claim of Terminal Benefits and BBMB share as per provisions of PSERC Tariff Regulations at ₹1788.07 crore and allows the same for FY 2014-15.

6.9.5 In the true-up for FY 2011-12, the Commission has allowed 'other employee cost' to PSPCL on actual basis based on the Audited Annual Accounts. The same was allowed subject to the condition that the utility shall make consistent improvement in productivity, optimize its employee cost, implement PwC Report /'Functional Model of Distribution Offices' as committed by it in its ARR Petition and reduce T&D losses. Since PSPCL has failed to meet aforesaid goals as discussed in the true up for FY 2011-12, the Commission is unable to accept the revised estimates of employee cost and considers it appropriate to determine 'other employee cost' as per its Regulations.

PSPCL has projected the 'other employee cost' at ₹2648.82 crore for FY 2014-15 after excluding terminal benefits and BBMB share amounting to ₹2702.07 crore. As per regulations, the approved 'other employee cost' for the previous year is to be considered as the base expense while allowing such cost in the succeeding year. Regulation 28(3)(b) provides for increase in other employee expenses limited to an increase in Wholesale Price Index (WPI). The average annual WPI increase for FY 2014-15 would only be available next year. Accordingly, based on the WPI indices available for 8 months (April 2013 to November 2013), the Commission has calculated the average WPI increase of 5.29% which is adopted for purposes of calculation of allowable employee cost for FY 2014-15. The approved 'other employee cost' in the Review for FY 2013-14 in para 5.10.5 of this Order is ₹2372.55 crore. After applying the WPI increase of 5.29%, the 'other employee cost' works out ₹2498.06 crore for FY 2014-15.

Accordingly, the Commission approves 'Other Employee Cost' of ₹2498.06 crore for PSPCL for FY 2014-15.

Thus, the Commission approves the total employee cost of ₹4286.13 (1788.07+2498.06) crore for FY 2014-15.

6.10 Repair and Maintenance (R&M) Expenses

6.10.1 In the ARR Petition for FY 2014-15, PSPCL has projected the R&M expenses at ₹442.65 crore, which includes R&M of ₹18.43 crore for asset addition during FY 2014-15. PSPCL has submitted that R&M expenses have been projected by further escalating the re-estimated expenses for FY 2013-14 by 9% as actual increase in WPI and CPI for FY 2013-14 is not yet available.

6.10.2 The Commission has been approving the R&M expenses in accordance with the provisions of Regulation 28 (2)(b) of PSERC Tariff Regulations by adjusting the base R&M expenses in proportion to the increase in WPI. The base R&M expenses of ₹391.46 crore (₹373.72 crore as the R&M expenses approved for FY 2013-14 and ₹17.74 crore as additional R&M expenses for assets added during the year) have been considered for FY 2014-15. After applying WPI increase of 5.29% as discussed in para 6.9.4 of this Tariff Order, allowable R&M expenses for FY 2014-15 work out to ₹412.17 crore.

6.10.3 PSPCL has claimed R&M expenses of ₹18.43 crore for likely asset addition of ₹2200.00 crore during FY 2014-15 in terms of Regulation 28(6) of PSERC Tariff Regulations. As regards this claim of ₹18.43 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.

The Commission, accordingly, approves the R&M expenses of ₹412.17 crore for FY 2014-15.

6.11 Administrative and General (A&G) expenses

6.11.1 In the ARR Petition for FY 2014-15, PSPCL has projected the A&G expenses at ₹172.87 crore, which include A&G expenses of ₹6.77 crore for asset addition during FY 2014-15. PSPCL has submitted that expenses A&G have been projected by further escalating the re-estimated expenses for FY 2013-14 by 9%.

6.11.2 The Commission has been approving the A&G expenses in accordance with provisions of the amended Regulation 28 (2)(b) of PSERC Tariff Regulations by adjusting the base A&G expenses in proportion to the increase in WPI. The base A&G expenses of ₹118.63 crore (₹113.23 crore as A&G expenses approved for

FY 2013-14 and ₹5.40 crore as additional A&G expenses for asset addition during the year) have been considered for FY 2014-15. Based on the actual increase in WPI (April 2013 to November 2013) of 5.29%, as discussed in para 6.9.5 of this order, the allowable A&G expenses for FY 2014-15 work out to ₹124.91 crore.

6.11.3 PSPCL has claimed A&G expenses to the extent of ₹6.77 crore on the proposed asset addition of ₹2200.00 crore during FY 2014-15. The claim of ₹6.77 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.

6.11.4 PSPCL also submitted that the Annual License fee and amount to be paid as Tariff filing fee for determination of ARR & Tariff Petition should also be allowed on actual basis as per clause 2 (b) of the amended Tariff Regulation 28. PSERC (Terms and Conditions for Determination of Tariff), Second Amendment, Regulations, 2012, Regulation 28 (2) (b) provides as under:-

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

6.11.5 As per above regulation, Annual License fee and fees for determination of tariff are also allowable to PSPCL in addition to the A&G expenses as worked out above. The Commission decides that the Annual License fee and fees for determination of tariff of PSPCL be allowed at the previous year's level i.e. ₹5.08 crore as Annual License fees and ₹5.74 crore as fees for determination of tariff. However this shall be trued up on receipt of Audited Annual Accounts for FY 2014-15.

6.11.6 As Commission is allowing A&G expenses as per PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005, so amount of ₹25.00 crore claimed by PSPCL as donation made to Cancer & Drug Addiction Treatment Infrastructure Fund should be meted out of profit earned by PSPCL during FY 2014-15 and not passed on to the consumers. Accordingly, this donation is not being allowed over & above the A&G expenses allowed on a normative basis in line with the regulations.

Thus, the Commission approves the A&G expenses of ₹135.73 (124.91+5.08+5.74) crore for PSPCL for FY 2014-15.

6.12 Depreciation Expenses

6.12.1 PSPCL has projected depreciation charges of ₹863.36 crore for FY 2014-15 in the ARR and Tariff Petition on assets of ₹42726.33 crore as on April 1, 2014.

6.12.2 PSPCL has submitted that depreciation expenses for FY 2014-15 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.

6.12.3 The Commission has approved the depreciation charges of ₹701.37 crore for FY 2013-14 in this Tariff Order on the assets of ₹21459.61 crore (net of land and land rights). In the absence of Audited Annual Accounts and sub-heads wise details of assets for FY 2013-14, the Commission adopts the addition of GFA of FY 2013-14 as ₹1928.97 crore determined in this tariff order for calculating depreciation charges. The Commission decides that no depreciation on assets added during FY 2014-15 is to be considered. Accordingly, the Commission determines the depreciation charges as ₹764.42 crore for FY 2014-15. However, depreciation on assets added during FY 2014-15 shall be considered during True Up.

The Commission, accordingly, approves the depreciation charges of ₹764.42 crore.

6.13 Interest and Finance Charges

6.13.1 PSPCL has claimed Interest and Finance Charges at ₹2763.30 crore in the ARR Petition for FY 2014-15 (net of capitalization of ₹385.00 crore but inclusive of ₹90.00 crore as finance charges) as detailed in Table 6.24.

Table 6.24: Interest and Finance Charges projected for FY 2014-15

(₹ crore)

Sr. No.	Description	Interest as depicted in ARR Petition
I	II	III
1.	Interest on Institutional Loans	**1415.95**
2.	Interest on GoP Loans	7.95
3.	Interest on GPF	174.17
4.	Interest to Consumers	175.00
5.	**Sub - Totals(1+2+3+4)**	**1773.07**
6.	Interest on Working Capital Loan (WCL)	1285.23
7.	Finance Charges	90.00
8.	**Total (5+6+7)**	3148.30
9.	Less: Capitalization	385.00
10.	**Net Interest and Finance Charges**	**2763.30**

PSPCL has submitted that it has planned significant capital works on various schemes of generation, distribution and transmission functions for which PSPCL has to raise long term loans from various financial institutions to finance these capital works. The interest expenses have been projected on the basis of current outstanding loans and new loans to be taken corresponding to the planned capital expenditure, loan repayment schedule and the interest rate charges to the respective loans. For the new loans considered to fund the investment outlay, PSPCL has considered the average of opening balance and closing balance of loans for calculation of interest expenses.

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

6.13.2 **Investment Plan**

PSPCL has projected the capital expenditure at ₹4107.62 crore in the ARR and Tariff Petition for FY 2014-15 as summarized in Table 6.25.

Table 6.25: Summary of Projected Capital Expenditure

(₹ crore)

Sr. No.	Particulars	FY 2014-15 (Projected)
I	**II**	**III**
(a)	Generation	1159.82
(b)	Transmission	300.00
(c)	Distribution	2647.80
	Total	**4107.62**

(a) Generation

The proposed expenditure is envisaged for New Generation power projects namely Shahpur Kandi Hydro Electric Project (₹335.81 crore), Mukerian HEP-II (₹59.00 crore), GNDTP based on RLA Study report (₹109.59 crore), 1320 MW State Sector Thermal Project near Mukerian (₹403.00 crore), R&M of HEP's of PSPCL (₹90.33 crore) and ₹162.09 crore for other works.

(b) Transmission

PSPCL has submitted that capital expenditure of ₹300.00 crore has been planned for network capacity addition, improvement projects for network up to 66 kV, construction of new substations and mini grid sub-stations along with associated transmission lines during FY 2014-15.

(c) Distribution

PSPCL has submitted that distribution function requires regular capital expenditure for network capacity addition and improvement works. The proposed expenditure is mainly envisaged for normal development works (₹650.00

crore),Shifting of Meters out of consumer premises (DSM measures) (₹400.00 crore), Comprehensive T&D losses reduction plan: HVDS project for conversion of LT lines of AP feeders to 11kV HT (₹100.00 crore), release of Tubewell connection (₹475.00 crore), works relating to APDRP-II part-A and B (₹980.00 crore) and for other works ₹42.80 crore.

The Commission has examined the capital expenditure plan projected by PSPCL for FY 2014-15 and observes that PSPCL has envisaged intensive capital expenditure especially for distribution and generation schemes. The Commission has approved the capital expenditure at ₹1450.00 crore in the Review for FY 2013-14, keeping in view the actual capital expenditure incurred upto December, 2013. The proposed capital expenditure for FY 2014-15 is very much higher than the approved capital expenditure for FY 2013-14. The utility has, thus, proposed a highly ambitious capital investment plan for FY 2014-15. The Commission is of the view that it will impose an avoidable burden on the consumers by way of increase in tariff on account of provision for higher capital expenditure. The Commission, therefore, keeping in view the level of actual capital expenditure incurred by PSPCL in the previous years and also taking into account the importance of the proposed capital schemes, considers it appropriate to allow capital expenditure of ₹2000.00 crore for FY 2014-15. However, the Commission will consider the actual expenditure incurred during FY 2014-15 by PSPCL in the Review of FY 2014-15 in the next Tariff Order.

The Commission, accordingly, approves the capital expenditure at ₹2000.00 crore for FY 2014-15.

PSPCL has proposed to capitalize assets to the extent of ₹3800.00 crore in the ARR Petition for FY 2014-15 against the proposed Investment Plan of ₹**4107.62** crore. The Commission has approved Capital expenditure of ₹2000.00 crore under the Investment Plan for FY 2014-15 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 ₹634.54 crore. The Commission considers capitalization of assets of ₹634.54 crore.

The Commission has approved the consumer contribution at ₹358.71 crore in the Review for FY 2013-14. The Commission takes into consideration, the consumer contribution of ₹358.71 crore at the level approved in the Review for FY 2013-14 towards funding the capital expenditure for FY 2014-15. Accordingly, the loan requirement for the approved investment of ₹2000.00 crore works out to

₹1641.29 (2000.00-358.71) crore for FY 2014-15. This loan requirement is taken into consideration for computation of interest charges.

In the ARR Petition for FY 2014-15, the opening balance of loans (other than WCL) is taken as ₹9248.39 crore and interest on loan availed by PSPCL is depicted as ₹1415.95 crore. The Commission has approved the closing balance of loans (other than WCL) of ₹7028.82 crore in para 5.14.6 (Refer Table 5.18) of this Order. Considering the opening balance of loans (other than WCL) of ₹7028.82 crore for FY 2014-15 and the loan requirement of ₹1641.29 crore, the interest on loans (other than WCL) works out to ₹974.37 crore as shown in Table 6.26.

Table 6.26: Interest on Loans (Other than WCL) for FY 2014-15

(₹ crore)

Sr. No.	Particulars	Loans as on April 01, 2014	Receipt of loans during FY 2014-15	Repayment of loans during FY 2014-15	Loans as on March 31, 2015	Amount of Interest
I	II	III	IV	V	VI	VII
1.	As per data furnished by PSPCL in ARR Petition (other than WCL)	9248.39	3800.00	1140.60	11907.79	1415.95
2.	Approved by the Commission (other than WCL)	7028.82	1641.29	1140.60	7529.51	974.37

The Commission approves the interest on loan at ₹974.37 crore for FY 2014-15.

6.13.3 **Interest on GoP Loans**

In the ARR Petition of 2014-15, PSPCL has claimed ₹7.95 crore as interest on account of GoP loans. On a query from the Commission, PSPCL informed vide memo no. 2928/CC/DTR/Dy.CAO/241/Deficiency Dated 10/12/2013 and No. 225/DTR/Dy.CAO/241/Vol-II dated 30.01.2014 that the Interest of ₹7.95 crore relates to RBI bonds charged by Government as interest and adjusted against subsidy. Thus, there are no GoP loans and consequently no interest liability on account of GoP loans. Also interest on loans taken in lieu of adjustment of ₹981.93 crore during FY 2011-12 is being separately allowed as interest on bridge loan. **Accordingly, claim of interest of ₹7.95 crore is not allowed.**

6.13.4 **Interest on loans taken to replace re-called GoP loans**

The interest on loans of ₹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 11.24% per annum paid or payable by PSPCL to the financial institutions for short term and mid-term loans as considered in the Review for FY 2013-14. **Thus, the interest of ₹339.68 crore is approved on this account.**

6.13.5 **Interest on Bridge Loan**

PSPCL has submitted that the Commission in its Tariff Order for FY 2012-13, had allowed interest on loans taken in lieu of adjustment of ₹981.93 crore during FY 2012-13 against subsidy which relates to RBI bonds (including interest) issued in tripartite agreement between CPSUs, GOI and Govt. of Punjab.

The Commission considers it appropriate to allow interest on ₹981.93 crore at the average rate of 11.24% per annum paid or payable by PSPCL to the financial institutions for short term and mid-term loans as considered in the Review for FY 2013-14. **The interest @11.24% on ₹981.93 crore works out to ₹110.37 crore for FY 2014-15 and is approved by the Commission.**

6.13.6 **Interest on Loans raised on account of non-refund of interest by GoP**

In the Tariff Order for FY 2012-13, the Commission determined ₹451.35 crore as the amount of interest payable by GoP to the utility on account of diversion of capital funds for revenue purpose. PSPCL, in its ARR petition has submitted that this amount has so far not been refunded to PSPCL. PSPCL has further submitted that the amount of ₹451.35 crore be treated as a bridge loan and interest be allowed on this account. The Commission, based on Audited Annual Accounts for FY 2010-11 and FY 2011-12, observed that there is no diversion of capital funds for revenue purpose by PSPCL**.** Thus, the Commission is of the view that no interest is allowable on this account to PSPCL. **So, no interest on this account is allowed to PSPCL.**

6.13.7 **Interest on General Provident Fund (GPF)**

PSPCL has claimed interest of ₹174.17 crore on GPF accumulations in its ARR for FY 2014-15.**The Interest of ₹174.17 crore on GPF, being a statutory payment, is allowed.**

6.13.8 **Finance Charges**

PSPCL has claimed finance charges of ₹90.00 crore which include guarantee fees of ₹30.00 crore payable to Government of Punjab on the working capital Loans availed by PSPCL. The finance charges of ₹60.00 crore work out to 1.58% of the estimated borrowings of ₹3800.00 crore. The Commission has approved loan requirement of ₹1641.29 crore for FY 2014-15. **Accordingly, the**

Commission approves the finance charges of ₹25.92 crore @1.58% on the loan requirement of ₹1641.29 crore for FY 2014-15.

6.13.9 **Interest on Consumer Security Deposits**

PSPCL has claimed ₹175.00 crore towards interest on Consumer Security deposits in the projections for FY 2014-15. PSPCL vide letter no. 402/DTR/Dy.CAO/241 Vol-III dated 03.03.2014 has intimated the security deposits ending 31.03.2014 as ₹2292 crore. **The Commission has determined an amount of ₹338.07 crore as interest payable to the consumers on security deposits, during FY 2014-15.** However, the Commission will consider actual amount of interest on consumer security deposits for FY 2014-15 during review/true up.

6.13.10 **Capitalization of Interest Charges**

PSPCL has claimed ₹385.00 crore towards capitalization of interest charges. The Commission determines the capitalization of interest at ₹75.26 crore in the ratio of closing balance of works in progress to the total capital expenditure. **The Commission, accordingly, approves capitalization of interest and finance charges of ₹75.26 crore for FY 2014-15.**

6.13.11 **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 ₹11314.43 crore as on 1st April, 2014 with an interest liability of ₹1285.23 crore. The Commission has determined the Working Capital requirement of **₹3109.09** crore as per PSERC Tariff Regulations. By applying an average rate of 11.24 % per annum payable by PSPCL to the financial institutions for short term and mid-term loans, the interest on working capital is worked out as ₹349.46 crore as shown in Table 6.27.

Table 6.27: Interest on Working Capital Requirement for FY 2014-15

(₹ crore)

Sr. No	Particulars	Amount
I	II	III
1.	Fuel Cost for two months	799.19
2.	O & M expenses for one month	402.84
3.	Receivables for two months	3673.96
4.	Maintenance Spares@15% of O&M expenses	725.10
5.	Less Consumer security deposit	2492.00
6.	**Total Working Capital Required**	**3109.09**
7.	Interest rate (calculated on weighted average)	11.24 %
8.	**Interest on Working Capital Loan**	**349.46**

The Commission, accordingly, approves ₹349.46 crore towards interest on working capital requirement of ₹3109.09 crore for FY 2014-15

Based on the analysis and decisions discussed above, the interest and finance charges are allowed as detailed in Table 6.28.

Table 6.28: Interest and Finance Charges for FY 2014-15

(₹ crore)

Sr. No.	**Particulars**	**Loans as on April 1, 2014**	**Receipt of loans**	**Repayment of loans**	**Loans as on March 31, 2015**	**Interest approved by Commission**
I	**II**	**III**	**IV**	**V**	**VI**	**VII**
1.	Approved by the Commission (other than WCL)	7028.82	1641.29	1140.60	7529.51	974.37
2.	GoP Loans					0.00
3.	Interest on					
a)	Loans taken to replace recalled GoP loans					339.68
b)	Bridge Loan					110.37
c)	Loan raised on account of non refund of interest by GoP					0.00
4.	Interest on GPF					174.17
5.	**Total (1+2+3+4)**	**7028.82**	**1641.29**	**1140.60**	**7529.51**	**1598.59**
6.	Add: Finance Charges					25.92
7.	Add: Interest on Consumer Security Deposits					338.07
8.	**Gross Interest and Finance Charges (5+6+7)**					**1962.58**
9.	Less : Capitalization					75.26
10.	**Net interest and Finance Charges (8-9)**					**1887.32**
11.	Add: Interest on Working Capital					349.46
12.	**Total (10+11)**					**2236.78**

The Commission, accordingly, approves the interest and finance charges of ₹2236.78 crore for PSPCL for FY 2014-15.

6.14 Charges payable to GoP on account of power from Ranjit Sagar Dam (RSD)

In the ARR Petition for FY 2014-15, PSPCL had claimed ₹14.13 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 during FY 2014-15. Consequent upon amendment of PSERC (Terms and Condition for Determination of Tariff) Regulations, 2005 vide Notification dated 17.09.2012, the utility is to be allowed these charges as per Regulation

29A. **Accordingly, the Commission approves an amount of ₹14.13 crore on this account for FY 2014-15.**

6.15 Return on Equity

In the ARR Petition for FY 2014-15, PSPCL has claimed RoE of ₹942.62 crore for FY 2014-15 @15.5% on the equity base of ₹6081.43 crore. Consequent upon amendment of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 vide Notification dated 17.09.2012, the utility is to be allowed RoE of 15.5% on the equity employed in creation of assets. Accordingly, RoE @15.5% on equity of ₹6081.43 crore for FY 2014-15 works out as ₹942.62 crore.

The Commission, thus, approves RoE of ₹942.62 crore to PSPCL for FY 2014-15.

6.16 Demand Side Management (DSM) Fund

In the ARR petition, PSPCL has claimed ₹40.76 crore towards creation of DSM Fund for FY 2014-15 by levying charge of one paisa on each unit of energy sold to all consumer categories.

> Clause 15 of the DSM Regulations reads as under:
>
> *"In order to qualify for cost recovery, each DSM programme must be*
>
> *(i) approved by the Commission prior to implementation*
> *(ii) implemented in accordance with approved DSM plan; and*
> *(iii) Implemented cost effectively.*

Further, the amount so earmarked shall be named as DSM Fund and shall be exclusively used for DSM objectives.

The Commission in the Tariff Order for FY 2013-14 issued directive to PSPCL to submit the Technical Potential Report as per DSM Regulations notified by the Commission latest by 30.06.2013 failing which the Technical Potential Estimate as per the data and information available with the Commission shall be declared after 30.06.2013 and PSPCL shall be required to achieve at least 10% of energy saving in potential declared by the Commission during FY 2013-14. In view of the failure of PSPCL to carry out any technical potential study, the Commission fixed a modest energy saving target of 250 MU for FY 2013-14 and 500 MU for 2014-15 as per the study reports and data available with the Commission.

However, the Commission provisionally approves an amount of ₹40.76 crore as claimed by PSPCL for implementation of various DSM programmes as per DSM Regulations during FY 2014-15. This amount shall be kept in a separate DSM fund and used exclusively for DSM objectives

after following the procedure laid down in DSM regulations. The Commission will consider actual expenditure incurred on DSM activities for FY 2014-15 during review/ true up of the same.

6.17 Transmission Charges payable to PSTCL

The Commission, in Tariff Order dated 22.08.2014, passed on the ARR of PSTCL for FY 2014-15, has determined ₹1013.06 crore (₹983.39 crore for Transmission business & ₹29.67 crore for SLDC business) as the transmission charges payable to PSTCL by PSPCL. Besides, the Commission has determined net surplus of ₹120.83 crore upto FY 2013-14. After adjusting the surplus of ₹120.83 crore upto FY 2013-14, the ARR of PSTCL for FY 2014-15 has been determined as ₹892.23 (1013.06-120.83) crore. The Commission determined carrying cost of ₹3.43 crore payable to PSTCL on the gap as discussed in para 6.14 of PSTCL Tariff Order for FY 2014-15. Accordingly, an amount of ₹895.66 (892.23+3.43) crore is being included in the ARR of PSPCL for FY 2014-15.

6.18 Non-Tariff Income

In the ARR Petition for FY 2014-15, PSPCL has projected Non-Tariff income of ₹818.56 crore for FY 2014-15. PSPCL has submitted that it has projected Non-Tariff income by considering an annual year on year escalation of 5% on the Non- Tariff income for the previous year. This growth has been envisaged based on the increase of sales assumed and the historical trend.

In the Petition, PSPCL has prayed that the late payment surcharge be not treated as part of the Non-Tariff Income as PSPCL's working capital requirements are being determined as per norms and there is no compensation to PSPCL on account of interest accrued on delayed payments against bills issued and including the Late Payment Surcharge in Non-Tariff/Other Income adversely impacts the cash flow position of the PSPCL. The Commission observes that receipts on account of Late Payment Surcharge are to be treated as Non-Tariff Income as per Regulation 34 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. Moreover, interest on working capital is allowed to the utility on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on normative basis. So the plea of the utility not to treat the late payment surcharge as part of the Non-Tariff Income finds no merit.

PSPCL has not taken into account the receipt on account of Late Payment

Surcharge in the Non-Tariff Income for FY 2014-15. Keeping in view the rationale given in above para, the Commission decides that the receipt on account of Late Payment Surcharge be taken as Non-Tariff Income at the previous year's level i.e ₹232.61 crore. However, the Commission has decided to rationalize the late payment surcharge during FY 2014-15 in the General Conditions of Tariff and reduction in revenue of PSPCL on this account shall be ₹100.00 crore. Accordingly, Commission decides to decrease the Non-Tariff income of PSPCL by ₹100.00 crore. As such, net late payment surcharge receivable by PSPCL during FY 2014-15 is determined as ₹132.61 (232.61-100.00) crore.

PSPCL's projections of Non-Tariff income include ₹363.78 crore as wheeling charges receivable from Open Access Consumers during FY 2014-15. The Commission is conscious of the fact that wheeling charges from OA Consumers is an infirm source of revenue and in view of lot of incentives to consumers for using PSPCL power e.g. introduction of ToD Tariff & kVAh Tariff, rebate to consumers catered at higher voltages, rebate to consumers for using power more than a threshold limit, the open access during 2014-15 is likely to be insignificant. The Commission, therefore, assumes wheeling charges from OA consumers as nil for PSPCL for FY 2014-15.

The Commission will, however, reconsider quantum of wheeling charges from Open Access Consumers after receipt of Audited Annual Accounts in the True up.

The Commission has decided to abolish the service charges payable by consumers w.e.f. 01.04.2014 in the General Conditions of Tariff and reduction in revenue on this account has been estimated as ₹29.23 crore. **As such, the Commission decides to decrease the Non-Tariff income of PSPCL by ₹29.23 crore on this account for FY 2014-15.**

Besides, meter rentals etc. of ₹31.63 crore of subsidized categories as projected by PSPCL in the ARR are also to be added to Non-Tariff income for FY 2014-15.

The Commission, therefore, approves the Non-Tariff income at ₹589.79 (818.56 + 132.61-363.78-29.23+31.63) crore for PSPCL for FY 2014-15.

6.19 Revenue from Existing Tariff for FY 2014-15

In the ARR Petition for FY 2014-15, the revenue from existing tariff projected by PSPCL for FY 2014-15 is ₹22755.39 crore, including revenue from AP consumers. PSPCL has estimated revenue from PLEC and MMC at ₹453.01

crore for FY 2014-15. It has not projected MMC and PLEC for FY 2014-15 separately in its ARR Petition. The Commission decides to retain these charges for FY 2014-15 at the level of FY 2013-14. **Accordingly, an amount of ₹606.48 crore is added to the revenue received from tariff for FY 2014-15 on account of MMC and PLEC.** Thus, the expected revenue from the existing tariff on the basis of sales approved by the Commission works out to ₹22043.76 crore as shown in Table 6.29.

Table 6.29: Revenue from Existing Tariff for FY 2014-15

Sr. No.	Category of consumers	As Projected by PSPCL			As approved by the Commission		
		Energy sales (MU)	Avg. Billing Rate (paise /unit)	Revenue (₹ crore)	Energy sales (MU)	Avg Billing Rate (paise/ unit)	Revenue (₹ crore)
I	II	III	IV	V	VI	VII	VIII
1.	Domestic						
	0-100 unit	6523			6498	456	2963.09
	101-300 unit	3408			3394	602	2043.19
	above 300 unit	1752			1745	644	1123.78
	Total	**11682**	**527**	**6154 .39**	**11637**		**6130.06**
2.	Non-Residential Supply						
	Upto 100 unit	1201	645	774.65	1195	645	770.78
	Above 100 unit	2146	658	1412.06	2136	658	1405.49
	Total	**3347**		**2186.71**	**3331**		**2176.27**
3.	Small Power	981	574	563.01	981	574	563.09
4.	Medium Supply	1998	626	1250.54	1996	626	1249.50
5.	Large Supply	10248	633	6487.28	10172	633	6438.88
6.	Public Lighting	170	658	112.1	170	658	111.86
7.	Bulk Supply & Grid Supply						
	HT	583	629	366.71	583	629	366.71
	LT	36	657	23.65	36	657	23.65
	Total	**619**		**390.36**	**619**		**390.36**
8.	Railway Traction	130	658	85.68	130	658	85.54
9.	**Sub-total metered sales within State**	**29176**	**591**	**17230.07**	**29036**		**17145.56**
10.	Agriculture	11586	425	4923.92	9749	425	4143.33
11.	Common Pool	289	467	134.97	289		134.97
12.	Outside State	129	104	13.42	54		13.42
13.	Add: PLEC & MMC			453.01			606.48
14.	**GRAND TOTAL**	**41179**	**553**	**22755.39**	**39128**		**22043.76**

6.20 Rebate to consumers catered at higher voltages

The Commission in para 5.2 of the Tariff Order for FY 2013-14 had decided to adopt 'Cost of Supply' study (Methodology-II) and observed in para 4.21 of the Tariff Order for FY 2013-14 that cost to serve at higher voltages is lesser than the cost to serve at lower voltages.

The Commission decides to approve rebate of 30 paise/kVAh to consumers catered at 400/220/132 kV voltage, 25 paise/kVAh at 66/33 kV voltage, 20 paise/kVAh to DS, NRS and MS categories at 11 kV voltage and 20 paise/kWh to AP/AP High-Tech, Compost Plants/Solid Waste Management Plants for Municipalities/Urban Local Bodies at 11 kV voltage, for FY 2014-15, and assesses the impact of this voltage rebate at ₹143.75 crore on the basis of energy sales data supplied by PSPCL. The revenue from tariff on existing rates has accordingly been reduced to this extent. The actual revenue impact will be adjusted at the time of true up.

