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

CONTENTS

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

PETITIONS FILED BY PSPCL FOR TRUE UP OF FY 2016-17, ANNUAL PERFORMANCE REVIEW OF FY 2017-18 AND REVISED ESTIMATES FOR FY 2018-19

PRESENT: Ms. Kusumjit Sidhu, Chairperson
Sh. S.S. Sarna, Member
Ms. Anjuli Chandra, Member

Date of Order: 19th April, 2018

ORDER

The Punjab State Electricity Regulatory Commission (Commission), in exercise of powers vested in it under the Electricity Act, 2003 (Act), passes this order for the true up of FY 2016-17, Annual Performance Review (APR) for FY 2017-18 and determining the Annual Revenue Requirement (ARR) for FY 2018-19 for generation and distribution of electricity by the Punjab State Power Corporation Limited (PSPCL) to the consumers of the State of Punjab. The petitions 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 Amritsar, Patiala, Ludhiana and Chandigarh, the responses of PSPCL to the objections and observations of the Government of Punjab (GoP), in this respect, have been considered. The State Advisory Committee constituted by the Commission under Section 87 of the Act has also been consulted and all other relevant facts and material on record have been perused before passing this Order.

1.1 Background

The Commission has in its previous Tariff Orders determined tariff in pursuance to the ARRs and Tariff Applications submitted by erstwhile Punjab State Electricity Board (the Board) for the years 2002-03 to 2006-07, 2008-09, 2009-10, 2010-11 and PSPCL for 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17 and Tariff Order for MYT Control Period from FY 2017-18 to FY 2019-20. Tariff Order for FY 2007-08 had been passed by the Commission in suo-motu proceedings.

PSPCL has submitted that it is one of the ‘Successor Companies’ of the erstwhile Punjab State Electricity Board (PSEB), 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 successor companies viz. Punjab State Power Corporation Limited (PSPCL), to undertake generation and distribution business and Punjab State Transmission Corporation Limited (PSTCL), to undertake transmission of electricity along with operation of State Load Dispatch Centre (SLDC) functions. Government of Punjab amended the Transfer Scheme vide Notification No. 1/4/04 EB (PR) 620 on December 24, 2012 known as Punjab Power Sector Reforms Transfer (First Amendment) Scheme, 2012. The salient features of the aforesaid amendments are appended as **Annexure-I**.

The Commission notified the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 (PSERC MYT Regulations, 2014) and vide notification dated May 28, 2015, the effective date of enforcement of these Regulations was April 1, 2017.

PSPCL filed petition for True-up for 2014-15, Review of FY 2016-17 and approval of ARR and Tariff for MYT Control Period from FY 2017-18 to FY 2019-20 (Petition No. 90 of 2016) and subsequently PSPCL filed Petition (no. 33 of 2017) for True up of FY 2015-16 in respect of its generation and distribution business which were disposed vide order dated 23.10.2017 as per the terms stipulated therein. PSPCL on the basis of feedback received from the consumers vide letter no. 993/ARR/DY.CAO/245/VOL-II dated 06.11.2017 requested the Commission to implement the revised Single Part Tariff from 01.04.2017 to 31.12.2017 and Two Part Tariff as determined for FY 2017-18 to be made applicable w.e.f. 01.01.2018. Similar representations were also received from various consumer organisations suggesting prospective application of the Two Part Tariff Structure. The Commission exercising its inherent powers under Regulation 69 and 70 of the Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005 decided to continue with the single part tariff from 01.04.2017 to 31.12.2017 and to implement the Two Part Tariff Structure w.e.f. 01.01.2018 to 31.03.2018 vide order dated 09.11.2017. Further, the Commission vide its Order dated 16.02.2018 took note of the decision of the

Government of Punjab (GoP) conveyed vide Department of Power (Energy Branch) memo no. 2/11/2017- PE2/3 dated 11.01.2018 with regard to (i) Retrospective implementation of increased tariff, (ii) Two part Tariff System and (iii) Power to industry @ ₹5/kVAh. Government of Punjab, vide the aforesaid decision has also increased the instalments for payment of dues/arrears by consumers from 9 months allowed by the Commission in its Tariff Order dated 23.10.2017, to 12 months. The Commission decided that the interest on account of instalments for the three months (in addition to the State Commission's Order) was to be borne by the Government of Punjab.

1.2 Annual Performance Review (APR) for FY 2017-18 and Annual Revenue Requirement (ARR) for FY 2018-19

PSPCL has filed the present petition for approval of Annual Performance Review (APR) for FY 2017-18 and revised estimates of Annual Revenue Requirement (ARR) for FY 2018-19 for Generation and Distribution in terms of the Punjab State Electricity Regulatory Commission (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014.

The petitioner has prayed to the Commission to:

a) admit the Petition seeking approval of APR for FY 2017-18 and Revised Estimates of ARR for FY 2018-19 for Generation and Distribution in accordance with the PSERC MYT Regulations, 2014;

b) approve the Petition for Generation and Distribution Business for FY 2017-18 to FY 2018-19 as proposed by the petitioner;

c) allow to submit True-up for FY 2016-17 as an additional submission;

d) pass any other order(s) as the Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;

e) take appropriate view on the revenue gap projected by PSPCL as per the PSERC MYT Regulations while determining the Tariff for the FY 2018-19;

f) condone any error/omission and to give opportunity to rectify the same;

g) allow PSPCL to make further submissions, addition and alteration to this petition as may be necessary from time to time.

On scrutiny of the petition, it was noticed that the Petition was deficient in some respects. The deficiencies were conveyed to PSPCL vide letter No. PSERC/Tariff/T-215/1619 dated 13.12.2017 and Letter no. PSERC/Tariff/T-215/2087 dated

02.02.2018 respectively. The reply to the deficiencies was furnished by PSPCL vide its Memo. No. 1146/ARR/ Dy.CAO/251/ Deficiency dated 22.12.2017 followed by Memo. No. 127/ARR/Dy. CAO/251/Deficiency dated 23.01.2018 and Memo No. 246/ARR/Dy.CAO/251/Deficiency dated 23.02.2018. The Petition was taken on record on 28.12.2017 as Petition No. 66 of 2017. PSPCL provided further clarifications / information as sought by the Commission.

1.3 Objections and Public Hearings

A public notice in respect of petition for APR for FY 2017-18 and Revised Estimates of ARR for FY 2018-19 was published by PSPCL in The Tribune (English), Ajit (Punjabi), Jagbani (Punjabi), Spokesman (Punjabi), Dainik Jagran (Hindi) on 02.01.2018 inviting objections from the general public and stake holders on the petition filed by PSPCL. Copies of the Petition for APR for FY 2017-18 and Revised Estimates of ARR for FY 2018-19 including deficiencies pointed out by the Commission and reply of PSPCL to the deficiencies were made available on the website of PSERC and PSPCL as well as in the offices of the Chief Engineer/ARR & TR, PSPCL, Shakti Vihar, Patiala, in the offices of all the Chief Engineer(s) (Operation) and all the Superintending Engineer(s) in charge of the Operation Circles of PSPCL. In the public notice dated 02.01.2018, the objectors were advised to file their objections with the Secretary of the Commission within 30 days of the publication of the notice, with an advance copy to PSPCL.

Public notice mentioning the summary of the submissions contained in Table 35 of the Petition was given for the information of the general public/stake holders which was published in The Tribune (English), Hindustan Times (English), Ajit (Punjabi), Jagbani (Punjabi) and Dainik Bhaskar (Hindi) on 21.01.2018.

The Commission decided to hold public hearings at Amritsar, Patiala, Ludhiana and Chandigarh. A public notice to this effect was uploaded on the website of the Commission as well as published in various news papers i.e. Tribune (Punjabi), Hindustan Times (English), Ajit (Punjabi), Jagbani (Punjabi) and Dainik Bhaskar (Hindi) 13.01.2018. The objectors and consumers whose objections were received within the due date were also informed in this respect, as per details hereunder:

Venue	Date & time of public hearing	Category of consumers to be heard
AMRITSAR Bachat Bhawan (Guest House), B – Block, Ranjit Avenue, Amritsar.	**February 2nd , 2018** 2.30 PM to 4.30 PM	All consumers/ organizations of the area.
PATIALA Technical Training Institute (TTI), PSPCL Auditorium, Shakti Vihar, Badunagar (near 23 No. Railway Crossing), Patiala.	**February 5th, 2018** 2.30 PM to 4.30 PM	All consumers/ organizations of the area.
LUDHIANA Multi Purpose Hall, Power Colony, PSPCL, Opp.PAU, Ferozepur Road, Ludhiana.	**February 8th, 2018** 11.30 AM to 1.30 PM	All consumers/ organizations of the area.
CHANDIGARH Commission's Office i.e. SCO 220-221, Sector 34-A, Chandigarh.	**February 15th, 2018** 11.30 AM to 1.00 PM	Industrial consumers/ organizations.
	3.00 PM to 4.30 PM	Agricultural Consumers and their Unions.
CHANDIGARH Commission's Office i.e. SCO 220-221, Sector 34-A, Chandigarh.	**February 16th, 2018** 11.30 AM to 1.00 PM	All consumers except Industry, Agricultural Consumers/ organizations and Officers'/Staff Associations of PSPCL and PSTCL.
	3.00 PM to 4.30 PM	Officers'/Staff Associations' of PSPCL and PSTCL.

Through this public notice, it was also intimated that the Commission will also hear the comments of Punjab State Power Corporation Limited and Punjab State Transmission Corporation Limited with respect to the objections raised by the public besides Corporations' own point of view at the Commission's office at SCO 220-221, Sector 34-A, Chandigarh on 22.02.2018 from 11.00 AM to 1.00 PM (to be continued in the afternoon, if necessary).

1.4 Petition for True up of FY 2016-17

PSPCL vide memo. no. 106/ARR/Dy.CAO/251/Vol.I dated 19.01.2018 requested to be allowed to submit true up for FY 2016-17 based on the Statutory Audit Report, without CAG report, stating that the CAG report will be submitted later on. The Commission conveyed its approval vide memo. no. 2018/PSERC/Dir.M&F/257 dated 06.02.2018 for the submission of True up for FY 2016-17 pending CAG report keeping in view the interest of the consumers of Punjab.

PSPCL filed Petition (05 of 2018) on 12.02.2018 for True up of FY 2016-17 based on the actual expenses and income as per the audited annual accounts for FY 2016-17 and requested the Commission to carry out the final True up of expenses and revenue submitted in its petition. The Petition was admitted and taken on record on 13.02.2018. The Commission noticed certain deficiencies in the petition and vide letter no. PSERC/2188 dated 16.02.2018 sought reply from PSPCL. PSPCL vide Memo. No. 263/ARR/Dy.CAO/251(True-up 2016-17)/Deficiency dated 01.03.2018 submitted its reply to the deficiencies.

Public notice was published by PSPCL on 14.02.2018 in The Tribune (English), Hindustan Times (English), Ajit (Punjabi), Punjab Kesri (Hindi) and in Punjabi Jagran (Punjabi) on 15.02.2018; inviting objections, if any, together with supporting material within 21 days of the publication of notice.

Public hearing in Petition No. 05 of 2018 was to be held on 07.03.2018 and comments of PSPCL to the objections raised by the Public besides Corporation's own point of view regarding the petition were to be heard on 09.03.2018 at the Commission's Office at Chandigarh.

1.5 The Commission held public hearings as per schedule from 2nd February, 2018 to 16th February, 2018 at Amritsar, Patiala, Ludhiana and Chandigarh. The views of PSPCL on the objections/comments received from public and other stakeholders were heard by the Commission on 22.02.2018. The public hearing with respect to the True up for FY 2016-17 on 07.03.2018 was not attended by any member of the public.

1.6 The Government of Punjab was approached by the Commission vide DO letter No. 1880 dated 08.01.2018 seeking its views on the Petition no. 66 of 2017 for Annual Performance Review (APR) for FY 2017-18 and Annual Revenue Requirement (ARR) for FY 2018-19 filed by the Punjab State Power Corporation Limited. Further, the views of the Government on Petition No. 05 of 2018 for True-up of FY 2016-17 were sought vide DO letter No. 2195 dated 16.02.2018. In response, Government of Punjab, vide Memo. No 1/1/2018-EB(PR)/366 dated 28.03.2018, submitted its comments/observations on the same.

1.7 The Commission, in all, received 23 written objections, including the comments of Government of Punjab and 2 no. objections in the matter of True up for FY 2016-17. A few objections were received after the due date. The Commission decided to take all these objections into consideration. The number of objections (category-wise) received from consumer groups, organizations and others are detailed below:

Sr. No.	Category	No. of Objections
1.	Chambers of Commerce	3
2.	Industrial Associations	4
3.	Industry	10*
4.	PSEB Engineers Association	2
5.	Government of Punjab	1
6.	Others	3
	Total	**23**

**Including 2 no. objections in the matter of True up for FY 2016-17*

The complete list of objectors is given in **Annexure-VI** to this Tariff Order. PSPCL submitted its comments on the objections, which were made available to the respective objectors. A summary of issues raised in objections, the response of PSPCL and the view of the Commission is contained in **Annexure-VII** to this Tariff Order.

1.8 State Advisory Committee

A meeting of the State Advisory Committee constituted under Section 87 of the Act was convened on 18.01.2018 for taking its views. The minutes of the meeting of the State Advisory Committee are enclosed as **Annexure-IV** to this Order.

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

1.9 Compliance of Directives

In its previous Tariff Orders, the Commission issued certain directives to PSPCL in the public interest. A summary of directives issued during previous years, status of compliance along with the directives of the Commission in these petitions is given in **Chapter 5** of this Tariff Order.

1.10 In this Order, the Commission has dealt with Petition No. 05 of 2018 for True up of FY 2016-17, Petition No. 66 of 2017 for Annual Performance Review for FY 2017-18 and Annual Revenue Requirement and determination of Tariff for FY 2018-19 filed by PSPCL.

Chapter 2
True up for FY 2016-17

2.1 Background

The Commission approved the ARR and Tariff for FY 2016-17 in its Tariff Order dated 27.07.2016, which was based on the costs and revenues projected by the Punjab State Power Corporation Limited (PSPCL). PSPCL furnished revised estimates for FY 2016-17 during the determination of ARR for MYT Control Period from FY 2017-18 to FY 2019-20. The Commission, in the Tariff Order of FY 2017-18, reviewed its earlier approvals and re-determined the same based on the revised estimates made available by PSPCL. Now, PSPCL has submitted true up of FY 2016-17, based on the actual expenses and income as per the audited annual accounts for the year.

This Chapter contains a true up of FY 2016-17, based on figures submitted by PSPCL in Petition No. 05 of 2018.

2.2 Energy Demand (Sales)

2.2.1 Metered Energy Sales

PSPCL's Submissions:

PSPCL has submitted the figures of actual energy sales as per annual accounts for FY 2016-17. PSPCL has submitted the total metered sales within State as 32232.44 MU, sales to common pool consumers as 305.39 MU and Outside State sale as 466.33 MU during FY 2016-17. PSPCL also submitted that the Outside State Sales comprises of 52.92 MU as royalty to HP from Shanan, 56.96 MU as HP share (free) in RSD and 356.45 MU sales to other States through exchange.

Commission's Analysis:

The Commission considered and accepted the Metered Energy Sales within the State, Sales to common Pool Consumers and Outside State Sales as submitted by PSPCL.

The sales projected by PSPCL during the determination of ARR for FY 2016-17, approved by the Commission in the Tariff Order of FY 2016-17, revised estimates furnished by PSPCL during determination of ARR for MYT Control Period from FY 2017-18 to FY 2019-20, revised by the Commission in review, figures now given by PSPCL and approved by the Commission are summarized in Table 2.1.

Table 2.1: Metered Energy Sales for FY 2016-17

(MU)

Sr. No.	Category	Projections		Revised Estimates		Trued up	
		Submitted by PSPCL during determination of ARR FY 2016-17	Approved by the Commission in T.O. FY 2016-17	Submitted by PSPCL during processing of ARR FY 2017-18	Revised by the Commission in Review in TO for FY 2017-18	Figures now submitted by PSPCL for true up	Now Trued up by the Commission
I	II	III	IV	V	VI	VII	VIII
1.	Domestic	13528.62	13528.62	13080.39	13080.39	13080.39	13080.39
2.	Non-Residential	3699.27	3699.27	3801.94	3801.94	3801.94	3801.94
3.	Small Power	936.60	936.60	983.83	983.83	983.83	983.83
4.	Medium Supply	2189.61	2189.61	2214.99	2214.99	2214.99	2214.99
5.	Large Supply	11611.47	11611.47	11115.19	11115.19	11115.19	11115.19
6.	Public Lighting	202.53	202.53	192.00	192.00	192.00	192.00
7.	Bulk Supply	697.18	697.18	661.06	661.06	661.06	661.06
8.	Railway Traction	166.79	166.79	183.04	183.04	183.04	183.04
9.	**Total metered Sales (within the State)**	**33032.07**	**33032.07**	**32232.44**	**32232.44**	**32232.44**	**32232.44**
10.	Common Pool	312.00	312.00	305.62	305.62	305.39	305.39
11.	Outside State sales						
a)	HP Royalty in Shanan	53.00	53.00	52.92	52.92	52.92	52.92
b)	HP Share (free) in RSD	68.00	–*	56.96	–*	56.96	56.96
c)	Sale through exchange	–	–	–	–	356.45	356.45
d)	**Total Outside State sales**	**121.00**	**53.00**	**109.88**	**52.92**	**466.33**	**466.33**
12.	**Total metered Sales (9+10+11)**	**33465.07**	**33397.07**	**32647.94**	**32590.98**	**33004.16**	**33004.16**

** HP share (free) in RSD not considered in sale as well as generation.*

Accordingly, the Commission trued up the revised metered sales of 33004.16 MU as per details shown in Column VIII of Table 2.1.

2.2.2 AP Consumption

The Commission approved AP consumption of 11551.62 MU for FY 2016-17 in review, against 12265.37 MU of AP consumption projected by PSPCL for FY 2016-17 in the Tariff Order for FY 2017-18.

PSPCL's Submissions:

PSPCL in its True up petition has submitted the figures of actual AP consumption of 12008.98 MU for FY 2016-17, with submission that:

(i) For estimation of agriculture sales it has adopted AP consumption based on pumped energy from FY 2016-17 and the actual AP consumption as recorded for FY 2016-17 is higher by 457.36 MU than that approved by the Commission.

(ii) The Commission is wrongly taking AP consumption of Kandi Area mixed feeders as 30% of total consumption whereas it has calculated the same as 45% of total consumption. PSPCL has already submitted detailed calculations to this effect vide its memo no. 2944/CC/DTR-121/Vol.11/TR-II dated 23.12.2013. PSPCL requested the Commission to approve AP sales as submitted in the petition based on AP consumption of Kandi area mixed feeders as 45% of the total consumption.

(iii) The Commission had assumed the losses of AP feeders by deducting 2.5% losses of transmission level and 15% of the distribution losses as sub-transmission level losses, which is not based on the facts. All new AP connections and shifted AP connections are on HVDS line only and therefore losses on AP feeders will not exceed 6-10%.

Commission's Analysis:

i) The Commission also estimates the AP consumption on the basis of pumped energy data supplied by PSPCL.

ii) **Mixed Kandi Area Feeders**: For assessment of AP consumption of consumers fed from Kandi Area mixed feeders, the pumped energy for agriculture load is being taken as 30% of the total pumped energy, as per the percentage of AP load to the total load of consumers fed from Kandi Area mixed feeders, furnished by PSPCL vide its letter no. 2944 dated 23.12.2013. The Request of PSPCL to consider 45% of the total pumped energy of Kandi Area mixed feeders as AP consumption, with the plea that although the percentage of sanctioned load of AP consumers fed from Kandi Area mixed feeders is around 30% but the billed energy of the consumers is around 45% of the total pumped energy, was not found convincing by the Commission. PSPCL was asked to submit comments on the observations of the Commission in the matter vide letter no. 702 dated 20.01.2014. Since, PSPCL has not submitted any comments in the matter, it has been presumed that PSPCL had nothing more to say in the matter.

Further, to ensure more accurate assessment of agriculture consumption of Kandi Area feeders, PSPCL was directed in the Tariff Order for FY 2013-14 that AP load of Kandi Area feeders fed from mixed feeders should be segregated and in case of any practical difficulty due to difficult terrain in certain areas, all AP motors of such feeders should be metered during the year 2013-14. These directions were also reiterated in the successive Tariff Orders of the

Commission. Further, in the Tariff Order for FY 2015-16, the Commission directed PSPCL specifically to utilise Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) for segregation of mixed Kandi Area feeders and/or achieve 100% metering on these feeders. But no physical progress has been reported so far by PSPCL.

The Commission is of the view, that with the implementation of these directives even in part, the percentage of AP load fed from mixed Kandi Area feeders would have reduced further. Pending implementation of the above directives, the Commission has no option but to continue with estimating the AP consumption of mixed Kandi Area feeders for the FY 2017-18, at the rate of 30% of the total consumption.

iii) **Assessment of T&D losses on AP feeders**: PSPCL's contention to consider the losses of HVDS line is not in order as all AP connections are not released/shifted to HVDS system. Further, to arrive at a more accurate and fair conclusion regarding loss level prevailing in AP sector, the Commission, while considering the review of FY 2014-15 in the Tariff Order for FY 2015-16, directed PSPCL in para 3.2.2 as under:

> *"PSPCL is directed to cover atleast 5% of the AP feeders under 100% metering spread across the State by December, 2015 and to engage an independent agency to collect data of pumped & billed energy to calculate T&D losses of these feeders on regular basis".*

It was felt by the Commission that the loss level in 11 kV AP feeders would more or less remain of the same order as in previous years and in case PSPCL is able to demonstrate its claim of lower T&D losses in the subsequent year(s), the Commission would consider the same. Accordingly, in the Tariff Order for FY 2016-17, the Commission reiterated its directions to PSPCL to install 100% meters on 5% pure AP feeders by December, 2016 and another 5% by December, 2017. Further, In the Tariff Order for FY 2017-18, the Commission has issued directions to PSPCL as under:

"The Commission directs PSPCL to ensure completion of the work of providing 100% meters on at least 1% AP feeders and computation of T&D losses by engaging an independent agency within time period allotted by the Commission. In case of delay in completing the job in the allotted time, the Commission shall assess the losses of AP sector for calculating AP consumption as the basis of data/information available with the Commission."

On a query by the Commission, PSPCL vide its letter no. 40 dated 18.01.2018, has submitted that it has been facing stiff resistance by farmer unions in some areas leading to law and order problem. In view of Law & Order problem, PSPCL had to frequently change the feeders, where such resistance was met, as a result of which this work has been delayed.. However, PSPCL expects to complete this works shortly.

As, PSPCL has failed to implement the directions of the Commission and demonstrate its claim of lower T&D losses on the AP feeders, the Commission decides to take the losses of AP feeders (11 kV and below) in accordance with Regulation 30(2) of the PSERC (Terms & Conditions of Intra-state Open Access) Regulations, 2011, which specifies that the customers availing supply at 33/66 KV shall bear 15% of the distribution losses in addition to transmission losses.

iv) The Commission in its previous Tariff Orders has issued directives to provide meters on all AP motors fed from urban feeders. But, no physical progress has been reported by PSPCL in the matter. **In view of non-implementation of the directive, the Commission decides to consider the consumption of AP connections running on urban feeders on pro-rata basis as per previous practice.**

v) During the review of FY 2016-17, the Commission under para 4.2.2 of the Tariff Order for FY 2017-18, noted that PSPCL has booked pumped energy of 133.73 MU on average basis due to defective/non-functional feeder meters during FY 2016-17 and on validation of the data of few grid substations, it was observed that excess energy has been booked by declaring healthy feeder meters as non-functional or defective. Accordingly, the Commission decided to reduce the pumped energy for FY 2016-17 by 1.044%. Moreover, in the Tariff Order for FY 2017-18, while carrying out the review exercise, the Commission has considered the data of pumped energy upto March, 2017 submitted by PSPCL and the same data has been submitted now for truing up. **Thus, the Commission decides to apply correction factor of (-)1.044% to the pumped energy for FY 2016-17 as decided in the review exercise.**

Accordingly, the Commission has worked out the estimated AP consumption for FY 2016-17 in Table 2.2.

Table 2.2: AP Consumption for FY 2016-17

(MU)

Sr. No.	Description	Energy
(i)	Energy pumped during FY 2016-17 in case of 3-phase 3-wire AP feeders	12321.73
(ii)	Energy pumped during FY 2016-17 in case of 3-phase 4-wire AP feeders	2.18 [a]
(iii)	Energy pumped during FY 2016-17 in case of Kandi Area mixed feeders feeding AP load	572.67 [b]
(iv)	Energy pumped during FY 2016-17 in case of Kandi Area pure AP feeders feeding AP load	5.89
(v)	Total energy pumped during FY 2016-17 for AP supply {(i)+ (ii)+ (iii)+(iv)}	12902.47
(vi)	Correction @ (-)1.044% of the total pumped energy {(v)*1.044%}	134.70
(vii)	Total AP energy pumped for FY 2016-17 {(v) - (vi)}	12767.77
(viii)	Less losses @10.14%[c] (14.50-(2.5+15% of 12.43)) {(vii)x10.14%}	1294.65 [c]
(ix)	Net AP consumption for FY 2016-17 {(vii) - (viii)}	11473.12
(x)	AP consumption for load of 72.89 MW running on Urban Feeders [not included above at Sr. No.(ix)] {(ix)x 72.89/11480.31}	72.84 [d]
(xi)	**Total AP consumption for FY 2016-17 {(ix)+ (x)}**	**11545.96**

(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 mixed feeders feeding mixed load, as 30%.

(c) The loss @10.14%(11 kV and below) for FY 2016-17 has been worked out as per the overall target of T&D loss of 14.50% fixed in the Tariff Order for FY 2016-17.

(d) AP load running on 3-phase 3-wire, 3-phase 4-wire and Kandi Area feeders is 11480.31 MW and load of AP connections (running on urban feeders) is 72.89 MW ending March, 2017, as submitted by PSPCL.

Thus, the Commission approves the AP Consumption of 11545.96 MU for FY 2016-17.

2.2.3 Total Energy Sales for FY 2016-17

The total energy sales submitted by PSPCL in the true-up petition and approved by the Commission are given in Table 2.3.

Table 2.3: Total Energy Sales for FY 2016-17

(MU)

Sr. No.	Particulars	Submitted by PSPCL for True-up	Trued up by the Commission
I	II	III	IV
1.	Metered sales within State	32232.44	32232.44
2.	AP consumption	12008.98	11545.96
3.	**Total sales within State**	**44241.42**	**43778.40**
4.	Common pool sale	305.39	305.39
5.	Outside State sale	466.33	466.33
6.	**Total Energy Sale**	**45013.14**	**44550.12**

Thus, the Commission approves the total energy sales of 44550.12 MU for FY 2016-17.

2.3 Transmission and Distribution Losses (T&D Losses)

In the Tariff Order for FY 2016-17, the Commission had fixed the target of overall T&D losses at 14.50% (including transmission loss of 2.50% of PSTCL) for FY 2016-17. PSPCL in its ARR Petition for MYT Control Period from FY 2017-18 to FY 2019-20 had also estimated the T&D losses @14.50% for FY 2016-17, which the Commission approved in the Tariff Order for FY 2017-18.

PSPCL's Submissions:

PSPCL has submitted that:

- The actual T&D losses for FY 2016-17 arrived at based on the actual energy sales, own generation and energy purchase, works out to 15.26%, which is higher than the approved loss level of 14.50%, amounting to an under achievement of 0.76% in comparison to the target given by the Commission for FY 2016-17. This is mainly due to change in methodology for the estimation of AP consumption form sample meter to pumped energy as adopted by PSPCL from FY 2016-17 onward. However, PSPCL is making concrete efforts to reduce and control the losses and is already at par with some of the efficient utilities in the country. PSPCL has already taken initiatives to reduce T&D losses, details of which are discussed in the Compliance Report on directives given by Commission apart from furnishing of regular status of these initiatives. PSPCL prays the Commission to approve the actual T&D loss of 15.26% for FY 2016-17.
- The Commission has fixed the trajectory of reduction of T&D losses considering the AP consumption on the basis of sample meter readings. However, the approach of approving the T&D losses based on AP pumped energy consumption is contrary to the Commission's trajectory of reduction in T&D losses, as without revising the trajectory, the same has proved detrimental to PSPCL.
- The Commission is approving T&D loss target collectively for PSPCL and PSTCL. Hereby, it is to be noted that while approving T&D loss targets, the Commission is considering transmission losses of 2.5%. However, in actual scenario transmission losses are much higher than approved level. PSPCL submits that this additional burden of transmission losses is being laden to PSPCL which make adverse impact on PSPCL technical and financial performance.
- In the previous Tariff Orders, the Commission has disallowed a part of the sales pertaining to AP consumption and added such disallowed sales to the T&D

losses. The re-worked T&D losses being higher than the approved losses, the Commission is disallowing the consequential power purchase cost, by multiplying the excess losses with the average rate of power purchase. However, the average rate of power purchase considered by the Commission includes the fixed cost of power purchase, which cannot be saved, even if the losses and hence, power purchase quantum is lower. Hence, disallowance of power purchase cost on account of excess losses, if at all considered appropriate, needs to be computed by multiplying the excess losses with the average variable rate of power purchase, after excluding the fixed cost of power purchase. In view of the same, it is prayed that the actual AP sales, which is in accordance with audited annual accounts of the PSPCL be approved for the final truing up for the year.

Commission's Analysis:

The Commission observes that during the processing of ARR for FY 2016-17, PSPCL vide its letter no. 481/CC/DTR/Dy.CAO/246.Vol.I dated 12.04.2016 submitted that as per MoU under UDAY scheme, it has to achieve target T&D loss of 14.50% for FY 2016-17. Further, in its ARR Petition for MYT Control Period from FY 2017-18 to FY 2019-20 also, PSPCL had estimated the same T&D losses for FY 2016-17, which indicated that PSPCL had no problem with the target fixed.

Regarding the request of PSPCL to consider separate loss target for PSPCL and PSTCL, the Commission noted that PSTCL has recently completed the boundary metering and the data is yet to be stabilized. In the absence of reliable data for the complete year of FY 2016-17, it would not be possible to determine the losses separately for PSPCL and PSTCL. However, once the data for the whole year is available, the Commission would be fixing targets separately.

The Commission in para 2.2 has determined the AP consumption as 11545.96 MU for FY 2016-17. The endeavour of the Commission has always been to determine the AP consumption as accurately as possible and near to actual. The AP consumption used to be taken on the basis of sample readings when meters on 11 kV rural feeders were not available. However, once meter readings were available on the 11 kV AP feeders, computation of energy being pumped into AP feeders came nearer to the actual, as it was based on the meter readings of these feeders. As such, the contention of PSPCL to consider the AP consumption as per audited accounts cannot be accepted.

Accordingly, the Commission retains the overall T&D loss level of 14.50% (including 2.50% transmission loss for PSTCL) for FY 2016-17 as approved in the Tariff Orders for FY 2016-17 and FY 2017-18.

2.4 PSPCL'S Own Generation

2.4.1 Thermal Generation:

The Commission in review of FY 2016-17, approved the gross thermal generation of 6211.14 MU. Now, PSPCL has submitted the actual gross thermal generation during FY 2016-17 as 6211.28 MU.

PSPCL's Submissions:

PSPCL submitted that the generating plants are operating as part of integrated grid and abide by the rules and regulations framed by CERC and the Commission to ensure the safety of the grid. In order to manage the frequency, PSPCL has to follow the instructions from Punjab State Load Dispatch Centre (PSLDC). In FY 2016-17, PSPCL has suffered loss of generation because of backing down of its generation on instructions received from PSLDC even though it was available for generation. The plant wise gross generation approved by the Commission in review, gross generation as per accounts and loss of Generation due to backing down instructions from SLDC (MUs), is summarised in Table 2.4:

Table 2.4: Gross Thermal Generation submitted by PSPCL for FY 2016-17

(MU)

Generating Station	Gross Generation approved in Review	Gross generation as per the audited accounts	Loss of Generation due to backing down instructions from SLDC	Total Gross generation including loss of generation due to backing down
GNDTP	698.66	698.66	3,201.02	3,899.68
GGSSTP	2,776.32	2,776.32	7,554.92	10,331.24
GHTP	2,736.16	2,736.30	5,231.75	7,968.05
Total	**6211.14**	**6,211.28**	**15,987.69**	**22,198.97**

PSPCL requested the Commission to consider the loss of generation due to backing down instructions of PSLDC for assessing the performance of generating plants. PSPCL has further submitted that it has achieved the Plant Availability of GNDTP as 96.98%, GGSSTP as 93.85% and GHTP as 99.17%, which is higher than the normative target of 85%.

Auxiliary Consumption:

PSPCL submitted that it has striven hard to achieve the normative auxiliary consumption approved by the Commission. However, the actual auxiliary consumption is slightly higher than that of approved by the Commission for all the three Generating Stations. PSPCL has submitted the actual auxiliary consumption of GNDTP, GGSSTP and GHTP as 11.16%, 9.66% and 8.87% respectively. PSPCL has further submitted that:

i) GNDTP, Bathinda is an old generating station whose units have already outlived their useful life of 25 years. Further, as per power demand scenario in the State of Punjab, GNDTP units remained under reserve shutdown for longer period and even during operational period; the units were backed down for maximum time as per directions of Power Controller (PC), Patiala. Frequent stop/start after reserve shutdown and running of units under backing down affects the performance of units. During FY 2016-17, there were 24 stops/start ups of GNDTP units after reserve shutdown, and the total duration of reserve shutdown during FY 2016-17 was 31485.50 hours. During backing down, power generation is reduced but most of the auxiliaries remain running at nearly full load, which results in increase in percentage aux. consumption. It needs to be appreciated that technology constraints in 110 MW units make it really difficult even for the Original Equipment Manufacturers (OEMs) to commit any guaranteed performance for the units.

   As such, the auxiliary consumption remains more or less constant for the generating units; however, the auxiliary consumption for GNDTP is slightly higher, i.e., 11.16% against the approved figure of 11.00%. PSPCL further submitted that:

   a) Regulation 20 of PSERC Tariff Regulations, 2005 as amended from time to time, specifies that while determining cost of generation, the Hon'ble Commission shall be guided by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 as amended from time to time. Regulation 26 (iv) of CERC Tariff Regulations specify that the norms for auxiliary consumption for all thermal generating stations shall be 8.50% except for those mentioned in the said regulations. However, GNDTP having sets of 110 MW/120MW can be compared with Tanda Thermal power station, for which CERC has determined auxiliary consumption to be 12%. PSPCL also referred to the observation made by Hon'ble APTEL in its judgement dated 18.10.2012 and requested that it can be seen that the norm for auxiliary consumption for GNDTP station of 110 MW/120 MW unit sets should be benchmarked with that applicable for Tanda station at 12% in accordance with the provisions of the CERC Regulations. The actual auxiliary consumption for GNDTP for FY 2016-17 is 11.16% which is lower than norm of 12% as applicable to Tanda Central Generating Station.

   b) PSPCL made references to orders dated 12.09.2010 of the Maharashtra

State Commission in the matter of petition filed by MSPGCL and order dated 13.10.2008 of the UPERC in the matter of petition filed by UPRVUNL, wherein, in addition to vintage, factors like derating of units, poor quality of coal, supply of wet coal, failure of maintenance due to non-availability of adequate funds on account of defaults in payment are cited.

c) The normative parameters are further relaxed by CERC vide regulation 6.3B of CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016 which provides the compensation for auxiliary consumption on account of part load operations. As per power demand scenario in the State of Punjab, its own units remained under reserve outage for longer period and during running period also units remained running on backing down for maximum time as per directions of Power Controller, Patiala. Frequent stop/start after reserve outage and running of units under backing down affects the performance of units. During backing down, power generation is reduced but most of the auxiliaries remained running at nearly full load which results in increase in percentage auxiliary consumption. PSPCL prays the Commission to consider the actual Auxiliary Consumption during True up exercise.

ii) For GHTP and GGSSTP, PSPCL submitted that the value of Auxiliary Consumption for FY 2016-17 was 8.87% and 9.66%, which is higher than the norm of 8.5%. The reason for high values of auxiliary consumption for these periods is low PLF on account of low system demand. PSPCL requested the Commission to approve Auxiliary Consumption of GHTP and GGSSTP for FY 2016-17 as recorded during the period.

Commission’s Analysis:

The Commission observes as under:

a) Regarding auxiliary consumption of GNDTP, the Commission observed that Hon’ble APTEL in its combined judgment dated 18.10.2012 in the matter of Appeal No.7, 46 and 122 of 2011 directed the State Commission to pass an appropriate order in the matter. The Commission initiated the Suo-Motu petition no. 57 of 2012 to comply with the directions of Hon’ble APTEL. The Commission in its Order dated 07.01.2013 observed that no further relief can be given in the matter to the Appellant. PSPCL again raised the same issue in its further Appeal No. 174 of 2013 before APTEL. The Hon’ble APTEL in its order dated 22.04.2015 upheld the decision of the Commission dated 07.01.2013.

b) The issues dealt by MERC in its Order dated 12.09.2010 and UPERC in its Order dated 13.10.2008 are of materially different nature.

c) Regarding reference to regulation 6.3B of CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016 in its submissions and request for approval of relaxed norms, the Commission notes that the referred CERC amendment is an amendment in the Indian Electricity Grid Code Regulations, and not in Tariff Regulations, and the same has not been yet adopted by PSERC in its State Grid Code. The Commission further observes that, Proviso (ii) to Regulation provides that "the compensation so computed shall be borne by the entity that has caused the plant to be operated at schedule lower than corresponding to Normative Plant Availability Factor up to technical minimum based on the compensation mechanism finalized by the RPCs". As PSPCL is managing both the businesses, of generation and distribution in the State, as such, PSPCL itself is responsible for operation of its plants as well as scheduling of power from its own generation plants. Accordingly, compensation (due, if any) to generation wing shall be recoverable from its distribution wing.

The Commission, therefore, decided to retain the normative auxiliary consumption for GNDTP at 11.00% as discussed above and for GGSSTP & GHTP at 8.50% & 8.50% respectively, in line with CERC Tariff Regulations, at the levels already approved in the Tariff Order for FY 2016-17. The net thermal generation on this basis works out to 5665.85 MU as shown in column XIV of Table 2.5.

2.4.2 The station-wise generation submitted by PSPCL during determination of ARR of FY 2016-17, revised by the Commission in the review, figures now supplied by PSPCL in true up petition and now approved by the Commission are given in Table 2.5.

Table 2.5: PSPCL's Thermal Generation for FY 2016-17

(MU)

Sr. No.	Thermal Station	RE submitted by PSPCL during processing of ARR for MYT Control Period		Revised by the Commission in TO for FY 2017-18		Generation now submitted by PSPCL for true up		Approved by the Commission	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	GNDTP	658.60	588.37	698.66	621.81	698.66	620.68	698.66	621.81
2.	GGSSTP	3140.58	2853.10	2776.32	2540.33	2776.32	2508.11	2776.32	2540.33
3.	GHTP	2942.12	2692.41	2736.16	2503.59	2736.30	2493.58	2736.30	2503.71
	Total	**6741.30**	**6133.88**	**6211.14**	**5665.73**	**6211.28**	**5622.37**	**6211.28**	**5665.85**

Accordingly, the Commission approves gross and net thermal generation for FY 2016-17 as 6211.28 MU and 5655.85 MU respectively.

2.4.3 **Hydel Generation:** The station-wise generation submitted by PSPCL to the Commission during determination of ARR for FY 2016-17, approved by the Commission in the Tariff Order, revised estimates furnished by PSPCL during determination of ARR of MYT Control period, revised by the Commission in review, figures now furnished by PSPCL and those accepted by the Commission are given in Table 2.6.

Table 2.6: PSPCL's Hydel Generation for FY 2016-17

(MU)

Sr. No.	Hydel Station	Projections		Revised Estimates		Trued Up	
		Submitted by PSPCL in the ARR for FY 2016-17	Approved by Commission in TO FY 2016-17	Submitted by PSPCL during processing of ARR for MYT Control Period	Revised by Commission in TO FY 2017-18	Generation figures now submitted by PSPCL	Trued up by the Commission
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**
1.	Shanan	518	518	472.88	472.88	472.87	472.87
2.	UBDC	369	369	341.06	341.06	341.05	341.05
3.	RSD	1515	1515	1306.13	1306.13	1306.13	1306.13
4.	MHP	1133	1133	1113.95	1113.95	1113.95	1113.95
5.	ASHP	720	720	673.86	673.86	673.85	673.85
6.	Micro hydel	6	6	5.62	5.62	5.61	5.61
7.	**Total own generation (Gross)**	**4261**	**4261**	**3913.50**	**3913.50**	**3913.46**	**3913.46**
8.	Less: Auxiliary consumption and Transformation losses	10	35	31.82	31.82	31.43	31.82*
9.	Less: HP share in RSD (free)		68	56.96	56.96	**	
10.	Less: Royalty to HP from Shanan			52.66		**	
11.	**Total own generation (Net)**	**4251**	**4158**	**3772.06**	**3824.72**	**3882.03**	**3881.64**
12.	**PSPCL share from BBMB**						
(a)	PSPCL share (Net)	4178	4178	3773.42	3773.42	3773.07	3773.07
(b)	Common pool share (Net)	312	312	305.62	305.62	305.39	305.39
13.	**Share from BBMB (Net)**	**4490**	**4490**	**4079.04**	**4079.04**	**4078.46**	**4078.46**
14.	**Total hydro generation (Net) (Own + BBMB)**	**8741**	**8648**	**7851.10**	**7903.76**	**7960.49**	**7960.10**

* *Transformation losses @0.5% (19.57 MU), auxiliary consumption @0.5% for RSD generation of 1306.13 MU and UBDC stage-1 generation of 170.53 MU (having static exciters and as intimated by PSPCL in the ARR)and@0.2%for others (12.26 MU).*

***Since, PSPCL has included the royalty/free share of HP in its sales, same are not to be excluded from its generation.*

The Commission, therefore, approves total net hydel generation for FY 2016-17 as 7960.10 MU, comprising 3881.64 MU from PSPCL's own hydel generating stations and 4078.46 MU as share from BBMB as shown in column VIII of Table 2.6.

2.5 Energy Balance

2.5.1 PSPCL in the True-up petition, has now submitted power purchase during FY 2016-17 as 39395.21 MU (net), which includes 39374.91 MU as Power Purchase and 20.30 MU open access power through UI.

2.5.2 The details of energy requirement, energy availability and the net purchase for FY 2016-17 approved by the Commission in review in the Tariff Order of FY 2017-18, figures now furnished by PSPCL and figures now approved by the Commission, is depicted in Table 2.7.

Table 2.7: Energy Balance for FY 2016-17

(MU)

Sr. No.	Particulars		Approved by the Commission in review of FY 2016-17	Now submitted by PSPCL in the ARR	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		32232.44	32232.44	32232.44	32232.44
2.	Sales to Agriculture Pumpsets		11551.62	12008.98	11545.96	11545.96
3.	Total Sales within the State		**43784.06**	**44241.42**	**43778.40**	**43778.40**
4.	T&D losses	(%)	14.50%	15.26%	14.50%	16.21%
		(MU)	7425	7964.93	7424.41	8471.04
5.	**Energy Input Required (3+4)**		**51209.06**	**52206.35**	**51202.81**	**52249.44**
6.	Sales to Common pool consumers		305.62	305.39	305.39	305.39
7.	Outside State Sales		52.92	466.33	466.33	466.33
8.	**Total requirement (5+6+7)**		**51567.60**	**52978.07**	**51974.53**	**53021.16**
B) Energy Available						
9.	Own generation (Ex-bus)					
10.	Thermal		5665.72	5622.37	5665.85	5665.85
11.	Hydro (Including share from BBMB and common pool consumers)		7903.76	7960.49	7960.10	7960.10
12.	Purchase (net)		37998.12	39395.21	38348.58	39395.21
13.	**Total Available**		**51567.60**	**52978.07**	**51974.53**	**53021.16**

2.5.3 The total energy available with PSPCL works out to 53021.16 MU (net), considering all purchases and own generation (net). With this energy available, T&D losses of PSPCL works out as 16.21% against the target of 14.50%. The difference of 1046.63 MU (net) between energy requirement worked out and energy availability is owing to the under achievement of T&D loss target as discussed in paras 2.2.2 & 2.3 and depicted in column V & VI of Table 2.7. Higher T&D loss over and above the level approved by the Commission has resulted in increased net power purchase to the extent of 1046.63 MU. The matter is further discussed in para 2.7.

The Commission approves the total energy requirement for FY 2016-17 at 51974.53 MU after retaining overall T&D losses at 14.50%.

2.6 Fuel Cost

The Gross Generation and Fuel Cost for FY 2016-17 approved by the Commission in the Tariff Order for FY 2016-17 and FY 2017-18 are detailed in Table 2.8.

Table 2.8: Fuel Cost for FY 2016-17

Sr. No.	Station	As per T.O. FY 2016-17		Review of FY 2016-17 as per T.O. FY 2017-18	
		Gross Generation (MU)	Fuel Cost (₹crore)	Gross Generation (MU)	Fuel Cost (₹crore)
I	II	III	IV	V	VI
1.	GNDTP	918.30	277.53	698.66	218.11
2.	GGSSTP	3959.00	1180.27	2776.32	776.39
3.	GHTP	3134.83	939.76	2736.16	840.38
4.	**Total**	**8012.13**	**2397.56**	**6211.14**	**1834.88**

PSPCL's Submissions:

2.6.1 PSPCL, in the True up Petition, has indicated actual fuel cost for FY 2016-17 for a gross generation of 6211.28 MU as ₹2072.15 crore. As per Annual Accounts of PSPCL for FY 2016-17, the total generation expenses are ₹2101.13 crore including ₹28.98 crore for other operating expenses, such as cost of water, lubricants, consumable stores and station supplies, which do not form part of the fuel cost and are being considered under Repair and Maintenance Expenses in para 2.9. Thus, the net fuel cost for FY 2016-17 as per Annual Accounts is taken as ₹2072.15 (2101.13-28.98) crore.

2.6.2 PSPCL has submitted that the fuel cost is based on various parameters i.e. calorific value and price of coal/oil, transit loss of coal, station heat rate of thermal generating stations and specific oil consumption, as given in Table 2.9.

Table 2.9: Operational and Cost Parameters submitted by PSPCL for FY 2016-17

Sr. No.	Station	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
1.	GNDTP	4241.96	9400.00	35848.59	4888.00	(-)0.62	2755.69	1.31
2.	GGSSTP	4165.00	9900.00	26143.09	5104.61	(-)0.64	2801.60	1.49
3.	GHTP	4054.00	9500.00	31332.00	5402.00	0.17	2438.46	1.11

With regard to various performance parameters, PSPCL has submitted that PSPCL is scheduling own thermal stations under Merit Order Dispatch. PSPCL has further submitted as under:

A. Station Heat Rate (SHR)

During FY 2016-17, PSPCL has considered the actual SHR of 2755.69 kCal/kWh for GNDTP, 2801.60 kcal/kWh for GGSSTP and 2438.46 kCal/kWh for GHTP. PSPCL submitted that the increasing life of assets and lower plant load factor affects the Station Heat Rate of the plants and requested the Commission to allow the technical performance of stations at relaxed levels and stated that:

a) For GNDTP, PSPCL submitted that the Commission in review exercises has approved Station Heat rate of 2750 kCal/kWh based on CERC norms for Tanda TPS (after its R&M), as specified in CERC Tariff Regulations, 2014. PSPCL submits that the GNDTP is a much older plant and SHR approved by the Commission is on the lower side as compared to that attained by PSPCL as the SHR tends to increase due to lower plant load factor and higher partial load losses.

b) For GGSSTP and GHTP, PSPCL submitted that the increasing life of the asset and lower Plant load factor affects the Station Heat Rate of the plant.

c) As per power demand scenario in the State of Punjab, PSPCL own units remained under reserve outage for longer period and during running period units remained on backing down for maximum time as per directions of PC, Patiala. During frequent stop/start after reserve outage and running of units under backing down affects the performance of units. During backing down, power generation is reduced and the Station Heat Rate (SHR) gets increased. Further, CERC has also recognized the fact that Station Heat Rate and Auxiliary Consumptions of the plant are affected on account of partial load and has made a reference to Regulation 6.3B of CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016. PSPCL has considered the relaxed Station Heat Rate based on projected loading of thermal generating stations during the Control Period, as per the said Regulation.

d) With regard to the deviation in technical parameters, PSPCL further referred to the following Orders of the Hon’ble APTEL:

- In the Judgment dated 31 July, 2009 in Appeal No. 42 & 43 of 2008 in the matter of Haryana Power Generation Company Limited vs. Haryana Electricity Regulatory Commission, the Hon'ble APTEL observed that advised that *"......The Tariff Policy also lays emphasis on laying down standard which are achievable and encourage efficient operations. It is essential that the norms laid are not too liberal as to encourage inefficient operations, but at the same time are at least near to those achievable.*

  17. Therefore under the circumstances, it is essential for the State Commission to arrange for a station-wise study to determine the SHR of the power plants of the appellant……."

- In the *judgment* dated 10 April, 2008 in Appeal No. 86 & 87 of 2007, in the matter of by Maharashtra State Power Generation Company Limited v. Maharashtra Electricity Regulatory Commission, the Hon'ble APTEL in the said judgement observed that *"…….Under the circumstance, we feel that the Commission either on its own or through the Appellant engage appropriate independent agency(ies), who can carry out a study in a time bound (preferably within three months) manner to reasonably assess the achievable SHR of the plants owned by the Appellant. Such agency may also be asked to suggest measures to improve the SHRs over a period of time."*

- In the judgment dated 23 November 2006 in the Appeal No. 129 of 2006, in the matter of Gujarat State Electricity Company Limited v. Gujarat Electricity Regulatory Commission, the Hon'ble APTEL on the point of the claim of station heat rate observed that *"……The problem of higher station heat rate is common to all the generating stations throughout India, which factor has been taken note of by various Regulatory Commissions and the CEA, where the generators have been permitted realistic norms. In fact the CERC has allowed higher station heat rates, so also other regulatory Commissions approved higher station heat parameters…..*

  ……Station Heat Rate has to be allowed considering the vintage and present condition of the station in view of the CEA recommendations and treatment given by CERC for similarly placed stations under its jurisdiction."

Commission's Analysis:

a) The issue of Regulation 6.3B of CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016, providing for compensation so computed to be borne by the entity that has caused the plant to be operated at schedule lower than corresponding to Normative Plant Availability Factor, has already been commented upon in para 2.4.1 under the "Auxiliary Consumption".

b) In respect of APTEL Orders mandating that station heat rate has to be allowed considering the vintage and present condition of the station in view of the CEA recommendations and treatment given by CERC for similarly placed stations under its jurisdiction, the Commission refers to Regulation 20 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005, which provides that while determining the cost of generation of each thermal/ gas/ hydro electric generating stations located within the State, the Commission shall be guided, as per as feasible, by the principles and methodologies of CERC, as amended from time to time. The Commission further notes that CERC in its Tariff Regulations has already taken the cognizance of the vintage of the generating stations and has fixed different Station Heat Rate for stations having different vintages and the Commission is considering the same. However, the Commission vide letter no. 1619 dated 13.12.2017 asked PSPCL to furnish the list of NTPC Plants of similar capacity and vintage as of PSPCL's own thermal generating stations and CERC orders in respect of these Thermal Generating Stations. PSPCL vide its reply dated 22.12.2017 has submitted two orders of CERC in the matter of Bongaigaon Thermal Power Station and Feroze Gandhi Unchahar Thermal Station, Stage-III. On persual of the said orders, the Commission observed that CERC did not allow any relaxation in the normative parameters with respect to Station Heat Rate, Auxiliary Consumption and Specific Oil Consumption, while working out the tariff for said plants.

Thus, the Commission finds no justification/reason to deviate from the normative parameters for working out fuel cost of Thermal Generating Stations of PSPCL for FY 2016-17. The Commission is considering the Station Heat Rate on normative basis as approved for FY 2016-17, in line with PSERC/CERC Tariff Regulations.

B. Transit Loss of Coal

PSPCL has submitted that it has been observed from past trends, the coal transit losses are inconsistent. The actual transit losses for FY 2016-17 are

(-)0.62%, (-)0.64% and 0.17% for GNDTP, GGSSTP & GHTP respectively. The coal transit losses are not within its control and are attributable to the following reasons:

a) Calibration of measuring instruments; Weighing of coal at two different locations having different calibration of weighing machines lead to error more than permissible limits.

b) Seasonal variation during the transportation of the coal results in changes in the moisture content of the coal during the transportation.

c) The transportation of coal happens through open wagon and is subject to pilferages.

d) During the unloading, small quantities of coal get stuck at the edges of the transport wagons due to moisture and remains undelivered to the plant, contributing to transit losses.

The Commission decided to consider the actual transit loss for all three Thermal Generating Stations in line with Regulation 20 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005.

C. Secondary Fuel Oil Consumption

PSPCL has submitted that the actual specific oil consumption for FY 2016-17 is more than that approved by the Commission due to regular backing down of generation. PSPCL has considered the Secondary Fuel Oil Consumption for GNDTP as 1.31 ml/kWh, for GGSSTP as 1.49 ml/kWh and for GHTP as 1.11 ml/kWh.

The Commission decided to consider the normative Secondary Fuel Oil Consumption for all three Thermal Generating Stations @ 0.5 ml/kWh in line with PSERC/CERC Tariff Regulations, 2014.

D. Price and calorific value of Coal and Oil

The price and calorific value of coal and oil for FY 2016-17 submitted by PSPCL is as shown in Table 2.9.

Fuel cost being a major item of expense, the Commission thought it prudent to get the same validated. Further, the Commission had decided in the Tariff Order for FY 2016-17 to adopt the GCV of received coal as per CERC Tariff Regulations, 2014, for working out the fuel cost. The weighted average calorific value and price of oil & coal, and transit loss of coal as per validation carried out by the staff of the Commission are indicated in Table 2.10. The calorific value (GCV) as shown under column III of

Table 2.10 is the calorific value of received coal.

Table 2.10: Operational and Cost Parameters as per validation obtained by the Commission for FY 2016-17

Sr. No.	Station	Gross Calorific value of coal (kCal/kg)	Gross Calorific Value of Oil (kCal/lt)	Price of Oil (₹/ KL)	Price of coal excluding transit loss (₹/MT)	Transit Loss (%)	Quantity of Imported Coal used (MT)
I	II	III	IV	V	VI	VII	VIII
1.	GNDTP	4392.66	9870.88	35812.69	4887.55	(-)0.62	0.00
2.	GGSSTP	4525.00	9836.04	26141.24	5056.73	(-)0.64	59236.00
3.	GHTP	4216.00	9930.00	31332.34	5401.66	0.17	60950.00

2.6.3 On the above basis, fuel cost for FY 2016-17 has been worked out as detailed in Table 2.11.

Table 2.11: Approved Fuel Cost for FY 2016-17

Sr. No.	Item	Derivation	Unit	GNDTP	GGSSTP	GHTP Units I&II	GHTP Units III&IV	Total
I	II	III	IV	V	VI	VII	VIII	IX
1.	Generation (Gross)	A	MU	698.66	2776.32	1029.49	1706.81	**6211.28**
2.	Heat Rate	B	kcal/kWh	2750.00	2450.00	2450.00	2428.00	
3.	Specific oil consumption	C	ml/kwh	0.50	0.50	0.50	0.50	
4.	Calorific value of oil	D	kcal/litre	9870.88	9836.04	9930.00	9930.00	
5.	Calorific value of coal	E	kcal/kg	4392.66	4525.00	4216.00	4216.00	
6.	Overall heat	F = (A x B)	Gcal	1921315.00	6801984.00	2522251.00	4144135.00	
7.	Heat from oil	G = (A x C x D) / 1000	Gcal	3448.00	13654.00	5111.00	8474.00	
8.	Heat from coal	H = (F-G)	Gcal	1917867.00	6788330.00	2517140.00	4135661.00	
9.	Oil consumption	I=(Gx1000)/D	KL	349.00	1388.00	515.00	853.00	
10.	Transit loss of coal	J	(%)	-0.62	-0.64	0.17	0.17	
11.	Total coal consumption excluding transit loss	K=(H*1000)/E	MT	436607.00	1500183.00	597045.00	980944.00	
12.	Quantity of Imported coal	L	MT	0.00	59236.00	22931.00	38019.00	
13.	Quantity of coal other than Imported coal	M=K-L	MT	436607.00	1440947.00	574114.00	942925.00	
14.	Quantity of coal other than Imported coal, including transit loss	N=M/(1-J /100)	MT	433917.00	1431784.00	575092.00	944531.00	
15.	Total quantity of coal required	O=L+N	MT	433917.00	1491020.00	598023.00	982550.00	
16.	Price of oil	P	₹ /KL	35812.69	26141.24	31332.34	31332.34	
17.	Price of coal	Q	₹ /MT	4887.55	5056.73	5401.66	5401.66	
18.	Total Cost of oil	R=P x I / 10^7	₹ crore	1.25	3.63	1.61	2.67	9.16
19.	Total Cost of coal	S=O x Q/10^7	₹ crore	212.08	753.97	323.03	530.74	1819.82
20.	**Total Fuel cost**	**T=R+S**	**₹ crore**	**213.33**	**757.60**	**324.64**	**533.41**	**1828.98**
21.	**Per unit Cost (gross)**	**U=T*10/A**	**₹ /kWh**	**3.05**	**2.73**	**3.15**	**3.13**	**2.94**
22.	**Per unit Cost (Net)**	**U=T*10/ (A-Aug.con.)**	**₹/kWh**	**3.43**	**2.98**	**3.45**	**3.42**	**3.23**

The Commission, thus, approves the fuel cost at ₹1828.98 crore for gross generation of 6211.28 MU for FY 2016-17.

2.7 Power Purchase Cost

The Commission, in its Tariff Order for FY 2016-17, approved power purchase cost of ₹14697.41 crore for purchase of 37142 MU (gross), including the cost of RE power and RECs for RPO compliance but excluding Transmission and SLDC charges paid to PSTCL. In review, the Commission revised the power purchase cost to ₹15038.01 crore, comprising of ₹15028.01 crore for purchase of 38557.55 MU (gross) and ₹10.00 crore for purchase of RECs.

PSPCL's Submissions:

2.7.1 In the petition for True-up of FY 2016-17, PSPCL has submitted the actual cost of power purchase for FY 2016-17 as ₹15890.95 crore, including ₹278.73 crore previous payments made during FY 2016-17 but excluding Transmission and SLDC charges paid to PSTCL. The Power Purchase Cost also includes short term power purchase of 2073.67 MU through traders at the total cost of 657.31 crore, PGCIL charges of ₹949.62 crore, ₹0.11 crore as NRPC fee, ₹34.08 crore paid as LPS & TDS and ₹10.00 crore as cost of purchase of RECs for FY 2016-17. PSPCL has submitted that the increase in power purchase cost by ₹724.24 crore is mainly due to additional power purchase of approx. 1438 MU during FY 2016-17 and has requested the Commission to approve cost of power purchase of ₹15890.95 crore and transmission charges of ₹1047.02 crore paid to PSTCL as per audited annual accounts for the year. The gross power purchase for FY 2016-17 submitted by PSPCL is 39995.53 MU (gross), including short term power purchase of 2073.67 MU. The net power purchase after accounting for actual external losses of 2.47% is 39374.91 MU. Further, PSPCL has shown 20.30 MU as Open Access power. The total power purchase (net) has been shown as 39395.21 MU. The Power Purchase cost for FY 2016-17 submitted by PSPCL is as under:

Sr. No.	Source	Gross Purchase (MU)	Energy recd. by PSPCL (MU) (3-(3*4/100))	Total AFC (₹ Crore)	PSPCL Allocation as per REA of March 2017)/ Contracted Capacity(%)	VC (Pc/Unit)	FC (₹ Crore) paid by PSPCL	VC (₹ Crore)	Others (₹ Crore)	Total (₹ Crore) (9+10+11)
1	2	3	4	5	6	7	8	9	10	11
A	**NTPC**									
1	Anta (G/F)	72.91	71.11	208.58	13.48	258.13	28.12	18.82	-0.06	46.89
2	Anta (R/F)	0.28	0.27			458.29		0.13		0.13
3	Anta (L/F)	0.00	0.00			-		0.00		0.00
4	Auraiya (G/F)	54.85	53.49	240.54	13.76	328.92	33.09	18.04	0.10	51.24
5	Auraiya (R/F)	0.21	0.20			542.86		0.11		0.11
6	Auraiya (L/F)	0.00	0.00			-		0.00		0.00
7	Dadri Gas (G/F)	229.87	224.19	320.14	16.74	278.59	53.58	64.04	-0.06	117.56
8	Dadri Gas (R/F)	0.64	0.62			523.34		0.33		0.33
9	Dadri Gas (L/F)	0.00	0.00			-		0.00		0.00

Sr. No.	Source	Gross Purchase (MU)	Energy recd. by PSPCL (MU) (3-(3*4/100))	Total AFC (₹ Crore)	PSPCL Allocation as per REA of March 2017)/ Contracted Capacity(%)	VC (Pc/Unit)	FC (₹ Crore) paid by PSPCL	VC (₹ Crore)	Others (₹ Crore)	Total (₹ Crore) (9+10+11)
1	2	3	4	5	6	7	8	9	10	11
10	Singrauli	1454.93	1418.98	827.33	10.63	143.99	87.93	209.50	1.85	299.28
11	Rihand-I	679.97	663.16	564.28	11.62	161.10	64.34	109.54	1.87	175.75
12	Rihand-II	807.19	787.24	595.70	10.88	160.03	64.82	129.18	1.28	195.28
13	Rihand-III	643.25	627.35	1023.55	9.02	158.34	92.37	101.85	0.27	194.48
14	Unchahar-I	141.79	138.29	233.86	8.81	289.30	20.60	41.02	0.10	61.72
15	Unchahar-II	287.34	280.24	243.32	15.04	287.80	36.59	82.70	0.02	119.30
16	Unchahar-III	93.33	91.03	189.90	8.85	287.42	16.80	26.83	-0.02	43.61
17	Farakka (ER)	125.32	122.23	918.09	1.39	250.52	12.76	31.40	0.29	44.45
18	Kahalgaon-I (ER)	272.91	266.17	564.79	6.07	239.78	34.28	65.44	0.57	100.29
19	Kahalgaon-II (ER)	771.69	752.62	1156.72	8.02	229.36	92.77	176.99	-0.62	269.14
20	NCTPS- 2C (DADRI II)	4.87	4.75	1060.31	0.69	310.73	7.35	1.51	-0.06	8.81
21	IGSTPS Jhajjar (NTPC JV)	9.54	9.31	1770.17	0.91	342.49	16.02	3.27	-1.30	17.99
22	Koldam	269.50	262.84	1142.41	7.73	213.08	66.56	57.43	0.06	124.04
23	LPS & TDS	-	-	-	-	-	-	-	34.08	34.08
B	**NHPC**									
24	Bairasuil	298.02	290.66	133.55	46.50	98.40	36.58	29.33	1.91	67.82
25	Salal	860.59	839.33	296.34	26.60	55.20	52.59	47.50	100.82	200.91
26	Tanakpur	49.73	48.50	116.65	17.93	148.10	12.18	7.36	0.90	20.44
27	Chamera-I	218.53	213.13	312.43	10.20	103.79	19.72	22.68	2.72	45.12
28	Chamera-II	166.61	162.50	254.99	12.15	97.80	19.29	16.29	0.98	36.56
29	Uri	375.65	366.36	356.81	13.75	79.30	31.50	29.79	23.15	84.43
30	Dauli Ganga	109.06	106.36	295.09	11.79	149.60	18.15	16.31	8.71	43.17
31	Dulhasti	222.61	217.11	935.50	10.07	255.09	56.64	56.79	16.59	130.02
32	Sewa-II	43.85	42.77	198.90	10.12	216.40	13.35	9.49	0.84	23.68
33	Chamera-III	85.56	83.45	404.52	9.64	212.30	21.14	18.17	0.02	39.32
34	Uri-II	130.86	127.63	469.23	9.05	208.19	36.26	27.24	11.33	74.84
35	Parbati-III	65.70	64.07	330.09	9.65	273.80	14.42	17.99	0.03	32.43
C	**NPCIL**									
36	NAPP	402.82	392.87	-		257.73	0.00	103.82	0.04	103.86
37	RAPP-3 &4	738.21	719.97	-		287.43	0.00	212.18	0.04	212.22
38	RAPP-5 & 6	307.84	300.23	-		352.95	0.00	108.65	0.02	108.67
D	**OTHER SOURCES (Central Sector)**									
39	Nathpa Jhakri HEP (SJVNL)	788.48	769.00	1656.84	11.51	140.90	124.33	111.10	0.16	235.59
40	Rampur HEP (SJVNL)	127.96	124.80	521.71	6.46	159.84	25.22	20.45	0.81	46.49
41	Tehri HEP (THDC)	284.13	277.11	1458.24	7.70	280.72	81.02	79.76	0.07	160.85
42	Koteshwer HEP (THDC)	93.14	90.84	393.33	6.36	190.86	17.92	17.78	0.02	35.72
43	Durgapur TPS (DVC)	1205.31	1175.52	1161.05	20.00	225.56	232.21	271.87	0.88	504.96
44	Raghunathpur (DVC)	426.46	415.93	1158.68	25.00	221.70	66.65	94.55	0.00	161.19
45	TRADERS (Short Term Power)	2073.67	2022.43	-		316.98		657.31	0.00	657.31
46	Open Access Chgs. of Traders for short term power	-	-	-	-	-	-	-	39.50	39.50
E	**TRADERS/IPPs (Long Term Power)**									
47	Tala HEP (PTC)	97.24	94.84	-		202.58		19.70		19.70
48	Pragati-III Gas Plant Bawana (PPCL)	181.85	177.36	1083.03	10.00	253.11	102.82	46.03	0.13	148.98

Sr. No.	Source	Gross Purchase (MU)	Energy recd. by PSPCL (MU) (3-(3*4/100))	Total AFC (₹ Crore)	PSPCL Allocation as per REA of March 2017)/ Contracted Capacity(%)	VC (Pc/Unit)	FC (₹ Crore) paid by PSPCL	VC (₹ Crore)	Others (₹ Crore)	Total (₹ Crore) (9+10+11)
1	2	3	4	5	6	7	8	9	10	11
49	Mundra UMPP (CGPL)	3167.59	3089.31		12.50	131.23	301.27	415.69	0.20	717.16
50	Mallana-II HEP (PTC)	307.65	300.05	167.83	100.00	283.23	82.42	87.14	24.94	194.50
51	NVVNL Bundled Power (NTPC Thermal Power + Solar power)	292.78	285.55	-		502.27		147.06		147.06
52	Sasan UMPP (RPL)	4171.96	4068.87		15.00	114.96	67.16	479.61	154.57	701.33
53	Talwandi Sabo TPS (Sterlite)	6475.96	6475.96		100.00	276.89	1432.23	1793.15	-274.91	2950.46
54	Talwandi Sabo TPS UI	-12.27	-12.27			330.42		-4.05		-4.05
55	NPL Rajpura TPS (L & T)	9014.95	9014.95		100.00	228.72	1490.77	2061.86	32.55	3585.18
56	NPL Rajpura UI	-72.20	-72.20			111.33		-8.04		-8.04
57	GVK	200.51	200.51		100.00	300.61	37.97	60.27		98.24
58	GVK UI	-0.99	-0.99			168.05		-0.17		-0.17
E	**Long Term NRSE Purchase within Punjab**									
59	Solar	899.00	899.00	-		725.03		651.80		651.80
60	Non solar	828.11	828.11	-		567.89		470.28		470.28
61	Short Term NRSE Purchase within Punjab	0.00	0.00	-				0.00		0.00
62	Net Banking with HPSEB,UPCL,J & K & thro. Traders	-14.06	-61.03	-		370.00		-5.20		-5.20
63	Open Access Chgs. of Banking			-					13.75	13.75
64	UI	-537.73	-537.73	-		-20.71		11.14	0.00	11.14
65	Reactive Charges			-				9.31		9.31
F	**Other Charges**									
66	PGCIL			-			949.62			949.62
67	NRPC Fee								0.11	0.11
68	RRAS (NTPC) and Injection Charges								-18.55	-18.55
69	Purchase of RECs for FY 2016-17			-			10.00			10.00
70	Previous Payments made during 2016-17			-						278.73
71	**Grand Total Power purchase (2016-17)**	**39995.53**	**39374.91**	**-**		**233.78**	**6081.41**	**9350.11**	**180.70**	**15890.95**

Commission's Analysis:

2.7.2 The Commission observed that the power purchase cost as per Annual Accounts the power purchase cost is ₹15890.95 crore, including ₹10.00 crore for purchase of RECs.

i) PSPCL vide letter no. 1146 dated 22.12.2017, in reply to deficiencies pointed out by the Commission in the matter of Petition No. 66 of 2017, has submitted that it has paid ₹18.14 crore as additional UI charges during FY 2016-17**. The Commission decides not to allow additional UI charges ₹18.14 crore paid under Central Electricity Regulatory Commission (Deviation Settlement mechanism and related matters) Regulations, 2014, for over-drawl of power, as the provision of the same has been made for the purpose of maintaining grid discipline.**

ii) PSPCL has shown ₹34.08 crore paid as Late Payment Surcharge (LPS) and TDS. On query by the Commission PSPCL submitted that it has paid ₹32.74 crore as LPS and ₹1.34 crore as TDS. Since working capital as per Regulations, was allowed to PSPCL, and the utility is supposed to make the payments in time, **the Commission found no justification to allow LPS of ₹32.74 crore on account of delayed payment of power purchase bills by the utility and hence disallowed.**

iii) PSPCL has also shown ₹278.73 crore as previous year payments made during FY 2016-17, which includes payment of ₹132.75 crore to PGCIL, ₹21.80 crore to NPL & ₹75.42 crore to Mallana-II. On query by the Commission, PSPCL submitted the details of ₹278.73 crore paid as previous year payments and submitted that these payments in respect of central sector generating stations have been made towards the bills raised by various PSUs for previous periods on account of revised energy charges, capacity charges, water usages charges, RLDC charges etc. on the basis of various CERC orders revising AFCs. Further, payments to NPL & Mallana-II has been made as per PSERC order dated 07.06.2017 & 20.12.16 respectively. **As per the practice followed in the past, the prior period expenses are not considered under the head Power Purchase and are dealt under Prior Period Expenses in para 2.16.**

iv) **Expense of ₹0.11 crore shown as Northern Region Power Committee (NRPC) fee for holding meeting, is chargeable under A&G expenses being dealt under para 2.10.**

v) As discussed in para 2.5.3, PSPCL has under-achieved the T&D loss level vis-à-vis the target approved by the Commission resulting in additional power purchase of 1046.63 MU on account of higher T&D losses. And, PSPCL has purchased short term power of 2073.67 MU through traders at the total cost of ₹657.31 crore. Since, as per the PSERC Tariff Regulations, the entire loss on account of underachievement of T&D losses vis-à-vis the target set by the Commission is to be borne by the licensee, **the Commission decides to consider 1046.63 MU of**

the short term power as excess power purchased on account of higher T&D losses and disallows the same at the average rate of short term power i.e. ₹331.78 crore.