6.21 Financial impact of extension in the period of ToD tariff

The Commission in the Tariff Order for FY 2013-14 had approved the proposal of PSPCL for introduction of Time of Day (ToD) tariff for six months (October to March of the year) during off peak hours from 2200 hours to 0600 hours for Large Supply industrial category and approved rebate of ₹1 per unit on the normal tariff for this category. This approval was valid for FY 2013-14. PSPCL had projected a loss of ₹129 crore on account of this rebate, which was estimated by PSPCL to be reduced to ₹108 crore as a result of increase in demand by 10% during off peak period. Further, PSPCL had proposed to adjust/recover this loss from additional revenue proposed to be generated by increase in PLEC. The Commission in the Tariff Order for FY 2013-14 approved the increase of 50% in the existing peak load exemption charges.

There was a persistent demand from Large Supply industrial consumers in general for extension in the period of ToD tariff for whole year. The Commission in its order dated 28.02.2014 has decided to extend the period of ToD tariff to 31.05.2014, after analyzing the issue and observing availability of surplus power with PSPCL during April and May of the year and also the declarations of PSPCL and PSTCL that the power available including surplus power can flow through transmission system and sub transmission system of PSPCL and PSTCL. It was also ordered by the Commission that the financial impact of the approval shall be taken care of in the Tariff Order for FY 2014-15. As brought out above, PSPCL had projected a loss of ₹129.00 crore for introduction of ToD tariff for six months (October to March of the year) during off peak hours from 2200 hours to 0600 hours for Large Supply industrial category with the proposed rebate of ₹1 per unit on normal tariff of this category**. The Commission has, accordingly, assessed the impact of extension in the period of ToD tariff to 31.05.2014 as ₹42.00 crore.** The revenue from tariff on existing rates has accordingly been reduced to this extent. The actual revenue impact will be adjusted at the time of true up.

6.22 Impact of rebate of 7.5% in view of APTEL judgment dated 07.03.2014.

The Hon'ble APTEL vide its common order dated 07.03.2014 has dismissed the Appeal nos. 202, 203 and 263 of 2012 filed by PSPCL before the Hon'ble APTEL challenging the Orders of PSERC dated 01.08.2012 in petition no. 37 of 2012 filed by BSNL, 06.08.2012 in petition no. 29 of 2012 filed by RIMT Institutions and 10.10.2012 in petition no. 41 of 2012 filed by Jaswinder Pal Singh, Ludhiana, respectively. In the impugned orders, the State Commission has held that the respondent consumers are entitled to rebate at 7.5% for taking supply of electricity at 11 kV, upto the period 31.03.2010. PSPCL vide its letter no. 5534 dated 24.04.2014 has intimated the financial impact of the implementation of the order of the APTEL dated 07.03.2014 as ₹22.52 crore. **The Commission accordingly allows this amount of ₹22.52 crore provisionally (subject to true-up) for making refund to the consumers during FY 2014-15.**

6.23 Carrying Cost on Revenue Gap

6.23.1 The Commission has determined a revenue gap of ₹1433.91 crore during the True up for FY 2010-11. The Commission allows carrying cost of ₹84.24 crore @11.75% for FY 2010-11 (six months) and ₹186.41 crore @13% for FY 2011-12 (full year) being Advance Rate of State Bank of India. The Commission also allows carrying cost of ₹80.58 crore for FY 2012-13 (six months) based on weighted average interest rate of loans for FY 2012-13 on account of non-recovery of the revenue gap. Thus, the Commission allows carrying cost of ₹351.23 (84.24+186.41+80.58) crore on revenue gap of ₹1433.91 crore for FY 2010-11 to PSPCL.

PSPCL was unable to furnish Audited Annual Accounts for FY 2010-11 for true-up in time i.e. during FY 2012-13 due to late finalization of the Opening Balance Sheet of PSPCL by GoP. The Commission, further, decides that the carrying cost due to delay in the finalization of the Opening Balance Sheet of PSPCL, which has been notified by GoP on 24.12.2012, is attributable to Government of Punjab. Accordingly, the carrying cost of revenue gap of ₹1433.91 crore for FY 2010-11 amounting to ₹322.35 crore (₹80.59 crore for 6 months of FY 2012-13 + ₹161.17

crore for 12 months of FY 2013-14 and ₹80.59 crore for 6 months of FY 2014-15) is passed on to GoP.

6.23.2 The Commission has determined a revenue gap of ₹512.40 crore during the True up for FY 2011-12. The Commission allows carrying cost of ₹119.69 crore [₹33.31 crore for FY 2011-12 (six months), ₹57.59 crore for FY 2012-13 (full year) and ₹28.79 crore, FY 2013-14 (6 months)] at interest rates as detailed above for FY 2011-12 to PSPCL.

As discussed in para 6.23.1, the carrying cost of revenue gap of ₹512.40 crore for FY 2011-12 amounting to ₹57.60 crore (₹28.80 crore for 6 months of FY 2013-14 + ₹28.80 crore for 6 months of FY 2014-15) is passed on to GoP.

6.23.3 The Commission has allowed carrying cost on revenue gap in T.O. for FY 2012-13 amounting to ₹279.99 crore. The Commission had ascertained a surplus of ₹645.67 crore in the review for FY 2012-13 in the Tariff Order for FY 2013-14. Similarly, Commission has ascertained a surplus of ₹971.16 crore during review of FY 2013-14. The Commission, accordingly, considers it appropriate to recover ₹279.99 crore carrying cost allowed in Tariff Order for FY 2012-13, ₹145.15 crore as carrying cost on the surplus for FY 2012-13 and ₹109.16 crore on the surplus for FY 2013-14.

Thus, the total carrying cost of PSPCL works out to ₹316.57 crore out of which ₹63.38 (351.23+119.69-279.99-145.15-109.16) crore (recovery) is attributable to PSPCL and ₹379.95 (322.35+57.60) crore is payable by Government of Punjab to PSPCL.

6.24 Revenue Requirement for FY 2014-15

A summary of the Aggregate Revenue Requirement of PSPCL for FY 2014-15 as discussed in the preceding paragraphs is given in Table 6.30.

Table 6.30: Revenue Requirement for FY 2014-15

(₹ crore)

Sr. No.	Items of Expenses	FY 2014-15	
		Proposed by PSPCL	**Approved by Commission**
I	**II**	**III**	**IV**
1.	Cost of fuel	4997.60	4795.12
2.	Cost of power purchase	9247.95	8381.06
3.	Employee cost excluding progressive funding of terminal benefits	4436.89	4286.13
	Progressive funding of terminal benefits	914.00	0.00
4.	R&M expenses	442.65	412.17
5.	A&G expenses	172.87	135.73
6.	Depreciation	863.36	764.42
7.	Interest charges (net of capitalization)	2763.30	2236.78
8.	Return on Equity	942.62	942.62
9.	Transmission Charges Payable to PSTCL	1333.12	895.66
10.	Charges payable to GoP on power from RSD	14.13	14.13
11.	Provision for DSM fund	40.76	40.76
12.	**Total revenue requirement**	**26169.25**	**22904.58**
13.	Less: Non-Tariff income	818.56	589.79
14.	**Net Revenue Requirement**	**25350.69**	**22314.79**
15.	Revenue from existing tariff	22755.39	22043.76
16.	Less: i. Rebate to Consumers catered at Higher Voltage ii. Impact of extension in the period of ToD tariff. iii. Impact of rebate of 7.5% in view of APTEL judgment		 143.75 42.00 22.52
17.	Net Revenue from existing Tariff		21835.49
18.	**Net GAP(-) /Surplus (+) for the year**	**(-) 2595.30**	**(-) 479.30**
19.	Add: Gap (-)/ Surplus (+) upto FY 2013-14	(-) 12082.38	(-) 177.71
20.	Carrying cost on gaps Attributable to GoP ₹379.95 crore Attributable to PSPCL ₹63.38 crore (Recovery)	872.95	(+)63.38
21.	**Total Gap(-) /Surplus (+)**	**(-) 15550.64**	**(-) 593.63**
22.	Energy Sales (MU)	41179	39128

The cumulative gap (deficit) for FY 2014-15 is determined at ₹593.63 crore. The Annual Revenue Requirement for FY 2014-15 is assessed at ₹22904.58 crore with energy sales of 39128 MU. The average cost of supply with this revenue requirement comes to 585.38 paise per unit (₹22904.58 crore/39128 MU). The combined average cost of supply works out to 588.30 paise per unit (₹23018.91 crore/39128 MU) after taking into account the ARR of ₹22904.58 crore for FY 2014-15, approved consolidated deficit of ₹177.71 crore upto FY 2013-14 and carrying cost of ₹63.38 crore (recovery) for the approved revenue gaps attributable to PSPCL.

Chapter 7
Tariff Related Issues

Certain tariff related issues have been raised by several consumers/consumer organizations in response to the public notice issued on ARR and Tariff petition filed by PSPCL for FY 2014-15 and during the course of public hearings held by the Commission. Separate public notices were issued by PSPCL for inviting objections/comments/suggestions from the public and other stakeholders on the proposals of PSPCL for introduction of kVAh tariff and Two Part Tariff in compliance to directives issued by the Commission in the Tariff Order for FY 2013-14. A public notice was also issued by the Commission for inviting objections/comments on the Staff Paper for replacement of PLEC with ToD tariff and introduction of contract demand system for MS category of consumers. Further, a public notice was issued for inviting objections/comments on the revised Staff Paper on Time of Day Tariff for FY 2014-15. Public hearings were also held in respect of these issues. Further, public objections/comments on the draft General Conditions of Tariff & Schedules of Tariff were invited from public/stakeholders through public notice. The Commission has examined these issues, taking into account the public objections and responses of PSPCL. The issues are discussed below:

7.1 kVAh Tariff

7.1.1 At the time of processing of ARR and Tariff Petition for FY 2004-05, many Industrial Consumer Associations/Chambers and one Employees' Association of the erstwhile Punjab State Electricity Board (Board) suggested for introduction of kVAh consumption based tariff in place of kWh based tariff for at least large supply and medium supply consumers. It was brought out that the suggestion if implemented would motivate the large supply and medium supply industrial consumers to have higher power factor which would in turn help in improving the system parameters and reduce technical losses. The Commission in its Tariff Order for FY 2004-05 had directed the Board to submit a detailed paper on the introduction of kVAh based tariff at least for large supply, medium supply and railway traction categories in the ARR for FY 2005-06.

In its response, the Board in its ARR and Tariff Petition for FY 2005-06 had stated that the experience from other states which have introduced kVAh tariff for their

HT consumers has revealed that it had adversely affected revenue of the power utilities of those states. It was further stated that the Board is on the verge of unbundling and can ill afford to experiment with the introduction of kVAh tariff which may result in loss of revenue. The Commission, in its Tariff Order for FY 2005-06, directed the Board to carry out the study for practicability of introducing kVAh tariff for large supply, medium supply and railway traction consumers.

The Board in its ARR and Tariff Petition for FY 2006-07 opposed the introduction of kVAh tariff, while admitting at the same time, the importance of kVAh tariff and stating that poor power factor loads at the consumer premises are the source of more reactive power flows in the system. A few Industrial Consumers Associations and consumers, however, had stressed that the Board should introduce kVAh tariff instead of kWh tariff so that the consumers having low power factor and drawing more kVAh power are penalized suitably. On the other hand, some consumers had supported the system of levying power factor surcharge and rebate which was said to be working satisfactorily. The Commission felt that there was a need for carrying out a detailed study in the matter and decided to continue with the existing system of kWh tariff and further directed the Board to examine various issues relating to introduction of kVAh tariff and submit its proposal along with the next ARR.

In the Tariff Order for FY 2007-08, the Commission had observed that the Board's proposal was not complete and accordingly directed the Board to submit a comprehensive proposal along with the next ARR.

In the Tariff Order for FY 2008-09, the Commission had observed that the purpose of introducing kVAh tariff had, to some extent, been achieved with the introduction of high power factor incentive and low power factor surcharge with effect from FY 2005-06. The Commission had also noted that the introduction of kVAh tariff was perhaps equally necessary for other categories, such as NRS or even domestic consumers with higher loads. The Commission in its Tariff Order for FY 2008-09 had decided to continue with the existing practice of power factor surcharge/incentive for large supply, medium supply and railway traction categories.

The Commission in the Tariff Order for FY 2009-10 had observed that 'the proposal to introduce kVAh tariff has been endorsed by a relatively small number of high end consumers. On the other hand, the concept of surcharge for low power factor and rebate for achieving high power factor is continuing for LS, RT and MS consumers for the last four years or so while it was now being introduced for the first time for SP, BS and those DS/NRS consumers whose loads were exceeding 100 kW. Before taking a view as to the introduction of kVAh tariff, the Commission deemed it proper to examine this matter separately taking into account not only the implications on the revenue stream of the Board but also the views of all categories of consumers who were proposed to be covered thereunder. The Commission, therefore, decided to continue the existing practice of levy of low power factor surcharge and high power factor incentive for LS, RT and MS consumers, besides bringing other categories under the ambit of this system.

The Board in its ARR for FY 2010-11 submitted that it was working on the implications of the introduction of kVAh tariff in the State and would submit the details separately. The Commission, in the Tariff Order for FY 2010-11, reiterated its direction to examine the implications of introduction of kVAh tariff and submit requisite details at the earliest. The Commission, in its Tariff Orders for FYs 2011-12, 2012-13 and 2013-14, advised the utility (PSPCL) to submit a final proposal for the introduction of kVAh tariff.

7.1.2 In compliance to the directive issued by the Commission in the Tariff Order for FY 2013-14, PSPCL submitted a proposal to the Commission for introduction of kVAh tariff for Large Supply (General Industry), Large Supply (PIU/Arc Furnace), Bulk Supply (BS) and Railway Traction (RT) categories of consumers, in September, 2013. It was submitted by PSPCL that while carrying out the study, the actual data for FY 2009-10 was used. The Commission, vide its letter no. 6501 dated 10.10.2013, directed PSPCL to submit proposal for introduction of kVAh tariff for DS/NRS consumers having loads exceeding 100 kW and given supply at 11 kV or higher voltage and for Medium Supply consumers, as these were also covered under power factor incentive/disincentive mechanism. PSPCL was also advised to frame the proposal after analyzing the latest available consumption data i.e. for FY 2012-13.

PSPCL submitted the consolidated proposal for introduction of kVAh tariff for Large Supply (General and PIU/Arc Furnace), Bulk Supply (HT/LT), Railway Traction, Medium Supply, Domestic Supply (for load more than 100 kW) and NRS (for load more than 100 kW) vide its letter no. 2696 dated 23.10.2013, after carrying out the study for these categories, using actual consumption data for FY 2012-13. PSPCL has proposed following conversion factors for switch over from kWh tariff regime to kVAh tariff regime:

Sr. No.	Category	Conversion factor
I	II	III
1.	Large Supply (General Industry)	0.95
2.	Large Supply (PIU/Arc Furnace)	0.98
3.	Bulk Supply (HT/LT)	0.95
4.	Railway Traction	0.97
5.	Medium Supply	0.92
6.	DS (load more than 100 kW)	0.92
7.	NRS (load more than 100 kW)	0.92

For the purpose of designing the kVAh tariff, PSPCL has adopted a revenue neutral approach, wherein the overall revenue for a particular consumer category/sub category would remain the same as in the case with kWh billing system. In order to maintain revenue neutrality for designing kVAh tariff, PSPCL has taken into consideration the following parameters:

- kWh consumption
- kVAh consumption (wherever being recorded, otherwise determined values)
- Revenue from sale of power
- Power factor surcharge/rebate (wherever being recorded, otherwise determined values)

In order to arrive at kVAh based tariffs in a revenue neutral scenario, PSPCL has used a multiplication/conversion factor, which is normally equal to the desired value of the power factor, as per following equation:

Tariff in kVAh = Tariff in kWh x Conversion Factor

7.1.3 A public notice was issued for inviting objections/comments from the public and stakeholders on the proposal submitted by PSPCL for introduction of kVAh tariff with effect from FY 2014-15. The objections/comments on the proposal were to be filed with the Commission by 02.12.2013. Public hearings in the matter were also held.

The various consumers/consumer organizations filed their objections/ comments on the proposal of PSPCL for introduction of kVAh tariff in response to the public notice issued by PSPCL for inviting objections/comments on the proposal for introduction of kVAh tariff and in response to the public notice issued by PSPCL for inviting objections/comments on the ARR and Determination of Tariff petition filed by PSPCL for FY 2014-15. Many consumers/consumer associations have appreciated the introduction of kVAh tariff as the same would resolve a lot of complications related with kWh tariff, whereas some have desired that the kVAh tariff should not be introduced as it will increase financial burden on all the consumers of the State. The objections raised are summarized below:

(i) The conversion factor is higher for high consumption industrial units, thereby the kVAh tariff will be reduced by least margin.

(ii) Large Supply (General Industry) consumers have been put on advantage of 32 paise per unit as compared to Large Supply (PIU/Arc Furnace) consumers, even though they consume less power and maintain less power factor.

(iii) The difference in tariff for Medium Supply category and Large Supply category (PIU/Arc Furnace) consumers is only 7 paise in the present kWh tariff regime, while in the proposed kVAh tariff regime, Medium Supply consumers will gain 50 paise per unit, even when they are maintaining less power factor as compared to LS (PIU/Arc Furnace) consumers.

(iv) The kWh tariff of the Non-Residential Supply (NRS) is 658 paise per unit and is 25 paise per unit more than the Large Supply. Now, with the introduction of kVAh Tariff, the tariff for NRS category will be 15 paise less than LS category. Thereby, productive units are beaten in rate by 40 paise per unit, which is against the policy of tariff fixation since the introduction of Electricity Act, 2003.

(v) PSPCL should consider the power factor at the generation end maintained by the Generating Company, to establish the conversion factor. The concerned and enlightened consumers, after spending huge amounts to keep the power factor around 0.98, are put into higher kVAh tariff. This approach is unreasonable.

(vi) The proposal for introduction of kVAh tariff may be allowed based on the input power factor of the power supply at the meter and accordingly the conversion factor be fixed.

(vii) The conversion factor should be same for all categories of consumers i.e. 0.92.

7.1.4 The reply of PSPCL to the objections is summarized as under:

(i) The proposal for introduction of kVAh tariff is based upon principle of revenue neutrality, so that both the consumers and PSPCL are not affected adversely. kVAh tariffs are not against the interest of the consumers as power factor rebate and power factor surcharge are taken care of automatically with the decrease or increase in kVAh consumption. Moreover, there will be no chance of wrong calculation of surcharge/rebate payable by/to the consumers with the introduction of kVAh tariffs.

(ii) The conversion factors for all the categories of consumers have been worked out for achieving revenue neutrality for conversion from kWh tariff regime to kVAh tariff regime. The conversion factor is that value of power factor where the revenue of PSPCL with kWh Tariff & kVAh Tariff would be same. The conversion factors for different categories of consumers have been fixed keeping in view the average power factor being maintained by that category of consumers and also taking into account the power factor incentive/surcharge levied on that category of consumers.

(iii) The consumers who have already spent huge amounts to keep their power factor at 0.98, will have an added advantage as they already have the resources to maintain the higher power factor. So, without spending much on the power factor improvement, their billable consumption will also be reduced.

(iv) In the kVAh tariff regime, all categories of consumers will be compensated linearly for improvement in their power factor, whereas in the current tariff regime, consumers are getting incentive @0.25% for each 1% rise in the power factor beyond the threshold limit.

(v) Regarding that the conversion factor may be based on the power factor of the power supply i.e. at 0.92, PSPCL has submitted that the consumers who are already maintaining power factor within the range of 0.95 to 1.0 will have more advantage than the consumers who are maintaining the power factor below average power factor, and as such fixing the conversion factor equivalent to average power factor is the most reasonable.

(vi) To adopt power factor at the input end of the energy meter is not in order as the inductive load of the consumers needs to be governed and averaged out for levy of kVAh tariff judiciously.

(vii) Regarding fixation of the same conversion factor i.e. 0.92 for all the categories of consumers, PSPCL has submitted that the same seems to be on no grounds. The average power factor currently required to be maintained by different categories of consumers is different and also in the present tariff structure the power factor incentive for Large Supply (PIU/Arc Furnace) is given for power factor more than 0.95 and for Large Supply (General Industry) consumers is being given for power factor more than 0.90. Further, the Large Supply (PIU/Arc Furnace) consumers are more responsible for the grid pollution.

7.1.5 The Commission notes that the objections raised by various objectors have been adequately replied by PSPCL. Many consumer associations/consumers have appreciated and welcomed the introduction of kVAh tariff. The conversion factors worked out and proposed by PSPCL in its proposal are for achieving category-wise/sub category-wise revenue neutrality for conversion from kWh tariff to kVAh tariff. The Commission holds that there is sufficient justification for introduction of kVAh tariff, instead of existing kWh tariff, as it will be beneficial for both, utility and consumers. **The Commission, therefore, approves the proposal of PSPCL for introduction of kVAh tariff for Large Supply (General Industry), Large Supply (PIU/Arc Furnace), Bulk Supply (HT/LT), Railway Traction, Medium Supply, DS (Load more than 100 kW) and NRS (Load more than 100 kW) categories of consumers. The kVAh tariff has been determined broadly on the basis of conversion factors proposed by PSPCL (refer para 7.1.2). The kVAh tariff shall be applicable with effect from 1st April, 2014. PSPCL is further advised to continue to record energy consumption in kWh for the purpose of Energy Balance and Energy Audit purposes and for any other purpose for which energy consumption data in kWh is required. PSPCL has confirmed vide letter no. 606/CC/DTR/Dy.CAO/233/Vol-III dated 05.05.2014 that kVAh reading alongwith kWh readings in case of LS, MS, BS, DS/NRS (with load more than 100 kW) and Railway Traction are being recorded w.e.f. 01.04.2014.**

7.2 Two Part Tariff for Retail Supply

7.2.1 (i) Section 45 of the Electricity Act, 2003 provides the power to distribution licensee to recover the charges for the supply of electricity by it in accordance with tariffs fixed from time to time. As per Section 45 (2) of the Electricity Act, 2003 (Act):

The charges for electricity supplied by a distribution licensee shall be –

(a) fixed in accordance with the methods and the principles as may be specified by the concerned State Commission;

(b) *published in such manner so as to give adequate publicity for such charges and prices.*

Section 45 (3) of the Act states that the charges for electricity supplied by a distribution licensee may include a fixed charge in addition to the charge for the actual electricity supplied.

Moreover, the Tariff Policy, 2006 focuses on introduction of Two Part Tariff and Time of Day (ToD) tariffs as it would result in flattening the peak and implementing various energy conservation measures. Clause 8.4 (1) of Tariff Policy, 2006 defines the tariff components and its applicability as follows:

"Two-part tariffs featuring separate fixed and variable charges and Time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year…"

In view of these provisions, the utility (PSPCL) was directed by the Commission to submit the Two Part Tariff proposal for implementation in the State.

(ii) With the ARR & Tariff petition for FY 2012-13, PSPCL had submitted Two Part Tariff proposal to the Commission. The assumptions for arriving at the proposal and the structure were also elaborated therein. Several consumers and consumer groups had raised specific objections to the Two Part Tariff proposal. PSPCL had given its response to the objections raised by the stakeholders. Keeping in view the objections raised by the stakeholders and the response of PSPCL, the Commission in its Tariff Order for FY 2013-14 had observed that "with the coming up of more accurate and sophisticated electronic metering equipment, there is hardly any possibility of manipulation of meter reading data, including maximum demand. 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 2013 -14 but would like to more surely prepare the ground for implementation from the next financial year."

The Commission further observed that:

"The Commission, while mindful of Tariff Policy enjoining early introduction of Two Part Tariff, is nevertheless, of the considered view that Two Part Tariff should be introduced only after attending concerns of 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 conduct mock trial/parallel run of the proposed Two Part Tariff system, at least in five selected Divisions of PSPCL for 6 months, and submit a detailed report along with a more refined proposal for introduction of Two Part Tariff, addressing the concerns of the consumers/consumer organizations expressed during the processing of ARR for FY 2013-14 and also the observations made by PSPCL during the mock trial/parallel run."

7.2.2 In compliance to the directive of the Commission in the Tariff Order for FY 2013-14, PSPCL has submitted Two Part Tariff proposal to the Commission, after conducting mock trial/parallel run. In the Two Part Tariff proposal, PSPCL has ensured revenue neutrality with the existing Single Part Tariff. However, PSPCL has reiterated that the Two Part Tariff has characteristics that the low consumption consumers pay more and the consumers having higher consumption pay less, which is also clear from the results of the mock trial obtained.

A public notice was issued by PSPCL for inviting comments and suggestions from the public and other stakeholders on the proposal for introduction of Two Part Tariff in the State. The objections/comments on the proposal of Two Part Tariff were to be filed with the Commission by 10.03.2014. A corrigendum was issued by PSPCL for extending the date of filing the objections/comments to 25.03.2014, and the date for holding public hearing for the purpose was also extended to 28.03.2014.

The various consumers/consumer organizations filed their objections on the proposal of PSPCL for introduction of Two Part Tariff. The objections raised are summarized as below:

(i) With the proposed Two Part Tariff, consumers having very low utilization factor, even temporarily due to market recession or otherwise, will suffer the most, as per unit cost will go high. Therefore, it has been proposed that there should be maximum cap on the per unit rate chargeable or fixed charges, whichever is higher and the minimum billing of an industrial unit should be on fixed charges or units consumed multiplied by the energy charges plus rupee one.

(ii) PSPCL has overstated the fixed charges just to gain excess recovery from consumers and reduce its financial losses.

(iii) PSPCL has proposed non linear load surcharge on Railways and other industries (to be identified later on). Any proposal of PSPCL regarding non linear load surcharge should be accepted only after studying the investment made by PSPCL to mitigate the impact of non linear load on other consumers or actual losses incurred and substantiated by PSPCL.

(iv) The Commission may take into account the voltage wise cost of supply as an input for determination of Two Part Tariff, and consumers with flat load profile, requiring electricity on a continuous basis, be considered separately.

(v) PSPCL proposal to introduce Two Part Tariff in the State is harmful to the industry and it would have to pay more than the monthly minimum charges.

(vi) PSPCL to ensure system reliability and attending of faults on the lines and substations in the minimum possible time, and minimum 95% availability limit must be specified for levy of fixed charges. If the availability of power at the metering point is less than 95%, the fixed charges for that month be reduced proportionately.

(vii) There should be no wheeling charges for PSPCL consumers availing open access up to sanctioned contract demand (SCD), on the transmission and distribution system of the licensees.

(viii) The proposal be so designed that it is revenue neutral for PSPCL as well as for the consumers. If the aim is to keep the billing amount same, then why the present system of Single Part Tariff should not be continued.

(ix) Fixed charges for the Industry should be applicable on either maximum demand recorded for that particular month or on 80% of SCD.

(x) With the proposed fixed charges and abolition of MMC, Captive Power Producers (CPPs) will suffer financially, as in addition to bearing fixed costs of CPPs, the owners will have to pay fixed charges for the same capacity to PSPCL for maintaining contract demand. As Electricity Act 2003 has provisions for promotion of CPPs, they need to be kept out of Two Part Tariff regime, as they have made heavy investments on CPPs, keeping in view the rules and regulations prevailing at the time of installation of CPPs. Alternatively, they may be allowed to reduce the contract demand equal to installed capacity of the CPP, with the provision of meeting their full load in case of scheduled or un-scheduled shut down of the CPP, on payment of nominal commitment charges.

(xi) PSPCL should reconsider the surcharges in totality and these should be levied only to improve the grid conditions. The point should be to review and withdraw the voltage surcharge and continuous process surcharge.

(xii) There is no reason to impose High Utilization Surcharge; rather, there is a case for rebate for High Utilization Factor.

(xiii) PIU industry needs to be given incentive so that existing units which are closing down due to high tariff and high electricity duty are revived and new units are set up in the State.

(xiv) Separate tariff/consumer categories need to be created for industrial consumers connected at 66 kV and 220 kV and their tariff be fixed based on Cost to Serve/Cost of Supply principle.

(xv) The proposal is silent on rebates, like EHT rebate admissible to 66 kV and 220 kV consumers under existing tariff.

(xvi) Agriculture load is mostly non linear, most unpredictable and most erratic load on the grid and deserves all type of surcharges. Therefore, agriculture category be kept at par with industry and Two Part Tariff be made applicable to agriculture also.

(xvii) The proposal shows that in most of the cases, only data for cycle 6 i.e. of one month has been considered for tabulation of results. This is not as per the orders of the Commission. PSPCL should use the data of 6 months for tabulation and mock trials.

(xviii) Basis for fixing ₹60/kW/month as fixed charges for SP category and fixed charges for other categories have not been given by PSPCL.

(xix) PSPCL has proposed different rates for LS General Industry and LS PIU, even though the utilization factors have been considered as same. The proposed tariff and proposal of high utilization factor charge is skewed against the high CD PIU Industry which will end up paying more than low CD industry.