Based on above, the cost of power purchase for FY 2016-17 has been worked out as detailed in Table 2.12.

Table 2.12: Power Purchase Cost

Sr. No.	Description		
1.	Power Purchase cost submitted by PSPCL (excluding cost of RECs)	15880.95	₹crore
2.	Less: Additional UI charges paid by PSPCL during FY 2016-17	18.14	₹crore
3.	Less: Late payment surcharge paid during FY 2016-17	32.74	₹crore
4.	Less: Previous year payments (Allowed in para 2.16 under Prior Period Expenses)	278.73	₹crore
5.	Less: NRPC Fee (Allowed in A&G Expenses)	0.11	₹crore
6.	**Power Purchase Cost (1-2-3-4-5)**	**15551.23**	**₹crore**
7.	Net Power Purchased by PSPCL during FY 2016-17	39395.21	MU
8.	Net Power purchase required as per energy balance (Table 2.7)	38348.58	MU
9.	Excess power purchase on account of higher T&D Losses (7-8)	1046.63	MU
10.	Short Term Power Purchase as per Format 7 of the petition for True-up of FY 2016-17	2073.67	MU
		657.31	₹crore
11.	Per unit cost of Short Term Power	3.17	₹/unit
12.	Less Adjustment/disallowance of Short Term power Purchase (1046.63 MU) on account of higher T&D losses (9*11)	331.78	₹crore
13.	**Net Power Purchase cost (₹ crore) (6-12)**	**15219.45**	**₹crore**

2.7.3 RPO Compliance

The energy requirement as now approved by the Commission in the true-up for FY 2016-17 is 51974.53 MU. The input energy available to PSPCL for consumption in its area of distribution works out to 49922.74 MU after deducting energy sale to common pool consumers, energy sale outside the State and transmission losses. The Commission notes that as per clause 6.4 (1) of the Revised Tariff Policy dated 28.01.2016 notified by the Central Government, Hydro Power is to be excluded for RPO compliance. The Hydro Power purchase / Generation works out to 12554.97 MU for FY 2016-17. Accordingly, the input energy for RPO compliance (Solar) would be 37367.77 MU. The RPO compliance for FY 2016-17 is shown in Table 2.13.

Table 2.13: RPO Compliance for FY 2016-17

Sr. No.	Description	FY 2016-17	
1.	Input Energy (MU)	49922.74 (for Non-Solar) 37367.77 (for Solar)	
2.	RPO specified	%	MU
	i. Non-Solar ii. Solar	4.1 % 1.3 %	2046.83 485.78
3.	RE generation/purchase (RPO compliance) i. Non-Solar including RECs equivalent 66.67 MU ii. a) Solar (excluding Net- Metering) b) Solar (Net-Metering) c) Total (Solar)	 2.49 % 2.65 %	 1241.45 963.14 26.57 989.71
4.	FY 2015-16 RPO shortfall allowed to be carried forward to FY 2016-17 i. Non-Solar ii. Solar	 2.92% 0.20%	 1456.08 89.16
5.	RPO balance after accounting for compliance shortfall of previous year (3-4) i. Non-Solar ii. Solar	 - 0.43% 2.41 %	 - 214.63 900.55
6.	RE shortfall (Non-Solar) / surplus (Solar) carried forward to next year now approved by the Commission (2-5) i. Non-Solar ii. Solar iii. RE shortfall (Non-Solar) allowed to be carried forward to FY 2017-18	 4.53 % 1.11 %	 2261.46 - 414.77 (Surplus) 1846.69

The Commission in its Order dated 16.03.2018 in Petition No. 51 of 2017 filed by PSPCL allowed carry forward of the balance shortfall pertaining to FY 2015-16 & shortfall of FY 2016-17 to FY 2017-18 which was worked out as 1872.40 MU [2225.03 MU (Non-Solar) – 352.63 MU (adjustment of excess Solar RPO against Non-Solar RPO shortfall)]. In the said Order, the Commission allowed adjustment of Solar power against Non-Solar power for the year FY 2016-17. Therefore, the Non-Solar RPO shortfall now on true-up of FY 2016-17 works out to be 1846.69 MU [2261.46 MU (Non-Solar)–414.77 MU (adjustment of excess Solar RPO against Non-Solar RPO shortfall)]. Accordingly, the Order dated 16.03.2018 in petition no. 51 of 2017 stands reviewed to that extent.

As brought out in the foregoing paras, PSPCL has incurred only ₹10.00 crore for purchase of RECs (Non-Solar) equivalent to 66.67 MU in FY 2016-17, which the Commission allows.

Further, the Commission in the review for FY 2016-17 carried out in the Tariff Order for MYT Control Period from FY 2017-18 to FY 2019-20 disallowed ₹14 crore in lieu of non-availability of 90 MUs renewable energy as four Micro-Hydel Plants of PSPCL were non-functional since long and another 18 (2x9) MW MHP Stage-II project in Distt. Hoshiarpur has been delayed considerably and not commissioned till the end of FY 2016-17. These projects, otherwise, were likely to have contributed renewable energy to the tune of 90 MU annually. Therefore, the Commission disallowed ₹14.00 crore required for purchasing Non-Solar RECs in lieu of non-availability of the said energy. Instead, the Commission directed that a separate fund of ₹42 crore (₹14 crore each in the true-up for FY 2014-15, FY 2015-16 & review of FY 2016-17) be created in the true-up for FY 2014-15 under para 2.8.8 and as detailed under paras 3.8.8 & 4.9.10 in the Tariff Order dated 23.10.2017 for PSPCL for MYT Control Period from FY 2017-18 to FY 2019-20. The said fund was to be utilized by PSPCL for procurement of power from renewable energy sources within the State, for RPO compliance. It has been observed that PSPCL has not mentioned utilizing/setting up of the said fund for procurement of power from renewable energy sources within the State. Since the fund does not appear to have been created, the amounts set aside may be kept separately in interest bearing instrument till used.

2.7.4 **Accordingly, the Commission approves the power purchase cost (excluding Transmission and SLDC charges paid to PSTCL) of ₹15229.45 crore for FY 2016-17, comprising ₹15219.45 crore for power purchase (net) of 38348.58 MU and ₹10.00 crore for purchase of RECs.**

2.8 Employee Cost

2.8.1 In the ARR Petition for FY 2016-17, PSPCL projected employee cost of ₹5715.97 crore against which the Commission approved a sum of ₹4835.58 crore in the Tariff Order for FY 2016-17. In the Review of FY 2016-7, PSPCL revised the claim of employee cost to ₹5114.40 crore, net of capitalization of ₹121.87 crore against which the Commission approved revised employee cost of ₹4547.46 crore.

PSPCL's Submissions:

2.8.2 In the True Up Petition of FY 2016-17, PSPCL has claimed employee cost of ₹4551.87 crore, net of capitalization of ₹139.06 crore for FY 2016-17, based on Audited Annual Accounts of PSPCL. The claim is also inclusive of ₹2040.58 crore on account of terminal benefits and ₹237.26 crore as BBMB share.

Commission's Analysis:

2.8.3 The O&M expenses are to be determined as per the provisions of Regulation 28 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (as amended from time to time)

As per Regulation 28(3)(a)(ii), terminal benefits and BBMB share of expenditure are to be allowed on actual basis.

In reply to the deficiency letter of the Commission, PSPCL vide memo no. 263/ARR/Dy.CAO/251 (True-Up 2016-17) /Deficiency dated 01.03.2018, has clarified that ₹32.20 crore are related to LTC, encashment of earned leave & staff welfare expenses and are not part of terminal benefits. As such, the terminal benefits work out to ₹2008.38 (2040.58-32.20) crore. Accordingly, the 'Other Employee Cost' works out to ₹2306.23 (4551.87-2008.38-237.26) crore.

In view of the above, terminal benefits amounting to ₹2008.38 crore and BBMB share of expenditure amounting to ₹237.26 crore are approved on actual basis for FY 2016-17.

2.8.4 As per Regulation 28 PSERC Regulations, 2005 increase in 'Other Employee Cost' is to be limited to average Wholesale Price Index (WPI) in subsequent years on the base employee cost approved for FY 2011-12. The 'Other Employee Cost' in the true up for FY 2011-12 has been approved at ₹2099.07 crore in Para 5.10.4 of Tariff Order for FY 2014-15. Wholesale Price Index (all commodities) of 100 for FY 2011-12 has increased to 111.60 for FY 2016-17, thereby accounting for 11.60% {(111.60-100.00)/100.00*100} increase in WPI. There is an increase in Consumer Price Index (CPI) from 194.83 in FY 2011-12 to 275.92 in FY 2016-17. Thus, percentage increase in Consumer Price Index (CPI) is calculated as @41.62% [(275.92-194.83)/194.83*100] on the base "Other Employee Cost' approved for FY 2011-12. The combination of 0.50 of WPI+0.50 of CPI increase will be an increase of 26.61% [(11.60+41.62)/2] which is applicable for whole of the FY 2016-17.

By applying WPI& CPI combined increase @26.61% on 'Other Employee Cost' of ₹2099.07 crore approved for the base year FY 2011-12, the 'Other Employee Cost' works out to ₹2657.63 crore for FY 2016-17.

As discussed in para 2.8.3, 'other employees cost' as per Audited Annual Accounts is ₹2306.23 crore. As per Regulations 28, increase in all expenses of employee cost other than BBMB and terminal benefits is required to be limited to increase in WPI (all commodities).

Accordingly, the Commission approves a total employee cost of ₹4551.87 (2008.38+237.26+2306.23) crore to PSPCL for FY 2016-17.

2.9 Repair & Maintenance (R&M) Expenses

2.9.1 In the ARR Petition for FY 2016-17, PSPCL projected R&M expenses at ₹673.58 crore against which the Commission had approved at ₹418.30 crore. In the Review of FY 2016-17, PSPCL revised its claim of R&M expenses to ₹599.43 against which the Commission approved revised R&M expenses of ₹349.53 crore based on the provisional accounts of FY 2016-17.

PSPCL's Submissions:

2.9.2 In the True-Up Petition for FY 2016-17, PSPCL has worked out R&M expenses of ₹594.04 crore on normative basis and claimed actual expenditure of ₹386.60 crore as per Audited Annual Accounts of FY 2016-17.

R&M expenses for the year are ₹386.59 crore, which includes cost of water, lubricants, consumable stores & station supplies of ₹28.98 crore (refer para 2.6.1 of this Order) and after capitalization of ₹0.79 crore.

Commission's Analysis:

2.9.3 Regulation 28 of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses approved by the Commission for FY 2011-12 in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent year.

2.9.4 The Commission in Tariff Order 2014-15 approved ₹320.67 crore for FY 2011-12 on Gross Fixed Assets of ₹39215.89 crore as on 01.04.2012. The Gross Fixed Assets as on 01.04.2016 are to the tune of ₹46455.75 crore. Therefore, base R&M expenses for FY 2016-17 works out to ₹379.87 (320.67/39215.89*46455.75) crore. As mentioned in para 2.8.4, there was WPI increase of 11.60% for FY 2016-17. By applying WPI increase @11.60% on the base R&M expenses of ₹379.87 crore, the R&M expenses work out to ₹423.93 (₹379.87*111.60/100) crore for FY 2016-17.

2.9.5 In the Audited Annual Accounts for FY 2016-17, PSPCL has disclosed capitalization of assets worth ₹3067.13 crore during FY 2016-17. The Commission vide letter no. PSERC/1739 dated 29.12.2017, (letter no. PSERC/2039 dated 29.01.2018) and letter no. 2548/PSERC/Dir. M&F/258 dated 16.03.2018 required PSPCL to furnish fixed asset register of FY 2016-17 to verify asset additions during the year, however, PSPCL has not furnished any suitable reply on this deficiency.

In view of the above, the Commission approves asset addition of ₹3067.13 crore (based on Audited Annual Accounts). As per Regulation 28(6), since details regarding commissioning/ capitalization of the assets added during FY 2016-17 are not available, R&M expenses for these assets are being considered assuming that these assets remained in service for six months on an average during FY 2016-17.

2.9.6 Average percentage rate of R&M expenses of ₹423.93 crore vis-à-vis the opening balance of Gross Fixed Assets of ₹46455.75 crore as on 01.04.2016 works out to 0.91% [(423.93/46455.75)*100]. The additional R&M expenses on the addition to the assets of ₹3067.13 crore work out to ₹13.96[(3067.13 /2)*0.91%] crore considering the asset addition for 6 months on an average during the year. The total R&M expense works out to ₹437.89 (423.93+13.96) crore.

2.9.7 During fuel cost data validation at GGSSTP, Ropar, it has been observed that expenditure of repair and maintenance of machinery of ₹3.06 crore has been booked in fuel cost. The Commission has not considered this amount of ₹3.06 crore while approving fuel cost and the same is allowed as R&M expenses in addition to actual R&M expenses of PSPCL for FY 2016-17 as per its accounts.

2.9.8 As per Regulation 28(2)(b), the base O&M expenses shall be adjusted according to variation in WPI over the year to determine the O&M expenses of subsequent years. Thus, the Commission, limits the Repair and Maintenance expense to ₹386.59 crore as per Audited Annual Accounts of FY 2016-17.

Accordingly, the Commission approves R&M expenses of ₹389.65 (386.59+3.06) crore for FY 2016-17 to PSPCL.

2.10 Administrative and General (A&G) Expenses

2.10.1 In the ARR Petition for FY 2016-17, PSPCL projected A&G expenses at ₹217.24 crore against which the Commission approved ₹138.00 crore in the Tariff Order for FY 2016-17. In the Review of FY 2016-17, PSPCL had revised its claim of A&G expenses to ₹184.25 crore against which the Commission approved revised A&G expenses of ₹145.41 crore based on provisional accounts of FY 2016-17.

PSPCL's Submissions:

2.10.2 In the True-Up Petition for FY 2016-17, PSPCL has worked out A&G expenses of ₹185.43 crore on normative basis, however, has claimed actual A&G expenses of ₹150.26 crore (net of capitalization cost of ₹34.18 crore) as per Audited Annual Accounts. These include annual license fee of ₹12.78 crore and audit fees of ₹0.18

crore. Also, PSPCL has claimed donation amounting to ₹5.00 crore made to Director Culture Affair, Punjab under A&G expenses and has booked ₹5.20 crore as 'Donations' under A&G expenses in its Financials, details of which are given in Table 2.14. PSPCL has submitted that the donations have been made as an initiative towards Corporate Social Responsibility.

Table 2.14: Detail of donations booked under A&G expenses in FY 2016-17

(₹crore)

Sr. No	Particulars	Amount
1.	Director Culture Affair, Punjab	5.000
2.	Chandigarh Patiala sub zone sports	0.005
3.	PSIEC Chandigarh Trade Fair	0.110
4.	Lakshmi Narain	0.001
5.	Cross by Advertising	0.080
6.	**Total**	**5.196**

Commission's Analysis:

2.10.3 The Commission allows A&G expenses as per Regulation 28 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005. The aforesaid contributions/ donations of ₹5.20 crore claimed by PSPCL should be met out of profit, if any. Accordingly, actual A&G expenses as per Audited Annual Accounts work out to ₹145.06 (150.26-5.20) crore.

2.10.4 Regulation 28 of the PSERC Tariff Regulations, 2005 provides for adjusting base O&M expenses approved by the Commission for FY 2011-12 in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for subsequent year. The Commission in Tariff Order 2014-15 approved ₹97.12 crore for FY 2011-12 on Gross Fixed Assets of ₹39215.89 crore as on 01.04.2012. The Gross Fixed Assets as on 01.04.2016 are to the tune of ₹46455.75 crore. Therefore, base A&G expenses for FY 2016-17 work out to ₹115.05 (97.12/39215.89*46455.75) crore. As mentioned in para 2.8.4 there is WPI increase of 11.60% for FY 2016-17. By applying WPI increase @11.60% on the base A&G expenses of ₹115.05 crore, the A&G expenses works out to ₹128.40 (115.05*111.60/100) crore for FY 2016-17.

2.10.5 As discussed in para 2.9.5 of this Order, the Commission has approved asset addition of ₹3067.13 crore (based on Audited Annual Accounts). In accordance with Regulation 28(6), since details regarding commissioning / capitalization of the assets added during FY 2016-17 are not available, A&G expenses for these assets are being considered assuming that these assets remained in service for six months on an average during FY 2016-17.

2.10.6 Average percentage rate of A&G expenses of ₹128.40 crore for assets of ₹46455.75 crore as on 01.04.2016 works out to 0.28% (128.40/46455.75*100) for PSPCL. By applying the average rate of 0.28% on addition of assets of ₹3067.13 crore for half year, the base A&G expenses for the fixed assets added during the year work out to ₹4.29 crore. Thus, A&G expenses for FY 2016-17 for PSPCL work out to ₹132.69 (128.40+4.29) crore. After adding ₹12.78 crore on account of License & ARR fee and ₹0.18 crore on account of Audit fee, normative A&G expenses works out to ₹145.65 (132.69+12.78+0.18) crore.

2.10.7 As per Regulation 28(2) (b), the base O&M expenses shall be adjusted according to variation in WPI over the year to determine the O&M expenses of subsequent years. As discussed in para 2.10.3, actual A&G expenses as per Audited Annual Accounts are of ₹145.06 crore, thus, the Commission, limits the A&G expenses to ₹145.06 crore. Further, as discussed in para 2.7.2(iv) of this Order, the Commission additionally allows NRPC fees of ₹0.11 crore under A&G expenses.

Accordingly, the Commission allows A&G expenses of ₹145.17 (145.06 + 0.11) crore for FY 2016-17.

2.11 O&M Expenses of BBMB

PSPCL's Submission

2.11.1 PSPCL in its Petition for Annual Performance Review (APR) of FY 2017-18 and Revised Estimates of FY 2018-19, has claimed BBMB O&M expenses of ₹1410.88 crore upto FY 2016-17 along with consequential carrying cost as detailed in Table 2.15.

Table 2.15: BBMB O&M expenses including carrying cost claimed by PSPCL

(₹crore)

Financial Year	BBMB O&M Expenses	Cumulative Impact	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	Carrying Cost
			(Rate of Interest as considered by PSERC in various Tariff Orders)							
			11.25%	11.24%	11.30%	11.31%	9.36%	9.36%	9.36%	
2009-10	76.32	-	-	-	-	-	-	-	-	-
2010-11	126.93	-	-	-	-	-	-	-	-	
2011-12	133.44	-	-	-	-	-	-	-	-	
2012-13	114.27	450.96	27.37	53.54	59.87	66.70	61.44	67.19	36.74	370.86
2013-14	128.01	128.01	-	7.19	15.28	17.02	15.68	17.15	9.38	81.69
2015-16	154.93	154.93	-	-	-	8.76	15.32	16.76	9.16	50.00
2016-17	152.37	152.37	-	-	-	-	-	14.26	7.80	22.06
Total	**886.27**	**886.27**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**524.61**
Cumulative Impact in the Tariff Order FY 2017-18										**1410.88**

Commission's Analysis:

2.11.2 The Central Electricity Regulatory Commission (CERC) vide its orders dated 12.11.2015 and dated 21.03.2016, had determined the O&M expenses for Transmission System and Generating System of BBMB respectively for FY 2009-2014. The Commission, in its earlier Orders (dated 27.07.2016 and 11.02.2017) in case of PSPCL, had determined the O&M expenses of BBMB based on the aforesaid CERC's Orders.

However, BBMB filed an appeal against the Commission's Order dated 11.02.2017, against which the Hon'ble APTEL, after hearing the Appeal no. 251 of 2016 and Appeal no. 94 of 2017, passed an order dated 06.09.2017 setting aside the orders of the PSERC dated 27.07.2016 and 11.02.2017

2.11.3 Accordingly, the Commission in its Order dated 08.11.2017 in Petition No.80 of 2016 and Petition No. 79 of 2015 (on directions from Hon'ble APTEL vide Order dated 06.09.2017), allowed the BBMB O&M expenses from FY 2009-10 to FY 2016-17 (excluding FY 2014-15) along with consequential carrying cost. The relevant extract from the Order is as under:

"The revenue gap occurring on this account and carrying cost thereon for these years will be considered in the next Tariff Order of PSPCL, subject to the Central Commission's Tariff Order of BBMB for FY 2009-14 (True-Up) and for FY 2014-19 as and when the same is issued by CERC."

2.11.4 The Commission determines BBMB O&M expenses of ₹992.36 crore [including consequential carrying cost upto FY 2016-17 (half year)] as detailed in Table 2.16.

Table 2.16: BBMB O&M expenses including carrying cost allowed by the Commission

(₹crore)

Financial Year	BBMB O&M Expenses	Cumulative Impact	FY 2012-13 (half year)	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17 (half year)	Carrying Cost
			(Rate of Interest: As considered by the Commission in previous Tariff Orders)					
			11.28%	11.46%	11.30%	11.31%	9.36%	
2009-10	76.32	-	-	-	-	-	-	-
2010-11	126.93	-	-	-	-	-	-	
2011-12	133.44	-	-	-	-	-	-	
2012-13	114.27	450.96	25.43	51.68	50.96	51.00	21.10	200.18
2013-14	128.01	128.01	-	7.33	14.47	14.48	5.99	42.27
2015-16	154.93	154.93	-	-	-	8.76	7.25	16.01
Total	**733.90**	**733.90**	**-**	**-**	**-**	**-**	**-**	**258.46**
Cumulative Impact of BBMB O&M expenses upto FY 2015-16								**992.36**

2.11.5 BBMB share of O&M expenses (in employee cost, R&M expenses and A&G expenses) for FY 2016-17 has already been allowed in earlier paras of this Order, hence, FY 2016-17 BBMB O&M expense has not been made part of Table 2.16.

Thus, the Commission allows BBMB O&M expenses of ₹992.36 crore including carrying cost of ₹258.46 crore upto FY 2016-17 (half year). The carrying cost for subsequent period (i.e. remaining half year of FY 2016-17, FY 2017-18 and FY 2018-19), is allowed along with carrying cost on gap of FY 2016-17 in para 3.25 of this Order.

2.12 Depreciation Charges

2.12.1 In the ARR Petition for FY 2016-17, PSPCL projected depreciation charges of ₹1157.58 crore on assets valued at ₹27150.89 crore (net of land and land rights) as on 1st April, 2016 against which the Commission approved depreciation charges of ₹1063.59 crore. In the Review of FY 2016-17, PSPCL had revised its claim for depreciation charges to ₹1183.19 crore against which the Commission approved the revised depreciation charges of ₹1143.64 crore for FY 2016-17.

PSPCL's Submissions:

2.12.2 In the True-Up Petition for FY 2016-17, PSPCL has claimed depreciation charges of ₹1208.50 crore for FY 2016-17 based on Audited Annual Accounts. PSPCL has submitted that the depreciation charges during FY 2016-17 are on account of asset added during the year and based on the depreciation rates approved by the Hon'ble Commission in its Regulations.

Commission's Analysis:

2.12.3 The Depreciation has been determined as per Regulation 27 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (as amended from time to time).

2.12.4 The Gross Fixed Assets as on 01.04.2016 are to the tune of ₹27518.58 crore (net of land and land rights). As discussed in para 2.9.5 of this Order, the Commission has approved asset addition of ₹3067.13 crore (based on Audited Annual Accounts). Asset addition net of land and land rights works out to ₹3074.27 crore during FY 2016-17. Thus, closing balance of Fixed Assets as on 31.03.2017 is ₹30592.85 crore (net of land and land rights).

As asset register has not been provided by PSPCL, asset additions during the year and depreciation thereon could not be verified.

Accordingly, the Commission approves the depreciation charges of ₹1208.50

crore for FY 2016-17.

2.13 Interest and Finance Charges

2.13.1 In the ARR Petition for FY 2016-17, PSPCL claimed Interest and Finance Charges of ₹3029.69 crore, against which the Commission approved an amount of ₹1503.74 crore for FY 2016-17. In the Review of FY 2016-17, PSPCL revised the Interest and Finance Charges for FY 2016-17 to ₹2927.52 crore against which the Commission approved the revised Interest and Finance Charges of ₹1190.85 crore for FY 2016-17.

PSPCL's Submissions:

2.13.2 In the True Up Petition for FY 2016-17, PSPCL has claimed the Interest and Finance Charges of ₹2656.51 crore for FY 2016-17, based on Audited Annual Accounts, as detailed in Table 2.17.

Table 2.17: Interest & Finance Charges claimed by PSPCL for FY 2016-17

(₹crore)

Sr. No.	Description	Amount
1.	Non SLR Bonds	32.48
2.	REC	508.26
3.	Commercial Banks (Long Term)	268.16
4.	PFC	3.56
5.	GPF	130.33
6.	CSS / APDRP	45.77
7.	Working Capital Loans	572.43
8.	Interest to Consumers	152.07
9.	Other Interest	12.39
10.	**Total**	**1725.45**
11.	State Govt. Loans	1192.17
12.	**Total**	**2917.62**
13.	Less: Capitalisation	283.61
14.	**Net Interest**	**2634.01**
15.	Finance Charges	22.50
16.	**Total Interest and Finance Charges**	**2656.51**

Commission's Analysis:

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

2.13.3 **Investment/Interest and Finance Charges**

The Commission in its Tariff Order for FY 2016-17 approved an Investment of ₹1600.00 crore against projected capital expenditure of ₹3183.95 crore for FY 2016-17.

As per Audited Annual Accounts for FY 2016-17, the opening Capital Work in Progress as on 01.04.2016 is ₹1656.25 crore. Net asset addition during FY 2016-17 is of ₹3067.13 crore. Closing balance of Capital Work in Progress as on 31.03.2017 is of ₹1178.76 crore.

The opening long term loan as per PSPCL's Petition is ₹20808.58 crore, which includes loan of ₹17.62 crore on account of RBI Bonds; ₹1772.88 crore on account of GPF liability and ₹9859.72 crore on account of loans converted under UDAY Scheme. Similarly, loan addition submitted by PSPCL includes loans converted under UDAY Scheme. These loans converted under UDAY scheme are not utilized for funding of capital expenditure and are thus excluded from long term loans. Moreover, there is no fresh loan addition on account of loans under UDAY Scheme. Further, loans relating to interest on GPF Liability is discussed separately in ensuing paragraphs. Accordingly, long term loan balances (opening, loan addition, repayment, closing balances and interest thereon) excluding loans related to RBI Bonds, GPF loans and loans under UDAY Scheme are worked out in Table 2.18.

Table 2.18: Long term loan claimed by PSPCL (Except UDAY Scheme, RBI Bonds and GPF Liability) for FY 2016-17.

(₹crore)

Particulars	Long term loan claimed by PSPCL	Amount of loan relating to UDAY Scheme	Amount of loan relating to RBI Bonds	Amount relating to GPF liability	Balance long term loan
Opening balance as on 01.04.2016	20808.58	9859.72	17.62	1772.88	9158.36
Loan addition during 2016-17	6766.94	3521.77* (-5768.54+2246.77)	-	-	3245.17
Loan re-payment during 2016-17	3265.04	-	17.62	230.27	3017.15
Closing balance as on 31.03.2017	24310.48	13381.49** (15628.26-2246.77)	-	1542.61	9386.38
Interest on loans for FY 2016-17	2180.73	1099.83*** (1192.17-92.34)	-	130.33	950.57

* *Out of the total loan addition of ₹5768.94 crore (submitted by PSPCL) on account of UDAY Scheme, only capex component of UDAY loans i.e. ₹2246.77 crore will be allowed.*

** *Out of the closing loan balance ₹15628.26 crore (submitted by PSPCL) on account of UDAY loans, only capex component of UDAY loans of ₹2246.77 crore shall be allowed.*

*** *Out of the total interest of ₹1192.17 crore (submitted by PSPCL) on account of UDAY loans, only interest of ₹92.34 crore (2246.77*8.22%*6/12) on account of capex component of UDAY loans shall be allowed.*

In the True-Up Petition for FY 2016-17, PSPCL has submitted an investment of ₹2545.62 crore (₹208.64 crore for Generation, ₹1796.39 crore for Distribution and ₹540.59 crore for Sub-Transmission) based on actual expenditure. Further, as per

Audited Annual Accounts, PSPCL has received consumer contribution, grants and subsidies of ₹843.71 crore during FY 2016-17. Accordingly, actual loan requirement for the level of investment works out to ₹1701.91 (2545.62-843.71) crore. However, the actual long term loan addition submitted by PSPCL is ₹998.40 (6766.94-5768.54) crore which is considered.

The Commission during the true up of FY 2015-16 [in Table 3.10 (B) of the Tariff Order for FY 2017-18] had approved closing loan balance as on 31.03.2016 of ₹8748.79 crore (other than WCL, GP Fund and GoP loans). Considering the opening balance of ₹8748.79 crore for FY 2016-17, the interest on long term loans works out to ₹908.58 crore in Table 2.19.

Table 2.19: Interest on Loans (Other than WCL and GoP Loans) for FY 2016-17

(₹crore)

Sr. No.	Particulars	Loans as on April 01,2016	Receipt of Loans during FY 2016-17	Repayment of Loans during FY 2016-17	Loans as on March 31, 2017	Interest on Loan
1.	As per data furnished in ARR Petition (other than WCL and GoP Loans)	9158.36	3245.17	3017.15	9386.38	950.57
2.	Approved by the Commission (other than WCL, GP Fund , GoP Loans and R- APDRP-A Scheme, UDAY Scheme)	8748.79	3245.17	3017.15	8976.81	908.58

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

PSPCL has claimed interest of ₹130.33 crore (at 8.10%-8.50%) on GPF accumulations based on Audited Annual Accounts for FY 2016-17. **The interest of ₹130.33 crore on GP Fund, being a statutory payment, is allowed as claimed by PSPCL for FY 2016-17.**

2.13.5 **Finance Charges**

PSPCL has claimed finance charge of ₹34.89 crore including guarantee fees, based on Audited Annual Accounts for FY 2016-17.

The claim also includes 'Penal interest on capital liabilities' of ₹0.03 crore and 'Carrying cost allowed by PSERC passed on to GoP' of ₹0.06 crore. Since the carrying cost is separately dealt in the Tariff Order, the same is excluded from finance charges. Further, penal interest is also excluded from finance charges. Accordingly, **the Commission approves the finance charges of ₹34.80 (34.89-0.03-0.06) crore for FY 2016-17.**

2.13.6 **Interest on Consumer Security Deposits**

In the True Up Petition for FY 2016-17, PSPCL has claimed ₹152.07 crore towards interest on consumer security deposits on the basis of Audited Annual Accounts for FY 2016-17. **The Commission allows the interest of ₹152.07 crore on Consumer Security Deposit for FY 2016-17.**

2.13.7 **Capitalization of Interest Charges**

In the True Up Petition of FY 2016-17, PSPCL has claimed ₹283.61 crore towards capitalization of interest charges based on Audited Annual Accounts for FY 2016-17. **The Commission approves capitalization of interest of ₹283.61 crore for FY 2016-17.**

2.13.8 **Interest on Working Capital**

In the Tariff Order for FY 2016-17, the Commission approved working capital of ₹3116.99 crore with interest cost of ₹291.13 crore. In the Review of FY 2016-17, the Commission approved interest of ₹246.67 crore on working capital of ₹2635.33 crore. In the True Up Petition of FY 2016-17, PSPCL has claimed ₹572.43 crore (including interest on bridge loans) as interest on working capital borrowings for FY 2016-17.

The Working Capital & Interest rate on Working Capital has been determined as per Regulation 30 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (as amended from time to time).

The details of working capital requirement and allowable interest thereon are depicted in Table 2.20.

Table 2.20: Interest on Working Capital Requirement for FY 2016-17

(₹crore)

Sr. No.	Particulars	Amount
1.	Fuel Cost for two months	304.83
2.	Operation and Maintenance expenses for one month	506.59
3.	Receivables for two months	4063.25
4.	Maintenance Spares @15% of O&M expenses	911.86
5.	**Sub Total**	**5786.53**
6.	Less: Consumer security deposit	2899.37
7.	Total working capital required	2887.16
8.	Interest rate (calculated on weighted average)	9.70%
9.	**Interest on Working Capital Loan**	**280.05**

The Commission, accordingly, approves interest of ₹280.05 crore on Working Capital Requirements for FY 2016-17.

In view of above, the interest and finance charges are approved as shown in Table 2.21.

Table 2.21: Interest and Finance Charges for FY 2016-17

(₹crore)

Sr. No.	Particulars	Loan as on April 01, 2016	Receipt of Loan during FY 2016-17	Re-payment of Loan during FY 2016-17	Loan as on March 31, 2017	Interest Approved by Commission
1.	Approved by the Commission (Other than WCL and GoP Loans	8748.79	3245.17	3017.15	8976.81	908.58
2.	GoP Loans / RBI Bonds	17.62	-	17.62	-	-
3.	Interest on GPF	1772.88	-	230.27	1542.61	130.33
4.	Finance Charges	-	-	-	-	34.80
5.	**Gross Interest and Finance Charges**	**-**	**-**	**-**	**-**	**1073.71**
6.	Less: Capitalization	-	-	-	-	(283.61)
7.	Net Interest and Finance Charges (5-6)	-	-	-	-	790.10
8.	Interest on Consumer Security Deposits	-	-	-	-	152.07
9.	Interest on Working Capital	-	-	-	-	280.05
10.	**Total Interest**					**1222.22**

The Commission, accordingly, approves the interest and finance charges of ₹1222.22 crore for PSPCL for FY 2016-17.

2.14 Return on Equity

2.14.1 In the ARR and Tariff Petition for FY 2016-17, PSPCL claimed the Return on Equity of ₹942.62 crore on base equity of ₹6081.43 crore against which the Commission had approved RoE of ₹942.62 crore to PSPCL.

2.14.2 In the Review of FY 2016-17, PSPCL had claimed ₹942.62 crore as RoE for FY 2016-17, against which the Commission approved RoE of ₹942.62 crore.

2.14.3 In the True Up Petition for FY 2016-17, PSPCL has claimed RoE of ₹942.62 crore @ 15.5% on Govt. equity holding of ₹6081.43 crore.

2.14.4 In accordance with the Regulation 25 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (as amended from time to time), **the Commission allows RoE of ₹942.62 crore @15.5% on the equity of ₹6081.43 crore**.

2.15 Subsidy payable by GoP

PSPCL in its True-Up Petition has claimed subsidy of ₹6176.96 crore based on the Audited Annual Accounts of FY 2016-17. However, GoP has paid subsidy of ₹5600.70 during FY 2016-17 to PSPCL. The Commission has worked out the category wise subsidy payable by GoP for FY 2016-17 in Table 2.22.

Table 2.22: Subsidy payable by GoP for different Categories

(₹crore)

Sr. No.	Category	Allowed by the Commission
1.	AP Consumption (including FCA) *	5289.17
2.	Scheduled Caste (SC) / Domestic Supply (DS) free power upto 200 units with connected load upto 1000 watts.	1196.68
3.	Non-SC/BPL DS consumers free power upto 200 units with connected load upto 1000 watts.	75.87
4.	Backward class DS consumer free power upto 200 units with connected load upto 1kW.	7.12
5.	Small Power (concessional tariff @ ₹499 paise per unit)	38.49
6.	Supply to Dairy Farming, Fish Farming (exclusive), Goat Farming and Pig Farming.	1.08
7.	**Total**	**6608.41**

*** *AP Consumption:*** *The Commission has considered AP consumption at 11545.96 MU @458 paise per unit, accordingly, revenue works out to ₹5288.05 crore. Total revenue including FCA of ₹1.12 crore amounts to ₹5289.17crore. (Refer Para 2.20.3 of this Order).*

Interest on delayed payment of subsidy: The GoP has paid ₹5600.70 crore subsidy to PSPCL during FY 2016-17 in staggered instalments. The Commission observed that there was delay in payment of subsidy to PSPCL in FY 2016-17. With a view to compensate PSPCL on this account, the Commission levies interest on the delayed payment of subsidy @9.70% (effective rate of interest on working capital loan) which works out to ₹307.79 crore.

Accordingly, the subsidy payable for FY 2016-17, inclusive of interest on delayed payment of subsidy, has been determined by the Commission at ₹6916.20 (6608.41+307.79) crore against which GoP had paid subsidy of ₹5600.70 crore. As such, there is shortfall subsidy of ₹1315.50 (6916.20-5600.70) crore during FY 2016-17. This has been carried forward to para 6.4.2.

2.16 Prior Period Expenses

PSPCL's Submission

PSPCL has claimed ₹278.73 crore under the head of Power Purchase Cost relating to previous period during FY 2016-17.

Commission's Analysis:

As discussed in para 2.7.2(iii) of this Order, on a query from the Commission, PSPCL provided further details of the said expense and submitted that the previous year payments in respect of central sector generating stations have been made towards the bills raised by various firms for previous period on account of revised energy charges, capacity charges, water usage charges, RLDC charges etc. on the basis of various CERC Orders revising AFC's and previous payments made towards NPL & Mallana-II. As per the detail, an amount of ₹278.73 crore relates to adjustment of prior period power purchase bills, the Commission allows ₹278.73 crore as prior period expenses.

Accordingly, the Commission approves Net Prior Period expenses ₹278.73 crore for FY 2016-17.

2.17 Other Debits and extraordinary items

PSPCL's Submission

PSPCL has submitted that 'Other Debits' are items which arise on account of retrospective changes in material cost variances, bad & doubtful debts written off, miscellaneous losses and write off's etc. PSPCL has recorded 'other debits' of ₹24.70 crore in the Audited Annual Accounts of FY 2016-17, details of which are shown in Table 2.23.

Table 2.23: Other Debits claimed by PSPCL as per Audited Annual Accounts of FY 2016-17

(₹crore)

Particulars	**Amount**
Materials cost variance	0.03
Bad & doubtful debts written off	0.53
Provision for Bad & doubtful debts	11.05
Total	**11.61**
Miscellaneous losses and write offs	13.08
Extra Ordinary Debit (Loss on a/c of flood, cyclone, fire etc.)	0.01
Total	**24.70**

Commission's Analysis:

Other Debits of ₹24.70 crore claimed by PSPCL primarily include bad and doubtful debts written off, miscellaneous losses and write off etc. Regulation 29 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 related to 'Bad & Doubtful Debts' states that the Commission may allow a provision for bad debts upto 1% of receivables in the revenue requirement of the generating company / licensee.

The Commission allows other debits and extraordinary items of ₹24.70 crore for FY 2016-17.

2.18 Transmission Charges payable to PSTCL

The Commission, in its Tariff Order of PSTCL, determined ₹1236.70 crore as the Transmission charges payable to PSTCL by PSPCL for FY 2016-17.

Accordingly, this amount is being included in the ARR of PSPCL for FY 2016-17 as Transmission charges.

2.19 Non-Tariff Income

2.19.1 In the ARR and Tariff Petition for FY 2016-17, PSPCL projected Non-Tariff Income of ₹826.65 crore against which the Commission had approved ₹1160.62 crore. In the Review of FY 2016-17, PSPCL revised the non-tariff income to ₹703.18 crore for FY 2016-17 against which the Commission had approved ₹1033.63 crore for FY 2016-17.

PSPCL's Submission

2.19.2 In True-Up Petition for FY 2016-17, PSPCL has submitted Non-Tariff Income of ₹1115.35 crore details of which are given in Table 2.24.

Table 2.24: Non-Tariff Income for FY 2016-17 as claimed by PSPCL

(₹crore)

Sr. No.	Particulars	Amount
1.	Meter/service rent	92.05
2.	Late Payment Surcharge	137.70
3.	Theft & pilferage of energy	45.48
4.	Misc. Receipts	559.89
5.	Misc. Charges (except PLEC)	15.59
6.	Wheeling charges	189.33
7.	Interest on staff loans & advance	55.61
8.	Income from trading	4.16
9.	Income staff welfare activities	0.04
10.	Investments & bank balances	10.99
11.	Gain on sale of asset	0.01
12.	**Total income**	**1110.85**
13.	BBMB income	4.50
14.	**Total non-tariff income**	**1115.35**
15.	Less: late payment surcharge	137.70
16.	Less: Rebate for timely Payment of Power Purchase	123.21
17.	**Net Non-tariff income**	**854.44**

In the Petition, PSPCL has prayed that the late payment surcharge may not be 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.

Commission's Analysis:

2.19.3 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.

As such, the Non-Tariff Income works out to ₹1115.35 (854.44+137.70+123.21) crore. **The Commission accordingly, approves Non-Tariff Income of ₹1115.35 crore for FY 2016-17.**

2.20 Revenue from sale of power

2.20.1 The Commission approved the Revenue from existing tariff for FY 2016-17 of ₹25747.94 crore during ARR and ₹24528.77 crore at the time of Review.

In the True-Up Petition for FY 2016-17, PSPCL has submitted revenue from sale of power at ₹24037.03 crore (including FCA) being actual as per Audited Accounts.

2.20.2 The Commission in Petition No. 71 of 2016 (filed by PSPCL) regarding subsidy on account of diversification of Agriculture-Mushroom farming, in its Order dated 10.11.2017, disallowed the same as it was never sanctioned by the Govt. of Punjab.

In view of the above, an amount of ₹1.83 crore being concession/rebate erroneously allowed to mushroom farming consumers is added as 'Notional Income' to the revenue from sale of power of PSPCL.

2.20.3 The Commission has approved 11545.96 MU's in Agricultural Supply (AP) category. Total revenue at the rate of 458 paise per unit works out to ₹5288.05 crore. Further, the Commission vide Order dated 29.03.2016 in Petition No.11 of 2016, allowed ₹1.12 crore on account of Fuel Cost Adjustment (FCA) chargeable to unmetered AP category. Accordingly, total revenue approved in AP category works out to ₹5289.17

(5288.05+1.12) crore.

The Commission approves the revenue from sale of power as ₹24473.31 Crore for FY 2016-17 as detailed in Table 2.25.

Table 2.25: Revenue from Sale of Power for FY 2016-17

(₹crore)

Sr. No.	Description	Actual as per Audited Annual Accounts		As approved by the Commission	
		Energy Sale (MU)	Revenue (₹crore)	Energy Sale (MU)	Revenue (₹crore)
I	II	III	IV	V	VII
1.	Domesticincluding others	13080.39	6879.27	13080.39	6879.27
2.	Non Residential Supply	3801.94	2357.99	3801.94	2357.99
3.	Public Lighting	192.00	131.02	192.00	131.02
4.	Industrial Consumers				
a)	Small Power	983.83	564.02	983.83	564.02
b)	Medium Supply	2214.99	1295.65	2214.99	1295.65
c)	Large Supply	11115.19	6938.43	11115.19	6938.43
5.	Bulk Supply (HT & LT)	661.06	400.44	661.06	400.44
6.	Railway Traction	183.04	112.41	183.04	112.41
7.	Common Pool	305.39	149.58	305.39	149.58
8.	Outside State	466.33	119.58	466.33	119.58
9.	Agricultural Supply (AP)	12008.98	4854.72	11545.96	5289.17
10.	Add: MMC	-	447.07	-	447.07
11.	Add: PLEC	-	93.40	-	93.40
12.	Less: Net Surcharge/Rebate	-	-306.55	-	-306.55
13.	Notional income as per Commission's Order dated 10.11.2017	-	-	-	1.83
14.	**Grand Total**	**45013.14**	**24037.03**	**44550.12**	**24473.31**

2.21 True up of ARR for FY 2016-17

In view of the above analysis, the trued up revenue requirement for FY 2016-17 is as per details given in Table 2.26.

Table 2.26: Revenue Requirement for FY 2016-17

(₹crore)

Sr. No.	Items of Expenses	Approved in the Tariff Order for FY 2016-17	Proposed by PSPCL in the Review	Approved by the Commission in Review	Claimed by PSPCL in True-Up	Finally approved by the Commission
I	II	III	IV	V	VI	VII
1.	Cost of Fuel	2397.56	2282.00	1834.88	2072.14	1828.98
2.	Cost of power purchase	14697.41	16489.91	15038.01	15890.95	15229.45
3.	Employee Cost	4835.58	5114.40	4547.46	4551.87	4551.87
4.	R & M expenses	418.30	599.43	349.53	386.60	389.65
5.	A & G expenses	138.00	184.25	145.41	150.25	145.17
6.	BBMB O&M Expenses	-191.09	-	-152.37	-*	992.36
7.	Depreciation	1063.59	1183.19	1143.64	1208.50	1208.50
8.	Interest & Finance charges	1503.74	2927.52	1190.85	2656.51	1222.22
9.	Return on Equity	942.62	942.62	942.62	942.62	942.62
10.	Transmission and SLDC charges payable to PSTCL	1151.01	1151.01	1175.72	1047.02	1236.70
11.	RSD charges payable to GoP	8.26	17.62	17.62	-**	-
12.	Provision for DSM	10.00	10.00	10.00	-	-
13.	Other Debits				24.70	24.70
14.	Prior Period Expenses	-	-	168.20	-***	278.73
15.	**Total Revenue Requirement**	**26974.98**	**30901.94**	**26411.57**	**28931.17**	**28050.95**
16.	Less: Non-Tariff Income	1160.62	703.18	1033.63	1115.35	1115.35
17.	**Net Revenue Requirement**	**25814.36**	**30198.76**	**25377.94**	**27815.82**	**26935.60**
18.	Revenue from existing tariff	25747.94	25628.26	24528.77	24037.03	24473.31
19.	**Gap: Surplus(+)/ Deficit(-) for FY 2016-17**	**(-) 66.42**	**(-) 4570.49**	**(-) 849.17**	**(-) 3778.79**	**(-) 2462.29**
20.	Gap: Surplus(+)/ Deficit(-) upto FY 2015-16 (as per table 3.14 of Tariff Order dated 23.10.2017)	(+) 247.29	(-) 1020.68	(+) 317.37	(+) 210.16	(+) 317.37
21.	Carrying Cost on FY 2014-15 and FY 2015-16 Gap (as per table 5.66 of Tariff Order dated 23.10.2017)	(-) 14.93	(-) 408.16	-	(-)1093.32 ****	(-) 107.21
22.	**Gap Surplus (+)/Deficit (-) upto FY 2016-17**	**(+) 165.94**	**(-) 5999.32**	**(-) 531.80**	**(-) 4661.95**	**(-) 2252.13**

* *PSPCL has claimed these expenses in FY 2017-18, subsequently PSPCL filed the Petition for True-up of FY 2016-17. Accordingly, the Commission allowed the BBMB O&M expenses as per Order of the Hon'ble APTEL dated 06.09.2017 and consequential order of the Commission dated 08.11.2017.*

** *included in R&M expenses*

*** *PSPCL has claimed this expense under cost of Power Purchase. (Refer Para 2.7 & 2.16)*

**** *PSPCL has claimed carrying cost of ₹1093.32 crore for FY 2016-17. The Commission has separately allowed carrying cost on revenue gap of FY 2016-17 in Para 3.25 of this Order*

Net revenue gap (deficit) is of ₹2252.13 crore upto FY 2016-17 as determined above, which has been carried over to Table 3.53 of this Tariff Order.

Chapter 3

Annual Performance Review for FY 2017-18 and Revised Estimates for FY 2018-19

3.1 Background

PSPCL, in its petition for Annual Performance Review (APR) of FY 2017-18 and Revised Estimates (RE) for FY 2018-19, has submitted the energy demand/ requirement viz-a-viz availability, expenditure for generation & distribution, revenue and resultant gap for FY 2017-18, based on actual figures of H1 (April, 2017 to September, 2017) of FY 2017-18, estimated performance for the H2 (October 2017 to March 2018) and revised projections for FY 2018-19. The Commission has analyzed the same in this chapter.

3.2 Energy Demand (Sales)

3.2.1 Metered Energy Sales

The Commission in the Tariff Order for FY 2017-18 had approved 35155.60 MU and 37126.50 MU of 'Metered Energy Sales within the State' for FY 2017-18 and FY 2018-19 respectively, same as projected by PSPCL in the ARR for MYT Control Period from FY 2017-18 to FY 2019-20.

PSPCL's submissions:

PSPCL has estimated energy sales of metered categories for FY 2017-18 on the basis of actual figures for H1 and by applying category-wise half-yearly 3 years compounded annual growth rate (CAGR) of second halves of FY 2013-14 to FY 2016-17, to the corresponding category-wise provisional energy sales in the second half of FY 2016-17. For FY 2018-19 PSPCL has projected the energy sales to the metered consumers, based on the category wise 3 year CAGR of the FY 2013-14 to FY 2016-17. The category wise 3 year CAGR for the period FY 2013-14 to FY 2016-17 for full year and for H2 is shown in the Table 3.1.

Table 3.1: CAGR for the Energy Sales (%)

Sr. No.	Consumer Category	3 Year CAGR (FY 2013-14 to FY 2016-17)	
		For full year	For second half (H2)
1.	Domestic	7.40%	4.98%
2.	Non-Residential	8.02%	6.87%
3.	Small Power	2.77%	2.01%
4.	Medium Supply	5.10%	6.34%
5.	Large Supply	4.26%	5.41%
6.	Public Lighting	4.10%	0.72%
7.	Bulk Supply	3.06%	0.81%
8.	Railway Traction	8.46%	7.72%

Further, sales to common pool consumers for FY 2017-18 and FY 2018-19 has been projected as 308.99 MU and 341.64 MU for FY 2017-18 and FY 2018-19 respectively, based on the provisional figures of sales for FY 2016-17. Outside State sale has been projected as 353.88 MU and 126.18 MU during FY 2017-18 and FY 2018-19 respectively.

Commission's Analysis:

The Commission has considered and accepted the Metered Energy Sales within the State, Sales to common Pool Consumers and Outside State Sales as submitted by PSPCL. The metered energy sales for FY 2017-18 and FY 2018-19 projected by PSPCL in the ARR for MYT Control period, approved by the Commission in the Tariff Order for FY 2017-18, submitted by PSPCL in the APR/RE and now revised by the Commission, are given in Table 3.2.

Table 3.2: Metered Energy Sales

(MU)

Sr. No.	Category	Projected by PSPCL in the ARR for MYT Control Period		Approved by the Commission in TO for FY 2017-18		Submitted by PSPCL in APR/RE		Now revised by the Commission	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	Domestic	14387.66	15597.33	14387.66	15597.33	13796.31	14816.97	13796.31	14816.97
2.	Non-Residential	4190.92	4527.60	4190.92	4527.60	4028.39	4351.47	4028.39	4351.47
3.	Small Power	1005.93	1023.63	1005.93	1023.63	1007.93	1035.80	1007.93	1035.80
4.	Medium Supply	2310.47	2421.70	2310.47	2421.70	2343.90	2463.43	2343.90	2463.43
5.	Large Supply	12072.94	12289.62	12072.94	12289.62	12647.99	13187.05	12647.99	13187.05
6.	Public Lighting	255.47	283.59	255.47	283.59	187.70	195.39	187.70	195.39
7.	Bulk Supply	744.99	782.65	744.99	782.65	673.87	694.47	673.87	694.47
8.	Railway Traction	187.22	200.38	187.22	200.38	206.55	224.02	206.55	224.02
9.	**Metered Sales within the State**	**35155.60**	**37126.50**	**35155.60**	**37126.50**	**34892.64**	**36968.60**	**34892.64**	**36968.60**
10.	**Common Pool sales**	**311.68**	**341.64**	**311.68**	**341.64**	**308.99**	**341.64**	**308.99**	**341.64**
11.	**Outside State sale**								
	HP Royalty in Shanan	52.66	52.66	52.66	52.66	52.92	52.92	52.92	52.92
	Free Share of HP in RSD	75.74	74.80	-*	-*	82.29	73.26	82.29	73.26
	Sale through PTC	-	-	-	-	218.67	-	218.67	-
	Total	**128.40**	**127.46**	**52.66**	**52.66**	**353.88**	**126.18**	**353.88**	**126.18**
12.	**Total Metered Sales (9+10+11)**	**35595.68**	**37595.60**	**35519.94**	**37520.80**	**35555.51**	**37436.42**	**35555.51**	**37436.42**

**HP share (free) in RSD not considered for sale as well as generation*

Accordingly, the Commission approves the revised metered sales of 35555.51 MU for FY 2017-18 and 37436.42 MU for FY 2018-19, as per details shown in Column IX and X of Table 3.2.

3.2.2 AP Consumption

Against projections of 12336.54 MU and 12608.25 MU of AP consumption for FY 2017-18 and FY 2018-19 respectively, submitted by PSPCL in the ARR for MYT Control Period, the Commission approved the respective AP consumption of 11811.90 MU and 12078.05 MU, in the Tariff Order for FY 2017-18.

PSPCL's submissions:

PSPCL has submitted the revised AP consumption of 12355.83 MU for FY 2017-18 and 13313.88 MU for FY 2018-19, with submission that the AP consumption for FY 2017-18 has been re-estimated on the basis of actual consumption of 9100.88 MU during H1 and sales for H2 has been estimated as 3254.95 MU, by applying 3 year half yearly CAGR of 9.48% on actual sales of H2 of FY 2016-17. Further, submissions made by PSPCL in respect of AP consumption of Kandi Area mixed feeders and assumed losses of AP feeders are same as contained in the true up of FY 2016-17.

Commission's Analysis:

i) Submissions made by PSPCL in respect of AP consumption of Kandi Area mixed feeders and assumed losses of AP feeders has been discussed in detail under para 2.2.2 of this Tariff Order.

ii) For estimation of the AP consumption, the Commission also follows the methodology of pumped energy. In order to minimize the error on account of human intervention, the Commission has directed PSPCL in the Tariff Order for FY 2017-18, to ensure supply of monthly AMR data of AP feeders regularly to the Commission failing which cut will be imposed on AP consumption. The Commission has noted that PSPCL has started submitting the monthly AMR data. But, since the data is of about 1500 AP feeders against a total of about 5400 AP feeders and does not contain feeder wise sanctioned load of AP consumers, it would not be possible to estimate the AP consumption of the State as a whole. **Thus, the Commission decides to continue with the estimation of the AP consumption on the basis of pumped energy data supplied by PSPCL.**

iii) Also, the Commission in its Tariff Order for FY 2017-18 directed PSPCL to ensure 100% metering of all such AP consumers failing which unmetered load fed from urban feeders shall not be considered for calculating AP consumption. However, PSPCL has failed to comply with the directive and 1423 AP connections are still unmetered on urban feeders.

The Commission decides to provisionally consider the consumption of AP connections running on urban feeders on pro-rata basis as per previous practice. The Commission shall review the matter at the time of True up and decision regarding non consideration of AP consumption of unmetered AP connections running on urban feeders shall be taken after considering the physical progress in the matter made by PSPCL during the complete year of FY 2017-18.

iv) PSPCL has submitted the data of energy pumped for AP supply for April, 2017 to September, 2017 vide letter no. 1146 dated 22.12.2017 and data of energy pumped for AP supply for October, 2017 vide email dated 09.01.2018. Accordingly, the assessment of AP consumption from April to October, 2017 has been made on the basis of pumped energy data. For estimation of consumption from November, 2017 to March 2018, the average of percentages of AP consumption during the last five months to the first seven months of FY 2014-15, FY 2015-16 and FY 2016-17 has been taken into consideration. Accordingly, the Commission has worked out the estimated AP consumption for FY 2017-18 in Table 3.3 A.

Table 3.3 A: AP Consumption for FY 2017-18

(MU)

Sr. No.	Description		Energy FY 2017-18
1.	**Energy pumped during April, 2017 to October, 2017**		
	i) 3-phase 3-wire AP feeders		10364.33
	ii) 3-phase 4-wire AP feeders		2.79 [a]
	iii) Kandi Area mixed feeders feeding AP load		434.92 [b]
	iv) Kandi Area pure AP feeders		6.91
	Total		**10808.95**
2.	**Estimated pumped energy for November, 2017 to March, 2018**	{(1) *21.07%[c]}	2277.45
3.	**Total AP energy pumped for 2017-18**	{(1) + (2)}	13086.40
4.	Less losses @9.94% (14.25-(2.5+15% of 12.05)	{(3)x9.94%}	1300.79 [d]
5.	Net AP consumption for FY 2017-18	{(3)-(4)}	11785.61
6.	AP consumption for load of 70.64 MW running on Urban Feeders (not included above)	{(5)x 70.64/11595}	71.80 [e]
7.	**Total AP consumption for FY 2017-18**	**{(5)+ (6)}**	**11857.41**

(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 considering the AP load on Kandi area mixed feeders feeding mixed load, as 30%.

(c) 21.07% (average of the percentages of AP consumption during the last five months to the first seven months of FY 2014-15, FY 2015-16 and FY 2016-17).

(d) The loss @9.94% (11 kV and below) for FY 2017-18 has been worked out as per the overall target of T&D loss of 14.25%(including Transmission loss of 2.5%) fixed in the Tariff Order for FY 2017-18.

(e) AP load running on 3-phase 3-wire,3-phase 4-wire, Kandi Area feeders is taken as 11595 MW and load of AP connections running on urban feeders taken 70.64 MW (ending Sept., 2017), as submitted by PSPCL vide its letter no. 1146 dated 22.12.2017.

v) In the Tariff Order for FY 2017-18, the Commission had approved the AP sales for FY 2018-19 by applying increase of 2.25% (based on the 5 year CAGR) on the estimated sales for FY 2017-18. The same approach has been adopted to approve the revised estimates of FY 2018-19 as shown in the Table 3.3 B.

Table 3.3 B: AP Consumption for FY 2018-19

(MU)

Projected by PSPCL in the ARR for MYT Control Period	Approved by the Commission in TO for FY 2017-18	Submitted by PSPCL in APR/RE	Estimated by the Commission for FY 2018-19 by applying CAGR of 2.25% on revised sales of FY 2017-18
12608.25	12078.05	13313.88	12124.20

Thus, the Commission approves the revised AP Consumption of 11857.41 MU for FY 2017-18 and 12124.20 MU for FY 2018-19. The Commission shall re-assess the AP Consumption at the time of true up of respective years after considering the efforts/physical progress made by PSPCL regarding the compliance of various directives given by the Commission and the consequential action required, if any.

3.3 Total Energy Sales

The metered energy sales, AP Consumption, Common Pool and Outside State Sales projected by PSPCL in APR/RE Petition and now revised by the Commission for FY 2017-18 and FY 2018-19 are given in Table 3.4.

Table 3.4: Total Energy Sales

(MU)

Sr. No.	Particulars	FY 2017-18		FY 2018-19	
		Submitted by PSPCL in the APR	Revised by the Commission for FY 2017-18	Submitted by PSPCL in the RE	Revised by the Commission for FY 2018-19
I	II	III	IV	V	VI
1.	Metered sales within State	34892.64	34892.64	36968.60	36968.60
2.	AP consumption	12355.83	11857.41	13313.88	12124.20
3.	**Total sales within State**	**47248.47**	**46750.05**	**50282.48**	**49092.80**
4.	Common pool sale	308.99	308.99	341.64	341.64
5.	Outside State sale	353.88	353.88	126.18	126.18
6.	**Total Energy Sale**	**47911.34**	**47412.92**	**50750.30**	**49560.62**

The Commission approves the revised total energy sales as 47412.92 MU for FY 2017-18 and 49560.62 MU for FY 2018-19.