(xx) In Nabha division, with the proposed Two Part Tariff, there will be increase of 33.27% in revenue over the revenue with existing tariff for PIU LS industry above 1 MVA. The increase in revenue is more in case of PIU industry than general industry. PIU consumers are being made to suffer at the cost of other consumers in the proposed structure of Two Part Tariff, which may be reconsidered by the Commission.

(xxi) The impact of the revision i.e. Two Part Tariff on cross subsidization has not been worked out in the proposal.

(xxii) Keep the consumers having set up the cogeneration plants out of preview of the Two Part Tariff proposal and existing system of Single Part Tariff with MMC may be continued in their case.

7.2.3 PSPCL in its response has stated that:

(i) The adjustment of units consumed against the fixed charges in the Two Part Tariff regime, is against the provisions of Electricity Act, 2003, hence suggestion made by the objectors to have maximum overall rate should be rejected.

(ii) PSPCL has already submitted a report on the approach for implementation of Two Part Tariff to the Hon'ble Commission in compliance with the directive of the Commission. Further, determination of tariff under Two Part Tariff structure and creation of separate category is the prerogative of the Hon'ble Commission. The Commission should approve Two Part Tariff in line with the proposal submitted by it to avoid any revenue loss to the utility.

(iii) Extra generation and distribution capacity has to be provided to meet with non linear load; hence its levy is quite justified.

(iv) It is incorrect to say that Two Part Tariff has only addressed the concerns of the utility.

(v) Two Part Tariff is necessary to recover the fixed charges and energy charges separately, while energy charges are linked to energy consumed, the fixed charges are essential to recover the infrastructure and other fixed costs of PSPCL. Forum of Regulators and CERC have also recommended recovering the costs through Two Part Tariff and the proposal is as per provisions of Electricity Act 2003. Two Part Tariffs have been adopted by HERC, HPERC, DERC, JKSERC, UERC, UPERC etc.

(vi) The rate of fixed charges payable is quite low as compared to MMC of Single Part Tariff.

(vii) Some breakdowns are beyond the reasonable control of the utility and such minor interruptions have no adverse effect on consumption of electricity by the consumers. In case of breakdown, utility shall be offering proportionate reduction in fixed charges with the approval of the Commission. It would be unreasonable to compare mechanism of recovery of fixed charges of NTPC wherein entire fixed cost is recovered through fixed charges as dynamics of system operation of generation, transmission and distribution business are different and any comparison shall be inaccurate and unfair.

(viii) For agriculture sector, power is given free of cost and State Govt. pays subsidy to PSPCL on the basis of tariff determined by the Commission.

(ix) All categories have been covered in Two Part Tariff, except agriculture.

(x) It is incorrect to say that fixed charges have been based upon utilization factor of industrial category, rather these have been fixed keeping in view the paying capacity of the consumers, and recovery of fixed charges shall give PSPCL only 30% of total fixed costs borne by PSPCL for generation/transmission/distribution of electricity to the consumers. Also, per unit energy charges get reduced with the levy of fixed charges in the Two Part Tariff regime.

(xi) With higher consumption, there is no change in the fixed charges as these are recovered on the basis of sanctioned contract demand.

(xii) Maintaining revenue neutrality and to reduce differentiation of per unit rate payable by various industrial consumers, surcharge of 10 paise per unit for consumption above 40% utilization factor and additional 10 paise per unit for consumption beyond 60% utilization factor has been proposed.

(xiii) Levy of wheeling charges is as per provisions of the Act and is justified. With purchase of power from outside sources, PSPCL is unable to recover the cost of supply, so the recovery of wheeling charges has been provided for the consumers availing/purchasing power from outside the State. Even cost of generation goes up, when power generation gets reduced due to availing of open access.

(xiv) Fixed charges have been proposed on the sanctioned contract demand of the consumers as PSPCL is to plan its network and power purchase requirement as per the sanctioned contract demand of the consumers.

(xv) The levy of fixed charges and energy charges in Two Part Tariff proposal is as per provisions of Electricity Act 2003. In case, CPP owners want to keep the contract demand as sanctioned, to meet with its requirement of power during non-availability of power from CPP, it should pay to PSPCL as per Two Part Tariff proposal, as PSPCL shall have to keep this capacity reserved to be utilized by CPP owners in such eventualities.

(xvi) Removal of surcharges shall affect revenue neutrality condition or otherwise basic tariff shall have to be increased, to maintain revenue neutrality.

(xvii) The levy of high utilization surcharge is a matter to be decided by the Hon'ble Commission. The power is surrendered after considering the requirements/demand of the consumers of PSPCL and as such only surplus power is surrendered. In case of power surplus scenario, the Hon'ble Commission may consider the suggestion of the objector. However, tariff of such power should reflect the appropriate cost incurred in procuring and supplying the power.

(xviii) Two Part Tariff proposal contains inherent incentive provisions for the consumers, as with higher consumption of power, the per unit rate gets reduced.

(xix) Review of Electricity Duty rate is for the State Govt. to consider for giving help to the units getting closed due to slump prevalent in industry.

(xx) Consumers getting supply at higher voltages i.e. 33/66 kV, 132/220 kV, are already getting rebate of 20 paise/unit and 25 paise/unit, keeping in view the cost of supply principle. The demand of industry to charge the rates as per cost of supply shall be achieved slowly with the elimination of cross subsidization of power to lower strata of society.

(xxi) As submitted in the proposal, data for multiple cycles has been considered for the study and single cycle data has been used for tabulation of results. Although, in few cases, full data of six months was not given, but the revenue received in Single Part Tariff and Two Part Tariff follows the same pattern and therefore the same may be accepted.

(xxii) There is only one PIU consumer in Nabha having contract demand above 1 MVA and higher bill amount is due to low consumption and this varies every month with increase/decrease in consumption. In other cities, the variation in revenue under Single Part Tariff & Two Part Tariff is within limits.

(xxiii) The tariffs proposed follow the principle of revenue neutrality and as such, the level of cross subsidization currently allowed will continue.

The Commission notes that there is considerable opposition from various categories of consumes for introduction of Two Part Tariff in the State. The various objectors have submitted their apprehensions and there is general fear in the minds of consumers that their bill amount will increase if the Two Part Tariff proposal submitted by PSPCL is introduced in the present form. PSPCL has tried to allay the apprehensions of the objectors in its reply to the objections raised by the various objectors. During the public hearing also, there was considerable opposition from the various categories of consumers. On examination of the proposal submitted by PSPCL, the Commission has also observed that the proposal will affect the majority of the consumers adversely, particularly the consumers having low consumption. There is a need for consensus building amongst various stakeholders before introduction of Two Part Tariff in the State. The Commission, therefore, directs PSPCL to re-examine the issues/objections raised by the consumers/consumer associations and even should discuss with the various categories of consumers/consumer associations, the issues raised by them, and thereafter resubmit the Two Part Tariff proposal, after addressing the concerns of the majority of the consumers/consumer associations.

7.3 Time of Day (ToD) Tariff

7.3.1 Time of Day (ToD) tariff is a tariff structure in which different rates are applicable for use of electricity at different times of the day. There are certain time blocks in a day when the demand for electricity is at its peak. World over, the Transmission/Distribution System is not designed to meet 100% peak demand round the clock. Thus, restrictions on power supply during peak hours are necessary to operate the system within permissible parameters and to avoid cascade tripping. ToD tariff is implemented to reduce consumption of electricity during peak hours. To achieve this objective, electricity is made expensive during peak hours so that consumers use less electricity during these hours. Electricity charges during off peak hours are also reduced as an incentive for people to use more electricity during off peak hours and thus flatten the demand curve.

7.3.2 Section 62 (3) of the Electricity Act 2003 lays down that:

"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to 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".

7.3.3 The provision 5.4.9 of the National Electricity Policy also advocates the ToD tariff which says that:

"The Act requires all consumers to be metered within two years. The SERCs may obtain from the Distribution Licensees their metering plans, approve these, and monitor the same. The SERCs should encourage use of pre-paid meters. In the first instance, TOD meters for large consumers with a minimum load of one MVA are also to be encouraged. The SERCs should also put in place independent third-party meter testing arrangements."

7.3.4 The provision of the Tariff Policy (8.4 Definition of tariff components and their applicability) envisages explicitly the emphasis on the ToD Tariff. The provision says that:

"Two-part tariffs featuring separate fixed and variable charges and Time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year. This would also help in flattening the peak and implementing various energy conservation measures".

7.3.5 In view of the above provisions, the Commission in its various Tariff Orders had been directing PSPCL to submit a proposal for the introduction of Time of Day Tariff in the State. PSPCL in its submissions in the ARR for FY 2013-14 had recommended the introduction of Time of Day Tariff for the year 2013-14 for Large Supply industrial consumers only. PSPCL had proposed 06:00 to 18:00 Hrs as normal hours, 18:00 to 22:00 Hrs as peak period and 22:00 to 06:00 Hrs as off peak period. PSPCL had submitted that off peak period for six months (October to March) only has been considered for ToD tariff as the load curve shows a dip during these months in demand during night hours which is not good for an efficient system operation during winter period i.e. from October to March.

7.3.6 The Commission in the Tariff Order for FY 2013-14 noted that the Time of Day (ToD) Tariff which is widely accepted Demand Side Management measure has already been implemented in majority of the States. In some other States like Haryana and Himachal Pradesh, ToD tariffs have not been notified but Peak Load Exemption Charges (PLEC), which are a form of ToD tariffs have been notified where additional tariff during peak load hours is applicable. Such type of ToD Tariff also existed in Punjab prior to FY 2013-14. The Commission further noted that in the initial stages, ToD tariffs were notified for limited consumer categories, typically for HT industrial and thereafter progressively extended to bring other consumer categories in the fold of ToD tariffs.

The Commission, therefore, in its Tariff Order for FY 2013-14 approved the proposal of PSPCL for introduction of Time of Day (ToD) tariff for six months (October to March) of FY 2013-14, during off peak hours from 22:00 hrs to 06:00 hrs for Large Supply industrial category, and approved rebate of ₹1 per unit on the normal tariff for this category. It was also ordered that there will not be any change in the duration of peak load hour restrictions which will not be for more than 3 hours in the evening between 18:00 hours to 22:00 hours and will continue to be governed as per existing instructions. The Commission also directed PSPCL to submit a detailed report about the financial and technical impact of introducing ToD Tariff, by 01.03.2014.

7.3.7 PSPCL vide its letter no. 378/DTR/Dy.CAO/Vol.III dated 26.02.2014 intimated that with the commissioning of IPPs in the State, there will be an energy surplus regime during FY 2014-15 in the State and that there shall be considerable generation capacity over hang across the country and thus it may not be feasible to sell large amount of power outside the state of Punjab. Further, PSPCL vide its letter no. 5106/TR-5/PSERC-Misc dated 24.02.2014 also submitted declaration on affidavit that the power available including surplus power can flow to the consumers through transmission and sub transmission system available with PSPCL for FY 2014-15. PSTCL vide its letter no. 482/FA/ARR-403 dated 26.02.2014 also submitted a declaration on affidavit that the power available including surplus power can flow through transmission system of 400 kV/220 kV/132 kV available with PSTCL for FY 2014-15.

In view of the persistent demand from Large Supply Industrial category consumers in general for extension in the period of ToD Tariff to whole year, the

Commission analyzed the issue and observed that in view of the surplus power available with PSPCL during April and May of the year also and the declarations of PSTCL and PSPCL that the power available including surplus power can flow through transmission system and sub-transmission system of PSTCL and PSPCL, the time period of ToD tariff could be extended to 31st May, 2014. It was also observed that this will help in utilization of surplus power and also flattening of the load curve during the period.

The Commission in its Order dated 28.02.2014, accordingly, decided to extend the period of ToD tariff to 31st May, 2014. It was also ordered that the financial impact of the approval shall be taken care of in the Tariff Order for FY 2014-15, and other terms and conditions shall remain the same as contained in the approval granted by the Commission in its Tariff Order for FY 2013-14.

7.3.8 During public hearings on the ARR for FY 2014-15, there was demand from various consumers/consumer associations for extension of ToD Tariff for Large Supply industrial category for FY 2014-15 and also for introduction of ToD tariff for Medium Supply industrial category consumers, as the same may make MS industry of Punjab to be more competitive, reduce the quantum of surrendered power and also earn more revenue for PSPCL, in view of surplus power available with PSPCL for FY 2014-15.

7.3.9 Keeping in view (a) the persistent demand from industrial category consumers to do away with PLEC, (b) surplus power during FY 2014-15 projected by PSPCL in the ARR of FY 2014-15 and (c) certification by PSPCL and PSTCL that the power including surplus power can flow through the transmission and sub-transmission system available with PSPCL and PSTCL, a Staff Paper was prepared for 'Replacement of Peak Load Exemption Charges with Time of Day Tariff'**.** The Commission was of the view that this proposal of replacement of PLEC with ToD tariff will go a long way to redress the inconvenience caused to the consumers on this account. Keeping in view the revenue neutrality of PSPCL, the following ToD tariff was proposed in the staff paper for replacing PLEC with ToD tariff during peak load hours from 06.00 PM to 10.00 PM for LS industrial category consumers, on actual consumption during this period:

For all LS consumers other than Continuous Process Industry & PIU.	Existing tariff + ₹3.00/unit.
For all PIU & Continuous Process Industry consumers.	Existing tariff + ₹4.00/unit.

7.3.10 The Staff Paper was placed on the website of the Commission and a public notice was issued inviting comments/objections from the general public and stakeholders by the Commission. The various consumers/consumer organizations filed their objections/ comments on the proposal contained in the Staff Paper for replacement of PLEC with ToD tariff. In view of the objections/comments of the stakeholders on the Staff Paper on replacement of PLEC with ToD tariff' and also the comments of PSPCL on it, a revised staff paper on Time of Day (ToD) tariff for FY 2014-15 was prepared, with the objective of encouraging the consumers of Large Supply and Medium Supply categories for consuming additional power and increasing their production, besides the objectives brought out in para 7.3.1. The following ToD tariffs were proposed for Large Supply industrial category and Medium Supply industrial category for incentivizing the consumers of these categories to consume additional power and increase their industrial production:

i) For Large Supply industrial category

(a) The following ToD tariff was proposed for Large Supply industrial category:

Sr. No.	Time period	Tariff
1.	06.00 AM to 06.00 PM	Normal Tariff* for FY 2014-15
2.	06.00 PM to 10.00 PM	Normal Tariff* for FY 2014-15 plus ₹3.30 per unit
3.	10.00 PM to 06.00 AM	Normal Tariff* for FY 2014-15 minus ₹1.50 per unit

** at applicable rates as per Schedule of Tariff for FY 2014-15*

It was proposed in the staff paper that the above ToD tariff shall be an optional tariff and any Large Supply industrial category consumer could opt for the same. It was also mentioned in the staff paper that with the introduction of above ToD tariff, the existing ToD tariff approved by the Commission in the Tariff Order for FY 2013-14 shall no more be applicable.

(b) The following tariff was proposed to be applicable in the staff paper for those Large Supply industrial consumers who do not opt for ToD tariff as proposed in para 7.3.10(i)(a):

Sr. No.	Time period	Tariff
1.	06.00 AM to 06.00 PM	Normal Tariff* for FY 2014-15
2.	06.00 PM to 10.00 PM	Normal Tariff for FY 2014-15 plus PLEC** during peak load hours as approved by the Commission in the Tariff Order for FY 2013-14
3.	10.00 PM to 06.00 AM	Normal Tariff* for FY 2014-15

** at applicable rates as per Schedule of Tariff for FY 2014-15*
*** suitably modified as per schedule of Tariff for FY 2014-15.*

ii) For Medium Supply industrial category

The following ToD tariff was proposed for Medium Supply industrial category:

Sr. No.	Time period	Tariff
1.	06.00 AM to 06.00 PM	Normal Tariff* for FY 2014-15
2.	06.00 PM to 10.00 PM	Normal Tariff* for FY 2014-15
3.	10.00 PM to 06.00 AM	Normal Tariff* for FY 2014-15 minus ₹1.00 per unit

** at applicable rates as per Schedule of Tariff for FY 2014-15*

It was also mentioned in the staff paper that the above ToD tariff shall be an optional tariff and any Medium Supply industrial consumer could opt for the same.

iii) It was proposed in the staff that the ToD tariff shall be applicable for the period from October, 2014 to March, 2015.

7.3.11 The revised staff paper was placed on the website of the Commission and a public notice was issued for inviting comments from the general public and stakeholders. The last date for submission of the comments was 05.05.2014 and the date for public hearing was fixed for 07.05.2014. The various consumers/ consumer organisations filed their comments on the proposal contained in the revised staff paper on ToD tariff for FY 2014-15. PSPCL also submitted its comments to the proposal contained in the revised staff paper.

7.3.12 The comments of the consumers/consumer organizations on the revised staff paper are summarized below:

(i) The staff paper is silent on the reasons for not accepting the objections of the consumers and the factors based on which the proposal has been finalized by PSERC.

(ii) There is no rationale to fix peak load hours for 4 hours of 6 PM to 10 PM and these should be retained as 3 hours, based on seasonal changes, so as to utilize the generation and transmission system optimally. The proposed four hours expensive power will not be beneficial to PSPCL, as the revenue of PSPCL will fall due to less consumption by the consumers due to expensive power, as compared to three hours duration. Industrial production will also be hit for additional one hour duration. This will further burden the already suffering industry.

(iii) There is no justification for fixing ₹3.30 per unit as ToD charges for consumption during peak load hours. It should be kept at ₹2 per unit. Further, the off peak hours rebate should be ₹2 per unit, and rebate for excess usage over the last year should be ₹2.66 per unit. PSPCL has entered in power surplus regime due to in-house addition of power generation in the Punjab state, and PSPCL shall not spend any extra amount for arranging power during peak load hours.

(iv) The loss on account of introduction of off peak rebate for MS industry should not be passed on to LS industry, but adjusted in the tariff of MS category itself. Further, large commercial consumers who are actually responsible for peaks, should also be brought under ToD.

(v) ToD off peak rebate should be increased to ₹3.30 per unit for full utilization of capacities and made applicable for full year.

(vi) The metering system should be replaced by PSPCL, wherever required, and the cost should be adjusted in the existing meter security and only additional amount, if any, be recovered from the consumers.

(vii) PSPCL should be directed to take proactive action to install software for preparing the monthly bills based on ToD tariff before 01.10.2014, to avoid the present practice of adjusting the rebates after 2 months.

(viii) As off peak rebate will not be available to such consumers who do not opt for ToD tariff, their PLEC should be ₹1.80 per unit.

(ix) Punjab Govt. and PSPCL policies towards industrial environment need introspection, as is clear from the fact that electricity consumption during off peak period from 10 PM to 6 AM has not increased, despite giving rebate of ₹1 per unit on the normal tariff for Large Supply Industrial consumers.

7.3.13 The comments of PSPCL are summarized as below:

(i) The proposal of the Hon'ble Commission is not revenue neutral.

(ii) ToD rebate cannot be extended for the months of April and May as PSPCL has almost flat load curve during these months and no benefits can be drawn by PSPCL by extending the ToD rebate for the months of April and May.

(iii) Surplus power is of two types i.e. (a) Cold Surplus Power (b) Hot surplus power. Majority of surplus power in Punjab corresponds to Thermal Power and the cold surplus power cannot be used to extend the ToD tariff rebate, which shall be detrimental to the interests of the utility and consumers in the long term.

(iv) PSPCL shall loose ₹44 crore per year for two months @ ₹22 crore per month for extending the ToD rebate and the burden of the same shall have to be passed on to the other consumers, and only continuous process industry shall be benefitted further.

(v) PLEC revenue as per calculations has been taken as ₹345 crore for FY 2013-14, whereas the same is between ₹380-400 crore, as per the actual data taken from CBC.

(vi) The consumption of LS consumers has considerably reduced and actual consumption for LS consumers shall be much less than the consumption projected in the ARR. PSPCL has worked reduction in consumption of LS consumers as 793 MU and loss of revenue of ₹44 crore during FY 2013-14.

(vii) Based on actual consumption pattern during off peak hours, as observed from October to March, PSPCL has worked out gain of ₹280 crore to continuous process industry at the proposed ToD rebate of ₹1.50 per unit for 8 months, the burden of which shall be borne by the other categories of consumers and accordingly, a surcharge @ ₹0.50 per unit on energy consumption from 06.00 AM to 06.00 PM was proposed by PSPCL, in order to reduce the gain to the particular category.

(viii) The objection of the industry that per unit rate of PLEC should be ₹2.70, is away from the facts, as per the data for FY 2012-13. Based on the data for FY 2012-13, rate of PLEC works out to ₹2.70 per unit. Since the rate of PLEC was increased by 50% in FY 2013-14, the PLEC rate works out to ₹2.70 x 1.5 = ₹4.05 per unit. With the extension of PLEC time from 3 to 4 hours, the rate of PLEC corresponding to prevalent PLEC charges works out to ₹3.04 per unit, and accordingly, PSPCL proposed PLEC at the rate of ₹3 per unit.

(ix) For MS category, PSPCL would loose approximately ₹20 crore with the implementation of ToD tariff for 6 months. As per the proposal of the Commission in the staff paper, MS consumers would get a rebate of ₹1 per unit on consumption during off peak hours and accordingly PSPCL shall loose about ₹27 crore for eight months.

(x) MS consumers should also be levied additional peak charges (from 18:00 hours to 22:00 hours) as proposed for LS consumers, so that the loss amounting to ₹27 crore may somewhat be reduced. The same shall not compensate the utility fully, as consumption of MS consumers during peak load hours is very less.

7.3.14 The Commission observes that the revised staff paper was prepared after keeping in view the comments received from various consumers/consumer organizations and PSPCL on the earlier staff paper on 'Replacement of PLEC with ToD Tariff'. The transmission/ distribution system is not designed, the world over, to meet 100% peak demand round the clock. The restrictions on power supply during peak hours are necessary to operate the system within permissible parameters and to avoid cascade tripping, and to achieve this objective, electricity is made expensive during peak hours.

The peak hours vary from season to season during a year, but uniformity has to be there for automatic logging/summation of energy consumption in the meter and its reading by the utility. Accordingly, the period of peak hours has been kept uniform throughout the year. The proposal contained in the staff paper is not mandatory, but is optional. Any Large Supply and Medium Supply consumer can opt for it. The existing mechanism shall continue to be applicable to those consumers, who do not opt for it. However, the Commission is of the view that the proposal is beneficial for all consumers and also for PSPCL, and as such, majority of Large Supply and Medium Supply consumers will opt for it.

It may not be possible for PSPCL to provide ToD compliant meters before 01.10.2014 to all those consumers who opt for ToD tariff. Therefore, the Commission is of the view that these consumers should arrange their own ToD compliant meters, in order to avail the facility of ToD tariff. This will also address their grievance that they do not get ToD rebate in time.

The present loading conditions of transmission/ distribution system of PSPCL do not permit applicability of the rebate in tariff during off peak hours for full year. Further, PSPCL in its comments to the proposal of the Commission on 'Replacement of levy of Peak Load Exemption Charges with Time of Day Tariff' submitted that normal tariff during day hours & off peak hours and PLEC during peak hours during the months from June to September should be applicable, irrespective of the option. The Commission agrees with the view point of PSPCL. The Commission shall continue to monitor PSPCL's system and take action for allowing ToD tariff during balance period of the year. The Commission in its order dated 28.02.2014 extended the period of rebate during off peak hours to 31.05.2014.

The Commission is of the view that with the implementation of the proposal contained in the staff paper, the Large Supply and Medium Supply industrial consumers will shift their operations to off peak hours, resulting in reduction in consumption during peak hours & normal hours and increase in consumption during off peak hours. The consumption during off peak hours may increase further, due to cheaper power available during this period. Further, PSPCL will be in a position to release more load/connections as a result of shifting of load. All this may give fillip to the industry, more employment opportunities, more revenue to the State Govt. etc. This may also result in increase in revenue of the utility.

7.3.15 In view of the above, **the Commission approves the Time of Day (ToD) tariff for Large Supply Industrial Category and Medium Supply Industrial Category consumers, as detailed below:**

i) For Large Supply industrial category

(a) The following Tariff is approved for all Large Supply Industrial Category consumers:

Period	Time period	Tariff
April, 2014 to May, 2014	06.00 AM to 06.00 PM	Normal Tariff for FY 2014-15*
	06.00 PM to 10.00 PM#	Normal Tariff for FY 2014-15* plus PLEC during peak load hours as approved by the Commission in the Tariff Order for FY 2013-14
	10.00 PM to 06.00 AM	Normal Tariff for FY 2014-15* minus ₹1.00 per kVAh
June, 2014 to Sept., 2014	06.00 AM to 06.00 PM	Normal Tariff for FY 2014-15*
	06.00 PM to 10.00 PM#	Normal Tariff for FY 2014-15* plus PLEC during peak load hours as approved by the Commission in the Tariff Order for FY 2013-14
	10.00 PM to 06.00 AM	Normal Tariff for FY 2014-15*

* *As per Schedule of Tariff for FY 2014-15.*

\# *Peak Load hours shall not be for more than 3 (three) hours between 6 PM to 10 PM depending upon season to season.*

(b)(i) The following ToD Tariff is approved for Large Supply Industrial Category consumers, who opt for ToD tariff:

Period	Time period	Tariff
October, 2014 to March, 2015	06.00 AM to 06.00 PM	Normal Tariff for FY 2014-15*
	06.00 PM to 10.00 PM	Normal Tariff for FY 2014-15* plus ₹3.00 per kVAh
	10.00 PM to 06.00 AM	Normal Tariff for FY 2014-15* minus ₹1.50 per kVAh

* *As per Schedule of Tariff for FY 2014-15.*

(ii) The following tariff is approved for those Large Supply industrial consumers, who do not opt for ToD tariff:

Period	Time period	Tariff
October, 2014 to March, 2015	06.00 AM to 06.00 PM	Normal Tariff for FY 2014-15*
	06.00 PM to 10.00 PM	Normal Tariff for FY 2014-15* plus PLEC# during peak load hours as existed prior to FY 2013-14
	10.00 PM to 06.00 AM	Normal Tariff for FY 2014-15*

* *As per Schedule of Tariff for FY 2014-15.*

\# *Peak Load hours shall not be for more than 3 (three) hours between 6 PM to 10 PM depending upon season to season.*

ii) For Medium Supply industrial category

(a) The following ToD tariff is approved for Medium Supply Industrial Category consumers, who opt for the same:

Period	Time period	Tariff
April, 2014 to September, 2014	06.00 AM to 06.00 PM	Normal Tariff for FY 2014-15*
	06.00 PM to 10.00 PM	
	10.00 PM to 06.00 AM	
Oct., 2014 to March, 2015	06.00 AM to 06.00 PM	Normal Tariff for FY 2014-15*
	06.00 PM to 10.00 PM	Normal Tariff for FY 2014-15*
	10.00 PM to 06.00 AM	Normal Tariff for FY 2014-15* minus ₹1.00 per kVAh

* *As per Schedule of Tariff for FY 2014-15.*

(b) The following tariff is approved for Medium Supply Industrial Category consumers, who do not opt for ToD tariff:

Period	Time period	Tariff
FY 2014-15	06.00 AM to 06.00 PM	Normal Tariff for FY 2014-15*
	06.00 PM to 10.00 PM	
	10.00 PM to 06.00 AM	

* *As per Schedule of Tariff for FY 2014-15.*

iii) The ToD tariffs shall be applicable for the period as indicated in the above tables.

iv) Large Supply and Medium Supply industrial category consumers have to submit the option for opting for ToD tariff by 15.09.2014.

v) Large Supply and Medium Supply industrial category consumers opting for ToD tariff have to arrange their own meters capable of recording ToD readings/data as per the above time blocks by 15.09.2014. PSPCL shall ensure its testing and commissioning by 30.09.2014, as the ToD tariffs shall be applicable from 01.10.2014.

vi) **Large Supply and Medium Supply Industrial Category Consumers who are unable to give their option and/or arrange their own meters by 15.09.2014, (as per para (iv) and (v) above) may submit their option and arrange their own meter capable of recording ToD readings/data as per above time blocks, after 15.09.2014. The meters of such consumers will be installed by PSPCL within 15 days of receipt of option and meter from the consumer(s). These consumers will be able to avail the ToD Tariff from the billing cycle falling immediately after installation of the energy meter by PSPCL.**

vii) **PSPCL shall lay down specifications of meters, short list the vendors and fix the rates at which meters shall be available.**

7.4 Introduction of Contract Demand System for MS Industrial Category

7.4.1 At present, PSPCL has adopted connected load system for MS industrial category. To facilitate the consumers to have flexibility in connected load as is prevalent in LS industrial category, a Staff Paper for introduction of contract demand system for MS industrial category was prepared, as the same shall go a long way in stimulating the demand of MS industrial category.

The Staff Paper was placed on the website of the Commission, wherein it was proposed that the MS industrial consumers shall declare their demand within three months of issue of notification in this regard by PSPCL and failing which, 100% of the connected load, converted into kVA by using 0.90 power factor/conversion factor, shall be taken as contract demand, subject to a maximum contract demand of 99 kVA. A public notice was issued inviting comments/objections from the general public and stakeholders by the Commission. The last date for submission of comments was 25.03.2014 and the date for public hearing was fixed for 28.03.2014.