3.4 Transmission and Distribution Losses (T&D Losses)

In its ARR petition for MYT Control Period, PSPCL had projected the overall T&D losses of 14.25% for FY 2017-18 and 14.00% for FY 2018-19. The same was accepted and accordingly the Commission in the Tariff Order for FY 2017-18, had fixed the overall target of T&D losses for FY 2017-18 and FY 2018-19 at 14.25% and 14.00% respectively, including transmission losses of 2.50%.

PSPCL's Submissions:

PSPCL has been taking steps to reduce the distribution loss through various loss reduction and network planning initiatives. Driven by the targets and directives given by the Commission, it is making concerted efforts to reduce and control the losses and is already recognized at par with some of the efficient utilities of the country. The main assumption is to continue to pursue the loss reduction programs initiated in earlier years and also increasingly use the technology to target erring consumers and reduce the losses further during FY 2017-18 and FY 2018-19. It is to be noted that after a certain level, further T&D loss reduction requires adequate capital investment to be incurred for the sub-transmission & distribution system strengthening/ modernisation and appropriate cost benefit analysis of the same is essential. The investments being made under sub transmission and distribution strengthening schemes are also expected to aid in the reduction of distribution loss both in urban and rural areas. PSPCL submitted that:

i) PSPCL has adopted AP consumption based on pumped energy methodology from FY 2016-17. AP Consumption is one of the key rider that make substantial impact on overall T&D loss of state. Based on all these circumstances, the expected distribution loss target during FY 2017-18 and FY 2018-19 is 14.75% and 14.50%.

ii) The Commission is approving T&D loss target collectively for PSPCL & PSTCL and is considering transmission losses of 2.50%. However, in actual, transmission losses are much higher than approved level. Additional burden of transmission losses is being laden to PSPCL which make adverse impact on its technical and financial performance. PSPCL prayed to the Commission to set separate target of transmission and distribution losses for PSTCL and PSPCL.

Commission's Analysis:

i) The Commission observes that PSPCL has adopted AP consumption based on pumped energy methodology from FY 2016-17 and had projected T&D losses of 14.25% and 14.00% for FY 2017-18 and FY 2018-19 in MYT Petition. The Commission accepted the same and fixed the overall target T&D losses for FY 2017-18 at 14.25% and 14.00% for FY 2018-19 (including the transmission losses of 2.50%), in the Tariff Order for FY 2017-18.

ii) The Commission notes the request of PSPCL to set separate target of transmission losses for PSTCL and distribution losses for PSPCL. The Commission also feels that in order to assess the performance and to motivate the achievement of higher benchmarks, utilities needs to be assigned individual targets.

Accordingly, for FY 2017-18 and FY 2018-19, the Commission retains the overall loss target (including the transmission loss level as 2.50%) of 14.25% and 14.00% given in Tariff Order for FY 2017-18. However, the Commission decides to segregate the same into the respective target of 12.05% and 11.89%

for distribution losses for PSPCL (as already worked out in Table 5.7 of Tariff Order for FY 2017-18).

3.5 Energy Requirement

3.5.1 The energy requirement for FY 2017-18 and FY 2018-19 projected by PSPCL in ARR for MYT Control Period, approved by the Commission in the Tariff Order for FY 2017-18 and submitted by PSPCL in APR/RE are as per Table 3.5 A.

Table 3.5 A: Energy Requirement

(MU)

Sr. No.	Particulars		Projected by PSPCL in ARR for MYT Control Period		Approved by the Commission in T.O. for FY 2017-18		Submitted by PSPCL in APR/RE	
			FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II		III	IV	V	VI	VII	VIII
1.	Total sales within the State		47492.14	49734.75	46967.50	49204.55	47248.47	50282.48
2.	T&D losses	%	14.25%	14.00%	14.25%	14.00%	14.75%	14.50%
		MU	7892.28	8096.35	7805.00	8010.00	8174.96	8527.44
3.	**Total sales including losses**		**55384.42**	**57831.10**	**54772.50**	**57214.55**	**55423.43**	**58809.92**
4.	Common pool sale		311.68	341.64	311.68	341.64	308.99	341.64
5.	Outside State sale		128.40	127.46	52.66	52.66	353.88	126.18
6.	**Total energy input required**		**55824.50**	**58300.20**	**55136.84**	**57608.85**	**56086.30**	**59277.74**

3.5.2 The Commission in the Tariff Order for FY 2018-19 for PSTCL has approved the transmission loss level of PSTCL as 2.50% and 2.40% respectively for FY 2017-18 and FY 2018-19. Accordingly, the revised total energy requirement for FY 2017-18 and FY 2018-19 worked out by the Commission, is given in Table 3.5 B.

Table 3.5 B: Revised Energy Requirement

(MU)

Sr. No.	Particulars		Now revised by the Commission	
			FY 2017-18	FY 2018-19
I	II		III	IV
1.	Metered sales within the State		34892.64	36968.60
2.	AP consumption		11857.41	12124.20
3.	**Total sales within the State (1+2)**		**46750.05**	**49092.80**
4.	Distribution losses on Sr.No.3	(%)	12.05%	11.89%
		(MU)	6405.21	6624.83
5.	**Energy input required (3+4)**		**53155.26**	**55717.63**
6.	Transmission losses on Sr. No. 5	(%)	2.50%	2.40%
		(MU)	1362.96	1370.11
7.	**Total energy input required (5+6)**		**54518.22**	**57087.74**
8.	Common pool sale		308.99	341.64
9.	Outside State sale		353.88	126.18
10.	**Total Energy Required at State Periphery (7+8+9)**		**55181.09**	**57555.56**

Accordingly, the Commission approves the revised energy requirement of 55181.09 MU for FY 2017-18 and 57555.56 MU for FY 2018-19, 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.

3.6 PSPCL's own generation

3.6.1 Thermal Generation

i) Gross Thermal Generation:

Gross Thermal Generation for FY 2017-18 & FY 2018-19, approved in the Tariff Order for FY 2017-18 and now submitted by PSPCL in APR/RE, is given in Table 3.6 A.

Table 3.6 A: Thermal Generation (Gross)

(MU)

Sr. No.	Station	Projections approved by the Commission		Submitted by PSPCL in APR/RE	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II	III	IV	V	VI
1.	GNDTP	-	-	301.31	0.00
2.	GGSSTP	3500.90	3468.60	2302.11	3623.47
3.	GHTP	2093.20	2103.23	2601.26	1855.46
4.	**Total**	**5594.10**	**5571.83**	**5204.68**	**5478.93**

PSPCL has submitted that as per the directions of Government, PSPCL has not scheduled any power from GNDTP Bathinda during H2 of FY 2017-18 and FY 2018-19 and is not claiming any performance parameters for the period. However, variable expenses during the real time operation, if any of GNDTP shall be claimed during the true up of respective years.

PSPCL's Submissions:

PSPCL has submitted that it has projected the plant availability of GHTP, Lehra Mohabbat and GGSSTP, Roopnagar for H2 of FY 2017-18 and for FY 2018-19, based on the provisional plant availability attained till H1 of FY 2017-18 and the planned maintenance schedule. PSPCL further submitted that it has undertaken consistent and regular maintenance apart from timely renovation & overhaul of its Units to sustain the generation from each of these power plants at the target output level set by the CEA. The plant availability of all the plants is estimated above 85%.

Commission's Analysis:

The Commission noted that PSPCL has surplus energy available from various tied up sources including central generating stations and IPPs in the State. PSPCL has to surrender the excess energy, to manage demand and maintain energy balance. The

Commission in its previous Tariff Orders has been consistently directing PSPCL that the surrendering of energy should be as per merit order dispatch from all the thermal generating stations, including PSPCL's own generating stations. As such, the Commission approves the gross thermal generation from PSPCL's own plants as projected by PSPCL, as shown in the Table 3.6 B.

Table 3.6 B: Revised Gross Thermal Generation

(MU)

Sr. No.	Station	Approved Gross Generation	
		FY 2017-18	FY 2018-19
I	II	III	IV
1.	GNDTP	301.31	0.00
2.	GGSSTP	2302.11	3623.47
3.	GHTP	2601.26	1855.46
4.	**Total**	**5204.68**	**5478.93**

ii) Auxiliary Consumption

PSPCL's Submissions:

Submissions made by PSPCL in respect of auxiliary consumption are same as made in the true up of FY 2016-17. The same has already been discussed in para 2.4.1 of this Tariff Order. PSPCL requested the Commission to approve the auxiliary consumption as per its submissions and also prays to consider the actual Auxiliary Consumption at the time of True up exercise for the respective year.

Commission's Analysis:

The matter has been discussed in detail under para 2.4.1 of this Tariff Order. **Accordingly, the Commission decides to retain the normative auxiliary consumption for FY 2017-18 and FY 2018-19, at the levels already approved in the Tariff Order for FY 2017-18 i.e. at 11.00%, 8.50% and 8.50% for GNDTP, GGSSTP and GHTP respectively.**

Accordingly, the station-wise auxiliary consumption for FY 2017-18 and FY 2018-19 projected by PSPCL in the ARR for MYT Control Period, approved by the Commission in the Tariff Order for FY 2017-18, submitted by PSPCL in APR/RE and now approved by the Commission are shown in Table 3.7.

Table 3.7: Auxiliary Consumption

Sr. No.	Station	Projected by PSPCL in ARR for MYT Control Period		Approved by the Commission in T.O.		Submitted by PSPCL in the APR/RE		Approved by the Commission	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	GNDTP	11.26%	11.26%	11.00%	11.00%	11.26%	11.26%	11.00%	-
2.	GGSSTP	9.05%	9.05%	8.50%	8.50%	9.05%	9.05%	8.50%	8.50%
3.	GHTP	8.98%	8.98%	8.50%	8.50%	8.98%	8.98%	8.50%	8.50%

Thus, the gross/net generation for FY 2017-18 and FY 2018-19, projected by PSPCL in the ARR for MYT Control Period & approved by the Commission in the Tariff Order for FY 2017-18 is shown in Table 3.8 A and submitted by PSPCL in APR/RE & now revised by the Commission is shown in Table 3.8 B.

Table 3.8 A: Thermal Generation

(MU)

Sr. No.	Station	Projected by PSPCL in ARR for MYT Control Period				Approved by the Commission in T.O. for FY 2017-18			
		FY 2017-18		FY 2018-19		FY 2017-18		FY 2018-19	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	GNDTP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.	GGSSTP	3500.90	3184.07	3468.60	3154.69	3500.90	3203.32	3468.60	3173.77
3.	GHTP	2093.20	1905.23	2103.23	1914.36	2093.20	1915.28	2103.23	1924.46
4.	**Total**	**5594.10**	**5089.30**	**5571.83**	**5069.05**	**5594.10**	**5118.60**	**5571.83**	**5098.23**

Table 3.8 B: Revised Thermal Generation

(MU)

Sr. No.	Station	Submitted by PSPCL in APR/RE				Now revised by the Commission			
		FY 2017-18		FY 2018-19		FY 2017-18		FY 2018-19	
		Gross	Net	Gross	Net	Gross	Net	Gross	Net
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	GNDTP	301.31	265.73	0.00	0.00	301.31	268.17	0.00	0.00
2.	GGSSTP	2302.11	2093.77	3623.47	3295.55	2302.11	2106.43	3623.47	3315.48
3.	GHTP	2601.26	2367.67	1855.46	1688.84	2601.26	2380.15	1855.46	1697.75
4.	**Total**	**5204.68**	**4727.17**	**5478.93**	**4984.39**	**5204.68**	**4754.75**	**5478.93**	**5013.23**

Accordingly, the Commission approves the revised gross/net thermal generation of 5204.68 MU/4754.75 MU for FY 2017-18 and 5478.93 MU/5013.23 MU for FY 2018-19 from PSPCL's own plants.

3.6.2 Hydel Generation

Against the net hydel generation (including BBMB share) of 7991.61 MU and 8310.65 MU for FY 2017-18 and FY 2018-19 respectively, projected by PSPCL in the ARR petition for MYT Control Period, the Commission approved the net hydel generation (including BBMB share) of 7899.09 MU and 8211.08 MU for FY 2017-18 and FY 2018-19 respectively in the Tariff Order for FY 2017-18.

Now, PSPCL has submitted the revised net hydel generation (including BBMB share) of 8498.02 MU and 8138.75 MU for FY 2017-18 and FY 2018-19 respectively.

PSPCL's Submissions:

PSPCL has submitted that the availability from own hydel plants for FY 2017-18 and FY 2018-19 has been re-estimated on the basis of the actual generation figures for H1 and the revised generation target estimated for the respective hydel plants for the H2. The availability projections for the H2 are considered same as that of H1. Royalty to HP from Shanan and Share of HP from RSD for H2 has been taken as average for the last three years of FY 2014-15 to FY 2016-17. Projected energy from BBMB has been taken as average of the energy available for the last three years. And, the auxiliary losses in the plants have been calculated based on the average of the historical data.

Commission's Analysis:

The Commission accepts the station-wise gross hydel generation as submitted by PSPCL in the present petition. The station-wise hydel generation for FY 2017-18 and FY 2018-19 projected by PSPCL in the ARR for MYT Control Period, approved by the Commission in the Tariff Order for FY 2017-18, submitted by PSPCL in the APR/RE and now approved by the Commission are given in Table 3.9.

Table 3.9: Hydel Generation

(MU)

Sr. No.	Station	Projected by PSPCL in ARR for MYT Control Period		Approved by the Commission in T.O. for FY 2017-18		Submitted by PSPCL in APR/RE		Now revised by the Commission	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	Shanan	519.00	519.00	519.00	519.00	519.45	519.00	519.45	519.00
2.	UBDC	336.00	336.00	336.00	336.00	383.60	350.00	383.60	350.00
3.	RSD	1702.00	1680.00	1702.00	1680.00	1905.94	1680.00	1905.94	1680.00
4.	MHP	1185.00	1185.00	1185.00	1185.00	1145.15	1127.00	1145.15	1127.00
5.	MHP Stage -II	82.90	82.90	82.90	82.90				
6.	ASHP	720.00	720.00	720.00	720.00	689.46	720.00	689.46	720.00
7.	Micro Hydel	5.09.00	5.09	5.09	5.09	5.63	5.00	5.63	5.00
8.	**Total own generation (Gross)**	**4549.99**	**4527.99**	**4549.99**	**4527.99**	**4649.23**	**4401.00**	**4649.23**	**4401.00**
9.	Less: Auxiliary consumption and Transformation Loss	12.68	12.47	37.46	37.24	28.67	25.77	38.85*	36.38*
10.	Less: HP share in RSD			75.74	74.80			**	**
11.	**Total own generation (Net) (7-8-9-10)**	**4537.31**	**4515.52**	**4436.79**	**4415.95**	**4620.56**	**4375.23**	**4610.38**	**4364.62**
12.	**PSPCL share from BBMB**								
(a)	PSPCL share excluding common pool share (Net)	3150.62	3453.49	3150.62	3453.49	3568.47	3421.88	3568.47	3421.88
(b)	Add Common pool share	311.68	341.64	311.68	341.64	308.99	341.64	308.99	341.64
13.	**Net share from BBMB**	**3462.30**	**3795.13**	**3462.30**	**3795.13**	**3877.46**	**3763.52**	**3877.46**	**3763.52**
14.	**Total hydro availability (Net) (Own + BBMB) (11+ 13)**	**7999.61**	**8310.65**	**7899.09**	**8211.08**	**8498.02**	**8138.75**	**8487.84**	**8128.14**

**Transformation loss @0.5%, Auxiliary consumption @0.5% for RSD and UBDC stage-I (having static exciters) and @0.2% for others.*

*** Since, PSPCL has included the royalty/free share of HP in its sales, same are not to be excluded from its generation.*

The Commission, thus, approves the revised total net hydel generation as 8487.84 MU for FY 2017-18 and 8128.14 MU for FY 2018-19 from own hydel stations and share from BBMB, as shown in Table 3.9.

3.6.3 **The net availability of PSPCL's own thermal & hydel generation including share from BBMB revised for FY 2017-18 and FY 2018-19, is depicted in Table 3.10.**

Table 3.10: PSPCL's own Net Thermal and Hydel Generation

(MU)

Sr. No.	Thermal and Hydel Generation	Net Generation in FY 2017-18	Net Generation in FY 2018-19
I	II	III	IV
1.	Thermal	4754.75	5013.23
2.	Hydel		
(a)	Own generation	4610.38	4364.62
(b)	Share from BBMB (including Common Pool share)	3877.46	3763.52
(c)	Total Hydel (Own + BBMB)	8487.84	8128.14
3.	**Total (Thermal + Hydel) availability**	**13242.59**	**13141.37**

3.7 Energy Balance

Details of energy requirement, availability and net purchase projected by PSPCL in its ARR petition for MYT Control Period, approved by the Commission in the Tariff Order for FY 2017-18, submitted by PSPCL in the APR/RE petition and now revised by the Commission are given in Table 3.11.

Table 3.11: Energy Balance

(MU)

Sr. No.	Particulars	Projected by PSPCL in ARR for MYT Control Period		Approved by the Commission in Tariff Order for FY 2017-18		Submitted by PSPCL in APR/RE		Now revised by the Commission	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II	III	IV	V	VI	VII	VIII	IX	X
1.	Total Energy requirement (Table 3.6 & 3.7)	55824.22	58299.85	55136.84	57608.84	56086.30	59277.74	55181.09	57555.56
2.	Energy Available (Own Thermal/ Hydel)	13088.91	13379.70	13017.69	13309.31	13225.19	13123.14	13242.59	13141.37
3.	**Purchase (net)**	**42735.31**	**44920.15**	**42119.15**	**44299.54**	**42861.11**	**46154.60**	**41938.50**	**44414.19**

The balance energy (net) requirement of PSPCL works out to 41938.50 MU and 44414.19 MU for FY 2017-18 and FY 2018-19 respectively, which has to be met through purchases from Central Generating Stations and other sources.

3.8 Fuel Cost

Fuel Cost projected by PSPCL in the ARR for MYT Control Period, approved by the Commission in the Tariff Order for FY 2017-18 and Revised Estimates now submitted by PSPCL is given as under:

(₹ crore)

Sr. No.	Particulars	Projected by PSPCL in ARR for MYT Control Period		Approved by the Commission in T.O. for FY 2017-18		RE submitted by PSPCL in APR	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II	III	IV	V	VI	VII	VIII
1.	Gross Generation	5594.10	5571.83	5594.10	5571.83	5204.68	5478.93
2.	Fuel Cost	1847.39	1840.37	1622.32	1616.38	1601.35	1661.60

PSPCL has revised the estimates of fuel cost based on calorific value and price of coal/oil, transit loss of coal, station heat rate of thermal generating stations and specific oil consumption, as given in Table 3.12.

Table 3.12: Operational and Cost Parameters submitted by PSPCL

Sr. No.	Station	GNDTP		GGSSTP		GHTP	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
I	II	III	IV	V	VI	VII	VIII
1.	Gross Calorific value of coal (kCal/kg)	4151.51	4265.57	4544.86	4544.86	4277.62	4277.62
2.	Calorific Value of Oil (kCal/lt)	9400.00	9400.00	9857.06	9857.06	9888.58	9888.58
3.	Price of Oil (₹/ KL)	33134.10	40410.00	23165.07	23165.07	31945.00	31945.00
4.	Price of coal excluding transit loss (₹/MT)	5078.53	4855.00	5124.72	5124.72	5324.00	5324.00
5.	Transit Loss (%)	-0.05%	0.02%	1.00%	1.00%	1.00%	1.00%
6.	Station Heat Rate (kCal/ kWh)	2522.48	2864.79	2597.00	2597.00	2512.15	2512.15
7.	Specific Oil Consumption (ml/kWh)	3.33	0.50	0.50	0.50	0.50	0.50

3.8.1 **Performance Parameters**

A. Station Heat Rate (SHR)

PSPCL's Submissions:

PSPCL has requested the Commission to allow technical performance of stations at relaxed level with same submissions as submitted in the true up for FY 2016-17, contained in para 2.6.2 (A) of this Tariff Order.

Commission's Analysis:

The submissions made by PSPCL has been already considered by the Commission under para 2.6.2(A) of this Tariff Order and the Commission finds no justification/reason to deviate from the normative parameters considered, in line with PSERC/CERC Tariff Regulations, for working out fuel cost for FY 2017-18 and FY 2018-19. The Commission is considering the Station Heat Rate as approved for FY 2017-18 and FY 2018-19 in the Tariff Order for FY 2017-18.

B. Transit Loss of Coal

PSPCL has submitted that it has been observed from past trends, the coal transit losses are inconsistent. The coal transit losses are not within its control and attributable to the various reasons as explained under para 2.6.2(B) of this Tariff Order. The actual transit losses as per actual H1 of FY 2017-18 is (-)0.05%, (-)0.41% and (-)0.68% for GNDTP, GGSSTP & GHTP respectively. However, PSPCL has considered the actual transit loss for GNDTP and normative transit losses of 1% for GGSSTP & GHTP for FY 2017-18 and FY 2018-19 and requested the Commission to approve the transit losses on normative basis.

The Commission decides to provisionally consider the transit loss for FY 2017-18 and FY 2018-19 @1.00% for all three Thermal Generating Stations as considered in the Tariff Order for FY 2017-18. However, no such loss is permissible for the PANEM/Imported Coal, which is priced on F.O.R. destination basis. The transit losses shall be revisited during the true up exercise for the respective years, in line with PSERC Regulations.

C. Secondary Fuel Oil Consumption

PSPCL has submitted that it has considered the Secondary Fuel Oil Consumption for all three Thermal Generating Stations as 0.5 ml/kWh in line with CERC Tariff Regulations, 2014 and approved by Commission in the Tariff Order for 2017-18. PSPCL further submitted that frequent stop/start after reserve outage and running of units under backing down affects the performance of units. During backing down, power generation is reduced but most of the auxiliaries remained running at nearly full load which results in increase in secondary fuel oil Consumption. Under the above circumstances, PSPCL prays the Commission to consider the actual secondary fuel oil consumption at the time of True Up exercise.

The Commission decides to consider the normative Secondary Fuel Oil Consumption for all three Thermal Generating Stations for FY 2017-18 and FY 2018-19 @ 0.5 ml/kWh in line with PSERC/CERC Tariff Regulations, 2014.

D. Price of Coal and Oil

Price of Coal and Oil for FY 2017-18 and FY 2018-19 approved by the

Commission in the Tariff Order for FY 2017-18 and price of Coal and Oil for H1 of 2017-18 submitted by PSPCL in APR is as under:

Sr. No.	Station	Price approved by the Commission in the T.O. for FY 2017-18		Price considered by PSPCL in APR	
		Coal (₹/MT)	Oil (₹/MT)	Coal (₹/MT)	Oil (₹/Kl)
1.	GNDTP	4913.00	36019.63	5078.53	33134.10
2.	GGSSTP	5124.72	23165.07	5124.72	23165.07
3.	GHTP	5324.00	31945.00	5324.00	31945.00

PSPCL has submitted that; for GNDTP, it has considered the actual prices of Coal and Oil for H1 of FY 2017-18 and for GGSSTP/GHTP it has considered the validated prices of Coal and Oil as considered by the Commission in the Tariff Order for FY 2017-18. PSPCL further submitted that any change in fuel cost from the level approved by the Commission shall be determined and recovered from the consumers after following the procedure detailed in the Conduct of Business Regulations.

Commission's Analysis:

3.8.2 Fuel cost being a major item of expense, the Commission thought it prudent to get the same validated for H1 of FY 2017-18. The calorific value of oil & coal and the price of oil & coal as per validation obtained by the Commission are indicated in Table 3.13. The Commission had decided to adopt the GCV of received coal as per CERC Tariff Regulations, 2014, for working out the fuel cost. The calorific value (GCV) as shown at Sr. No. 1 of Table 3.13 is the calorific value of received coal. The Commission further decides to consider the validated values of GCV & prices of Coal & Oil for FY 2017-18 and FY 2018-19, which shall be reviewed during the True-up of respective years. The Operational and Cost Parameters approved by the Commission for working out fuel cost is indicated in Table 3.13.

Table 3.13: Operational and Cost Parameters approved by the Commission

Sr. No.	Parameters	GNDTP	GGSSTP	GHTP
I	II	III	IV	V
1.	Gross Calorific value of coal (kCal/kg)	4397.11	4347.00	4133.00
2.	Calorific Value of Oil (kCal/lt)	9746.57	9844.73	9907.00
3.	Price of Oil (₹/ KL)	33117.75	31461.01	29944.62
4.	Price of coal excluding transit loss (₹/MT)	5076.16	5177.86	5232.15
5.	Transit Loss %	1.00%	1.00%	1.00%
6.	Specific Oil Consumption (ml/kWh)	0.50	0.50	0.50
7.	Station Heat Rate (kCal/ kWh)	2750.00	2450.00	2450.00 (for Units I&II) 2428.00 (for Units III&IV)

3.8.3 **Based on above the fuel cost for FY 2017-18 and FY 2018-19 has been worked out as detailed in Table 3.14 A and Table 3.14 B.**

Table 3.14 (A): Fuel Cost for FY 2017-18

Sr. No.	Item	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	301.31	2302.11	871.15	1730.11	**5204.68**
2.	Heat Rate	B	kcal/kWh	2750.00	2450.00	2450.00	2428.00	
3.	Specific oil consumption	C	ml/kwh	0.50	0.50	0.50	0.50	
4.	Calorific value of oil	D	kcal/litre	9746.57	9844.73	9907.00	9907.00	
5.	Calorific value of coal	E	kcal/kg	4397.11	4347.00	4133.00	4133.00	
6.	Overall heat	F = (A x B)	Gcal	828603	5640170	2134315	4200707	
7.	Heat from oil	G = (A x C x D) / 1000	Gcal	1468	11332	4315	8570	
8.	Heat from coal	H = (F-G)	Gcal	827135	5628838	2130000	4192137	
9.	Oil consumption	I=(Gx1000)/D	KL	151	1151	436	865	
10.	Transit loss of coal	J	(%)	1	1	1	1	
11.	Total coal consumption excluding transit loss	K=(H*1000)/E	MT	188109	1294879	515364	1014308	
12.	Quantity of Imported coal	L	MT	0	0	0	0	
13.	Quantity of coal other than Imported coal	M=K-L	MT	188109	1294879	515364	1014308	
14.	Quantity of coal other than Imported coal, including transit loss	N=M/(1-J/100)	MT	190009	1307959	520570	1024554	
15.	Total quantity of coal required	O=L+N	MT	190009	1307959	520570	1024554	
16.	Price of oil	P	₹/KL	33117.75	31461.01	29944.62	29944.62	
17.	Price of coal	Q	₹./MT	5076.16	5177.86	5232.15	5232.15	
18.	Total Cost of oil	R=P x I / 107	₹ crore	0.500	3.621	1.306	2.590	8.017
19.	Total Cost of coal	S=O x Q/107	₹ crore	96.452	677.243	272.37	536.062	1582.127
20.	**Total Fuel cost**	**T=R+S**	**₹ crore**	**96.952**	**680.864**	**273.676**	**538.652**	**1590.144**
21.	**Per unit Cost (for Gross Generation)**	**U=T*10/A**	**₹/kWh**	3.22	2.96	3.14	3.11	3.06
22.	**Per unit Cost (for Net Generation)**	**V=T*10/(A – Aux. Cons.)**	**₹/kWh**	3.62	3.23	3.43	3.40	3.34

Table 3.14 B: Fuel Cost for FY 2018-19

Sr. No.	Item	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	0.00	3623.47	621.38	1234.08	**5478.93**
2.	Heat Rate	B	kcal/kWh	2750.00	2450.00	2450.00	2428.00	
3.	Specific oil consumption	C	ml/kwh	0.50	0.50	0.50	0.50	
4.	Calorific value of oil	D	kcal/litre	9746.57	9844.73	9907.00	9907.00	
5.	Calorific value of coal	E	kcal/kg	4397.11	4347.00	4133.00	4133.00	
6.	Overall heat	F = (A x B)	Gcal		8877502	1522381	2996346	
7.	Heat from oil	G = (A x C x D) / 1000	Gcal		17836	3078	6113	
8.	Heat from coal	H = (F-G)	Gcal		8859666	1519303	2990233	
9.	Oil consumption	I=(Gx1000)/D	KL		1812	311	617	
10.	Transit loss of coal	J	(%)		1	1	1	
11.	Total coal consumption excluding transit loss	K=(H*1000)/E	MT		2038110	367603	723502	
12.	Quantity of PANAM coal and Imported coal	L	MT		0	0	0	
13.	Quantity of coal other than PANAM coal and Imported coal	M=K-L	MT		2038110	367603	723502	
14.	Quantity of coal other than PANAM coal and Imported coal, including transit loss	N=M/(1-J/100)	MT		2058697	371316	730810	
15.	Total quantity of coal required	O=L+N	MT		2058697	371316	730810	
16.	Price of oil	P	₹/KL	33117.75	31461.01	29944.62	29944.62	
17.	Price of coal	Q	₹./MT	5076	5177.86	5232.15	5232.15	
18.	Total Cost of oil	R=P x I / 107	₹ crore		5.701	0.931	1.848	8.480
19.	Total Cost of coal	S=O x Q/107	₹ crore		1065.964	194.278	382.371	1642.613
20.	**Total Fuel cost**	**T=R+S**	**₹ crore**		**1071.665**	**195.209**	**384.219**	**1651.093**
21.	**Per unit Cost (for Gross Generation)**	**U=T*10/A**	**₹/kWh**		**2.96**	**3.14**	**3.11**	**3.01**
22.	**Per unit Cost (for Net Generation)**	**V=T*10/(A – Aux. Cons.)**	**₹/kWh**		**3.23**	**3.43**	**3.40**	**3.29**

The Commission, therefore, approves the revised fuel cost of ₹1590.14 crore for gross thermal generation of 5204.68 MU for FY 2017-18 and ₹1651.093 crore for gross thermal generation of 5478.93 MU for FY 2018-19.

3.9 Power Purchase Cost

3.9.1 The Commission, in the Tariff Order for FY 2017-18, approved power purchase cost of ₹17681.12 crore for purchase of 45595.27 MU (gross) for FY 2017-18 and ₹18864.54 crore for purchase of 44819.79 MU (gross) FY 2018-19. PSPCL in the APR Petition, has submitted the revised estimate of power purchase of 42861.11 MU (including 3.92 MU of Open Access UI) at a total cost of ₹17001.58 crore for FY 2017-18 and 46154.61 MU at a total cost of ₹18670.89 for FY 2018-19.

PSPCL's Submissions:

3.9.2 PSPCL submitted that it has considered the actual data for power purchase for H1 of FY 2017-18 and has projected the data for H2 of FY 2017-18 and FY 2018-19 on following assumption:

(i) Projected energy from all existing Central Hydro Generating and BBMB stations has been taken as per target provided by Central Hydro Generating stations.

(ii) Projected energy from all existing Central Thermal & Nuclear Generating stations has been taken as allocated share from respective stations. Moreover, Punjab also receives a quantum of power from the unallocated share in various CGSs at different intervals during a year.

(iii) PSPCL is also purchasing power from Independent Power Producers (IPPs) including Talwandi Sabo, Rajpura TPS (NPL), Goindwal Sahib, etc. The projected energy from IPPs, has been taken as same as the actual energy available for FY 2016-17.

(iv) Projected Energy from the new Hydro and Thermal projects has been calculated in accordance to the CEA regulations/Designed Energy as mentioned in the PPA.

(v) Inter-State transmission losses have been taken same %age of actual grid losses to the gross power import for March, 2016.

3.9.3 PSPCL had submitted that during FY 2017-18 and FY 2018-19, it is projected to have surplus energy available from tied up sources. In order to manage demand and maintain energy balance, the surplus energy has been projected to be surrendered as per Merit Order of power purchase from existing thermal and gas generating stations on monthly basis. Merit Order is based upon the variable rates of September, 2017. After surrender of energy, only variable charges have been reduced and fixed/other charges have been assumed the same.

3.9.4 PSPCL has taken the following assumptions for the estimation of Power purchase cost:

(i) Annual Fixed Charges: Capacity charges 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.

- CERC Tariff Regulations, 2014 are effective from April 1, 2014 for a period of 5 years i.e. up to March 31, 2019. And, the generating companies or the transmission licensees are allowed to recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate of the respective financial year directly without making any application before the CERC. Further, Annual Fixed Charges with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be shall be trued up by CERC along with the tariff petition filed for the next tariff period. Accordingly, the revised AFC's as calculated by various central sector generators and charged in their bills have been considered. AFC's for FY 2017-18 and FY 2018-19 for various plants have been assumed same as applicable for H1 of FY 2017-18.
- For H1 of FY 2017-18, fixed charges for SASAN UMPP, Mundra UMPP, Mallana-II, Pragati, NPL and TSPL have been taken as actual paid during the period and assumed same for H2 of FY 2017-18. For GVK fixed charges have been calculated at normative rate @192.60 paise/unit.
- For FY 2018-19, Fixed charges for SASAN UMPP, Mundra UMPP, NPL and TSPL have evaluated as per PPA (Schedule 11) For GVK and Mallana-II, fixed charges have been calculated at normative rate @192.60 paise/unit and @231.36 paise/unit respectively.

(ii) Variable Charges: PSPCL has submitted that no upward rise has been considered the cost for projection of energy charges for FY 2017-18 and FY 2018-19. All Power purchase data upto September, 2017 is on actual basis except the water usage charges for NHPC stations, which has been calculated on the basis of previous year (FY 2016-17) unit rate of water charges, as bills for FY 2017-18 are yet to be received. For H2 of FY 2017-18 and FY 2018-19, variable rates of plants have been taken same as that billed for September, 2017. For existing hydro plants, VC is based upon applicable AFC. Variable rates of new plants whose rates have been quoted by the company have escalated by 5% every year from quotation to COD, afterwards the same rates have been assumed. Further, the variable rates of new plants whose rates have not been quoted have been assumed maximum rates of Thermal & Hydro Plants.

PSPCL understands that any change in cost from the level approved by the Commission shall be determined in accordance with the fuel cost adjustment

(FCA) formula specified by the Commission in the Conduct of Business Regulations, and recovered from the consumers after following the procedure detailed in the Conduct of Business Regulations.

(iii) **Banking:** For the period H1 of FY 2017-18, the actual Cost of banking of power i.e. 365 paise/unit, have been considered and assumed same for H2 of FY 2017-18 and FY 2018-19.

(iv) **NRSE power and Bundled power:** Energy rates of NRSE power and Bundled power through NVVNL has been taken as actual paid during H1 of FY 2017-18 and assumed same for H2 of FY 2017-18 and FY 2018-19.

(v) **Power Grid (Transmission) charges:** For the period H1 of FY 2017-18, the actual charges paid to Power Grid on account of Transmission charges have been considered and assumed same for H2 of FY 2017-18. For FY 2018-19 have been escalated by 5% from FY 2017-18.

Commission's Analysis:

3.9.5 As discussed in para 3.7, the requirement of 41938.50 MU and 44414.19 MU (net) is to be met through purchase from central generating stations and other sources during FY 2017-18 and FY 2018-19 respectively. The transmission loss external to PSTCL system has to be added to arrive at the quantum of gross energy to be purchased. PSPCL in the APR Petition has projected the provisional inter-State loss at 2.85% and 2.93% for FY 2017-18 and FY 2018-19 respectively, which the Commission provisionally approves, subject to true up and validation of the same.

In the Power Purchase Cost for FY 2017-18, PSPCL has included the following costs in the power purchase cost, which the Commission considered and decides as under:

(i) **Late payment surcharge of ₹0.84 crore:** As the working capital as per Regulations was allowed to PSPCL, the Commission found no justification to allow the late payment surcharge for delayed payment of power purchase bills. **Accordingly, the Commission decide not to allow late payment surcharge of ₹0.84 crore.**

(ii) **Previous year payments of (-)₹301.48 crore:** On query by the Commission, PSPCL has intimated that NTPC has given a credit of ₹301.48 crore on account of tax refund for the period of FY 2004-05 to FY 2008-09 along with interest. **As per the practice followed in the past, the prior period expenses are not considered under the head Power Purchase and are dealt in para 3.23.**

(iii) **Payment to Patran Transmission Company of ₹11.36 crore:** On query by the Commission, PSPCL has intimated that this amount has been paid to Patran Transmission Company in compliance to CERC Order**, which the Commission allows.**

(iv) **Expenses of ₹0.07 crore as Northern Region Power Committee (NRPC) fee: The same is chargeable under A&G expenses being dealt under para 3.12.**

(v) **Additional UI charges:** On query by the Commission, PSPCL vide letter no. 1146 dated 22.12.2017 has submitted that it has paid ₹18.74 crore as additional UI charges. **The Commission decides not to allow additional UI charges leviable/paid under Central Electricity Regulatory Commission (Deviation Settlement mechanism and related matters) Regulations, 2014, for over-drawl of power, as the provision of the same has been made for the purpose of maintaining grid discipline.**

3.9.6 **Accordingly, the total cost of power purchase cost for FY 2017-18 and FY 2018-19, excluding cost of purchase of RECs, is worked out in Table 3.15.**

Table 3.15: Power Purchase cost

Sr. No.	Description		FY 2017-18		FY 2018-19	
			Submitted by PSPCL	Approved by the Commission	Submitted by PSPCL	Approved by the Commission
1.	Power Purchase (Net)		42861.11 MU	41938.50 MU	46154.61 MU	44414.19 MU
2.	Inter State Power Purchase		23760.45 MU	23760.45 MU	24182.90 MU	24182.90 MU
3.	Intra State power purchase (IPPs/NRSE)		19100.66 MU	18178.05 MU	21971.71 MU	20231.52 MU
4.	External Losses	(%)	2.85%	2.85%	2.93%	2.93%
		(MU)	698.12 MU	698.12 MU	729.05 MU	729.05 MU
5.	Power Purchase (Gross)		43559.23 MU	42636.62 MU	46883.66 MU	45143.24 MU
6.	**Cost of Power Purchase (excluding cost of purchase of RECs for FY 2017-18**					
	a) Fixed Cost		₹6697.49 crore	₹6697.49 crore	₹8094.81 crore	₹8094.81 crore
	b) Variable Cost		₹10100.48 crore	₹9886.55 crore*	₹10781.64 crore	₹10381.40 crore*
	c) Other Charges		₹178.13 crore	₹178.13 crore	₹154.10 crore	₹154.10 crore
	Total		**₹16976.1 crore**	**₹16762.17 crore**	**₹19030.55 crore**	**₹18630.31 crore**
7.	Cost of Purchase of RECs		₹326.96 crore	**	₹ 89.82 crore	**
8.	Less: Previous payments made during FY 2017-18 (H1)		(-) ₹301.48 crore	***		
9.	**Power Purchase Cost**		**₹17001.58 crore**	**₹16762.17 crore**	**₹ 19120.37 crore**	**₹18630.31 crore**
10.	Less: NRPC Fee			₹0.07 crore		
11.	Less: Additional UI charges paid by PSPCL during FY 2017-18 (H1)			₹18.74 crore		
12.	**Total Power Purchase Cost**		**₹17001.58 crore**	**₹16743.36 crore**	**₹ 19120.37 crore**	**₹18630.31 crore**

* On pro-rata basis.

** Considered under para 3.9.8 (RPO compliance).

*** Dealt under Prior Period Expenses head.

3.9.7 **The Commission reiterates that the quantum and rate of power approved by the Commission is only for the purpose of power purchase and energy balance. PSPCL needs 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 station after giving consideration to compensation payable to CCL for less lifting of allotted quantity of coal. While considering merit order dispatch from IPPs within the State, PSPCL should consider the variable cost with domestic coal, if sufficient quantity of domestic coal is available with the IPPs for the power to be scheduled. The inter-state transmission losses be also kept in view while surrendering power as per merit order dispatch. 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.**

The Commission observed that, since PSPCL has sufficient contracted generation capacity to meet its load/demand, it does not need Short Term Power. However, in case of any exigency or for commercial considerations, PSPCL may go for purchase of short term power in a judicious and economical manner, after following procedure as specified in regulations notified by the Commission and also resort to Demand Side Management Practices to maintain its commercial viability.

3.9.8 **RPO Compliance:**

(a) For FY 2017-18:

The energy input requirement now revised by the Commission in the review of FY 2017-18 is 53155.26 MU. The Commission notes that as per clause 6.4(1) of the revised Tariff Policy dated 28.01.2016 notified by the Central Government, Hydro Power is to be excluded for RPO compliance (Solar). The hydro power purchase/generation works out to 13478.82 MU for FY 2017-18. Accordingly, the input energy for RPO compliance (Solar) would be 39676.44 MU. The RPO compliance for FY 2017-18 is given in Table 3.16 A.

Table 3.16 A: RPO Compliance for FY 2017-18

Sr. No.	Description	FY 2017-18	
1.	Input Energy (MU)	53155.26 MU (for Non-Solar) 39676.44 MU (for Solar)	
		%	MU
2.	RPO specified i. Non-Solar ii. Solar	4.2 % 1.8 %	2232.52 714.18
3.	RE generation/purchase (RPO compliance) i. Non-Solar ii. a) Solar (excluding Net- Metering) b) Solar (Net-Metering) c) Total (Solar)	2.38 % 3.53 %	1265.90 1374.58 26.57* 1401.15
4.	Balance RPO shortfall of FY 2015-16 & RPO shortfall FY 2016-17 allowed to be carried forward to FY 2017-18 i. Non-Solar ii. Solar		1846.69 0.00
5.	RPO balance after accounting for carry forward of shortfall of previous years (3-4) i. Non-Solar ii. Solar	1.09 % 3.53 %	580.79 (Deficit) 1401.15
6.	Net RE requirement yet to be complied with in FY 2017-18 (2-5) i. Non-Solar ii. Solar	5.29 % 1.73% (Surplus)	2813.31 686.97 (Surplus)

* *Estimated (based on generation data of FY 2016-17 supplied by PSPCL).*

In the Tariff Order for PSPCL for MYT control period from FY 2017-18 to FY 2019-20, the Commission for FY 2017-18 had provisionally approved an amount of ₹1786.22 crore for purchase of power from renewable energy sources within the State. However, the Commission did not allow the amount of ₹91.09 crore demanded by PSPCL for purchasing RECs for RPO compliance and decided to consider the same on actual basis at the time of review/true up for FY 2017-18.

Now in the APR for FY 2017-18, PSPCL has proposed an amount of ₹1383.42 crore for long term purchase of power from renewable energy sources and ₹326.96 crore for purchase of RECs for RPO compliance. The Commission notes that PSPCL has not been purchasing RECs for RPO compliance in the previous years despite the funds having been allowed by the Commission in the respective Tariff Orders. Therefore, the Commission provisionally approves additional ₹90.00 crore for RPO compliance subject to actual at the time of true-up of FY 2017-18. Further, PSPCL is directed to utilize ₹42.00 crore for compliance of RPO, from the separate fund

(₹14.00 crore each in the true-up for FY 2014-15, FY 2015-16 and FY 2016-17) already directed to be created in the true-up for FY 2014-15 under para 2.8.8 and as detailed under paras 3.8.8 & 4.9.10 in the Tariff Order dated 23.10.2017 for PSPCL for MYT Control Period from FY 2017-18 to FY 2019-20. Since the fund does not appear to have been created, the amounts set aside may be kept separately in interest bearing instrument till used.

Therefore, the Commission allows ₹1383.42 crore for purchase of power from renewable energy sources and ₹48.00 crore (₹90.00 crore – ₹42.00 crore) for RPO compliance.

The Commission notes that four micro hydel projects of PSPCL at Daudhar, Nidampur, Rohti and Thuhi (total capacity 3.9 MW) are non-functional since long. PSPCL has indicated that these 4 nos. Micro Hydel projects are not likely to be commissioned by 31.03.2018. Another 18 (2x9) MW MHP Stage-II project in Distt. Hoshiarpur has been delayed considerably and one unit (Unit-2) was commissioned on 06.06.2017 & Unit-1 was put on Trial-run on 14.02.2018, for which the COD has not been declared by PSPCL so far. However, Unit-2 commissioned on 06.06.2017, went into shutdown on 06.02.218 due to technical fault in the machine. Unit-2 has contributed renewable energy to the tune of 34.66 MUs during FY 2017-18. The projects which have not been commissioned, would otherwise have contributed RE energy to the tune of 55 MU (approx) during FY 2017-18. In view of this, the Commission disallows ₹8.00 crore required for purchasing Non-Solar RECs in lieu of non-availability of the said energy. In view of the above, PSPCL is directed to deposit the said amount of ₹8.00 crore in the separate fund already created in the true-up for FY 2014-15 under para 2.8.8 and as detailed under paras 3.8.8 & 4.9.10 in the Tariff Order dated 23.10.2017 for PSPCL for MYT control period from FY 2017-18 to FY 2019-20.

(b) For FY 2018-19:

The energy requirement as approved by the Commission for FY 2018-19 is 55717.63 MU. The Commission notes that as per clause 6.4(1) of the revised Tariff Policy dated 28.01.2016 notified by the Central Government, Hydro Power is to be excluded for RPO compliance (Solar). The hydro power purchase / generation works out to 13568.80 MU for FY 2018-19. Accordingly, the input energy for RPO compliance (Solar) would be 42148.83 MU. PSPCL has intimated the projections of power to be procured from renewable energy sources during FY 2018-19 as 1401.34 MU (Non-Solar) and 1408.91 MU (Solar). Further, taking into account PSPCL's own generation

(Non-Solar) of 355 MU and NVVNL bundled power (Solar) as 95.50 MU, rooftop Solar (Net-Metering) as 26.57 MU, the RE power projected to be procured / generated by PSPCL in FY 2018-19 works out to 1756.34 MU (Non-Solar) and 1530.98 MU (Solar). Accordingly the RPO compliance for FY 2018-19 is projected in Table 3.16 B.

Table 3.16 B: RPO Compliance for FY 2018-19

Sr. No.	Description	FY 2018-19	
1.	Input Energy (MU)	55717.63 (for Non-Solar) 42148.83 (for Solar)	
		%	MU
2.	RPO specified i. Non-Solar ii. Solar	 4.3 % 2.2 %	 2395.86 927.27
3.	RE generation/purchase (RPO compliance) i. Non-Solar ii. a) Solar (excluding Net- Metering) b) Solar (Net-Metering) c) Total (Solar)	 3.15 % 3.63 %	 1756.34 1504.41 26.57* 1530.98

** Estimated (based on generation data of FY 2016-17 supplied by PSPCL).*

Now in the Revised Estimates for FY 2018-19, PSPCL has proposed an amount of ₹1745.17 crore for long term purchase of power from renewable energy sources and ₹89.82 crore for purchase of RECs for RPO compliance. **The Commission allows ₹1745.17 crore for purchase of power from renewable energy sources and ₹89.82 crore for purchase of RECs for RPO compliance subject to actual at the time of true-up of FY 2018-19.**

3.9.9 **Accordingly, the Commission approves the revised power purchase cost (excluding Transmission and SLDC charges paid/payable to PSTCL) of ₹16791.36 crore, comprising ₹16743.36 crore for power purchase of 42636.62 MU (gross) & ₹48.00 crore for purchase of RECs for FY 2017-18 and ₹18720.13 crore, comprising ₹18630.31 crore for power purchase of 45143.47 MU (gross) & ₹89.82 crore for purchase of RECs for FY 2018-19.**

3.10 Employee Cost

PSPCL's Submissions:

3.10.1 In the current Petition, PSPCL has projected employee cost for its Generation and Distribution Business as per details in Table 3.17 and project wise for Generation Business as per details in Table 3.18.

Table 3.17: Employee Cost projected by PSPCL for Generation and Distribution Business

(₹crore)

Particulars	FY 2017-18			FY 2018-19		
	Generation	Distribution	Total	Generation	Distribution	Total
Employee Cost	1031.34	4482.87	5514.21	1070.73	4673.52	5744.25

Table 3.18: Project wise Employee Cost for Hydro and Thermal (Generation Business) projected by PSPCL

(₹crore)

Projects	FY 2017-18	FY 2018-19
Shanan	23.47	24.37
UBDC	36.83	38.24
RSD	31.00	32.18
MHP	49.17	51.05
ASHP	33.94	35.23
Total (Hydro) (A)	**174.41**	**181.07**
GNDTP	270.46	280.79
GGSSTP	407.49	423.05
GHTP	178.97	185.81
Total (Thermal) (B)	**856.92**	**889.65**
Total Generation (A)+(B)	**1031.33**	**1070.72**

3.10.2 PSPCL has submitted that the employee cost for FY 2017-18 and FY 2018-19 has been claimed on the basis of actual expenses of the past years. PSPCL has briefly discussed and relied upon Hon'ble APTEL's judgments dated September 11th, 2014, March 30th, 2015 and 18th October, 2016 to claim employee expenses on actual basis. PSPCL prays that the Hon'ble Commission may approve the projected Employee Cost as claimed in Table 3.17 and Table 3.18 above.

PSPCL has submitted that impact of wage revision due to 6th Pay Commission has not been considered. Further, PSPCL has not considered the provision for Progressive Funding since the matter is pending before the Hon'ble Tribunal.

Commission's Analysis:

3.10.3 PSPCL has claimed the employee cost of ₹5514.21 crore for FY 2017-18 and ₹5744.25 crore for FY 2018-19. In this regard it is observed that the employee cost as per Audited Annual Accounts of past years is much lower than the employee cost claimed / projected by PSPCL. Year wise data of employee cost as per Audited Annual Accounts is given in Table 3.19.

Table 3.19: Actual Employee Cost of PSPCL in recent past years.

(₹crore)

Financial Year	Employee Cost
FY 2013-14	4010.07
FY 2014-15	4076.47
FY 2015-16	4397.99
FY 2016-17	4551.87

3.10.4 The Commission in the MYT Order dated 23.10.2017, approved total employee cost of ₹4688.30 crore for FY 2017-18 and ₹4845.39 crore for FY 2018-19, based on Regulation 26 of PSERC MYT Regulations. PSPCL has not explained reasons for its excess claim of employee cost, in accordance with concerned PSERC Regulation(s).

However, PSPCL vide Memo. No 345/ARR/Dy.CAO/251 Vol II dated 16.03.2018, supplied project wise actual O&M expenses of FY 2016-17. Accordingly, the Commission reallocates the already approved employee cost of Hydro Projects in Order dated 23.10.2017 in Table 3.20 and Table 3.21.

Table 3.20: Employee Cost approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	**FY 2017-18**	**FY 2018-19**
Terminal Benefits	2191.75	2275.69
Other Employee Cost	2496.55	2569.70
Total Employee Cost	**4688.30**	**4845.39**
Allocated to Generation	722.01	746.20
Allocated to Distribution	3966.29	4099.19

Table 3.21: Project wise Employee Cost - Hydro & Thermal (Generation Business) for FY 2017-18 and FY 2018-19

(₹crore)

Projects	**FY 2017-18**	**FY 2018-19**
Shanan	17.49	18.08
UBDC	33.88	35.01
RSD	24.24	25.06
MHP	36.53	37.75
ASHP	29.44	30.43
Total (Hydro) (A)	**141.58**	**146.33**
GNDTP	183.20	189.33
GGSSTP	276.01	285.25
GHTP	121.22	125.29
Total (Thermal) (B)	**580.43**	**599.87**
Total Generation (A)+(B)	**722.01**	**746.20**
Total Distribution	**3966.29**	**4099.19**

Further, Government of Punjab vide memo no.1/15/17/EB(PR)/832 dated 21.12.2017 has decided to permanently close all units of GNDTP Bathinda and Unit 1 & 2 of GGSSTP Ropar. Since the employees from these units will be redeployed within PSPCL, thus, the closure of the aforesaid units will not have any impact on the total employee cost of PSPCL. Accordingly, the Commission provisionally allows employee cost in GNDTP and GGSSTP as was allowed in Order dated 23.10.2017. However, the same shall be re-allocated at the time of True-Up of FY 2017-18 once PSPCL provides detail(s) of redeployment of its employees (related to the closed units) within the utility.

3.11 Capital Investment Plan

3.11.1 Regulation 11 of PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 states that the scope of the Annual Performance Review is comparison of the performance of the Applicant with the approved forecast of ARR along with the performance targets specified by the Commission [Regulation 11(7) of PSERC Regulations, 2014].

The Petition for Annual Performance Review should include the details of actual capital expenditure, details of income tax paid and actual operational and cost data to enable the Commission to monitor the implementation of its order including comparison of actual performance with the approved forecasts (and reasons for deviations). Additionally, the Applicant is required to submit Annual Statement of its performance of Generation Business (indicating the cost data – plant wise, and performance parameters - unit-wise) and Distribution Business, including a copy of its latest audited accounts [Regulation 11(4) of PSERC Regulations, 2014].

3.11.2 The Commission in the Tariff Order dated 23.10.2017 (of PSPCL) had provisionally approved capital expenditure of ₹1310.67 crore for FY 2017-18 and ₹1303.25 crore for FY 2018-19. Subsequently, the Commission in its Order dated 11.01.2018 in Petition No.46 of 2016, approved the same capital expenditure.

3.11.3 In the current Petition, PSPCL revised its claim of capital expenditure to ₹1469.00 crore in FY 2017-18 and ₹1922.00 crore in FY 2018-19. No details of capital expenditure have been given, nor has any Petition been filed for revising/reviewing the earlier decision. As Shahpur Kandi project has not yet been taken up, hence, the Capital Expenditure approved in Order dated 11.01.2018 in Petition No. 46 of 2016 stands and requires no modification.

3.12 Repair & Maintenance (R&M) and Administrative & General (A&G) Expenses

PSPCL's Submissions:

3.12.1 In the current Petition, PSPCL has projected R&M and A&G expenses for its Generation and Distribution Business as per details in Table 3.22 and further project wise expenses of Generation Business allocated to Hydro and Thermal in Table 3.23:

Table 3.22: R&M and A&G Expenses projected by PSPCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18	FY 2018-19
Generation	223.86	226.52
Distribution	448.52	471.85

Table 3.23: Project wise R&M and A&G Expenses in Hydro & Thermal (Generation Business)

(₹crore)

Projects	FY 2017-18	FY 2018-19
Shanan	2.82	2.86
UBDC	1.83	1.85
RSD	3.98	4.03
MHP	13.47	13.63
ASHP	0.82	0.83
Total (Hydro) (A)	**22.93**	**23.20**
GNDTP	38.13	38.59
GGSSTP	89.27	90.33
GHTP	73.53	74.41
Total (Thermal) (B)	**200.93**	**203.32**
Total Generation (A)+(B)	**223.86**	**226.52**

3.12.2 PSPCL has submitted that R&M and A&G expenses have been linked to 'K' and WPI index, wherein, 'K' is constant governing relationship between R&M and A&G expenses and Gross Fixed Assets. PSPCL has analyzed actual figures of R&M and A&G expenses and GFA for FY 2015-16 for computing 'K'. PSPCL's final claim is shown below in Table 3.24.

Table 3.24: Computation of K factor for Control Period

(₹crore)

Sr. No.	Particulars	FY 2017-18		FY 2018-19	
		Generation	Distribution	Generation	Distribution
1.	Opening GFA	24173.33	25319.03	24448.26	26623.95
2.	Closing GFA	24448.26	26623.95	24751.15	28106.22
3.	Average GFA	24310.79	25971.49	24599.70	27365.08
4.	'K' factor	0.91%	1.65%	0.91%	1.65%
5.	Escalation factor	1.73%	1.73%	1.73%	1.73%
6.	License and ARR fees	-	13.70	-	13.70
7.	R&M and A&G expenses	**223.86**	**448.52**	**226.52**	**471.85**

Commission's Analysis:

3.12.3 As discussed in para 3.11, the Commission has approved the same capital expenditure of ₹1310.67 crore for FY 2017-18 and ₹1303.25 crore for FY 2018-19. PSPCL has not furnished the Cost Audit Report of FY 2016-17 to verify the project wise value of assets as on 31.03.2017. However, PSPCL vide Memo. No 345/ARR/Dy.CAO/251 Vol II dated 16.03.2018, supplied project wise actual O&M expenses for FY 2016-17 Accordingly, the Commission reallocates the R&M and A&G expenses of Hydro Projects as per Table 3.25 as were previously approved in Order dated 23.10.2017.

Table 3.25: Project wise R&M and A&G Expenses- Hydro & Thermal for FY 2017-18 and FY 2018-19

(₹crore)

Projects	FY 2017-18	FY 2018-19
Shanan	5.63	5.93
UBDC	6.77	7.14
RSD	3.19	3.36
MHP	5.21	5.48
ASHP	1.64	1.72
Total (Hydro) (A)	**22.44**	**23.63**
GNDTP	36.28	3.71
GGSSTP	33.06	34.01
GHTP	41.78	42.84
Total (Thermal) (B)	**111.12**	**80.56**
Total Generation (A)+(B)	**133.56**	**104.19**
Distribution*	**425.12**	**455.23**

** Inclusive of ₹12.68 crore on account of License and ARR fees for all years of Control Period.*

3.13 O&M Expenses of BBMB

The Commission allows ₹258.23 crore for FY 2017-18 and ₹271.14 crore for

FY 2018-19 as O&M expenses of BBMB in Generation Business of PSPCL as was **previously allowed in Order dated 23.10.2017.**

Further, PSPCL has claimed BBMB O&M expenses of ₹1410.88 crore upto FY 2016-17 along with consequential carrying cost pursuant to Order of the Hon'ble APTEL dated 06.09.2017 and consequential Order of the Commission dated 08.11.2017. **This issue has already been dealt in para 2.11 of this Tariff Order (True-Up of FY 2016-17).**

3.14 Depreciation

PSPCL's submissions:

3.14.1 In the ARR Petition for MYT Control Period, PSPCL has projected depreciation charges for its Generation and Distribution Business as per details in Table 3.26 and Table 3.27.

Table 3.26: Depreciation projected by PSPCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	**FY 2017-18**		**FY 2018-19**	
	Generation	**Distribution**	**Generation**	**Distribution**
Opening GFA	24173.33	25319.03	24448.26	26623.95
Closing GFA	24448.26	26623.95	24751.15	28106.22
Depreciation	**608.34**	**988.96**	**614.23**	**1038.55**

Table 3.27: Project wise Depreciation claimed by PSPCL in Hydro & Thermal (Generation Business)

(₹crore)

Projects	**FY 2017-18**	**FY 2018-19**
Shanan	3.99	4.03
UBDC	8.09	8.17
RSD	261.82	264.36
MHP	22.26	22.47
ASHP	15.13	15.28
Total (Hydro) (A)	**311.29**	**314.31**
GNDTP	62.63	63.24
GGSSTP	32.41	32.72
GHTP	202.01	203.96
Total (Thermal) (B)	**297.05**	**299.92**
Total Generation (A)+(B)	**608.34**	**614.23**

3.14.2 PSPCL has computed depreciation using relevant depreciation rates specified in CERC Tariff Regulations, 2014. The rates are applied on opening GFA for full year and addition to GFA for half year period. The utility has also submitted that no depreciation is computed on land.

Commission's Analysis:

3.14.3 As discussed in para 3.11, the Commission has approved the same capital expenditure of ₹1310.67 crore for FY 2017-18 and ₹1303.25 crore for FY 2018-19. Consequently, asset additions for FY 2017-18 and FY 2018-19 as approved in Order dated 23.10.2017 remain the same and require no alteration. PSPCL has not furnished the Cost Audit Report of FY 2016-17 to verify the project wise value of assets as on 31.03.2017. **Accordingly, the Commission maintains the depreciation as was approved in Order dated 23.10.2017. The same is reproduced in Table 3.28:**

Table 3.28: Depreciation approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	**FY 2017-18**		**FY 2018-19**	
	Generation	**Distribution**	**Generation**	**Distribution**
Opening GFA	24013.49	25336.59	24099.03	26871.22
Addition during year	85.54	1534.63	207.14	1233.33
Closing GFA	24099.03	26871.22	24306.17	28104.55
Depreciation	**458.75**	**770.07**	**461.36**	**810.89**

Project wise depreciation approved under Generation Business is apportioned in Table 3.29.

Table 3.29: Project wise Depreciation approved for Hydro & Thermal (Generation Business)

(₹crore)

Projects	**FY 2017-18**	**FY 2018-19**
Shanan	7.99	9.20
UBDC	6.51	6.56
RSD	192.87	193.26
MHP	12.22	12.87
ASHP	2.93	2.96
BBMB	21.86	21.85
Total (Hydro) (A)	**244.38**	**246.70**
GNDTP	44.66	44.66
GGSSTP	23.62	23.89
GHTP	146.09	146.11
Total (Thermal) (B)	**214.37**	**214.66**
Total Generation (A)+(B)	**458.75**	**461.36**

3.15 Interest and Finance Charges

PSPCL's submissions:

3.15.1 In the current Petition, PSPCL has claimed interest charges of ₹62.21 crore for FY 2017-18 and ₹72.24 crore for FY 2018-19 under its Generation Business. In its Distribution Business, PSPCL has claimed interest charges of ₹3104.88 crore for FY 2017-18 and ₹3003.23 crore for FY 2018-19. The total interest and finance charges claimed by PSPCL for its Generation and Distribution Business are mentioned in Table 3.30 and Table 3.31.

Table 3.30: Interest expenses for Generation Business claimed by PSPCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18	FY 2018-19
Opening Balance	692.30	786.88
Loan Addition during the year	284.10	321.52
Repayment during the year	189.52	209.74
Closing Balance	786.88	898.66
Interest Charges	82.02	93.65
Interest Capitalised	19.82	21.40
Net IFC for Generation	62.21	72.24

Table 3.31: Interest expenses for Distribution claimed by PSPCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18	FY 2018-19
GOP Loans (UDAY BONDS)	1306.46	1306.95
DISCOM Bonds (UDAY LOANS)	110.70	442.80
PFC-R-APDRP	36.92	40.69
LTL-COMMERCIAL BANKS	189.06	72.32
Bank Loans for Annual Plans	4.08	35.70
CSS Loans-APDRP	4.30	3.60
REC-Total T&D Scheme /66KV Work Loans	346.64	144.33
WCL Loans	607.94	580.71
REC Loans for Annual Plans	5.67	66.59
Interest to Consumers	167.00	183.70
Finance Charges (on Long term loans)	216.26	11.04
Finance Charges (on WC loans)	7.50	10.89
Other Loans	2.07	-
Liability for GPF	112.64	93.46
CC/OD Limits	71.08	90.30
NON-SLR Bonds	15.34	10.08
Sub Total	3203.66	3093.16
Less: Interest Capitalised	98.78	89.93
Net IFC for Distribution	3104.88	3003.23

3.15.2 PSPCL has submitted that it has considered estimated outstanding loans as on March 31, 2017 as opening loan balance for FY 2017-18. The addition of loan has been considered towards the capital investment proposed during FY 2017-18 and FY 2018-19. The interest expenses have been computed considering repayment of actual loans and applicable interest rate for loans.

Commission's Analysis:

3.15.3 As discussed in para 3.11, the Commission has approved the same capital expenditure of ₹1310.67 crore for FY 2017-18 and ₹1303.25 crore for FY 2018-19. Accordingly, asset and loan addition for FY 2017-18 and FY 2018-19 as approved in Order dated 23.10.2017 remain same and require no alteration. **Thus, the Commission allows the same interest and finance charges as were approved in Order dated 23.10.2017. Further, interest on GPF, interest on Consumer Security Deposits, Finance Charges and interest capitalization previously allowed by the Commission is maintained and same is re-produced in Table 3.32 and Table 3.33.**

Table 3.32: Project wise interest on long term loan under Generation and Distribution Business for FY 2017-18 and FY 2018-19

(₹crore)

Projects	**Interest on Loan**	
	FY 2017-18	**FY 2018-19**
Shanan	2.32	3.50
UBDC	0.24	0.91
RSD	17.36	23.65
MHP	3.42	14.15
ASHP	0.13	0.71
BBMB	14.30	10.73
Total (Hydro) (A)	**37.77**	**53.65**
GNDTP	5.49	0.08
GGSSTP	10.47	16.79
GHTP	1.41	0.06
Total (Thermal) (B)	**17.37**	**16.93**
Total Interest Generation (A)+(B)	**55.14**	**70.58**
Total Interest (Distribution)	**800.60**	**899.89**

The total interest and finance charges for Distribution Business are approved as detailed in Table 3.33.

Table 3.33: Interest and finance charges for Distribution Business for FY 2017-18 and FY 2018-19

(₹ crore)

Particulars	FY 2017-18	FY 2018-19
Interest on Loan (Distribution) as per Tariff Order dated 23.10.2017	800.60	899.89
Add: Interest for GPF Liability	102.15	84.21
Add: Finance Charges	254.30	21.64
Less: Capitalization of Interest Charges	183.09	169.07
Sub Total	**973.96**	**836.67**
Add: Interest on Consumer Security Deposits	193.92	209.81
Interest on Loan (Distribution)	**1167.88**	**1046.48**

3.15.4 **Interest on Working Capital**

PSPCL's submissions:

In the current Petition, PSPCL has claimed interest on working capital of ₹140.78 crore for FY 2017-18 and ₹145.55 crore for FY 2018-19 for Generation Business.