7.4.2 The various consumers/consumer organizations raised objections/ comments on the proposal for introduction of Contract Demand System for MS industrial category. These objections are summarized below:

(i) Mohali Industries Association has agreed with the proposed parameters followed by the Commission for the introduction of contract demand system for MS category. It has been submitted that this should go a long way in mitigating the problems faced by MS category consumers. It has been desired that to go with the present day requirements, the load slab for MS category should be raised from 100 kW to 250 kW, as the load limits for SP, MS and LS categories are old and have not been changed with the needs of time.

(ii) Power Engineers Associates have proposed to introduce contract demand system in case of NRS, DS, BS and Street Light categories having sanctioned load more than 50 kW, in addition to MS category.

(iii) Punjab Rice Millers Association has submitted that the rice millers of the State may be kept out of the decision to change MS category consumers from kW to kVA system as with the introduction of proposed system, Medium Supply consumers who have connected load upto 99 kW shall be further burdened with extra 9% consumption charges. Whereas, after detailed deliberations, a decision was taken by PSERC on 23.10.2012 through which 100% increase was given to PSPCL by the rice millers of the State and MMC billing cycle was enhanced from 4½ months to 9 months. Apart from this, 35% increase was also given in the revenue of PSPCL by the millers by increasing slab system from 3200 units to 4800 units irrespective of connected load of the millers.

7.4.3 PSPCL in comments has submitted that the proposal of shifting from connected load system to contract demand system for MS category of consumers may be acceptable, subject to confirmation from the Metering department regarding capability of the same in the currently installed energy meters for MS category of consumers. PSPCL has submitted that MDI for previous months and MDI for current month are available in around 12000 (5000+7000) number energy meters; in about 5400 meters, only current MDI is available, whereas previous MDI is only available through DDL. PSPCL is not sure and has not confirmed regarding availability of MDI in balance meters, which have been said to be ‘old meters’. In view of the above, PSPCL has submitted following points for consideration of the Commission for introduction of contract demand system for MS category:

(i) Consumers having sanctioned load between 90-99.9 kW are empowered to use their load up to sanctioned limit. With 0.9 power factor for MS supply consumers, the demand comes to 90/0.9=100 kVA to 99.9/0.9=111 kVA, whereas restriction is going to be placed up to 99 kVA, as beyond 100 kVA contract demand, the category comes under Large Supply. It will be mandatory for such consumers to get their contract demand sanctioned up to 99 kVA only.

(ii) The billing for these consumers shall be either on basis of sanctioned contract demand or actual maximum demand recorded during the month. There shall be no problem to bill these consumers on sanctioned contract demand. In case billing is to be based on actual maximum demand recorded during the month, the downloading of data from approximately 25000 consumers every month shall not be possible with existing meters. So, option shall be given to MS consumers to install kVA/ToD compliant meters at their own expense.

(iii) Tariff structure for billing the consumers on contract demand/actual maximum demand shall have to be modified accordingly.

(iv) At present, number of MS consumers up to 50 kW is 11711 approximately and with load 51 kW to 99.9 kW as 13103 approximately. It shall be better to cover consumers with load above 50 kW only under contract demand system in the first instance.

7.4.4 The Commission notes that the introduction of contract demand system in case of schedule BS consumers and schedule DS/NRS consumers with load exceeding 100 kW was introduced with effect from Ist April, 2010, as ordered in the Tariff Order for FY 2009-10 issued on September 08, 2009. The contract demand system for large supply category was already in vogue. It was further decided by the Commission that such consumers may install the additional load but in case the maximum demand exceeds the sanctioned contract demand, the consumers will be levied a demand surcharge @₹750/kVA of demand in excess of the sanctioned contract demand irrespective of number of defaults. The tariff was decided to be single part, with MMC based on contract demand. Further, the adequate time was given to the consumers to get their contract demand sanctioned and to the Board to install compatible meters with TPT features.

The MS category of consumers is levied load surcharge @₹1000/kW if connected load exceeds sanctioned load. MMC is based upon sanctioned connected load and tariff is single part.

7.4.5 With the introduction of contract demand system for MS category consumers, these consumers may install the required load but they have to keep their maximum demand within the sanctioned contract demand. Further, the introduction of contract demand system in case of NRS & DS categories having sanctioned load more than 50 kW and less than 100 kW will be considered by the Commission in the next stage. The fears of Punjab Rice Millers Association that the introduction of proposed contract demand system for Medium Supply consumers shall burden them with extra 9% consumption charges, are unfounded and without any basis. These consumers shall have the flexibility of getting their contract demand sanctioned up to 100 kVA and monthly minimum charges in rupees per kVA for the sanctioned contract demand instead of existing rupees per kW for the sanctioned load shall be leviable.

Further, the billing of MS category consumers where MDI for billing period (presently one month) is available, shall be on the basis of sanctioned contract demand or actual maximum demand recorded during the month, whichever is higher. In case of energy meters where MDI for billing period is not available and is only available through DDL, provisional billing shall be on the basis of sanctioned CD, subject to adjustment/correction on the basis of DDL. PSPCL has to ensure that compatible meters are installed at the premises of all MS category consumers, for which a period of three months shall be given to the consumers for getting their contract demand sanctioned and to PSPCL for installing compatible meters. The tariff structure for billing the consumers on contract demand/actual demand basis has accordingly been modified in the Tariff Schedule for MS category and the requisite amendments have also been made in the General Conditions of Tariff (Annexure-I (Volume-II) of this Tariff Order). **The Commission, therefore, decides the introduction of contract demand in case of MS category consumers. These consumers may install the required load but in case the maximum demand exceeds the sanctioned contract demand, the consumers will be levied a demand surcharge @₹750/kVA of demand in excess of sanctioned contract demand irrespective of number of defaults. The tariff will continue to be single part as here-to-fore and MMC will be based on contract demand**.

However, adequate time is required to be given to consumers to get their contract demand sanctioned and PSPCL to install compatible meters. **The Commission, therefore, decides to introduce contract demand system for MS category consumers with effect from 01.01.2015. PSPCL is directed to issue notice to all MS category consumers within one month of issue of the Order, for declaring their contract demand within two months of the issue of notice subject to a maximum of 100 kVA. It may also be mentioned in the notice that if the consumer fails to declare his contract demand within the specified period, his sanctioned load shall be converted into kVA by using 0.90 power factor, subject to a maximum of**

100 kVA. PSPCL is further directed to install compatible meters against all Medium Supply consumers before 31st December, 2014. However, any MS Industrial Category consumer shall be at liberty to arrange its own compatible meter and get it installed from PSPCL before this date, as per the laid down procedure.

The above decision regarding introduction of contract demand system for MS Industrial Category consumers shall also apply to Compost Plants/Solid Waste Management Plants for Municipalities/Urban Local Bodies.

7.5 Cost of Supply

7.5.1 In view of the provisions of Electricity Act, 2003 and the National Electricity Policy, the Commission in its various Tariff Orders has been directing PSPCL to expedite the 'Cost of Supply' study and submit its findings to the Commission at the earliest. PSPCL, at the time of processing of ARR and Determination of Tariff petition for FY 2013-14, submitted the cost of supply study report. The cost of supply study report containing detailed explanation on the approach and the methodology developed, results obtained from the two methodologies referred to as Methodology I and Methodology II, was made available for offering comments/suggestions by the stakeholders. The Commission, after considering various comments/suggestions made by the stakeholders and the response of PSPCL, decided to adopt Methodology II for determination of cost of supply to various categories of consumers. Indicative voltage-wise, category-wise cost of supply for the year 2013-14, on the basis of results obtained with Methodology II, were accordingly determined and made part of the Tariff Order for FY 2013-14.

7.5.2 The Commission observed in the Tariff Order for FY 2013-14 that it would have been ideal to fix electricity tariff for all consumers on cost to serve basis. But, historically, there has been extensive cross subsidization in electricity sector. The tariff for consumers, who pay less than the cost to serve, will need to be hiked significantly to cover the gap between the tariff of subsidized consumers and cost to serve these consumers. Further, the Commission is raising tariff of subsidized consumers gradually to reduce such gap, and at the same time avoiding tariff shock to subsidized consumers and bringing the tariffs of various consumers within reasonable difference as compared to cost to serve these consumers. Keeping this in view and in order to move in the direction of cost of supply, the Commission, in the Tariff Order for FY 2013-14, decided to give rebate to the various categories of consumers getting supply at 11kV/33kV/66kV/132kV/ 220 kV.

7.5.3 **On the basis of data submitted by PSPCL in its Petition for ARR and Determination of Tariff for FY 2014-15 and the ARR approved by the Commission for FY 2014-15, the Commission has determined the indicative voltage-wise, category-wise cost of supply for the year 2014-15, using Methodology II (Appendix II, Volume-I). Further, in order to move further in the direction of cost of supply, the Commission decides to give rebate as mentioned in para 9.2.2 [Note (vii) under Table 9.1].**

7.6 Sale of Surplus Power

7.6.1 PSPCL has projected in the ARR for FY 2014-15 that it shall be having 12904 MU (gross) and 12807 MU (net) surplus power during FY 2014-15, available from tied up sources i.e. central generating stations and the upcoming IPPs in Punjab. In order to manage and to maintain energy balance, the surplus power during FY 2014-15 has been projected to be surrendered by PSPCL, on merit order of power purchase from these stations. After surrender of surplus power, only variable charges have been reduced and fixed/other charges have been considered in the power purchase cost. The impact of fixed charges to be borne due to surrender of surplus power has been projected as ₹1706 crore. It has further been submitted that the projections for power availability as submitted for long term plan of PSPCL differ from the projections submitted in ARR due to difference in demand forecasts based on restricted and unrestricted demand. The projections during FY 2014-15 for generation from Talwandi Sabo TPS, Rajpura TPS and Goindwal Sahib TPS are based on availability of 65% considering the stabilization period after commissioning of plants and PLF of 80%. PSPCL has not submitted any proposal to utilize/sell this power within the State or outside the State. PSPCL has not considered its own thermal generating stations in the merit order dispatch. However, PSPCL has stated that due to capacity overhang across the country, it may be difficult to sell surplus power outside Punjab.

7.6.2 The variable cost of surplus power has been projected in the ARR for FY 2014-15 as ₹3376 crore, which gives average per unit variable cost as ₹2.64. After adding T&D losses @16% as projected by PSPCL in the ARR, the average variable per unit cost works out to ₹3.06 (approximately). Further, average per unit fixed cost of the surrendered power works out to ₹1.31. The total average per unit cost of the surplus power, as such, works out to ₹4.37.

The total loss of fixed cost of ₹1706 crore can be recovered if the whole of the surplus power of 12807 MU as projected by PSPCL in the ARR is sold within the State or outside the State, which seems to be unlikely. It is expected that about 3000 MU out of a total surplus power of 12807 MU may be sold if a discount is given on power consumption beyond a threshold. To make up for all this and adding other unforeseen costs of PSPCL in the form of Fuel Cost Adjustment, increase in fixed costs and some return to PSPCL etc. in the average total cost as worked out above, **the Commission approves rebate of ₹1/kWh(or kVAh) on the category-wise tariff for all categories, except Street Lighting and AP categories**. This will result in reducing extra fixed cost of surrendered power to some extent, the actual quantum of which and savings will only be known at the end of FY 2014-15 and shall be considered by the Commission at the time of true up.

7.6.3 **The criterion for allowing the rebate shall be as under:**

(i) **The rebate shall be allowed for any consumption during the financial year exceeding the consumption worked out on the following methodology:**

The average consumption (including purchase of power under open access) of three years shall be taken as threshold for allowing rebate. In case, period is less than three years or there is reduction or extension in load/demand, average consumption shall be worked out on prorata basis.

(ii) **The billing at the reduced rates after allowing the rebate shall be done once the consumer crosses the target consumption as worked out under Step (i), e.g. if a consumer has average consumption of three years as 10000 units, the consumer shall be entitled for billing at the reduced rate for any consumption exceeding the threshold consumption of 10000 units during FY 2014-15. The rebate shall be allowed to the consumer as and when the consumption of the consumer exceeds 10000 units.**

(iii) **In case of consumers to whom kVAh tariff has been made applicable, their consumption threshold shall be worked out by using conversion factors as mentioned in para 7.1.2 of this Tariff Order.**

7.7 Service Charges

7.7.1 PSPCL is charging 'Service Charges' on monthly basis from all consumers through Electricity Bills at the following rates, as specified in 'Schedule of General Charges':

Service Charges per Month		
DS & NRS	***DS***	***NRS***
Single phase	*₹5/-*	*₹5/-*
Three phase up to 20 kW	*₹10/-*	*₹25/-*
Three phase above 20 kW	*₹20/-*	*₹45/-*
Industrial/BS/RT/Street Lighting		
Upto 20 kW	*₹20/-*	
Above 20 kW and up to 100 kW	*₹75/-*	
Above 100 kW and up to 500 kW	*₹150/-*	
Above 500 kW	*₹450/-*	
AP consumers	*₹6/-*	

7.7.2 PSPCL, in its plea for revision of Schedule of General Charges, has stated that levy of service charges is justifiable because service charges are levied for maintaining the service line to consumers and replacing the same free of cost, in case it gets damaged. PSPCL vide its letter dated 16.04.2014 has intimated that the amount on account of service charges collected during FY 2012-13 was ₹29.23 crore.

The Commission has observed that in the Schedule of General Charges, basically the 'user charges' have been specified, with the intent that an individual shall pay for availing specific personal services of individualistic nature. PSPCL's justification that the service charges are levied for maintaining the service line to consumers and replacing the same free of cost, in case it gets damaged, is also not maintainable, as to maintain the continuity of supply is the obligation of the licensee to ensure un-interrupted supply of electricity to all its consumers under the Act. Moreover, its cost to utility i.e. salary of staff and material cost is being already considered under 'Employee Cost' and 'R&M expenses' in the ARR, while determining the tariff rates.

The Commission, as such, decides that these charges should be discontinued w.e.f. 01.04.2014 and to ensure that discontinuation of service charges do not have any effect on the finances of PSPCL, the Commission allows ₹29.23 crore as provisional deduction from the Non-Tariff Income of PSPCL for FY 2014-15.

7.8 General Conditions of Tariff & Schedules of Tariff

7.8.1 'General Conditions of Tariff & Schedules of Tariff' were approved by the Commission and made effective from April 1, 2006. Subsequently number of amendments & additions were made in the General Conditions of Tariff & Schedules of Tariff by the Commission through different Tariff Orders and other Orders in various Petitions filed before it.

In view of such a large numbers of amendments, Commission is of the view that the General Conditions of Tariff & Schedules of Tariff be updated by incorporating the various amendments for the convenience of the stakeholders. The Commission also felt the necessity to make them comprehensive and align with various provisions of the Act & the Regulations framed there under.

Public objections/comments on the 'draft General Conditions of Tariff & Schedules of Tariff' were invited from public/stakeholders by 04.02.2014 through public notice, published on 04.01.2014 in different newspapers. On request of consumers, the last date for filing objections/comments was extended to 20.02.2014.

7.8.2 The issues highlighted in the objections/comments are summarized below: -

A. General Conditions of Tariff

Issues Raised

i) It has been suggested that the General Conditions of Tariff & Schedules of Tariff should be issued only as regulations under the provisions of Section 181 and other relevant sections of the Electricity Act, 2003.

ii) Service Charges should be withdrawn as the levy of 'Service Charges' is not covered in the Act since the licensee is required to develop and maintain its system to supply electricity in its area of supply.

iii) For Large Supply industry, the requirement of declaring load in KW may be dispensed with in view of PSERC orders and schedule may be amended accordingly.

iv) The provisions for separate Single Point Connection for colony load in case of MS/SP categories may also be made as in case of LS category.

v) Monthly Minimum Charges (MMC) cannot be charged as per Section 45(3) of the Act. Section 45 specifies only levy of fixed charges in addition to charges for actual electricity supply and rent or other charges in respect of meter/electrical plant provided by the Licensee**.** So MMC clause may be deleted and replaced with fixed charges.

vi) For the purpose of computing Contract Demand, bring at par all consumers for the applicability of 0.90 power factor. It has further been suggested to introduce kVA based Tariff for medium supply.

vii) Allow separate domestic supply connection in the factory building of an Industrial consumer.

viii) In case of HT/EHT consumers where metering is on LV side instead of HV side, 3% transformation losses being assumed are very much on higher side. Full load iron and copper losses of transformer are in the range of 1 to 1.25%. PSPCL should not penalize the consumer for not making available metering equipment.

ix) Where a consumer has deposited all the charges and created the entire infrastructure to receive supply at the specified voltage, but due to constraint connection could not be released at the specified voltage then the consumer may be given an option either to receive supply at lower voltage without levy of surcharge or to seek refund of difference of cost of line at higher and lower voltage and pay the voltage surcharge.

x) LT voltage surcharge may be reduced from 15% to 7.5% and limit of 2500 kVA may be enhanced to 4000kVA for supply at 11 kV. In case of DS/NRS/BS/LS consumers with Contract Demand exceeding 4000 KVA and catered at 11 kV against specific voltage of 33/66 kV, surcharge may be levied @ 5% instead of 10%.

xi) For Consumers getting supply at 220/132 kV against specified voltage of 11/33/66 kV, a rebate of 5% instead of 25 paise per unit may be allowed. Similarly for consumers getting supply at 66/33 kV against specified voltage of 11 kV, a rebate of 5% has been suggested instead of 20 paise per unit.

xii) As per existing Regulation 13.5, rebate of 7.5 % is admissible to MS, SP, DS and NRS consumers catered at 11 kV or higher voltages against the specified voltage of 400 volts. This rebate was allowed to cover up for transformation losses and cost incurred by the consumer to get supply at higher voltage. However in the draft Regulations such consumers have been clubbed with consumers in whose case the character of service is

11KV, thus depriving them their legitimate right of 7.5% rebate. For such existing consumers, this rebate needs to be restored w.e.f.2013 as the terms of their agreement cannot be changed / modified afterwards.

xiii) In view of PSPCL becoming surplus in power, the issue of imposition of Peak Load Restrictions needs to be reviewed. Further, there is no justification for imposition of PLEC during the months of October to March when there is no AC load and there are no system constraints.

xiv) The lighting load in the premises of accredited news papers should be charged industrial tariff instead of NRS tariff

xv) PSPCL has submitted that option to seasonal industry under clause 18.4 to opt for general industry may cause confusion in implementation.

xvi) PSPCL has proposed that all AP connections shall be released only after installation of minimum BEE four star labeled and ISI marked motor pump sets & accessories.

xvii) Regarding Late Payment Surcharge, PSPCL has advocated for keeping status quo. The representative of industry submitted that the introduction of interest charges after 15 days will make the accounts of late payment surcharge very cumbersome for ordinary consumer. The 15 days period may be changed to 6 months. It has also been suggested to increase 7 days period to 15 days and 15 days to 30 days.

xviii) The facility of Single Point Supply to Co-operative Group Housing Societies/Employers may also be extended to Residential Colonies, Shopping Malls/Building Complexes/Industrial Estates approved by the State Government/PUDA etc.

xix) Common services in case of Single Point Supply have been proposed under domestic supply in clause 22.1. However, in clause 22.2, these common services are covered under Non Residential Supply. Common services viz. Lifts, Water supply pumps, Sewerage treatment Plant and Clubs/Community Service Centre used by residents of the Society without any commercial use, should be covered under Domestic Supply.

xx) A rebate of 10% on the total consumption of electricity recorded at Single Point connection for common services in a Co-operative housing society/Employers colony be allowed on the pattern of DS supply.

Views of Commission

i) The General Conditions of Tariff and Schedules of Tariff are tariff related matters and hence these are being made part of the Tariff Order as per the Act for ready reference of consumers.

ii) Regarding Service Charges, refer para 7.7 of this Tariff Order.

iii) In case of LS & other demand based categories, the information from the consumer regarding connected load is required for ensuring compliance of safety standards prescribed by CEA and also for various studies of load forecasting. However, there is no penal provision for exceeding the sanctioned load.

iv) As per PSERC (Single Point Supply) Regulations, an employer can get single point supply for its employees residing in a separate colony. In view of small complex of SP/MS consumers, it may not be feasible to carve out a separate colony for employees and such facility can be misused leading to unnecessary disputes.

v) Monthly Minimum Charges (MMC) is a kind of fixed charge for covering the fixed cost incurred by the Licensee for providing electricity supply to the consumers.

vi) The clause has been amended as "Consumers with load exceeding 100 kW and all MS/ BS consumers, shall declare the maximum demand in KVA which shall not exceed 100% of the sanctioned load in kW and converted in kVA by using 0.90 power factor". Regarding introduction of kVA base tariff for MS category refer para 7.4 of this Tariff Order.

vii) Separate DS connection in the factory building of an Industrial consumer may lead to disputes regarding misuse of supply.

viii) The transformation loss figure of 3% has been retained in view of the type of distribution transformers being used in the field.

ix) The levy of surcharges was reviewed in the Tariff Order for FY 2011-12 and rationalized after detailed analysis, discussions and inviting public objections.

x) The rebates on the basis of cost of supply introduced by the Commission in the Tariff Order 2013-14 have been suitably revised in this Tariff Order for FY 2014-15.

xi) Rebates were withdrawn w.e.f 01.04.2010 in the TO for the FY 2009-10 and rebates on the basis of voltage wise/category wise cost of supply have been introduced w.e.f 01.04.2013.

xii) The issue of PLEC & introduction of ToD tariff has been dealt with separately in para 7.3 of this tariff Order.

xiii) The office/lighting load of news paper printing presses is covered under NRS Tariff as per the existing conditions and there is no sufficient ground for changing the clause .

xiv) The clause has been suitably amended and procedure has been laid down for seasonal industry to avail option for running as general industry.

xv) Sometimes star rated motors may not have ISI mark so imposition of both the conditions may not be practicable. A star rated motor is more energy efficient than a simple ISI rated motor.

xvi) Late Payment Surcharge is levied by the distribution licensee to ensure timely payment of electricity bills in order to maintain cash flow of the utility. The present provision of levy of 10% surcharge on full amount even in case of delay by a few days was being perceived to be harsh by the consumers. The clause has been sufficiently rationalized to protect the interest of the utility as well as of the consumers. Regarding apprehension that calculation of interest will become cumbersome, it is pointed out that in the era of computerized billing, no problem in computing late payment surcharge is visualized by the Commission.

xvii) As per Hon'ble APTEL order dated 11th July 2011 in appeal no. 155 of 2010, the Malls / PUDA colonies/ Industrial Estates / Shopping Complexes cannot be covered under Single Point Supply.

xviii) Supply for common services under NRS category is given only in case a co-operative group housing society/employer does not apply for single point supply connection under PSERC (Single Point Supply to Co-operative Group Housing Societies/Employers) Regulations, 2008.

xix) The issue of rebate and other terms and conditions for supply at Single Point are covered under PSERC (Single Point Supply to Cooperative Group Housing Societies/Employees) Regulation, 2008 and the proposal of PSPCL shall be taken care of while amending these Regulations.

B. Schedules of Tariff

Issues Raised

i) Dairy farming and poultry farming has been included in the draft schedules of industrial Tariff (LS/MS/SP). Dairy/poultry farming is part of agriculture activities. As such, the same may be covered under AP Tariff category instead of Industrial category and 24 hours supply may be ensured for these activities. Also huge expenditure is involved for getting connection under Industrial category from UPS/Industrial feeder instead of Agriculture feeder.

ii) If the consumer is to be made liable to compensate the distribution licensee in case damage to licensee equipment due to default on the part of the consumer, then the licensee should also be made liable to compensate the consumer in case of any damage to his equipments & loss of production due to system jerks.

iii) If the supply to a MS consumer is given at 11 KV (at consumer's discretion) then, in that case, the consumer will have to bear transformation losses, cost of T/F and allied metering equipment also. As such, in such a case, a rebate of 7½% (3% for losses & 4.5% towards cost of equipment), as was admissible up to 31.03.2013, should be allowed.

iv) The load surcharge is proposed to be increased from existing ₹750/kW to ₹1000/kW in case of MS/SP categories. This will place these consumers at a disadvantageous position viz a viz LS consumers where it is proposed to retain the present demand surcharge of ₹750/KVA. Load surcharge in case of AP consumers shall be at the rate of Rs.1000/- per BHP for each default.

v) On behalf of Department of Local Government, it has been brought out that the philosophy of levy of annual minimum charges on the basis of total connected load is not rational since 100% street lights are never functional around the year. Further, renewal Charges for sodium vapour lamps may also be provided for various categories of public lighting schedule.

vi) The condition regarding Global Gap Certification (GAP) is meant for export markets only and may not be insisted for Green House farming which involves irrigation with drip fertigate with automation to lower indoor temperature or artificial foggers etc. and the crop is sold in the market.

vii) Similarly Hazard Analysis & Critical Control Point (HACCP) is like ISO certification meant for sale of agriculture commodities in international market. In the present scenario, the cut flower and exotic vegetables (Colored Capsicum, tomatoes, cherry tomatoes, strawberry, Kheera etc.) sold in the Punjab/Indian market are not GAP or HACCP certified. Therefore, this condition may not be insisted.

Also the green house roof rain water harvesting system, storage tank and reuse capability as per specifications of the Department of Soil and Water Conservation (Govt. of Punjab) may not be insisted. Only normal rain water harvesting and recharging system to raise the water table should be specified.

The Conditions laid down in the availability clause for AP High Tech category (SXI.1.2–8.3) are irrelevant and should not be made applicable for green house farming. The general AP Tariff schedule should be made applicable and at least 12 hours power supply during day time throughout the year should be made available.

The certification by the district horticulture department should only be insisted in case of AP High-tech applicants.

On the other hand, PSPCL has opined that AP High-tech is a commercial profitable venture as such the same may not be covered under AP category (meant for small poor farmers) and is justified to be covered under AP High-Tech category.

Views of Commission

i) Dairy/Poultry farming has been covered in the Industrial category as per recommendations of the State Govt. Also, availability of 24 hours supply, which is one of the main concern of this category of consumers, cannot be ensured from AP feeders due to system constraints.

ii) In the Supply Code, technical standards have been prescribed for voltage variation and the consumer can lodge claim for compensation, if any, from the Licensee.

iii) Rebates based on voltage wise category wise cost of supply have been introduced w.e.f 01.04.2013 and other related rebates have been withdrawn. However, in case of rice shellers, cold storage, ice factories &

stone crushers under MS category getting supply at 11 kV and having installed own transformer has been allowed an additional rebate of 3 paise per unit over and above the voltage wise rebate based on cost of supply.

iv) Load surcharge and demand surcharge cannot be equated. However with the introduction of contract demand for MS category consumers, load surcharge in MS category consumers has been withdrawn. The load surcharge for AP consumers has been levied on per BHP basis.

v) While agreeing that all the lamps/tubes are not functional at the same time due to various reasons beyond the control of local bodies/Licensee, the Commission has decided that annual minimum charges shall be calculated on the basis of 70% of the sanctioned/connected load of the consumers. The provision for Sodium vapour lamps has been made in the schedule.

vi) Regarding simplification of conditions for availing supply under AP High tech category, the Commission observes that in order to promote diversification of agriculture activities and in view of the fact that the agriculture products grown by green house farmers are mostly meant for Indian market, it is appropriate to impose only those conditions which are as per state government policy for such farming. Moreover, in case such farmers export their products they will be automatically required to comply with the International standards. The Commission, therefore, decides that production of certificate from Director/Agriculture and/or Director/ Horticulture or any other officer authorized by the Govt. of Punjab, to the effect that the farming being carried out by the consumer involves use of high technology requiring power supply to produce quality products such as vegetables/fruits/seeds/flowers etc. to meet the standards of domestic/International markets will be sufficient.

In view of the above, the Commission approves the General Conditions of Tariffs (Annexure-I, Volume-II) and Schedules of Tariffs (Annexure-II, Volume-II). The category-wise tariffs for FY 2014-15, as determined by the Commission in para 9.2, have been incorporated in Schedules of Tariffs.

Chapter 8
Commission's Directives

Compliance of Commissions Directives

PSERC has a statutory function under Electricity Act, 2003 to guide the Distribution Licensee into becoming an efficient, commercially viable entity and to function at a high level of efficiency. The Commission issues directives to achieve these objectives through its Tariff Order every year to enable the Distribution Licensee achieve higher performance and efficiency. Measures to improve quality of service being rendered to consumers have also been given due importance in these directives.