PSPCL has submitted that interest on working capital projected / claimed as per MYT Regulations, 2014 separately for Thermal and Hydro as per allocation matrix furnished. The details of working capital claimed and interest thereon are given in Table 3.34.

Table 3.34: Interest on Working Capital for Hydro and Thermal (Generation Business) for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18			FY 2018-19		
	Hydro	Thermal	Total	Hydro	Thermal	Total
Working Capital	184.58	1084.82	1269.40	188.80	1121.05	1309.85
Interest on Working Capital	20.47	120.31	140.78	20.98	124.57	145.55

Commission's Analysis:

3.15.5 The Commission has determined the working capital and interest thereon in accordance with PSERC Tariff Regulations. The project wise details of working capital requirement and allowable interest thereon are in Table 3.35 to Table 3.38.

Table 3.35: Working Capital and interest thereon for Thermal (Generation Business) allowed by the Commission for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18				FY 2018-19			
	GNDTP	GGSSTP	GHTP	Total	GNDTP	GGSSTP	GHTP	Total
Maintenance Charges @ 15% of O&M	32.92	46.36	24.45	103.73	28.96*	47.89	25.22	102.07
Fuel Cost for 2 months	16.16	113.48	135.39	265.03	-	178.61	96.57	275.18
O&M Exp for 1 month	18.29	25.76	13.58	57.63	16.09*	26.61	14.01	56.71
Receivables for 2 months	76.22	188.24	207.91	472.37	53.75	258.08	168.19	480.02
Total Working Capital	**143.59**	**373.84**	**381.33**	**898.76**	**98.80**	**511.19**	**303.99**	**913.98**
Interest on Working Capital	**13.44**	**34.99**	**35.69**	**84.12**	**9.25**	**47.85**	**28.45**	**85.55**

**O&M expenses include Employee Cost of ₹189.33 crore and A&G expenses of ₹3.71 crore.*

Table 3.36: Working Capital and interest thereon for Hydro (Generation Business) allowed by the Commission for FY 2017-18

(₹crore)

Particulars	Shanan	UBDC	RSD	MHP	ASHP	Micro	BBMB	Total
Maintenance Charges @ 15% of O&M	3.47	6.10	4.11	6.26	4.66	-	-	24.60
O&M Exp for 1 month	1.93	3.39	2.29	3.48	2.59	-	-	13.68
Receivables for 2 months	6.14	10.95	67.32	13.00	7.60	0.09	51.72	156.82
Total Working Capital	**11.54**	**20.44**	**73.72**	**22.74**	**14.85**	**0.09**	**51.72**	**195.10**
Interest on Working Capital	**1.08**	**1.91**	**6.90**	**2.13**	**1.39**	**0.01**	**4.84**	**18.26**

Table 3.37: Working Capital and interest thereon for Hydro (Generation Business) allowed by the Commission for FY 2018-19

(₹crore)

Particulars	Shanan	UBDC	RSD	MHP	ASHP	Micro	BBMB	Total
Maintenance Charges @ 15% of O&M	3.60	6.32	4.26	6.49	4.82	-	-	25.49
O&M Exp for 1 month	2.00	3.51	2.37	3.60	2.68	-	-	14.16
Receivables for 2 months	6.79	11.28	68.05	15.22	7.86	0.08	53.26	162.54
Total Working Capital	**12.39**	**21.11**	**74.68**	**25.31**	**15.36**	**0.08**	**53.26**	**202.19**
Interest on Working Capital	**1.16**	**1.98**	**6.99**	**2.37**	**1.44**	**0.01**	**4.98**	**18.93**

Table 3.38: Working Capital and interest thereon for Distribution allowed by the Commission for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18	FY 2018-19
Maintenance Charges @ 15% of O&M	658.71	683.16
O&M Exp for 1 month	365.95	379.54
Receivables for 2 months	4001.58	4347.90
Sub-Total	**5026.24**	**5410.60**
Less: Consumer Security Deposit	2983.37	3227.88
Total Working Capital	**2042.87**	**2182.72**
Interest on Working Capital	**191.21**	**204.30**

Accordingly, the Commission approves Interest on Working Capital of ₹102.38 crore for FY 2017-18 and ₹104.48 crore for FY 2018-19 for Generation Business and ₹191.21 crore for FY 2017-18 and ₹204.30 crore for FY 2018-19 for Distribution Business.

3.16 Return on Equity

PSPCL's submissions:

3.16.1 In the current Petition, PSPCL has claimed total RoE of ₹942.62 crore in two years as per details given in Table 3.39 and Table 3.40.

Table 3.39: Return on Equity Claimed by PSPCL for Control Period from FY 2017-18 to FY 2019-20

(₹crore)

Particulars	FY 2017-18	FY 2018-19
Generation	577.90	577.90
Distribution	364.72	364.72

Table 3.40: Project wise ROE in Hydro & Thermal (Generation Business)

(₹crore)

Projects	FY 2017-18	FY 2018-19
Shanan	2.58	2.58
UBDC	22.54	22.54
RSD	197.12	197.12
MHP	23.20	23.20
ASHP	13.37	13.37
Micro	3.23	3.23
Total (Hydro) (A)	**262.04**	**262.04**
GNDTP	103.25	103.25
GGSSTP	92.45	92.45
GHTP	120.15	120.15
Total (Thermal) (B)	**315.85**	**315.85**
Total Generation (A)+(B)	**577.89**	**577.89**

3.16.2 PSPCL has submitted that the Commission had approved a return on equity for FY 2015-16 at the rate of 15.50% worked out at ₹942.62 crore on an equity base of ₹6081.43 crore, which is also the claim for FY 2017-18 and FY 2018-19. It is further submitted that PSPCL has assumed that no fresh equity will be added during FY 2017-18 and FY 2018-19.

Commission's Analysis:

3.16.3 In accordance with PSERC Regulations for MYT, the Commission allows RoE of ₹942.62 crore (@ 15.50% on the equity of ₹6081.43 crore) to PSPCL for FY 2017-18 and FY 2018-19. However, the Commission has apportioned the RoE to different projects based on the respective Gross Fixed Assets (GFA) of the project. As mentioned in para 3.11 above, GFA for FY 2017-18 and FY 2018-19 as approved in Order dated 23.10.2017 remain same and require no alteration. Accordingly, the apportionment of equity remains the same and approved. The same is reproduced in Table 3.41.

Table 3.41: Project wise ROE allowed by the Commission for FY 2017-18 and FY 2018-19

(₹crore)

Projects	**FY 2017-18**	**FY 2018-19**
Shanan	2.34	2.89
UBDC	16.36	16.05
RSD	150.16	146.88
MHP	18.51	18.65
ASHP	10.08	9.90
Micro	0.50	0.49
BBMB	11.09	10.84
Total (Hydro) (A)	**209.04**	**205.70**
GNDTP	77.27	75.49
GGSSTP	70.41	69.02
GHTP	88.96	86.94
Total (Thermal) (B)	**236.64**	**231.45**
Total Generation (A)+(B)	**445.68**	**437.15**
Distribution	**496.94**	**505.47**

3.17 Charges Payable to GoP on RSD

The Commission allows ₹9.19 for FY 2017-18 and ₹9.07 crore for FY 2018-19 as royalty charges payable to Government of Punjab on power from RSD (under Generation Business), **which were previously allowed in Order dated 23.10.2017.**

3.18 Aggregate Revenue Requirement of Generation Projects (Hydro and Thermal) for FY 2017-18 and FY 2018-19

3.18.1 The Commission in Review Petition No. 05 of 2017 has re-determined the incentive for higher plant availability factor of GNDTP for FY 2010-11 and 2011-12 as ₹168.23 crore.

3.18.2 A summary of project wise Aggregate Revenue Requirement (ARR) of Generation Business of PSPCL (consisting of Hydro and Thermal Plants/Projects) for FY 2017-18 and FY 2018-19 has been given from Table 3.42 to Table 3.45.

Table 3.42: ARR for Thermal Plants (Generation Business) for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18				FY 2018-19			
	GNDTP	GGSSTP	GHTP	Total	GNDTP	GGSSTP	GHTP	Total
Fuel Cost	96.95	680.86	812.33	1590.14	-	1071.67	579.43	1651.10
Employee Cost	183.20	276.01	121.22	580.43	189.33	285.25	125.29	599.87
R&M and A&G Expenses	36.28	33.06	41.78	111.12	3.71	34.01	42.84	80.56
Depreciation	44.66	23.62	146.09	214.37	44.66	23.89	146.11	214.66
Interest Charges	5.49	10.47	1.41	17.37	0.08	16.79	0.06	16.93
Return on Equity	77.27	70.41	88.96	236.64	75.49	69.02	86.94	231.45
Interest on Working Capital	13.44	34.99	35.69	84.12	9.25	47.85	28.45	85.55
Revenue Requirement	**457.29**	**1129.42**	**1247.48**	**2834.19**	**322.52**	**1548.48**	**1009.12**	**2880.12**

Table 3.43: APR for Hydro Plants (Generation Business) for FY 2017-18

(₹crore)

Particulars	Shanan	UBDC	RSD	MHP	ASHP	Micro	BBMB	Total
Employee Cost	17.49	33.88	24.24	36.53	29.44	-	-	141.58
R&M and A&G Expenses	5.63	6.77	3.19	5.21	1.64	-	-	22.44
BBMB O&M Expenses	-	-	-	-	-	-	258.23	258.23
Depreciation	7.99	6.51	192.87	12.22	2.93	-	21.86	244.38
Interest Charges	2.32	0.24	17.36	3.42	0.13	-	14.30	37.77
Return on Equity	2.34	16.36	150.16	18.51	10.08	0.50	11.09	209.04
Interest on Working Capital	1.08	1.91	6.90	2.13	1.39	0.01	4.84	18.26
Maint. Charges payable to GoP for RSD	-	-	9.19	-	-	-	-	9.19
Revenue requirement	**36.85**	**65.67**	**403.91**	**78.02**	**45.61**	**0.51**	**310.32**	**940.89**

Table 3.44: ARR for Hydro Plants (Generation Business) for FY 2018-19

(₹crore)

Particulars	Shanan	UBDC	RSD	MHP	ASHP	Micro	BBMB	Total
Employee Cost	18.08	35.01	25.06	37.75	30.43	-	-	146.33
R&M and A&G Expenses	5.93	7.14	3.36	5.48	1.72	-	-	23.63
BBMB O&M Expenses	-	-	-	-	-	-	271.14	271.14
Depreciation	9.20	6.56	193.26	12.87	2.96	-	21.85	246.70
Interest Charges	3.50	0.91	23.65	14.15	0.71	-	10.73	53.65
Return on Equity	2.89	16.05	146.88	18.65	9.90	0.49	10.84	205.70
Interest on Working Capital	1.16	1.98	6.99	2.37	1.44	0.01	4.98	18.93
Maint. Charges payable to GoP for RSD	-	-	9.07	-	-	-	-	9.07
Revenue requirement	**40.76**	**67.65**	**408.27**	**91.27**	**47.16**	**0.50**	**319.54**	**975.15**

Table 3.45: Total ARR for Generation Business for FY 2017-18 and FY 2018-19

(₹crore)

Projects	FY 2017-18	FY 2018-19
GNDTP	457.29	322.52
GGSSTP	1129.42	1548.48
GHTP	1247.48	1009.12
Total Thermal (A)	**2834.19**	**2880.12**
Total Hydro (B)	940.89	975.15
Total Generation (A)+(B)	**3775.08**	**3855.27**
Add: Generation Incentive	168.23	-
Total ARR Generation	**3943.31**	**3855.27**

3.19 Transmission Charges Payable to PSTCL

In the current Petition, PSPCL has claimed Transmission charges payable to PSTCL of ₹1234.87 crore for FY 2017-18 and ₹1283.86 crore for FY 2018-19 under its Distribution Business. **The Commission, in the Tariff Order of PSTCL for APR of FY 2017-18 and Revised Estimates for FY 2018-19, has determined Transmission charges payable by PSPCL to PSTCL at ₹1240.06 crore for FY 2017-18 and ₹1281.99 crore for FY 2018-19. The same is also being considered in the ARR of Distribution Business of PSPCL for FY 2017-18 and FY 2018-19.**

3.20 Non-Tariff Income

3.20.1 In the current Petition, PSPCL has claimed Non-Tariff Income of ₹788.52 crore for FY 2017-18, ₹785.35 crore for FY 2018-19 in its Distribution Business. These figures claimed by PSPCL, exclude income on account of late payment of surcharge and rebate for timely payment for power purchase. Non-Tariff Income claimed by PSPCL is discussed in Table 3.46.

Table 3.46: Non-Tariff Income claimed by PSPCL in Distribution Business

(₹crore)

Particulars	**Non - Tariff Income**	
	FY 17-18	**FY 18-19**
Meter / Service Rent	99.69	105.59
Late Payment Surcharge	137.70	137.70
Misc. Receipts	591.02	591.02
Misc. Charges (fuse, pub. lighting, mtc. Charges, recon. fee)	15.59	15.59
Wheeling Charges	9.07	-
Interest on Staff Loan & Advance	56.07	56.07
Income from Staff Welfare Activities	0.04	0.04
Investments & Bank balances	10.79	10.79
Depreciation from Consumer Contributions	129.46	129.46
Total Non-Tariff Income	1049.43	1046.26
Less: Late Payment Surcharge	137.70	137.70
Less: Rebate for timely payment of Power Purchase	123.21	123.21
Net Non-Tariff Income	**788.52**	**785.35**

3.20.2 The Commission observes that receipts on account of late payment surcharge are to be treated as Non-Tariff Income as per Regulation 28 of PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014. Similarly, PSPCL has also not included rebate for timely payment for power purchase in the Non-Tariff Income whereas these are to be taken as Non-Tariff Income. As such the Non-Tariff Income is worked out in Table 3.47.

Table 3.47: Non-Tariff Income allowed by the Commission in for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	**FY 2017-18**	**FY 2018-19**
Net Non-tariff Income claimed	788.52	785.35
Add: Late Payment Surcharge	137.70	137.70
Add: Rebate for timely payment of power purchase	123.21	123.21
Non-Tariff Income allowed by the Commission	**1049.43**	**1046.26**

The Commission accordingly approves Non-Tariff Income of ₹1049.43 crore for FY 2017-18 and ₹1046.26 crore for FY 2018-19 in Distribution Business.

3.21 Demand Side Management (DSM) Fund

PSPCL in the Petition, has proposed to create a DSM Fund for funding energy saving and Demand Side management activities for which an amount of ₹10.00 crore for FY 2017-18 and FY 2018-19. PSPCL has submitted that as per clause 1.8 of the DSM Regulations, PSPCL is allowed to recover costs incurred in any DSM related activity including planning, conducting load survey/research, designing, implementing, monitoring and evaluating DSM programs by adding the costs to the Aggregate Revenue Requirement (ARR) to enable their funding through tariff structure or by implementing programs at the consumer premises that would attract appropriate return on investment.

Regulation 15 of the DSM Regulations states that 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. PSPCL has further submitted that for implementation of demand side measures to manage demand efficiently, it requires to take measures from technical experts in this field and active participation of consumers. PSPCL has projected the contribution of ₹10.00 crore towards DSM fund in both FY 2017-18 and FY 2018-19. Further, this expenditure is to be incurred to provide benefits to end consumers to reduce their bills by managing demand effectively.

The Commission has observed that although PSPCL is being provided sufficient funds for carrying out DSM measures during the last few years but the licensee has failed miserably to use any amount on energy efficiency and DSM measures. **However, the Commission provisionally approves an amount of ₹10.00 crore for both FY 2017-18 and FY 2018-19, as claimed by PSPCL for implementation of DSM Programme. This amount shall be kept in a separate DSM Fund and used exclusively for DSM Programme as per the procedures laid down in the DSM Regulations.**

3.22 Revenue from Sale of Power

In the current Petition, PSPCL has projected revenue from sale of power at ₹29549.72 crore for FY 2017-18 and ₹31513.45 crore for FY 2018-19. Subsequently, PSPCL vide memo no.261/ARR/Dy.CAO/251/Vol-I dated 01.03.2018, submitted the revised revenue of ₹31320.38 crore for FY 2018-19, based on two part tariff.

The Commission observes that PSPCL has claimed (-)₹303.65 crore on account of HV Rebate / Impact of ToD Tariff, however, has not recorded any revenue on account of 'Recoveries for theft of power / Malpractices' in FY 2018-19. Actual revenue on account of 'Recoveries for theft of power / Malpractices' as per Audited Annual Accounts of past years is approximately ₹53.03 crore (average of past four years). Year wise data of 'Recoveries for theft of power / Malpractices' as per Audited Annual Accounts is given in Table 3.48:

Table 3.48: Recoveries for theft of power/Malpractices

Financial Year	Recoveries for theft of power / Malpractices
FY 2013-14	55.95
FY 2014-15	59.38
FY 2015-16	51.31
FY 2016-17	45.47

Accordingly, the Commission approves revenue on account of 'Recoveries for theft / malpractices, HV Rebate, Impact of ToD Tariff of (-)₹250.62 (-303.65+53.03) crore for FY 2018-19.

The Commission approves revenue from sale of power at ₹29297.53 crore for FY 2017-18 and ₹30771.46 crore for FY 2018-19 in Distribution Business of PSPCL, the details of which are discussed in Table 3.49 and Table 3.50.

Table 3.49: Revenue from Sale of Power for FY 2017-18

(₹crore)

Sr. No.	Description	Claimed by PSPCL		As approved by the Commission	
		Energy Sale (MU)	Revenue (₹crore)	Energy Sale (MU)	Revenue (₹crore)
1.	Domestic	13796.31	8327.53	13796.31	8327.53
2.	Commercial / Non-Residential Supply	4028.39	2959.18	4028.39	2959.18
3.	Public Lighting	187.70	138.71	187.70	138.71
4.	Industrial Consumers				
a)	Small Power	1007.93	614.84	1007.93	614.84
b)	Medium Supply	2343.90	1527.23	2343.90	1527.23
c)	Large Supply	12647.99	8527.67	12647.99	8527.67
5.	Bulk Supply	673.87	480.76	673.87	480.76
6.	Railway Traction	206.55	154.09	206.55	154.09
7.	**Sub-Total**	**34892.64**	**22730.01**	**34892.64**	**22730.01**
8.	AP Consumption	12355.83	6252.05	11857.41	5999.85
9.	**Total within State**	**47248.47**	**28982.06**	**46750.05**	**28729.86**
10.	Common Pool	311.68	144.15	308.99	144.15
11.	Outside State	128.40	142.40	353.88	142.40
12.	**Total Sales**	**47688.55**	**29268.61**	**47412.92**	**29016.41**
13.	MMC, Theft and Other Charges, HV Rebate, Impact of ToD Tariff	-	281.12	-	281.12
14.	**Grand Total**	**47688.55**	**29549.73**	**47412.92**	**29297.53**

Table 3.50: Revenue from Sale of Power for FY 2018-19

(₹crore)

Sr. No.	Description	Claimed by PSPCL				As approved by the Commission			
		Energy Sale (MU)	Revenue (₹crore)			Energy Sale (MU)	Revenue (₹crore)		
			Energy Charges	Fixed Charges	Total		Energy Charges	Fixed Charges	Total
1.	Domestic	14816.97	8972.70	300.89	9273.59	14816.97	8972.70	300.89	9273.59
2.	Commercial / Non-Residential Supply	4351.47	2963.81	293.00	3256.81	4351.47	2963.81	293.00	3256.81
3.	Public Lighting	195.39	140.88	4.26	145.14	195.39	140.88	4.26	145.14
4.	Industrial Consumers								
a)	Small Power	1035.80	567.62	89.61	657.23	1035.80	567.62	89.61	657.23
b)	Medium Supply	2463.43	1379.52	191.38	1570.90	2463.43	1379.52	191.38	1570.90
c)	Large Supply	13187.05	7645.56	1488.02	9133.58	13187.05	7645.56	1488.02	9133.58
5.	Bulk Supply								
a)	HT	650.94	380.80	59.81	440.61	650.94	380.80	59.81	440.61
b)	LT	43.53	27.21	3.99	31.20	43.53	27.21	3.99	31.20
6.	Railway Traction	224.02	149.20	18.81	168.01	224.02	149.20	18.81	168.01
7.	**Sub-Total**	**36968.60**	**22227.30**	**2449.77**	**24677.07**	**36968.60**	**22227.30**	**2449.77**	**24677.07**
8.	AP Consumption	13313.88	6736.82	-	6736.82	12124.20	6134.85	**-**	6134.85
9.	**Total Sales within State**	**50282.48**	**28964.12**	**2449.77**	**31413.89**	**49092.80**	**28362.15**	**2449.77**	**30811.92**
10.	Common Pool	341.64	159.38	-	159.38	341.64	159.38	-	159.38
11.	Outside State	126.18	50.78	-	50.78	126.18	50.78	-	50.78
12.	Recoveries for theft/malpractices, HV Rebate, Impact of ToD Tariff	-	-303.65	-	-303.65	-	-250.62	-	-250.62
13.	**Total Sales**	**50750.30**	**28870.63**	**2449.77**	**31320.40**	**49560.62**	**28321.69**	**2449.77**	**30771.46**

3.23 Prior Period Expenses

PSPCL's Submissions:

PSPCL has claimed (-) ₹301.48 crore under the head of Power Purchase Cost relating to previous adjustments made during FY 2017-18.

Commission's Analysis:

As discussed in para 3.9.5 of this Order, an amount of (-) ₹301.48 crore relates to adjustment of prior period power purchase bills, the Commission allows (-) ₹301.48 crore as prior period expenses.

Further, PSPCL has filed Petition No.11 of 2018 with the Commission for approval of FCA for 3rd quarter of FY 2017-18. PSPCL in the said Petition has included payment of ₹322.28 crore to M/s Nabha Power Limited (NPL) towards washing cost of coal, the transportation of coal from the mine site via washery of coal to the project site inclusive of cost of road transportation etc. as per Hon'ble Supreme Court judgement dated 05.10.2017 in Civil Appeal No.179 of 2017. The Commission decides to provisionally allow this amount as prior period expenses of FY 2017-18 in present Petition i.e. 66 of 2017 for Annual Performance Review for FY 2017-18 and Revised Estimates for FY 2018-19.

Accordingly, the Commission approves Net Prior Period expenses ₹20.80 crore (322.28-301.48) for FY 2017-18.

3.24 Subsidy payable by GoP for FY 2017-18

In the Petition for APR, PSPCL has claimed subsidy of ₹8511.44 crore for FY 2017-18. Subsequently, PSPCL vide memo no.107/ARR/Dy.CAO/251/Vol.1 dated 19.01.2018 submitted revised subsidy of Domestic and Industrial consumers. The Govt. of Punjab (GoP), Department of Power (Energy Branch) vide Memo No. 2/11/2017-PE2/3 dated 11.01.2018 decided to give power subsidy to Medium Supply (MS) and Large Supply (LS) Industrial Consumers. Pursuant to the said decision of GoP, the Commission passed a consequential Order dated 16.02.2018. The same has been mentioned in Table 3.51.

Domestic Consumers: The Commission has determined subsidy payable on account of domestic consumers based on actual consumption data (from 01.04.2017 to 31.10.2017) provided by PSPCL vide memo no.61/ARR/Dy CAO/251/Deficiency dated 10.01.2018.

AP Consumption: The Commission has considered AP consumption at 11857.41 MU, on which revenue @506 paise per unit works out to ₹5999.85 crore for FY 2017-18.

Table 3.51 Subsidy payable by GoP for different categories for FY 2017-18

(₹crore)

Sr. No.	Category	Subsidy Approved by the Commission in Tariff Order dated 23.10.2017	Claimed by PSPCL in APR of FY 2017-18	GoP Subsidy to MS & LS Industrial Consumers (GoP memo dated 11.01.2018)	Subsidy now payable by GoP
1.	AP Consumption	5976.82	6252.05	-	5999.85
2.	Scheduled Caste (SC)/Domestic Supply (DS) free power upto 200 units with connected load upto 1000 watts.	1121.80	1359.34	-	1085.97
3.	Non-SC/BPL DS consumers free power upto 200 units with connected load upto 1000 watts.	87.24	84.71	-	67.85
4.	Backward class DS consumer free power upto 200 units with connected load upto 1kW.	707.98	707.98	-	73.95
5.	Freedom Fighters	0.83	0.83	-	0.83
6.	Subsidy for new/ prospective industry under Progressive Punjab summit, 2015	113.31	-	-	-
7.	Small Power (concessional tariff @₹499 paise per unit)	-	106.52	-	113.90
8.	MS+LS Supply Consumers subsidy on account of 50% share of arrears	-	-	300.00	300.00
9.	MS+LS Supply consumers on account of ₹5/kVah from 01.01.2018 to 31.03.2018	-	-	275.00	275.00
10.	Additional MMC Subsidy on account of MOR	-	-	50.00	50.00
11.	**Total**	**8007.98**	**8511.44**	**625.00**	**7967.35**

Interest on delayed payment of subsidy: The GoP has paid ₹6477.57 crore subsidy upto 16.03.2018 (including adjustments against ED etc.) to PSPCL during FY 2017-18 in staggered instalments and by adjustments against ED etc. The Commission observes that there was delay in payment of subsidy to PSPCL in FY 2017-18. With a view to compensate PSPCL on this account, the Commission levies interest on the delayed payment of subsidy @9.36% (effective rate of interest on working capital loans) which works out to ₹460.20 crore approximately.

Accordingly, the subsidy payable for FY 2017-18, inclusive of interest on delayed payment of subsidy, has been determined by the Commission at ₹8427.55 (7967.35+460.20) crore against which GoP had paid subsidy of ₹6577.57 crore. As such, there is shortfall subsidy of ₹1849.98 (8427.55-6577.57) crore during FY 2017-18. This has been carried forward to para 6.4.2.

3.25 Carrying Cost on Revenue Gap

True Up FY 2016-17

The Commission in Table 2.26 of this Tariff Order, has determined a Revenue (Deficit) of ₹2462.29 crore in the True Up for FY 2016-17. Accordingly, the Commission determines carrying cost on the Revenue (Deficit) of ₹2462.29 crore @9.70% for FY 2016-17 (six months), @9.36% for FY 2017-18 (full year), @9.36% for FY 2018-19 (six months).

The carrying cost on revenue gap of ₹2462.29 crore for FY 2016-17, amounting to ₹465.13 crore (₹119.42 crore for six months of FY 2016-17 and ₹230.47 crore for FY 2017-18 and ₹115.24 crore for six months of FY 2018-19) is allowed to the utility.

3.26 Revenue Requirement for MYT Control Period for FY 2017-18 and FY 2018-19

A final summary of Net Revenue Requirement of Distribution Business of PSPCL from FY 2017-18 to FY 2019-20 has been given from Table 3.52.

Table 3.52: Net revenue Requirement of Distribution Business of PSPCL for FY 2017-18 and FY 2018-19

(₹crore)

Sr. No.	Particulars	Claimed by PSPCL		Allowed by the Commission	
		FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
1.	Cost of Power Purchase	17001.58	19120.37	16791.36	18720.13
2.	Employee Cost	4482.87	4673.52	3966.29	4099.19
3.	R&M and A&G Expenses	448.52	471.85	425.12	455.23
4.	Depreciation	988.96	1038.55	770.07	810.89
5.	Interest Charges *	3104.88	3003.23	1359.09	1250.78
6.	Return on Equity**	364.72	364.72	496.94	505.47
7.	Cost of Generation Business (Allowed as per Table 3.45)	4257.77	4381.36	3943.31	3855.27
8.	Transmission charges payable to PSTCL	1234.87	1283.86	1240.06	1281.99
9.	Prior period expenses	-	-	20.80	-
10.	Provision for DSM fund	10.00	10.00	10.00	10.00
11.	**Total Revenue Requirement**	**31894.17**	**34347.46**	**29023.04**	**30988.95**
12.	Less: Non-Tariff Income	788.51	785.35	1049.43	1046.26
13.	**Net Revenue Requirement**	**31105.66**	**33562.11**	**27973.61**	**29942.69**
14.	Less: Revenue from sale of Power at existing tariff	29549.72	31320.38***	29297.53	30771.46
15.	**Gap: Surplus (+) / Deficit (-) for the year**	**(-) 1555.94**	**(-) 2241.73**	**(+) 1323.92**	**(+) 828.77**
16.	Add: BBMB O&M expenses as per Order of the Hon'ble APTEL dated 06.09.2017	**(-) 1410.88**	**-**	**-******	**-**
17.	**Total Revenue Gap: Surplus (+) / Deficit (-) for the year**	**(-) 2966.82**	**(-) 2241.73**	**(+) 1323.92**	**(+) 828.77**

* *Includes interest on working capital requirement*

** *PSPCL has claimed same Return on Equity (RoE) in FY 2017-18 and FY 2018-19 under Distribution Business. However, the total RoE (of ₹942.62 crore both for FY 2017-18 & FY 2018-19) approved by Commission is allocated among Generation (and further projects under Thermal & Hydro) and Distribution based on the Gross Fixed Assets (GFA) pertaining to Generation and Distribution Business. Accordingly, RoE allowed in FY 2017-18 and FY 2018-19 is different (and higher than claimed) as allocated based on the GFA for the respective years.*

*** *PSPCL in its Petition, projected revenue from sale of power of ₹31513.45 crore for FY 2018-19. Subsequently, PSPCL vide memo no. 261 / ARR / Dy.CAO / 251 / Vol-I dated 01.03.2018, submitted the revised revenue of ₹31320.38 crore for FY 2018-19, based on two part tariff.*

**** *Allowed by the Commission in True up of FY 2016-17 (Para 2.11 of this Order).*

3.27 Fuel Cost Adjustment Surcharge for 3rd Quarter of FY 2017-18

The Commission vide its order dated 05.04.2018 in the Petition No. 11 of 2018 has decided to provisionally allow ₹104.34 (10.84+93.50) crore on account of increase in

Fuel Cost of PSPCL's own Thermal Generating Stations and increase in Power Purchase Cost from all Thermal Stations under long term contract with PSPCL during the 3rd quarter of FY 2017-18, in the Tariff Order for FY 2018-19, subject to reconciliation/validation during the True up of FY 2017-18. Accordingly, the Commission consider the same while working out the cumulative gap upto FY 2018-19 in Table 3.53.

3.28 Cumulative Gap for FY 2018-19

Accordingly, the Cumulative Gap for FY 2018-19 has been worked out as shown in Table 3.53.

Table 3.53: Cumulative Gap [(Surplus (+) / Deficit (-)] upto FY 2018-19 approved by the Commission

(₹crore)

Sr. No.	Particulars	Claimed by PSPCL	Allowed by the Commission
		FY 2018-19	
1.	Total Gap: Surplus (+) / Deficit (-) upto FY 2016-17 (As per Table 2.26) **(A)**	(-) 4661.95	(-) 2252.13
2.	Gap: Surplus (+) / Deficit (-) for FY 2017-18 **(B)**	(-) 2966.82	+1323.92
3.	Gap: Surplus (+) / Deficit (-) for FY 2018-19 **(C)**	(-) 2241.73	+828.77
4.	Carrying Cost of FY 2016-17 **(D)**	-*	(-) 465.13
5.	Carrying Cost of FY 2017-18 **(E)**	(-) 323.84	-
6.	Impact of Petition No. 11 of 2018		(-) 104.34
7.	**Total Cumulative Gap: Surplus (+) / Deficit (-) upto FY 2018-19 i.e. (A) + (B) + (C) + (D) + (E)**	**(-) 10194.34**	**(-) 668.91**

** Already included in deficit upto FY 2016-17 of ₹4661.95 crore.*

The Cumulative Gap (Deficit) upto FY 2018-19 is thus, determined at ₹668.91 crore. The Annual Revenue Requirement for FY 2018-19 is assessed at ₹30988.95 crore with energy sales of 49560.62 MU. The combined average cost of supply works out to 655.49 paise per kWh (₹32486.63 crore/49560.62 MU), after taking into account the ARR of ₹30988.95 crore for FY 2018-19, approved consolidated deficit of ₹928.21 (-2252.13+1323.92) crore upto FY 2017-18, carrying cost of ₹465.13 crore for FY 2016-17 and impact of Petition No. 11 of 2018 as ₹104.34 crore.

Chapter 4
Tariff Related Issues

4.1 Utilization of Surplus Power

4.1.1 To reduce the burden of fixed cost of the surrendered power on the consumers of the State by encouraging consumption of surplus power, the Commission in the Tariff Order for FY 2016-17, approved the base tariff rate of ₹4.99 per kVAh for Large Supply industrial category consumers, who consume power above threshold limit. All other surcharges and rebates as approved by the Commission and Govt. levies as notified by the State Government were to be charged extra. In order to further encourage the industry for productive use of surplus power, the Commission in Tariff Order for FY 2017-18, decided to extend the benefit of reduced energy charges for consumption of power above the threshold limit, to all categories of Industrial Consumers. Further, reduced energy charges for FY 2017-18 were specified as under:

a) ₹5.25 per kWh for Small Power and ₹4.99 per kVAh for Large Supply/Medium Supply consumers under Single Part Tariff structure for the period from 01.04.2017 to 31.12.2017, and

b) @₹4.45 per kWh for Small Power and ₹4.23 per kVAh for Large Supply/Medium Supply consumers under Two Part Tariff structure w.e.f. 01.01.2018.

All other terms and conditions, including determining of threshold limit, were kept same as approved in the Tariff Order for FY 2016-17 read with Order of the Commission dated 18.10.2016 in Petition No. 64 of 2016.

4.1.2 Now, in the ARR for FY 2018-19, PSPCL has projected surplus power of 20417 MU for FY 2018-19. PSPCL has not submitted any proposal to utilize/sell the surplus power, which has been proposed to be surrendered as per the merit order of power purchase from the thermal plants. Various consumers/stakeholders in their objections/suggestions on the ARR have suggested continuing the system of reduced base rate for energy consumption above the threshold limit.

Accordingly, the Commission decides to continue with its policy of encouraging the industry in promoting the productive use of surplus power. The reduced Energy Charge for FY 2018-19 (under Two Part Tariff Structure) shall be ₹4.28 per kVAh for Large Supply/Medium Supply/Small Power

industrial consumers and ₹4.50 per kWh for Small Power Industrial consumers under kWh based Tariff, for consumption of power exceeding the threshold limit as under:

i) The maximum annual consumption in any of the last two financial years shall be taken as threshold. In case, the period is less than two financial years i.e. if connection has been released after 31.03.2016, reduced Energy Charge shall not be permissible.

ii) Only PSPCL consumption shall be considered for calculating maximum annual consumption in any of the last two financial years which is to be taken as threshold limit and also for calculating consumption eligible for reduced Energy Charge.

iii) Any change in load/contract demand either during the last two financial years or during the current financial year i.e. FY 2018-19, shall not be considered while calculating the threshold limit or calculating consumption eligible for reduced Energy Charge. Any consumption above the threshold consumption will be eligible for the reduced Energy Charge.

iv) The billing at the reduced Energy Charge shall be done once the consumer crosses the threshold consumption e.g. if a consumer has maximum annual consumption in any of two preceding financial years as 10000 kVAh, the reduced Energy Charge shall be allowed to the consumer as and when his consumption during the current year exceeds 10000 kVAh.

v) All other surcharges and rebates as approved by the Commission and Govt. levies as notified by the State Government shall be charged extra.

4.2 Time of Day (ToD) Tariff

4.2.1 Time of Day (ToD) tariff is widely-accepted as an effective tool for Demand Side Management (DSM). The motive of levying additional charge during peak-hours and allowing rebate during off-peak hours is to incentivize consumers to shift their consumption from peak to off-peak hours, thereby helping in flattening of the load curve to optimize the generation capacity and minimize the cost of power procurement for the distribution licensee. In case the consumption cannot be shifted, then levy of such additional charges should enable recovery of the additional cost incurred by the distribution licensee to meet the demand during such hours.

4.2.2 The Commission, in the Tariff Order for FY 2016-17, removed the Peak Load Exemption Charges (PLEC) and approved the following ToD tariff:

a) ToD tariff comprising of normal tariff plus additional charge of ₹2.00 per kVAh, applicable during peak hours from 06:00 PM to 10:00 PM from 1st June to 30th September for Large Supply industrial category consumers.

b) ToD tariff comprising of normal tariff minus rebate of ₹1.00 per kVAh, applicable from 10:00 PM to 06:00 AM (next day) from 1st October to 31st May of next year, for Medium Supply & Large Supply industrial category consumers.

Further, in the tariff Order for FY 2017-18 issued on 23.10.2017, the Commission decided that w.e.f. 01.11.2017, ToD tariffs shall also be applicable for NRS/BS consumers with sanctioned Contract Demand exceeding 100 kVA. Also, off-peak rebate during the applicable period was increased from ₹1.00 per kVAh to ₹1.25 per kVAh

4.2.3 **Accordingly, the Commission decides that for the FY 2018-19, ToD tariffs shall be applicable for Medium Supply/Large Supply Industrial Category consumers and NRS/BS consumers (with sanctioned Contract Demand exceeding 100 kVA) as under:**

<table>
<tr><th>Period</th><th>Time period</th><th>ToD Tariff</th></tr>
<tr><td rowspan="3">1st April, 2018 to 31st May, 2018</td><td>06.00 AM to 06.00 PM</td><td rowspan="2">Normal Tariff*</td></tr>
<tr><td>06.00 PM to 10.00 PM</td></tr>
<tr><td>10.00 PM to 06.00 AM (next day)</td><td>Normal Tariff* minus ₹1.25/kVAh</td></tr>
<tr><td rowspan="3">1st June, 2018 to 30th September, 2018</td><td>06.00 AM to 06.00 PM</td><td>Normal Tariff*</td></tr>
<tr><td>06.00 PM to 10.00 PM</td><td>Normal Tariff* plus ₹2.00/kVAh</td></tr>
<tr><td>10.00 PM to 06.00 AM (next day)</td><td>Normal Tariff*</td></tr>
<tr><td rowspan="3">1st October, 2018 to 31st March, 2019</td><td>06.00 AM to 06.00 PM</td><td rowspan="2">Normal Tariff*</td></tr>
<tr><td>06.00 PM to 10.00 PM</td></tr>
<tr><td>10.00 PM to 06.00 AM (next day)</td><td>Normal Tariff* minus ₹1.25/kVAh</td></tr>
</table>

***** *As per Schedule of Tariff applicable for FY 2018-19.*

Cumulative effect of ToD rebate and reduced Energy Charges for consumption beyond threshold limit as per para 4.1 above, shall be limited to the lowest Energy Charge of ₹4.28 per kVAh.

4.3 Introduction of special tariff for use of electricity exclusively during night hours

The Commission notes that a distribution licensee generally plans for long term power procurement to meet its base load/demand and goes for short term power procurement to cater to its peak demand. Thus, to achieve optimum power procurement, the load curve needs to be as flat as possible. The Commission further observes that despite the various initiatives taken by the Commission, there is still large variation in the demand during the day and the night. In the discussions held with PSPCL Management on 22.02.2018 during the presentation regarding objections received against PSPCL's petition for ARR of FY 2018-19, CMD/PSPCL was also of the view that reduced tariff for use of electricity exclusively during night time can be a viable proposition for increasing/shifting the consumption during/to low demand period.

Therefore, to give an impetus to the consumption of surplus power during night hours and also to flatten the load curve of the utility, the Commission decides to have a special reduced tariff for LS/MS Industrial consumers who opt to use electricity exclusively during night hours. The tariffs for use of electricity exclusively during night i.e. from 10.00 PM to 06.00 AM next day shall be as under:

IND.	FIXED CHARGES	ENERGY CHARGE
LS/MS	**50%** of the normal rates of Fixed Charges applicable to the respective category under relevant Schedule of Tariff	₹4.28/kVAh*

**ToD rebate shall not be applicable on this reduced rate*

NOTE:

i) *A maximum of 15% of the contracted demand can be availed beyond the night hours prescribed above.*

ii) *A maximum of 10% of total units consumed during night hours in a billing period can be availed beyond the night hours prescribed above. However, ToD surcharge, as applicable, shall also be chargeable for this consumption during the peak-period, if any.*

iii) *In case the consumer exceeds the %age specified in condition no. i above during any of the billing month, then fixed charge during the relevant billing month shall be billed as per normal rates of fixed charge applicable to the respective category.*

iv) *In case the consumer exceeds the %age specified in condition no. ii above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per normal rates of energy charge applicable to the respective category.*

v) *In case the consumer exceeds the %ages specified in condition no. i and ii both during any of the billing month, then billing of such consumers during the billing period shall be done as normal consumers of relevant category.*

vi) *This tariff shall be applicable if the consumer so opts to be charged in place of normal tariff by using electricity exclusively during night hours as above. The option can be exercised to switch over from normal tariff to exclusive night time tariff by giving not less than one month's notice in writing.*

vii) *Other terms and conditions shall remain same as applicable to the respective categories as per the relevant Schedule of Tariffs.*

4.4 Fixed Charges

4.4.1 **Marriage Palaces:** The Commission in the Tariff Order for FY 2017-18 has decided to charge the Fixed Charges for marriage palaces on 10% of Sanctioned Load/Contract Demand or Actual Load/Demand recorded during the billing cycle/month, whichever is higher. The idea was to motivate them to use PSPCL's supply instead of the DG Sets. Now, in order to further encourage the Marriage Palaces to shift their load to PSPCL's system, PSPCL vide its letter dated 22.02.2018 has recommended to amend the prevailing provision as under:

> *"NRS consumers running Marriage Palaces shall pay Fixed Charges on 25% of Sanctioned Load/Contract Demand. In case, the consumer exceeds its Sanctioned Load/Contract Demand during a billing cycle/month, he shall also be liable to pay load/demand surcharge as specified in Schedule of Tariff."*

The Commission agrees to the proposal of PSPCL and approves the same.

4.4.2 **CPPs/Co-Gen Plants:** Various CPP/Co-Gen consumers in their objections/ suggestions furnished to the Commission in reference to PSPCL's ARR Petition for FY 2018-19, has submitted that these plants have been setup under the policies of MoP/MNRE/GoP and provided relief to then PSEB (Now PSPCL) when it was under severe shortage of power. CPPs/ Co-Gen. Plants uses PSPCL supply only as standby supply, with such heavy liability of Fixed Charges they would not be able to compete in the market and requested to allow them to maintain CD as per the requirement on payment of nominal commitment charges. It was also suggested that either the existing single part tariff be continued for them or else the Regulations applicable for such CPPs in Maharashtra and Madhya Pradesh be implemented in Punjab. A petition to this effect has been also filed by the consumers before the Commission. Some of the CPP/Co-Gen consumers in their representations have suggested charging of fixed charges on 50% (instead of 80%) of their Sanctioned Contract Demand or actual, whichever is higher.

In the discussions held with PSPCL Management on 22.02.2018 during the presentation regarding objections received against PSPCL Petition for ARR of FY 2018-19, PSPCL was also of the opinion that some relief can be given to CPPs/Co-Gen Plants.

The amendments in PSERC (Harnessing of Captive Power Generation) Regulations, 2009 are already under the consideration of the Commission. Therefore, till the finalization of amendment in the relevant Regulations, the Commission decides to levy the Fixed Charges for consumers having CPPs/Co-

Gen Plants on 50% of the Sanctioned Contract Demand or actual Demand recorded during the billing cycle/month (restricted to the Sanctioned Contract Demand), whichever is higher. In case, consumer exceeds his Sanctioned Contract Demand during a billing cycle/month, he shall be liable to pay demand surcharge as specified in the respective Schedule of Tariff.

4.4.3 **Temporary supply:** The Commission observes that existing provisions of Temporary supply envisage payment of 'fixed charges' on monthly basis even if supply is required for a day or two. Thus prospective consumers are finding it more convenient to hire DG Sets instead of applying for temporary supply, when they require power supply for few days only.

Thus, in order to encourage such consumers to come forward for availing temporary supply from the distribution licensee, the Commission decides that Fixed Charges from temporary supply consumers shall be levied @ 12*2A/365 per day, where 'A' is the Monthly Fixed Charge applicable to the corresponding permanent supply consumer category. Provided that fixed charges so computed shall not exceed the fixed charges applicable on monthly basis. Further, the Commission also decides to revise the Fixed Charges and Energy Charges for Temporary Supply consumers @ 1.3 times (in place of existing 1.5 times) the charges (highest slab rate wherever applicable) specified under the relevant schedule of tariff applicable for corresponding permanent supply consumers.

4.4.4 **Seasonal, Ice factory & Ice candies and cold storage consumers:**

PSPCL in its Two Part Tariff proposal submitted along with ARR for 1st MYT Control Period has proposed to consider the seasonal category under 'general industrial category' and to also charge Ice factory, Ice candies and cold storage industrial categories as per general industrial category rates. No objection from any consumer/ stakeholder was received against the proposal.

The Commission had decided in the last Tariff Order to charge Energy Charges from these categories, at the rates as applicable to the corresponding general industrial category consumers. However, the Commission was of the view that it may not be convenient for them to pay Fixed Charges during their non-working/off-seasonal period and decided to charge Fixed Charges from these categories of consumers as under:

a) Seasonal Industry consumers shall pay Fixed Charges as specified in respective Schedule of Tariff for 6 months only during their seasonal period; no fixed charges shall be levied during the remaining part of the year, provided their demand remains within the sanctioned demand.

b) Ice factory, Ice candies and cold storage consumers shall pay Fixed Charges as specified in respective Schedule of Tariff.

Accordingly, detailed procedure for billing of seasonal industries has been specified in condition 18 of General Conditions of Tariff, annexed with this Tariff Order, which shall be applicable for the season commencing during FY 2018-19. However, Industries falling under seasonal category shall have the option to be considered under respective General Industrial category.

4.4.5 **Regularization of load:** With the introduction of Two Part Tariff**,** information on the Load/Demand of the consumer becomes more important as Fixed Charges are linked to the Load/demand of the consumers. It was felt that the consumers while taking connection would have declared a load as per their installation at that time, but with the passage of time may have added more load without getting it regularized from the Utility. Accordingly, in the Tariff Order for FY 2017-18, PSPCL was directed to give an opportunity to DS, NRS and SP Category of Consumers, allowing them to get their load regularized without any penalty. The Utility was also directed to give wide publicity regarding the VDS scheme. But, it has been gathered that due to lack of adequate awareness about the Scheme, many consumers have not yet got their load regularized.

Therefore, the Commission directs the Utility to further extend the voluntarily Disclosure Scheme (VDS) for another 6 months, allowing all categories of Consumers to get their load regularized without any penalty, on same terms and conditions as mentioned in the Tariff order for FY 2017-18. PSPCL is again directed to give wide publicity regarding the VDS scheme. Performa, free of charge, containing simple format for load declaration be sent to all consumers along with the electricity bills and special counters be setup in sub-divisions for guiding consumers in declaration of their load and accepting the load declaration forms. Load declaration shall be accepted without any charges and receipt properly acknowledged. Applicable Charges for load regularization, if any, shall be recoverable through separate bill cum notice. The load shall be deemed to be regularized from the date of submission of the self declaration proforma. Special teams at Circle, Division and sub-division level be constituted for helping consumers to get their load regularized without any hassle. PSPCL is also directed to inspect the consumer loads during the VDS

scheme, with prior intimation/information to the consumers and guide them for regularisation of the excess load, if any, without any penalty. PSPCL should submit response to the VDS scheme to the Commission on monthly basis along with details regarding inspections.

4.5 Tariff Categories/Sub-categories:

4.5.1 Arc Furnaces & Power Intensive Units (PIU):

a) Various consumers/Associations in their objections/suggestions submitted to Commission have suggested merging of Arc Furnaces & PIU categories with the General Industrial Category. However, PSPCL has commented that since the Arc Furnaces and other PIU Industries affect the distribution system of PSPCL more than that of General Industry these cannot be considered under general category and has submitted as under:

i) The load of these PIU industry is non-linear.

ii) The non-linear nature of these loads distorts the voltage waveform and pollutes the power quality.

iii) The presence of harmonics in the system reduces the Distribution capacity of the Utilities. The capacity loss increases with the increase in non-linear load.

iv) As the harmonic current increases, the true maximum demand will increase. But the static energy meters will record only RMS value of maximum demand. The excess demand increases with the increase in non-linear load.

v) The non-linear load will not exhibit true power factor. The true power factor of non-linear load is low where harmonic currents are present.

vi) The presence of harmonics in the system increases the Iron/Energy Losses of Utility Power Transformers. The energy loss in Utility power transformer increases with the increase in non-linear load.

vii) The Utility has to invest more to provide higher level of short circuit MVA to absorb the power quality pollutants created by the industry having a large capacity of non-linear loads.

The Commission notes that the provisions for compliance with the specified harmonics standards, measurements/monitoring of harmonics currents generated by a consumer and provision for penal action against consumers contributing harmonic distortion in excess of the specified standards already exists in Regulation 24 of the Supply Code 2014. However, PSPCL is yet to submit a proposal before the Commission, regarding the penalty to be levied on the consumers contributing harmonic distortion in excess of the specified standards. **Thus, till a system for measurements/monitoring of Harmonics currents generated by a consumer and levy of penalty on the consumers contributing harmonic distortions in excess of the specified standards is put in place, the Commission decides to give some relief in the fixed charges payable by the Arc/ PIU units.**

b) Some of the consumers /Associations in their objections/suggestions submitted to Commission have submitted that, existing instructions are not clear about the slab rates for charging of Fixed/Energy charges to be levied from the consumers having mixed loads i.e. where in addition to Arc/ Power Intensive loads, general industrial loads are also running.

In order to clarify the issue, the Commission decides that:

Henceforth, in case of mixed nature of loads where in addition to Arc/ Power Intensive loads, general industrial loads are also running, Fixed and Energy Charges shall be determined by computing the Maximum Demand and energy consumption for the billing month on pro-rata basis in proportion to such demands sanctioned by the distribution licensee and applicable tariff (Fixed Charge and Energy Charge) shall be as specified against the corresponding demand slab (without clubbing of Arc/Power Intensive and general load) under the relevant schedule of tariff.

For example, in case a consumer having sanctioned load/demand of 1800 kVA for General load and 900 kVA for Power Intensive load, has maximum recorded Demand of 2400 kVA and energy consumption of 6 LU (kVAh) during a billing month, his billing shall be carried out separately for General and Arc/PIU loads as under:

Contract Demand (CD)	**General load**	**Arc/PIU Load**
	1800 kVA	900 kVA
Computation of Billing Demand on pro-rata basis corresponding to the recorded max demand of 2400 kVA	2400*(1800/(1800+900)) =1600 kVA or 80% of CD for general load, whichever is higher	2400*(900/(1800+900)) = 800 kVA or 80% of CD for Arc/PIU load, whichever is higher
Computation of energy consumption on pro-rata basis corresponding to the recorded consumption of 6 LU (kVAh)	6*(1800/(1800+900)) = 4 LU (kVAh)	6*(900/(1800+900)) = 2 LU (kVAh)
Applicable Tariff (Fixed Charges & Energy Charge)	As applicable to CD of 1800 kVA i.e. demand slab of 1001-2500 kVA under the Schedule of Tariff for General Industry	As applicable to CD of 900 kVA i.e. demand slab of 101-1000 kVA under the Schedule of Tariff for Arc / PIU Industry

4.5.2 **Information Technology (IT) units**: The Commission refers to its letter no. 3735 dated 27.07.2011 wherein it was desired that:

"..... PSPCL may frame the policy for release of electricity connections to IT and IT Enabled Services, Communication & Electronics Industry, Knowledge Parks and Biotechnology Industries depending upon the nature of job. Service Providers, even if Service Tax is exempted, should be covered under NRS category and the electricity connections to those units which are liable to pay Excise Duty, even if exempted from payment of Excise Duty, may be covered under Industrial Tariff."

Now, since Service Tax and Excise Duty have been merged into GST, the above criteria may no longer hold good. **Thus, the Commission decides that IT units covered under definition of 'Electronic Hardware and Information Technology (IT) Sector'** ***as per the GoP notification no. 17/7/2014-AS 1/ 1372 dated 09.11.2015 or as amended from time to time, shall be covered under Schedule of Tariff for respective Industrial Category."***

4.5.3 **The Commission also decides to have a simplified single-slab tariff for NRS Consumers having Load/demand in excess of 20 kW/kVA (in place of 50 kW/kVA).**

4.5.4 **Additional Industries covered under Seasonal industry**:

a) Punjab State Agriculture Marketing Board vide letter dated 15.02.2018 regarding Maize Dryers has submitted that:

"It is requested that as per agricultural policy draft of Punjab Government the area under maize has to be increased from 1.3 lakh hectare to 5.5 lakh hectare. At the time of the maize harvesting, relative humidity is very high in the air, this result in the higher moisture content (which varies from 20% to 30%). Whereas, the ideal storage moisture content is 14% or less. Due to the excessive moisture content the maize grains get affected by Alfa toxin fungus. Due to this maize grains get infested which are unsuitable for human and industrial consumption. This was a big hurdle to increase the area under maize cultivation. To overcome this problem Punjab State Agricultural Marketing Board had established Maize Drying Centers.

The Maize arrival in the Punjab is limited to the period only from 1st June to 30th November. These centers are working only for this period, but Board is paying electricity bill of the above mentioned units, whole of the year. Thus, this increase the drying charges of the maize. The farmers of Punjab State are already in financial crisis. Beside this the ground water level is going down day by day. To *avoid this practice the growing of maize is one of the measures.*

So, it is requested that maize drying centers may also be declare as "Seasonal Industry" at par with the rice shellers and ice factories. So that Mandi Board will get the benefit of adjusting off seasonal minimum electricity bill in the main seasonal period."

PSPCL has also proposed that maize dryer plants may be considered under seasonal industrial category.

b) Also, Punjab Agri. Export Corporation Ltd. vide its letter dated 27.11.2017 has informed the Commission that 'fruits and vegetables processing, packing and storage facilities' are functioning on seasonable basis.

Condition No. 18 of the General Conditions of Tariff defines Seasonal industries as industries/factories which by virtue of nature of their production work during part of the year upto a maximum of 9 months during the period of 1st September to 31st May the next year. However, the seasonal period for rice shellers has been considered from 1st October to 30th June next year. The Commission observes that the stipulation of seasonal period of September/October to May/June is causing exclusion of many of the industries which by virtue of the nature of their production are also seasonal in nature and work only during a part of the year, from getting the benefit of seasonal industry.

Thus, the Commission decides to simplify/amend the definition of seasonal industry in General Conditions of Tariff and include the Maize Dryer Units and Food (including fruits and vegetables) processing, packing and storage units under the seasonal Industry. Amended definition, list of industries covered under seasonal category and detailed procedure for billing of seasonal industry has been specified in Condition 18 of General Conditions of Tariff.

4.6 Cost of Supply (CoS)

In view of the provisions of Electricity Act, 2003, National Electricity Policy and directions of the Commission. PSPCL, at the time of processing of ARR and Determination of Tariff petition for FY 2013-14, submitted the CoS study report. The study report contained detailed explanation on the approach and the methodology developed, results obtained from the two methodologies referred to as Methodology-I and Methodology-II. The report was made available for offering comments/suggestions by the stakeholders, and after considering various comments/suggestions made by the stakeholders and the response of PSPCL, the

Commission decided to adopt Methodology II for determination of CoS of various categories of consumers.

4.6.1 Indicative voltage-wise, category-wise cost of supply for the respective years, on the basis of results obtained with Methodology-II was made part of the Tariff Orders w.e.f. FY 2013-14. The Commission also observed 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 the 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. The Commission is raising the tariff of subsidized consumers gradually to reduce this gap, and at the same time avoiding a tariff shock to subsidized consumers and bringing the tariffs of various consumers within reasonable levels of their cost to serve. Moreover, PSPCL has not so far completed the work of preparing Asset Registers, without which voltage-wise/category-wise assets could not be determined accurately. Thus, voltage-wise/category-wise Cost of Supply (CoS) worked out on the basis of estimated data supplied by PSPCL may not be depicting the actual cost of supply.

The indicative voltage-wise, category-wise CoS for the year 2018-19, based on data submitted by PSPCL in this Petition, using Methodology II is annexed as Annexure-V of this Tariff Order.

4.6.2 Further, in order to move in the direction of CoS, the Commission decided to give rebate in the Tariff Orders w.e.f. FY 2013-14, to the various categories of consumers getting supply at 11/33/66/132/220 kV (at 400 kV w.e.f. Tariff Order for FY 2015-16).

The Commission decides to continue with the voltage rebates, as mentioned in para 6.2 [Note (v) under Table 6.2].

4.7 kVAh Tariff and Contract Demand system

4.7.1 The Commission in the Tariff Order for FY 2014-15 introduced the kVAh tariff for Large Supply, Bulk Supply, Railway Traction, Medium Supply, DS (load more than 100 kW) and NRS (load more than 100 kW) categories of consumers. The Commission further extended kVAh Tariff and Contract Demand system to DS and NRS categories of consumers having connected Load exceeding 50 kW and upto 100 kW, in the Tariff Order for FY 2015-16.

4.7.2 As, the introduction of kVAh Tariff and Contract Demand system requires readiness on the part of the Utility such as installation of compatible meters on such consumers, PSPCL was directed in the Tariff Order for FY 2017-18, to submit the roadmap for introduction of contract demand system for the SP Industrial category and other (remaining) consumers having load in excess of 20 kW, within 3 months from the issue of Tariff Order. In compliance thereof, PSPCL vide its letter dated 08.02.2018 has intimated that all field offices has been instructed to record kVAh reading for SP category and other (remaining) consumers having load in excess of 20 kW and to replace energy meters not compatible with kVAh reading for these categories of consumers at the earliest. PSPCL also furnished copy of CC No. 6 of 2018 dated 25.01.2018 containing instructions regarding the same.

4.7.3 The Commission observes that, kVAh Tariff and Contract Demand system is a win-win situation for the consumers as well as the utility. For the utility, the prime benefit is maintenance of high power factor by the consumers of these categories, which in turn helps in improving the system parameters and reduces technical losses, interruptions etc. It also translates into direct monetary benefit to the utility through reduced cost incurred on installation of HT/LT capacitors at line/distribution transformers. In case, the power factor is not maintained at desired levels by the consumers, then licensee automatically recovers higher revenue from the consumers responsible for having lower power factor on account of higher consumption. On the other hand kVAh Tariff Contract Demand system is advantageous to the consumers also in the sense, that it give them flexibility in installation of additional electricity consuming equipments provided they keeps their demand within the sanctioned limits. Also, if a consumer improves/maintains his power factor more than conversion factor fixed for that category of consumers, then his energy consumption gets reduced, thereby resulting in lower electricity bills.

The Commission, therefore, decides to extend the kVAh Tariff and Contract Demand system for the Non-Residential Supply (NRS) consumers with load exceeding 20 kW and upto 50 kW, all Small Power Industrial Supply (SP) consumers and other consumers with load exceeding 20 kW (except Domestic Supply consumers with load upto 50 kW, Public Lighting, AP & AP High Technology/High Density Farming) as under:

i) PSPCL is directed to issue notice to all such consumers within one month of issue of this Order and consumers shall declare their contract demand within two months of the issue of notice. It may also be mentioned in the notice that if a consumer fails to declare his contract demand within the specified period, his sanctioned load shall be converted into sanctioned contract demand in kVA by using 0.90 power factor, subject to a maximum

of 20 kVA in case of SP consumers.

ii) **The kVAh tariff <u>shall be applicable with effect from 01.08.2018.</u> However, PSPCL is advised to continue to record energy consumption in kWh for the purpose of Energy Balance and Energy Audit purpose and for any other purpose for which energy consumption data in kWh is required.**

iii) **The Commission expects that all such consumers have already been provided with kVAh meters. In case of any exception, the distribution licensee is directed to provide the same within two months of issue of this Tariff Order. However, consumers shall be at liberty to arrange their own compatible meters and get these installed from PSPCL before this date, as per the laid down procedure.**

iv) **Henceforth, no Power Factor Surcharge and/or load Surcharge shall be leviable from consumers covered under kVA/kVAh Tariff. These consumers shall have flexibility in installation of additional equipments/load, provided they keep their demand within the sanctioned limits. The Fixed charges shall be levied as per Condition 9 of General Conditions of Tariff.**

4.8 **Additional Charge for Continuous Process Industry and Steel Rolling Mills**

The Commission in Tariff Order for FY 2017-18, has already discontinued the levy of the additional charge (of 10 paise/unit over and above the normal tariff on the pro-rata consumption) for running the industry on a continuous basis.

In view of the continuing surplus power scenario, the Commission also decides to discontinue 5% surcharge being levied on Steel Rolling Mills consumers as per Condition 14 of General Conditions of Tariff,

4.9 EV Charging Stations

Electric Vehicle (EV) Charging Stations are now required for the recharging of electric vehicles, such as plug-in electric vehicles, including electric cars, neighborhood electric vehicles and plug-in hybrids. As plug-in hybrid electric vehicles and battery electric vehicle ownership are expanding, there is a growing need for widely distributed publicly accessible charging stations, some of which will need to support faster charging. Accordingly, PSPCL was directed to submit a proposal for the same. PSPCL vide its letter dated 22.02.2018 has proposed that a new special category tariff for battery swapping infrastructure to serve E-vehicles may be introduced at reduced tariff in order to promote green energy.

Thus, in order to encourage the Electric Vehicles by providing publicly accessible charging stations, the Commission decides to charge 'EV Charging Stations' under Single Part Tariff at the rate of ₹5.00 per kVAh under the Schedule of Tariff applicable for NRS category. However, charging of EV vehicles by individual consumers for their own purpose shall be allowed under the relevant schedule of tariff applicable to the individual consumer.

Chapter 5
Directives

Compliance of Commission's Directives

The Commission has been issuing various directions to PSPCL through Tariff Orders in order to bring efficiency, transparency in the operations of the distribution licensee and also to ensure availability of quality power at affordable rates to all sections of the society as envisaged in the Electricity Act, 2003. The distribution licensee is required to achieve minimum Standards of Performance (SoP) as specified in the Supply Code issued by the Commission under section 57 & 58 of the Act. However, it has been observed by the Commission that PSPCL has failed repeatedly to comply with the directions of the Commission. The status of compliance of directives issued in the Tariff Order for MYT Control Period from FY 2017-18 to FY 2019-20 along with the comments of the Commission and further directives for compliance of PSPCL during FY 2018-19 is summarized as under:

<u>Directive No.5.1</u>: T&D Loss Reduction:

(i) Shifting of meters outside consumer premises

Directive for FY 2017-18

In the Tariff Order for FY 2016-17, the Commission directed PSPCL to shift all meters of Non-APDRP areas under Phase II by July 2016 & In-house by Dec. 2016. However, PSPCL could shift only 35000 meters under Phase II and just 5000 meters departmentally during FY 2016-17. Thus 4.06 lac meters are yet to be shifted in Non-APDRP areas. PSPCL in its status report ending Dec. 2016 assured that all pending meters under non-APDRP areas shall be shifted by March 2017. The repeated failure of PSPCL to achieve its own targets is one of the reasons for non-achievement of T&D loss reduction targets fixed by the Commission.

Under R-APDRP towns, PSPCL was directed to complete shifting of meters by March, 2017 which was the date fixed by MoP/GoI for completion of works under R-APDRP. However, there are still 1.92 lac meters pending which the licensee intends to complete during FY 2017-18. Any loss of grant due to delay in completion of R-APDRP works shall be treated as gross violation of the directions of the Commission and shall not be allowed as pass through in the ARR. In addition, penalty under section 142 of the Act shall also be imposed.

Third Party Audit:

The Commission observes that lot of time has been lost by PSPCL in the implementation of

Order of the Commission dated 26.05.2015 in Petition No. 25 of 2015 for third party audit. PSPCL was directed to award work by August 2015 but work was allotted in April 2016. A list of randomly selected 126 feeders was approved by the Commission in May 2016 and the work was to be completed within 9 months but PSPCL after a gap of almost 9 months, informed the Commission vide letter dated 01.03.2017 that the study on 73 feeders is not possible due to change in the configuration of these feeders due to bifurcation etc. PSPCL should have verified the status of feeders before submitting the list for random selection to the Commission. It clearly shows the casual approach of the distribution licensee and its officers in implementing the orders/ directions of the Commission. The work of 53 number feeders was started in April 2016 and should have been completed as per the timelines in the work order. No report has been submitted to the Commission. In the status report, no timelines for completion of job has been committed. PSPCL is directed to submit the report of feeders where study has been completed along with timelines for completion of the job within one month of the issue of this tariff order. No further delay shall be allowed. Strict action shall be initiated in case of failure to accomplish the job in a time bound manner.