The Commission's directives are an integral part of the Tariff Order which the Distribution Licensee is obligated to comply with in order to lower its cost of supply to the consumers and improve consumer service. However, it is observed that compliance of the directives issued by the Commission to PSPCL in public interest in the previous Tariff Orders has not been entirely satisfactory. The status of compliance of directives issued in the Tariff Order for FY 2013-14 and PSERC comments along with further directives for compliance by PSPCL during FY 2014-15 is summarized as under:

An overview of the directives issued to PSPCL in Tariff Order for FY 2013-14, its compliance & directives for FY 2014-15

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
8.1	**T&D Loss Reduction**	**(i) Shifting of meters outside consumer premises:** **a) <u>Non APDRP (Rural) Area:</u>** PSPCL should ensure: i) completion of job (20.81 lac meters) under Phase-I as per the revised target i.e 31.03.2013. ii) that out of 17.20 lac meters under Phase II, 5 lac meters shall be shifted departmentally by DS Organization up to 30th June 2013. The work of balance meters for which work is to be got executed on turnkey basis, must be	Total No. of GSC (DS+NRS) Meters: 57.14 + 9.27= 66.41 lac. Meters shifted: 36.97+5.75=42.72* lac. Meters yet to be shifted: 14.14+2.19+7.36=23.69 lac *42.72 lac Includes all the meters that have been shifted outside consumer premises into pillar boxes or outside. **Schedule for shifting of Balance Meters:** (1) **14.47 lacs** All 18 nos. schemes for shifting of in non-APDRP areas have been sanctioned by REC. Work order issued on 23.10.2013 on turnkey basis under Non- APDRP Scheme for rural & urban areas.	Commission notes with concern the slow progress in shifting of balance meters. More than 1/3rd GSC meters are still to be shifted. Also, Commission's directive to shift 5 lac meters departmentally up to 30th June 2013 has not been complied with. The practice of combining the status report of shifting of meters under Non APDRP (Rural) Area & R-APDRP (Urban) Area is not

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		completed by 31st March 2014. **R-APDRP (Urban) Area:-** PSPCL must: i) complete the job of shifting balance meters of the 15 towns (out of 5.55 lac meters), as per the revised target i.e. 31.3.2013.. ii) shift at-least 50% of the balance meters of remaining towns covered under R-APDRP during 2013-14. Priority be given to towns having high losses.	Progress of shifting of meters. 0.33 lac. **Completion period** – 14 months from the Date of issue of W.O. i.e. Dec. 2014. (2) **2.74 lacs** Being done in house by the PSPCL under Non-APDRP Schemes in rural/suburban (Non APDRP) areas. Progress ending Mar., 14 = 0.55 lac. Balance ending Mar.,14 = 2.19 lac Completion by 31.3.2015 (3) **7.36 lacs** Under APDRP Part-B Schemes in the Major Towns (47 Towns) out of which W.O. for 15 towns are already issued and work in progress. Remaining 32 Towns shall be covered in W.O. issued on 10.5.2013 for which survey is being done. Progress: Work yet to start Completion within twenty six months from 10.5.2013 (Date of W.O.) i.e. up to 07/2015.	appreciated. A clear cut scheme-wise detail of meters shifted/ to be shifted under Non-APDRP & R-APDRP areas be submitted quarterly to the Commission. It is also a matter of serious concern that PSPCL delayed the submission of DPRs for Phase II and allotted the work of shifting of balance meters under non-APDRP in Oct. 2013 resulting into a delay of 7 months for starting of Phase II after completion of Phase I under which 20.81 lac meters were shifted. Start of Phase II should have been dovetailed with Phase I completion. This has affected the T&D loss reduction programme of PSPCL adversely. Responsibility for this delay need to be fixed by PSPCL and report sent to the Commission within three months of issuance of this Tariff Order. PSPCL must complete the job of shifting the balance meters as per the revised target. The shifting of meters be conducted on priority number one on higher loss feeders and a PERT in this regard be submitted to the Commission along with ARR for 2015-16.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
		(ii) Replacement of Electro-mechanical (E/M) meters: The earlier directive was to replace all E/M meters (1ф meters and 3 ф meters) during 2012-13 but PSPCL failed to meet the target. PSPCL should replace 50% of remaining E/M meters during 2013-14 and balance during 2014-15 with first priority for high loss feeders. It shall be the last extension in the compliance period & any slippage will not be acceptable.	**a)3-ф meters: SP/DS/NRS** **Total requiring replacement :** 13132 nos.(reconciled) Replaced: 6433 nos. (ending 3/2014) Balance: 6699 nos. **Target**: Balance will be replaced by 30.9.2014. **AP** Target : 47711 nos. Replaced : 9794 nos. Balance : 37917 nos. **b)1-ф meters (DS/NRS)** **Target : **1769205 nos. Replaced **:** 662172 nos.(ending 3/2014) Balance **:** 1107033 nos **Target of Completion:** 3 lac meters per year.	**a)3-ф meters: SP/DS/NRS** Commission directs PSPCL to ensure replacement of all 3 phase (other than AP) E/M meters as committed by the targeted date of 30.9.2014. **b)1-ф meters (DS/NRS)** PSPCL has failed to comply with the directive to replace 50% of remaining E/M meters during 2013-14 despite clear directions that no further extension shall be allowed. PSPCL was to replace the E/M meters along with shifting of meters. The target for shifting of all meters in Non-APDRP areas is Dec 2014 & in R-APDRP area is July 2015. The replacement must be completed within these target dates.
		Further it should be ensured that all **dead stop/burnt/ defective meters** are replaced by 31.05.2013 and quarterly status report must be submitted regularly to the Commission.	The matter is already under consideration of PSERC in the Suo-Motu petition No.19/2013. All key exceptions ending 2/2014 was submitted to Commission during directive review meeting on 19.3.2014.	There are still more than 7600 burnt /defective meters prior to June 2013 which are yet to be replaced. This is a gross violation of Standard of Performance approved by the Commission. PSPCL is directed to comply with the time frame mentioned in SoP.
		(iii) Conversion of LVDS to HVDS: While reiterating its view that: • the proposal of PSPCL to install higher rating Distribution Transformers	Out of 9.5 lac existing/ old AP connections fed on LT feeders; a) 2,21,442 AP connections have been converted by installing 1,86,072 Nos Dedicated DTs. b) Due to small rating transformer being	Commission's directive to convert atleast 25% LVDS tubewell consumers into Less LT HVDS per year starting from 2013-14 has not been complied with by

<table>
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<tr><td></td><td></td><td>(DTs) to feed AP connections through LT line up to 200 meters may be counterproductive & result in high line losses.
• use of 25 & 63 kVA T/Fs should be avoided as far as possible and if necessary, must not be used to feed more than three AP motors.
• instead of ordinary LT cable, aerial bunched conductor should be used to avoid unauthorized running of motors.
• possibility of reducing line length from 200 meter to an optimum level may also be explored.
Commission directed that atleast 25% LVDS tubewell consumers should be converted into Less LT HVDS per year starting from 2013-14 with first priority for high loss feeders, so that the project is completed by 2016-17.</td><td>highly prone to theft, increase in losses due to additional links of GO switches and increase in HT spur lines making patrolling/ identification of faults/maintenance difficult, PSPCL has modified the HVDS scheme by allowing LT line upto 200 mtr. and installing higher rating DT's of 25 & 63 KVA by clubbing more than one AP connections.
4 no DPRs have been sent for sanction of REC for conversion of 24684 AP tube wells of high loss feeders into HVDS as per modified scheme.
c) As per PSERC's comments /directive for 2013-14, detailed planning for conversion of balance 7.04 lac AP connections to HVDS in 4 years .i.e up to 2016-17 is being prepared after which schemes will be got sanctioned from REC for execution of works in time bound manner.</td><td>the utility.
Commission now directs PSPCL to initiate steps to convert atleast 33% LVDS tubewell consumers into Less LT HVDS per year so as to achieve the target by Mar, 2017. None of the 25 kVA & 63kVA transformers depending upon size of the motors be used to feed more than three AP motors and Aerial Bunched Conductor be used to feed these consumers to avoid theft of power.</td></tr>
<tr><td></td><td></td><td>iv) Agricultural Feeders Loss Reduction Scheme:
PSPCL was directed to submit execution plan by 31.05.2013 for implementing the scheme aiming at reducing the length of 11kV & LT lines, sparing 11kV poles by re-routing the AP feeders & implemented in parallel with conversion of LVDS to Less LT HVDS.</td><td>During preparation of DPRs for conversion of LVDS to less LT HVDS, care will be taken to reduce length of 11KV & LT lines, sparing 11kV poles, conductor & other allied parts. During the execution of 19 Nos HVDS schemes re-routing was done and material worth approx. Rs. 4.00 Cr. was dismantled. Besides above following works have been also executed :
<table><tr><td>Description</td><td>Progress during 2013-14</td></tr><tr><td>Nos. of feeders Deloaded</td><td>1058</td></tr><tr><td>Conductor (km) Replaced/ Augmented.</td><td>739</td></tr><tr><td>T/F Deloaded (nos.)</td><td>34788</td></tr></table></td><td>PSPCL's admission that material worth rupees four crore was dismantled while executing 19 no. HVDS schemes prove the benefits of this scheme. The directive for 2013-14 to re-route the AP feeders to attain optimum length of 11 kV & LT lines, sparing electric poles & other material in parallel with conversion of LVDS to less LT HVDS be implemented all over Punjab.
The steps taken to deload lines & transformers and replacement/augmentation of conductor are appreciated. This must continue during 2014-15.</td></tr>
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Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
		(v) Installation of Capacitors on: **a) 11kV feeders**: The Commission advised the utility to ensure that all new installations be provided matching MVAR addition for power factor improvement. **b) DTs** The Commission notes the action taken by utility.	a) Target revised from 2700 MVAR to 3300 MVAR as per requirement supplied by DS offices against which 600 MVAR has been procured. **Progress:** 2959.35 MVAR of 11 KV HT capacitors on 11 KV feeders and 499.487 MVAR 11 KV capacitor banks have been installed at various 33/66 kV S/Stns. up to 31.03.14. All the new installations are being provided with matching capacitors. b) Under R-APDRP part-B project in 15 towns by APDRP the work of installation of LT shunt capacitor is completed. For balance 25 no. towns to be covered under R-APDRP project the WOs have been issued on 10.5.2013 and this work will be completed by 9.7.2015.	The Commission notes the compliance. The process should continue proportional to the growth of power network/load.
		vi) Low Cost Measures **(a) Earthing** : **(i) DTs** PSPCL need to regularly monitor earth resistance at its installations (including DTs) on annual basis as directed. Certified Earth Resistance-cum-Earth Leakage current statement at PSPCL installations as directed in TO 2012-13 be submitted to the Commission by 31st July every year.	The instructions had been issued to field offices to regularly monitor earth resistance on annual basis and directions are being complied.	Certified Earth Resistance-cum-Earth Leakage current statement should be submitted by PSPCL within two months of issuance of this Tariff Order.
		(ii) Adequacy of existing switchgears & earthmat at all 33/66 kV S/S: List of sub-stations where earthing has been strengthened may be submitted to the Commission.	The list of 91 No.sub stations where earthing has been strengthened stands submitted to PSERC vide this office memo No. 2439 dated 10.5.2013.	The Commission notes the compliance. The process of strengthening the sub-station earthing system must be carried out by PSPCL on regular basis.
		(b) Tightening of loose joints and nuts/bolts PSPCL should ensure that this exercise is carried out regularly and certificate for completion of this work be submitted by 30th June every year.	Directions have been issued to field offices to carry out the exercise.	The Commission notes the compliance. The exercise must be carried out annually & a certified statement be submitted to the Commission annually by 31st July.
		(c) Load balancing at DS transformers:	Directions have been issued to field offices to carry out the exercise.	The Commission notes the compliance. The exercise

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<tr><td></td><td></td><td>PSPCL should ensure that exercise of load balancing of DS transformers is carried out regularly and certificate for completion of this work be submitted by 30th June every year.</td><td></td><td>must be carried out annually & a certified statement be submitted to the Commission annually by 31st July.</td></tr>
<tr><td></td><td></td><td>(d) Reduction in Transformer damage rate:
PSPCL should submit the road map to achieve the target of deloading of DTs & bringing down damage rate as per target for urban/rural areas (less than 1% in urban & less than 4% in rural areas in 3 years).</td><td>Small capacity Transformers installed in PSPCL are as under:
Ending March, 2014
<table><tr><th>Detail</th><th>6.3 kVA</th><th>10 kVA</th><th>16 kVA</th></tr><tr><td>Total installed</td><td>102327</td><td>150638</td><td>95393</td></tr><tr><td>Damaged during 2013-14</td><td>5835</td><td>9113</td><td>7867</td></tr><tr><td>Damage rate (%)</td><td>5.70</td><td>6.05</td><td>8.25</td></tr><tr><td>Overloaded DT's</td><td>8800</td><td>17526</td><td>16512</td></tr></table>PSPCL executed conversion of LVDS to HVDS for AP consumers. To prevent installation of high capacity AP motors, loading of small DTs was kept 100%. During past two years it is learnt that small DTs have very low overloaded capacity and in paddy summer season when voltage of grid dip, current drawn by AP motors increases, resulting in excessive damage of small capacity DTs.
PSPCL in its effort to reduce damage of DT's has drawn road map of deloading of above overloaded DT's in 2014-15 & 2015-16.</td><td>The damage rate of small capacity Transformers is on a higher side. PSPCL is directed to deload all overloaded transformers by 31st May, 2015</td></tr>
<tr><td>8.2</td><td>Implementa-tion of R-APDRP Scheme:</td><td>(i) Baseline data
PSPCL should ensure timely completion of the work.</td><td>All the meters for Ring fencing and Boundary metering stand installed. Ring fencing data and baseline data of 47 no. towns have been cleared by WAPCOS and accepted by M/s PFC Ltd.(nodal agency)</td><td>The Commission notes the compliance.</td></tr>
<tr><td></td><td></td><td>(ii) R-APDRP(Part-A)
The Commission reiterates its directions to PSPCL to implement its IT plan across the State on priority ensuring that the grant component in R-APDRP scheme is fully availed by the State. In case of failure to do so, loan amount eligible for conversion into grant shall not be taken in to account by</td><td>IT Systems are being deployed in 47 towns eligible under R-APDRP Part A. The remaining areas are to be covered under Non R-APDRP except GIS and AMR of Distribution Transformers. Till date the IT Systems have been deployed in 7 towns.
The work which has been held up due to in-activity of ITIA because of techno-commercial reason has been revived in June, 2013.
Implementation Progress:</td><td>The Commission notes the action being taken and reiterates its directions to PSPCL to implement its IT plan across the State within the time frame fixed by MoP. Commission reiterates its direction that in case of failure to do so, loan amount eligible for</td></tr>
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Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
		the Commission while processing the ARR.	• GIS work has been restarted at Mohali, Patti, Sirhind, Nawanshahar, Faridkot, Ropar, Rajpura, Nakodar & Jaito towns. GIS has been completed in Malout town. • The billing application has been largely stabilized leading to correct, complete & timely billing. • Most of software gaps in MBC & MDAS modules have been plugged and remaining shall be completed by 31.5.2014 **Remarks :** The work is likely to be completed by 30.06.2015	conversion into grant shall not be taken in to account by the Commission while processing the ARR.
		(iii) R-APDRP (Part-B) The Commission reiterates its directive that R-APDRP scheme should be implemented by PSPCL within the given time frame as fixed by MoP/GoI/PFC so that the 50% grant under the scheme is fully availed. In case of failure to do so, loan amount eligible for conversion into grant shall not be taken in to account by the Commission while processing the ARR.	Work orders for shifting of meters and installation of LT shunt capacitors in 15 no towns were allotted in the year 2011. The shifting of 3.95 lac meters (out of 5.55 lac) stand completed by 31.03.2014. The work of installation of LT shunt capacitor has already been completed. For the balance work (strengthening and improvement of distribution system, new Grid substation, augmentation of Grid substation and transmission system up to 66KV etc.) in above 15 no. towns and all the works in remaining 25 no. towns, 40 WOs for 39 towns has been issued on 10/5/2013 to three contractors i.e. A2Z Maintenance & Engg Services Ltd, M/s Godrej & Boyce Mfg. Co. Ltd, & M/s Larsen & Tourbo Ltd. PSPCL has issued installation orders for execution of work where joint survey has been completed. Joint survey by consortium of A2Z Gurgaon is still in progress. M/s Godrej & Boyce Mfg. Co. Ltd. & M/s Larsen & Tourbo Ltd. have already started procurement of material as per joint survey/installation orders issued.	PSPCL to implement the scheme within the time frame fixed by MoP. Commission reiterates its direction that in case of failure to do so, loan amount eligible for conversion into grant shall not be taken in to account by the Commission while processing the ARR.
		iv) Management Information System (MIS) PSPCL should expedite the implementation & include provisions of MIS for PSERC returns in its IT plan as directed earlier.	MIS Performa supplied to the ITIA and the same are being processed /analyzed and the reports in the desired formats will be available by 31.05.2014.	PSPCL is directed to implement the project in the stipulated time.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
8.3	**Energy Audit**	**i) Energy Audit of Distribution System:** PSPCL must ensure DT level energy audit of at least 7 number Go Live towns by 30.09.2013 on the lines of TO 2012-13 directives & share the result with the Commission. For Non-APDRP areas, till DT meters are made operational. 11kV feeder wise energy audit reports must be generated by updating the consumer indexing & shared with the Commission by 30.11.2013.	The achieving of master data validation that includes the network hierarchy is being carried out town wise. The complete EDM (Energy Data Management) solution is in final stage of testing on the basis of increased MDAS data now available. **Remarks:** Energy audit of 7 towns already integrated will be available after the system gets stabilized and the same will be done before 31.05.2014.	The delay in conducting energy audit of 7 towns already integrated with the system has been viewed seriously by the Commission. PSPCL shall furnish by 30.09.2014: a) Energy audit of already integrated 7 towns. b) 11kV feeder wise energy audit reports generated for Non-APDRP areas by updating the consumer indexing.
		(ii) Energy audit of Thermal Generating Stations: Efforts should be made for improvement in SHR (Station Heat Rate) and Reduction in auxiliary consumption of the Thermal Generating Stations at least to the normative levels specified in the Tariff Order. Enough funds have been placed by the Commission at the disposal of PSPCL to implement CPRI recommendations.	**GGSSTP Ropar:** Heat Rate Study, which includes Energy Audit of all the 6 units of GGSSTP was got conducted from M/s CPRI, Bangalore. M/s CPRI has concluded that units Heat rate of GGSSTP was 2621 Kcal/kwh (at the time of test), which can be improved by implementing the suggested Short Term, Medium Term & Long Term measures; and the achievable heat rate shall be 2600, 2564 & 2529 Kcal/kwh respectively on implementing those measures. GGSSTP is implementing the recommendations in a phased manner, depending upon their technical feasibilities, availability of funds and shut down of the units. **GNDTP, Bathinda** Energy Audit (along with Heat Rate Study) of GNDTP Unit-1&2 has been got conducted from M/s CPRI, Bangalore, Recommendations of the agency are being implemented in a phased manner at the plant. Energy Audit of unit-3&4 was not carried out due to their Renovation & Modernization. COD (Commercial Operation Declaration) of unit-3 after its R&M was made w.e.f. 7.12.2012.and the unit is running satisfactorily. R&M works of unit-4 are under progress and the unit is to be test synchronized by 30.04.2014.	The Commission notes the action being taken. The Energy Audit at PSPCL's thermal plants & other installations be continued as a regular exercise as laid down by BEE.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
			GHTP Lehra Mohabbat. The work order has been placed upon M/s National Productivity Council Hyderabad.	
		(iii) Energy Audit of Hydro Generating Stations: Compliance noted. Action plan to reduce the GT Losses of Shanan, ASHP & MHP be submitted to the Commission.	Compliance of Directives issued by the commission has already been made as the Auxiliary losses of all the Hydro Stations of PSPCL are comparable with NHPC Projects e.g. CERC norms set for Aux. consumption of Chamera HEP are 0.4% of the generated energy. Detail of auxiliary consumption and G.T. Losses in respect of all Hydel Projects of PSPCL ending Mar., 2014 is tabulated below : <table><tr><td>Sr No.</td><td>Name of Plant</td><td>Aux.Cons. (%)</td><td>(%) GT Losses</td></tr><tr><td>1</td><td>RSD</td><td>0.18</td><td>0.15</td></tr><tr><td>2</td><td>ASHP</td><td>0.08</td><td>0.33</td></tr><tr><td>3</td><td>UBDC</td><td>0.28</td><td>0.36</td></tr><tr><td>4</td><td>MHP</td><td>0.16</td><td>1.48</td></tr><tr><td>5</td><td>Shanan</td><td>0.06</td><td>1.25</td></tr></table>**Remarks :** 1. **MHP:-** Power generated in the generating unit is carried out to LV side of generated unit to step up T/F through the 11 KV Aluminum cables (500 mm^2 at PH1&2 and 800 mm^2 at PH 3 & 4) for each phase i.e. total 6 no. Aluminum cable have run load with length of the each cable 105 meter. The losses in these cables are also contributing to GT losses. Further, generator transformers of this plant (PH-1 to PH-4) are very old and were commissioned during 1983, 1988 & 1989. 2. Work for replacement of 132 KV CT/PTs as per State Grid Code is in progress. **3. Shanan :-** Due to installation of single phase transformers instead of 3-phase due to space constraints and are about 30 years old, contributing to higher GT losses. These need over hauling for which action is being taken in a phased manner. Two new T/Fs are under procurement which will be energized on receipt thus sparing old T/Fs for their overhaul.	The Commission notes the action being taken. The process needs to continue & monitoring report submitted to the Commission annually.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
8.4	**Demand Side Manage-ment Energy Conser-vation**	**i) Bachat Lamp Yojna:** PSPCL should frame proposal to implement the scheme outside BLY by providing CFLs to consumers on subsidized rates through some BEE approved Energy Service Company (ESCO). Commission may approve cost of this efficient lighting programme along with other approved DSM initiatives as pass through within the provisions of DSM regulations during true up.	Under BLY Project a total 16,38,059 no. of CFLs have been distributed in 4,93,999 no. of households in 5 no. of CPAs by M/s C Quest Capital Malaysia. C Quest has not completed CFL distribution in all the 7 no. of registered CPAs. Meeting between CQC, CE/TA&I, PSPCL and BEE was also held at BEE office Delhi on dated 15.02.2013. Efforts were made to pursue M/s CQC to complete at least the pending 2 no. of registered CPAs and on the basis of discussions in meeting with M/s CQC, CE/TA&I decided that 'if within a period of 2 years from date, that is 30.04.2015, the spot price of CERs recovered to EURO 8 as registered on point carbon website, CQC will complete the remaining CPAs' A consumer survey was also carried out in all the PSPCL circles, 3000 no of consumers were covered. It was found that after installation of meters outside consumer premises and in pillar boxes, consumers have started using CFLs to reduce their energy bill by themselves.	The Commission observes that the replacement of ICLs with CFLs outside BLY has not been explored by PSPCL. The option for replacing ICLs with LED or CFL should be explored by PSPCL and submit the plan within 3 months of issue of this Tariff order.
		(ii) Agriculture DSM Commission should be apprised of the feeders selected for implementing Agriculture DSM along with execution plan for 2013-14. The directive of 2012-13 is reiterated and PSPCL should come up with the proposal to replace 100% AP pumpsets with efficient pumpsets.	Bids for Ag DSM Pilot Project covering 6 no. feeders of Muktsar and Tarn Taran districts were floated in 2011-12. Despite repeated extensions and modifications no response was received. Meetings with pump manufacturers and BEE were also conducted so that the project can be started. After due deliberations, it was decided by the competent authority to select new feeders so that the results of pilot project can be extrapolated for the whole state of Punjab. After this EESL shown interest to implement Pilot Project of Ag.DSM Project on ESCO mode where in all the capital investment of the project will be borne by M/s EESL and investment will be recovered through energy saving achieved. Regarding this a meeting was held with EESL on dated 18.02.2014. In this meeting M/s EESL suggested that it require at least 2500 nos. of Agriculture pump sets to be replaced under Ag DSM project in ESCO mode. A proposal has been initiated for approval from the competent authority regarding Ag.DSM Scheme and as discussed	No tangible action has been taken by PSPCL to take up the pilot project despite repeated directions from the Commission. PSPCL is directed to take immediate action to undertake Agriculture DSM pilot project on top priority on the lines of a pilot project executed by EESL for 600 AP pumps in Hubli where energy saving of 37% has been reported. Based on this pilot project, HESCOM, a distribution company of Karnataka has awarded EESL with work order for over 10000 pumps.

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			and agreed in the meeting, first, DPR of 40 Nos. AP pump sets will be finalized and thereafter if the DPR is approved by competent authority this scheme will be implemented for 2500 nos. of AP pump sets on Pilot Basis.	
		(iii) DSM Plan Commission notified DSM Regulations in March 2012 & PSPCL was required to establish technical potential for DSM in the state on the basis of load/market research within 6 months of notification and prepare comprehensive DSM plan within one year. Commission directs that technical potential report must be submitted latest by 30.06.2013. Technical Potential estimate as per data & information available with the Commission shall be declared after 30.06.2013 & PSPCL shall be required to achieve atleast 10% of energy saving in potential declared by the Commission during the year 2013-14. PSPCL can execute following DSM schemes where the suppliers can approach the consumers directly for replacement of inefficient electrical appliances at concessional rates e.g.: a) Replacing electro-magnetic choke with electronic choke for tubelight. b) Replacing old fans with energy efficient fans. c) Replacing old ACs and Refrigerators with energy efficient ones.	Specifications for the engagement of consultants for the preparation of complete DSM Plan for the state of Punjab have been prepared & approved and tender process for the same has been started. Three nos. bids were received and technical evaluation of tenders has been completed. Financial bid has also been opened. M/s MITCON the lowest bidder has given a presentation to PSPCL management regarding their modus operandi and survey sample size. The case has been submitted to the PSPCL Management for further decisions. Work order will be awarded to the consultant as soon as tender process is completed.	It is matter of serious concern that PSPCL could not engage even the consultants to prepare DSM plan. PSPCL is directed to achieve energy saving of 500 MU (including back log of 2013-14) during the FY 2014-15.
		(iv) PSPCL should ensure strict compliance of the notification for use of 4 star labelled pump sets for all new AP connections.	All new agricultural connections are released with minimum 4 star BEE labeled agricultural pump sets, power capacitor, foot/ reflex valves. The commercial circular no. 43/2011 has been issued on 03.11.2011 in this regard. All CEs(DS) have been requested to take the necessary steps to implement the instructions strictly.	The Commission notes the compliance. The process must continue.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
8.5	Agricultural Consumption & Metering Plan	**(i) Agricultural Consumption** Commission has taken a serious view of the failure of PSPCL to ensure accuracy of sample meter readings and compliance of directives in this regard. It is a matter of concern that despite repeated assurances, PSPCL failed to supply credible AMR data of pure AP feeders to the Commission. PSPCL is directed to implement the following steps:	All CEs/DS have been requested to take the necessary steps to implement the directives of PSERC and it is hoped that compliance of the same will be made within time.	
		a) All remaining mixed AP feeders should be segregated.	a) AP mixed feeders are 10 Nos. The work of segregation of these feeders in majority is held up due to stay granted by courts or due to non-clearance of ministry of Railways. Earnest efforts are being made to remove above hurdles to segregate remaining mixed AP feeders during 2014-15.	a)The Commission notes the compliance.
		b) AP load of Kandi area feeders fed from mixed feeders should be segregated. In case segregation in some cases is not practicable, then in such cases all AP motors should be metered under AMR-LT capacitor model. Compliance should be ensured during 2013-14.	b) In Kandi area, it is found difficult to segregate the AP and other loads due to local constraints. Regarding accurate computation of energy consumption of AP load and non AP load, the segregation of AP energy input and non-AP energy input is being done accurately in the ratio of the consumption in each category. All non AP consumers are metered and their consumption is being assessed accurately from the meter readings and AP consumption is being computed from the sample meters and input energy has been segregated according to the ratio of their consumption on the basis of the fact that losses on the feeders are common to both the categories.	b) PSPCL has failed to implement the directive for segregation of Kandi area feeders. It appears that PSPCL lacks the will for metering of AP consumers under AMR-LT capacitor model. The non compliance is hampering the efforts of the Commission to assess the AP consumption more accurately. The Commission reiterates its directions that AP load of Kandi area feeders fed from mixed feeders should be segregated. In case segregation in some cases is not practicable, then in such cases all AP motors should be metered.
		c) Ensure that AMR meters shall be installed on all AP feeders & accurate/ credible AMR data in respect of all AP feeders is made available to the Commission by 30th Sept. 2013.	c) AMR compatible meters on all 3250 AP feeders covered in the scope of work order on M/s. ERL Bangalore have already been installed on all AP feeders, but DCUs have not been installed / in working condition at all the grid sub- stations due to certain reasons.	c) It is a matter of serious concern that despite substantial investment & repeated assurances, PSPCL has failed to ensure flow of AMR data

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
			Thus nearly 2000 feeder's accurate data has been sent to the concerned authorities. The submission of AMR data on monthly basis has been done by 10th of each month and it will be done for future also. Targets: Out of 4200 AP feeders, 3250 AP feeders are covered under AMR system.	of all AP feeders. The feeder count under AMR data remained in the range of 1950-2000 (out of 4200 AP feeders) for more than one year. PSPCL is directed to ensure submission of AMR data of all AP feeders within 3 months of issuance of this Tariff Order.
		d) Ensure submission of monthly data of pumped energy on AP feeders as per Grid meters on the formats already prescribed by 10th of each month.	d) Monthly data of pumped energy on AP feeders as per Grid meters on the formats up to 02/2014 stands submitted to Hon'ble PSERC.	d) There is usually delay in submission of monthly pumped energy data. PSPCL must ensure compliance of directive.
		e) Ensure submission of AMR data on monthly basis on the prescribed formats and submit the same by 10th of each month.	e) Correct Data of approx. 2000 AP feeders (monthly basis) on the prescribed formats up to 02/2014 stands submitted to Hon'ble Commission.	e) The AMR Data of AP feeders has been discontinued by PSPCL w.e.f. March 2014. PSPCL is directed to ensure submission of AMR data of about 2300 nos. AP feeders immediately and remaining by 1st December, 2014.
		f) Ensure that as per the existing instructions, all AP motors fed from urban feeders are provided with energy meters and consumption of such connections should be counted in metered AP sale.	f) All AP connections fed from urban feeders have been identified and list has been submitted to PSERC, however, 100% meters on these AP connections fed from the Urban Feeders cannot be installed due to financial constraints. All the CE's/DS have been directed to ensure compliance and consumption of such connections will be counted in AP sale.	f) It is ironical that PSPCL has not been able to put meters on AP motors running on urban feeders during 2013-14. The directive of the Commission to provide meters on all AP motors fed from urban feeders is reiterated with further direction to ensure compliance within six months otherwise all such consumers shall be treated as being fed from AP feeders.
		(ii) Metering Plan Commission observed that release of new tube well connections with ordinary meters may not serve any purpose since for reading these meters there will	Memorandum No. 81 dated 12.12.2013 was placed before WTDs for metering of AP consumers. As per decision of WTDs in its 134th meeting held on 13.12.2013, SE(T) to Director/D was requested to take up matter with the Govt. of	Despite repeated queries PSPCL has failed to submit any proposal to achieve 100% metering thus violating the provisions of the Act.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
		be huge manpower requirement. It would therefore be better to extend the AMR-LT capacitor model proposed to be implemented on 10% feeders to cover all AP consumers on these feeders. Commission noted that EoI for covering 10% AP feeder on AMR-LT capacitor model has been opened on 03.12.2012 & good response has been received from firms. The project should be implemented on 10% AP feeders spread uniformly throughout the state (& not on 10% AP consumers) during FY 2013-14. Thereafter 30 % AP feeders should be covered each year so as to complete the project by FY 2016-17.	Punjab. Accordingly detailed note duly approved by CMD PSPCL has been sent to PSERC vide CE/Metering office memo No. 2513 dated 09.04.2014 with copy to Secretary/Power, Govt. of Punjab where in it is mentioned that PSPCL requests the Govt. of Punjab in exercise of the powers vested with it under Section 108 to direct the PSERC not to insist for 100% AP metering of AP Sector as well as not to disallow any expenditure on the grounds of non-compliance of directives in this regard as dis-allowance shall have the same implications and effect on the performance of the Utility by aggravating the financial crises further.	The Commission reiterates its directive to PSPCL to implement AMR-LT capacitor model on AP motors to provide least cost & efficient solution to 100% AP metering. PSPCL is directed to submit its plan to achieve 100% metering as per Section-55 of the Act, within three month of the issuance of this Tariff Order.
8.6	**kVAh Tariff**	PSPCL is directed to expedite the submission of the proposal	The Proposal stands submitted to the Hon'ble Commission vide this office memo No. 2779 dated 7.11.2013 and public hearings on the issue have been held.	Refer para 7.1 of this Tariff Order.
8.7	**Two Part Tariff/TOD**	**Two Part Tariff:** PSPCL is directed to submit the proposal again after examining the issues raised by the consumers and consumer organizations along with detailed report on the result of the mock/parallel run of billing on single part and two part tariff systems. **ToD Tariff:** Commission has approved the proposal of PSPCL for introduction of ToD for LS industrial category. PSPCL to submit the proposal for introduction of ToD Tariff for other categories of consumers.	**1. Two Part Tariff:** As per Directions, the proposal for Two Part Tariff and the outcome of the Mock Trial on prescribed performa has been submitted to PSERC vide this office memo no 226/DTR/Dy.CAO/233/Vol.III dated 30.01.2014 & thereafter, Public Hearing was held on 28.03.2014. Reply of the objections is being sent to PSERC as well as the objectors. **2. ToD Tariff:** The PSERC in Tariff Order for FY 2013-14 has approved introduction of Time of Day (TOD) Tariff for six months (October to March) of the year, during off peak hours from 22:00 hrs to 06:00 hrs for Large supply industrial category. Further, PSERC vide its order dated 28.2.2014 has decided to extend the period of TOD tariff to 31.05.2014.	Commission reiterates its directive to PSPCL, to re-submit the proposal. Refer para 7.2 of this Tariff Order. Refer para 7.3 of this Tariff Order.
8.8	**Employee Cost**	**(i) Implementation of PwC Report on Manpower** It is a matter of concern that PSPCL could not take any decision regarding implementation	PwC Report is under consideration of the BOD. The manpower strength of PSPCL has already declined below the manpower strength proposed by PwC (48767). At the time of start of the manpower study by PwC in 2007-08, the	Commission notes the submission that the manpower strength of PSPCL has declined below the manpower

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
		of PwC report on manpower in almost two years. PwC report was not only to reduce employees' strength but also to increase productivity of existing manpower by re-deployment and re-training of the existing staff. The Commission directs PSPCL to submit the action taken report on PwC report by 30.6.2013 and ensure compliance during 2013-14.	manpower strength of erstwhile PSEB was approx.65718 (as per PwC report); the figure came down to approx. 59276 (PSPCL - 55411 & PSTCL – 3865) in year 2010-11 & current strength for PSPCL is approx. 48269. The reasons for decline have been the high rate of superannuation in the recent years, non-recruitment/ insufficient recruitment and the non-uniformly distributed manpower across the organization. Being a Govt. undertaking it may not be possible for PSPCL to further reduce its present manpower through retrenchment. But various efforts are being made for rationalization of the existing manpower. The bare minimum manpower is being recruited to ensure smooth functioning of the organization, as further reduction in manpower will not be good for the health of the organization in the short as well as long term.	strength proposed by PwC but is of the view that report intended not only to reduce employees' strength but also to increase productivity of existing manpower by re-deployment and re-training of the existing staff. Commission directs PSPCL to submit the action taken report on PwC report within 3 months of issue of Tariff Order.
		(ii) Re-organisation of DS on functional lines Commission directs PSPCL that in view of successful implementation of re-organisation of distribution set up in Patiala, Nabha & other divisions as reported by PSPCL, the re-organisation be expedited in order to complete all R-APDRP towns by 31.12.2013 & remaining by 31.3.2014. In the functionally reorganized DS Divisions, separate wing for Design & Construction (D&C) be added.	Detail of restructured DS divisions/sub divisions on functional basis was enclosed along with status of directives submitted on 2.5.2013. Re-organization plan is under consideration of PSPCL and shall be submitted subsequently.	PSPCL in its meeting dated 30.04.2012 had assured that re-organisation of DS on functional lines shall be completed all across Punjab by 30.06.2013. No further re-organisation of distribution set up has been undertaken during 2013-14 and no feedback on review of the plan has been submitted by PSPCL. The Commission has viewed this policy paralysis in PSPCL seriously. PSPCL is directed to implement re-organization of DS wing on top priority.
		(iii) AMR of HT consumers The implementation of AMR for HT consumers should be expedited and completed by 31.3.2014. AMR of all MS consumers be implemented on priority for successful introduction of ToD for these consumers during 2014-15.	The MDAS application has been deployed at DC Patiala. AMR data from HT/select LT consumers is to be acquired through modems connected to HT/select LT meters. Till date 1960 modems have been installed for these consumers. Billing of high end consumers in the 7 towns integrated with DC is being carried	PSPSL has failed to comply with the target given by the Commission. Commission reiterates its directive for implementation of AMR for all HT and MS consumers.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
			out based on AMR data. Remarks: The AMR of HT consumers covered under R-APDRP Part A will be completed whenever town is declared "Go Live"	
		(iv) Distribution SCADA/DMS: The revised target date of completing distribution SCADA/ DMS by 30.6.2014 must be met by PSPCL.	RFP for implementation of SCADA in three cities viz Ludhiana, Jalandhar and Amritsar was floated on 31.05.2012. Further processing had been on hold till verification/validation of AT&C Losses of Ludhiana Town which has now been verified by WAPCOS and accepted/approved by PFC during March, 2013. Further activities relating to RFP have been restarted. Tenders of 4 no. of firms opened on 10.06.2013. The technical evaluation of bids was completed well within time but the tender enquiry had to be dropped as 3 no. firms did not extend the validity due to unexpected fall of rupee against dollar and 1 no. firm had a black listed consortium partner. A fresh tender enquiry is being floated shortly. Target and Remarks : The process for making electrical network SCADA/DMS compatible falls/ depend on the readiness/completion of work by RAPDRP Part B vendors.	The Commission notes the action being taken. PSPCL should emulate distribution SCADA of Reliance Energy/NDPL to cover its maximum area. This will not only help to reduce its manpower requirement but also help in increasing its efficiency & improve consumer service.
		(v) Unmanned Grid S/Stns Schedule Plan to implement unmanned sub-stations on experimental basis in the short listed three towns of Jalandhar, Amritsar & Ludhiana (where SCADA scheme is being implemented under R-APDRP scheme) should be submitted to the Commission within three months of the issue of T.O.	The project is linked with the implementation of distribution SCADA.	The automation process needed to be expedited by PSPCL. Almost all grid sub stations of Reliance Energy Mumbai are unmanned & running successfully for last many years. PSPCL need to emulate such models to reduce its manpower requirement & increase efficiency.
		(vi)Training There is much scope for implementing already approved PSEB training policy aiming for one week training for all every year besides developing a dedicated Management Development Institute. With the creation of HRD as a distinct function headed by a Director in PSPCL, it should be possible to emulate NTPC, PGCIL, NDPC in training and multi skilling	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. The Training policy has been recently amended to make it more suitable to the fast changing environment. Also a panel of in-house faculty of PSPCL is being prepared. It was planned to achieve a target of 1,10,000 training man days during the year 2013-14, till 31st March, 2014 approx. 98407 man days of training has been imparted.	The Commission notes the action being taken. The process to train & re-train its manpower need to be continued by PSPCL to enhance efficiency of its staff. A faithful implementation of its own order on 'PSEB Training Policy' aiming at 'one week training for all' is a must.

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
		to optimize output of PSPCL manpower.	A dedicated cell named ODMD (Organizational Development & Management Development) attached with CE/HRD has been established for introduction and implementation of Modern Management Techniques. Further following important works have been initiated. 1. 29 Nos. Quality Circles have been established in PSPCL and PSPCL's Quality Circle Awards were held where the best performing Quality Circles were honoured. 2. In order to disseminate the adopted vision, mission and core values, workshops on value actualization are being conducted all across PSPCL to cover maximum Nos. of employees. About 8048 employees have been covered under these workshops conducted at zonal headquarters, thermal plants and Hydel plants. Further, in-house session on values actualization has been developed which is being integrated into all the in-house training programmes. 3. In order to develop a competency driven organization. 5 No. workshops on "Building Organizational Effectiveness through Competency Mapping" have been conducted for 100 senior officers (EICs/CEs/Dy.CEs/SEs/Addl.SEs.) of PSPCL. In these workshops, the mapping process was integrated with OD intervention thus initiating the change management at top level of the organization. Following training needs were identified by ODMD cell and role specific training is being provided to concerned employees: • Workshops on "Legal Procedures" to enhance legal capabilities of officers/officials of PSPCL dealing with court cases. • Workshops on "Office Communication & Procedures" to improve level of knowledge & communication skills of officers/officials of PSPCL and get them well versed with modern procedures of official communication.	

<table>
<tr><th>Sr. No.</th><th>Issues</th><th>PSERC's Directives for FY 2013-14</th><th>PSPCL's Reply/progress ending 31.3.2014</th><th>PSERC Comments/ Directives for FY 2014-15</th></tr>
<tr><td>8.9</td><td>Receivables</td><td>PSPCL may explain increase in the amount of the receivables against Industrial category and ensure reduction in the outstanding amount particularly from industrial consumers & submit compliance.</td><td>To curb the accumulating defaulting amount, the status of defaulting amount is being monitored by the Management on month to month basis and suitable directions are being conveyed to EICs/CEs/DS for their expeditious clearance. The follow up action with EIC/CEs DS has already been taken to take effective steps to liquidate the Receivables especially of ISC category for which, the Hon'ble Commission has taken serious note.
Category-wise Defaulting Amount ending 03/2014 viz-a-vis 03/2013 is as under:
(₹ in lacs)
<table>
<tr><th>Category</th><th>Ending 03/13 (audited)</th><th>Ending 03/14 (un-audited)</th></tr>
<tr><td>ISC</td><td>30318.84</td><td>38445.14</td></tr>
<tr><td>AP</td><td>445.15</td><td>270.82</td></tr>
<tr><td>GSC</td><td>38478.78</td><td>34922.26</td></tr>
<tr><td>Others</td><td>1324.55</td><td>669.41</td></tr>
<tr><td>Total</td><td>70567.32</td><td>74307.63</td></tr>
</table></td><td>Despite the concern shown by the Commission, receivables against Industrial category has further increased.
PSPCL is directed to explain the increase in the amount of the receivable against Industrial category and to initiate steps to ensure its reduction.</td></tr>
<tr><td>8.10</td><td>Mtc. of category wise details of Fixed Assets</td><td>The utility was directed to expedite finalization of fixed assets register.</td><td>The Company Act. 2013 has came into force w.e.f. 29.8.2013 vide Central Govt. Notification No. 27 dated 30.8.2013. The Accounting Standards are to be revised under section 133 of the ibid Act. In view of this, W.O. has been issued to the firm M/s Ernst & Young to standardize various processes and procedures by developing and documenting the Financial Accounting Manuals, Budgeting, Audit and Internal Control under the provision of this new Company Act and Accounting Standards framed thereunder. The review of Fixed Assets Records also falls within the scope of this work.</td><td>The Commission notes the action being taken.</td></tr>
<tr><td>8.11</td><td>Power purchase from Traders and through UI.</td><td>PSPCL should strictly follow the Power Purchase Regulations notified by the Commission.</td><td>PSPCL is following the Power purchase regulations notified by Commission while making short term power purchase. Hon'ble PSERC vide its order dated 17.1.2013, approved quantum of 2836 MU (2578+10% over & above) only under short term purchase through tenders. PSPCL have purchased 2691 MU through traders.</td><td>The Commission notes the action being taken</td></tr>
<tr><td>8.12</td><td>Loading status of sub-trans-mission system (66 kV & 33 kV)</td><td>PSPCL should ensure completion of the work of deloading of sub-stations as per the target i.e 31.5.2013.
Details of loading be put on website to enable the consumers to know the likelihood of feasibility</td><td>Out of 161 Nos. priority works, 149 Nos. have been completed/ commissioned up to 31.03.2014.
List of overloaded 66/33 kV grid S/Stns (loading above 70%) along with its status is available on PSPCL website which is regularly updated on monthly basis.</td><td>During processing of ARR for FY 2013-14, PSPCL committed to complete the priority works (161 nos.) before 31.05.2013.
PSPCL should ensure completion of de-loading</td></tr>
</table>

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
		clearance.		of sub-stations at the earliest to ensure flow of adequate power which shall be available with PSPCL in future.
8.13	**Cost Audit of generat -ing stations**	The cost audit reports along with action taken report should be expedited.	M/s Khushwinder Kumar & Co., Jalandhar. has been appointed as cost auditor for the year 2011-12, but no cost auditor report is submitted by the cost auditor. The work of maintaining the cost accounting records for year 2010-11 & 2011-12 had been allotted to M/s Khurana & Co. and work of maintaining the cost accounting records had already being in process towards finalization. Once the cost accounting records is finalized the work of cost audit will be got started. The matter regarding finalization of cost accounting record and cost audit report for the year 2011-12 is expected to finalize during the month of March, 2014. For expedite of work regarding Cost Audit Report for the year 2011-12, office of Cost Controller is in touch with Cost Auditor regularly.	The Commission notes the action being taken.
8.14	**AMR of DS/NRS consumers**	PSPCL may launch program of AMR (on lease basis to avoid high Capital investment) for DS/NRS & other consumers of the State. A pilot in this regard may be carried out during 2013-14.	At present successful techno-commercial model of AMR of DS/NRS consumers is yet to be developed in the country. However, Ministry of Power (GOI) has taken up an initiative for establishing Smart Grid pilot project in India for increasing power availability, reducing AT&C losses and optimal utilization of resources for sustainable growth. For implementation of this pilot project in Punjab, a DPR of smart grid pilot project for 9 no. feeders of Tech. II Subdivision, pilot include functionalities of AMI for residential & Industrial consumer and Peak Load Management. It is further intimated that this project is yet at the incipient stage and may take long time of 2 to 3 years for execution.	The Commission notes the action being taken. Progress may be reported from time to time.
8.15	**Improveme-nt in quality of service**	The **Standard of Performance (SOP)** notified by the Commission should be prominently displayed at all the sub-divisional offices / bill collection centres/complaint centres within three months from the issuance of this Tariff Order. Commission observed that **Reliability Indices data** is not	The directions of PSERC are under implementation. All DS office have been directed to display the Standard of Performance (SOP) notified by the Commission at all the sub divisional offices/bill collection centres/complaint centres. Monthly reliability indices ending 02/2014 have been uploaded on the website of PSPCL.	The Commission notes the action being taken.

<table>
<tr><th>Sr. No.</th><th>Issues</th><th>PSERC's Directives for FY 2013-14</th><th>PSPCL's Reply/progress ending 31.3.2014</th><th>PSERC Comments/ Directives for FY 2014-15</th></tr>
<tr><td></td><td></td><td>being uploaded regularly on PSPCL website & scanned copies are put on the website which are not consumer friendly. PSPCL must put the RI data as per SOP requirements and supply information to the Commission for onward supply to CEA.</td><td></td><td></td></tr>
<tr><td>8.16</td><td>Fuel Audit of various Thermal Plants of PSPCL</td><td>The Commission, in its Orders dated 10.02.2012 and 27.02.2013, has issued directions in the matter of Fuel Audit of Thermal Plants of PSPCL. PSPCL is directed to report the progress made to the Commission every quarter, with regard to the implementation of these directions.</td><td>The implementation status of the directives in orders dated 08.10.2012 and 27.02.2013 in respect of all the thermal power plants in annotated form is being submitted to the Commission.
The comparison of GCV of received and bunkered coal w.e.f. April,2013 in respect of all three TPPs is as under:
<table>
<tr><th rowspan="2">Month</th><th colspan="3">Difference in GCV (AFB) (Kcal/Kg)</th></tr>
<tr><th>GHTP</th><th>GGSSTP</th><th>GNDTP</th></tr>
<tr><td>April, 2013</td><td>161</td><td>190</td><td>40.85</td></tr>
<tr><td>May 2013</td><td>96</td><td>175</td><td>110.48</td></tr>
<tr><td>June,2013</td><td>127</td><td>183</td><td>122.28</td></tr>
<tr><td>July 2013</td><td>77</td><td>175</td><td>100.14</td></tr>
<tr><td>Aug. 2013</td><td>131</td><td>146</td><td>55.90</td></tr>
<tr><td>Sept. 2013</td><td>65</td><td>115</td><td>147.46</td></tr>
<tr><td>Oct. 2013</td><td>142</td><td>129</td><td>84.42</td></tr>
<tr><td>Nov. 2013</td><td>103</td><td>123</td><td>89.11</td></tr>
<tr><td>Dec. 2013</td><td>145</td><td>196</td><td>151.49</td></tr>
<tr><td>Jan. 2014</td><td>17</td><td>136</td><td>91.12</td></tr>
<tr><td>Feb. 2014</td><td>30</td><td>146</td><td>137.46</td></tr>
<tr><td>Mar. 2014</td><td>34</td><td>134</td><td>126.45</td></tr>
</table>
The norms of 150 kcal/kg drop as per PSERC is based upon theoretical studies only and is not implemented/established in India. PSPCL has challenged the same in APTEL vide petition no. 98/13.</td><td>The direction to PSPCL to report the progress made to the Commission every quarter, with regard to the implementation of these directions is reiterated. Despite implementing & attaining the norm of 150 kcal/kg & even lower, PSPCL observation that it was 'not implementable' is incorrect.
Latest progress of work undertaken by PSPCL as laid down in CPRI report on Fuel Audit to improve its efficiency may be intimated within one month of issuance of this Tariff Order.</td></tr>
<tr><td>8.17.</td><td>Review of PPAs with Generators / Traders for purchase of power from</td><td>The Commission has advised PSPCL, in para 4.8.5 of the Tariff Order for FY 2013-14, to review its PPAs with the Generators/Traders for purchase of power from outside the State of Punjab, and shift from PPAs with Thermal Generators/Traders to PPAs of</td><td>Mercados as Consultant has been engaged vide W.O.No.11/S-124 dated 2.1.2014 & Work for studying/reviewing the PPAs is in progress.</td><td>PSPCL is directed to submit the report at the earliest.</td></tr>
</table>

Sr. No.	Issues	PSERC's Directives for FY 2013-14	PSPCL's Reply/progress ending 31.3.2014	PSERC Comments/ Directives for FY 2014-15
	outside the State of Punjab.	Hydro Generators/Traders as hydro power suits the load profile of Punjab and may prove cheaper to thermal power due to consistent rise in fuel prices, in the long run. PSPCL is directed to submit the action taken report in the matter and progress achieved on priority.		

B. New Directive issued in Tariff Order for FY 2014-15

Sr. No.	Issue	Directive in Tariff Order FY 2014-15
1.	**Audited Annual Accounts for FY 2012-13 and FY 2013-14**	PSPCL has submitted that the audit of account for FY 2012-13 is under process and is likely to be completed before filling of next ARR and Tariff Petition. PSPCL is directed to submit Audited Annual Accounts for FY 2012-13 and FY 2013-14 along with the audit report of Statutory Auditors and CAG of India at the time of filing of ARR Petition for FY 2015-16.
2.	**Per Unit Fuel Cost**	The Per Unit Fuel Cost in respect of GGSSTP is more by around 11% than Per Unit Fuel Cost in respect of GHTP (Units I&II). PSPCL is directed to analyse the reasons for this higher Per Unit Fuel Cost in respect of GGSSTP and submit the action taken report for bringing the Per Unit Fuel Cost of GGSSTP to the level of GHTP (Units I&II), within two months of the issue of this Tariff Order.
3.	**System Analysis wings**	PSPCL should establish system analysis wings under CE/Planning and CE/PPR to conduct planning and system operation studies respectively. The technical proposals submitted to the Commission requiring the system analysis studies should invariably be supported by these studies (load flow/short circuit/stability studies etc.)
4.	**Updating of consumer's Security Registers, payment of interest on Security Consumption and Security Meter**	The Commission directs PSPCL to submit the certificate within two months of issuance of this tariff order that consumer's security registers have been updated and annual interest on Security (Consumption) and Security (Meter) payable upto FY 2013-14 has been credited to the accounts of all eligible consumers as per provisions of the Supply Code.
5.	**Introduction of Contract Demand System**	The Commission in para 7.4 of the Tariff Order has approved introduction of Contract Demand System for Medium Supply Industrial category consumers. To move further in this direction, the Commission intends to introduce Contract Demand System for the left out categories/consumers, i.e. for all 3 phase DS/NRS/SP Industrial consumers. In these days, every day new equipments are coming up in the market and consumers are interested in installing such equipments. The introduction of Contract Demand System for these categories will facilitate these consumers to install the load/equipments of their requirement and at the same time keep their contract demand within the sanctioned limit. PSPCL is directed to submit a road map for introduction of Contract Demand System for these categories/consumers, within two months of the issue of the Tariff Order.

Chapter - 9
Determination of Tariff

9.1 Annual Revenue Requirement

The Commission has determined the ARR of PSPCL for FY 2014-15 at ₹22904.58 crore. The Commission has simultaneously undertaken the true up of FY 2010-11 and FY 2011-12, consequent upon the availability of Audited Annual Accounts for these financial years, which has resulted in accumulated revenue gap (deficit) of ₹1433.91 crore for FY 2010-11 and revenue gap (deficit) of ₹512.40 crore for FY 2011-12. The true up for FY 2012-13 has not been undertaken by the Commission since PSPCL has not submitted the Audited Annual Accounts. The review for FY 2013-14 indicates surplus of ₹971.16 crore. After considering consolidated revenue gap (surplus) of ₹645.67 crore for FY 2012-13 as per Tariff Order for FY 2013-14 and impact (recovery) of ₹151.77 crore as a result of Commission's orders dated 07.01.2013 and 28.03.2013, the Commission has arrived at the consolidated gap (deficit) of ₹177.71 crore ending FY 2013-14. The Commission has determined the revenue gap (deficit) of ₹479.30 crore for FY 2014-15 and consolidated gap of ₹593.63 crore, including consolidated gap (deficit) of ₹177.71 crore ending FY 2013-14 and carrying cost (recovery) of ₹63.38 crore on revenue gaps of previous years.

9.2 Determination of Retail Supply Tariff

9.2.1 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, 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 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).

9.2.2 To meet the revenue gap of ₹593.63 crore for FY 2014-15, an increase of 2.74% is required over the existing tariff 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 588.30 paise/unit.

The provisions of the Act, Tariff Policy and Commission's own Regulations require that there should be a gradual reduction of cross subsidies. Therefore, the Commission decides to increase the tariff for various categories of consumes as given in Table 9.1 to recover the revenue gap of ₹593.63 crore. The cross subsidy levels for all categories of consumers are now within ±20% of the combined average cost of supply. Further, the Commission decides to increase the MMC by 2.74%. The existing and revised tariffs are indicated in Table 9.1.

Table 9.1: Existing and Revised Tariff for FY 2014-15

Sr. No.	Category of Consumers	Existing Tariff		Revised Tariff approved by the Commission	
		Energy Rate (paise/kWh)	MMC (₹)	Energy Rate	MMC (₹)
A) PERMANENT SUPPLY					
1A.	**Domestic (for loads upto 100kW)**				
a)	Upto 100 kWh	456	51/kW	456 paise/kWh	52/kW
b)	101 to 300 kWh	602		614 paise/kWh	
c)	Above 300 kWh	644		656 paise/kWh	
1B.	**Domestic (for loads exceeding 100kW)**				
a)	Upto 100 kVAh	456	46/kVA	420 paise/kVAh	47/kVA
b)	101 to 300 kVAh	602		565 paise/kVAh	
c)	Above 300 kVAh	644		604 paise/kVAh	
2A.	**Non-Residential Supply (for loads upto 100kW)**				
a)	Upto 100 kWh	645	185/kW	657 paise/kWh	190/kW
b)	Above 100 kWh	658		671 paise/kWh	
2B.	**Non-Residential Supply (for loads exceeding 100kW)**				
a)	Upto 100 kVAh	645	166/kVA	604 paise/kVAh	171/kVA
b)	Above 100 kVAh	658		617 paise/kVAh	
3.	**Public Lighting**	658	As per 8 hrs/Day	669 paise/kWh	As per 8 hrs/Day
4.	**Agricultural Pumpsets**	i) Without GoP subsidy:425 paise/kWh or ₹331/BHP/ month	Not Applicable	i) Without GoP subsidy:456 paise/kWh or ₹332/BHP/ month	Not Applicable
		ii) With GoP subsidy: NIL		ii) With GoP subsidy: NIL	
5.	**AP High – Technology**	425	Not Applicable	456 paise/kWh	Not Applicable
6.	**Compost Plants/Solid Waste Management Plants for Municipalities/ Urban Local**	425	Not Applicable	456 paise/kWh	Not Applicable

Sr. No.	Category of Consumers	Existing Tariff		Revised Tariff approved by the Commission	
		Energy Rate (paise/kWh)	MMC (₹)	Energy Rate	MMC (₹)
	Bodies				
7.	**Industrial Consumers**				
a)	Small Power	574	153/kW	585 paise/kWh	157/kW
b)	Medium Supply	626	203/kW	587 paise/kVAh	209/kW or 188/kVA
c)	Large Supply				
i)	General Industry	633	182/kVA	614 paise/kVAh	188/kVA
ii)	PIU	633	478/kVA	633 paise/kVAh	491/kVA
iii)	Arc Furnace	633	478/kVA	633 paise/kVAh	491/kVA
8.	**Bulk Supply (including MES)**				
a)	HT	629	299/kVA	609 paise/kVAh	307/kVA
b)	LT	657		635 paise/kVAh	
9.	**Railway Traction**	658	306/kVA	651 paise/kVAh	314/kVA
B) SEASONAL INDUSTRY: COTTON GINNING, PRESSING AND BAILING PLANTS, RICE SHELLERS, KINNOW GRADING AND WAXING CENTRES, RICE BRAN STABILISATION UNITS (WITHOUT T.G.SETS) (SP, MS, LS)					
a)	During Season				
	SP	574	559/kW	585 paise/kWh	574/kW
	MS	626	559/kW	587 paise/kVAh	574/kW or 518/kVA
	LS	633	504/kVA	614 paise/kVAh	518/kVA
b)	Off Season				
	SP	679	NA	690 paise/kWh	NA
	MS	719	NA	731 paise/kVAh	NA
	LS	727	NA	740 paise/kVAh	NA
C) ICE FACTORY & ICE CANDIES AND COLD STORAGE					
a)	April to July				
	SP	574	761/kW	585 paise/kWh	782/kW
	MS	626	761/kW	587 paise/kVAh	782/ kW or 704/kVA
	LS	633	685/kVA	614 paise/kVAh	704/kVA
b)	August to March Next Year				
	SP	574	153/kW	585 paise/kWh	157/kW
	MS	626	153/kW	587 paise/kVAh	157/kW or 140/kVA
	LS	633	136/kVA	614 paise/kVAh	140/kVA
D) GOLDEN TEMPLE, AMRITSAR AND DURGIANA TEMPLE, AMRITSAR					
a)	First 2000 kWh	Free	NA	Free	NA
b)	Beyond 2000 kWh	520	NA	532 paise/kWh	NA
E) TEMPORARY SUPPLY					
i)	Domestic	1109	₹939 or ₹187/kW whichever is higher	1139 paise/kWh (for loads upto 100kW)	₹965 or ₹192/kW whichever is higher
				1048 paise/kVAh (for loads exceeding 100kW)	₹965 or ₹173/kVA whichever is higher
ii)	NRS	1109	₹1880 or ₹471/kW, whichever is higher	1139 paise/kWh (for loads upto 100kW)	₹1932 or ₹484/kW whichever is higher
				1048 paise/kVAh (for loads	₹1932 or ₹436/kVA whichever is higher

Sr. No.	Category of Consumers	Existing Tariff		Revised Tariff approved by the Commission	
		Energy Rate (paise/kWh)	MMC (₹)	Energy Rate	MMC (₹)
				exceeding 100kW)	
iii)	Industrial (SP,MS & LS)	As per Tariff approved at A(7) above for permanent supply + 100%	₹753/kW of sanctioned load for SP and MS and ₹676/kVA for LS	As per Tariff approved at A(7) above for permanent supply + 100%	₹774/kW for SP, 774 per kW / 697 per kVA for MS & ₹697/kVA for LS
iv)	Wheat Threshers	As per Tariff approved at A(7) above for permanent supply + 100%	₹753/kW of sanctioned load for SP and MS and ₹676/kVA for LS	As per Tariff approved at A(7) above for permanent supply + 100%	₹774/kW for SP, 774 per kW / 697 per kVA for MS & ₹697/kVA for LS
v)	Fairs, Exhibition & Mela Congregations	Bulk Supply tariff as at A(8) + 50%	₹7524 per service	Bulk Supply tariff as at A(8) + 50%	₹7730 per service
vi)	**Touring Cinemas**				
a)	Lights and Fans	1109	For (a) and (b), ₹1880 or ₹471/kW of sanctioned load, whichever is higher	1139 paise/kWh	For (a) and (b), ₹1932 or ₹484/kW or ₹436/kVA of sanctioned load/demand, whichever is higher
b)	Motive Load	Rate for Industrial permanent supply as at A(7) + 100%		Rate for Industrial permanent supply as at A(7) + 100%	

Notes:

(i) *The Schedules of Tariff of various categories approved by the Commission are as per Annexure II of Vol.II of this Tariff Order. These Schedules shall be read with the provisions of General Conditions of Tariff approved by the Commission as per Annexure I of Vol. II of this Tariff Order.*

(ii) *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;*

(iii) *AP consumers and consumers mentioned in (ii) above will not be charged meter rentals in view of Government Subsidy;*

(iv) *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. ₹47 per kVA.*

(v) *Consumers getting single point supply for providing electricity to ultimate users shall be eligible for rebate @ 12% of electricity consumption charges in case of the Residential Colonies/Co-operative Group Housing Societies/Employers Colonies and @ 10% of electricity consumption charges in case of Commercial Complexes/Shopping Malls/Industrial Estates etc., in addition to other voltage rebates as may be applicable;*

(vi) *10 paise/kVAh on prorata basis, on continuous process industries, shall continue to be levied as here-to-fore.*

(vii) *Rebate of 30 paise/kVAh to all consumers getting supply at 400/220/132 kV, 25 paise/kVAh to all consumers getting supply at 66/33 kV, 20 paise/kVAh to DS, NRS & MS consumers getting supply at 11 kV and 20 paise/kWh to AP/AP High-Technology, Compost Plants/Solid Waste Management Plants for Municipalities/ Urban Local Bodies consumers getting supply at 11 kV shall be allowed.*

9.3 Effect of revised tariff on cross subsidy

9.3.1 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 2014-15 at existing tariff is depicted in Table 9.2.