Reply of PSPCL:

Scheme wise detail of meter shifted ending December-2017 and balance meters required to be shifted is as under:

Scheme		Total Meters Covered Under The Scheme (In Lacs)	Revised Scope	Total Meter Shifted Upto 12/2017 (In Lacs)	Balance Meters To Be Shifted (In Lacs)
Non-APDRP	Phase-I	20.81	20.81	20.81	0
	Phase-II	11.81	9.22	7.92	1.30
	In-house	5.48	8.07	5.52	2.55
R-APDRP	(Part-B)	11.54	11.58	10.34	1.24
Total		49.64	49.68	44.59	5.09

Remarks:

Phase-II:

Under Phase-II, balance work of 1.30 Lac meters is pending on account of following reasons which are beyond control of PSPCL:

1. Approx. 0.99 Lac connections is pending due to stiff resistance by consumers in DS Circle Sangrur, Barnala, Bathinda and Faridkot despite several attempts by PSPCL by taking up the matter with Punjab Government/District Administration to provide police protection.

2. Work of 0.31 Lac connections in DS Circle Patiala is pending due to court/Arbitration

case with M/s Jindal Traders, Barnala. Now decision of Arbitrator has been received and tender is being called for completion of work. After sorting out the above disputes, balance work of 1.30 Lac connections shall be completed by PSPCL.

In-house:

Under In-house category also, the balance meters pertain mainly to those pockets where resistance is met from Kissan Unions etc.

R-APDRP (Part-B):

A total of 46 towns have been covered under R-APDRP Part-B scheme. The work of 13 towns has been completed upto December 2016 before the date fixed by MoP/GoI as 03/2017 for completion of work under R-APDRP Part-B scheme. For the remaining 33 towns GOI/MoP/PFC has given extension upto 03/2018 for completion of work under R-APDRP (Part-B) scheme. Till 31.12.2017 the work of a total 18 towns has been completed & the work of remaining 28 towns will be completed by 31.3.2018 the deadline fixed by GoI/MoP/PFC. Upto date status of meters shifted upto 31.12.2017 is as under:

Sr. No.	Name of Contractor	Quantity as per IOs Issued	Shifted up-to 31.12.2017	Balance to be shifted	Target Date During 2017-18
1.	M/s L&T (02 Towns)	264135	264135	0	0
2.	M/s Godrej (16 Towns)	211971	208239	3732	3732
3.	15 Towns	544046	461335	82711	82711
4.	M/s Nucon Switchgear Pvt. Ltd. (07 Towns)	65591	58674	6917	6917
5.	M/s Shreem Electric Ltd. (06 Towns)	72538	41788	30750	30750
	Total	**11,58,281**	**10,34,171**	**1,24,110**	**1,24,110**

The delay in completion of R-APDRP work was due to cancellation of work allotted to M/S A2Z Engineering Pvt. Ltd. on dated 10.05.2013 for 22 towns and reallocation of work of 12 towns to M/S Nucon Switchgear Pvt. Ltd. & M/S Shree Electric Ltd. on 06.01.16 with time period for completion of work in 26 months. In Amritsar town for shifting of meter outside consumer premises, the contractor M/s UBI Tech Faridabad has left the work without completing the scope of work as per work order. Now the work of shifting the remaining meters is to be carried out departmentally with outsourced labour. The work will be completed by 31.03.2018. At this stage no difficulty is foreseen for conversion of loans into grant under R-APDRP (Part-B) scheme.

Third Party Audit

Work order no.84 dated 26.04.2016 was placed upon M/s Wapcos Limited, New Delhi. 126 No. 11 KV Feeders was randomly selected by the Commission for evaluation.

67 evaluation reports submitted by third party independent evaluation agency along with feeder wise abstract of benefits as per evaluation reports has been submitted to the Commission vide this office Memo No. 2354 dated 22-11-2017 for kind information and consideration of Commission please. The evaluation reports of 32 more feeders have been submitted by the agency and after receipt of report of balance 26 feeders, the complete report shall be submitted to the Commission.

PSERC Comments & Directive:

Though PSPCL assured to shift all meters under non-APDRP areas by March, 2017, there are still 3.85 lac meters pending for shifting under Non-APDRP areas. Ending March 2017, 1.92 lac meters were pending under R-APDRP scheme. Now PSPCL has indicated that 1.24 lac meters are pending as on 31.12.2017 which shows that only about 68000 meters have been shifted in 9 months. MoP/GoI has extended the date for completion of the work to 31.03.2018. PSPCL is directed to ensure completion of the job within stipulated time. The Commission reiterates that any loss of grant due to delay in completion of R-APDRP works shall be treated as gross violation of the directions of the Commission and shall not be allowed as pass through in the ARR.

Third Party Audit

The compliance of Order of the Commission dated 26.05.2015 in petition No.25 of 2015 for Third Party Audit has been delayed by PSPCL. The work order was issued on 26.04.2016 and schedule of completion was 9 months. However, reports of only 67 feeders have been supplied by PSPCL in November, 2017. The licensee was asked vide letter dated 20.12.2017 to supply the T&D losses of all 67 feeders for FY 2015-16 and FY 2016-17 but no information has been received from PSPCL. The Commission directs PSPCL to supply the data along with audit report of remaining feeders within a month of the issue of this tariff order.

(ii) Replacement of Electro-mechanical (E/M) meters

a) 3-ф meters: SP/DS/ NRS

Directive for FY 2017-18

During review meeting held on 14.10.2016, Director/ Distribution assured that all 3-ф electromechanical meters shall be replaced by Dec. 2016 but 223 meters are still pending. PSPCL has repeatedly failed to complete the job in a time bound manner.

Reply of PSPCL

There are 42 electromechanical meters balance as on 30.12.2017. These will be replaced shortly.

PSERC Comments & Directive:

The replacement of 3 ϕ electromechanical meters with electronic meters is painfully slow as only 223 Nos. were pending for replacement ending 03/17 but 42 meters are still pending for replacement ending 12/2017. This implies that only 181 meters have been replaced with electronic meters in nine months. PSPCL is directed to complete the job immediately.

b) 1-ф electromagnetic meters (DS/NRS)

Directive for FY 2017-18

The Commission notes with concern that 8.52 lac single phase electro-mechanical meters were pending for replacement ending March 2016 and PSPCL was directed in the T.O for FY 2016-17 to replace all by March 2017. However, ending March 2017, there are still over 7.00 lac meters pending for replacement.

PSPCL could replace only 1.49 lac meters during FY 2016-17. Thus the target for replacement of over 7.00 lac meter during FY 2017-18 appears to be unrealistic.

The consistent non-implementation of the directions of the Commission has resulted in failure of the distribution licensee to achieve T&D loss target fixed by the Commission. No further slippage of target date shall be allowed by the Commission. Failure to replace all meters as committed by PSPCL will result in penalty.

Reply of PSPCL

As on 31.12.2017, there are balance 6.22 Lac single phase electromechanical meters are pending to be replaced.

Detail	SAP area	Non-SAP area
1 phase electromechanical meters balance as on 31.03.2017	291648	411392
Meters replaced upto 30.06.2017	10711	8447
Meters replaced upto 30.09.2017	25502	14854
Meters replaced upto 31.12.2017	14599	7238
Balance Target for 2017-18	240836	380853

There is already a provision existing in the billing software of SAP and Non- SAP system for having a unique identification code for electro-mechanical and electronic meters.

PSERC Comments & Directive:

As per the status report ending March, 2017 submitted by PSPCL, the licensee assured that balance 7.03 lac meters will be replaced by March 2018 but it is a matter of concern that PSPCL could replace only 81351 meters in nine months and replacement of 6,21,689 meters is still pending. PSPCL has not provided any timelines for completion of the job. PSPCL is directed to submit the roadmap of replacement of 1-ф electromagnetic meters with electronic meters within 15 days of the issue of this tariff order.

iii) Reduction in Transformer damage rate:

Directive for FY 2017-18

The Commission notes the action and directs PSPCL to ensure de-loading of all overloaded distribution transformers.

Reply of PSPCL:

Damage rate of DT's	Upto 12-2016	Upto 12-2017
	3.71	3.60

There are 7471 small Capacity DTs and 223 large capacity DTs which are overloaded as on 30.12.2017, due to extension in load by AP consumers and natural growth of general consumers. These are being de-loaded on priority.

PSERC Comments & Directive:

PSPCL is directed to de-load all overloaded transformers before start of paddy season and submit a comprehensive report to the Commission by June, 2018.

Directive No.5.2: Implementation of R-APDRP Scheme:

(a) R-APDRP (Part A):

Directive for FY 2017-18

The scrutiny of on-line data for FY 2016-17 available on PSPCL website reveals that out of 47 towns, only 10 towns have losses below 15%. There are 6 towns with AT&C losses above 40%, 14 towns with losses between 30% to 40% and 17 towns with losses between 15% to 30%. There are 2 towns with collection efficiency below 60%. Malout town has AT&C loss of 60.11% with billing efficiency of 69.71% and collection efficiency of 57.22% for full year. PSPCL is directed to take action against delinquent officials/ officers for loss of revenue to the utility due to poor collection efficiency in these towns under intimation to the Commission. It is a matter of concern that huge investment made under R-APDRP scheme has failed to yield the desired results**.**

Reply of PSPCL:

The necessary instructions have been given to field officers regarding regular updation of consumer mapping to improve the AT&C losses of towns. Training regarding the same is also being given to field offices. AT&C losses of some these towns are not within the baseline of PFC/MoP. Presently, no town has less than 60% collection efficiency. Most of the towns have above 90% collection efficiency. Collection efficiency of few towns was less due to inflated/outsourced bills generated at field offices. Necessary instructions have been given to field offices for timely correction of outsourced bills.

PSERC Comments & Directive:

All the 47 towns have been declared 'Go Live' by April 2015. PSPCL shall ensure that part A of the R-APDRP scheme is implemented as per the guidelines of MoP/GoI and 100% grant is availed under the scheme.

<u>Distribution SCADA/ DMS</u>

Directive for FY 2017-18

The Commission notes the progress for implementation of SCADA for three towns. The progress of the SCADA system installation & commissioning be shared with the Commission on quarterly basis. The Commission directs PSPCL to ensure timely commissioning of SCADA.

Reply of PSPCL:

All the DRS/FDS/FAT (Data Required Sheet/Functional Design specifications/Factory Acceptance test) documents submitted to PSPCL have been approved.

All the three Supervisory Control And Data Acquisition (SCADA)/Document Management System (DMS) control centre buildings have been completed and control centre equipments have been installed and commissioned successfully by M/s Siemens.

All the 79 Remote Terminal Units (RTUs) have reached at the respective sites in all the three towns. Till date 76 have been installed.

All the 69 Feeder Remote Terminal Units (FRTUs) have been installed at respective sites in all three towns.

PSERC Comments & Directive:

The Commission notes the action taken. PSPCL should ensure successful completion of the project within the stipulated time.

<u>Management Information System (MIS):</u>

Directive for FY 2017-18

The Commission observes that tracking meter replacements, key exceptions etc, are not available on PSPCL website and also the data for AT&C loss of various towns are not correct. PSPCL should ensure correct data on its website.

Reply of PSPCL:

The necessary instructions have been given to field officers to ensure correctness/ improvement of AT&C losses. Information regarding Key exceptions report is now available at PSPCL website.

PSERC Comments & Directive:

Under UDAY scheme, PSPCL is required to implement MIS for tracking meter replacement, key exceptions etc. The status report is silent on its implementation. PSPCL should submit the latest status immediately.

(b) R-APDRP (Part B):

Directive for FY 2017-18

In the status report ending Dec. 2016, PSPCL reported 100% completion of work by L&T and Godrej. However, the status report ending March 2017 shows that some work is still pending. PSPCL is advised to submit the correct and verified data to the Commission.

As per R-APDRP (Part B) scheme of MoP/GoI, if the distribution utility achieves 15% AT&C loss level on sustained basis for 5 years in the project area and the project is completed within the time schedule then upto 50% loan is converted into grant every year starting from the year in which the base line data is verified by an independent agency. Now MoP/GoI has fixed the completion date as 31.3.2017, which has not been achieved by the utility. PSPCL is expecting extension in target date from GoI. The Commission reiterates its directions that R-APDRP schemes should be implemented by PSPCL in the time frame fixed by MOP/GOI/ so that 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.

Reply of PSPCL:

Total 46 towns has been covered under R-APDRP Part-B scheme. The work of 13 towns has been completed upto December 2016 before the date fixed by MoP/GoI as 03/2017 for completion of work under R-APDRP Part-B scheme. For the remaining 33 no. towns GOI/MoP/PFC has given extension upto 03/2018 for completion of work. Till 31.10.2017 the work of total 15 towns has been completed & the work of remaining 31 towns will be completed by 31.3.2018 as per the deadline fixed by GoI/MoP/PFC. Firm-wise progress of shifting of meters is as under:

<table>
<tr><td></td><td colspan="4">Scope: Strengthen sub-transmission and Distribution System of 46 towns of Punjab with DPRs cost of ₹ 1632 .70 crore</td></tr>
<tr><td rowspan="5">Work in Progress</td><td>Name of Firm</td><td>No. of Package</td><td>No. of Towns</td><td>Status of work completed as on 31.12.2017</td></tr>
<tr><td>L&T</td><td>4</td><td>3</td><td>98.00%</td></tr>
<tr><td>Godrej</td><td>2</td><td>20</td><td>92.05%</td></tr>
<tr><td>M/s Nucon switchgear Ltd.</td><td>1</td><td>16</td><td>73.5%</td></tr>
<tr><td>M/s Shreem Electric Ltd.</td><td>1</td><td>6</td><td>58.73%</td></tr>
<tr><td></td><td colspan="4">Work of Patiala town already completed departmentally.</td></tr>
</table>

PSERC Comments & Directive:

The Commission reiterates that PSPCL should ensure that the work is completed on time so that the 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.

<u>Directive No.5.3</u>: Energy Audit:

Directive for FY 2017-18

In the TO for FY 2016-17, the Commission had observed that 44 towns have AT&C losses more than 15% and had expected PSPCL to take remedial measures to reduce losses. However, the scrutiny of on-line data for FY 2016-17 available on PSPCL website reveals that out of 47 towns, only 10 towns have losses below 15%. There are 6 towns with AT&C losses above 40%, 14 towns with losses between 30% to 40% and 17 towns with losses between 15% to 30%. There are 2 towns with collection efficiency below 60%. Malout town has AT&C loss of 60.11% with billing efficiency of 69.71% and collection efficiency of 57.22% for full year. It is a matter of concern that huge investment made under R-APDRP scheme has failed to yield the desired results.

One of the conditions for conversion of loan into grant under R-APDRP is achievement of AT&C loss level of 15% on sustained basis for 5 years. It is apprehended that unless immediate remedial measures are taken by PSPCL, the utility may not be able to fully utilise the grant under the scheme. PSPCL is directed to analyse the reasons for high AT&C losses in these towns and submit the same to the Commission within one month along with remedial measures proposed.

Under UDAY scheme, PSPCL was required to complete consumer indexing upto 11 kV level in rural areas by Sept. 2016 but the utility has failed to achieve the target. PSPCL has now assured to complete the job by March 2017. PSPCL is directed to submit the certificate within 15 days of the issue of this TO that consumer indexing of all feeders has been updated.

Reply of PSPCL:

The necessary instructions have been given to field officers regarding regular updation of consumer mapping to improve the AT&C losses of towns. Training regarding the same is also being given to field offices. The losses of these towns are now within the baseline of PFC/MoP. Presently, no town has less than 60% collection efficiency. Most of the towns have above 90% collection efficiency. Collection efficiency of few towns was less due to inflated/outsourced bills generated at field offices. Necessary instructions have been given to field offices for timely correction of outsourced bills.

i) Indexing of 4083 rural feeders has been completed out of total of 7490 Feeders.

ii) In rural areas under IPDS scheme, PSPCL is going to implement consumer indexing upto 11 KV feeders for 97 towns. Tendering work is in progress for this project.

iii) Consumer indexing was altered due to change in feeder profiles while executing of works under various on-going schemes.

iv) Sub division wise/Division wise audit is already being done under PSPCL.

v) Based upon regular monitoring and taking corrective steps PSPCL is one of the few utilities in India which has been able to bring distribution losses below 15%.

PSERC Comments & Directive:

PSPCL was directed to submit a certificate that consumer indexing of all feeders has been updated. However, consumer indexing of only 54.5% feeders has been updated. The scrutiny of the online data available on the website of PSPCL from December 2016 to November 2017 reveals that out of 47 towns only 17 towns have AT&C losses below 15%, which is the target fixed by MoP/GoI under R-APDRP. There are 16 towns with AT&C losses more than 30%. It is surprising that Patti town has AT&C losses of 86.77% with billing efficiency of 42.18% and collection efficiency of 31.35%. The collection efficiency of 12 towns is less than 90%. In the last tariff order, PSTCL was directed to take action against the delinquent officials/ officers for high AT&C losses under the intimation to the Commission but it appears that no action has been taken by PSPCL in this regard. PSPCL must take disciplinary action against officials/officers who have been negligent in their duty to collect revenue due to the utility. In addition a drive be undertaken with the help of the district authorities to recover the dues. PSPCL is directed to complete consumer indexing on top priority and also submit a comprehensive report regarding reasons for high AT&C losses of 16 towns with losses above 30%.

Energy Audit of Thermal Generating Stations:

Directive for FY 2017-18

The Commission observes that despite claim of implementing the recommendations of Energy Audit Reports and R&M of all four units of GNDTP by PSPCL, the performance parameters of all the three plants are varying considerably from norms. The status of achievements of targets fixed under PAT-1 be shared with the Commission within one month of the issue of this Tariff order.

The proper implementation of the recommendations of Energy Audit Reports be ensured for all the three thermal plants and achievement of targets/ progress on energy savings under PAT-II scheme of GoI be shared with the Commission on quarterly basis

Reply of PSPCL:

GNDP, Bathinda:

Energy Audit of all the GNDTP units was got conducted from M/s Siri Energy & Carbon Advisory Services (P) Ltd. Hyderabad. Report of the same was sent to BEE, New Delhi & PEDA, Chandigarh.

Under PAT-1 scheme, GNDTP Bathinda was given the target of normalized Station Heat Rate (n-SHR) of 3329 Kcal/KWh against which GNDTP achieved n-SHR of 3131.875 Kcal/KWh. For this achievement, Ministry of Power, GoI, approved 49913 Energy Saving Certificates (ESCerts) to GNDTP Bathinda.

The target of n-SHR given to GNDTP Bathinda under PAT-2 cycle is 3054.93 Kcal/KWh. The PAT-2 cycle is for the period 2016-17 to 2018-19 and the normalized Station Heat Rate (n-SHR) for this period shall be determined based on the plant performance parameters of the year 2018-19. However, before normalization, the net SHR achieved during the year 2017-18 upto Dec., 2017 is 2880.66 Kcal/Kwh.

GGSSTP Ropar:

Energy Audit of all the 6 units of GGSSTP, ROPAR was conducted by M/s Zenieth Energy Systems, Bangalore against Work Order No. 241/E-88 dtd. 3.9.2015 & its report was submitted to Punjab Energy Development Agency (PEDA), Chandigarh and Bureau of Energy Efficiency (BEE), New Delhi. Also, a copy of the report was sent to PSERC. No R&M of any Unit of GGSSTP ROPAR has been carried out.

Under PAT-1 scheme, GGSSTP was given the target of normalized Station Heat Rate (n-SHR) of 2830 Kcal/KWh against which GGGSSTP was shown to have achieved n-SHR of 2887.8853 Kcal/KWh. As a result, Ministry of Power, GoI, imposed a penalty of 68200 Energy Saving Certificates (ESCerts) upon this plant.

The target of n-SHR given to GGSSTP Ropar under PAT-2 cycle is 2833.34 Kcal/KWh. The PAT-2 cycle is for the period 2016-17 to 2018-19 and the normalized Station Heat Rate (n-SHR) for this period shall be determined based on the plant performance parameters of the year 2018-19. However, before normalization, the net SHR achieved during the year 2017-18 upto Dec., 2017 is 2972.29 Kcal/Kwh.

GHTP Lehra Mohabbat:

At GHTP Lehra-Mohabbat, no R&M (Renovation & Modernisation) of any Unit has been proposed/carried out. Under PAT-1 scheme, GHTP was given the target of normalized Station Heat rate (n-SHR) of 2637 Kcal/KWh against which GHTP achieved normalized

Station heat rate of 2640.05 Kcal/KWh. As a result, Ministry of Power, GoI imposed a penalty of 2145 Energy Saving Certificates (ESCerts) upon this plant.

The target of n-SHR given to GHTP by the BEE under PAT-2 cycle is 2620.19 Kcal/KWh. The PAT-2 cycle is for the period 2016-17 to 2018-19 and the normalized Station Heat Rate (n-SHR) for this period shall be determined based on the plant performance parameters of the year 2018-19. However, before normalization, the net SHR achieved during the year 2017-18 upto Dec., 2017 is 2757.96 Kcal/Kwh. It is being ensured at GHTP that the recommendations of Energy audit Report are fully implemented so as to achieve maximum energy savings.

PSERC Comments & Directive:

The Commission observes with serious concern that GGSSTP Ropar and GHTP Lehra-Mohabbat have failed to achieve normalized SHR target of PAT-1 Scheme and are lagging far behind the target of PAT-2 Scheme. The reasons for non-achievement of targets be shared with the Commission within one month of issue of Tariff Order.

<u>Energy Audit of Hydro Generating Stations:</u>

Directive for FY 2017-18

The Commission observes that PSPCL has placed orders for GTs of MHP, UBDC, Shanan & Joginder Nagar in January, 2017. The latest status along with completion schedule must be shared with the Commission within one month of issue of this tariff order.

Reply of PSPCL:

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. Detail of auxiliary consumption and G.T. Losses in respect of all Hydel Projects of PSPCL ending Dec., 2017 is tabulated below:

Sr. No.	Name of Plant	Aux. Cons. (%)	GT Losses (%)
1.	RSD	0.22	0.11
2.	ASHP	0.094	0.171
3.	UBDC	0.20	0.31
4.	MHP	0.210	1.299
5.	Shanan	0.03	1.03

Remarks for:

1. Above Sr. No.4 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 (size 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, GT losses are higher as the generator transformers of this plant (PH-1 to PH-4) are very old and were commissioned during 1983, 1988 & 1989. 2 new 20 MVA GTs shall be commissioned near future.

Work for replacement of 132 KV CT/PTs as per State grid Code is in progress.

2. Above Sr. No. 5 Shanan:

GT losses are higher due to installation of single phase transformers instead of 3-phase T/Fs due to space constraints. These T/Fs are about 30 years old and possess iron core due to which they have higher losses. These old T/Fs are being replaced.

Latest Status of Procurement of Transformers:

1. Out of 4 nos. 20 MVA,11/132 kV Generator Transformers against purchase order cum contract agreement no 38/HPs/ED.III/M-53 dated 11.01.2017, 2 No. have been commissioned at UBDC Balance 2 No. GTs at MHP shall be commissioned during forthcoming lean period i.e. from March-May-2018.
2. Out of 7 no. Single phase 12 MVA 11/132/√3 KV Generator against P.O. No 39/HPs/ED-I/S-343/Vol.II dt.12.01.2017, 3 No. have been commissioned at Shanan HEP. Remaining 4 No. shall be commissioned upto March-2018
3. Status of tender enquires for replacement of 220kV/132kV/66kV CTs/PTs is as under:

Sr. No.	Description	Status
1.	TE No. 211 dt.28-10-16	LOI No. 240/HPs/ED-III/M-106/Vol.II dt. 08.02.2018 issued to M/s. Mehru Electrical & Mechanical Engineers (P) Ltd. Bhiwadi. The delivery period as per tender enquiry for all types of CTs shall be within 4 months from the date of approval of drawings. The drawings needs to be submitted by the firm within 21 days from the date of issue of P.O.
2.	TE No. 212 dt.28-10-16	P.O. No. 49/HPs/ED-III/M-107dated 25-10-17 placed on M/s Mehru Electrical & Mechanical engineers Pvt. ltd., Bhiwadi. All types of PTs shall be supplied within 4 months from the date of approval of drawings. The drawings has been approved on 09.01.2018.

PSERC Comments & Directive:

PSPCL is directed to share the status of replacement of remaining GTs and CTs/PTs within one month of issue of Tariff Order for FY 2018-19.

Directive No.5.4: Demand Side Management Energy Conservation:

I) Efficient Lighting

Directive for FY 2017-18

The Commission notes with concern that for the last two years, PSPCL has been assuring that scheme for implementation to replace 16 lac ICLs with LEDs under DELP will be implemented but not a single LED has been distributed.

Now PSPCL has informed that LEDs will be distributed to consumers through EESL at subsidised rates under UJALA scheme of GoI. The energy saving measure in lighting sector is one of the most effective tool to tackle demand curve during peak load hours and many DISCOMs have taken a very proactive action to implement the scheme. PSPCL should finalise the project on top priority and intimate the status within 15 days of the issue of this TO.

Reply of PSPCL:

After the clarification of various terms and conditions an Agenda regarding implementation of National UJALA Program in the state of Punjab, was placed in the 191st meeting of WTD PSPCL, held on 06.04.2017. In this meeting, in-principal approval was accorded to distribute 9 Watt LED lamps, 50 Watt Energy Efficient Fans & 20 Watt LED Tube light under UJALA Scheme in Up Front Model Only. Accordingly, the UJALA Scheme was launched, on 24.05.2017 at Mohali which is being further extended in whole state of Punjab in phased manner through M/s EESL.

Under this programme, about 5.49 lac 9 watt LED Lamps at the price of ₹70/- each, around 41928 of 20 Watt LED Tube lights at the price of ₹ 220/- each and about 6942 of 50 Watt energy efficient fans at the price of ₹ 1200/- each have been distributed among the consumers of Punjab. This scheme has been successfully inaugurated in 17 circles during FY 2017-18.

PSERC Comments & Directive:

EESL has distributed 5.49 lac 9 W LED lamps, about forty two thousand 20 W tube lights and 6942 50 W fans by December, 2017. Considering the large consumer base of over 90 lac in Punjab, the pace of distribution is slow. PSPCL is directed to get the work expedited so that maximum energy saving appliances are distributed before the onset of next summer season. PSPCL shall submit the status of the project by 30.04.2018.

ii) Agricultural DSM:

PSERC Directive for FY 2017-18

The Commission observes that the pilot project started by M/s EESL on 02.08.2016 was stopped by the firm on 02.09.2016 after replacing only 14 out of 108 motors and PSPCL failed to address the issues of the project implementer or the consumers. The utility must appreciate that no DSM project particularly that of AP sector can be successfully implemented without hand holding of the licensee. PSPCL must ensure completion of pilot project immediately so that benefits may be showcased to the stakeholders including the State Government. PSPCL is directed to share the status of the project with the Commission within one month of issue of Tariff Order.

Reply of PSPCL:

To implement various energy efficiency programs in the state of Punjab, Govt. of Punjab and PSPCL identified the areas of south zone to replace 1 lac inefficient pumps with BEE 5 star rated motors. Accordingly, it was decided to implement a demonstrative pilot project of Ag-DSM for approx. 100 no. of pump at Chatipeer feeder fed from 66 KV Achal S/S under Nabha Division, Circle Patiala having 108 pumps to find out the actual energy saving potential and consider it deemed for rolling out the large scale implementation of Ag-DSM project in the State of Punjab.

M/s EESL started execution of the Ag-DSM demonstrative pilot project on the selected Chattipeer feeder. Out of 108 of AP pumpsets, 14 nos. of Pump sets were replaced. Later on M/s. EESL changed the brand of the motors to get more efficiency but it was objected by the farmers due to lesser discharge for the same rating of motor. After this the project was held up by M/s. EESL.

EESL submitted a fresh proposal wherein it was proposed that the pump sets will be distributed over the counter as a current up-scaling methodology to implement Ag-DSM Project in the state of Punjab

There were various observations and issues in the fresh proposal submitted by M/s. EESL that were required to be discussed with M/s. EESL, therefore meeting was held between EESL & PSPCL on dated 22.11.2017 in the office of CE/TA&I, PSPCL, Patiala to resolve all such issues. In the meeting various issues/points were raised by PSPCL and it was assured by M/s. EESL that these points would be discussed with higher management of EESL and the reply will be submitted at the earliest, which is awaited.

PSERC Comments & Directive:

The Commission observes that no progress has been made to revive the Agricultural DSM pilot project of 11 kV Chatipeer Feeder fed from 66 kV S/S Achal where work stands held up after replacement of 14 out of 108 pump sets covered in the project. Since EESL is not responding so PSPCL should explore alternative means to execute at least one pilot project to showcase the benefits to the stakeholders.

iii) DSM Plan / Capacity Building Programme:

Directive for FY 2017-18

The Commission observes that no tangible progress has been made by PSPCL to get the DSM plan prepared despite accepting load research report of TERI on energy savings potential of different categories of consumers. Since notification of DSM regulations in 2012, the Commission has been issuing various directions and also suggesting execution of various DSM projects but it is a matter of concern that not even a single pilot project on any DSM measure has been completed by PSPCL.For the last three years, The Commission has been approving DSM funds, as requested by PSPCL in the ARR but not a single penny has been spent by the utility. From the status reports submitted by PSPCL during the last three years, it appears that implementation of DSM measures is the last priority of the distribution licensee.

Reply of PSPCL:

MoP has launched Capacity building programme during the XIIth five year plan and PSPCL has signed MoU with BEE under this programme. Under this programme EESL will make complete DSM Action Plan for all categories of consumers of State of Punjab. BEE will provide full financial as well as technical support to PSPCL. In this context, as per the terms & conditions of MoU signed between BEE and PSPCL, EESL has empanelled M/s The Energy and Resources Institute (TERI) for study of load research and analysis.

M/s TERI has completed the survey on 1480 consumers for all categories of Punjab. The survey report submitted by M/s TERI was found satisfactory by the management and M/s EESL was informed to prepare Action plan for the state of Punjab under Capacity Building Programme.

Further, M/s. EESL submitted the action plan in which it was observed that some important observations are required to be incorporated so accordingly the same was informed to M/s EESL but the reply is still awaited.

PSERC Comments & Directive:

The above reply of the directive is a copy of the progress report ending March 2017 submitted by PSPCL during the processing of previous ARR. It shows that no progress has been made by PSPCL in implementation of DSM measures in the last 9 months. The Commission has been allowing DSM funds as sought by PSPCL, in last few tariff orders but no expenditure has been reported. PSPCL must appreciate that any reduction in peak demand, particularly during summers, with the implementation of DSM measures would increase availability of power which can be diverted to industry. PSPCL should submit the roadmap for implementation of DSM plan within a month of the issue of this tariff order.

<u>Directive No.5.5</u>: Agricultural consumption:

a) Implementation of DDUGJY

Directive for FY 2017-18

The Commission has taken a serious view of PSPCL's action to get the DPRs approved under DDUGJY by excluding Kandi Area feeders separation despite clear directions of the Commission. PSPCL is directed to ensure strict compliance of the Order of the Commission dated 24.04.2017 in Petition No. 5 of 2017 for segregation and metering of all kandi area feeders in a time bound manner. PSPCL shall submit quarterly status report of the works to the Commission.

Reply of PSPCL:

After the approval accorded by PSERC vide its orders dated 24.04.17 against the petition No. 05/2017, the detailed project reports for feeders segregation / AP consumer metering were submitted on the web portal of DDUGJY by PSPCL on 01.06.2017. A new tender enquiry for execution of works on full turnkey basis covered in Kandi Area project for feeder segregation / AP consumer metering was floated on 24.07.2017.

As per WTDs decision against Agenda No. 263 dt. 08.11.2017, Notification of Awards / Letters of Intent to eligible firms against TE No. 54 were issued on 01.12.2017. All works shall be got completed within 24 months from the date of issue of work orders as per guidelines of DDUGJY.

PSERC Comments & Directive:

As per the implementation plan submitted by PSPCL in petition no. 5 of 2017, the kandi area feeders with less than 200 tubewell connections are to be covered under 100% metering but PSPCL has not provided the status of such feeders. The Commission directs PSPCL to submit list of such feeders along with progress of installing meters on quarterly basis. PSPCL should also submit feeder wise quarterly progress on separation of Kandi Area Feeders under DDUGJY Scheme.

b) **AMR of AP feeders**

Directive for FY 2017-18:

The introduction of AMR system of 11 kV feeders, particularly AP feeders, in year 2012-13 was projected by the utility as a major achievement in bringing transparency in the operations of PSPCL. The Commission was assured that real time data for 11 kV feeders shall be made available for which access to the data shall be provided. Though, AMR data of over 2000 feeders was submitted during FY 2013-14 but PSPCL failed to provide correct data to the Commission as there was large number of discrepancies in the AMR data. Despite repeated assurances from the management of PSPCL, no AMR data has been submitted to the Commission since March 2014. In the review meeting held on 14.10.2016, Director/D admitted that data of 2604 AP feeders is being captured at the data centre and the same will be supplied to the Commission within a week but no data has been supplied to the Commission for obvious reasons. PSPCL is directed to explain the reasons for non-submission of the data and also how PSPCL has benefitted with the investment on setting up and maintaining AMR system within one month of issue of this TO. PSPCL shall ensure supply of monthly AMR data regularly to the Commission failing which cut will be imposed on AP consumption.

Reply of PSPCL:

The AMR data of pure AP feeders for the months of Jan.2017 to Dec. 2017 has already been submitted to PSERC.. The AMR data for the months of Dec.,2017 was sent to PSERC vide memo no. 2049 dated 30.01.2018. Moreover, the online access of AMR system has been provided to PSERC w.e.f. 13.09.2017.

The data of AP feeders from 376 S/Stns. is being received under AMR Project and 189 Substations is being received in R-APDRP Part-A scheme. The data of 109 substations out of balance 335 is to be covered under IPDS scheme of MoP and GoP for which tender have already been floated for implementation of AMR of these substations. The balance 226 No. substations are being covered under 11Kv rural feeder monitoring scheme of RECTPCL, New Delhi for which the work of installation of modems at 11KV rural feeders meters under this scheme has been started.

The data of in-house AMR project is being utilized for the following:-

i) The real time data of 661 AP feeders is being used for HVDS scheme under PSPCL CDM project of World bank.

ii) The AMR data of rural feeders (AP 3P3W, UPS and Kandi Area) covered under AMR project is to be utilized by RECTPCL under 11KV Rural feeders Monitoring scheme for integration with NPP (National Power portals).

iii) The AP supply duration is being monitored by Management/Field officers during paddy season from the supply hour report generated through AMR.

PSERC Comments & Directive:

PSPCL is submitting AMR data of about 1600 feeders out of a total of 5400. In the review meeting held on 14.10.2016, it was confirmed by Director/distribution that data of more than 2600 feeders are being captured at the data centre and further assured that more feeders will be covered under AMR in the coming months. However, after more than one year, PSPCL is still submitting the data of about 2400 feeders which shows that data of large number of feeders are not being submitted for obvious reasons. The Commission directs PSPCL to cover all AP feeders under AMR and also ensure accuracy of the data during FY 2018-19.

c) 100% metering on A.P. consumers fed from urban feeders

Directive for FY 2017-18:

The Commission in the TO for FY 2013-14 directed PSPCL to ensure compliance of already standing instruction to meter all AP motors fed from urban feeders. The direction has been reiterated in all subsequent TOs but the only achievement of PSPCL in the last more than 4 years is that instructions to the field officers have been issued. In the review meeting of 14.10.2016, CMD/PSPCL assured that needful shall be done within a week. However, still 1439 number AP connections fed from urban feeders are unmetered. The Commission directs PSPCL to ensure 100% metering of all such AP consumers failing which unmetered load fed from urban feeders shall not be considered for calculating AP consumption.

Reply of PSPCL:

Directions have already been given to field offices for providing 100% metering on AP motors running on urban feeders. Some resistance has been reported but still meters are being installed. 1148 AP Connections on Urban feeders are left and will be provided meters shortly**.**

PSERC Comments & Directive:

During review meeting held on 14.10.2016, it was assured by then CMD/PSPCL that all AP connections running on urban feeders will be provided meters within a week. As per the status report ending March 2017, there were 1439 unmetered AP connections running from urban feeders. The Commission directed PSPCL to ensure 100% metering of all such AP connection but still 1148 AP connections on urban feeders are unmetered. PSPCL is directed to explain the reasons for non compliance of the directions of the Commission within 15 days of the issue of this tariff order. The Commission reiterates its directive that after due validation, consumption of only metered AP consumers fed from urban feeders shall be considered while computing AP consumption.

Directive No.5.6: Employee Cost

i) Implementation of PwC Report:

Directive for FY 2017-18

The Commission directs PSPCL to plan the redeployment of existing manpower for achieving more efficiency and better performance indices with proper implementation of IT.

The roadmap for redeployment of manpower be shared with the Commission.

In view of the closure of thermal units, PSPCL is directed to initiate fresh study for optimum utilisation of existing manpower and to reduce employee cost. PSPCL is also directed to outsource its meter reading, bill collection, compliant handling & other consumer related services to save employee cost.

Reply of PSPCL:

In line with the recommendations of PwC Report, PSPCL is already conducting various in-house restructuring & re-engineering initiatives. As regards efficiency and better indices efficiency parameters have already improved manifold and PSPCL is looking forward to further Improve these indices with continuous improvement and implementation of IT. The IT implementation(R-APDRP Part A-IT systems, SAP ISU) in the distribution wing has also picked up pace and is progressing well.

For optimum utilisation of existing manpower and to reduce employee cost, the following measures are being taken:

1) Restructuring of PSPCL & PSTCL staff is already in process.
2) For Restructuring of Distribution Organisation, revised distribution norms are being framed.
3) Re-deployment of Manpower
4) Restructuring of Manpower by abolishing of, diversion & conversion of posts.

The proposal of reorganisation of distribution setup and revised staffing norms under functional setup has been finalised by the core committee constituted for the purpose and will be submitted to the Commission after approval by the BOD.

PSERC Comments & Directive:

The revised staffing norms approved by PSPCL must be submitted within one month of the issue of this tariff order.

ii) <u>Reorganization of DS on functional lines:</u>

Directive for FY 2017-18:

In the review meeting held on 14.10.2016, the Commission directed PSPCL that detailed impact assessment report of re-organisation of DS system on functional lines must be supplied to the Commission. PSPCL must submit report within one month of issue of this Tariff Order.

Reply of PSPCL:

The report has been submitted to PSERC with the reply of directives ending Sept.2017

PSERC Comments & Directive:

The report submitted by PSPCL reveals that reorganization of distribution set up on functional lines has not been implemented in Kapurthala, Hoshiarpur and Nawanshahar Circles. No Impact Assessment Report of reorganization of DS System on functional lines has been supplied by PSPCL as directed by the Commission. PSPCL is directed to submit the report within one month of issue of this Tariff Order.

Directive No.5.7: Receivables:

Directive for FY 2017-18:

The Commission observes that there is huge difference in the outstanding amount ending 3/16 reported during processing of ARR for FY 2016-17 and audited figures ending 3/16 now supplied. The outstanding amount of GSC category ending March 2016 was reported as ₹36493.59 lac which has now been reported as ₹ 68196.41 lac i.e a difference of over ₹31700 lac, which needs to be explained.

The receivables against Govt. Deptts. have further risen from ₹ 520.94 crore ending March 2016 to ₹ 756.25 crore ending March 2017. PSPCL has failed to protect its financial interests and ignored the directions of the Commission to introduce prepaid metering on Govt. Department connections in consultation with the State Govt. and also on temporary connections. In the review meeting held on 14.10.2016, the Commission referred to the success story of Manipur where revenue collection increased manifold after introduction of pre-paid meters. It was assured that pre paid meters shall be introduced. The lacklustre approach of PSPCL in this regard is not appreciated. The progress of introduction of pre-paid meters and its roll out plan must be shared by PSPCL with the Commission within one month of the issue of this Tariff Order.

Reply of PSPCL:

The offices of respective Chief Engineers/DS of various Zones have sent the amount of GSC category to the tune of ₹ 63224.95 Lacs and total defaulting amount of ₹163016.84 lac. for the period ending 3/17 whereas the office of the chief auditor has sent the audited defaulting amount of GSC category of ₹ 90271.38 Lacs and total defaulting amount as ₹ 190968.89 Lacs for the same period i.e. ending 3/17. The reason for vast difference between audited & Un-audited defaulting amount had been sought from all CEs/DS.

As regarding Govt. offices defaulting amount is concerned, efforts are being made at every level to minimize the defaulting amount against Govt. departments. Further real time window of defaulting Govt. departments connections have been got developed by this office as per directions of Hon'ble CMD of PSPCL. Moreover worthy CMD of PSPCL has also requested vide D.O. letters to Principal Secretaries/Secretaries of major defaulting Govt. departments to release funds for making payments of pending electricity bills.

Status of Defaulting Amount (₹ in lacs.) ending 12/2017 viz-a-viz 09/2017 is as under:

Category	Ending 09/17 (un-audited)	Ending 12/17 (un-audited)
Ind	113593.29	123218.04
AP	279.70	271.07
GSC	86401.31	86897.18
Others	3086.27	3588.65
Total	**203360.58**	**213974.94**

Tender enquiry No. MQP-116/2017-18 PO(M) to procure prepaid meters as a pilot project was floated with due date of opening as 07.07.2017 which was further extended vide Corrigendum No.1 with due date of opening as 23.08.2017. Corrigendum No.2 with due date of opening as 06.10.2017 and Corrigendum No.3 with due date of opening as 06.11.2017, but no firm participated. So in order to encourage participation of firms, the quantity of the tender enquiry was increased to 5000 vide Corrigendum No.-4 with due date of opening as 08-12-2017, but still no firm participated in the tender enquiry.

M/s Genus power Infrastructure had submitted representation vide which they have suggested to go for web based smart meters which can be used in prepaid mode instead of prepaid meters. As such, since no firm had participated in the tender enquiry and in view of representation of M/s Genus Power Infrastructures, the tender enquiry has been dropped and the concerned office is in the process of refloating the same with specifications based on Web meter type prepaid meter

PSERC Comments & Directive:

The Commission observes that receivables of PSPCL ending 03/2015 were ₹84,494.53 lac, which increased to ₹1,59,915.72 lac ending 03/2017 and further to ₹2,13,974.94 lac (un-audited) ending 12/2017 i.e increase of ₹54059 lac in 9 months. The outstanding amount against Government departments has increased from ₹75625 lac ending March 2017 to ₹ 107765 lac ending 12/2017 i.e an increase of ₹32140 lac. in nine months. The Commission directed PSPCL to introduce pre-paid metering in Government departments in consultation with the State Government but no action has been taken by PSPCL. The Commission observes that PSPCL has never been serious of introducing prepaid meters. PSPCL should have taken action as per the provisions of Supply Code against defaulters. The Commission directs PSPCL to disconnect the connections of defaulters except essential services as per provisions of Supply Code and ensure reduction in the receivables by atleast 25% by Sept 2018 and further 25% by March 2019 (except court cases).

<u>Directive No.5.8</u>: Mtc. of category wise details of Fixed Assets

Directive for FY 2017-18:

Commission is not convinced with the reply of PSPCL and further directs PSPCL to complete the task of preparing the Fixed Assets Cards & Record and submit its Report within a month of the issue of this Tariff Order.

Reply of PSPCL:

It is submitted that ‘PSPCL has already initiated the process of the maintenance of fixed asset register showing the identity of asset (i.e. estimate wise/scheme wise) and also presenting date of commissioning from period 16-17. Further, these fixed assets are maintained category wise (type of asset i.e. for land, office building, coal handling equipment, plant and machinery, vehicles, furniture, computers etc.). Presently the register for FY 16-17 are prepared by accounting units in excel program and same have been checked by audit wing of PSPCL as well as statutory auditor. A computer program is also under development to maintain these fixed asset records for previous years in the same manner. Further, efforts are being maintained to prepare fixed assets registers on the same pattern as of 16-17 for earlier years as well, since 16.04.10. However, due to policy of erstwhile PSEB for providing depreciation from next year of commissioning a particular asset prior to 16.04.2010 was not maintained.

PSERC Comments & Directive:

The reply of PSPCL in this regard is not convincing. PSPCL is directed to complete the preparation of Fixed Assets Cards and record without any delay and submit its report within one month from the issue of this Tariff Order.

<u>Directive No.5.9</u>: Loading status of sub-transmission system (66 kV & 33 kV)

Directive for FY 2017-18:

The Commission notes the action taken and directs PSPCL to ensure deloading of all overloaded 33/66 kV lines and grid sub-stations as per the criteria fixed by the utility.

Reply of PSPCL:

The TS Organization of PSPCL during the year 2016-17 commissioned 70 Nos 66KV Sub-station works. 658.659 Ckt. KM 66 KV transmission line has been constructed during the year 2016-17. 11KV Capacitor banks of 240.897 MVAR capacity have been added and commissioned during the year 2016-17 in the Sub transmission System. For the year 2017-18, 75 Nos. 66KV Sub-station works are to be completed & commissioned including 23 Nos. new 66KV Sub-stations. 900 Ckt. KM transmission lines shall also be completed during the year 2017-18. 300 MVAR capacity shall be added in the Sub-transmission system of the

State for further improving the efficiency in the State of Punjab. The addition of this transformation capacity shall further bring down the loading of existing 66KV Sub-stations. As per the transmission works list 2017-18 released by Planning Organisation in the month of June-2017, TS organisation of the PSPCL is working on the formulated time bound action plan to bring the loading of Sub-stations within the 70% loading limit.

As such, it may be observed that efforts are being made to keep the loading of all the Sub-stations of the State upto maximum limit of 70%. Progress of transmission/sub-transmission works to deload the system is as under:

Year	66KV Sub-station works	66KV Transmission lines (Ckt. KM)	MVA Capacity added	11 KV Capacitor Banks (MVAR Capacity Added)
2012-13	150	414.589	1510.45	61.245
2013-14	153	662.217	1499.00	438.238
2014-15	226	715.250	2222.20	334.806
2015-16	115	814.886	1130.50	191.901
2016-17	70	658.659	686.00	240.897
2017-18 ending Dec.17	38	314.739	454.50	125.212

PSERC Comments & Directive:

PSPCL was directed to de-load all overloaded 33kV/ 66 kV lines and grids as per criterion fixed. PSPCL should have supplied the data of overloaded lines & Substations and timelines to de-load rather than data of lines erected and MVAs added from FY 2012-13 onwards. PSPCL should submit a list of overloaded lines and Grid Sub-stations along with action plan to de-load the same before start of next paddy season within a month of issue of this tariff order.

Directive No.5.10: Cost Audit of generating stations

PSERC Directive for FY 2017-18:

The Commission notes the action taken by PSPCL. The Commission directs PSPCL to submit the copy of the cost audit report for FY 2014-15 within one month of the issue of this Tariff Order. PSPCL is further directed to ensure timely submission of audit report for FY 2015-16.

Reply of PSPCL:

The cost audit report of FY 2015-16 has also been sent vide this office Memo No. 2392 dated 22-12-2017. However, the printed copy of the cost audit report of FY 2015-16 is enclosed herewith.

PSERC Comments & Directive:

The Commission notes the action taken and **hence directive is dropped.**

<u>Directive No.5.11</u>: AMR of HT/DS/NRS Consumers

(i) <u>AMR of H.T. consumers:</u>

PSERC Directive for FY 2017-18:

The Commission notes that the AMR of HT consumers of 47 towns has been completed. The timelines for AMR of balance 97 towns covered in IPDS and MS consumers be shared with the Commission within one month of issue of this Tariff Order.

Reply of PSPCL:

The timelines for AMR of balance 97 towns covered in IPDS and MS consumers are upto 05-01-2020. However, all efforts will be made to complete the work as early as possible.

PSERC Comments & Directive:

PSPCL should expedite the implementation of AMR under IPDS.

(ii) AMR of DS/ NRS consumers

PSERC Directive for FY 2017-18:

The Commission notes the action taken and observes with concern that smart grid pilot project is behind schedule. The Commission directs PSPCL to submit the status along with completion timelines of Mohali project immediately. PSPCL should also submit progress of installing smart meters under UDAY scheme within one month of issue of this Tariff Order.

Reply of PSPCL:

<u>Status of Smart Grid Pilot project in PSPCL</u>

For smart Grid pilot project, WO-cum-CA No.-510/DIT-739 dated 28.04.2015 was placed upon M/s Kalkitech, Bangalore. M/s Kalkitech failed to supply the main equipment component of the project i.e. 2419 meters (1101 single phase and 1318 three phase) out of the total 2737 meters. Further, firm has not supplied or given the FAT call for any hardware items like Servers, Workstations, Routers, Switches, DCUs and Modems etc. Furthermore, Smart Grid control Center has not been commissioned by the firm and integration of Smart Grid control center with the data Center Patiala has not been done.

M/s Kalkitech has continuously defaulted causing irreparable loss to PSPCL. On account of this default, W.O. No.-510/DIT-739 dated 28.04.2015 issued to M/s Kalki Communication Technologies Pvt. Ltd. (Kalkitech), Bangalore has been terminated vide DGM/IT office Memo no. 3513/DIT-739 dated 07.08.17.

PSPCL proposal to do the implementation of the smart grid pilot project itself has been submitted to Director/NSGM for approval. In the 11th monitoring committee of IPDS held on

5th Dec. 2017, proposal of PSPCL has been approved and committee given the extension to the project upto 31.03.2018.

Status of Installation of Smart Meters

Tender enquiry no. 148/DIT-893 dated 20,9,2017 for procurement of 66000 smart meters have been floated. Due date of opening of tender enquiry no. 148 dated 4.12.2017 is extended six times as no bid received/less bids received against this TE. Now the bid opening is schedule on 22.02.2018. The work order for the project of meter data management (MDM) system has been awarded and project of MDM is under implementation stage. Procurement of hardware items is under process.

PSERC Comments & Directive:

The Commission observes that the work order to M/s Kalkitech has been terminated in August, 2017 and monitoring committee of IPDS has accepted the proposal of PSPCL to execute the project by itself. The licensee should submit the status report ending March 2018 immediately.

Regarding floating of TE 148 dated 20.09.2017 for 66,000 Smart meters with bid opening now extended 6th time to 22.02.2018 for installing smart meters under UDAY Scheme, the details of total requirement of Smart meters under UDAY scheme and timelines of commissioning viz-a-viz targets under UDAY needs to be supplied.

Directive No.5.12: Fuel Audit of various Thermal Plants of PSPCL:

PSERC Directive for FY 2017-18:

The Commission notes that the difference of receipted and bunkered GCV of coal is excessively high w.r.t. the norms fixed by the Commission. The Commission reiterates its directions to adhere to the norms fixed by the Commission.

The Commission notes the action taken to sign tripartite agreement with CIMFR & CIL on 19.09.2016 for third party sampling and analysis at loading end, but the work has not yet started by CIMFR as per tripartite agreement. The Commission directs PSPCL to follow up vigorously with CIMFR for early implementation of tripartite agreement. As directed by the Commission during meeting on 14.10.2016 the monitoring of GCV at both ends be ensured and compliance be shared with the Commission.

Reply of PSPCL:

Efforts are being made to keep the difference of received and bunkered coal GCV’s as low as possible. The Comparison of GCV of received and bunkered coal at PSPCL Thermal Plants is as under:

Month	Receipt Coal GCV (AFB) (Kcal /Kg)	Bunkered Coal GCV (AFB) (Kcal /Kg)	Difference in GCV (AFB) (Kcal /Kg)
GGSSTP, Rupnagar			
Oct-17	4359	4029	330
Nov.-17	4257	4067	190
Dec.-17	4870	4038	132
GHTP, Lehra Mohabbat			
Oct-17	4138	4099	39
Nov.-17	4180	4103	77
Dec.-17	4167	4103	64
GNDTP, Bathinda#			
Oct-17	0	0	0
Nov.-17	0	0	0
Dec.-17	0	0	0

 # Note: No coal is received during Q-3, 2017-18 at GNDTP, Bathinda.

PSPCL executed Tripartite agreements with CIMFR and CIL subsidiaries on 19.09.2016 for third party sampling and analysis at loading end. However, due to infrastructure constraints CIMFER is undertaking the work of third party sampling & analysis in a phased manner. CIMFER has already started the work of third party sampling & analysis at loading end in respect of coal supplies from CIL subsidiaries by Rail mode to PSPCL thermal stations. CIMFER has also started the work of third party sampling & analysis in respect of Road-cum-Rail mode supplies from SECL, however the work of third party sampling & analysis at the loading ends in respect of coal supplies by Road-cum-Rail mode from CCL to PSPCL thermal power stations is yet to start.

Keeping in view the importance of the work of 3rd party sampling and analysis by CIMFR in respect of coal supplies by CCL "Road Mode," a team comprising of senior officers of PSPCL visited CIMFR headquarters at Dhanbad and CCL headquarters at Ranchi in December -2017 to impress upon them for early start of the work of 3rd party sampling and analysis for CCL road supplies. The team of officers in its report has submitted that the work in respect of CCL road supplies could not be started by CIMFR as CCL has not provided the enabling conditions for the 3rd party sampling in respect of coal supplies through CCL "Road Mode" at Piperwar/Ashoka mines and N.K. area mines of CCL. PSPCL is regularly impressing upon CCL and CIMFR for starting the work of third party sampling & analysis in respect of 'Road-cum-Rail Mode' supplies from CCL on priority.

GCV is being monitored at the both loading & unloading end. At loading end by CIMFER and at unloading end by PSPCL.

PSERC Comments & Directive:

The Commission notes that CERC in its Tariff Regulations, 2014, has made the provision for consideration of weighted Average Gross calorific value of coal as received, for coal based stations and the Commission is also following the same. It is in interest of PSPCL to make arrangements for accurate sampling/analysis of coal GCV and to take remedial measures to effectively minimize the heat loss of coal from loading end to the bunker.

<u>Directive No. 5.13</u>: Review of PPAs with Generators/Traders for purchase of power from outside the State of Punjab.

PSERC Directive for FY 2017-18:

The Commission notes the action taken regarding identifying plants for surrendering power share on mutually agreed terms with NTPC & NHPC for at least for next five years. The outcome of the action on the issue be shared with the Commission. Further, PSPCL may explore the possibility of reviewing the PPAs of IPPs also.

Reply of PSPCL:

After reviewing all the Long term PPAs/BPSAs, 11 No. NTPC/NHPC generating stations (Anta, Auriya, Dadri, Jhajar, Unchahar-I, Farakka, Kahalgaon-I of NTPC and Sewa-II, Chamera-III, Uri-II & Parbati-III of NHPC) have been recognized for surrendering its power share on mutual agreed terms. The same matter is repeatedly being taken-up by Govt. of Punjab with MOP, GOI with the latest D.O. letter being written by Secretary Power, GoP to secretary power, GoI on dated 09-11-2017.

Also, a legal opinion regarding surrender of power share has been taken by PSPCL and the advocate Mr. M.G.Ramachandran opined that PSPCL cannot treat any agreement as terminated unless the generating company agrees to the same.

Further, regarding review of PPAs of IPPs, it is submitted that there is no provision for review of PPAs signed with IPPs. However, only clause 'Terms of Agreement' which is from the 'Effective date' to 'Expiry date' exists in the PPAs of IPPs.

PSERC Comments & Directive:

The Commission notes the efforts made by PSPCL regarding flagging of the issue at the appropriate level through GoP, and also the legal aspects involved in review of PPAs of IPPs. **Hence the directive is dropped.**

<u>Directive No.5.14</u>: Audited Annual Accounts & Cost Audit Report:

Directive for FY 2017-18:

(i) Audited Annual Report for FY 2015-16 has been supplied to Commission. PSPCL is directed to ensure timely submission of audited accounts.

(ii) The Commission directs PSPCL to submit the copy of the cost audit report for FY 2014-15 within one month of the issue of this Tariff Order. PSPCL is further directed to ensure timely submission of audit report for FY 2015-16.

Reply of PSPCL:

(i) The annual accounts for FY 2016-17 have been prepared and Statutory auditors have also submitted its report. The same have been submitted to CAG for supplementary audit now

(ii) The cost audit report of FY 2015-16 has also been sent vide this office Memo No. 2392 dated 22-12-2017.

PSERC Comments & Directive:

The Commission has taken note of the compliance and directs PSPCL to submit CAG report and Cost Audit Report for FY 2016-17. PSPCL may also ensure that in future these reports are in consonance with the time requirement of the Companies Act 2013.

Directive No.5.15: Per Unit Fuel Cost:

Directive for FY 2017-18:

During the proceedings in Suo-moto petition no. 41 of 2016, PSPCL informed the Commission that it has been decided to call for fresh tenders for selection of new Mine Developer and Operator for Pachhwara Coal Mine and affidavits in this regard have been filed before the Hon'ble Punjab & Haryana High Court on 14.07.2017. PSPCL is directed to implement the Order of the Commission dated 08.08.2017 in Suo-moto petition no. 41 of 2016 to reduce the per unit cost of generation of its own thermal plants.

Reply of PSPCL:

PSPCL has decided to call for fresh tenders for selection of new Mine Developer and Operator for early operationalization of Pachhwara Central Coal Mine. PSPCL has already finalised the tender specification for selection of MDO in consultation with the consultant M/s. KPMG and after getting it vetted from Ld. Advocate General Punjab, the fresh global tender enquiry in this regard is likely to be floated shortly with the approval of BODs of PSPCL.

PSERC Comments & Directive:

The Commission notes the status of compliance. PSPCL is directed to endeavour for early opertionalisation of the Mine in order to reduce the fixed cost liability on consumers of the State.

<u>Directive No.5.16</u>: System Analysis wings:

Directive for FY 2017-18:

The Commission notes that no tangible progress has been made except creation of System Analysis Wing on 02.01.2015 in compliance to the Order of the Commission in Petition No.54 of 2014. The Commission reiterates the directions to PSPCL to make the system analysis wing duly functional to generate Load Flow studies, Short Ckt analysis, stability studies etc to make proposal based on technical analysis. The timelines to make system analysis wing duly equipped and functional be shared with the Commission within one month of issue of T.O.

Reply of PSPCL:

Analysis wing was created in the Planning Organisation vide O/o No.03/SE/Plg-3 dated 2.1.2015 in compliance to the directive of PSERC issued against the suo-moto petition No. 54/2014. The process of Expression of Interest for getting more information about the various options from different firms offering Load flow studies is underway and will be floated shortly.

PSERC Comments & Directive:

The Commission observes that practically no action has been taken to operationalize the System Analysis Wing ever since its creation vide order dated 02.01.2015. The Commission reiterates the directions to PSPCL to make the system analysis wing duly functional to generate Load Flow studies, Short Ckt analysis, stability studies etc and to make proposal, based on technical analysis.

<u>Directive No. 5.17</u>: Updating of consumer's Security Registers, payment of interest on Security Consumption and Security Meter:

Directive for FY 2017-18:

The Commission notes with serious concern that ACD record of about 5 lac consumers are yet to be updated by PSPCL. It is the duty of the distribution licensee to maintain the record and consumers cannot be deprived of their dues due to laxity on the part of PSPCL. PSPCL should find a way out and ensure that provisions of the Act and the Supply Code are implemented.

Reply of PSPCL:

It is submitted that PSPCL has made rigorous efforts to update the record of various consumers w.r.t. their ACD with DS offices. But the record being old and not updated continuously in the Sub-Divn./Divn. Offices, the desired results could not be achieved. Now

PSPCL has given press advertisement in various popular/leading news papers requesting its consumers to come forward with the details of ACD deposited with them in the respective Sub-Divisions, so their records can be updated. Now, approximately 1.60 Lac. Consumers record is pending and ACD of these consumers will be uploaded as soon as some record is traced or made available by the consumer.

PSERC Comments & Directive:

The Commission notes that number of consumers whose ACD record was not updated by PSPCL has reduced from 5 lac to 2.84 lac. The Commission reiterates that PSPCL should ensure that no consumer is deprived of its right to get interest on security deposit as per the provisions of the Supply Code.

Directive No.5.18: Calculation of depreciation as per straight line method:

Directive for FY 2017-18:

Necessary clarification regarding the useful life of the Assets has already been supplied to PSPCL vide Commission's letter dated 26.05.2017. The Commission directs PSPCL to take useful life of the Assets in accordance with the already given clarification.

Reply of PSPCL:

It is submitted that instructions regarding depreciation has been circulated vide Accounts Circular No. 9/2015 dated 01.07.2015 and Accounts Circular No. 12/2016 dated 20.07.2016 which are based on "Punjab State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations-2005". The condition that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station/line shall be spread over the balance useful life of the assets is in accordance with the 'Punjab State Electricity Regulatory Commission (Terms and conditions for determination of Generation, Transmission, Wheeling and Retail supply Tariff) Regulations 2014' issued by PSERC vide notification dated 1st July 2014, which is applicable w.e.f. 01.04.2017. Therefore, it is submitted that implementation of the directive that the remaining depreciable value as on 31st March of the year closing the after the period of 12 years from effective date of commercial operation of the station/line shall be spread over the balance useful life of the assets shall be considered by PSPCL while preparing policy instructions for the accounts for FY 2017-18 and onwards. However, process has been started to draft the policy in line with these guidelines and necessary study is being conducted to address the bottlenecks to implement this clause.

PSERC Comments & Directive:

The Commission has taken note of the compliance by PSPCL and further directs to complete the task within one month from the issue of Tariff Order.

Directive No.5.19: Proper sealing/ locking of pillar boxes/ MCBs:

Directive for FY 2017-18:

Despite instructions issued by the PSPCL, the compliance by field officers needs to be ensured. It has generally been seen that there is no sealing of MCBs fixed on poles or outer wall of the premises.

Reply of PSPCL:

Instructions have already been passed to field offices for ensuring sealing of meters & locking of Pillar boxes. This issue is stressed upon during review meeting & disciplinary action has been taken against delinquent officials.

PSERC Comments & Directive:

The Commission observes that despite issuance of instructions by PSPCL, numerous unsealed Pillar Boxes/MCBs are existing in the field. It is the duty of the distribution licensee to get its instructions implemented to protect its commercial interests and also avoid undue harassment of the honest consumers.

PSERC Directive No.5.20: Periodic Checking of Meters:

Directive for FY 2017-18:

In the review meeting held on 14.10.2016, it was confirmed by CMD/PSPCL that although meters are being checked regularly at site by MMTS but CTs/PTs could not be checked at site due to non-availability of testing equipment for which procurement process has been started. However, in its reply now, PSPCL has not supplied any information regarding the status of procurement of testing equipment and timelines for ensuring compliance of Commissions' directions for periodic inspection/complete testing at site of all EHT meters/metering equipments. PSPCL must submit the same within one month of issue of this Tariff Order.

Reply of PSPCL:

It is brought out that the periodic checking of all the EHT connections have been carried out by MMTS squads. During the checking, the instantaneous contribution of all the three phases by PTs and CTs, phase disassociation, any anomaly etc. as recorded by meter are checked. The history of tampered data as recorded by meter was also downloaded through DMRI for scrutinising any discrepancy. The EHT meters checked and detail of checking of EHT meters by MMTS units of CE/Enf. during 2nd quarter of FY 2017-18 ending Sept., 2017 is as under :

Sr. No.	Enf. Circle	No. of EHT Meters	No. of Conns. checked during Qtr.	Stat-us of M.F.	No. of DDL done	Accuracy of mtr. checked or not.	Any other violation found during checking
1.	Amritsar	15	1	OK	1	Checked	NIL.
2.	Bathinda	22	2	OK	2	Checked	HMEL CKT-2 Plant Site Meter and CKT-1 Grid side meter accuracy found out of permissible limit
3.	Jalandhar	18	12	OK	12	Checked	NIL
4.	Ludhiana	68	67	OK	67	Not checked	NIL
5.	Patiala	65	25	OK	25	Not checked	NIL
	Total	**188**	**107**	**OK**	**107**		

Details regarding replacement of defective meters at Grid S/Stn during 3rd quarter:

Sr. No.	Enf. Circle	Information received for checking of meters from the concerned grid office	No. of DDL of defective meters done by MMTS	Any other violation found during checking
1.	Amritsar	4	DDL could not be done due to corrupted meter software.	Nil
2.	Bathinda	5	5	Nil
3.	Jalandhar	11	11	Nil
4.	Ludhiana	8	8	Nil
5.	Patiala	2	2	Nil
	Total	**30**	**26**	**Nil**

It is submitted that a tender was called in 2015 for procurement of testing equipment for HT/EHT consumer by Enforcement Organization. However, the same was called off as no bid was found to be technically acceptable. Thereafter, a committee was constituted with the approval of worthy CMD in 2016 for procurement of such equipment.

The Committee held its first meeting on 22.02.2017. M/s SM System had offered portable testing equipment to test HT/EHT metering equipment & subsequently called for giving live demonstration. The firm gave live demo on 6th & 7th July 2017 at ME lab Patiala and in the premises of HT consumers M/s Thapar University Patiala where in all the committee members were present. However, the equipment requires disconnection of power supply and separation of CT/PT unit & Meter for testing which was found to be too tedious and technically not practical.

Thereafter, other channels were explored and it was learnt that ME Lab, Jalandhar can perform such testing if requisite equipment & staff is provided. It is submitted that ME Lab, Jalandhar is NABL accredited Lab. The ASE/ME Lab Jalandhar has given detailed proposal and committee in its meeting dated 31.10.2017 had gone through the proposal and gave recommendations to procure 3 no. equipments to be stationed at Patiala, Jalandhar and Ludhiana. The approx cost of the equipment will be 2.25 Crore for these units. The case was submitted for approval of the Competent Authority and certain queries were raised which are being compile with. Meanwhile, the process for publication of NIT and preparation of specifications is being taken side by side. The procurement process is likely to be completed within 3 months after publication of the tender enquiry.