Table 9.2: Aggregate quantum of cross subsidy for Energy Sales of FY 2014-15 at Existing Tariff (Combined average cost of supply =573.13 paise/unit)

Sr. No.	Consumer Category	Energy Sales (MU)	Existing Tariff (paise/ unit)	Revenue with Existing Tariff (₹ crore)	PLEC + MMC etc. (₹ crore)	Non-Tariff Income (₹ crore)	Impact of High Voltage Rebate, extension of ToD period and APTEL Order (₹ crore)	Total Revenue (₹ crore) (V+VI+ VII-VIII)	Expected Revenue with Average cost of supply (₹crore)	Cross Subsidy generated (+)/ Utilised(-) (IX-X) (₹crore)
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1.	**Domestic**									
a)	Upto 100 Units	6498	456	2963.09	79.58	98.08		3140.75	3724.20	-583.45
b)	101-300 Units	3394	602	2043.19	41.57	51.23		2135.99	1945.20	190.79
c)	Above 300 Units	1745	644	1123.78	21.37	26.34	2.50	1168.99	1000.11	168.88
	Total	**11637**		**6130.06**	**142.52**	**175.65**	**2.50**	**6445.73**	**6669.51**	
2.	**NRS**									
a)	Upto100 Units	1195	645	770.78	14.64	18.04		803.46	684.89	118.57
b)	above100 Units	2136	658	1405.49	26.16	32.24	38.93	1424.96	1224.21	200.75
	Total	**3331**		**2176.27**	**40.80**	**50.28**	**38.93**	**2228.42**	**1909.10**	
3.	**Public Lighting**	170	658	111.86	2.08	2.57		116.51	97.43	19.08
4.	**Industrial**									
a)	Small Power	981	574	563.09	12.01	14.81		589.91	562.24	27.67
b)	Medium Supply	1996	626	1249.50	24.44	30.13		1304.07	1143.97	160.10
c)	Large Supply	10172	633	6438.88	375.46	153.54	149.38	6818.50	5829.88	988.62
	Total	**13149**		**8251.47**	**411.91**	**198.48**	**149.38**	**8712.48**	**7536.09**	
5.	**Bulk Supply**									
a)	HT	583	629	366.71	7.14	8.80	13.57	369.08	334.13	34.95
b)	LT	36	657	23.65	0.44	0.54		24.63	20.63	4.00
	Total	**619**		**390.36**	**7.58**	**9.34**	**13.57**	**393.71**	**354.76**	
6.	**Railway Traction**	130	658	85.54	1.59	1.96	3.90	85.19	74.51	10.68
7.	**Common Pool**	289		134.97	0.00	4.36		139.33	165.63	-26.30
8.	**Outside State**	54		13.42	0.00	0.00		13.42	30.95	-17.53
9.	**AP**	9749	425	4143.33	0.00	147.15		4290.48	5587.44	-1296.96
10.	**Total**	**39128**		**21437.28**	**606.48**	**589.79**	**208.28**	**22425.27**	**22425.42**	**1924.09** **-1924.24**

9.3.2 The position of cross subsidy levels in the system for energy sales of FY 2014-15 with revised tariffs (as approved in para 9.2) is indicated in Table 9.3.

9.3.3 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. Impact of High Voltage Rebate, extension of

ToD period and APTEL Order has been deducted from the revenue of relevant categories.

Table 9.3: Aggregate quantum of cross subsidy for Energy Sales of FY 2014-15 at Revised Tariff (Combined average cost of supply = 588.30 paise/unit)

Sr. No.	Consumer Category	Energy Sales (MU)	Revised Tariff (paise/ unit)	Revenue with Revised Tariff (₹ crore)	PLEC + MMC etc. (₹ crore)	Non-Tariff Income (₹ crore)	Impact of High Voltage Rebate, extension of ToD period and APTEL Order (₹ crore)	Total Revenue (₹ crore) (V+VI+ VII-VIII)	Expected Revenue with Average cost of supply (₹crore)	Cross Subsidy generated (+)/ Utilised(-) (IX-X) (₹crore)
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1.	**Domestic**									
a)	Upto 100 Units	6498	456	2963.09	81.76	98.08		3142.93	3822.77	-679.84
b)	101-300 Units	3394	614	2083.92	42.70	51.23		2177.85	1996.69	181.16
c)	Above 300 Units	1745	656	1144.72	21.96	26.34	2.50	1190.52	1026.58	163.94
	Total	**11637**		**6191.73**	**146.42**	**175.65**	**2.50**	**6511.30**	**6846.04**	
2.	**NRS**									
	Upto 100 Units	1195	657	785.12	15.04	18.04		818.20	703.02	115.18
	Above 100 Units	2136	671	1433.26	26.88	32.24	38.93	1453.45	1256.61	196.84
	Total	**3331**		**2218.38**	**41.92**	**50.28**	**38.93**	**2271.65**	**1959.63**	
3.	**Public Lighting**	170	669	113.73	2.14	2.57		118.44	100.01	18.43
4.	**Industrial**									
a)	Small Power	981	585	573.89	12.34	14.81		601.04	577.12	23.92
b)	Medium Supply	1996	638	1273.45	25.11	30.13		1328.69	1174.25	154.44
c)	Large Supply	10172	646	6571.11	378.87	153.54	149.38	6954.14	5984.19	969.95
	Total	**13149**		**8418.45**	**416.32**	**198.48**	**149.38**	**8883.87**	**7735.56**	
5.	**Bulk Supply**									
a)	HT	583	641	373.70	7.34	8.80	13.57	376.27	342.98	33.29
b)	LT	36	668	24.05	0.45	0.54		25.04	21.18	3.86
	Total	**619**		**397.75**	**7.79**	**9.34**	**13.57**	**401.31**	**364.16**	
6.	**Railway Traction**	130	671	87.23	1.64	1.96	3.90	86.93	76.48	10.45
7.	**Common Pool**	289		134.97		4.36		139.33	170.02	-30.69
8.	**Outside State**	54		13.42		0.00		13.42	31.77	-18.35
9.	**AP**	9749	456	4445.54		147.15		4592.69	5735.34	-1142.65
10.	**Total**	**39128**		**22021.20**	**616.23**	**589.79**	**208.28**	**23018.94**	**23019.01**	**1871.34** **-1871.53**

The cross subsidy likely to be generated at the revised level of tariff comes to ₹1871.34 crore against which ₹1871.53 crore cross subsidy is required, leaving a deficit of ₹0.19 crore.

9.3.4 Taking into account the quantum of cross subsidy in each consumer category determined for sales of FY 2014-15 as per existing tariffs brought out in Table 9.2 and as per revised tariffs brought out in Table 9.3, the gross quantum of cross subsidy from each category for FY 2014-15 at existing tariff and revised tariff is given in Table 9.4.

Table 9.4: Aggregate quantum of Cross Subsidy Comparison with Average Cost of supply 573.13 paise/unit (Existing Tariff) and Average cost of Supply 588.30 paise/unit (Revised Tariff)

Sr. No.	Consumer Category	Quantum of Cross Subsidy in absolute terms			
		Existing Tariff		Revised Tariff	
		Energy Sales (MU)	Cross Subsidy (₹ crore)	Energy Sales (MU)	Cross Subsidy (₹ crore)
I	II	III	IV	V	VI
1.	**Domestic**				
a)	Upto 100 Units	6498	-583.45	6498	-679.84
b)	101-300 Units	3394	190.79	3394	181.16
c)	Above 300 Units	1745	168.88	1745	163.94
	Total	**11637**		**11637**	
2.	**NRS**				
a)	Upto 100 Units	1195	118.57	1195	115.18
b)	Above 300 Units	2136	200.75	2136	196.84
		3331		**3331**	
3.	Public Lighting	170	19.08	170	18.43
4.	**Industrial**				
a)	Small Power	981	27.67	981	23.92
b)	Medium Supply	1996	160.10	1996	154.44
c)	Large Supply	10172	988.62	10172	969.95
	Total	**13149**		**13149**	
5.	**Bulk Supply**				
a)	HT	583	34.95	583	33.29
b)	LT	36	4.00	36	3.86
	Total	**619**		**619**	
6.	**Railway Traction**	130	10.68	130	10.45
7.	**Common Pool**	289	-26.30	289	-30.69
8.	**Outside State**	54	-17.53	54	-18.35
9.	**AP**	9749	-1296.96	9749	-1142.65
10.	**Total**	**39128**	1924.09 -1924.24	**39128**	1871.34 -1871.53

9.3.5 Further, the cross subsidy levels based on the energy sales determined for FY 2014-15 at existing and revised tariffs, in percentage terms, are brought out in Table 9.5.

Table 9.5: Cross Subsidy Levels

Sr. No.	Consumer Category	Existing Tariff: Combined Average Cost of Supply 573.13 paise/Unit				Revised Tariff: Combined Average Cost of Supply 588.30 paise/Unit			
		Energy Sales (MU)	Total Revenue (₹ crore)	Realisation per unit (Paise per unit)	Cross Subsidy Levels (%)	Energy Sales (MU)	Total Revenue (₹ crore)	Realisation per unit (Paise per unit)	Cross Subsidy Levels (%)
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	**Domestic**								
a)	Upto 100 Units	6498	3140.75	483.34	-15.67%	6498	3142.93	483.68	-17.78%
b)	101-300 Units	3394	2135.99	629.34	9.81%	3394	2177.85	641.68	9.07%
c)	Above 300 Units	1745	1168.99	669.91	16.89%	1745	1190.52	682.25	15.97%
	Total	**11637**	**6445.73**			**11637**	**6511.30**		
2.	**NRS**								
a)	Upto 100 Units	1195	803.46	672.35	17.31%	1195	818.20	684.69	16.38%
b)	Above 100 Units	2136	1424.96	667.12	16.40%	2136	1453.45	680.45	15.66%
	Total	**3331**	**2228.42**			**3331**	**2271.65**		
3.	**Public Lighting**	170	116.51	685.35	19.58%	170	118.44	696.71	18.43%
4.	**Industrial**								
a)	Small Power	981	589.91	601.34	4.92%	981	601.04	612.68	4.14%
b)	Medium Supply	1996	1304.07	653.34	14.00%	1996	1328.69	665.68	13.15%
c)	Large Supply	10172	6818.50	670.32	16.96%	10172	6954.14	683.66	16.21%
	Total	**13149**	**8712.48**			**13149**	**8883.87**		
5.	**Bulk Supply**								
a)	HT	583	369.08	633.07	10.46%	583	376.27	645.40	9.71%
b)	LT	36	24.63	684.17	19.37%	36	25.04	695.56	18.23%
	Total	**619**	**393.71**			**619**	**401.31**		
6.	**Railway Traction**	130	85.19	655.31	14.34%	130	86.93	668.69	13.66%
7.	**Common Pool**	289	139.33			289	139.33		
8.	**Outside State**	54	13.42			54	13.42		
9.	**AP**	9749	4290.48	440.09	-23.21%	9749	4592.69	471.09	-19.92%
10.	**Total**	**39128**	**22425.27**	**573.13**		**39128**	**23018.94**	**588.30**	

9.4 GoP Subsidies

9.4.1 After determining the ARR and tariff for FY 2014-15, the Commission in its D.O. letter No. 9143/PSERC dated 25th July, 2014 (Appendix-III) 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 2014-15, PSPCL has projected AP consumption of 11586 MU against which the Commission has determined the same to be 9749 MU in para 6.1.3 of this Tariff Order. The revenue from AP consumption of 9749 MU @ 456 paise/unit works out to ₹4445.54 crore.

Rentals and Charges: In addition, subsidy of ₹9.00 crore on account of rentals and charges etc. in respect of AP consumers is also payable by the GoP for FY 2014-15. Accordingly, total AP subsidy of ₹4454.54 (4445.54 + 9.00) crore will be payable by GoP in respect of AP consumers for FY 2014-15.

Scheduled Caste Domestic Supply (SC DS) consumers: PSPCL in the ARR of FY 2014-15 has claimed subsidy of ₹877.00 crore inclusive of meter rentals and service charges of ₹92.00 crore. However, in reply to deficiencies, PSPCL has revised the claim of meter rentals and service charges in respect of SC DS consumers to Rs. 20.63 crore. As such, the claim of PSPCL in respect of subsidy for SC DS consumers is reduced to ₹805.63 crore, inclusive of rentals and charges of ₹20.63 crore.

The Commission in para 5.18 of this Tariff Order has determined average consumption of 82 units per month for each SC DS category consumer during FY 2013-14. By increasing this consumption of 82 units per month per consumer for FY 2013-14 by 5%, the average consumption per month for each SC DS consumer shall become 86 units. By multiplying the consumers for FY 2014-15, i.e. 1265451 number with 86 units per month per consumer for 12 months, the consumption works out to 1305.95 MU. By multiplying the rate of tariff for first 100 units i.e. 456 paise per unit, subsidy for SC DS category works out to ₹595.51 crore.

Accordingly, the Commission determines subsidy of ₹616.14 crore, inclusive of rentals and charges of ₹20.63 crore for SC DS consumers for FY 2014-15.

Non-SC Below Poverty Line (BPL) DS consumers: PSPCL has claimed subsidy of ₹47.00 crore inclusive of meter rentals and service charges of ₹2.00 crore on this account for FY 2014-15.

The Commission in para 5.18 of this Tariff Order has determined consumption of 67 units per month for each Non-SC BPL DS category consumer during FY 2013-14. By increasing the per unit consumption of 67 units per month per consumer for FY 2013-14 by 5%, consumption per month for each Non-SC BPL DS consumer shall become 71 units. By multiplying the consumers for FY 2014-15, i.e. 94526 number with 71 units per month per consumer for 12 months, the consumption works out to 80.54 MU. By multiplying the rate of tariff for first 100 units i.e. 456 paise per unit, subsidy for Non-SC BPL DS category works out to ₹36.72 crore.

Accordingly, the Commission determines subsidy of ₹38.72 crore inclusive of rentals and charges of ₹2.00 crore for Non-SC BPL DS consumers for FY 2014-15.

Thus, total requirement of subsidy for FY 2014-15 works out to ₹5109.40 (4454.54 + 616.14 + 38.72) crore.

9.4.2 **Balance subsidy of previous years**:

The Commission has determined excess payment of subsidy of ₹274.53 crore (including ₹193.55 crore upto FY 2009-10) upto FY 2010-11 as discussed in para 2.19 of this Tariff Order.

For FY 2011-12, the Commission has determined subsidy at ₹3800.98 crore against which GoP has paid an amount of ₹4182.00 crore as discussed in para 3.18 of this Tariff Order. As such, there is an excess payment of ₹381.02 (4182.00-3800.98) crore by GoP during FY 2011-12.

For FY 2012-13, the Commission had determined net amount of subsidy and interest payable by GoP to PSPCL at ₹412.39 crore in para 3.15.3 of the Tariff Order for FY 2013-14.

The Commission in para 5.19 of this Tariff Order has determined short payment of subsidy amounting to ₹84.90 crore by GoP to PSPCL during FY 2013-14.

Thus, total excess subsidy paid by GoP upto FY 2013-14 works out to ₹158.26 (274.53+381.02-412.39-84.90) crore.

9.4.3 On the above basis, subsidy payable by GoP during FY 2014-15 is detailed in Table 9.6.

Table 9.6: Subsidy payable by Govt. of Punjab to PSPCL for FY 2014-15

(₹ 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
FY 2014-15				
Subsidy payable by GoP during FY 2014-15	4445.54 (+) 9.00 4454.54	595.51 (+)20.63 616.14	36.72 (+)2.00 38.72	5109.40
Less: Subsidy paid in excess upto FY 2013-14.				158.26
Net subsidy payable by GoP during FY 2014-15				4951.14

The subsidy of ₹4951.14 for FY 2014-15 is required to be paid in advance in 12 monthly installments @ ₹412.60 crore per month from April 2014 to September 2014 and ₹412.59 crore from October 2014 to March 2015.

Further, any change in the Fuel Cost from the level approved by the Commission is to be passed on to the consumers as FCA as per Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005. 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 above.

Change in subsidy for FY 2012-13 and FY 2013-14, if any, will be determined at the time of true-up of these years, when Audited Annual Accounts for these years are submitted by PSPCL along with next ARR.

GoP in its letter no. 01/01/2014-EB(PR)/604 dated 12.08.2014 (Appendix-IV) has conveyed approval for the payment of subsidy of ₹4951.14 crore and additional subsidy amount, if any, payable on account of Fuel Cost Adjustment during FY 2014-15 up to a total of ₹5300 crore. Keeping in view the decision of GoP, the Commission has incorporated the same in the tariff structure in Table 9.1.

9.4.4 GoP is also liable to pay an amount of ₹206.01 crore (as discussed in para 2.18.2 of Tariff Order for FY 2011-12) on account of non-refund of excess interest paid by PSPCL to GoP. Also, as per para 2.15.12 of this Tariff Order, the amount payable by GoP to PSPCL on account of share of disallowance for diversion of capital funds for revenue purposes has been worked out to ₹5.43 crore. Thus, the total amount payable to PSPCL by GoP works out to ₹211.44 (206.01+5.43) crore.

GoP is advised to make payment of ₹211.44 crore to PSPCL as discussed in para 2.19 of this Tariff Order.

9.4.5 GoP is also to pay an amount of ₹379.95 crore on account of carrying cost to PSPCL as discussed in para 6.23 of this Tariff Order.

9.5 Renewable Energy

9.5.1 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 2012 is in vogue.

9.5.2 Tariff for Purchase of Electricity from Renewable Sources of Energy

The Commission has adopted the Central Electricity Regulatory Commission (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012 with State specific modifications in its Order dated 19.07.2012 in petition no. 35 of 2012 (suo motu). Every year, the Commission determines the generic levellised tariff for purchase of electricity from various types of renewable energy power projects to be commissioned during the year. For FY 2012-13 and FY 2013-14, such tariff was determined by the Commission in its ibid Order dated 19.07.2012 and Order dated 25.06.2013 in petition no. 37 of 2013 (suo motu) respectively. For FY 2014-15, the Commission shall determine the generic tariff in due course. The tariff payable to the existing and new renewable energy generating stations is governed as per the Terms and Conditions of their respective Power Purchase Agreements (PPAs).

9.5.3 Renewable Purchase Obligation (RPO)

The Commission notified the Punjab State Electricity Regulatory Commission (Renewable Purchase Obligation and its compliance) Regulations, 2011 (RPO

Regulations) on 03.06.2011, 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 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.

9.5.4 RPO for FY 2014-15

The RPO specified by the Commission for FY 2014-15 is 3.81% (Non-Solar) and 0.19% (Solar) i.e.4.0% (overall). Pursuant to review meeting held on 13.03.2014, PEDA in consultation with PSPCL, vide letter dated 27.03.2014 has furnished details of renewable energy power projects commissioned in FY 2013-14 and projections of renewable energy capacity likely to be commissioned in FY 2014-15. As per the said information, the renewable energy capacity available to PSPCL as on 31.03.2014 and projections for renewable energy capacity to be added during FY 2014-15 for meeting the RPO is given in Table 9.7.

Table 9.7: Existing Renewable Energy Capacity and Projections for FY 2014-15

	Biomass (MW)	Non-fossil fuel Cogeneration (MW)	Small Hydro (MW)	Solar (MW)	Biogas+ Waste to Energy (MW)	Total (MW)
I	II	III	IV	V	VI	VII
Upto 31.3.2014	72.50	147.20*	130.70	35.75	1 (0+1)	**387.15**
Projections for FY 2014-15	26	11.50	20.65	269.52	1 (1+0)	**328.67**

* Revised from 147.45 MW (Tariff Order FY 2013-14) as per information received from PEDA

The Commission also notes that the generation/purchase from renewable energy power projects and RPO during FY 2014-15 has been projected to be 1158.14 MU [1065.15 MU (Non-Solar) and 92.99 MU (Solar)] while RPO during the same period shall be 1800.76 MU [1715.22 MU (Non Solar) and 85.54 MU (Solar)]. During the meeting, PEDA informed that with the likely installation of 250 MW Solar PV capacity allocated by PEDA by 31.12.2014, the Solar RPO would be fully met in FY 2014-15. **The Commission directs PSPCL to comply with the RPO specified in the RPO Regulations for FY 2014-15.**

9.5.5 **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' (APPC) as ₹3.74 per kWh. This 'Pooled Cost of Purchase', based on the data for FY 2013-14, will be applicable during FY 2014-15.

9.6 Separate Tariff for each Function

9.6.1 In this Order, the Commission is determining separate tariffs for generation and distribution functions of PSPCL. The segregation of the ARR for FY 2014-15 of

PSPCL into generation and distribution functions has been carried out based on the information furnished by PSPCL in its letter nos. 504 dated 27.03.2014 & 523 dated 02.04.2014 and the Audited Annual Accounts of FY 2011-12 of PSPCL.

9.6.2 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 & carrying cost of gaps upto FY 2013-14, has been computed in proportion to the revenue requirement (in Table 9.8) of each function.

9.6.3 The segregated ARR on the above basis is given in Table 9.8. The generation function has been further divided into thermal and hydel taking into account the fact that the Regulations for determining the tariff for these are different.

Table 9.8: Segregation of ARR for FY 2014-15

(₹ crore)

Sr.No	Item of expense	Generation			Distribution	Total
		Hydel	Thermal	Total		
I	II	III	IV	V	VI	VII
1.	Cost of fuel	0.00	4795.12	4795.12	0.00	4795.12
2.	Cost of Power purchase	0.00	0.00	0.00	8381.06	8381.06
3.	Employee cost	329.17	606.06	935.23	3350.90	4286.13
4.	R&M expenses	27.66	183.75	211.41	200.77	412.18
5.	A&G expenses	4.28	9.91	14.19	121.55	135.74
6.	Depreciation	263.27	185.45	448.72	315.71	764.43
7.	Interest charges	662.30	723.14	1385.44	851.31	2236.75
8.	Return on Equity	268.18	304.18	572.36	370.26	942.62
9.	Provision for DSM fund	0.00	0.00	0.00	40.76	40.76
10.	Charges payable to GoP on Power from RSD	14.13	0.00	14.13	0.00	14.13
11.	Transmission charges payable to PSTCL	0.00	0.00	0.00	895.66	895.66
12.	**Total revenue requirement**	**1568.99**	**6807.61**	**8376.60**	**14527.98**	**22904.58**
13.	Add: Consolidated Gap upto FY 2013-14	12.17	52.82	64.99	112.72	177.71
14.	Add Carrying Cost of Revenue Gaps	-4.34	-18.84	-23.18	-40.20	-63.38
15.	**Total of Consolidated Gap and carrying cost (13+14)**	**7.83**	**33.98**	**41.81**	**72.52**	**114.33**
16.	**Gross revenue requirement (12+15)**	**1576.82**	**6841.59**	**8418.41**	**14600.50**	**23018.91**

9.7 Generation Tariff

9.7.1 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 by CERC from time to time. CERC by its notification dated 21st February, 2014 has issued the Tariff Regulations for generation and transmission projects for the period 2014-19 by repealing its earlier Tariff Regulations.

9.7.2 As per CERC Regulations, generation tariff shall comprise of:

(i) Annual Fixed Charges (AFC), which include return on equity, interest on loan capital, depreciation, interest on working capital and O&M expenses;

(ii) Energy (variable) charges for recovery of Fuel Cost (primary and secondry fuel).

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

9.7.3 Full AFC is payable on achievement of normative plant availability as specified in CERC Tariff Regulations, 2014.

9.7.4 The Commission has assessed the plant wise AFC for FY 2014-15 on the basis of data provided by PSPCL, as reproduced at Annexure-VI (Volume-II) whereas proportion of generation cost under each head is given in Annexure-VII (Volume-II). Accordingly, the total revenue requirement for each plant is computed and indicated in Annexure-VIII (Volume-II). The plant wise AFC determined for FY 2014-15 is given in Table 9.9.

Table 9.9 - Annual Fixed Charges - Generation for FY 2014-15

Sr. No	Plant	Annual/Fixed Capacity Charges (₹ crore)	Net Generation (MU)	Fixed Charges (Paise/unit)
I	II	III	IV	V
A	**Thermal Plants**	**2046.47**		
1.	GNDTP	597.80	2725	219.38
2.	GGSSTP	774.90	8974	86.35
3.	GHTP	673.77	6607	101.98
B	**Hydel Plants**	**1576.82**		
1.	Shanan	35.50	514	69.07
2.	UBDC	121.84	339	359.41
3.	RSD	970.39	1603	605.36
4.	Mukerian	136.38	1352	100.87
5.	Anandpur Sahib	91.77	724	126.75
6.	Micro Hydel	1.85	7	264.64
7.	Bhakhra Left Bank and Bhakhra Right Bank	92.79		*
8.	Beas & Extension.	126.30		*

** 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 - ₹2046.47 crore

ii) Hydel - ₹1576.82 crore

9.7.5 The AFC for both thermal and hydel plants will be payable on achievement of target availability as discussed in para 9.7.3.

9.7.6 The variable (energy) charges for a thermal plant are the primary fuel cost and secondary 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 2014-15, the total fuel cost for all the three thermal plants is ₹4795.12 crore. These costs have been worked out plant wise and the variable charges per unit of energy for each plant are given in Table 9.10.

Table 9.10: Variable (Energy) Charges for FY 2014-15

Sr. No.	Particulars	GNDTP	GGSSTP	GHTP
I	II	III	IV	V
1.	Fuel cost (₹ crore)*	753.49	2433.09	1608.54
2.	Net Generation (MU)	2725	8974	6607
3.	Variable charge per unit sold (Paise/kWh)	276.51	271.13	243.46

** The plant wise fuel cost has been taken as approved by the Commission in para 6.7.*

9.8 Total charges for Generating Plants

The total charges (fixed and variable) for generating plants as determined by the Commission are given in Table 9.11.