PSERC Comments & Directive:

The Commission observes that accuracy of 68 EHT meters of Ludhiana and 65 EHT meters of Patiala has not been checked. The Commission observes that no tangible progress has been made to procure testing equipment for checking of HT/EHT meters at site since floating of TE in 2015. PSPCL should have explored the alternative means to get the accuracy of EHT metering equipment checked through a third agency. PSPCL should submit time bound action plan of checking of all EHT metering equipment at site within a month of the issue of this tariff order.

Directive No.5.21: Replacement of defective energy meters at Grid Sub-station

PSERC Directive for FY 2017-18:

The Commission notes the action being taken and reiterates that defective grid meters must be replaced within maximum of 10 days as directed repeatedly by the Commission and the real time data of defects should invariably be supplied to the Commission.

Reply of PSPCL:

As per the directions of Hon'ble PSERC, the defective meters are being replaced within stipulated period of 10 days.

PSERC Comments & Directive:

The compliance of Commission’s directions shall be monitored separately. **Hence directive is dropped.**

Directive No.5.22: Power Regulatory Measures:

PSERC Directive for FY 2017-18:

PSPCL is directed to plan its maintenance schedule well in advance and give at least one week notice of power shutdown to consumers.

Reply of PSPCL:

The instructions have already been issued to distribution offices for the same and details of planned shutdown are published on PSPCL website well in advance, local DS offices publish the information regarding shutdown in local newspaper for information of public.

PSERC Comments & Directive:

PSPCL shall ensure implementation of the directions. **The directive is dropped.**

Directive No.5.23: Assessment of T&D losses on AP feeders:

Directive for FY 2017-18:

While approving a list of 55 number (1%) AP feeders for energy audit, PSPCL was directed to ensure installation of 100% meters on these feeders by March 2017. No compliance has been reported by PSPCL. The Commission directs PSPCL to ensure completion of the work of providing 100% meters on at least 1% AP feeders and computation of T&D losses by engaging an independent agency within time period allotted by the Commission. In case of delay in completing the job in the allotted time, the Commission shall assess the losses of AP sector for calculating AP consumption as the basis of data/information available with the Commission.

Reply of PSPCL:

Installation of 100% meters on 55 no. (1%) AP Feeders has been completed. Work of auditing will started shortly by DSM organization.

PSERC Comments & Directive:

PSPCL has failed to supply the exact number of feeders which have been covered under 100% metering and also failed to submit the status of computation of T&D losses by an independent agency. Director/Distribution, PSPCL in its letter to the Commission dated 18.01.2018 has submitted that due to the resistance by farmer unions, the work has been delayed. However, in its reply indicated above, it appears that PSPCL has achieved 100% metering on selected 1% AP feeders. PSPCL is directed to submit the list of feeders which have been covered under 100% metering and also the status of engaging independent agency for computation of loss within 15 days from the issue of this Tariff Order.

Directive No.5.24: Sale of Surplus Power:

PSERC Directive for FY 2017-18:

The Commission notes the status of compliance.

PSPCL is directed to follow the matter more vigorously.

PSPCL is directed to identify the sectors with potential for more consumption and encourage/facilitate such consumers to increase consumption to reduce fixed cost liability.

Reply of PSPCL:

i) For sale of surplus power PSPCL has created a dedicated cell consisting of a Dy. CE, an Addl.SE and an AE to manage sale of surplus power.

ii) PSPCL has appointed M/s PTC, M/s. Tata Power Trading Company Limited (TPTCL) for sale of surplus power on behalf of PSPCL.

iii) PSPCL is considering tenders for sale of power to other Utilities/Discoms and participating in every tender and except for the like paddy season, coal related conditions, transmission corridor congestion etc.

iv) PSPCL had got orders for supply of power to Bihar State Power holding co. Ltd. (BSPHCL) and Maharashtra State electricity Distribution Co. Ltd. (MSEDCL) in the month of Oct.-17. PSPCL has supplied 116 MU of power at an average rate of ₹4.26 per Kwh.

v) PSPCL had also floated Tender Enquiry no. PPR 05/2017 for sale of surplus power. But no response was received even after due date was extending twice and tender enquiry was dropped finally.

vi) In addition to above PSPCL has also sold 453.76 MU of Energy at an average rate of ₹3.45 per KWH at Punjab periphery in India Energy Exchange (IEX) during the period Oct'17 to Dec'17 by daily bidding in Day-Ahead market.

For sale of surplus power under bilateral arrangements, along-with banking, matter has been taken at CMD/PSPCL level with various states like Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, West Bengal, Andhra Pradesh, Karnataka, Tamilnadu.

Regarding identification of sectors with potential for more consumption and encourage/facilitate such consumers to increase consumption to reduce fixed cost liability. it is intimated that a meeting was held on 08.01.2018 with representative for Marriage palace and Hot Mix plant associations in the chamber of EIC/Commercial. In the said meeting, the representatives of Marriage palace Association were told about of the provision for marriage palaces incorporated by Hon'ble PSERC in tariff Order for FY 2017-18. They were requested to discuss the matter in next meeting of their association and to work out their bills are per above provision and make their mind to shift their load from DGs to PSPCL, as per unit cost is less (comparative to DG sets) in case they purchase power from PSPCL.

In the said meeting, the representatives of "The Hotmix Plant Owner Association Punjab, Patiala" had requested PSPCL to make separate category for Hot mix and ready mix plants on the analogy of marriage palaces in continuation to its letter no. 307 dated 22.09.2017 (copy enclosed as Annexure-R) to Hon'ble Power Minister, Punjab.

In order to encourage the Marriage palace consumers to shift their load to PSPCL system, following proposal has already been submitted before Hon'ble Commission in meeting held on 22.02.2018 at Chandigarh to amend the prevailing provision as under:-

> *"NRS consumers running Marriage Palaces shall pay Fixed Charges on 25% of Load/Contract Demand (or any suitable percentage that Hon'ble Commission find deem fit) per month. In case, the consumer exceeds its sanctioned Load/Contract Demand during a billing cycle/month, he shall be liable to pay Load/Demand Surcharge as provided in relevant Schedule of Tariff."*

Director/Distribution, PSPCL office has also taken-up matter with DS offices for their inputs and suggestions for Sales of Surplus power.

PSERC Comments & Directive:

The Commission notes the status of compliance. PSPCL is directed to keep on identifying the sectors with potential for increase in power consumption in order to reduce the fixed cost liability on consumers of the State.

<u>Directive No.5.25</u>: On line registration of applications for release of load/ demand:
PSERC Directive for FY 2017-18:

The Commission notes that PSPCL has implemented the single window system & online registration of applications for release of demand for consumers with load/demand more than 100 kVA and has made provision for the same for all consumers in 47 R-APDRP towns. PSPCL is directed to extend this feature to all consumers of the State in a time bound manner. PSPCL should submit the roadmap within one month of the issue of this tariff order. PSPCL is further directed to upload on its website the circle wise status of pending applications for new/extension in load cases.

Reply of PSPCL:

PSPCL has implemented the single window system & online registration of applications for new/extension in load for connections above 100 KW of PSPCL in 47 R-APDRP towns under SAP-system and facility is available for 0-100 KW on WSS-portal. Further the same facility will be soon available to 97 No. towns under IPDS scheme.

The list of pending applications above 100KVA can be accessed through link "pspcl.in>consumer services>list of consumers (Above 100KVA) whose electrical connection has been replaced/pending(serial no.5).

PSERC Comments & Directive:

The Commission directs PSPCL to expedite the implementation of the project in 97 towns covered under IPDS. The status of implementation of IPDS should be submitted by PSPCL to the Commission on quarterly basis on the same format as is submitted to GoP/GoI.

Directive No.5.26: De-commissioning of old inefficient plants

PSERC Directive for FY 2017-18:

The Commission notes that PSPCL's thermal plants are low on merit order for power procurement. PSPCL may explore the possibility of de-commissioning of old inefficient plants that have out lived their useful life.

Reply of PSPCL:

Govt of Punjab vide memo no.1/15/17-EB(PR)/832 dated 21st Dec.2017 has decided permanent closure of all units of GNDTP, Bathinda and unit no. 1&2 of GGSSTP, Ropar.

PSERC Comments & Directive:

Noted. Dropped

Directive No.5.27: Preventive maintenance of transmission lines:

PSERC Directive for FY 2017-18:

PSPCL is directed to adopt hot line washing system for insulators to prevent tripping of transmission lines during foggy months.

Reply of PSPCL:

T.E No. TSQ-1084 was floated by this office for procurement of 5400 nos. 90 KN Polymer Insulator Strings for 66 kV Lines for P&M Works. The original date of opening was 23.02.2018 but the tender date now stands extended to 09.03.2018.

PSERC Comments & Directive:

PSPCL has made no tangible progress to implement the directions of the Commission. During recent public hearings, the industrial consumers expressed serious concern at the frequent tripping/breakdowns of transmission lines during foggy season causing great loss of production. Interruptions in supply to large industrial consumers not only cause loss of production but also loss of revenue to PSPCL. The reply of PSPCL that issue is under consideration indicates total apathetic attitude of the licensee towards a serious problem. PSPCL is directed to submit its action plan within one month of the issue of this tariff order and ensure that needful is done before next foggy season.

Directive No.5.28: Customer satisfaction, Quality of Service & Adherence to Standards of Performance:

Directive for FY 2017-18:

During the public hearings, a large number of consumers expressed their total dissatisfaction with the quality of services being rendered by PSPCL. The general complaint of the consumers was with respect to delay in release of connections, wrong billing, excessive interruptions, delay in restoration of supply, delay in replacing the defective meters etc. Uninterrupted quality supply is the most important indicator of economic growth of the State. Immediate attention is required to address the key areas of consumer's dissatisfaction. The Commission has specified the minimum Standards of Performance (SoP), time frame for release of connections and for availing other services from the licensee in the Supply Code. However, the same are not being followed resulting in undue harassment to the consumers and also loss of revenue to the utility.

The Commission directs PSPCL to initiate a study regarding customer satisfaction towards power supply service provided by PSPCL and identify areas of consumer's dissatisfaction. PSPCL should regularly submit quarterly circle wise compliance report regarding adherence to Standards of Performance (SoP) and other timelines on the format, which will be issued separately. The non-compliance of the Standards of Performance and other timelines shall invite punitive action as per provisions of the Act.

Reply of PSPCL:

Monthly Review meetings are being taken by Director/D for monitoring of Key Exception and other Distribution Parameters and all field officers are directed to replace all burnt/ defective meters as per time frame given in SOP. With these efforts the key exception upto 2016 has been completed and efforts are on to clear key exception of 2017. The key exception reports as on 20.02.2018 have been supplied to the Commission.

PSPCL has a single complaint number 1912 for all types of consumer complaints, It has been successfully rolled out all over Punjab to all DS divisions serving all consumers. 100% complaints are now being registered, monitored through the system. Since its rollout in 2014 more than 91 Lac complaints have been registered and resolved with average of 8000 complaints per day and a peak of more than 30000 complaints in a single day being handled through the system.

Each consumer is assigned a unique registration number, consumer can register complaints through Call, SMS, Mobile App, Social Media or email. On closure of complaint, feedback is taken from consumers by third party. Incorrectly closed complaints are reopened by third party. Consumer also has the option to automatically re-open incorrectly closed complaints by sending SMS to 1912 computerised mobile numbers.

In the study carried out of the system it has been observed that more than 80% consumers have expressed their satisfaction with the system, PSPCL is further trying to improved the satisfaction level and all DS offices have been directed to attend to the complaints as per SoP guidelines.

PSERC Comments & Directive:

PSPCL was directed to regularly submit cycle wise key exception reports but only two reports have been received during the year. From the scrutiny of the key exception report dated 25.09.2017, it has been observed that there are still 7 burnt meters and 13 defective meters pertaining to year 2015. Similarly, 1594 burnt meters and 4414 defective meters pertaining to year 2016 are yet to be replaced. As per the Standards of Performance specified by the Commission, the burnt meters are required to be changed within 5 working days and defective meter within 10 working days but the pendency of such meters for more than 2 years makes a mockery of the Standards of Performance. The total pending key exceptions for year 2016 are 20360. The pending key exceptions ending cycle 2 for the year 2017 has increased from 2,33,496 to 2,48,608 at the end of the current cycle. PSPCL is directed to explain the reasons for non implementation of the Standard of Performance within one month of the issue of this Tariff Order.

Whereas release of connections is concerned, no town covered under R-APDRP has released the connections within the time period specified by the Commission. In some towns, the percentage of connections released within the time limits specified by the Commission is as low as 3%. The above data shows that PSPCL has failed to achieve the desired performance parameters even after making huge investments under R-APDRP. PSPCL is directed to submit a detailed report regarding improvement of performance parameters under R-APDRP scheme along with reasons for non achievement of desired results.

Directive No.5.29: Achievement of 100% Metering:

PSERC Directive for FY 2017-18:

Section 55 of the Electricity Act, 2003, mandates that no licensee shall supply electricity except through the installation of a correct meter. In Punjab, all consumers, except AP are metered. The Commission has been issuing directions to PSPCL to ensure 100% metering in a phased manner but no action has been taken by the licensee to fulfill the mandate of the Act. The State Government has been paying meter rental of AP consumers as part of the subsidy claimed by PSPCL in the ARR. Thus, there is no financial burden on the distribution licensee for implementing the directions of the Commission. PSPCL is directed to complete 100% metering of all the consumers including the AP consumers, in a phased manner within a maximum period of five years staring from April 2018. PSPCL shall install meters on all AP consumers fed from at least 20% of the AP feeders spread across the State in each year so as to complete the job in 5 years i.e. by March 2023. In view of Punjab Government policy guidelines dated 04.09.2017, all new AP connections are to be metered. It flows from this that all extensions of load should also be metered. Failure to achieve the yearly target of

AP metering, as directed above, shall invite a minimum progressive cut of 1% on AP consumption over and above any other disallowance which the Commission may impose while calculating the AP consumption.

Reply of PSPCL:

Regarding the directions of the commissioner to provide 100% metering to all consumers within five years starting from April 2018, it is submitted as follows:

1. Feeders supplying power to Agriculture Pump Sets have been segregated and are metered. Each month meter readings of these feeders are submitted to Hon’ble Regulator.
2. Except AP consumers all category of consumers are metered. In AP consumers about 10% consumers have been metered under the sample meter category.
3. PSPCL has over the years has taken multiple measures to directly minimise the losses for AP consumers
4. As per previous directions of PSERC 1% AP feeders have been converted to 100% metered.
5. A new AP connection category AP Metered Tatkal Scheme has been launched. Under this scheme AP connections are released on priority if consumer opts for AP metering and agrees to pay bill as per CC 39/17.
6. Although The Electricity Act provides for 100% metering of all consumers but installation of meters on a category of consumers which are being provided free power by GoP will not serve any purpose except recording energy, as meters have already been provided on all feeders. In case 100% metering on AP feeders is carried out, there is no doubt this would certainly make AP energy accounting more accurate but this scheme would also require considerable investment in manpower and equipments keeping in view the large expanse of network and may not justify the return on investment.
7. Further if implemented, recording monthly readings using AMR not only involves connectivity issues but also requires huge infrastructure, additional manpower and software licences cost. No utility in India has carried out AMR for such large number of consumers. So far only utilities have carried out AMR of large consumers numbering from hundreds to few thousand.
8. Manually recording meter readings shall required large manpower, keeping in view large expanses of network.
9. Assuming approximately 13.68 Lac total AP consumers an investment of appx 1000 Cr. shall be required for AMR meters, Data Centre Servers and Software Licenses. Periodic

replacement of defective meters or modems will also involve cost.

PSPCL has taken multiple measures to enhance the energy accounting on agriculture networks, such as enhancing the sample size of consumer meters, 100% AP feeder metering, segregation of AP feeders. Policy has already been changed, mandating all new AP connections to be released on HVDS, installing meters on new AP connections. Releasing connections on priority to consumers opting for AP tatkal metered category etc. Given the already achieved low level of losses the added investment may not deliver any significant incremental cost-benefit.

PSERC Comments & Directive:

The direction to PSPCL was to achieve 100% metering within 5 years i.e by March 2023 as per the provisions of section 55 of the Act. PSPCL was further directed to submit roadmap of 100% metering within one month of the issue of tariff order for FY 2017-18. However, instead of submitting the roadmap along with status of implementation, PSPCL is reiterating its submission that huge investment is involved in providing 100 % meters and no useful purpose will be served by implementing the provision of the Act & the directions of the Commission. This argument has repeatedly been rejected by the Commission. After considering the arguments put forth by PSPCL, the Commission issued directions to the distribution licensee to implement the mandate of the Act. Repeated wilful violation of the directive will attract penal proceedings under section 142 and 146 of the Act.

Directive No.5.30: Calculation of AT&C losses:

Directive for FY 2017-18:

The Ministry of Power (MoP), GoI, has specified targets for reduction of AT & C losses under Uday Scheme as under:

Year	FY 2015-16	FY 2016-17	FY 2017-18
AT&C loss	16.16%	15.30%	14.50%

PSPCL and the Punjab Government are signatories to MoU under UDAY scheme and are responsible to achieve the targets of AT&C losses fixed therein.

The AT&C loss data for 47 towns covered under R-APDRP for FY 2016-17 has been examined and it is observed that the AT&C losses for 29 towns are more than 25%. The highest AT&C loss is that of Malout town at 60.11%. The collection efficiency of two towns i.e. Malout and Faridkot is even below 60%. In view of the increase in the amount of receivables from consumers and the State Govt./ State Govt. Departments, the claim of PSPCL of having a collection efficiency of more than 99% appears to be exaggerated.

PSPCL is directed to regularly supply the circle-wise monthly data of AT&C losses to the Commission. The AT&C loss trajectory will be considered in the performance review. Failure to achieve AT&C loss target will be penalized.

Reply of PSPCL:

That the AT&C losses of towns under R-APDRP of Punjab state are high due to tagging of consumer on dummy feeder instead of their respective Pole/DT/Feeder. Necessary instructions are given regularly to field officers/officials regarding proper updation of consumer mapping to improve the AT&C losses of towns. As a result now these losses have been reduced to some extent. The table is as below:-

As per observations made by PSERC in Progress/Status report of compliance of directives ending March, 2017 is as follows:

	AT&C Losses in %age				Collection efficiency in %age		
	Less than 15	Between 15 and 30	Between 30 and 40	More than 40	Below 60	Between 60 and 90	More than 90
No. of towns	10	2	17	6	2	17	28

Now, the current status of AT&C losses and Collection efficiency report ending Dec.2017 is as follows:

	AT&C Losses in %age				Collection efficiency in %age		
	Less than 15	Between 15 and 30	Between 30 and 40	More than 40	Below 60	Between 60 and 90	More than 90
No. of towns	15	15	12	5	0	17	30

Moreover, it is further intimated that, Director Distribution PSPCL has also taken this matter in meeting with the officer of all zones of PSPCL and necessary instructions are being given to field officials/officers regarding regular updation of R-APDRP feeder wise network and tagging of consumer data in the GIS/SAP systems to improve the AT&C losses. As instruction have been issued and all out efforts are being made to rectify the bottle neck so that all the meters be made effective to contribute after proper indexing of consumers by field offices due to which AT&C losses have been improved to some extent and it will take some time to improve the losses of the towns according to goal fixed by PFC.

1. 14.35% AT&C Losses has been achieved at distribution level against target of 15.04% ending Q-3 of FY 2017-18.
2. PSPCL has achieved the 87.85% billing efficiency against target of 84.96% ending Q-3 of FY 2017-18.
3. PSPCL has achieved 97.50% collection efficiency (excluding Subsidy) which has

been increased by 0.65% from last year corresponding quarter.

4. %age distribution losses has also been decreased by 1.02% from last year corresponding quarter.

PSERC Comments & Directive:

As per the statement of AT&C losses (calculated as per the guidelines issued by CEA) submitted by PSPCL, the AT&C losses upto Dec. 2017 are 31.27% which far exceeds the target fixed under UDAY scheme. PSPCL should explain the reasons for high AT&C losses.

<u>Directive No. 5.31</u>: Segregation of Financial Statement of Distribution and Generation Business:

Directive for FY 2017-18:

The Commission directs PSPCL to segregate the Financial Statements and Cost Accounts for Distribution and Generation (project wise) business for determination of tariff as per Regulation 5.1 of MYT Tariff Regulations. The Commission has taken the cost of each element as per the Allocation Statement provided by PSPCL for Distribution and Generation. The Allocation Statement shall not be accepted during true up of FY 2017-18 onwards without audited Financial Statements of project-wise Generating Projects and Distribution Business in accordance with Regulation 5.3 of PSERC MYT Regulations.

Reply of PSPCL:

Accounts of PSPCL are being prepared as per provisions of Company Act. There is no requirement of Company Act to prepare separate financial statements of an organisation within its control. There are three thermal plants and six hydel projects which are managed/funded by PSPCL and power generated from some hydel plants is shared by other states/utilities also. Assets and liabilities relating to these plants and other functions of PSPCL are common like loans, equity, banking arrangements, head office control, terminal benefits of employees which cannot be segregated for preparing different financial statement under present system. It is humbly requested to review this directive in the light of above submission.

PSERC Comments & Directive:

The Commission is not satisfied with the reply of PSPCL and reiterates its directive to segregate the financial statement and cost accounts for distribution & generation (project wise) business for determination of tariff as per Regulation 5 of MYT Regulation.

<u>Directive No.5.32</u>: Review of Performance Parameters:

Directive for FY 2017-18:

The Commission shall be reviewing the status of implementation of Directives along with following performance parameters on quarterly basis with the management of PSPCL:

i) Operating performance of each Generation Project

ii) Generation cost of each Thermal plant

iii) Category wise energy sale, revenue assessed and collected.

iv) Defaulting Amount

v) T&D/AT&C losses

vi) Detection of theft cases and recovery of charges by PSPCL.

vii) Key Exception Reports.

viii) Reliability Indices

ix) Resolution of consumers' grievances by Dispute Settlement Committees

x) Resolution of consumers' complaints received at 1912 and other billing complaints received directly in the office.

xi) Release of connections and age analysis of pending test reports.

xii) Revenue Account (format MR-36).

The formats of the above mentioned performance parameters shall be prescribed separately

Reply of PSPCL:

The reply of various parameters in the prescribed Formats is enclosed.

PSERC Comments & Directive:

The perusal of the information supplied shows that own Thermals operate at very low PLF and high specific oil consumption causing high generation cost. The Commission observes rampant increase in defaulting amount. Regarding AT&C losses for 2017-18 the Commission observes that the AT&C losses up to December, 2017 calculated as per CEA methodology, are 31.27% which is very high. The Commission observes in general that a lot of improvement is required in performance parameters.

In the key exception reports, it has been observed that all new connections have been shown as released within the time period prescribed by the Commission. However, from the data available on PSPCL's website for 47 R-APDRP towns, no town has released connections within time period specified by the Commission. PSPCL should explain the disparity in the data within 15 days from the release of this tariff order.

<u>Directive No.5.33</u>: Balancing of load/ Earthing of Distribution Transformer:

PSERC Directive for FY 2017-18:

In compliance to earlier directions of the Commission to PSPCL for carrying out the exercise of balancing of loads and earthing on its distribution transformers, the utility reported its compliance in ARR for FY 2015-16.

The Commission reiterates its direction to PSPCL to recheck load balancing of its distribution transformers & earthing of distribution transformers as per the standards laid down in IEEE Guide 80 and take remedial measures, wherever required.

Reply of PSPCL:

This exercise is carried out on monthly basis by DS offices and the required remedial measures are taken for balancing of load.

PSERC Comments & Directive:

The Commission notes the action being taken and directs PSPCL to regularly carryout the exercise for load balances and earthing of DTs. **The directive is dropped.**

<u>Directive No.5.34</u>: Plan to meet future load growth.

PSERC Directive for FY 2017-18:

As per the Demand-Supply scenario submitted by PSPCL in petition no. 41 of 2016 (Suo-moto) to the Commission, PSPCL is surplus in terms of Peak Demand (MW) up to FY 2019-20 & in terms of Energy (MU) up to FY 2020-21. It is expected to become deficit in Peak Demand from FY 2020-21 onwards. PSPCL is directed to submit its action plant for the next 15-20 years.

Reply of PSPCL

As per the Demand-Supply scenario submitted by PSPCL in petition no. 41 of 2016 (Suo-moto) to the Commission, PSPCL is surplus in terms of Peak Demand (MW) up to FY 2019-20 & in terms of Energy (MU) up to FY 2020-21. It is expected to become deficit in Peak Demand from FY 2020-21 onwards i.e. during the period June to October only and surplus during rest of the year (7 months)

Year/ Month	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**
	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit
June	2%	**-1%**	**-5%**	**-8%**	**-12%**	**-17%**
July	**-2%**	**-5%**	**-9%**	**-12%**	**-16%**	**-21%**
August	5%	2%	**-1%**	**-5%**	**-8%**	**-13%**
September	3%	0%	**-3%**	**-7%**	**-10%**	**-15%**
October	6%	3%	0%	**-3%**	**-5%**	**-10%**

and deficit in energy from FY 2021-22 onwards i.e. during the period June to September only and surplus during rest of the year (8 months).

Year/Month	2021-22	2022-23	2023-24	2024-25	2025-26
	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit
June	12%	**8%**	4%	**-1%**	**-7%**
July	**-1%**	**-6%**	**-11%**	**-16%**	**-23%**
August	3%	**-1%**	**-6%**	**-11%**	**-18%**
September	7%	2%	**-2%**	**-7%**	**-14%**

In the above scenario, 25 upcoming plants (list attached as Annexure-P), in which PSPCL has its share for long term (upto 25 years) are likely to be commissioned from 2018-19 to 2025-26 and will supply power to PSPCL up to their agreement. In addition to this, PSPCL has a proposal to phase-out the existing 6X210 MW units of GGSSTP, Ropar with 3X 800 MW Coal based Super Critical units and Work order cum Contract Agreement has been signed with M/s Steag Energy Services (India) Pvt. Ltd., Noida for carrying out feasibility study. Tentative completion for 1st, 2nd & 3rd unit is 52, 58 & 64 months from the letter of award as informed by the consultant.

In view of the above, shortfall during June to September only, it may not be prudent to tie up any more power through thermal plants or any other power plant for long term. To meet the power deficiency scenario, PSPCL may go for short term purchase directly from plants as well as through Power Exchanges (IEX, New Delhi) or may increase banking transactions through different states, which have deficit scenario during November to February. The banked power during this period will help to meet the power shortfall by return back during June to September.

By this way, future load growth will be sorted out by increasing the banking transactions with other states and balanced shortfall will be met through short term purchase directly from plants as well as through Power Exchanges during period June to September.

PSERC Comments & Directive:

The Commission notes the status of compliance but cautions PSPCL to take remedial steps for deficit likely in the coming 2-3 years due to closure of GNDTP, two units of GGSSTP and likely closure of NPL & TSPL for FGD installation.

<u>Directive No.5.35</u>: Voluntarily Disclosure Scheme (VDS) for DS, NRS and SP Category of Consumer:

PSERC Directive for FY 2017-18:

PSPCL is directed to allow Voluntarily Disclosure Scheme (VDS) for DS, NRS and SP Category of Consumers, allowing them to get their load regularized without any penalty. The

VDS shall remain available for 6 months from date of issue of this Tariff Order.

Reply of PSPCL:

In this regard, PSPCL has issued Commercial Circular No. 52/2017 dated 15/11/2017 to allow Voluntary disclosure scheme for DS, NRS and SP category consumers, and the VDS scheme for them is valid for six months w.e.f. 09/11/17 to 08/05/18. The circular was also been uploaded on PSPCL website. The office of CE/Commercial, vide letter dated 22/02/2018 has asked all CEs/DS to supply the response status, which is still awaited

PSERC Comments & Directive:

PSPCL is directed to extend the scheme for another six months for all consumers. Further, PSPCL is also directed to check the consumer loads during the VDS scheme and guide them for regularisation of the excess load, if any, without any penalty. PSPCL should submit response to the VDS scheme to the Commission on monthly basis along with details regarding checking.

Directive No.5.36: Introduction of kVAh Tariff and Contract Demand system for SP Category and other remaining) consumers having load in excess of 20 kW:

PSERC Directive for FY 2017-18:

The Commission intends to introduce kVAh Tariff and Contract Demand system for SP Category and other (remaining) consumers having load in excess of 20 kW. It requires readiness on the part of PSPCL such as, installation of compatible meters on such consumers etc. PSPCL is directed to submit the roadmap for introduction of contract demand system for the SP Industrial category and other (remaining) consumers having load in excess of 20 kW, within 3 months from the issue of Tariff Order.

Reply of PSPCL:

All field offices has been instructed to record kVAh reading for SP category and other (remaining) consumers having load in excess of 20 kW and to replace energy meters not compatible with kVAh reading for these categories of consumers at the earliest.

In this regard, a Commercial Circular no. 06/2018 dated 25.01.2018 has been issued which states as under:

"As per directive of Hon'ble PSERC, it is hereby instructed to start recording the KVAH reading, Contract Demand along with KWH reading of Energy meters in respect of SP category and other (remaining) consumers having load in excess of 20 kW w.e.f. 24.01.2018. The instructions issued vide CC No.4/2014 dated 14.01.2014 for recording of MDl, resetting of its knob and resealing of MDI knob for all above such category shall also be complied with. Further energy meters not compatible with kVAh reading for these categories of consumers may also be replaced at the earliest."

PSERC Comments & Directives:

The Commission notes the compliance and direct PSPCL to submit the plan for further extension of demand/kVAh tariff to the remaining consumers.

Chapter 6
Determination of Tariff for FY 2018-19

6.1. Aggregate Revenue Requirement for FY 2018-19

The Commission in para 3.28 of the Tariff Order has determined the Gross Revenue Requirements upto FY 2018-19 as ₹32486.63 crore and Cumulative Gap (Deficit) upto FY 2018-19 as ₹668.91 crore. With energy sales of 49560.62 MU, the combined average cost of supply works out to 655.49 paise per kWh. The detail is as under:

Table 6.1: Aggregate Revenue Requirement for FY 2018-19

(₹ crore)

Sr. No.	Particulars	Allowed by the Commission
1.	Revenue Requirement for FY 2018-19 (As per Sr. No. 11 of Table 3.52)	30988.95
2.	Cumulative Gap (Deficit) upto FY 2017-18	928.21 (2252.13-1323.92)
3.	Carrying Cost on gap for FY 2016-17	465.13
4.	Impact of the Commission's Order in Petition No. 11 of 2018 (as per para 3.27 of Tariff Order)	104.34
5.	**Gross Revenue Requirements upto FY 2018-19** (1+2+3+4)	**32486.63**
6.	Non-Tariff Income	1046.26
7.	Net Revenue Requirement upto FY 2018-19	31440.37
8.	Expected Revenue at existing tariff during FY 2018-19	30771.46
9.	**Total Cumulative Gap (Deficit) required to be covered**	**(668.91)**
10.	**%age of overall increase required over the revenue from existing tariff** {excluding revenue from Common Pool consumers (₹159.38 crore) and Outside State sales(₹50.78 crore) & Rebates etc. ((-)₹250.62 crore)}	**2.17%** {668.91/ (30771.46-50.78-159.38+250.62)}
11.	**Combined Average Cost of Supply** (Gross Revenue Requirement/Energy Sales) (paise per kWh)	**655.49** (32486.63/49560.62)

6.2. Determination of Tariff

6.2.1. 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 view the relevant aspects of the National Electricity Policy, Tariff Policy, the norms adopted by it in earlier Tariff Orders and inputs received from consumers/ consumer organizations/ stakeholders in their objections/ suggestions and during the process of public hearings.

Revenue from tariff at existing rates taken into account for working out the percentage increase in tariff required to cover the gap (deficit), does not include income from sales to Common Pool consumers and Outside State sale.

6.2.2. An overall increase of 2.17% is required over the revenue from existing tariff to cover the revenue gap (deficit) of ₹668.91 crore for FY 2018-19, over the existing tariff i.e. in Fixed Charges as well as Energy Charges, but excluding sales to Common Pool consumers and Outside State sales.

6.2.3. As discussed in para 4.5.1 of this Tariff Order, the Commission decides to give some relief in the Fixed Charges payable by the ARC Furnaces/PIU industrial category consumers. Further, the tariff of NRS consumers having load upto 20 kW, has been adjusted in view of the regulatory requirements to keep cross subsidy levels within ±20% as per policy guidelines. The Commission decides to marginally increase the Fixed Charges of other category of consumers and also decides to effect an increase of 2.00% over the existing Energy Charges, to cover the revenue gap. As discussed in para 4.7 of this Tariff Order, the Commission also decides to introduce the contract demand system and kVAh Tariff for the Non-Residential Supply (NRS) consumers with load exceeding 20 kW and upto 50 kW, all Small Power Industrial Supply (SP) consumers and other consumers with load exceeding 20 kW (except Domestic Supply consumers with load upto 50 kW, Public Lighting, AP & AP High Tech/High Density Farming). Accordingly, the revised tariff (Two Part) for FY 2018-19 determined by the Commission vis-à-vis existing tariff is indicated in Table 6.2.

Table 6.2: Revised Tariff for FY 2018-19

Sr. No.	Category			Existing Tariff for FY 2017-18		Revised Tariff for FY 2018-19	
				***Fixed Charges per Month (₹)**	**Energy Charges (₹)**	***Fixed Charges per Month (₹)**	**Energy Charges (₹)**
A	**PERMANENT SUPPLY**						
1.	**Domestic Supply**	Upto 2 kW	Up to 100 kWh	**20/kW**	**4.81/kWh**	**25/kW**	**4.91/kWh**
			Above 100 kWh & upto 300 kWh		**6.38/kWh**		**6.51/kWh**
			Above 300 kWh & upto 500 kWh		**6.98/kWh**		**7.12/kWh**
			Above 500 kWh		**7.19/kWh**		**7.33/kWh**
		Above 2 kW & upto 7 kW	Up to 100 kWh	**25/kW**	**4.81/kWh**	**35/kW**	**4.91/kWh**
			Above 100 kWh & upto 300 kWh		**6.38/kWh**		**6.51/kWh**
			Above 300 kWh & upto 500 kWh		**6.98/kWh**		**7.12/kWh**
			Above 500 kWh		**7.19/kWh**		**7.33/kWh**
		Above 7 kW & upto 50 kW	Up to 100 kWh	**30/kW**	**4.81/kWh**	**40/kW**	**4.91/kWh**
			Above 100 kWh & upto 300 kWh		**6.38/kWh**		**6.51/kWh**
			Above 300 kWh & upto 500 kWh		**6.98/kWh**		**7.12/kWh**
			Above 500 kWh		**7.19/kWh**		**7.33/kWh**
		Above 50 kVA & upto 100 kVA	All Units	**60/kVA**	**6.11/kVAh**	**70/kVA**	**6.23/kVAh**
		Above 100 kVA	All Units	**60/kVA**	**6.31/kVAh**	**70/kVA**	**6.44/kVAh**

Sr. No.	Category			Existing Tariff for FY 2017-18		Revised Tariff for FY 2018-19	
				*Fixed Charges per Month (₹)	Energy Charges (₹)	*Fixed Charges per Month (₹)	Energy Charges (₹)
2.	**Non-Residential Supply**	Upto 7 kW	Up to 100 kWh	**50/kW**	**6.84/kWh**	**40/kW**	**6.86/kWh**
			Above 100 kWh & upto 500 kWh		**7.09/kWh**		**7.12/kWh**
			Above 500 kWh		**7.21/kWh**		**7.24/kWh**
		Above 7 kW & upto 20 kW	Up to 100 kWh	**70/kW**	**6.84/kWh**	**50/kW**	**6.86/kWh**
			Above 100 kWh & upto 500 kWh		**7.09/kWh**		**7.12/kWh**
			Above 500 kWh		**7.21/kWh**		**7.24/kWh**
		Above 20 kW & upto 50 kW (kW/kWh tariff)	Up to 100 kWh	**70/kW**	**6.84/kWh**	**80/kW**	**7.24/kWh**
			Above 100 kWh & upto 500 kWh		**7.09/kWh**		
			Above 500 kWh		**7.21/kWh**		
		Above 20 kVA & upto 50 kVA (kVA/kVAh tariff)**	Up to 100 kWh	**70/kW**	**6.84/kWh**	**110/kVA**	**6.27/kVAh**
			Above 100 kWh & upto 500 kWh		**7.09/kWh**		
			Above 500 kWh		**7.21/kWh**		
		Above 50 kVA & upto 100 kVA	All Units	**100/kVA**	**6.15/kVAh**	**110/kVA**	**6.27/kVAh**
		Above 100 kVA	All Units	**100/kVA**	**6.35kVAh**	**110/kVA**	**6.48/kVAh**
		EV Charging Stations	All Units			**NA**	**5.00/kVAh**
3.	**Small Power**						
	kW/kWh tariff	Upto 20 kW	All Units	**85/kW**	**5.48/kWh**	**90/kW**	**5.58/kWh**
	kVA/kVAh tariff**	Upto 20 kVA	All Units			**75/kVA**	**5.29/kVAh**
4.	**Medium Supply**	Above 20 kVA & upto 100 kVA	All Units	**100/kVA**	**5.60/kVAh**	**115/kVA**	**5.72/kVAh**
5.	**Large Supply**						
	General Industry	Above 100 kVA & upto 1000 kVA	All Units	**140/kVA**	**5.70/kVAh**	**150/kVA**	**5.81/kVAh**
		Above 1000 KVA & upto 2500 kVA	All Units	**195/kVA**	**5.74/kVAh**	**205/kVA**	**5.85/kVAh**
		Above 2500 KVA	All Units	**230/kVA**	**5.78/kVAh**	**240/kVA**	**5.90/kVAh**
	PIU / ARC Furnace	Above 100 kVA & upto 1000 kVA	All Units	**160/kVA**	**5.74/kVAh**	**155/kVA**	**5.85/kVAh**
		Above 1000 KVA & upto 2500 kVA	All Units	**295/kVA**	**5.98/kVAh**	**250/kVA**	**6.10/kVAh**
		Above 2500 kVA	All Units	**295/kVA**	**5.98/kVAh**	**280/kVA**	**6.11/kVAh**
6.	**Bulk Supply**	LT	All Units	**155/kVA**	**6.25/kVAh**	**165/kVA**	**6.38/kVAh**
		HT	All Units	**195/kVA**	**5.85/kVAh**	**205/kVA**	**5.97/kVAh**
7.	**Railway Traction**		All Units	**200/kVA**	**6.66/kVAh**	**210/kVA**	**6.79/kVAh**
8.	**Public Lighting**		All Units	**80/kW**	**7.21/kWh**	**90/kW**	**7.35/kWh**
9.	**Agricultural Pumpset (AP)**		All Units	**5.06/kWh or 403/BHP/month**		**5.16/kWh or 411/BHP/ month**	
				Nil with GoP subsidy		**Nil with GoP subsidy**	
10.	**AP High Technology/ High Density Farming**		All Units	**NA**	**5.06/kWh**	**NA**	**5.16/kWh**
11.	**Compost / Solid Waste Management Plants for Municipalities/ Urban Local Bodies**		All Units	**18/kVA**	**5.06/kWh**	**23/kVA**	**4.75/kVAh**

Sr. No.	Category			Existing Tariff for FY 2017-18		Revised Tariff for FY 2018-19	
				***Fixed Charges per Month (₹)**	**Energy Charges (₹)**	***Fixed Charges per Month (₹)**	**Energy Charges (₹)**
12.	**Charitable Hospitals set-up under PwD Act**	Up to 20 kW	All Units	**20/kW**	**4.81/kWh**	**25/kW**	**4.91/kWh**
		Above 20 kW	All Units	**18/kVA**	**4.43/kVAh**	**23/kVA**	**4.52/kVAh**
13.	**Start-up Power for Generators/CPPs**		All Units	**NA**	**6.55/kVAh**	**NA**	**6.68/kVAh**
B	**SEASONAL INDUSTRY (as per Condition 18 of General Conditions of Tariff):**						
a)	**During Season**						
	Small Power		All Units	**170 per kW**	**Same as applicable to correspond-ding General Industry**	**180 per kW/ 150 per kVA**	**Same as applicable to correspond-ding General Industry**
	Medium Supply		All Units	**200/kVA**		**230/kVA**	
	Large Supply		All Units	**280/kVA**		**300/kVA**	
b)	**During Off Season**						
	Small Power		All Units	**Nil**		**Nil**	
	Medium Supply		All Units				
	Large Supply		All Units				
C	**ICE FACTORIES & CANDIES AND COLD STORAGES**						
a)	**During April to July**						
	Small Power		All Units	**170/kW**	**Same as applicable to correspond-ding General Industry**	**180 per kW/ 150 per kVA**	**Same as applicable to correspond-ding General Industry**
	Medium Supply		All Units	**200/kVA**		**230/kVA**	
	Large Supply		All Units	**280/kVA**		**300/kVA**	
b)	**During August to March**						
	Small Power		All Units	**43/kW**		**45 per kW/ 38 per kVA**	
	Medium Supply		All Units	**50/kVA**		**58/kVA**	
	Large Supply		All Units	**70/kVA**		**75/kVA**	
D	**Golden Temple & Durgiana Mandir, Sri Amritsar Sahib**		First 2000 Units	**NA**	**Free**	**NA**	**Free**
			Above 2000 Units	**NA**	**5.82/kWh**	**NA**	**5.94/kWh**
E	**TEMPORARY SUPPLY**						
	Domestic & NRS		All Units	**1.5 times the charges (highest slab in case of slab rates) specified under the relevant schedule for permanent supply corresponding to the connected load /demand**		**1.3 times the charges (highest slab in case of slab rates) specified under the relevant schedule for permanent supply corresponding to the connected load /demand**	
	Industrial (SP/MS/LS)		All Units				
	Wheat Threshers (SP/MS/LS)		All Units				
	Fairs, Exhibitions, Melas and congregations (BS)		All Units				
	Touring Cinemas, theatres, circuses etc i) Lights & Fans (NRS) ii) Motive Load(SP/MS/LS)		All Units				
F	**For use of electricity exclusively during night hours**						
	Large Supply/Medium Supply					**50% of FC specified under relevant category**	**4.28/kVAh**

**Fixed Charge (unless otherwise specified in Schedule of Tariff) shall be levied on 80% of the sanctioned load/demand or actual demand recorded, whichever is higher.*

***To be applicable w.e.f. 01.08.2018.*

Notes:

(i) The Schedules of Tariff with revised rates of tariff for various categories of consumers as approved by the Commission are as per ***Annexure III*** *of this Tariff Order. These Schedules shall be read*

*with the updated provisions of General Conditions of Tariff approved by the Commission as per **Annexure II** of this Tariff Order;*

*(ii) Free power/subsidized tariff shall be applicable to various categories of consumers as per GoP letter no. 7/71/2017-ਪੈਸ2/1736 dated 18th April, 2018 (**Annexure-IX** of this Tariff Order).*

(iii) Cooperative Group Housing Societies/ Employers availing single point supply under PSERC (Single Point Supply to Co-operative Group Housing Societies/Employers) Regulations will be levied fixed charges as applicable to Domestic Supply consumers with load exceeding 100 kVA i.e. @₹70 per kVA. A rebate of 12% (Twelve percent) will be admissible on electricity charges, comprising of fixed and energy charges, in addition to other voltage rebates as may be applicable.

(iv) Franchisee appointed by licensee for a particular area in its area of supply as per 7th proviso to Section 14 of the Electricity Act read with Regulations 6.6.2 of the Supply Code 2014, shall be admissible for rebate on electricity charges comprising of fixed charges and energy charges as per the franchisee agreement between the parties. Voltage rebate as may be applicable shall be admissible in addition to the above rebate as approved by the Commission;

(v) 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 & Compost Plants/ Solid Waste Management Plants for Municipalities/ Urban Local Bodies getting supply at 11 kV and 20 paise/kWh to AP/AP High-Technology/High Density Farming consumers getting supply at 11 kV shall be continued.

6.3. Cross Subsidy with Revised Tariff

6.3.1. The Commission in its MYT Regulations, 2014, Tariff Regulations has defined cross subsidy for a consumer category as the difference between the average realization per unit from that category and the combined average cost of supply per unit, expressed in percentage terms as a proportion of the combined average cost of supply. The cross-subsidy levels for different categories of consumers as worked out for energy sales for FY 2018-19 at revised tariff are depicted in Table 6.3.

6.3.2. Category-wise revenue has been worked out as per revised rates as discussed in para 6.2.3. High Voltage Rebate and impact of ToD tariff have been taken as projected by PSPCL in the ARR. Non-tariff income has been apportioned in the ratio of energy sale to different categories, except Outside State sale and Common Pool Consumers.

Table 6.3: Cross Subsidy Levels for Energy Sales of FY 2018-19 at Revised Tariff (Average cost of supply = 655.49 paise/kWh)

Sr. No.	Category of Consumers	Sales	Revenue with Revised Tariff		Non-Tariff Income	ToD Surcharge/ Rebate/HV Rebate	Total realization	Realisation per unit	Cross Subsidy levels
			Fixed Charges	Energy Charges					
		MU	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)	(₹ Crore)	Paise/Unit	%
I	II	III	IV	V	VI	VII	VIII = (IV+ V+VI+VII)	IX	X
1.	**Domestic Supply**								
	Upto 2 kW	7779.80	105.65	4764.42	165.80		5035.87	647.30	(1.25%)
	Above 2kW & upto 7kW	3443.88	166.57	2141.60	73.39		2381.56	691.54	5.50%
	Above 7kW & upto 50kW	3190.66	112.38	1992.61	67.99		2172.98	681.04	3.90%
	Above 50 kVA & upto 100 kVA	139.52	4.55	86.92	2.97		94.44	676.91	3.27%
	Above 100 kVA	263.11	10.74	169.45	5.61	(1.84)	183.95	699.15	6.66%
	Total	**14816.97**	**399.89**	**9155.00**	**315.76**	**(1.84)**	**9868.81**	**666.05**	**1.61%**
2.	**Non Residential Supply**								
	Upto 7 KW	1087.59	56.19	771.56	23.17		850.92	782.39	19.36%
	Above 7 kW & upto 20 kW	1071.60	47.08	767.75	22.84		837.67	781.70	19.25%
	Above 20 kVA & upto 100 kVA	1291.43	84.53	874.58	27.52		986.63	763.99	16.55%
	Above 100 kVA	900.85	89.69	583.75	19.20	(6.30)	686.34	761.88	16.23%
	Total	**4351.47**	**277.49**	**2997.64**	**92.73**	**(6.30)**	**3361.56**	**772.51**	**17.85%**
3.	**Public Lighting**	**195.39**	**4.79**	**143.61**	**4.16**		**152.56**	**780.79**	**19.12%**
4.	**Small Power**	**1035.80**	**94.88**	**577.98**	**22.08**		**694.94**	**670.92**	**2.35%**
5.	**Medium Supply**	**2463.43**	**220.09**	**1409.08**	**52.50**	**(17.20)**	**1664.48**	**675.67**	**3.08%**
6.	**Large Supply**								
	Large Supply (GI)	9860.37	1100.88	5773.98	210.15	(137.69)	6947.32	704.57	7.49%
	Large Supply (PIU)	3326.68	384.56	2025.77	70.91	(71.80)	2409.44	724.27	10.49%
	Total	**13187.05**	**1485.44**	**7799.75**	**281.06**	**(209.49)**	**9356.76**	**709.54**	**8.25%**
7.	**Bulk Supply**								
	HT	650.94	68.83	388.61	13.87	(9.10)	462.21	710.07	8.33%
	LT	43.53	2.08	27.77	0.93		30.78	707.11	7.88%
	Total	**694.47**	**70.91**	**416.38**	**14.80**	**(9.10)**	**492.99**	**709.89**	**8.30%**
8.	**Railway Traction**	**224.02**	**19.75**	**152.11**	**4.77**	**(6.72)**	**169.91**	**758.45**	**15.71%**
9.	**Agriculture Pumpset**	**12124.20**	**-**	**6256.09**	**258.40**		**6514.49**	**537.31**	**(18.03%)**
10.	**Sale to Outside State**	**126.18**		**50.78**			**50.78**		
11.	**Sale to Common Pool Consumer**	**341.64**		**159.38**			**159.38**		
12.	**TOTAL**	**49560.62**	**2573.24**	**29117.79**	**1046.26**	**(250.64)**	**32486.65**	**655.49**	

6.3.3. The cross-subsidy levels based on the energy sales determined for FY 2018-19 at revised tariffs, in percentage terms, are brought out in Column X of Table 6.3 and are within ± 20% as mandated in Tariff Policy.

6.3.4. The Hon'ble APTEL in its judgment dated 17.12.2014 in Appeal No. 142 of 2013 and 168 of 2013 has directed the Commission to show the cross-subsidy for each category of consumer with respect to voltage wise cost of supply in the next tariff order. In compliance to the judgment of the Hon'ble APTEL, the cross-subsidy level for each category of consumer with respect to voltage wise cost of supply is shown in **Annexure-V** of this Tariff Order.

6.4. GoP Subsidies as estimated by PSERC

6.4.1. After determining the Tariff for FY 2018-19, the Commission vide its D.O. No. PSERC/M&F/267/2422 dated 07.03.2018 **(Annexure-VIII)** solicited the views of GoP regarding its commitment to extend subsidy to any consumer or class of consumers under Section 65 of the Act.

The letter indicated that if GoP continued its present policy of subsidizing AP consumers, SC/Non-SC BPL/BC DS consumers, Freedom Fighter consumers and Industrial consumers, the total subsidy payable for FY 2018-19 would amount to ₹8950.20 crore.

6.4.2. **Balance Subsidy of previous years:**

Amount of Subsidy upto FY 2017-18:

The Shortfall of subsidy payable by GoP upto FY 2017-18 is detailed in Table 6.4.

Table 6.4: Shortfall subsidy upto FY 2017-18

Particulars	Amount (₹ crore)
Shortfall subsidy upto FY 2015-16 as per para 8.5.2 of Tariff Order for MYT Control Period (dated 23.10.2017)	1603.17
Shortfall subsidy of FY 2016-17 (para 2.15 of this Tariff Order)	1315.50
Shortfall subsidy of FY 2017-18 (para 3.24 of this Tariff Order)	1849.98
Total balance subsidy of previous years	**4768.65**

The total amount of balance subsidy of previous years (upto FY 2017-18) works out to ₹4768.65 crore.

6.4.3. **Decision of Govt. of Punjab on subsidy payable**

GoP vide its memo No. 7/71/2017-ਊਸ2/1736 dated 18th April, 2018 **(Annexure-IX)** has conveyed its decision regarding the payment of subsidy as under:

"(i) Free power to AP section would continue as in 2017-18.

(ii) Concessional Power Subsidy to DS consumers belonging to SC, BC and Non-SC BPL would continue as per the Policy in 2017-18.

(iii) Subsidised power to industry would also continue as in 2017-18.

(iv) Subsidised power to new industry through invest Punjab also to continue as in 2017-18."

On the above basis, total estimated subsidy payable by GoP during FY 2018-19 is detailed in Table 6.5.

Table 6.5: Subsidy payable by GoP to PSPCL during FY 2018-19

(₹ crore)

Particulars	AP	SC- DS	Non-SC, BPL DS	Backward Class DS	Small Power	Medium Supply	Large Supply	Total
Subsidy payable for FY 2018-19	6256.09	1107.69	69.21	75.43	61.11	174.90	1204.94	**8949.37**
Balance subsidy payable for previous years								**4768.65**
Total subsidy payable by GoP during FY 2018-19								**13718.02**

Change in subsidy, if any, will be re-determined at the time of true-up, as and when Audited Annual Accounts for the year are submitted by PSPCL.

The subsidy for FY 2018-19 of ₹13718.02 crore is required to be paid in advance in 12 monthly installments of ₹1143.17 crore from April, 2018 to January, 2019 and ₹1143.16 crore in February, 2019 and March, 2019.

6.5. 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. The Commission has determined the 'Pooled Cost of Purchase' (APPC) based on the data for FY 2017-18, as detailed Table 6.6.

Table 6.6: Pooled Cost of Purchase

Sr. No	Particulars	FY 2017-18	
		Generation (MU)	**Cost (₹ crore)**
	Own Generation		
1.	Thermal	4754.75	2834.19
2.	Hydel	8487.84	940.89
3.	Less: UBDC (being RE power)	383.60	65.67
4.	Net Power Purchase from Hydel (2-3)	8104.24	875.22
5.	Net Power Purchase with in State (1+4)	12858.99	3709.41
6.	Inter State Power Purchase (net)	41938.50	16743.36
7.	RE Power Purchase	2190.34	1383.42
8.	Inter State Power Purchase (net) other than RE (6-7)	39748.16	15359.94
9.	Total Power Purchase (5+8)	52607.15	19069.35
10.	Transmission & SLDC charges		1240.06
11.	Total Generation + Transmission & SLDC Charges		20309.41
12.	Energy at the distribution licensee's boundary with 2.50% transmission loss)	51291.97	
13.	**Pooled Cost of Purchase (11/12) (₹/Unit)**	**3.96**	

Accordingly, the Commission has determined the 'Pooled Cost of Purchase' (APPC) as ₹3.96 per kWh, which will be applicable during FY 2018-19.

6.6. Separate Tariff for each Function

6.6.1. A summary of project wise ARR of Thermal Generating Stations and Hydel Generating Stations of PSPCL for FY 2018-19 has been shown in Table 3.42 and Table 3.44 respectively of this Tariff Order. Further, the details of ARR of Distribution Business of PSPCL have been given in Table 3.52 and the revenue gap has been given in Table 3.53 of this Tariff Order. The project wise ARR of Thermal Generating Stations & Hydel Generating Stations of PSPCL and ARR of Distribution Business of PSPCL for FY 2018-19 is as given Table 6.7.

Table 6.7: Project wise ARR of PSPCL for FY 2018-19

(₹crore)

Sr. No.	Item of Expense	GNDTP	GGSSTP	GHTP	Shanan	UBDC	RSD	MHP	ASHP	Micro	BBMB	ARR of Genera-tion Business	ARR of Distribu-tion Business	ARR of PSPCL (XIII+XIV)
I	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X**	**XI**	**XII**	**XIII**	**XIV**	**XV**
1.	Cost of Power Purchase												18720.13	**18720.13**
2.	Fuel Cost		1071.67	579.43								1651.10		**1651.10**
3.	Employee Cost	189.33	285.25	125.29	18.08	35.01	25.06	37.75	30.43			746.20	4099.19	**4845.39**
4.	R&M and A&G Expenses	3.71	34.01	42.84	5.93	7.14	3.36	5.48	1.72			104.19	455.23	**559.42**
5.	BBMB O&M Expenses										271.14	271.14		**271.14**
6.	Depreciation	44.66	23.89	146.11	9.20	6.56	193.26	12.87	2.96		21.85	461.36	810.89	**1272.25**
7.	Interest Charges	0.08	16.79	0.06	3.50	0.91	23.65	14.15	0.71		10.73	70.58	1046.48	**1117.06**
8.	Return on Equity	75.49	69.02	86.94	2.89	16.05	146.88	18.65	9.90	0.49	10.84	437.15	505.47	**942.62**
9.	Interest on Working Capital	9.25	47.85	28.45	1.16	1.98	6.99	2.37	1.44	0.01	4.98	104.48	204.30	**308.78**
10.	Maintenance Charges payable to GoP for RSD						9.07					9.07		**9.07**
11.	Provision of DSM Funds												10.00	**10.00**
12.	Transmission Charges payable to PSTCL												1281.99	**1281.99**
13.	**Revenue Requirement**	**322.52**	**1548.48**	**1009.12**	**40.76**	**67.65**	**408.27**	**91.27**	**47.16**	**0.50**	**319.54**	**3855.27**	**27133.68**	**30988.95**
14.	Add: Consolidated Gap upto FY 2017-18, including carrying cost of Gaps	2.73	13.10	8.54	0.51	0.85	5.14	1.15	0.59	0.01	1131.20	1163.81	229.53	**1393.34**
15.	Impact of Commission's order in Pet. 11 of 2018		6.56	4.28								10.84	93.50	**104.34**
16.	**Gross revenue requirement (13+14+15)**	**325.25**	**1568.14**	**1021.94**	**41.27**	**68.50**	**413.41**	**92.42**	**47.75**	**0.51**	**1450.74**	**5029.92**	**27456.71**	**32486.63**

6.7. Generation Tariff

6.7.1. As per PSERC MYT Tariff Regulations, 2014, the generation tariff will comprise of Energy Charges and Fixed (Capacity) Charges.

6.7.2. The fixed cost of a thermal generating station shall be computed on annual basis, based on norms specified under PSERC MYT Tariff Regulations, 2014 and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by the beneficiaries as per their respective percentage share/allocation in the capacity of the generating station. Full

Annual Fixed Charges (AFC) are payable on achievement of normative plant availability as specified in PSERC MYT Tariff Regulations, 2014. The Capacity Charge payable to a thermal generating plant for a calendar month shall be calculated in accordance with the formulae specified in the PSERC MYT Tariff Regulations, 2014.

6.7.3. The fixed cost of a hydro generating station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and energy charge, which shall be payable by the beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station. The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be calculated in accordance with the formulae specified in the PSERC MYT Tariff Regulations, 2014.

6.7.4. The Energy (Variable) Charges for a thermal generating plant shall cover the primary fuel cost and secondary fuel cost, and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel price adjustment), in accordance with PSERC MYT Tariff Regulations, 2014.

6.7.5. The Commission has assessed the project wise AFC for FY 2018-19 on the basis of data submitted by PSPCL in the petition, in Table 6.7. The project wise AFC determined for FY 2018-19 is given in Table 6.8.

Table 6.8: Annual Fixed Charges-Generation for FY 2018-19

<table>
<tr><th>Sr. No.</th><th>Plant</th><th>Annual/Fixed Capacity Charges (₹crore)</th><th colspan="2">Generation (MU)</th><th colspan="2">Fixed Charges (paise/unit)</th></tr>
<tr><td>I</td><td>II</td><td>III</td><td colspan="2">IV</td><td colspan="2">V</td></tr>
<tr><td>A</td><td>Thermal Plants</td><td>1253.390</td><td colspan="4"></td></tr>
<tr><td>1.</td><td>GNDTP</td><td>325.250</td><td colspan="4">—#</td></tr>
<tr><td>2.</td><td>GGSSTP</td><td>489.910</td><td>5409.410*</td><td>3315.480**</td><td>90.566*</td><td>147.764**</td></tr>
<tr><td>3.</td><td>GHTP</td><td>438.230</td><td>6058.050*</td><td>1697.750 **</td><td>72.338*</td><td>258.124**</td></tr>
<tr><td>B</td><td>Hydel Plants</td><td>331.930
(50% of AFC)</td><td colspan="4"></td></tr>
<tr><td>1.</td><td>Shanan</td><td>20.635</td><td colspan="2">519.000</td><td colspan="2">39.759</td></tr>
<tr><td>2.</td><td>UBDC</td><td>34.250</td><td colspan="2">350.000</td><td colspan="2">97.857</td></tr>
<tr><td>3.</td><td>RSD</td><td>206.705</td><td colspan="2">1680.000</td><td colspan="2">123.039</td></tr>
<tr><td>4.</td><td>Mukerian</td><td>46.210</td><td colspan="2">1127.000</td><td colspan="2">41.003</td></tr>
<tr><td>5.</td><td>Anandpur Sahib</td><td>23.875</td><td colspan="2">720.000</td><td colspan="2">33.160</td></tr>
<tr><td>6.</td><td>Micro Hydel</td><td>0.255</td><td colspan="2">5.000</td><td colspan="2">51.000</td></tr>
<tr><td>7.</td><td>BBMB***</td><td></td><td colspan="2"></td><td colspan="2"></td></tr>
</table>

 # Closed/Retired w.e.f.01.01.2018.
** Worked out by taking Normative Annual Plant Availability Factor (NAPAF) of 85%.*
*** Worked out as per scheduled energy.*
**** AFC for hydel plants at Sr. No. 7 is determined by CERC.*

Accordingly, the total AFC (50% for Hydel Plants) recoverable in the case of thermal and hydel plants are:

i) Thermal - ₹1253.39 crore

ii) Hydel (excluding BBMB) - ₹331.93 crore

6.7.6. The AFC for both thermal and hydel plants will be payable on achievement of target availability as discussed in para 6.7.2 and para 6.7.3.

6.7.7. The variable (energy) charges for a thermal plant are the primary fuel cost and secondary fuel cost and is computed as cost per unit of ex-bus energy (energy sent out). As per approved ARR for FY 2018-19, the total fuel cost for all thermal plants is ₹1651.10 crore. After including impact of FCA i.e. ₹10.84 crore, the total Fuel Cost has been worked out as ₹1661.94 crore (1651.10 + 10.84). These costs have been worked out plant wise and the variable charges per unit of energy for each plant are given in Table 6.9.

6.7.8. Energy Charge Rate (ECR) in paise per kWh on ex-power plant basis, for a hydro generating station, shall be determined up to three decimal places based on the formula specified in the PSERC MYT Regulations, 2014 are given in Table 6.9.

Table 6.9: Variable (Energy) Charges for FY 2018-19

A	**Variable (Energy) Charges for Thermal Plants**			
Sr. No.	**Plant**	**Fuel Cost (₹crore)**	**Generation (MU)**	**Variable Charges (paise/unit)**
I	**II**	**III**	**IV**	**V**
1.	GNDTP	-	-	-
2.	GGSSTP	1078.230	3315.480	325.211
3.	GHTP	583.710	1697.750	343.814
B	**Variable (Energy) Charges for Hydel Plants**			
Sr. No.	**Plant**	**Variable Cost (50% of AFC**)**	**Generation (MU)**	**Variable Charges (paise/unit)**
I	**II**	**III**	**IV**	**V**
1.	Shanan	20.635	519.00	39.759
2.	UBDC	34.250	350.00	97.857
3.	RSD	206.705	1680.00	123.039
4.	Mukerian	46.210	1127.00	41.003
5.	Anandpur Sahib	23.875	720.00	33.160
6.	Micro Hydel	0.255	5.00	51.000

** The plant wise fuel cost has been taken as approved by the Commission in para 3.8*
*** AFC has been taken as per Table 6.7*

6.7.9. **Total charges for Generating Plants (Thermal and Hydel)**

The total charges (fixed and variable) for generating plants as determined by the Commission are given in Table 6.10.

Table 6.10: Total energy charges for FY 2018-19

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**			
a)	**For generation as per NAPAF**			
1.	GNDTP	-	-	-
2.	GGSSTP	90.566	325.211	415.777
3.	GHTP	72.338	343.814	416.152
b)	**For generation as per scheduled energy**			
1.	GNDTP	-	-	-
2.	GGSSTP	147.764	325.211	472.975
3.	GHTP	258.124	343.814	601.938
B	**Hydel Plants**			
1.	Shanan	39.759	39.759	79.518
2.	UBDC	97.857	97.857	195.714
3.	RSD	123.039	123.039	246.078
4.	Mukerian	41.003	41.003	82.006
5.	Anandpur Sahib	33.160	33.160	66.320
6.	Micro Hydel	51.000	51.000	102.000

6.8. Distribution/Wheeling Charges

6.8.1. The gross revenue requirement for distribution for FY 2018-19 as per Table 6.7 is ₹7361.09 crore (excluding the power purchase cost and transmission charges). As per PSERC MYT Regulations, 2014 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. The Commission has, accordingly, worked out the total distribution capacity of PSPCL for FY 2018-19 as 12775.54 MW (net of transformation losses and auxiliary consumption).

6.8.2. The details regarding determination of wheeling charges for FY 2018-19 are given in Table 6.11.

Table 6.11: Wheeling Charges for FY 2018-19

a)	Energy requirement at the distribution periphery during FY 2018-19 (as per Table 3.5 B of the Tariff Order)	55717.63 MU
b)	Contracted capacity of PSPCL	12775.54 MW
c)	Revenue requirement for distribution (as per para 6.8.1) excluding PPC & Transmission Charges of PSTCL	₹7361.09 crore
d)	Wheeling charges for using distribution network during FY 2018-19 (c x 1000/a)	132 paise/kWh
e)	Wheeling charges during FY 2018-19 per MW/month $[(c \times 10^7)/(b \times 12)]$	₹480155/MW/Month

Accordingly, the Commission determines wheeling charges for using distribution network during FY 2018-19 as ₹480155/MW/Month (or 132 paise/kWh).

6.9. Open Access Charges

6.9.1. The Commission, in exercise of powers conferred under Section 42 read with Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling the Commission in this behalf, framed the Punjab State Electricity Regulatory Commission (Terms and Conditions for Intra-State Open Access) Regulations, 2011 and notified the same vide Notification, the 1st July, 2011. These Regulations were amended vide Notification dated 4th May, 2012, wherein existing Regulation 25(5) was substituted as under:

"25(5) Long term, Medium term and short term Open Access customers availing supply at 220 kV, 132 kV, 66 kV, 33 kV or 11 kV, in addition to transmission charges, shall be liable to pay wheeling charges determined by the Commission as per the Tariff Order applicable for the year".

The Commission passed the Tariff Order dated 16.07.2012 for FY 2012-13 for PSPCL, and made wheeling charges applicable for Open Access customers as per amended Regulation 25 (5). Some Open Access customers filed Appeals, being No(s) 176, 191, 237, 245, all of 2012 against Tariff Order for FY 2012-13 and Appeal No(s) 142 and 168, both of 2013 against Tariff Order for FY 2013-14 challenging the wheeling charges payable by all Open Access consumers irrespective of the voltage level at which supply was being taken. The Hon'ble APTEL decided Appeal No(s) 176, 191, 237 and 245 of 2012 by common Judgment dated 12.09.2014.

Findings of the Hon'ble APTEL on the issue (Para 88 (i)) are as under:

"Wheeling Charges: We feel that the wheeling charges have been determined by the State Commission in contravention to the provisions of the Act, Tariff Policy, National Electricity Policy and its own Regulations. Therefore, we have no option but to set aside the impugned Order in respect of determination of wheeling charges applicable to Open Access customers for the period 7.5.2012 to 31.3.2013 with directions to re-determine the wheeling charges applicable to Open Access customers as per the above findings within 90 days of communication of this Judgment and pass on the consequential relief to the Appellants and other Open Access customers. The retrospective revision of the inter-state transmission

charges and wheeling charges for short term inter-state Open Access transactions by Open Access customers is also set aside as it is a contravention to the Inter-state Open Access Regulations of the Central Commission. Accordingly, this issue is decided in favour of Appellants".

The Commission initiated suo-motu proceedings vide Petition No. 56 of 2014 to comply with the directions of the Hon'ble APTEL and called upon the parties to file written submissions with regard to the directions of the Hon'ble APTEL. During hearing on 11.11.2014, PSPCL submitted copies of Memorandum of Appeal filed under Section 125 of the Electricity Act, 2003 before the Hon'ble Supreme Court against the Order dated 12.09.2014 of the Hon'ble APTEL. The Commission, after hearing PSPCL on 16.12.2014, closed the hearing of the petition and reserved the Order.

The Hon'ble Supreme Court, in its Order dated 06.04.2015 had stayed the Judgment dated 12.09.2014 passed by the Hon'ble APTEL.

Similarly, some consumers of PSPCL had filed Appeal No.142 and 168 both of 2013 and had challenged the Tariff Order dated 10.04.2013 for FY 2013-14 for PSPCL, interalia on the ground of levy of wheeling charges as determined in the said Tariff Order in terms of Open Access Regulation 25(5) as amended in 2012 on the Open Access customers irrespective of the voltage at which the supply was taken. The findings of the Hon'ble APTEL dated 17.12.2014 on the issue in these Appeals are the same as in its Order dated 12.09.2014 in Appeal No(s) 176, 191, 237 and 245, all of 2012.

PSPCL filed Appeal before the Hon'ble Supreme Court under Section 125 of the Electricity Act, 2003. The Hon'ble Supreme Court had admitted the Appeals (Civil Appeal No(s) 2151-2152 of 2015) and had stayed the impugned judgment vide Order dated 27.03.2015.

Since both the judgments (dated 12.09.2014 and 17.12.2014) of the Hon'ble APTEL on the issue of levy of wheeling charges on Open Access customers have been stayed by the Hon'ble Supreme Court, the directions of the Hon'ble APTEL vide these Judgments cannot be complied with in this Tariff Order. The wheeling charges in terms of Regulation 25(5) of Open Access Regulations as amended vide notification dated 4th May, 2012, shall continue to be payable by all Open Access customers for FY 2018-19.

6.9.2. As per clause 25(5) of PSERC (Open Access) Regulations, 2011 (amended on 4th May, 2012), 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 the Tariff Order for PSTCL for FY 2018-19, shall be liable to pay wheeling charges for use of distribution network during FY 2018-19 are as under:

a) For Long Term/Medium Term Open Access (OA) customers = ₹480155MW/Month

b) For Short Term Open Access (OA) customers = 132 paise/kWh (119 paise/kVAh)

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.

Provided that in case of wheeling of power for consumption within the State, generated from NRSE project in the State, achieving commercial operation (COD) from 09.07.2015 to 31.03.2017, no transmission and wheeling charges shall be leviable, irrespective of the distance, for a period of 10 (ten) years from its date of commercial operation (COD).

6.9.3. 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 (11.89%), which works out to 1.78%, in addition to Transmission Loss of 2.5%.
(iii)	OA customers at 11 kV	40% of distribution losses (11.89%), which works out to 4.76%, in addition to Transmission Loss of 2.5%.

6.9.4. As per clause 26(2) of PSERC (Open Access) Regulations, 2011, the cross-subsidy surcharge for various categories of consumers during FY 2018-19 shall be as under:

Large supply		
General Industry	-	49 paise/kWh (47 paise/kVAh)
PIU/Arc Furnace	-	69 paise/kWh (68 paise/kVAh)
Domestic Supply	-	44 paise/kWh (40 paise/kVAh)
Non-Residential supply	-	106 paise/kWh (98 paise/kVAh)
Bulk Supply	-	55 paise/kWh (52 paise/kVAh)
Railway Traction	-	103 paise/kWh (101 paise/kVAh)

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

6.10. Date of Effect

The Commission notes that the ARR Petition of PSPCL for FY 2018-19 is for the complete financial year. The recovery of tariff, therefore, has to be such that the total revenue requirement of PSPCL for FY 2018-19 is recovered in this period. **The Commission, therefore, decides to make the revised tariffs applicable from April 01, 2018 until and unless specified otherwise in this Tariff Order. The tariff structure determined above shall remain operative till March 31, 2019. This Order supercedes the Commission's earlier (interim) Order dated 28.03.2018.**

This Order is signed and issued by the Punjab State Electricity Regulatory Commission on this, the 19th day of April, 2018.

Date: April 19, 2018
Place: CHANDIGARH

Sd/-	Sd/-	Sd/-
(Anjuli Chandra) **MEMBER**	**(S.S. Sarna)** **MEMBER**	**(Kusumjit Sidhu)** **CHAIRPERSON**

Certified

Sd/-

Secretary
Punjab State Electricity Regulatory Commission,
Chandigarh.

ANNEXURE - I

The Government of Punjab amended the "Punjab Power Sector Reforms Transfer Scheme" on 24th December, 2012, vide notification number 1/4/04EB (PR)/620 known as Punjab Power Sector Reforms Transfer (First Amendment) Scheme, 2012. The salient features of the aforesaid amendments are as under:

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 the 16th April, 2010, and the same shall be funded over a period of ten years commencing on and with effect from the 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 the 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, the 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 sheet for Powercom and Transco as on the 16^{th} April, 2010.

<u>ANNEXURE - II</u>

GENERAL CONDITIONS OF TARIFF

1. General

Supply of electric energy to various categories of consumers shall be chargeable under the relevant Schedule of Tariffs. The particular schedule applicable to a new consumer shall be determined with reference to nature and/or quantum of load/demand and intimated to the prospective consumer at the time of issue of Demand Notice. This shall be subject to review on the basis of any change in nature and/or the quantum of actual connected load/demand.

2. Tariffs to be exclusive of levies

The tariffs i.e. Fixed and Energy Charges shall be exclusive of electricity duty, cesses, taxes and other charges levied by the Government or other competent authority from time to time.

3. Tariffs to be exclusive of general charges

The tariffs shall be exclusive of rentals and other charges as per the Schedule of General Charges as approved by the Commission from time to time.

4. Point of Supply

Unless otherwise approved by the Commission, the tariffs shall be applicable to supply at single point and at voltage specified in the Supply Code 2014. Supply at other points and/or other voltages shall be billed separately, if otherwise permissible.

5. Connected Load shall be as specified in Supply Code 2014**.**

6. Applicability of Industrial Tariff Category

The applicable category of tariff, under Schedules Large Power Supply (LS), Medium Power Supply (MS) & Small Power supply (SP) industrial consumers, shall be based on the total of industrial and general load/demand (kW/kVA) as applicable i.e. bona-fide factory lighting, residential quarters and colony lighting including street lighting. While computing total load/demand (kW/kVA) for determining applicable schedule, fraction of half and above shall be taken as whole kW/kVA and fraction below half shall be ignored.

7. Periodicity of Billing

Periodicity of Billing shall be as per Supply Code 2014. However, in case of bimonthly billing, consumption slabs shall be doubled while applying the relevant tariff.

8. Fuel Cost Adjustment (FCA)

8.1 To neutralize the changes in fuel cost, FCA as per provisions of PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulation, 2014 & PSERC (Conduct of Business) Regulations, 2005, as amended from time to time, shall be applicable in addition to the energy charges of various categories of consumers specified in relevant Schedule of Tariff.

8.2 FCA clause shall be applicable to all metered and un-metered categories of consumers.

9. Two Part Tariff (TPT) Structure/Fixed Charges

All consumers (except AP, AP High-Technology/High Density Farming, EV Charging Stations, Golden Temple and Durgiana mandir) shall be covered under Two Part Tariff structure, as approved by the Commission in the Tariff Order. Further fixed charges under TPT shall be charged as under:

(a) For consumers covered under Contract Demand system as per condition 10 below, the Fixed Charges (unless otherwise specified in Schedules of Tariff) shall be levied on 80% of the sanctioned Contract Demand or Actual demand recorded during the billing cycle/month (restricted to sanctioned Contract Demand), whichever is higher. In case, the consumer exceeds its sanctioned Contract Demand during a billing cycle/month, he shall be liable to pay applicable demand surcharge as provided in Schedule of Tariff for relevant category.

(b) For other consumers (not covered under Contract Demand system as per condition 10 below), the Fixed Charges shall be levied on 80% of the sanctioned load in kW.

10. Contract Demand

10.1 Contract demand shall mean the maximum demand in kVA sanctioned to the consumer.

10.2 All consumers with load exceeding 20 kW (except Domestic Supply consumers with load upto 50 kW, Public Lighting, AP, AP High-Technology/High Density Farming) and Small Power (SP) Industrial supply Consumers & Bulk Supply (BS) consumers are required to declare their maximum demand in in kVA.

Existing Non-Residential Supply (NRS) consumers with load exceeding 20 kW and upto 50 kW, Small Power Industrial Supply (SP) consumers and all other consumers with load exceeding 20 kW (except Domestic Supply (DS) consumers with load upto 50 kW, Public Lighting, AP, AP High-Technology/High Density Farming) are required to declare their 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. However, in case of SP consumers, the maximum demand shall not exceed 20 kVA. The date of applicability of contract demand for these consumers shall be as specified in the Tariff Order.

10.3 The maximum demand for any month shall be considered as highest average load measured in kilovolt Ampere (kVA) during a block of 30 minutes period.

11. Metering

Metering equipment for HT/EHT consumers for the whole supply including general load shall normally be installed on the HV side of the transformer at the point of commencement of supply.

12. Non availability of Metering Equipment

In case of HT/EHT consumers receiving supply at 11 kV and above, if metering equipment is installed on LV side of the transformer due to non-availability of metering equipment, both the energy consumption (kWh/kVAh) and maximum demand shall be enhanced by 3% to account for the transformation losses.

13. Voltage Surcharge/rebate

13.1 **Voltage Surcharge:**

The levy of voltage surcharge shall be as under:-

i) All consumers catered at 400 volts against specified voltage of 11 kV shall be levied surcharge at the rate of 15%.

ii) All consumers catered at 11 kV against specified voltage of 33/66 kV shall be levied surcharge at the rate of 10%.

iii) All consumers catered at 33/66 kV against specified voltage of 132/220 kV shall be levied surcharge at the rate of 5%.

iv) All these surcharges shall be leviable on the energy charges.

v) The exemptions from levy of surcharge(s) shall continue as under:-

(a) LS consumers existing as on 31.03.2010 availing supply at 33/66 kV but required to convert their system so as to receive supply at 132/220 kV will not be levied any surcharge related to supply voltage, till such consumers request for change of their Contract Demand.

(b) DS/NRS/BS consumers existing as on 31.03.2010 catered at a voltage lower than specified in Supply Code 2014 will be liable to pay surcharge only in case of any change in Contract Demand.

13.1.1 In case there is any constraint in releasing a new connection or additional load/demand to an existing consumer at specified voltage, the distribution licensee may allow supply at a lower voltage subject to technical feasibility and on payment of voltage surcharge as specified above with the permission of Whole Time Directors.

Provided that existing consumers paying surcharge as per sub-clause (ii) or (iv) of condition 13.1 of General Conditions of Tariff annexed as Annexure-I to the Tariff Order for FY 2016-17 shall continue to be governed by existing provisions till conversion to amended Supply Voltage in accordance with regulation 4.2 read with sub-regulation 4.2.2 of PSERC (Electricity Supply Code and Related Matters) (2^{nd}Amendment) Regulations, 2016.

13.2 **Voltage Rebate**

As the cost to serve at higher voltage is lower than the cost to serve at lower voltage so rebate on energy charges to various categories of consumers getting supply at HT/EHT voltages shall be applicable as determined by the Commission in the Tariff Order for the relevant year.

14. Steel Rolling Mill Surcharge (Deleted)

15. Time of Day (ToD) Tariff

15.1 Time of the Day (ToD) tariff shall be applicable to all Large Supply consumers, Medium Supply consumers, and NRS/BS consumers with sanctioned Contract Demand exceeding 100 kVA, during such period and on such terms and conditions as determined by the Commission in the Tariff Order for the relevant year. However, no ToD rebate shall be applicable to the consumers covered under Condition 22.

16. Non-availability of MDI reading and/or kVAh Consumption

16.1 **Defective MDI:**

16.1.1 In case the MDI of a consumer becomes defective, the maximum demand shall be computed as under:

16.1.2 Higher of the average of maximum demands recorded during the preceding three months before the MDI became defective or the maximum demand of corresponding month of the previous year provided there was no change of load/demand thereafter, shall be adopted for billing purposes for the period the MDI remained defective.

16.1.3 If there was change of load/demand immediately before the MDI became defective, the maximum demand computed as above shall be adjusted on pro-rata basis.

16.1.4 In case of new connections where the previous reading record is not available the maximum demand shall be taken as 80% of sanctioned contract demand for billing purposes during the period MDI became defective.

16.2 **Non-availability of kVAh consumption**

16.2.1 In case kVAh consumption is not available due to defective meter or otherwise, monthly average power factor of the consumer's installation recorded during the last three correct working months preceding the period of overhauling (i.e. period of review of billing account) shall be taken as monthly average power factor for the purpose of power factor surcharge/incentive to the applicable category till such time kVAh consumption is available.

16.2.2 Where the billing is done on kVAh consumption basis, the procedure given in the Supply Code 2014 shall be followed for billing purposes as applicable to defective/dead stop meters.

17. Tariff for News Paper Printing Presses

Accredited news paper printing presses shall be treated as industrial premises and therefore the supply to these consumers shall be considered as industrial supply and shall be charged under relevant industrial tariff. However, the lighting load in the premises of accredited news paper presses shall be metered separately and charged as per rates under Schedule Non-Residential Supply.

18. Seasonal Industries

18.1 Seasonal industries mean industries/factories which by virtue of nature of their production, work during part of the year up to a maximum of 9 months during the year as specified below in Condition 18.2.

18.2 Approved seasonal industries are as under:

(i) All cotton ginning, pressing and bailing plants

(ii) All rice shellers

(iii) All rice bran stabilization units (without T.G. Sets)

(iv) Kinnow grading & Waxing Centers

(v) Maize Dryer Plants

(vi) Food (including fruits and vegetables) processing, packaging and storage units.

- Seasonal period for industries at Sr. No. (i), (iii) and (iv) shall be considered from 1st September to 31st May next year and seasonal period for rice sheller industry at Sr. no. (ii) shall be from 1st October to 30th June next year. The seasonal industrial consumers at Sr. no. (i) to (iv) shall not be required to serve advance notice before starting or closing the unit.
- Seasonal industrial consumers at Sr. No. (v) and (vi) shall be required to intimate the period of their season subject to maximum 9 months by 31st May or one month prior to start of season, whichever is earlier.
- Seasonal industry consumers shall not be required to give any undertaking not to run his seasonal industry during off season.

18.3 Rice bran stabilization units having T.G. Sets, Rice Huller Mills, Ice Factories and Ice Candy Plants shall not be treated as seasonal industries.

18.4 The seasonal Industry consumers shall have the option to be covered under General Industry Category and relevant Industrial Tariff shall be applicable in such cases. The seasonal industrial consumers shall exercise their option one month prior to start of the season. In such case, the billing as general industry shall be done for whole one year i.e. for a period of 12 months from the date of start of season.

18.5 **Billing of Seasonal Industries**

Billing for all seasonal industries shall be done monthly and charged as under:

18.5.1 For **exclusive Seasonal industries** mentioned above (except Rice Shellers), billing shall be done monthly as per the tariff (comprising of fixed and energy charges) applicable in respective schedule of tariff for seasonal industry. However, the Fixed Charges, as applicable in respective schedule of tariff for seasonal period, shall be levied on sanctioned load/demand for the period of six months only from the beginning of the seasonal period in accordance with condition 9 above. Thereafter, only energy charges, as applicable in respective schedule of tariff, shall be levied on actual consumption recorded during the month. However, load/demand surcharge, shall be leviable for the excess load/demand, if any, as per the relevant schedule of tariff.

18.5.2 **For rice shellers (exclusive seasonal Industry),** billing shall be done as under:

- Billing for the rice sheller seasonal industry shall be done monthly w.e.f. 1st October as per tariff (comprising of fixed and energy charges) applicable in respective schedule of tariff subject to payment of Seasonal Minimum Consumption Charges (SMCC). The Seasonal Minimum Consumption Charges (SMCC) will be based on energy consumption formula (4800+nx)x9 wherein monthly energy consumption of 50 kW rice sheller will be taken as 4800 units in accordance with LDHF formula (L-load: 50 kW. D-days: 24 days. H-hours: 10, F-demand factor: 0.4); where 'n' represents numerical number rounded off to two decimal point and will be positive/negative.

  0,1,2,3,4,5……..upto 'n' for each 10 kW increase/decrease, respectively, with respect to base load of 50 kW. "x" has been taken as 400 units per 10 kW change in load over base load of 50 kW. The SMCC shall be calculated as under:

  a) Energy Charges shall be calculated on the Seasonal Minimum Consumption as per the rates specified in respective schedules of tariff and,

  b) Fixed Charges shall be calculated on sanctioned load/demand, in accordance with condition 9 above, at the rates specified in respective schedule of tariff for seasonal period of six months

- Once the amount equivalent to SMCC, worked out as above, is deposited by the consumer in the form of consumption through monthly bills, thereafter only energy charges, as applicable in respective schedule of tariff for seasonal period, shall be levied on actual consumption recorded during the month and no fixed charges shall be levied. However, load/demand surcharge, shall be leviable for the excess load/demand, if any, as per the relevant Schedule of Tariff.

NOTE:

In case of MS and LS category of consumers, the kWh consumption computed as per above procedure shall be converted to kVAh consumption by using power factor of 0.90.

18.5.3 **For mixed Industries**, comprising of seasonal Industry and general industry, billing shall be done monthly as under:

a) Energy Charges shall be levied on actual consumption recorded during the month, as applicable in respective Schedule of Tariff for General Industry, throughout the year.

b) Fixed Charges in accordance with condition 9 above shall be levied on sanctioned general load/demand, as applicable in respective Schedule of Tariff for General Industry throughout the year and on sanctioned seasonal load/demand for six months at seasonal rates, as applicable in respective Schedule of Tariff, from the beginning of seasonal period irrespective of the actual period of running of seasonal load.

18.5.4 The amended procedure for billing of seasonal industry shall be applicable for the season commencing during FY 2018-19.

19. Agricultural Pumping Supply

19.1 All AP connections shall be released only after installation of minimum four star labeled motor and through meter.

19.2 Chaff cutters, threshers and cane crushers for self use shall be allowed to be operated on agriculture pumping supply connections.

19.3 The water from tube well shall be allowed to be used by the consumers only to irrigate the land in their possession.

20. Rounding-off Energy Bill

The charges i.e. both Fixed and energy charges including surcharges, rebates, octroi (if applicable), meter/MCB rentals, electricity duty as well as total energy bill (net as well as gross) shall be rounded-off individually to the nearest rupee by ignoring 1 to 49 paise and taking 50 to 99 paise as one rupee. Thus the amount mentioned in the bill shall be in whole rupee. The net amount payable in all electricity bills shall be rounded-off to the nearest ₹10/- (Rupees ten) and difference due to rounding-off shall be adjusted in subsequent bills.

21. Late Payment Surcharge

In the event of the energy bill or other charges relating to electricity not being paid in full within the time specified in the bill, the consumers shall be levied late payment surcharge as under:

21.1 For all categories of consumers having HT/EHT specified supply voltage, if the full amount of the bill is not paid within due date, late payment surcharge shall be levied @ 2% on the unpaid amount of the bill up to 7 days after the due date. After 7 days, the surcharge shall be levied @ 5% on the unpaid amount of bill up to 15 days from the due date.

21.2 In case of consumers having LT specified supply voltage, if the full amount of the bill is not paid within due date, the late payment surcharge shall be levied @ 2% on the unpaid amount of the bill up to 15 days from the due date.

21.3 In case of AP consumers, late payment surcharge shall not be levied up to 7 days after the due date. After 7 days surcharge shall be levied as in the case of LT consumers.

21.4 Interest @ 1.5% per month on gross unpaid amount including surcharge payable as per clause 21.1, 21.2 & 21.3 above shall be levied after expiry of 15 days from the due date of the bill till the deposit of outstanding amount. Part of the month shall be treated as full month for this purpose.

22. Use of electricity exclusively during night hours

Reduced tariffs as may be decided by the Commission in the Tariff Order for the year, shall be applicable to LS/MS Industrial consumers who opt to use electricity exclusively during night hours i.e. from 10.00 PM to 06.00 AM next day, subject to conditions as under**:**

i) A maximum of 15% of the contracted demand can be availed beyond the night hours prescribed above.

ii) A maximum of 10% of total units consumed during night hours in a billing period can be availed beyond the night hours prescribed above. However, ToD surcharge, as applicable, shall also be chargeable for this consumption during the peak-period, if any.

iii) In case the consumer exceeds the %age specified in condition no. i above during any of the billing month, then fixed charge during the relevant billing month shall be billed as per normal rates of fixed charge applicable to the respective category.

iv) In case the consumer exceeds the %age specified in condition no. ii above during any of the billing month, then entire energy consumption during the relevant billing month shall be billed as per normal rates of energy charge applicable to the respective category.

v) In case the consumer exceeds the %ages specified in condition no. i and ii both during any of the billing month, then billing of such consumers during the billing period shall be done as normal consumers of relevant category.

vi) This tariff shall be applicable if the consumer so opts to be charged in place of normal tariff by using electricity exclusively during night hours as above. The option can be exercised to switch over from normal tariff to exclusive night time tariff by giving not less than one month's notice in writing.

vii) Other terms and conditions shall remain same as applicable to the respective categories as per the relevant Schedule of Tariffs.

23. Load/Demand Surcharge

23.1 Load/Demand Surcharge for Consumers covered under Contract Demand System

23.1.1 Load Surcharge

No load surcharge shall be levied for the extra load connected by the consumer temporarily or otherwise thereby exceeding sanctioned load. However, the installation of extra load shall conform to CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 and statutory clearances wherever applicable shall be obtained by the consumer.

23.1.2 Demand Surcharge for exceeding the Contract Demand

If a consumer in a month exceeds the sanctioned contract demand, demand surcharge shall be charged at a rate of ₹750/- per kVA on excess demand irrespective of number of defaults. This demand surcharge shall be without prejudice to the distribution licensee's right to take such other appropriate action as may be deemed necessary to restrain the consumer from exceeding his contract demand.

In the event of MDI being defective, maximum demand for billing purpose shall be computed as per clause 16 of General Conditions of Tariff. In case computed maximum demand is more than the sanctioned contract demand, no surcharge for demand consequent to this computation shall be levied.

23.2 Load Surcharge for Consumers not covered under Contract Demand System

If the connected load of a consumer exceeds the sanctioned load, the excess load shall be unauthorized load. Such excess load shall be charged load surcharge at a rate of ₹1000/- per kW or part thereof for each default. This load surcharge shall be without prejudice to the distribution licensee's right to take such other appropriate action as may be deemed necessary to restrain the consumer from exceeding his sanctioned connected load. The unauthorized load so detected shall be got removed. However if the unauthorized extension is up to 10% of the sanctioned load, the consumer shall be required to pay load surcharge and the connection shall not be disconnected. The unauthorized load upto 10% of the sanctioned load so detected shall either be removed or got regularized by the consumer.

23.3 Compensation for damage

Any consumer who exceeds his sanctioned load/demand shall be liable to compensate the distribution licensee for all damages occasioned to its equipments or machinery by reason of this default. Without prejudice to this right, the distribution licensee may also cause the service of the consumer to be disconnected without any notice to the consumer.

24. Interpretation of Tariff

If a question arises as to the applicability of tariff to any class of consumer or as to the interpretation of various clauses of tariff or General Conditions of Tariff, decision of the Commission shall be final.

ANNEXURE-III

SCHEDULES OF TARIFF (FY 2018-19)

(To be read with General Conditions of Tariff annexed at Annexure –II)

SI. SCHEDULE OF TARIFF FOR LARGE SUPPLY INDUSTRIAL POWER (LS)

SI.1 Availability

SI.1.1 This tariff shall apply to all industrial power supply consumers having contract demand exceeding 100 kVA, including IT units covered under definition of 'Electronic Hardware and Information Technology (IT) Sector' as per the GoP notification no. 17/7/2014-AS 1/ 1372 dated 09.11.2015 or as amended from time to time.

Oil/Gas terminals, gas bottling plants, depots of oil/gas companies, poultry, goatery, piggery, fish farming (exclusive) & dairy farms, Maize Dryer Units, Food (including fruits and vegetables) processing, packing and storage units, meeting above criteria shall also be covered in this schedule.

SI.1.1.1 A separate NRS connection in the premises of LS consumers shall be permissible for regular conduct of commercial activities provided such activity is permissible under bye laws/Rules of the Govt. The electric wiring and portion of the building for such activity should be separate.

SI.2 Character of Service

SI.2.1 Alternating Current, 50 cycles/second, Three Phase 11 kV or higher Voltage as specified in the Supply Code 2014, depending on quantum/type of load/ contract demand and availability of bus voltage and transformer winding capacity at the feeding sub-station.

SI.3 Tariff

	Description	Energy Charge (₹/kVAh)	Fixed Charge (₹/kVA)
SI.3.1	**General Industry**		
	i) Above 100 kVA and upto1000 kVA	5.81	150
	ii) Above 1000 KVA and upto 2500 kVA	5.85	205
	iii) Above 2500 KVA	5.90	240
SI.3.2	**Arc Furnaces & Power Intensive Units including Induction furnaces, Chloroalkaline units, Billet heaters, Surface hardening Machines & Electrolytic process industries**		
	i) Above 100 kVA and upto1000 kVA	5.85	155
	ii) Above 1000 KVA and upto 2500 kVA	6.10	250
	iii) Above 2500 KVA	6.11	280
SI.3.3	**Seasonal Industries covered under condition 18 of the General Conditions of Tariff**		
	i) Seasonal Rate	Same as specified for the relevant general Industrial category	300 (for 6 Months)
	ii) Off Seasonal Rate		Nil
SI.3.4	**Ice Factories, Ice Candies & Cold Storages**		
	i) April to July		300
	ii) August to March next year		75
SI.3.5	For **use of electricity exclusively during night hours** i.e. from 10.00 PM to 06.00 AM next day	4.28	**50%** of the charges specified for the relevant category

Note: In addition to the Energy Charge:

(i) Fuel Cost Adjustment (FCA) charges shall be applicable in accordance with condition 8 of General Conditions of Tariff.

(ii) ToD tariff shall be applicable as per the Tariff Order for the year. However, ToD rebate shall not be applicable to consumers covered under Condition 22 of General Conditions of Tariff, for use of electricity exclusively during night hours.

SI.3.6 For Arc/PIU industries where the load is of mixed nature, i.e. in addition to Arc/ Power Intensive loads, General Industrial loads are also running, Fixed and Energy Charges shall be determined by computing the Maximum Demand and energy consumption for the billing month on pro-rata basis in proportion to such demands sanctioned by the distribution licensee and applicable tariff (Fixed Charge and Energy Charge) shall be as specified against the corresponding demand slab (without clubbing of Arc/Power Intensive and general load) under the relevant schedule of tariff.

In such cases, Power Intensive loads shall comprise of loads as mentioned in para SI.3.2, including auxiliary loads, loads of pollution control machinery, gas plants & corresponding lighting loads, and general industrial loads in such cases shall comprise loads of rolling mills and its allied loads, related workshop, general engineering machinery and corresponding lighting load, for the purpose of levy of Fixed Charges.

SI.3.7 For industrial units having CPP / Co-Gen. plant, Fixed Charges shall be levied, for the load to be exclusively fed from the distribution licensee's system, as per Condition 9 of General Conditions of Tariff. However, billing demand of these units shall be considered as 50% of the sanctioned contract demand or actual demand recorded during the billing cycle/month (restricted to the sanctioned contract demand), whichever is higher, till the finalisation of amendments to PSERC (Harnessing of Captive Power Generation) Regulations, 2009.

SI.3.8 Voltage Surcharge/Rebate

The voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SI.4 Seasonal Industries

Seasonal industries shall be billed as per condition 18 of General Conditions of Tariff.

SI.5 Factory Lighting and Colony Lighting

All consumption for bona fide factory lighting shall be included for charging under the above tariff. The consumption for residential purposes i.e staff quarters of factory, street lighting etc. shall also be charged under this Schedule. However, a separate single point connection may be allowed for the colony load including street lighting under PSERC (Single Point Supply to Cooperative Group Housing Societies/Employers) Regulations 2008, if the colony is in separate premises.

SI.6 Load/Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SI.7 Force Majeure applicable for Arc/Induction furnaces

In the event, where normal working of the industry is affected in the event of lock out due to labour problem, damage of EHV Power Transformer, failure on the part of distribution licensee to supply power, fires, earth-quakes, floods, tempests and lightning, directly resulting in closure of industry or normal supply hours reduced through specific order of the distribution licensee for power regulation purposes, the consumer shall be entitled to proportionate reduction in fixed charges, provided that such closure or reduced working hours continue for at least seven days consecutively in a billing cycle month directly as a consequence of any of the above conditions, with the approval of load sanctioning authority. In the event of relief being allowed in fixed charges under above conditions, the consumers shall, however, be required to pay atleast fixed charges as applicable to general Industry large supply consumers.

SII <u>SCHEDULE OF TARIFF FOR MEDIUM SUPPLY INDUSTRIAL POWER (MS):</u>

SII.1 Availability

This tariff shall apply to all industrial power supply consumers having contract demand above 20 kVA but not exceeding 100kVA, including IT units covered under definition of 'Electronic Hardware and Information Technology (IT) Sector' as per the GoP notification no. 17/7/2014-AS 1/ 1372 dated 09.11.2015 or as amended from time to time.

Oil/Gas terminals, gas bottling plants, depots of oil/gas companies, poultry, goatery, piggery, fish farming (exclusive) & dairy farms, Maize Dryer Units, Food (including fruits and vegetables) processing, packing and storage units, meeting above criteria shall also be covered in this schedule.

SII.1.1.1 A separate NRS connection in the premises of MS consumers shall be permissible for regular conduct of commercial activities provided such activity is permissible under bye laws/Rules of the Govt. The electric wiring and portion of the building for such activity should be separate.

SII.2 Character of Service

SII2.1 Alternating Current, 50 cycles/ second, Three Phase 400 volts or 11 kV (at consumer's discretion).

SII.2.2 Metered supply connections to poultry, goatery, piggery, fish farming (exclusive) & dairy farms may be released from category-1 or UPS or AP feeder at the option of the consumer subject to the technical feasibility to release such connection. However, the consumer opting for supply from AP feeder shall be entitled to limited hours of supply as per power supply schedule applicable to AP consumers. The consumers opting for supply from AP feeder shall not be eligible for tariff applicable to agriculture consumers.

SII.3 Tariff

	Description	Energy Charge (₹/kVAh)	Fixed Charge (₹/kVA)
SII.3.1	**General Industry**	5.72	115
SII.3.2	**Seasonal Industries** covered under condition 18 of the General Conditions of Tariff:		
	(i) Seasonal Rate	5.72	230 (for 6 Months)
	(ii) Off Seasonal Rate		Nil
SII.3.3	**Ice Factories, Ice Candies & Cold Storages** (i) April to July (ii) August to March next year	5.72	 230 58
SII.3.4	For **use of electricity exclusively during night hours** i.e. from 10.00 PM to 06.00 AM next day	4.28	**50%** of the charges specified for the relevant category

Note: In addition to the Energy Charge:

(i) Fuel Cost Adjustment (FCA) charges shall be applicable in accordance with condition 8 of General Conditions of Tariff.

(ii) ToD tariff shall be applicable as per the Tariff Order for the year. However, ToD rebate shall not be applicable to consumers covered under Condition 22 of General Conditions of Tariff, for use of electricity exclusively during night hours.

SII.3.5 Voltage Surcharge/Rebate

The voltage surcharge/rebate shall be applicable as per condition 13 of the General Conditions of Tariff.

SII.3.6 In case of Rice Shellers, Ice Factories, Cold Storage & Stone Crushers falling under this schedule, where the metering is done on 11 kV and the consumer has installed his own transformer, additional rebate of 3 paise per kVAh shall be admissible over and above the voltage rebate admissible as per condition 13 of the General Conditions of Tariff.

SII.4 Seasonal Industries

Seasonal industries shall be billed as per condition 18 of General Conditions of Tariff.

SII.5 Factory Lighting

The consumption for the bona fide factory lighting and residential quarters, if any, attached to the factory shall not be metered separately. Only one meter shall be installed for industrial & general load and entire consumption shall be charged at the rate for industrial consumption.

SII.6 Load/Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SIII SCHEDULE OF TARIFF FOR SMALL INDUSTRIAL POWER SUPPLY (SP)

SIII.1 Availability

This tariff shall apply to Industrial Power Supply consumers with sanctioned load/ demand not exceeding 20 kW/kVA, including IT units covered under definition of 'Electronic Hardware and Information Technology (IT) Sector' as per the GoP notification no. 17/7/2014-AS 1/ 1372 dated 09.11.2015 or as amended from time to time.

Oil/Gas terminals, gas bottling plants, depots of oil/gas companies, poultry, goatery, piggery, fish farming (exclusive) & dairy farms, Maize Dryer Units, Food (including fruits and vegetables) processing, packing and storage units, meeting above criteria shall also be covered in this schedule.

SIII.1.1 A separate NRS connection in the premises of SP consumers shall be permissible for regular conduct of commercial activities provided such activity is permissible under the bye laws/Rules of the Govt. The electric wiring and portion of the building for such activity should be separate.

SIII.2 Character of Service

SIII.2.1 Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts, as specified in the Supply Code 2014.

SIII2.2 Metered Supply connections to poultry, goatery, piggery, fish farming (exclusive) & dairy farms may be released from category-1 or UPS or AP feeder at the option of the consumer subject to the technical feasibility to release such connection. However, the consumer opting for supply from AP feeder shall be entitled to limited hours of supply as per power supply schedule applicable to AP consumers. The consumers opting for supply from AP feeder shall not be eligible for tariff applicable to agriculture consumers.

SIII.3 Tariff

A. kW /kWh Tariff

	Description	Energy Charge (₹/kWh)	Fixed Charge (₹/kW)
SIII.3A.1	**General Industry**	5.58	90
SIII.3A.2	**Seasonal industries** covered under condition 18 of the General Conditions of Tariff:		
	i) Seasonal Rate	5.58	180 (for 6 Months only)
	ii) Off Seasonal Rate		Nil
SIII.3A.3	**Ice Factories, Ice Candies & Cold Storages**		
	i) April to July	5.58	180
	ii) August to March next year		45

B. kVA/kVAh Tariff

	Description	Energy Charge (₹/kVAh)	Fixed Charge (₹/kVA)
SIII.3B.1	**General Industry**	5.29	75
SIII.3B.2	**Seasonal industries** covered under condition 18 of the General Conditions of Tariff:		
	i) Seasonal Rate	5.29	150 (for 6 Months)
	ii) Off Seasonal Rate		Nil
SIII.3B.3	**Ice Factories, Ice Candies & Cold Storages**		
	i) April to July	5.29	150
	ii) August to March next year		38

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

SIII.3.4 Voltage Surcharge/Rebate

Voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SIII.4 Seasonal Industry

Seasonal industries shall be billed as per condition 18 of General Conditions of Tariff.

SIII.5 Factory Lighting

The consumption for the bona fide factory lighting and residential quarters, if any, attached to the factory shall not be metered separately. Only one meter shall be installed for industrial & general load and entire consumption shall be charged at the rate for industrial consumption.

SIII.6 Load/Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SIII.7 Power Factor Surcharge/Incentive (under kWh Tariff only)

SIII 7.1 The monthly average power factor of the plant and apparatus owned by the consumer shall not be less than 0.90. The monthly average power factor shall mean the ratio of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two decimal figures.

SIII 7.2 All consumers under this schedule shall be provided with meter/metering equipment to measure monthly average power factor. Power factor surcharge/incentive shall be applicable as prescribed below.

SIII.7.2.1 Power Factor Surcharge

If the monthly average power factor falls below 0.90, the consumer shall pay on the energy charges a surcharge of 1% for each 0.01 decrease in the monthly average power factor below 0.90. The surcharge shall be 2% for each 0.01 decrease of monthly average power factor below 0.80.

SIII.7.2.2 Power Factor Incentive

If the monthly average power factor exceeds 0.90, incentive @ 0.25% for each increase of 0.01 above the limit of 0.90 shall be allowed on the energy charges.

SIV <u>SCHEDULE OF TARIFF FOR AGRICULTURAL PUMPING SUPPLY (AP)</u>

SIV.1 Availability

This tariff shall apply to irrigation pumping supply loads including Kandi Area tube wells, tube wells in farms of PAU, Lift irrigation tube wells, PSTC tube wells, IB tube wells, tube wells installed under Technical Co- operative Assistance Scheme, tube wells of Co-operative Societies formed by marginal farmers for installing deep bore tube wells under Central Assistance Schemes, tube wells used to provide irrigation for horticulture/floriculture in open field condition or net houses, green/hot houses, tube wells of Harijan farmer's cooperative societies and Punjab Water Resources Management and Development Corporation's tube wells for reviving ecology of Holy Bein.

Power utilized for any other purpose shall be separately metered and charged under the relevant schedule.

SIV.2 Character of Service

Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts as specified in the Supply Code 2014.

SIV.3 Tariff

	Description	Energy Charge (₹)	Fixed Charge (₹/kW)
SIV.3.1	Agricultural Pumping Supply (AP)	**5.16/kWh or 411/BHP/ month or Nil with GoP subsidy**	

Note:

Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the Energy Charges, in accordance with condition 8 of General Conditions of Tariff.

SIII.3.2 Voltage Surcharge/Rebate

Voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SIV.4 Flat rate supply shall only be allowed to consumers getting supply from agriculture feeders. The consumers located within Municipal Limits of cities/towns or getting supply from Urban/City/Urban Pattern Supply/Kandi area feeders shall be covered under metered supply only.

SIV.4.1 20% surcharge on flat rate charges or as determined by the Commission in the Tariff Order for this year shall be leviable in case of agricultural consumers covered under flat rate/metered supply category until a consumer fulfils the following requirements:

SIV.4.1.1 Delivery pipe should not be more than 2 feet above the ground level water channel except for the consumers who are having underground irrigation system.

SIV.4.1.2 Bend used in the delivery pipe should not be sharp but of suitable curvature.

SIV.4.1.3 Motor-Pump should be installed on a Pucca leveled foundation in case of mono-block or belt driven pump-sets.

SIV.4.2 Extra fixed charges shall be levied wherever an agricultural tube well covered under this schedule is also used for fish farming as below:

SIV.4.2.1 Fish culture in a pond up to half acre: ₹900/- per annum

SIV.4.2.2 Fish culture in a pond above half acre: ₹1800/- per annum

but up to one acre:

SIV.4.2.3 Additional area under fish pond to be charged in multiples of half acre rate. The pond area shall include bundhing.

SIV.4.2.4 Relevant industrial tariff shall be applied for such tube wells which are exclusively used for fish farming.

SIV. 4.3 Misuse of AP supply

The misuse of AP supply provided to agricultural tube wells for other purposes shall be dealt with as per provisions of Electricity Act, 2003.

SIV.5 Pump House Lighting

The consumption for bona fide lighting of the pump or machine house of 2 CFLs with total wattage aggregating 40 watts shall be allowed per tube well connection.

SIV.6 Load Surcharge

Load surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SIV.7 Installation of Shunt Capacitors

SIV.7.1 No tube well connection shall be released without installation of ISI mark Shunt Capacitors of requisite capacity. The kVArh capacity of Shunt Capacitors to be installed shall be as prescribed by the distribution licensee with the approval of the Commission.

SIV.7.2 AP consumers having got installed Shunt Capacitors at their tube well premises from the distribution licensee against payment of monthly rentals, shall be charged rentals @ ₹4/- per kVArh per month from the date of installation. The rentals shall, however, be recovered on half yearly basis i.e. ₹24 per kVArh in April and October every year.

SIV.7.3 Before allowing extension in load/regularization of load by distribution licensee, the existing AP consumers shall install capacitors of adequate capacity as prescribed by distribution licensee with the approval of the Commission.

SV <u>SCHEDULE OF TARIFF FOR NON RESIDENTIAL SUPPLY (NRS)</u>

SV.1 Availability

SV.1.1 This tariff shall apply to non-residential premises such as business houses, cinemas, clubs, offices, hotels/motels, marriage palaces, departmental stores, shops, guest houses, restaurants for lights, fans, appliances like pumping set & air conditioning units/plants, lifts, welding sets, small lathes, electric drills, heaters, EV Charging Stations, battery chargers, embroidery machines, printing presses, ice candy machines, dry cleaning machines, power presses, small motors etc., Private hospitals (other than charitable), Private unaided educational institutions i.e. schools, colleges and universities, hostels and residential quarters attached thereto where such institutions/installations are not covered under schedule DS/BS, Telecommunication/Cellular Mobile Phone Towers and all private sports institutions/ facilities including gymnasiums.

SV.1.2 If a portion of residential/industrial premises is regularly used for any commercial activity permitted under law, the consumer shall be required to obtain a separate connection under NRS category for the portion put to commercial use. In such an event, two connections, one under Schedule DS/Industrial and the other under Schedule NRS shall be permitted.

SV.1.3 Any of the following activities carried out in a part of residential premises shall also be covered under this schedule.

a) A private outpatient clinic/hospital or laboratory.

b) PCO.

c) Milk processing (other than chilling plant)) for commercial purposes.

d) Offices of any other professional service provider.

e) ATM.

SV.2 Character of Service

Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts. All NRS consumers with load above 20 kW shall get their contract demand sanctioned. For load/contract demand exceeding 100 kW/kVA, the supply shall be given at 11 kV or higher voltage as specified in the Supply Code 2014, depending on quantum of contract demand and availability of bus voltage and transformer winding capacity at the feeding sub-station.

SV.3 Tariff

	Description	Energy Rate (₹)	FC (₹)
SV.3.1	**Loads upto 7 kW**		
	i) Upto 100 kWh	6.86/kWh	40/kW
	ii) Above 100 & upto 500 kWh	7.12/kWh	
	iii) Above 500 kWh	7.24/kWh	
SV.3.2	**Loads exceeding 7 kW & upto 20 kW**		
	i) Upto 100 kWh	6.86/kWh	50/kW
	ii) Above 100 & upto 500 kWh	7.12/kWh	
	iii) Above 500 kWh	7.24/kWh	
SV.3.3	**Loads/demand exceeding 20 kW & upto 50 kW/kVA**		
	kW/kWh Tariff	7.24/kWh	80/kW
	kVA/kVAh Tariff	6.27/kVAh	110/kVA
SV.3.4	**Loads/demand exceeding 50 kW/kVA & upto 100 kVA (All Units)**	6.27/kVAh	110/kVA
SV.3.5	**Demand exceeding 100 kVA (All Units)**	6.48/kVAh	110/kVA
SV.3.6	**EV Charging Stations**	5.00/kVAh	NA

Note:

i) Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

ii) ToD tariffs to NRS consumers with sanctioned Contract Demand exceeding 100 kVA shall be applicable as per the Tariff Order for the year, in accordance with condition 15 of General Conditions of Tariff.

iii) The energy charges shall be increased by 25% for private hospitals & MRI/CT Scan centres getting continuous supply through independent feeders under this Schedule.

iv) Consumers running Marriage Palaces shall pay Fixed Charges on 25% of Sanctioned Load/Contract Demand. In case, the consumer exceeds its Sanctioned Load/Contract Demand during a billing cycle/month, he shall also be liable to pay applicable load/demand surcharge.

SV.3.7 Voltage Surcharge/Rebate

The voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SV.4 Load/ Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SVI <u>SCHEDULE OF TARIFF FOR DOMESTIC SUPPLY (DS)</u>

SVI.1 Availability

This tariff shall apply to the following:

SVI.1.1 Supply to a residential premise for lights, fans, single/three phase domestic pumping set/toka machine not exceeding 2 BHP and other house hold appliances. Where a room or a part of residential house is being utilized by a person for imparting education/tuition work or for cookery classes/beauty parlour/tailoring work etc., supply for such purposes shall also be covered under this schedule.

Where a portion of the residential premises is used regularly for the conduct of business, the supply in that portion shall be separately metered under separate connection and billed under Schedule NRS.

SVI.1.2 Supply to Govt. sports institutions/facilities, including gymnasiums, Govt./Govt. aided educational institutions viz. schools, colleges, universities, I.T.Is, including hostels and residential quarters attached to these educational institutions.

Supply to hostels and/or residential quarters attached with the private educational institutions where separately metered shall also be covered in this schedule. Hostels will be considered as one unit and billed without compounding.

SVI.1.3 Supply to all places of worship provided that concerned authorized officer of the distribution licensee certifies the genuineness of place being used for worship by general public.

SVI.1.4 Supply to Sainik Rest Houses of Rajya Sainik Board.

SVI.1.5 Supply to Govt. hospitals, primary health centres, civil dispensaries and hospitals run by charitable institutions covered under section 80(G) of the Income Tax Act.

SVI.1.6 Release of more than one connection in the premises of Domestic Supply consumer shall be admissible subject to the following conditions:-

SVI.1.6.1 In case where family members/occupants living in a house have separate cooking arrangements.

SVI.1.6.2 In case a tenant wants a separate connection, he shall furnish consent of the landlord in the form of affidavit duly attested by Notary Public that the landlord shall clear all the liabilities in case the tenant leaves the premises without paying licensee's dues.

SVI.2 Character of Service

Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts as specified in Supply Code 2014. All DS consumers with load above 50 kW shall get their contract demand sanctioned. For load/ contract demand exceeding 100 kW/kVA, the supply shall be given at 11 kV or higher voltage as specified in the Supply Code 2014, depending on quantum of contract demand and availability of bus voltage and transformer winding capacity at the feeding sub-station.

SVI.3 Tariff

	Description	Energy Charge (₹)	Fixed Charge (₹)
SVI.3.1	**Loads upto 2kW**		
	i. Upto 100 kWh	4.91/kWh	25/kW
	ii. Above 100 kWh & upto 300 kWh	6.51/kWh	
	iii. Above 300 kWh & upto 500 kWh	7.12/kWh	
	iv. Above 500 kWh	7.33/kWh	
SVI.3.2	**Loads exceeding 2 kW & upto 7 kW**		
	i. Upto 100 kWh	4.91/kWh	35/kW
	ii. Above 100 kWh & upto 300 kWh	6.51/kWh	
	iii. Above 300 kWh & upto 500 kWh	7.12/kWh	
	iv. Above 500 kWh	7.33/kWh	
SVI.3.3	**Loads exceeding 7 kW & upto 50 kW**		
	i. Upto 100 kWh	4.91/kWh	40/kW
	ii. Above 100 kWh & upto 300 kWh	6.51/kWh	
	iii. Above 300 kWh & upto 500 kWh	7.12/kWh	
	iv. Above 500 kWh	7.33/kWh	
SVI.3.4	**Loads/demand exceeding 50 kW/kVA & upto 100 kVA (All units)**	6.23/kVAh	70/kVA
SVI.3.5	**Demand above 100 kVA (All units)**	6.44/kVAh	70/kVA

Golden Temple and Durgiana Mandir, Sri Amritsar Sahib

	Description	Energy Charge (₹)	Fixed Charge (₹)
SVI.3.6	First 2000 kWh	Free	NA
	Beyond 2000 kWh	5.94/kWh	

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges in accordance with condition 8 of General Conditions of Tariff.

SVI.3.7 Voltage Surcharge/Rebate

Voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SVI.4 Load/ Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SVI.5 Single Point Supply to Co-operative Group Housing Societies/ Employers etc.

Supply to such consumers shall be governed by the provisions as contained in PSERC (Single Point Supply to Co-operative Group Housing Societies/ Employers) Regulations, 2008, as amended from time to time, i.e. total consumption of electricity recorded at single point connection of a Co-operative Housing Society/employer's colony will be billed at a rate equal to the highest slab rate of Schedule of Tariff for Domestic Supply (DS) and a rebate of 12% (Twelve percent) will be admissible in addition to any other rebate on electricity charges, comprising of fixed and energy charges as may be approved by the Commission. The Fixed Charges on the basis of Contract Demand of the consumer shall be applicable as specified in the Tariff Order for the year.

SVII <u>SCHEDULE OF TARIFF FOR BULK SUPPLY (BS)</u>

SVII.1 Availability

This tariff shall apply to the following:

SVII.1.1 General or mixed loads exceeding 10 kW to MES, Defence Establishments, Railways, Central PWD institutions, Irrigation Head works, Jails, Police/Para Military Establishments/Colonies and Govt. Hospitals/ Medical Colleges/Govt. Educational Institutions having mixed load subject to a minimum of 25% domestic load and motive/Industrial load not exceeding 50%, where further distribution will be undertaken by the consumer.

SVII.1.2 General or mixed loads exceeding 10 kW to all private educational institutes/ universities/ colleges/ hospitals etc. having mixed load subject to a minimum of 25% domestic load and motive/Industrial load not exceeding 50%, for their own use and to run the affairs connected with the functions of such educational institutes/ universities/ colleges/ hospitals etc. provided the entire LD system has been laid at the cost of the consumer.

SVII.1.3 However, institutions/Installations having DS load less than 25% will be covered under relevant NRS Schedule of Tariff. Where motive/Industrial load of any installation exceeds 50% of the total load, such an installation will be charged applicable industrial tariff.

SVII.2 Character of Service

Alternating Current, 50 cycles/second, Three Phase 400 volts or 11 kV or higher voltage as specified in the Supply Code 2014, depending on quantum of contract demand and availability of bus voltage and transformer winding capacity at the feeding sub-station. All BS consumers shall get their Contract Demand sanctioned irrespective of their connected load. Contract Demand above 100 kVA shall be released on HT/EHT as specified in Supply Code 2014.

SVII.3 Tariff

	Description	Energy Charge (₹/kVAh)	Fixed Charge (₹/kVA)
SVII.3.1	HT	5.97	205
SVII.3.2	LT	6.38	165

Note:

i) Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges in accordance with condition 8 of General Conditions of Tariff.

ii) The energy charges shall be increased by 25% in case of existing private hospitals & MRI/CT Scan centres getting continuous supply through independent feeders under BS Schedule. All Govt. hospitals and hospitals run by charitable institutions covered under Section 80-G of Income Tax Act, 1961 shall be exempted from levy of 25% extra energy charges.

iii) ToD tariffs to BS consumers with sanctioned Contract Demand exceeding 100 kVA shall be applicable as per the Tariff Order for the year, in accordance with condition 15 of General Conditions of Tariff.

SVII.3.3 Voltage Surcharge/Rebate

Voltage Surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SVII.4 Load /Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SVIII SCHEDULE OF TARIFF FOR PUBLIC LIGHTING SUPPLY

SVIII.1 Availability

Available for Street Lighting system including signalling system and road & park lighting undertaken by the local bodies like Municipal Corporations, Municipal Committees, Nagar Councils, Panchayats, Institutions etc.

SVIII.2 Character of Service

Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts as specified in the Supply Code 2014.

SVIII.3 Tariff

Energy Charges (₹/kWh)	Fixed Charges (₹/kW)
7.35	90

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of

General Conditions of Tariff.

SVIII.4 Rates of Line Maintenance and Lamp Renewal Charges

SVIII.4.1 Category-A

Where the initial installation of complete street light fittings & lamps and their subsequent replacement shall be carried out at the licensee's cost, the line maintenance and lamp renewal charges shall be as under:

SVIII.4.1.1 Ordinary/CFL/LED lamps

(i)	Lamps up to 150 watts	₹16/-per lamp per month
(ii)	Lamps above 150 watts	Special quotation

SVIII.4.1.2 Mercury/ Sodium Vapour lamps

(i)	Lamps of 80 watts	₹49/- per lamp per month
(ii)	Lamps of 125 watts	₹53/- per lamp per month
(iii)	Lamps of 250 watts	₹90/- per lamp per month
(iv)	Lamps of 400 watts	₹101/-per lamp per month

SVIII.4.1.3 Fluorescent tubes

(i)	Single 2 ft 20 watts	₹26/- per point per month
(ii)	Single 4 ft 40 watts	₹43/- per point per month
(iii)	Double 2 ft 20 watts	₹43/- per point per month
(iv)	Double 4 ft 40 watts	₹68/-per point per month

SVIII.4.2 Category-B

Where the initial installation and subsequent replacement of complete street light fittings shall be done at the cost of the licensee and initial installation & subsequent replacement of lamps shall be done at the cost of Street Lighting consumers i.e. lamps to be supplied by the consumer, the line maintenance and lamp renewal charges shall be as under:

SVIII.4.2.1 Ordinary/CFL/LED lamps

(i)	Lamps up to 150 watts	₹14/- per lamp per month
(ii)	Lamps above 150 watts	Special quotation and special lamps

SVIII.4.2.2 Mercury/Sodium Vapour lamps

(i)	Lamps of 80 watts	₹29/- per lamp per month
(ii)	Lamps of 125 watts	₹36/- per lamp per month
(iii)	Lamps of 250 watts	₹63/- per lamp per month
(iv)	Lamps of 400 watts	₹68/-per lamp per month

SVIII 4.2.3 Fluorescent tubes

(i)	Single 2 ft 20 watts	₹23/- per point per month
(ii)	Single 4 ft 40 watts	₹40/- per point per month
(iii)	Double 2 ft 20 watts	₹39/- per point per month
(iv)	Double 4 ft 40 watts	₹61/-per point per month

SVIII.4.3 Category-C

Where the initial installation of complete street light fittings and lamps as well as their subsequent replacement shall be done at the cost of Street Lighting consumer i.e. fittings and lamps to be supplied by the consumer, the line maintenance and lamp renewal charges shall be as under:

SVIII.4.3.1 Ordinary/CFL/LED lamps

(i)	Lamps up to 150 watts	₹11/- per lamp per month
(ii)	Lamps above 150 watts	Special quotation and special lamps

SVIII.4.3.2 Mercury/Sodium Vapour lamps

(i)	Lamps of 80, 125, 250 and 400 watts	₹13/- per lamp per month

SVIII.4.3.3 Fluorescent tubes

(i)	Single 2 ft 20 watts	₹ 13/- per point per month
(ii)	Single 4 ft 40 watts	₹ 13/- per point per month
(iii)	Double 2 ft 20 watts	₹ 13/- per point per month
(iv)	Double 4 ft 40 watts	₹ 13/-per point per month

Note: Where the work of lamp renewal/replacement is being carried out by the local bodies, the charges pertaining to line maintenance and lamp renewal/ replacement shall be shared by licensee and the Municipal Corporation/ Committee/Council/Panchayat in the ratio of 50:50.

SVIII.4.4 Category-D

Where the initial installation of complete street light fittings and lamps as well as subsequent replacement of fittings shall be carried out at the cost of Street Lighting consumer but the replacement of fluorescent tubes shall be done at the cost of the licensee i.e. fluorescent tubes to be supplied by the licensee, the line maintenance and fluorescent tube replacement charges shall be as under:

(i)	Single 2 ft 20 watts	₹16/- per point per month
(ii)	Single 4 ft 40 watts	₹16/- per point per month
(iii)	Double 2 ft 20 watts	₹18/- per point per month
(iv)	Double 4 ft 40 watts	₹21/-per point per month

SVIII.5 Rebate to Village Panchayats

For Street Lighting supply to Village Panchayats, a rebate of twenty five percent over the standard tariff (i.e. energy charges and line maintenance and lamp renewal charges under all categories) shall be admissible.

SIX SCHEDULE OF TARIFF FOR RAILWAY TRACTION (RT)

SIX.1 Availability

Available to the Railways for traction load.

SIX.2 Character of Service

Alternating Current, 50 cycles/second, Single/Two/Three Phase 132 kV/220 kV as specified in the Supply Code 2014, depending upon the availability of bus voltage and transformer winding capacity at the feeding sub-station wherever possible at the discretion of the distribution licensee.

SIX.3 Tariff

Energy Charges (₹/kVAh)	Fixed Charges (₹/kVA)
6.79	210

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

SIII.3.1 Voltage Surcharge/Rebate

Voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SIX.4 Contract Demand and Demand Surcharge

The railways shall intimate the contract demand for sanction and the same shall be taken as connected load. Demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SIX.5 Single Point Delivery

The above tariff is based on the supply being given through a single delivery & metering point and at a single voltage. Supply at any other point or at other voltage shall be separately metered and billed.

SX. <u>SCHEDULE OF TARIFF FOR TEMPORARY METERED SUPPLY (TM)</u>

Availability

Temporary supply shall be permitted to an applicant as per Supply Code 2014 for a period as per applicant's request, but not exceeding two years in the first instance. However, the distribution licensee may extend such supply on an application by the consumer.

Fixed Charges for Temporary Supply shall be levied @ 12*2A/365 per day, where 'A' is the Monthly Fixed Charge applicable to the corresponding permanent supply consumer category. Provided that fixed charges so computed shall not exceed the fixed charges applicable on monthly basis.

SX.1 Tariff for Domestic and Non-Residential Supply

SX.1.1 Availability

Temporary supply shall be permitted on an application to domestic and non-residential supply applicants (excluding touring cinemas).

SX.1.2 Character of Service

Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts or 11 kV or higher voltage as specified in the Supply Code 2014.

SX.1.3 Tariff

	Description	Energy Charge (₹)	Fixed Charges (₹)
SX.1.3.1	Domestic Supply	1.3 times the charges (highest slab rate) specified under the relevant schedule for permanent supply corresponding to the Connected Load/Demand	
SX.1.3.2	Non Residential Supply		

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

SX.1.3.3 Voltage surcharge/rebate

The voltage surcharge/rebate shall be applicable as per Condition 13 of General Conditions of Tariff.

SX.1.4 Load/ Demand Surcharge

In case a temporary supply consumer covered under this schedule exceeds his sanctioned load/contract demand at his premises, the consumer shall be levied load/demand surcharge at the same rate as applicable under relevant schedule for permanent supply.

SX.2 Tariff for Temporary Small, Medium and Large Power Industrial Supply

SX.2.1 Availability

Temporary supply shall be permitted to all industrial consumers for loads including pumps for dewatering in case of floods on an application as per applicant's request.

SX.2.2 Character of Service

Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts or 11 kV or higher voltage as specified in the Supply Code 2014.

SX.2.3 Tariff

	Description	Energy Charge (₹)	Fixed Charges (₹)
SX.2.3.1	SP	1.3 times the charges specified under the relevant schedule for permanent industrial supply corresponding to the Connected Load/Demand	
SX.2.3.2	MS		
SX.2.3.3	LS		

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with clause 8 of General Conditions of Tariff.

SX.2.3.4 Voltage Surcharge/Rebate

The voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SX.2.4 Factory Lighting

SX.2.4.1 In case of temporary supply to Large Supply, Medium Supply & Small Power Industrial consumers, the bonafide factory lighting and motive/ Industrial power consumption shall be measured through one and the same meter and charged at the relevant tariff as per para SX.2.3 of this Schedule.

SX.2.5 Load/Demand Surcharge

In case a temporary supply consumer covered under this schedule exceeds his sanctioned load/contract demand at his premises, the consumer shall be levied load/demand surcharge at double the rates as applicable under relevant schedule for permanent supply.

SX.3 Tariff for Wheat Threshers

SX.3.1 Availability

Available for threshing of wheat for the period between 1st April to 30th June.

SX.3.2 Character of Service

Alternating Current, 50 cycles/second, Three Phase 400 volts or 11 kV or higher voltage as specified in the Supply Code 2014.

SX.3.3 Tariff

	Description	Energy Charge (₹)	Fixed Charges (₹)
SX. 3.3.1	SP	1.3 times the charges specified under the relevant schedule for permanent industrial supply corresponding to the Connected Load/Demand	
SX. 3.3.2	MS		
SX. 3.3.3	LS		

Note:

Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

SX.3.3.4 Voltage surcharge/rebate

The voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SX.3.4 Load/Demand Surcharge

In case a temporary supply consumer covered under this schedule exceeds his sanctioned load/contract demand at his premises, the consumer shall be levied load/demand surcharge at double the rates as applicable under relevant schedule for permanent industrial supply.

SX.4 Tariff for Fairs, Exhibitions, Melas and Congregations

SX.4.1 Availability

Available for temporary loads of Fairs, Exhibitions, Melas and Congregations.

SX.4.2 Character of Service

Alternating Current, 50 cycles/second, Three Phase 400 volts or 11 kV or higher voltage as specified in the Supply Code 2014.

SX.4.3 Tariff

	Description	Energy Charge (₹)	Fixed Charges (₹)
SX. 4.3.1	HT	1.3 times the charges specified under the relevant schedule for bulk supply corresponding to the Connected Load/Demand	
SX. 4.3.2	LT		

SX.4.3.3 Voltage Surcharge/Rebate

The voltage surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SX.4.4 Load/Demand Surcharge

In case a temporary supply consumer covered under this schedule exceeds his sanctioned load/contract demand at his premises, the consumer shall be levied load/demand surcharge at the same rate as applicable under the relevant schedule for bulk supply.

SX.5 Tariff for Touring Cinemas

SX.5.1 Availability

SX.5.1.1 Available to all touring cinemas, theatres, circuses etc. However, supply shall be given separately for general loads (Lights/fans and motive loads).

SX.5.1.2 The connection shall be sanctioned in the first instance for the entire period of validity of license or for the period requisitioned for, whichever is less.

SX.5.2 Character of Service

Alternating Current, 50 cycles/second, Single Phase 230 volts or Three Phase 400 volts or 11 kV or higher voltage as specified in the Supply Code 2014.

SX.5.3 Tariff

	Description	Energy Charge (₹)	Fixed Charges (₹)
SX.5.3.1	Lights and fans	1.3 times the charges (highest slab rate) specified under the relevant schedule for permanent NRS supply corresponding to the Connected Load/Demand	
SX.5.3.2	Motive load	1.3 times the charges specified under the relevant schedule for permanent Industrial supply corresponding to the Connected Load/Demand	

SX.5.3.3 Voltage surcharge/rebate

The voltage surcharge/rebate shall be applicable as per clause 13 of General Conditions of Tariff.

SX.5.4 Load/ Demand Surcharge

In case a temporary supply consumer covered under this schedule exceeds his sanctioned load/contract demand at his premises, the consumer shall be levied load/demand surcharge at the same rate as applicable under relevant schedule for permanent industrial supply.

SXI <u>SCHEDULE OF TARIFF FOR AP HIGH TECHNOLOGY/HIGH DENSITY FARMING SUPPLY</u>

SXI.1 Availability

Available for High Technology green house farming and High Density AP farming. The AP (High Technology) Supply shall be subject to fulfilling the conditions as mentioned at SXI.1.1, 1.2 & 1.3 whereas High Density AP Supply shall be subject to conditions mentioned at SXI.1.4

SXI.1.1 Setting up a green house with a minimum area of 2000 sq. metres.

SXI.1.2 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.

SXI.1.3 A distribution licensee shall take necessary steps to annually verify that all consumers continue to fulfil the obligations as above for coverage under this category. In the event of a consumer ceasing to fulfil these obligations, connection released shall be disconnected after giving at least 15 days notice.

SXI.1.4 The farmers opting for High Density Farming supply shall furnish a certificate from Director/Agriculture and/or Director/Horticulture department to the effect that farming being carried out by the applicant is covered under High Density farming as per the State Government policy.

SXI.2 Character of Service

Alternating Current, 50 cycles/second, Three phase 400 volts for loads not exceeding 100 kW and 11 kV or higher voltage supply for loads above 100 kW as specified in the Supply Code 2014.