Table 9.11: Total energy charges for FY 2014-15

Sr. No.	Plant	Fixed Charges (Paise/unit)	Variable Charges (Paise/unit)	Total Charges (Paise/unit)
I	II	III	IV	V = (III+IV)
A	**Thermal Plants**			
1.	GNDTP	219.38	276.51	495.89
2.	GGSSTP	86.35	271.13	357.48
3.	GHTP	101.98	243.46	345.44
B	**Hydel Plants**			
1.	Shanan	69.07	-	69.07
2.	UBDC	359.41	-	359.41
3.	RSD	605.36	-	605.36
4.	Mukerian	100.87	-	100.87
5.	Anandpur Sahib	126.75	-	126.75
6.	Micro Hydel	264.64	-	264.64

9.9 Distribution / Wheeling Charges

The gross revenue requirement for distribution for FY 2014-15 as per Table 9.8 is ₹5323.78 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. PSPCL intimated the total distribution capacity for working out the wheeling charges for FY 2014-15 as 13405.35 MW. The Commission has, however, worked out the total distribution capacity of PSPCL for FY 2014-15 as 12689.34 MW (net of transformation losses and auxiliary consumption). The details regarding determination of wheeling charges are given in Table 9.12.

Table 9.12: Wheeling Charges for FY 2014-15

a)	Energy requirement at the distribution periphery (as per Table 6.5 of the Tariff Order).	43988 MU
b)	Distribution capacity determined by the Commission.	12689.34 MW
c)	Gross revenue requirement for distribution (excluding power purchase cost and charges payable to PSTCL, as per Table 9.8)	₹5323.78 crore
d)	Wheeling charges for using distribution network (c x 1000/a)	121 paise/kWh
e)	Wheeling charges per MW/month [(c x 10^7)/(b x 12)]	₹349623/MW/Month

Accordingly, the Commission determines wheeling charges as ₹349623/ MW/Month.

9.10 Open Access Charges

9.10.1 As per the Open Access Regulations notified by the Commission, the wheeling charges for FY 2014-15 are ₹349623/MW/Month.

9.10.2 The energy requirement at the distribution periphery as per Table 6.5 of this Tariff Order for FY 2014-15 is 43988 MU. On this basis, the wheeling charges for use of the distribution network are determined as 121 paise/kWh (109 paise/kVAh).

As per clause 25(5) of PSERC (Open Access) Regulations, 2011 (amended on 4th 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 2014-15, shall also be liable to pay wheeling charges (i.e. of 121 paise/kWh (109 paise/kVAh) determined by the Commission as per Tariff Order applicable for the year.

Transmission and Wheeling charges for wheeling of NRSE power for consumption within the State shall be levied @ 2% of the energy injected into the State Grid, irrespective of distance. In case of wheeling of NRSE Power outside the State, full transmission and wheeling charges shall be leviable.

For Long-term and Medium-term OA customers availing supply at 220 kV, 132 kV, 66 kV, 33 kV or 11 kV, wheeling charges shall be ₹349623/MW/Month of the contracted capacity.

9.10.3 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 (14.17%), which works out to 2.13%, in addition to Transmission Loss of 2.5%.
(iii)	OA customers at 11 kV	40% of distribution losses (14.17%), which works out to 5.67%, in addition to Transmission Loss of 2.5%.

9.10.4 As per clause 26(2) of PSERC (Open Access) Regulations, 2011, the cross subsidy surcharge for various categories of consumers, for FY 2014-15, shall be as under:

Large supply	-	95 paise/kWh (90 paise/kVAh for Large Supply General Industry and 93 paise/kVAh for Large Supply PIU/Arc Furnace consumers)
Domestic supply	-	94 paise/kWh (86 paise/kVAh)
Non-Residential supply	-	92 paise/kWh (85 paise/kVAh)
Bulk supply	-	57 paise/kWh (52 paise/kVAh)
Railway Traction	-	80 paise/kWh (78 paise/kVAh)

9.10.5 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.

9.11 Fuel Cost Adjustment (FCA)

PSPCL has submitted Petition No. 11 of 2014 for fuel cost adjustment for the 3rd quarter of FY 2013-14. PSPCL has worked out adjustment amount during the quarter as ₹137.60 crore, consisting of ₹107.034 crore as change in fuel cost of its own thermal stations and ₹30.57 crore as change in power purchase cost.

The Commission, in its order dated 28.03.2014 in the matter of Petition No. 11 of 2014 for fuel cost adjustment for the 3rd quarter of FY 2013-14 has passed the following order:

> *"Fuel Cost Adjustment surcharge as determined by PSPCL for the second quarter of FY 2013-14 and as being presently levied from 01.01.2014 to 31.03.2014 shall continue to be levied from 01.04.2014 to 30.06.2014, as Petition No. 63 of 2013 for determination of ARR and Tariff filed by PSPCL for FY 2014-15 is under process and is likely to take some more time. The effect of fuel cost ending September, 2013 shall be taken into consideration in the review of FY 2013-14, in the Tariff Order for FY 2014-15. The adjustment on this account shall be made by the Commission at the time of determination of ARR for FY 2014-15".*

PSPCL has also submitted Petition No. 33 of 2014 for fuel cost adjustment for the 4th quarter of FY 2013-14. PSPCL has worked out adjustment amount during the quarter as ₹150.55 crore, consisting of ₹118.949 crore as change in fuel cost of its own thermal stations and ₹31.60 crore as change in power purchase cost.

The Commission, in its order dated 01.07.2014 in the matter of Petition No. 33 of 2014 for fuel cost adjustment for the 4th quarter of FY 2013-14 has passed the following order:

> *".........PSPCL is hereby directed not to charge any FCA surcharge after 30.06.2014. The net effect of the fuel cost adjustment for the 3rd and 4th quarters of FY 2013-14 and the recovery made by PSPCL by continuing the FCA surcharge from 01.04.2014 to 30.06.2014 shall be taken into account at the time of determination of ARR for FY 2014-15".*

In para 4.7 of the Tariff Order for FY 2013-14, it has been provided 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 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 as per Punjab State Electricity Regulatory Commission (Conduct of Business) (second amendment) Regulations, 2005".

In view of the above, the Commission has worked out the Fuel Cost Adjustment for the 3rd and 4th quarters of FY 2013-14. 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 3rd and 4th quarters has been worked out both with the parameters including price and gross calorific value of coal and oil as contained in the Review of FY 2013-14 in Chapter 5 of this Tariff Order as well as with actual price and gross calorific value of coal and oil as intimated by PSPCL in the petitions, but keeping performance parameters as approved by the Commission in its Tariff Order for FY 2013-14, except SHR of GHTP Units III & IV, which has now been determined as 2428 kcal/kWh in para 2.7.5. The fuel cost for the 3rd and 4th quarters has been worked out with parameters including price and gross calorific value of coal and oil as contained in the Review of FY 2013-14 in Chapter-5 of this Order, instead of that as approved in the Tariff Order for FY 2013-14, since effect of these values has been considered for calculating the fuel cost for the second half of FY 2013-14 in the Review of FY 2013-14 in Chapter 5 of this Tariff Order.

For 3rd quarter of FY 2013-14, to arrive at the change in Power purchase cost approved by the commission for Central Sector Stations, the variable cost of Central Sector Stations for the actual quantum of power purchase during the 3rd quarter has been worked out both with the variable per unit cost considered by the Commission in the Review of FY 2013-14 in Chapter 5 of this Tariff Order, as well as with variable per unit cost as intimated by PSPCL for the 3rd quarter of FY 2013-14.

For 4th quarter of FY 2013-14, to arrive at the change in Power purchase cost approved by the Commission for Central Sector Stations & other generating stations where PSPCL has entered into long term contracts, the variable cost of Central Sector Stations & other generating stations for the actual quantum of power purchase during the 4th quarter has been worked out both with the variable per unit cost considered by the Commission in the Review of FY 2013-14 in Chapter 5 of this Tariff Order, as well as with variable per unit cost as intimated by PSPCL for the 4th quarter of FY 2013-14. The change in variable cost of other generating stations where PSPCL has entered into long term contracts has been considered in view of amendment issued in respect of PSERC Business Regulations vide notification dated 14.05.2014.

The summary of the FCA charged / chargeable for 3rd quarter and 4th quarter of FY 2013-14, after taking into consideration the effect of FCA charged by PSPCL for 3rd quarter of FY 2013-14 in compliance to Commission's order dated 28.03.2014 (@ 12 paise/unit), is summarized below:

Sr. No.	Description	FCA Amount (₹ crore)		
		Total	Chargeable/ charged to metered category	Chargeable/ charged to unmetered (AP) category
1.	FCA chargeable for 3rd quarter of FY 2013-14 as determined by the Commission in case of Petition No. 11 of 2014	49.27	40.75	8.52
2.	FCA charged by PSPCL for 3rd quarter of FY 2013-14 in compliance to Commission's order dated 28.03.2014 (@ 12 paise/unit)	102.69	84.94	17.75
3.	Extra FCA charged by PSPCL for 3rd quarter of FY 2013-14 (2-1)	53.42	44.19	9.23
4.	FCA chargeable for 4th quarter of FY 2013-14	61.06	53.20	7.86
5.	**Net FCA amount (4-3)**	**7.64**	**9.01**	**(-) 1.37**

The net chargeable FCA amount as worked out above is ₹7.64 crore. FCA amount for metered category and unmetered category have been worked out as ₹9.01 crore and (-) ₹1.37 crore respectively.

Thus, the Commission decides that the net FCA amount for 3rd quarter and 4th quarters of FY 2013-14 as worked out above be adjusted by PSPCL while determining the FCA amount and FCA surcharge for the 1st quarter of FY 2014-15, to be leviable by PSPCL from October, 2014 to December, 2014.

9.12 Date of Effect

The Commission notes that the ARR of PSPCL for FY 2014-15 covers the complete financial year. The recovery of tariff, therefore, has to be such that the total revenue requirement of PSPCL for FY 2014-15 is recovered in this period.

The Commission, therefore, decides to make the revised tariffs applicable from April 01, 2014 and the tariff structure determined above shall remain operative till March 31, 2015. The Commission further decides

that the arrears on account of tariff revision w.e.f. April 01, 2014 shall be recovered by PSPCL in suitable instalments.

This Order is signed and issued by the Punjab State Electricity Regulatory Commission on this, the 22nd day of August, 2014.

Date: 22.08.2014

Place: CHANDIGARH

Sd/-	Sd/-	Sd/-
(GURINDER JIT SINGH) MEMBER	(VIRINDER SINGH) MEMBER	(ROMILA DUBEY) CHAIRPERSON

Certified

Sd/-
Secretary

Punjab State Electricity Regulatory Commission, Chandigarh.

APPENDIX- I

Minutes of the Meeting of State Advisory Committee of the Punjab State Electricity Regulatory Commission held on February 17, 2014.

The meeting of the PSERC, State Advisory Committee was held in the office of the Commission at Chandigarh on February 17, 2014 to discuss ARRs and Tariff Petitions for FY 2014-15 filed by PSPCL and PSTCL. The following were present:

1.	Mrs. Romila Dubey, Chairperson, PSERC	Ex-officio Chairperson
2.	Er.Virinder Singh, Member, PSERC	Ex-officio Member
3.	Er.Gurinder Jit Singh, Member, PSERC	Ex-officio Member
4.	Sh. Jacob Pratap, Dy. Labour Commissioner, on behalf of Labour Commissioner, Pb.	Member
5.	Sh. Jaspal Singh, CE, on behalf of Vice Chancellor, PAU	Member
6.	Sh. D.L Sharma, Chairman, CII, Punjab State Council	Member
7.	Sh. K.K. Singh, Advisor Power on behalf of Chairman, PHDCCI,	Member
8.	Sh. R.B. Kumar, Dy. CEE/TRD/NR, HQ on behalf of Chief Elec. Engineer, Northern Railways	Member
9.	Sh. Aishvarya Sharma, AAE-II, On behalf of Director/Agriculture	Member
10.	Sh. Vinod Bansal, Financial Advisor on behalf of Director, Finance & Commercial, PSTCL	Member
11.	Er. K.L. Sharma, Director/Distribution, PSPCL	Member
12.	Er. Rakesh Kumar Sahi, Chief Engineer, ARR & TR, PSPCL	Member
13.	Er. S.K.Anand, Ex-Member Distribution, PSEB	Member

14.	Prof. R. S. Ghuman, Chair Professor, .Nehru SAIL Chair and Head Panchayati Raj Unit, CRRID,	Member
15.	Shri Pishora Singh, President, BKU (EKTA), Sidhupur	Member
16.	Shri Bhagwan Bansal Punjab Cotton Factory, Ginners Association	Member
17.	Er. Suresh Kumar Gupta, (Ex-Member/ Generation), PSEB, Patiala	Member
18.	Sh. Vijay Talwar, State Vice-President-Cum-Co Chairman, National Power Committee, Laghu Udyog Bharti, Jalandhar	Spl. Invitee
19.	Sh. Amrik Singh Khalilpur VPO Khalilpur, Derababa Nanak, Distt. Gurdaspur.	Spl. Invitee
20.	Er. A.S. Pabla, House No. 69, Phase-III-A, SAS Nagar (Mohali)	Spl. Invitee
21.	Er. P.P. Garg, Secretary, Secretary/PSERC	Ex-officio

The Chairperson welcomed the Members of the State Advisory Committee and thanked everyone present for having spared time to attend the meeting. The Chairperson thereafter requested the Members to offer their suggestions/comments on the Annual Revenue Requirement and Tariff Petitions for FY 2014-15 filed by PSPCL and PSTCL.

1. <u>Prof. R.S. Ghuman</u>

Prof. R.S. Ghuman pointed out that all the AP consumers should be given supply through meters so that the actual consumption of AP sector could be measured. Chairperson, PSERC pointed out that necessary directives have been given to PSPCL for 100% metering of AP connections. However, PSPCL is finding it difficult to implement directives as a lot of manpower is required to install and read energy meters. Although AMR system has been installed at majority of the 11 kV AP feeders, installing meters at the premises of each and every AP consumer is very expensive. Shri S.K. Gupta pointed out that even now a large number of AP connections are running on mixed load rural feeders and PSPCL is ignorant about this aspect. Director/Distribution, PSPCL stated that at present about 12,000 AP connections are running on urban and kandi area feeders. Chairperson, PSERC directed PSPCL to submit a status report regarding AP connections running on mixed load rural feeders within three months. Prof. Ghuman was of the view that due to unmetered AP supply, the T&D losses have been inflated with theft of energy. He was of the view that if the utility is not able to generate the exact data regarding AP connections then it is the governance failure of PSPCL. He pointed out that the percentage of metered energy sale is going down. There is also unauthorized AP meter load. He further pointed out that the revenue gap is increasing year by year raising doubts about survival of the utility. Member (V), PSERC pointed out that PSERC has directed PSPCL to implement an AMR cum LT shunt capacitor model through outsourcing which will not cost anything to the utility but the response of the utility to implement this project was lukewarm.

Prof. R.S. Ghuman also requested for a clarification regarding different tariff rates for the Thermal Power Plants (TPPs) coming up in private sector in Punjab. Er. S.K. Gupta further pointed out that these TPPs are going to be charged higher rates by Coal India Limited for the coal to be supplied to these thermal plants. Director/Gen. & RE, PSERC explained that TPPs at Rajpura and Talwandi Sabo were allotted by erstwhile PSEB (now PSPCL) under case-2 bidding through competitive bidding process undertaken as per Competitive Bidding Guidelines and Standard Bidding Documents issued by Ministry of Power, Government of India.

Prof. R.S. Ghuman suggested that the proposal of PSPCL to surrender about 13000 MU from these TPPs and bear fixed charges to the tune of ₹1706.00 crore should be rejected. Rather, some viable solution is needed to sell this power to minimize loss on this account.

2. **Sh. Aishvarya Sharma, AAE-II**

Sh. Aishvarya Sharma, AAE-II who represented Director Agriculture endorsed the views of Prof. Ghuman.

3. **Mr. S.K. Gupta**

Mr. S.K. Gupta pointed out that the revenue collection has reduced by about ₹900 crore whereas there is marginal decrease in energy sales. At this, Chief Engineer/ARR, PSPCL stated that the decrease in revenue is due to power factor incentive, voltage rebate, roll back in tariff and on account of various judgments of APTEL/various Courts. Mr. Gupta raised the issue of recalling of loans by the Govt. of Punjab. Chairperson, PSERC stated that the recalling of loans is a matter between PSPCL and Government of Punjab. Mr. Gupta further stated that the revenue gap is increasing year by year and the financial condition of the utility is getting from bad to worse every year. He further pointed out that as per ARR, PSPCL is going to surrender 13,000 MU of surplus power in FY 2014-15 and as a result of this, the consumers will have to bear the burden of fixed charges to the tune of ₹1706 crore. Out of ₹1706 crore, ₹1053 crore is in respect of three upcoming plants in the State of Punjab. He suggested that auctioning/sale of surplus power be resorted to by PSPCL to reduce the burden of fixed cost on the consumers. He pointed out that the price of coal in case of GGSSTP is higher than the price of coal in respect of GNDTP and GHTP and desired that the reasons for higher price vis-à-vis GCV variation needs to be looked into. Mr. Gupta further pointed out that the upcoming IPPs in Punjab will receive coal at higher rate than generating stations of PSPCL.

4. <u>Sh. R.B.Kumar, Dy. CE/TRD/Northern Railway</u>

Sh. R.B.Kumar pointed out that step motherly treatment is being meted out to Northern Railway, as power factor rebate which is given to Industrial Consumers for power factor more than 0.9 is not available to Railways, and the same is given for power factor more than 0.95. He also requested that instead of cash, bank guarantee should be accepted as security from the Railways.

5. <u>Mr. Bhagwan Bansal, Punjab Cotton Factory Ginners Association</u>

Mr. Bhagwan Bansal pointed out that due to decrease in water table, cotton ginning industry was adversely affected. He requested that Monthly Minimum Charges should be done away with and bills should be raised only on actual consumption basis. He further requested that if any cotton ginning industrial consumer opts for temporary disconnection of his industry due to non availability of raw material, then the same may be reconnected within one year without charging MMC.

6. **Mr. Jaspal Singh, CE, Punjab Agriculture University**

Mr. Jaspal Singh requested the Commission to requisition the action taken report on the minutes of the State Advisory Committee from PSPCL regularly.

7. **Mr. D.L. Sharma, Chairman, CII**

The Chairperson requested the CII to deliberate upon and submit a proposal regarding the utilization of surplus power by way of increased consumption of industrial consumers. CII representative requested that in the tariff order, wheeling charges and cross subsidy surcharge should be reduced and also the burden of fixed charges of surplus power should not be passed on to the consumers. Member (V) pointed out that this would be counterproductive as consumers would resort to open access rather than buying power from PSPCL which would effect the survival of the utility. At this, CII requested that at least cross subsidy charges should be reduced and should be determined as per voltage-wise/category-wise cost of service. He further pointed out that the increase in equity by Government of Punjab by transfer of figures from one head to another was effecting the consumers adversely.

8. **Er. A.S.Pabla**

Er. Pabla suggested that the meters should be installed on all AP connections. With metering of AP connections, the power factor of each tube well connection can be measured and corrective steps can be taken. This will lead to huge saving for the utility. DSM measures can also be applied on AP connections which will further lead to 20% to 30% of saving. Er. Pabla further requested the Commission that the DSM measures have not been taken care of in the ARR by PSPCL and it should be part of ARR.

9. **Er. S.K.Anand**

Er. S.K. Anand appreciated the Commission for its role. He stressed that the financial position of PSPCL is deteriorating. He further added that all proposals such as AMR, DSM & others are not useful at all as the condition of distribution system is not good. He suggested that the distribution system should be overhauled in a phased manner but on priority basis. Even SCADA at 400 kV is not hundred percent working. He also suggested that the subsidy should be given by the State Govt. at average cost of supply. He stressed that all stakeholders should come on one platform. He pointed out the following shortcomings of the utility which needed to be addressed on priority.

- There is no personnel and technical planning in PSPCL.
- No policy regarding postings and transfers.
- Distribution system has no engineering inputs.
- No technical map of 11 kV/LT system.
- There is shortage of manpower at some places, and as such restructuring of manpower is required.

He pointed out that the basic malady of PSPCL was that its present distribution structure is 4 to 5 tiered and is based on 1895 PWD Model. According to Er. S.K. Anand, its adverse effects are as under:

i) In spite of more than 50,000 employees in the distribution set up, against a requirement of not more than 35,000 to 40,000, there are huge all round shortages of staff and the worst effected is the cutting edge level of the sub division, which is effecting the operations adversely.

ii) There are, by and large, no engineering inputs in the distribution set up where the new construction, as well as the operation and maintenance activity is being looked after by line staff. Design element is missing. The entire distribution system is poorly laid and poorly maintained, with the resultant ill effects, in terms of an abnormal incidence of outages and equipment failure.

iii) There is no way that PSPCL can achieve the desired standards of supply under this system.

Er. S.K.Anand expressed strong apprehension about the initiative of installing of automatic metering and removal of meters from consumer premises to stall leakages/theft. Already, a large number of these meters have gone defective.

He stressed the need to replace the current distribution set up with a modern set up on functional basis. Director/Distribution PSPCL expressed that there was lot of opposition to the expansion of restructuring of distribution based on Patiala model for cities and Nabha model for rural areas. On this, Member (V) pointed out that distribution reorganization based on functional model was the order of the day and all neighbouring countries of India like Sri Lanka, countries in Africa and some Indian utilities like Andhra Pradesh have changed their distribution organization on functional basis and thus PSPCL was to implement only a well tried and practical model of distribution organization which it has been committing to implement since 2010.

10. **Mr. Sachdeva, PHD Chamber**

Mr. Sachdeva pointed out that at the time of creation of companies, the balance sheet of these companies should have been zero but it was not so. He stated that the steel industry in Punjab is in a bad shape and the tariff rates for industrial consumers should not be increased. Further, the rebate on ToD Tariff should be increased to ₹2.00 per unit. He suggested that the voltage wise tariff should be introduced. AP cross subsidy burden should be reduced. He suggested that as the number of employees are decreasing in PSPCL, man power planning is the need of the hour. Automation is the necessity of the hour and everything including billing details etc should be available on the website of the utility. He further added that the decisions/directives of the Commission are not being implemented by PSPCL and the Commission should penalize the utility for any violations in this regard.

Sh. R.S. Sachdeva also suggested that the proposal of PSPCL to surrender about 13000 MU from Thermal Power Plants and bear fixed charges to the tune of ₹1706 crore may not be agreed to. Rather, some viable solution is needed to sell this power to minimize the loss on this account.

11. **Sh. Pishora Singh, President, Bharti Kisan Union (Ekta)**

Sh. Pishora Singh suggested that the tariff rates of electricity for rural areas should be reduced as the villages are not getting uninterrupted power. He suggested that the number of employees should be increased in the rural areas as during the emergency/night hours no employees are available for attending the complaints of the consumers in the rural areas and also there are lots of power cuts in rural areas. More staff is required to maintain the supply in the villages. The consumers are required to travel about 30 KM to lodge their complaints. He added that at present PSPCL has outsourced the construction of new lines/shifting of meters in pillar boxes to the contractors and the quality of work done by the contractors is very poor. PSPCL should look in to the matter. He also added that the VDS for AP consumers should be opened. He further pointed out that although the meters of the consumers have been shifted outside their houses, but the cost of damage to meter is being borne by the consumers without verifying the cause of damage. This practice of PSPCL should be stopped immediately. He stressed the need of NRSE/Micro Hydel projects in the State instead of thermal projects.

12. <u>Mr. Vijay Talwar, Laghu Udyog Bharti (Punjab Chamber)</u>

Mr. Talwar alleged that PSPCL is not disclosing all the non tariff income from the consumers. PSPCL has collected about ₹2,000 crore as non tariff income but has shown ₹900 crore only in the ARR for FY 2014-15. Either a special audit should be carried out or sworn affidavit taken from PSPCL regarding the correctness of the figures. He further said that PLEC should be done away with and instead of PLEC, tariff should be so designed that it is ₹3.00 per unit more during peak load period than the normal tariff. ToD should be implemented upto MS category of consumers. PPAs should be reviewed where they are expiring or likely to be renewed in the future. PSPCL has spent hundreds of crore in implementation of IT in PSPCL, but no results have so far been shown, as such, PSPCL needs to expedite execution of IT plan on priority.

The Chairperson concluded the meeting by thanking all present for their suggestions and assured the house that their concerns and suggestions would be considered.

APPENDIX-II

CATEGORY-WISE & VOLTAGE-WISE COST OF SUPPLY: FY 2014-15

Voltage of Supply	Consumer Category	Cost of Supply (₹)
220 kV	Industry	4.39
	Traction	4.47
132 kV	Industrial	4.49
	Bulk	4.43
	Traction	4.53
66 kV	Industrial	5.06
	Common Pool	4.64
	Commercial	5.16
	Bulk	5.07
33 kV	Industrial	5.10
	Domestic	5.61
	Bulk	4.96
11 kV	Industry LS	5.51
	Domestic	5.16
	Commercial	5.35
	Bulk	5.40
LT	Industry MS	6.29
	Industry SP	6.59
	Domestic (0-100)	5.68
	Domestic (101-300)	5.68
	Domestic (above 300)	5.68
	Agriculture	5.58
	Commercial	6.15
	Public Lighting	5.73
	Bulk	5.44

APPENDIX-III

Punjab State Electricity Regulatory Commission
SCO : 220-221, Sector 34-A, Chandigarh-160 022
Tel. : 0172-2648321, Fax : 0172-2664758

DO No. 9143/PSERC

Dated : 25th July, 2014

P.P. GARG
Secretary

The Punjab State Power Corporation Limited (PSPCL) and the Punjab State Transmission Corporation Limited (PSTCL) had filed their Aggregate Revenue Requirements for the year 2014-15 with the Commission. The filing of PSPCL included proposal for review for FY 2013-14 based on revised estimates of the revenue requirement for its generation and distribution business. The filing of PSTCL included a review for FY 2013-14 based on the revised estimates of revenue requirement for its transmission business (including SLDC business). With the ARR, both the Corporations i.e. PSPCL & PSTCL has filed Annual Audited Accounts for FY 2010-11 and FY 2011-12.

2. The Commission has decided to undertake true-up for FY 2010-11 and FY 2011-12 in case of PSPCL and PSTCL. However, Commission shall undertake true-up for FY 2012-13 along with their next ARR Petition i.e. for FY 2015-16 when the Audited Annual Accounts for FY 2012-13 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 2014-15, review for FY 2012-13 & FY 2013-14 and true-up for FY 2010-11 & FY 2011-12 (for both PSPCL & PSTCL), total revenue gap up to FY 2014-15 has been worked out. The Commission has decided to cover this revenue gap through a suitable hike in tariff. The Commission has also decided to increase the monthly minimum charges suitably.

3. Subsidy for FY 2014-15:

a) 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.

b) The requirement of subsidy in the current year will be as follows:

- For the year 2014-15, the Commission has determined subsidy of Rs.4445.54 crore for AP Supply. After adding subsidy of Rs.9.00 crore on account of service charges etc. in respect of AP consumers, total subsidy payable by GoP works out to Rs.4454.54 crore.
- Further, subsidy amounting to Rs.654.86 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.5109.40 (4454.54+654.86) crore for the year 2014-15.

Contd.P/2

c) The Commission has determined that excess subsidy of Rs.158.26 crore paid by the Government to PSPCL upto FY 2013-14.

d) The Commission, therefore, determines net subsidy of Rs.4951.14 (5109.40-158.26) crore payable by GoP to PSPCL for the year 2014-15. The subsidy of Rs.4951.14 crore is required to be paid in advance in 12 monthly instalments @ Rs.412.60 crore per month from April 2014 to September 2014 and @ Rs.412.59 crore per month from October 2014 to March 2015.

4. Further, any change in the Fuel Cost from the level approved by the Commission is to be passed on to the consumers as FCA as per Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005. 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-3 above.

In case GoP intends 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.

Yours sincerely,

(P.P. Garg)

Sh. Sarvesh Kaushal, IAS,
Chief Secretary to Govt. of Punjab,
Chandigarh.

CC: Sh. Anirudh Tewari, IAS,
Secretary to Govt. of Punjab,
Department of Power,
Punjab Civil Secretariat-II, Sector 9,
Chandigarh.

APPENDIX-IV

GOVERNMENT OF PUNJAB
DEPARTMENT OF POWER
(ENERGY BRACH)

To

The Secretary,
Punjab State Electricity Regulatory Commission,
SCO No. 220-21, Sector-34A,
Chandigarh.

Memo No.01/01/2014-EB(PR)/604
Dated Chandigarh the 12-8-2014

Subject:- Annual Revenue Requirement filed by PSPCL and PSTCL for 2014-15

Please refer to your D.O. letter No. 9143/PSERC, dated 25.07.2014 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 2014-15 as decided by the Hon'ble Deputy Chief Minister of Punjab. The Concurrence of Finance Department has been obtained in this regard to pay subsidy of Rs. 4951.14 crore and additional subsidy amount, if any, payable on account of Fuel Cost Adjustment during year upto a total of Rs. 5300 Crore.

Under Secretary, Power