SXI.3 Tariff

Energy Charge (₹)	Fixed Charges (₹)
5.16/kWh	Not Applicable

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

SXI.3.1 Voltage Surcharge/Rebate

Voltage Surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SXI.4 The provisions of Regulation 9 of the Supply Code 2014 shall be applicable for the release of a connection under this category. Connections with a load of more than 100 kW shall be released at 11 kV. An independent feeder shall be provided at the consumer’s expense if uninterrupted supply is required. Connection with a load not exceeding 100 kW may be released from AP feeder or category-1 or UPS feeder at the option of the consumer, subject to the technical feasibility to release such connection. However, the consumers opting for supply from agriculture feeders shall be entitled to limited hours of supply as per power supply schedule applicable to AP consumers. Only metered supply shall be admissible under this category.

SXI.5 Load Surcharge

Load surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SXI.6 Power Factor Surcharge/Incentive

Consumers shall be required to maintain a monthly average power factor of 0.90. The monthly average power factor shall mean the ratio of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two decimal points.

SXI. 6.1 Low Power Factor Surcharge

If the monthly average power factor falls below 0.90, the consumer shall pay on the energy charges a surcharge of 1% for each 0.01 decrease in the monthly average power factor below 0.90. The surcharge shall be 2% for each 0.01 decrease of monthly average power factor below 0.80.

SXI.6.2 Power Factor Incentive

If the monthly average power factor exceeds 0.90, incentive @ 0.25%, for each increase of 0.01 above 0.90 shall be allowed on the energy charges.

SXI.6.3 For power factor surcharge & incentive, the energy charges shall also include the surcharge or rebate as applicable under para SXI.3.1 of this schedule.

SXII. <u>SCHEDULE OF TARIFF FOR SUPPLY OF ELECTRICITY TO COMPOST PLANTS/SOLID WASTE MANAGEMENT PLANTS FOR MUNICIPALITIES/ URBAN LOCAL BODIES</u>

SXII.1 Availability

Available for Industrial/motive loads of compost plants/solid waste management plants including pumps etc., for Municipalities/Urban Local Bodies. The connections shall be released under this category as per terms and conditions applicable to industrial consumers.

SXII.2 Character of Service

Alternating Current, 50 cycles/second, Three Phase 400 volts or 11 kV or higher voltage as per Supply Code 2014 depending on quantum of demand.

SXII.3 Tariff

Energy Charge (₹)	Fixed Charges (₹)
4.75/kVAh	23/kVA

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

SXII.3.1 Voltage Surcharge/Rebate

Voltage Surcharge/rebate shall be applicable as per condition 13 of General Conditions of Tariff.

SXII.4 Load/Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

SXIII. <u>SCHEDULE OF TARIFF FOR START UP POWER</u>

SXIII.1 Availability

Available to Generators/CPPs, who seek supply for start up power for pre-commissioning or planned/forced outages.

This power shall also be available to generators/CPPs connected to CTU grid with proper accounting.

SXIII.2 Character of service

Alternating Current, 50 cycles/second, Three Phase 11kV or higher voltage.

SXIII.3 Tariff

Energy Charge (₹)	Fixed Charges (₹)
6.68/kVAh	Not Applicable

SXIII.4. Demand Surcharge

The Demand Surcharge for exceeding the Contract Demand shall be as applicable to Large Supply Industrial Consumers (General).

SXIII.5. Terms and Conditions

SXIII.5.1 The Contract Demand for supply for start up power shall not exceed 15 % of the rated capacity of the unit with highest rating in the power plant.

SXIII.5.2 The generator shall execute an agreement with the distribution licensee for meeting the requirement for start up power incorporating above terms and conditions.

SXIII.5.3 Start up Power to CPPs shall be governed by terms and conditions as specified in PSERC (Harnessing of Captive Power Generation) Regulations, 2009, as amended from time to time.

SXIV. SCHEDULE OF TARIFF FOR CHARITABLE HOSPITALS SET-UP UNDER PERSONS WITH DISABILITY (EQUAL OPPORTUNITIES, PROTECTION OF RIGHTS AND FULL PARTICIPATION), ACT 1995.

SXIV.1 Availability

Available to Charitable Hospitals set-up under Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation), Act 1995.

SXIV.2 Character of Services

Alternating Current, 50 cycles/second, Three Phase 400 volts or 11 kV or higher voltage as per Supply Code 2014 depending on quantum of load/demand.

SXIV.3 Tariff

	Load/Demand	Energy Charge (₹)	Fixed Charges (₹)
SXIV.3.1	Loads not exceeding 20 kW	4.91/ kWh	25/kW
SXIV.3.2	Loads/demand exceeding 20 kW/kVA	4.52/kVAh	23/kVA.

Note: Fuel Cost Adjustment (FCA) charges for the relevant period shall be applicable in addition to the energy charges, in accordance with condition 8 of General Conditions of Tariff.

SIII.3.3 Voltage Surcharge/Rebate

Voltage surcharge/rebate shall be applicable as per Condition 13 of General Conditions of Tariff.

SXIV.4 Load/ Demand Surcharge

Load/demand surcharge shall be applicable as per Condition 23 of General Conditions of Tariff.

<u>ANNEXURE-IV</u>

Minutes of the Meeting of State Advisory Committee of Punjab State Electricity Regulatory Commission, Chandigarh held on 18th January, 2018.

The meeting of the PSERC, State Advisory Committee was held in the office of the Commission at Chandigarh on 18th January, 2018 to discuss the Annual Performance Review and the Annual Revenue Requirement for FY 2017-18 and FY 2018-19 respectively filed by PSPCL and PSTCL and to solicit views on improvements in the grievances redressal mechanism and consumer advocacy. The following were present:

1.	Ms. Kusumjit Sidhu Chairman, PSERC, SCO 220-221, Sector-34-A, Chandigarh.	Ex-officio Chairperson
2.	Er. S.S. Sarna Member, PSERC, SCO 220-221, Sector-34-A, Chandigarh.	Ex-officio Member
3.	Er. Anjuli Chandra Member, PSERC, SCO 220-221, Sector- 34-A, Chandigarh.	Ex-officio Member
4.	Additional Chief Secretary Department of Power, Government of Punjab, Chandigarh.	Member
5.	Principal Secretary Food & Civil Supplies and Consumer Affairs, Government of Punjab, Chandigarh.	Ex-officio Member
6.	Principal Secretary New and Renewable Sources of Energy (NRSE), Govt. of Punjab, Chandigarh	Member
7.	Sh. Rajiv Bhatia Secretary, PSERC, SCO 220-221, Sector-34-A, Chandigarh.	Ex-officio Secretary
8.	Chairman-cum-Managing Director, PSPCL, The Mall, Patiala.	Member
9.	Chairman-cum-Managing Director, PSTCL, The Mall, Patiala	Member
10.	Labour Commissioner, Deptt. of Labour & Employment, Government of Punjab, Chandigarh	Member
11.	Chief Engineer, Punjab Agriculture University, Ludhiana	Member
12.	Mr. Nitin Bhatt, Regional Manager – Punjab/Haryana, Chandigarh. Energy Efficiency Services Limited, 4th floor, IWAI Building, A-13, Sector-1, Noida-201301	Member
13.	Chairman, CII, Punjab State Council, Sector 31-A,Chandigarh	Member

14.	Chairman, PHDCCI, Punjab Committee, Sector 31A, Chandigarh	Member
15.	Indian Energy Exchange Limited, Fourth Floor, TDI Centre, Plot No.-7, Jasola, New Delhi-110025	Member
16.	S. Bhupinder Singh Mann, Ex-MP, (Rajya Sabha) National President (BKU), Chairman, National Kisan Coordination Committee. Outside Qazi Mori Gate, Batala, District Gurdaspur	Member
17.	Sh. P.P. Singh Vice President (E&U), Nahar fibers, Ludhiana	Member
18.	Sh. Vijay Talwar, State vice-President-cum-Co Chairman, National Power Committee, Laghu Udyog Bharti (Pb. Chapter) 1051, Dada Colony, Industrial area, Jalandhar-144004	Member
19.	Sh. P.S. Virdi, President, The Consumer Protection Federation (Regd.), Kothi No. 555, Phase-1, Sector-55, Mohali.	Member
20.	Sh. Mohinder Gupta, President, Mandi Gobindgarh Induction Furnaces Association, Gobindgarh	Member
21.	Sh. Bhagwan Bansal, President of Punjab Cotton & Ginners Association, Regd. Shop No. 109, New Grain Market, Muktsar.	**Special Invitee**

At the outset, the Chairperson welcomed the members of the State Advisory Committee to the first meeting of the newly constituted Committee and thanked everyone present for having taken the time to attend the meeting. The Chairperson thereafter requested the members to offer suggestions/comments on the APR for FY 2017-18 and Revised Estimates for the MYT Control Period financial year 2018-19 filed by PSPCL and PSTCL, and also sought their views on improvements in the grievances redressal mechanism and consumer advocacy. The Chairperson also requested the members to give their views/suggestions for utilization of surplus power available in the State of Punjab. The Chairperson further highlighted the Commission's concern on the following issues for the protection of consumers' interest and grievances redressal in an effective manner and sought views/suggestions of the Members of the State Advisory Committee to ensure speedy resolution of complaints of power consumers of State of Punjab:-

1. <u>Consumer Grievances:</u>

The Chairperson informed that the Commission has constituted a committee headed by Secretary PSERC to deliberate upon the issues regarding consumer grievance vis-à-vis delay in release in new connection, levy of various charges, supply related complaints, wrong metering, billing complaints and deficiencies in services against employee and officers. The members were informed that the committee has submitted its interim report on prevailing mechanism regarding registration of grievances and it's monitoring.

2. **Consumer Advocacy Cell:**

The Chairperson stated that the Commission is in the process of setting up a Consumer Advocacy Cell with the primary objective of generating consumer awareness and educating the consumers on the process of consumer grievance redressal and other matters relating to their rights and duties. The Chairperson further stated that the Commission believes that the benefit of electricity reforms can reach the consumers only when they participate effectively in the regulatory process and that considering the special nature of the Electricity Act, consumers need to be educated and empowered by way of information to play their role.

Thereafter, the members gave their valuable suggestions as under:-

1. **Additional Chief Secretary/Power:**

Additional Chief Secretary/Power assured that the issues deliberated in the State Advisory Committee meeting will be taken up with the PSPCL management in due course.

2. **CMD, PSPCL & PSTCL, Patiala:**

He has expressed his views as under:

PSPCL has sufficient power to supply to the Consumers of the State of Punjab. Lot of improvements have been made in distribution system. However, there is still scope of further improvement. It was also stated that consumers are expecting 24x7 power supply and PSPCL has fulfilled the expectations of the consumers to a great extent. The power consumption graph in Punjab is a bell shaped curve. During 4 months i.e. Paddy season and summer, the power consumption is about 12000 MW whereas it is 5000-7000 MW during rest of the year. Outages are not due to shortage of power but due to problems such as overloading of Transformers, Transmission/Distribution lines etc. for which preventive measures are being taken.

The main challenge before PSPCL is to use/sell the surplus power after paddy season. PSPCL has managed to sell five times more power in the power exchange, than last year. During the FY 2017-18, it has sold power in power exchange amounting to ₹292 crore as compared to ₹46 crore during FY 2016-17. PSPCL will endeavor to sell more power to meet with the challenge of surplus power. It was also informed that with the restructuring of loans, interest charges have been reduced.

3. Sh. Bhupinder Singh Mann:

Mr. Mann desired that Agriculture be considered as an industry. It is contributing to the state as well as to the nation through taxes collected through Punjab Mandi Board and Food Corporation of India. It was also stated that agriculture is not being subsidized free of cost by the Govt. and that approximately, ₹6000-7000 crore p.a. is being paid by the Farmers through local taxes, charges etc. by the Govt. Agencies as and when agriculture goods, equipments are purchased by the farmers and also through proceeds of crops sold in the market.

It was also added that optimum utilization of power and water resources be ensured by the State Govt./PSERC/PSPCL.

4. Principal Secretary, NRSE (CEO, PEDA):

He suggested as under:

PSERC has provided in the Tariff Order regarding new capacity addition of the Renewable projects in clause 8.7.4 Renewable energy capacity for FY 2017-18, FY 2018-18 and FY 2019-20. PEDA has to ensure that the projected capacity is added in the respective years.

At the same time, it was submitted that PSPCL is not purchasing power at the Generic tariff approved by PSERC for renewable projects. It has negotiated the tariff of ₹5.25 per unit with some Co-gen projects by violating the CERC/PSERC Regulations. PSPCL has further directed PEDA not to initiate any bidding process for Renewable projects and is not signing PPAs with 88.5 MW biomass projects with whom PEDA has signed IA's. The Developers have run away from Punjab and have started investing in other states. As such it will be impossible to achieve the capacity addition targets given in the Tariff Order.

Govt. of India, Ministry of Power has revised the RPO Targets in the National Tariff Policy (NTP) 2016 notified on 28.01.2016 as per which the Solar RPO is now to be calculated on total consumption of energy in the distribution area after excluding hydro energy. Further, the solar RPO Obligation shall be so fixed that it reaches 8% by 2022.

However, it was pointed out that the Commission has partially implemented the Tariff Policy of the Central government by exclusion of hydro power from the input energy (solar) available to PSPCL for consumption in its area of distribution and has not reserved minimum percentage for purchase of solar energy which shall be such that it reaches 8% of total consumption of energy. This partial implementation has been done by the PSERC without amending the Punjab State Regulations for the Renewable Purchase Obligation and its compliance, notified on 03.06.2011 and its amendment thereof. Accordingly, the RPO Regulations have to be amended by PSERC in line with the National Tariff Policy 2016. While amending the Regulations RPO Trajectory till 2022 needs to be re-drawn.

5. <u>Shri R.S. Sachdeva, Chairman of PHDCCI, Punjab Committee:</u>

He suggested as under:

The industries reducing their demand in view of two part tariff should be given a window of 2-3 years to increase their demand without any surcharge. Retrospective hike in tariff has hit the industry badly.

He pointed out that the process for Tariff Order for 2018-19 has started, however, the issues of Tariff Order for 2017-18 have not yet been settled and there is a confusion regarding number of installments for payment of arrears of tariff. The field officers of PSPCL interpret the instructions of the Commission regarding ToD and Voltage rebate in a different way at every level. He pointed out that PSPCL is not implementing the decision made by the Commission and unnecessarily drag them to higher courts. It was also informed that after the decision of Hon'ble APTEL, the refund in the bill relating to higher tariff charged was made, however, the refund relating to electricity duty is still pending.

The higher ACD rates are affecting the cash flow of the industries and suggested that prepaid meters shall be installed which will benefit both utility and consumers.

He further suggested that the tariff should not be increased this year and 17% increase as requested by PSPCL is very discouraging and the amount previously disallowed by the Commission should not be carry forward in the following years.

6. <u>Shri Ajay Goal, CII, Vardhman Industry:</u>

He suggested that the policies framed by PSPCL should be implemented at lower level. Threshold consumption should be defined in the Tariff Order. He pointed out that the consumption of 2680 MU during off peak load hours goes down to 133 MU during peak load hours due to ToD of ₹2/-. Withdrawal of ToD charges will result in increase in the consumption.

7. <u>Sh. P.P. Singh, vice-president, Nahar Fibers:</u>

He thankfully acknowledge the decision of the Commission to increase Night Rebate from ₹1.0/- to ₹1.25/- and discontinuation of additional charge on continue process on industry, which was effective from 01/11/2017. He also, thanked the Punjab Government and CMD, PSPCL for fixing variable charges at ₹5.0/kVAh.

PSPCL has never given any suggestion for use of surplus power, rather it has objected to the steps taken by Commission and has filed case in APTEL against decision of Commission relating to Threshold Consumption. Under the changed scenario CMD, PSPCL is also a part of Punjab Government, Therefore, it was requested that PSPCL should withdraw its Petition regarding Threshold.

Further, he expressed more confidence with the working of the Commission from the Industry point of view. He also suggested that the Tariff should be announced well in time.

He expressed a doubt as to whether PSPCL has given the correct picture regarding consumer arrears, which have arisen (in the case of LS consumers) from 44% to 145%.

Voltage Surcharge/Rebate:

All consumers catered at 11 kV against specified voltage of 33*66 kV are being levied surcharge at the rate 10%., which become 60 paisa/kVAh, whereas rebate is of 25 paisa/ kVAh,. Therefore, rebate should be increased to match the surcharge.

Rebate on Utilization factor:

The Commission, while deciding the tariff for Large Supply industry below 2500 kVA has taken average utilization factor of 16.39% and above 2500 kVA as 29.40%. The Commission has taken care of less utilization factor by fixing reduced fixed and variable charges for lower utilization factor. PSPCL is getting more return from an industry having higher utilization factor. Exercise may be undertaken to find out, how much PSPCL is being benefited from consumer who keeps his load variation within ± 10%, throughout the year 24 hours in a day for 360 days.

Agriculture Sector:

Power Factor of feeder in paddy season remains 0.75 to 0.8. Power factor (lagging). Therefore, it can be seen how much transmission losses are there. In case the industry has 0.75 power factor, the surcharge is 20% according to Regulations. If it is 0.8 then the surcharge is 10%. It was suggested the Commission should look into the matter so as to reduce losses and overall reduction in consumer tariff.

Consumer Grievances:

a. For filing a petition in the Consumer Grievances Redressal Forum (CGRF) regarding disputed billing amount, a consumer is required to deposit the full undisputed amount of the bill and 20% of disputed amount as worked out by the consumer. SDO/DS is not allowed to accept part payment of the current bill amount. Accordingly, his request is not accepted in DS office and he is not permitted to deposit the 20% disputed amount. Either he has to deposit full amount of the bill or if he insists on part payment, he is directed to approach the office of CGRF for permission.

b. A person has to visit CGRF office at Patiala to submit request for permission to allow the part payment and he is advised to come after 3-4 days for getting the approval letter. Only thereafter, the concerned SDO accepts the part payment.

c. The competency of the authorities under CCHP has been reduced and all cases above ₹2 lakh are in the competency of the CGRF. Sometimes in the process, the last date of payment is over and consumer is burdened with surcharge on late payment.

d. This procedure needs to be streamlined and local office needs to be permitted to accept such amounts with a condition to file the case in CGRF within 15 days, otherwise the full amount can be claimed with interest.

e. Any complaint against PSPCL filed on the Commission's website or through a letter, needs to be disposed off in a time bound manner. Presently letters have been written regarding wrong issuance of CC of Threshold limit and non refund of ED on the threshold limit rebate but these still remain undecided and no reply has been received so far.

Consumer Advocacy:

a. There is no denying the fact that consumer needs awareness regarding the latest rules and regulations and participation in the regulatory process as a stake holder.

b. The industry has no problem with senior PSPCL officers but at ground level there are many problems. It is requested that for a separate meeting be convened in this regard, in the presence of PSERC as well as PSPCL officers and representatives of industry, to have better understanding between consumers and PSPCL.

8. **Mr. Rohit Bajaj, Indian Energy Exchange Limited:**

It was submitted as under:

a. **Surplus Scenario:-**

Today India's installed capacity is 321 GW which is enough to meet the demand for next 5 years at a growth rate of 6%. Further capacity addition of 70,000 MW of conventional power and more than 1, 00,000 MW of Renewable power is expected during the 13th plan. Also, at the current prevailing PLFs i.e. for Coal (65%), Gas (22%), Diesel (3.5%), Hydro (33%), Nuclear (74%), RE (16%), the total generation for FY 2017 was 1,236 billion units whereas it could possibly be more than 1600 billion units. Thus, with present and planned capacity addition, surplus situation is expected to continue for the next 8-10 years.

b. **Improved Transmission Capacity:**

In the last 3-4 years, inter-regional transmission capacity has increased from 38,550 MW in 2014 to 78,050 MW in November 2017. As a result of this capacity addition, congestion has significantly reduced and prices in different regions have also started converging. Further, by commissioning of Champa-Kurukshetra Pole-1 & Pole-2, NR import has further increased from 22, 950 MW in FY 2014 to 36,450 MW in November 2017. Also, as there are no more Open Access customers from Punjab; N3 import corridor will be further relieved for PSPCL to buy during its peak demand during paddy season.

c. Thus, we can say with the surplus scenario in the country and improved transmission capacity for NR, PSPCL can utilize the same for their benefit to purchase power from exchange more economically.

d. **PSPCL Demand in Paddy Season:**

Punjab's demand during paddy season touches around 12000 MW, which lasts for about four months starting from June to September. During this period, PSPCL is in deficit so it is advised to purchase power from Indian Energy Exchange Limited.

Advantages of Power Procurement for IEX:

- **Flexibility:**

  Indian Energy Exchange Limited also provides flexibility to the participants for buying and selling on the same day in different time blocks and thereby the ability to manage their requirements more efficiently. The Exchange has also provided a variety of order types within the DAM to meet the needs of the participants and provide them more flexibility, such as ‘single bids’, which allows the participants to specify multiple sequences of price and quantity pairs in a portfolio manner, ‘block bid’ for all or none orders wherein the participants can specify one price and one quantity for a combination of continuous 15 minute time blocks. The participants can further link these bids and set priority for bid selection to manage their power portfolio more efficiently.

- **Better Forecast of Demand:**

  Distribution companies can project their demand and supply positions more accurately on a day-ahead basis. Our Exchange offers the option to the distribution companies to true-up their buy or sell positions based on the day-ahead projections.

- **Competitive Prices:**

  Over the last few years it has been observed with increasing traded volumes at IEX, average prices have come down and are more competitive than the bilateral prices.

e. <u>Merit Order Despatch for Day-Ahead scheduling:</u>

DISCOM(s) or Power Procurement Group shall consider marginal cost of power purchases from all the sources while preparing their day-ahead dispatch schedule.

- Generators under Long term PPA-Both CGS & SGS
- Power Exchange Volume
- Short term/Medium term Bilateral Contracts

While preparing the dispatch schedule all the available options shall be stacked in the increasing order of landed cost of its marginal cost. Marginal cost of various sources shall be Energy Charge in case of two-part tariff of PPA and single-price for all one-part tariff contracts i.e. Medium and Short term and day-ahead PX prices. Further, Discom may need to take into account technical operational constraints for generating plants as per CERC/SERC grid codes or other guidelines issued for them from time to time. In case, few generating plants are required to operate on full/partial basis in order to avoid transmission constraints, such special conditions will be recorded for the purpose of audit. DISCOMs shall follow the merit order dispatch principle and keep records of their most optimal merit order dispatch for the audit purposes.

SLDC shall publish or issue the plant constraints (like minimum technical limit) and network constraints, based on inputs from the plant operators and approval from the Commission. This information is essential for disocms to prepare their respective merit order dispatch schedule.

f. <u>Banking Transactions by DISCOM:</u>

All banking transactions will be done with due consideration of its benefits to discom based on historic exchange prices. Discom will need to ascertain that such banking arrangement is beneficial over exchange after considering banking margins, only then such banking contracts shall be entered into. In other words if the exchange price difference for both period (banking and return) is less than the banking margin, in such scenario one should consider exchange over banking.

g. <u>REC:</u>

In the APR submitted by PSPCL, it is mentioned that the Non-Solar obligation for FY 2018 including previous years is 2179.44 MUs and cost of purchasing RECs@1500 is noted to be 326.96 crore. Non-solar REC inventory stands at 67.6 lakhs by end of December 2017 so it is suggested that PSPCL should buy RECs from the exchange and fulfill its obligation.

9. <u>Sh. Vijay Talwar State Vice President – cum-Co Chairman, N. P. C. Laghu Udyog.</u>

A. CONSUMER ADVOCACY CELL.

i. It was strongly recommend that, presently available Consumer Grievances Redressal Mechanism should be streamlined by establishing CGRF in every zone (5 zones) for resolving disputes at reasonable cost and to avoid heavy rush of disputes, which are now pending in Civil Courts, Consumer Forums, State Forums, National Commission, High Courts and Supreme Courts. It was also strongly recommended that Consumer Advocacy Cell should be formed in PSERC for giving guidance and legal aid to consumers. It is the fundamental right of every citizen (Consumer) to have free legal aid to get justice.

B. COST OF SUPPLY.

9.1 It was he requested that Hon'ble commission may pass necessary orders for special Audit of PSPCL by Institution of charted Accountants to determine the actual income of PSPCL especially non Tariff Income and non paid amounts of interest on security, threshold limit rebate and TOD rebates.

9.2 PSPCL should be directed to disclose the expenses claimed as interest payable to consumers on their security deposits, threshold limit rebate payable to consumers and TOD rebate payable to consumers & also disclose how much amount is yet to be released to consumers. Non-payment of applicable interest, threshold limit rebate and applicable TOD rebate needs to be paid / adjusted to consumers. Hon'ble Ombudsman found these lapses and has passed orders pertaining to threshold limit rebate.

9.3 Industrial, Bulk supply & NRS consumers should be categorized voltage wise only. There should not be sub categories which create confusion,

9.4 PSPCL (Licensee) should be directed not to issue any circular (which involves financial Burden or financial benefit to any consumer) without getting the approval of commission. Approval granted by commission or the power to issue circular quoting the provisions of Act, Rules and Regulations should be annexed with that circular. If any circular is to be issued which does not involve financial implications, Powercom should give certificates on that circular confirming that no financial part is involved in this circular thus no permission is required from commission to issue this circular.

9.5 The method of deciding the consumer's disputes by Dispute Settlement Committee mechanism is not transparent. PSPCL (Licensee) be instructed to put the decisions taken by Dispute Settlement Committees on their web site. Dispute Settlement Committee and CGRF Ombudsman should passing speaking orders strictly in accordance to Act, Rules, Regulations, Tariff Orders, Orders and Directions of Commission. This is very important, and is in the vital interest of consumers to show transparency.

9.6 Forum for Redressal of Consumer Grievances created under section 42 (5) of Act should be increased to hold meetings in every Zone head quarter i.e. Jalandhar, Ludhiana, Amritsar. Bathinda & Ludhiana so that consumers could get justice at affordable price. Dispute Settlement Committees should be abolished, Hon'ble High Court in the case of Ranbaxy has already decided that there is no provision to form Dispute Settlement Committee. This will save wastage of expenses, detailed as under:

A) Consumer, Sr. XEN, AEE, & R.A. is to go to Patiala for attending Five to six meetings in every case resulting loss of time, fuel, Salary TA / DA of Board officers & consumers, besides Road Traveling risk. Also, this effects the work in Distribution area due to absence of their officers for the reason to attend Forum meetings at Patiala.

9.7 Returns submitted by PSPCL need prudence check. Distribution Transformer meters readings are normally not recorded. Energy Losses shown in returns needs thorough check. Further mandatory registers such as Security deposit register, sundry Job control order (Financial part) register, Sundry Job control order (Technical Part) register, complaint Register as per Format prescribed by commission, Meter control register (ME – 1 Register ME – 2 Register), Meter Sealing records are not maintained properly in sub Divisions. This results in loss of revenue to Powercom which should not be burdened on consumers by increasing tariff.

9.8 Hon'ble commission should take regular meetings, every month to listen to grievances/ Suggestions of consumers. This will give grass root level information to the Commission resulting in effective action.

9.9 Distribution licensee should disclose true sales in kVAh units for categories and sub-categories where kVAh tariff is applicable.

9.10 Hon'ble commission should direct the PSPCL (Licensee) to update Consumer Charter, Supply Code, Schedule of general Charges, Electricity Supply Instructions Manual approved by Commission & put the same on website. Also, copies of the same should be made available to public against a reasonable price.

9.11 It is mandatory to give single Point supply under section 43 of act. Thus 10 / 12 % rebate along with other rebates should be stopped, being not in consonance to the provisions of Electricity Act 2003.

9.12 PSPCL (Licensee) charges full cost of Meter / Metering equipment as Security Meter with the application, then why is there shortage of Meters resulting in late release of connections, late replacement of burnt meters, defective meters. This causes great loss to consumers, who had invested huge amount & their project is delayed only due to non release of connections.

9.13 Distribution loss should be calculated after converting kVAH units into kWH units by adopting 0.90 Power Factor as per Commercial Circular No. 49 of 2010.

9.14 Revenue earned for kVAh units sale should be reflected truly, category wise and sub-category wise. True income calculated on kVAh units X tariff rates should be reflected in revenue income as per tariff.

9.15 PSPCL should be directed to disclose the total income which they collected from consumers as per Supply Code, Schedule of Charges, general Condition of Tariff, Schedule of Tariff, Electricity supply, Instruction Manual, & also the amounts collected from cable operators for giving them poles on hire, Meter testing charges for testing 20% meters every year, which is mandatory under Meter Regulations framed by Central Electricity Authority U/S 55 of Electricity Act 2003, Protection Testing fee charged, site appraisal charges, Deposit estimate charges collected, Other amounts illegally collected, for changing UPS feeder to category – 1 feeders, category 1 to category 2 feeders cost of damaged Meters / Burnt meters / CT / PT, voltage surcharge charges @ 7%, 10% & 15% from consumers, Power Factor surcharge, late payment surcharge, MMC, weekly off day violation charges, 25% surcharge charged for uninterrupted supply given to Hospitals & all other charges collected by PSPCL including establishment charges, Advertising charges etc.

9.16 Income earned from fuel surcharge, charged from consumers should be disclosed separately which is over and above the tariff income earned by calculating as per tariff rates. It seems that, income collected from consumers under the head Fuel Surcharge has not been shown in revenue income.

9.17 Consumer contribution should be calculated by taking the full payments received as service connection charges plus security works plus deposit estimates plus capital cost received through tariff minus (-) actual expenses incurred for releasing new connections.

9.18 True amount of late payment surcharge should be reflected. PSPCL is accumulating the amounts by charging late payment surcharge plus interest from month to month which runs for many months. PSPCL should exercise their power U/S 56 of the Electricity Act and should serve statutory notice and disconnect connection than to extend payment date by charging heavy late payment surcharge and penal interest.

9.19 Loss from manufacturing units of PSPCL viz. from manufacturing of PCC poles should not burden the consumers. Depreciation, ROE, Interest etc should not be allowed through tariff.

9.20 The Commission should direct the PSPCL to submit affidavit giving the detailed list of consumers whose cases are pending with courts, Consumer Forum, National Commission, Dispute Settlement Committees, Forum for Redressal of consumer Grievances, OMBUDSMAN, APTEL, Commission, Supreme Court, Special Courts, Assessing officers under section 126 and Appellant Authority U/S 127 by giving the complete details of Amount pending in these cases.

9.21 The Commission should also call for the information showing income received in excess of service connection charges actually spent & also the income from OYT release of connections. These information / Suggestions are not exhaustive, He also suggested that Prudent check be conducted by the Commission & Special Audit be got done from Institution of Chartered Accountant. Income from weekly off day violation penalty collected, Income from the sale of electricity to the following categories whose rates are higher but no sale is shown in Metered sale block.

A. Seasonal Industry.
B. Temporary connections.
C. 10 paisa collected from Power Intensive units.
D. 10 paisa collected from continuous status consumers,
E. Fuel surcharge collected during last year & this year.
F. Service Charges collected through bills.
G. Service Rent collected through bills.
H. Wheeling Charges.
I. Cross Subsidy surcharge.
J. All other charges collected from Open Access consumers.
K. 10% of Octroi collection charges are admissible to collect octroi. Income from this head is to be disclosed.

9.22 Prepaid Metering has been introduced, but PSPCL is not following mandatory instructions to install prepaid meters.

9.23 Rates of tariff for temporary connection are too high as compared to the rates for permanent supply consumers, sales of temporary connection have not been shown in tariff income. Non- disclosing of these figures will affect consumer's tariff. It is pertinent to place on record that every new connection be given as permanent one after constructing building by getting temporary connection. Further there are lots of Mela functions in Punjab where temporary connections are to be given. PSPCL should give true fact and true figures should be probed by Hon'ble Commission for income earned from temporary supply consumers.

9.24 As per Section 42(1). It is mandatory duty of PSPCL being distribution licensee to develop & maintain an efficient, coordinated and economical distribution system in his area of supply. Licensee is getting Return on equity only against this investment. Depreciation earned is to be used for replacement or developing additional system or returning capital loans. Further contributions are charged from consumers by means of fixed SCC which includes proportionate cost of Backup, Bay & line.

9.25 PSPCL (Licensee) should disclose Surplus-Lands, Guest Houses, detail of Encroached Lands, Surplus Assets, Assets owned by licensee but used by Govt. for irrigation & flood control purpose, Vehicles not in use, damaged transformers, waist material, Oil & Damaged assets.

9.26 Identification of staff working at the officers residence, replace bulb & Tubes with CFL in all PSPCL offices guest houses, Resident accommodation, works & other street lights & other buildings owned by PSPCL.

9.27 Find out advertisers for giving them space to put their advertisement Material on their website & properties. Reduce quantum of free supply to PSPCL Employees because same is given to them over & above the wages & salary. Income from the free sale of electricity should be added in revenue income and expenses for giving free supply to be added in employee cost. Giving free supply to Powercom employees is discriminatory action because no such free supply is given to Govt. employees. Sale of electricity to Powercom employees, works in their offices, Guest Houses, Street lights in their yards, colonies & electricity used in their offices be also disclosed.

9.28 PSPCL should reduce the expenses on their overheads, improve cash flow, Recover the defaulting amounts and disclose true Picture by calling true returns from sub divisions & other responsible offices.

9.29 Convert A.P. Tariff from kWh to kVAh Basis. This is essentially required because Powercom not checking these connections resulting very Low Power Factor of A.P. connection. This is root cause of overloading the system during Paddy. Tariff of AP consumers on kVAh basis is only the solution to be introduced on A.P. consumers.

9.30 Income from capacitors installed by PSPCL on AP supply consumers has not been disclosed.

9.31 Powercom employees should be directed to follow Rules, Law & Regulations. Accountability of delinquent officers / officials is to be fixed. This will bring discipline in PSPCL.

9.32 Tariff of LS Category should be same for General Industry & Power Intensive units. This will increase revenue of Powercom. Consumers will be saved from the harassment of Powercom.

9.33 Street light connections should only be metered connections to avoid wastage of electricity which is the reasons of street lights remain lighted even during day time. As per Section 55, supply of electricity should be only by installing correct meters.

9.34 With the introduction of Two Part Tariff there should be no category of seasonal Industry cold storage, Ice candy etc because Fix charges are levied separately.

9.35 Two Parts Tariff, T.O.D. Tariff should also be applied on A.P. Consumers. AMR meters should be installed on AP Category. Consumers for giving true figures AP consumers generally complain that they are not getting regular supply.

9.36 Tariff for SP & MS consumers should be rational & any increase in Tariff to these categories will be fatal. Cross subsidy on these categories of consumers should be Zero. Powercom should be directed to control their expanses & reduce Tariff to sell the electricity to consumers. Saving of expanses by Powercom will help reducing tariff. Merge PIU & General Industry Load with LS (General Category).

9.37 The Commission has fixed tariff rates for general industrial load separately and Power Intensive load including Induction Furnace load separately. But in the case where consumers are having mix load i.e. general load plus Induction Furnace load (PIU) for manufacturing their end product are charged on PIU tariff only instead of calculating consumption on prorate basis. Even on demand of consumers PSPCL is not installing separate meter for General Industrial load and PIU load. Thus income from this category consumers should be reflected separately where as revenue income is shown only under LS general industrial load rate which is lower than PIU rates.

9.38 Income earned from VDS schemes, load surcharge for authorize load detected, un-authorized use of electricity charges and theft of energy charges, income detected from wrong meters, wrong multiply factor, process fee collected has not been disclosed. Which need disclosure itemwise.

9.39 The Commission should pass necessary orders to cancel all commercial circulars issued by PSPCL without following the procedure to get approval by Commission.

9.40 Fee for billing complaints by consumers U/S 142 and 146 of Act should not be more than ₹500/- as is fixed by other Regulators, so that consumers should file their complaints before the Commission. It is fundamental right of every citizen for getting free legal aid. Advocacy cell should be created in Punjab State Electricity Regulatory Commission as detailed in Model Regulations framed by Forum of Regulators.

10. Sh.Mohinder Gupta, President, Mandi Gobindgarh Induction Furnace Association.

Shri Gupta suggested implementing single part tariff instead of two part tariff for industry. The tariff for power intensive units should be less than the tariff of general industry. Penalty/demand surcharge should not be charged for overshooting of demand upto 110%. The tariff should be announced before 31st March for calculating next year progress.

Shri Gupta suggested that Maximum Overall Rate should be fixed below ₹7.00 per kWh. He further suggested that interest on ACD should be fixed as 12% per annum or prepaid meters should be installed. PSPCL should submit the ARR on factual basis.

11. <u>Er P.S. Virdi, President, the Consumer Protection federation:</u>

He thanked the Commission for nominating him as a member of State Advisory Committee. On behalf of Consumers Protection Federation (regd.) S.A.S Nagar, he drew attention of the Commission to the following suggestions for the better system and performance of PSPCL and PSTCL as under:

11.1. **<u>Thermal Plants:</u>**

When there is surplus power then why the same it is not being sold outside to other states to recover the production cost and give employment to the young talented youths and other unemployed citizen.

11.2. Amount in crore of rupees is still out standing against different Govt. departments and also with some big real estate developers/Industrialists. There should be strict rules to penalize the defaulters for the loss to PSPCL/PSTCL revenue.

11.3. To regulate the billing system of electricity consumption, monthly billing should be introduced with prepaid bill, for better early revenue every month.

11.4. Subsidized Tube-well consumption should be fixed with meters, where these should be provided only for agriculture purposes and not for farm houses.

11.5. As per policy of PSPCL, 100% target of electricity consumption meters has not been achieved. Only 60% to 70% fixed outside the premises of consumers has been achieved.

11.6. There should be strict vigilance on Kundi connection theft. It is a big loss every month to the Power Corporation in rural area and illegal colonies. The concerned field staff should be made accountable for the big theft through Kundi connection.

11.7. Monthly billing system is strongly recommended for the early recovery of revenue for PSPCL. It will reduce the finical burden on the consumers.

11.8. To control and to avoid theft through kundi connection, the help of local welfare associations at the District/city level in coordination with concerned divisional engineer be taken for increasing the revenue of PSPCL.

11.9. As per various press news items, the tariff being imposing on the consumers w. e. f. April 2017 which is not in the interest of general consumer and it will put heavy financial burden on the consumers, hence. He strongly recommended implementing the same from the January, 2018 i.e. current month.

12. <u>Shri Bhagwan Bansal, Cotton & Ginning Industry (Special Invitee).</u>

He suggested that Monthly Minimum Charges (MMC) for seasonal industry should be reduced to that of three months. He further added that force majeure clause in Arc Furnace Industry should also be made applicable to Ginning Industry.

Annexure-V

<table>
<tr><th colspan="4">Category-wise & Voltage-wise Cost of Supply and Cross Subsidy comparison with Cost of Supply for FY 2018-19</th></tr>
<tr><th rowspan="2">Voltage level</th><th rowspan="2">Consumer category</th><th>Cost of Supply</th><th rowspan="2">Cross subsidy level w.r.t. Cost of Supply</th></tr>
<tr><th>₹/unit</th></tr>
<tr><th>I</th><th>II</th><th>III</th><th>IV</th></tr>
<tr><td rowspan="3">220 kV/132 kV</td><td>Industrial</td><td>5.40</td><td>31.00%</td></tr>
<tr><td>Traction</td><td>5.40</td><td>40.34%</td></tr>
<tr><td>Bulk</td><td>5.33</td><td>21.42%</td></tr>
<tr><td rowspan="4">66 kV/33 kV</td><td>Industrial</td><td>6.12</td><td>15.51%</td></tr>
<tr><td>NRS</td><td>6.48</td><td>17.96%</td></tr>
<tr><td>Bulk</td><td>6.00</td><td>18.26%</td></tr>
<tr><td>Domestic</td><td>5.42</td><td>10.52%</td></tr>
<tr><td rowspan="4">11 kV</td><td>Industrial LS</td><td>6.63</td><td>11.72%</td></tr>
<tr><td>Domestic</td><td>6.12</td><td>14.28%</td></tr>
<tr><td>NRS</td><td>6.70</td><td>13.79%</td></tr>
<tr><td>Bulk</td><td>6.24</td><td>9.27%</td></tr>
<tr><td rowspan="7">LT</td><td>Industrial MS</td><td>7.34</td><td>-7.88%</td></tr>
<tr><td>Industrial SP</td><td>7.92</td><td>-15.29%</td></tr>
<tr><td>Domestic</td><td>6.68</td><td>-0.45%</td></tr>
<tr><td>Agriculture</td><td>6.94</td><td>-22.59%</td></tr>
<tr><td>NRS</td><td>7.14</td><td>8.61%</td></tr>
<tr><td>Public Lighting</td><td>6.77</td><td>15.28%</td></tr>
<tr><td>Bulk</td><td>6.53</td><td>13.22%</td></tr>
</table>

ANNEXURE -VI

LIST OF OBJECTORS – PSPCL

Objection No.	Name & address of Objector
1.	Sh. Balbir Singh Kharbanda, General Secretary, Cycle Trade Union (Regd.), Kharbanda Complex, Gill Road, Miller Ganj, Ludhiana.
2.	Sh. Sandeep Jain, Sr.Vice President, Induction Furnace Association of North India, Room No.204, 2nd Floor, Savitri Complex, G.T.Road, Ludhiana.
3	Sh. P.P.Singh, Vice President (E&U), Nahar Fibres (Prop.Nahar Spinning Mills Ltd., 373, Industrial Area A, Ludhiana.
4.	Shri Gaurav Banerji, Manager Electrical, KRBL Ltd., Vill. Bhasaur, Dhuri-148024, Distt.Sangrur, Punjab.
5.	Shri Gurmeet Singh, Head (E&I), Khanna Paper Mills Ltd., Fateh Garh Churian Road, Amritsar (Punjab).
6.	Sh. Mohinder Gupta, President, Mandi Gobindgarh Induction Furnace Association (Regd.), Grain Market, Mandi Gobindgarh.
7.	Sh. H.S. Sandhu, V.P. (Works), Siel Chemical Complex, A Unit of Mawana Sugars Limited, 5th Floor, Kirti Mahal 19, Rajendra Place, New Delhi-110125.
8.	Sh. H.N.Singhal, President (Corp.HR & Admn.), Nahar Industrial Enterprises Ltd., Focal Point, Ludhiana-141 010.
9.	Sh.Madhu Pillai, Resident Director, PHD Chamber of Commerce and Industry, Regd.Office:PHD House, Sector 31A, Dakshin Marg, Chandigarh-160 031.
10.	Shri Amrit Garg, Hon.Secretary, M/s Sangrur Distt. Industrial Chamber, C-9, Industrial Point, Sangrur-148001.
11.	M/s Laghu Udyog Bharti Phagwara, Office:55-Industrial Area, Phagwara-144401.
12.	Director, M/s Arora Iron & Steel Rolling Mills (P) Ltd., Dhandari Khurad, Near Phase-VII, Focal Point, Ludhiana-141010.
13.	Mr. P.D.Sharma, President, Apex Chamber of Commerce & Industry (Punjab), Room No.204, 2nd Floor, Savitri Complex-1, G.T. Road, Ludhiana-141003.
14.	Sh. P.P.Singh, Vice President (E&U), Nahar Fibres (Prop.Nahar Spinning Mills Ltd., 373, Industrial Area A, Ludhiana.
15.	President, Punjab Unaided Technical Institutions Association, C-124, Phase VIII, ELTOP, Near PCL Chowk, Mohali.
16.	Capt. S.S.Dhillon, IAS (Retd.), Chairman, I.N.A.Rural Development Society, H.No.1528 (1st Floor), Sector-34, Chandigarh.
17.	General Manager (Project/Horticulture), Punjab Mandi Board, Punjab State Agriculture Marketing Board, Punjab Mandi Bhawan, Sector-65A, SAS Nagar (Mohali).
18.	PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.

Objection No.	Name & address of Objector
19.	Er. Gaurav Singh, House No.594, Mohyal Nagar, Jalandhar City-144001.
20.	PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.
21.	Comments/Observations of Govt. of Punjab, Department of Power (Power Reforms Wing), Chandigarh.
Objections in Petition No. 05 of 2018 - True up for FY 2016-17	
1.	Sh. P.P. Singh, Vice President (E&U), Nahar Fibres (Prop.Nahar Spinning Mills Ltd., 373, Industrial Area ‘A’, Ludhiana-141003.
2.	Sh.Mohinder Gupta, President, Mandi Gobindgarh Induction Furnace Association (Regd.), Grain Market, Mandi Gobindgarh-147301

ANNEXURE - VII

PSPCL – OBJECTIONS

Objection No. 1: Sh.Balbir Singh Kharbanda, General Secretary, Cycle Trade Union (Regd.), Kharbanda Complex, Gill Road, Miller Ganj, Ludhiana.

Issue No.1: Fabricated & Inflated ARR for FY 2017-18 and RE for FY 2018-19:
PSPCL Petition for APR for FY 2017-18 and RE for FY 2018-19 is fabricated, inflated. Objector sought audited Balance Sheet for the years 2015-16 & 2016-17 through post and strongly opposed retrospective revision of tariff.

Reply of PSPCL:
In present petition for APR for FY 2017-18 and revised Estimates for FY 2018-19, PSPCL has submitted the revenue requirements based on Actual figures of first half of FY 2017-18, provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Hence, it would not be correct to say that the revenue gap figures are inflated. It has been observed that during the year FY 2017-18 the main input costs relating to cost of purchase of power from outside sources, establishment cost etc has gone up and therefore will result in increase in revenue gaps. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. It is therefore not appropriate to hold that revenue gap arising out of these expenses is inflated and unrealistic Moreover Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. Further, the determination of tariff is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.
So for as audited balance sheet of PSPCL is concerned, audited balance sheet for FY 2015-16 is available on PSPCL website "www.pspcl.in/information centre/arr-tariff-petitions**."** PSPCL has submitted the True Up for FY 2016-17 on 12-2-2018 and balance sheet for FY 2016-17 is also available on PSPCL website. Further, the determination of tariff and its applicability is the prerogative of Hon'ble Commission.

View of the Commission:
The information sought needs to be supplied to the objector under intimation to the Commission.

Objection No. 2: Sh.Sandeep Jain, Sr.Vice President, Induction Furnace Association of North India, Room No.204, 2nd Floor, Savitri Complex, G.T.Road, Ludhiana.

Issue No. 1: Maximum Overall Rate (MOR) for the industry under two part tariff system.
PSERC introduced two part tariff system retrospectively with effect from 1/4/2017 vide tariff order dated 23.10.2017 but was later reviewed and modified vide order dated 9.11.2017 to single part tariff from 1.4.2017 to 31.12.2017 and two part tariff was made applicable for 3 months of 1/1/2018 to 31.3.2018. One of the adverse impacts of the two part tariff is the exponential increase in per unit cost after considering the impact of fixed charges for industries passing through low demand phase due to recession in economy etc. Though the fixed charges have been kept lower for low end consumers but per unit impact is still very high for Small and Medium Enterprises having contract demand above 100KVA.
The fixed charges for the consumers falling in the category 100 KVA to 1000 KVA for the PIU category industry is ₹160/KVA/Month and Energy Charge of 574 paisa per unit. This works out to 22 paise per KVAH per 100 % utilization factor and for a consumer running his factory for six hours per day, for 6 days a week, this works out to 103 paisa per unit and overall rate as 67paisa per KVAH. The overall rate for usage of 5 hours a day will work out to be 696 paisa per unit. Cost per unit will increase, if the usage reduces further due to market conditions or low demand phase as happened in the recent past.
Similar will be the case for the consumers with CD above 1000 KVA, where the Fixed Charges are ₹295/KVA/Month and EC as 598 paisa per unit. For a consumer running the factory for 6 hours per day for 6 days a week, the FC per unit works out to 190 paisa per unit and per unit effective tariff as 788 paisa. Keeping in view the difficulties of such consumers, GoP was kind enough to agree to the concept of MOR for the industry. On the insistence of the Commission that Tariff Order already stands issued and for any

relaxation GoP has to compensate PSPCL, GoP has allocated ₹ 50 Cr for allowing MOR to the industry for 3 months. Keeping in view the genuine difficulty of the lower end consumers employing thousands of workmen and as approved by GoP also, we request the Hon'ble Commission to make the Maximum Overall Rate for industry as the permanent feature of the two part tariff to give relief to industry operating on the margin otherwise these are bound to become financially unviable and shut their shops causing huge blow to the efforts of GoP to revive the industry in Punjab.

Reply of PSPCL:

Single Part tariff has been converted into Two Part Tariff at an average utilization factor (U.F.) of each category. Two Part Tariff for respective categories has been split at certain U.F., there may be hundreds of consumers having UF above the Utilization Factor at which the tariff has been designed and hundreds below this designed Utilization Factor. In case we fix MOR tariff equal to Single Part Tariff, all consumers having UF above designed Utilization Factor shall be paying less than Single Part Tariff determined by the Hon'ble Commission and all consumers having UF below designed Utilization Factor will be paying the revised Single Part Tariff only, though they were required to pay higher than revised Single Part Tariff as per designed Two Part Tariff, This will result in perpetual revenue loss. There should not be MOR concept in Two Part Tariff system or it has to be fixed sufficiently higher than Single Part Tariff.

View of the Commission:

The Commission agrees with the reply of PSPCL to the extent that there should not be MoR concept in Two Part Tariff structure.

Issue No. 2: Differential Tariff based on CD in one category in Two Part Tariff

While in single part tariff, same tariff rate was applicable to all consumers of the category, in two part tariff, sub categories have been created based on the CD. The tariff i.e. fixed and energy charges both have been kept lower for consumers with lower CD. However, the conversion of single part tariff to two part tariff for revenue neutrality and subsidy levels have been worked out for all PIU consumers as one category. Thus such LS consumers with CD between 100 to 1000KVA are being subsidized at the cost of consumers with CD above 1000 KVA. This sub categorization within one category of industry gives heart burning to consumers at the margin. Thus a consumer with 950 to 990 KVA Demand is unduly benefitted compared to a consumer with 1010 to 1050 KVA demand since the per unit effective cost of power increases abnormally for the later consumer. It is also pointed out that the basis for this categorization i.e. Contract demand is not a valid basis for differentiation as per Section 62(3) of the Act 2003 reproduced below:

(3) 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.

It is therefore requested that this sub categorization be dispensed with immediately and MOR be introduced which will take care of low utilization factor of industries appropriately.

Reply of PSPCL:

Refer to reply of PSPCL against Issue No.1 of objection No.2 above.

View of the Commission:

The Commission observes that a common fixed charge for a particular category is possible only if all the sub-groups within a category have similar utilization factor. But, keeping in view the inherent characteristic of the Two Part Tariff structure wherein the low consumption consumers pay more and the consumers having higher consumption pay less, the Commission decided to have different sub-groups (based on their average utilization factor) for the purpose of determining tariff, so that, in case of substantial variation in the utilization factor amongst a particular category, consumers having very low utilization as compared to the average utilization factor do not have to pay at excessively higher rates. However, combined per unit rate (FC+EC) of electricity at the respective designed/average UF for all sub-groups remains same. In case, charges are capped, the revenue to the utility will suffer.

Issue No. 3: Timely issue of Tariff order for 2018-19.

PSPCL has already filed the Petition for APR 2017-18 and RE 2018-19. PSERC has issued notice for Public Comments on 2.1.2018. Public Hearings are scheduled between Feb 2- to Feb 16 2018 and PSPCL's Presentation is scheduled for 22 Feb. Thus the tariff order for the year 2018-19 can very easily be issued by 23- Mar to be made applicable from 1.4.2018 with clear notice of 7 days. We request the Hon'ble Commission to stick to the time lines and issue the TO well in advance, so that industry is aware of the costing of the products and do not suffer financially on this account as happened during 2017-18. This will also spare the GoP of the complications of bearing the arrears. Further, if there is delay in issue of Tariff Order, consumer should not be made to suffer and TO be made effective retrospectively.

Reply of PSPCL:

The issue is addressed to the Hon'ble Commission. PSPCL in this matter has no comments to offer. However, PSPCL requests the Hon'ble Commission to issue the tariff order for FY 2018-19 on time.

View of the Commission:

The Commission notes the objector's concern. Tariff determination exercise is carried out as per PSERC Regulations after carrying out the prudence check of the expenses of the utility. It has always been Commission's endeavor to determine the tariff within the time lines as laid down in the Act/Regulations. However, sometimes exigencies which are not in the control of the Commission cause delay in its proceedings.

Issue No. 4: TARIFF FOR POWER INTENSIVE LS INDUSTRY (PIU)

In Tariff Order for 2014-15, PSERC had approved the tariff of Rs 6.33 per KVAH for PIU industry against 6.33/KWH prevailing in 2013-14. Thus, power factor incentive available to us in 2013-14 was withdrawn. However, the tariff of general industry was lowered from 6.33 to 6.14 paisa per unit. Same tariff has been continued for 2015-16. Thus, the Power Intensive industry has been put in a disadvantageous position under two part tariff as in addition to existing 20 paisa per unit, PIU industry has been loaded with Rs 65/KVA/Month also compared with General Industry now. Though higher MMC was applicable earlier on PIU category, but it was not affecting 99% of consumers since their consumption was higher than MMC. However, the fixed charges are applicable irrespective of usage/non usage of power and the difference is now apparently hurting us.

Though PSPCL recovers higher tariff from PIU consumers, but does not install any equipment at its end proving thereby that no harmful effect occurs on the grid due to PIU industry. Further, data supplied by PSPCL on two part tariff proposal indicate that PIU industry has high Utilization Factor than General industry proving that assets deployed for PIU industry are giving higher returns to PSPCL. PIU industry also maintains higher Power factor than General Industry and thus has better voltage profile. As such justice demands that under the present surplus scenario, the tariff for PIU industry should be lower than General Industry or at least equal to general industry. It is unfair to impart undue preference to General Industry consumer's vis-à-vis PIU.

Reply of PSPCL:

The tariff at which electricity can be sold to consumers is determined by Hon'ble Commission. Further, fixation of tariff and application of any rebate to any particular category of consumer is the prerogative of the Hon'ble Commission as per Electricity Act, 2003 and provisions of the PSERC Tariff Regulations. PSPCL sells electricity to the consumers at rates specified in the tariff order issued by the Hon'ble Commission. Further, PSPCL has no intention to earn more from any class of consumer by this proposal. This is just an exercise carried out by PSPCL (as per the directions of Hon'ble Commission) which is based on the latest available data to bring revenue neutrality to the extent possible. No cross subsidization has been proposed by PSPCL in its proposal. The higher fixed charges for any category shall automatically be got benefitted by the reduction in corresponding energy charges.

View of the Commission:

Refer para 4.5 of this Tariff Order.

Issue No. 5: Grant of Night Rebate and levy of Peak Charge in monthly bills

Under the Time of Day tariff, the night rebate is admissible from 00 hours of 1st Oct of each year to 24 Hours of 31st May of the next year. Similarly, Peak Load Charge is levied from 00 hours of 1st June to 24.00 hours of 30th Sept each year. The TOD is applicable on LS, MS, BS and NRS consumers with CD exceeding 100 KVA. Thus thousands of consumers become liable to pay peak charge or receive night rebate at 00 hours of the appointed day but it is not possible for the Meter Reading Staff/Officers to note down the readings of all the consumers on the specified time and date. Thus actual reading date vary and except few consumers, meter reading is carried out either before or after the specified time. The bills issued are being prepared by PSPCL as per their suitability. The consumer is made to suffer in the process and peak charges are claimed in excess and night rebate is curtailed. This is giving rise to billing disputes and the consumer has to run after the CBC officers for getting the bill corrected. This is giving rise to unfair practices also as meter reading staff is obliging some persons with timely readings who get correct bills and others are made to suffer. It is therefore requested that PSPCL should be directed to grant night rebate and levy peak charge on proportionate basis in the first instance itself and manual bill corrections be minimized. Any excess claim is refunded with penal interest. We also request that penalty for wrong billing is introduced in the Standard of Performance.

Reply of PSPCL:

PSPCL is providing night rebate on TOD tariff in line with the instructions of Hon'ble PSERC. The monthly bills are being served to 80 to 85% LS consumers through AMR technology and there is no manual intervention. The manual bill adjustment is made in case of late receiving of UI account from open access wing and in case there is problem in fetching the data through AMR. In case no AMR data is received the bills are prepared manually by downloading the meter reading data through CMRI by the respective DS offices.

View of the Commission:

ToD Meters are programmed to record the slot (time) wise consumption. PSPCL needs to address the issue to the satisfaction of its consumers.

Issue No. 6. Category wise Cost of Supply / HT Rebate

Objector raised the issue on PSERC approved methodology II for Voltage wise CoS study and pointed out that the study indicated that available data is quite inadequate and assumptions had to be taken at every step due to absence of one or other parameter required for the study. Further, even the assumptions had been so taken that HT/EHT consumers were loaded with unjustified costs and made to share big burden of the ARR and cost of supply as worked out in Methodology II was not representing the ground realities and needs to be made realistic and fine tuned with more data collection on actual basis.

Still PSERC had accepted Voltage wise and category wise Cost of supply for 2013-14 in TO 2013-14. The Commission had further observed in Para 5.2.10 of TO as under:-

> 5.210 It would be 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. As such, 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 these consumers.

Accordingly rebate for EHT consumers was reintroduced. The practice was continued in 2014-15 and PSERC ordered in the TO as under:-

> 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-l). 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]

The rebate of 30/25 paisa is being continued till date. In order to make the cost of supply more realistic and reliable, it is requested that PSPCL be asked to firm up the data required for the study since lot of computerization/digitization has taken place and IT practices have been introduced under APDRP schemes in PSPCL/PSTCL. Further as per recent orders of APTEL in an appeal filed by the Objector, it has been ordered that Cross Subsidy Levels be also worked out on the basis of Cost of supply and it should be ensured that these levels remain or are less than those of last year and should not exceed 20% limit. Further, voltage rebate be further enhanced to make it commensurate with the cost of supply. The voltage surcharge is being levied in percentage terms i.e. a consumer required to take supply at 66 KV but taking supply at 11 KV is levied voltage surcharge of 10% but voltage rebate is flat 25 paisa per unit. Therefore we request that Voltage rebate be increased proportionately and fixed in percentage terms.

Reply of PSPCL:

PSPCL in its petition never proposed any rates for the tariff or any cross subsidization. All these factors such as slab and category wise tariff rates, cost of supply, cross subsidy etc. are in the purview of the Hon'ble Commission while keeping in view Electricity Act, 2003 and provisions of the PSERC Tariff Regulations and Acts. As given in the Tariff Policy, there has to be gradual reduction in cross-subsidy, keeping in view the interest of Utility. Hon'ble Commission has always endeavored to reduce the cross subsidy as provided under the Electricity Act, 2003 and the Tariff Policy. Further, Tariff Policy and Tariff Regulations notified by the Commission mandate gradual reduction of the cross-subsidy to the level of $\pm$20% of the average cost of supply. Hence in light of the same, it is requested that while determining the tariff in conjunction with the cross subsidy factor, the Hon'ble

Commission has also to keep in mind the interests of PSPCL. The determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003 on the basis of data supplied by PSPCL in the ARR, keeping the interest of PSPCL in view.

View of the Commission:

Refer to para 4.6 of this Tariff Order.

Issue No. 7: Mixed Load PIU Industry:

The Schedule SI 3.5 of the Tariff Order for FY 2017-18, provides as under:

"For Arc/PIU Industries, where the load is of mixed nature, i.e. in addition to Arc/ Power Intensive Loads, General Industrial loads are also running. MMC/ Fixed Charges, as applicable, shall be determined by computing the contract demand on prorate basis in proportion to such loads duly sanctioned by the load sanctioning authority. in such cases, Power Intensive Loads shall comprise of loads as mentioned in para SI. 3.2/ SI. 3.2A. including auxiliary loads, loads of pollution control machinery, gas plants & corresponding lighting loads, and general industrial loads in such cases shall comprise loads of rolling mills and its allied loads, related workshop, general engineering machinery and corresponding lighting load, for the purpose of levy of MMC/ Fixed Charges, as applicable."

The above does not clarify that the industry with mixed load of General and PIU with demand above 1000 KVA but PIU load is less than 1000 KVA then will it be covered under Tariff Clause Sl.3.2A (i) with Fixed Charges of ₹160.00 /KVA ?

Keeping such consumers under Tariff clause of SI.3.2A (ii) with Fixed Charges of ₹ 295.00/KVA will be very harsh.

This is an example of unfair differential tariff between the same type of industry on the basis of contract demand and thus creating unfair competition leading to undue benefit to one person at the cost of other person.

This is particularly applicable to General Industry with Induction Billet Heaters as part load. So, there should be no tariff differential within the same category on the basis of load.

Reply of PSPCL:

The Schedule no. SI.3.5 of Schedule of Tariff for FY 2017-18 is self-explanatory w.r.t. charging of fixed charges, in case of mixed load (i.e. PIU/Arc and General Load), by computing the contract demand on prorata basis in proportion to such loads duly sanctioned by the load sanctioning authority. For mixed load LS (Arc/PIU) industries, the energy charges shall be levied according to the tariff slab of Arc/PIU category as per the total load (general load plus power intensive load)/CD of the consumer. For example, if General CD is 900 kVA and power intensive CD is 900 kVA, then, for calculating Variable charges tariff slab as per 1800 kVA shall be considered, i.e. Rs. 5.98/kVAh shall be levied for entire consumption as practiced in previous tariff.

View of the Commission:

Refer para 4.5 of this Tariff Order.

Issue No. 8: Cross Subsidization Levels of Agriculture and Industry and reduction of cross subsidy levels.

i) The National Tariff Policy stipulates to keep the average realization per unit from each category to the 20% (plus or minus) of combined average cost of supply (ACOS).

ii) While deciding Appeal No 142 & 168 of 2013 filed by Mawana Sugars & Bansal Alloys Vs PSPCL and others, APTEL has also given directions to PSERC in para 14 of the order to work out the cross subsidy on the basis of voltage wise category wise cost of supply (VCOS) also and has also held that as per the provisions of the Act 2003, the cross subsidy of any category of consumers will not be increased from the level of last year.

iii) PSERC has determined the cross subsidy levels for both the ACOS and VCOS in the TO 2017-18. It is submitted that while working out the same for FY 2018-19, the tariff of the subsidized class of consumers i.e. agriculture sector and other subsidized domestic consumers be increased suitably in compliance to the above orders of APTEL to ensure that:

   a) Cross subsidy levels based on cost of supply remain equal to or are less than those of last year.

   b) Cross Subsidy levels remain within +/-20% based on average cost of supply as here to fore.

iv) APTEL has also ordered in a recent Judgment dated 9.1.2017 in Appeal No. 134 of 2015 in Spentex Industries Limited Vs MPERC and others that trajectory for gradual reduction of cross subsidies shall also be finalized by the SERCs in line with provisions of the Section 61 of the Act. Hon'ble APTEL has made following observations:

'26(e) The State Commission is required to prepare a road-map for reduction of cross subsidies amongst the various categories of consumers.

27(c). We would like to put a remark on this count that the State Commission while issuing the Retail Supply Tariff orders and avoiding tariff shock to consumers should also identify the road map for reduction of cross subsidy

Accordingly, Hon'ble Commission is also requested to decide and notify the road map for reduction of cross subsidies.

It is further suggested that a limit on consumption should be specified for the categories of consumers which are being cross subsidized. Once the consumption of these categories exceeds their limit specified in the order, they should be charged at normal tariff rate and not at subsidized rate. Thus if supply of additional power to Agriculture Sector is made due to draught conditions thro' additional costly spot purchase or imposing cuts on highest tariff categories like industry, it should not be at subsidized but normal tariff and subsidy due from GoP be worked out accordingly.

In the present scenario, GoP is subsidizing the Agriculture, Industry and lower end consumers of PSPCL, the effect on overall subsidy of GoP would be only nominal if tariff for all categories are brought nearer to the cost of supply in a phased manner.

Reply of PSPCL:

The tariff and level of cross subsidy is determined by Hon'ble Commission. Further, as per Electricity Act, 2003 and provisions of the PSERC Tariff Regulations.

Further, Clause 8.3 of Tariff Policy states as under:-

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

As given in the Tariff Policy, there has to be gradual reduction in cross-subsidy, keeping in view the interest of Utility. Hence in light of the same it is requested that while determining the tariff in conjunction with the cross subsidy factor, the Hon'ble Commission has also to keep in mind the interests of PSPCL.

Further, Supply to agriculture tube wells is free as per policy of the Government and capping of the same is at the discretion of the Government of Punjab. Moreover, supply to AP consumers is limited only up to 8 hours that too during the months of June to September for paddy cultivation. As far as supply of power to agriculture category of consumers at COS rate is concerned, the said issue is under the prerogative of Hon'ble Commission. PSPCL would comply with the directions of the Hon'ble Commission. PSPCL only request the Hon'ble Commission to kindly allow to recover the legitimate cost of PSPCL claimed in the Petition

View of the Commission:

The Commission has always endeavored to reduce the cross subsidy as provided under the Electricity Act, 2003 and the Tariff Policy. Further, Tariff Policy and Tariff Regulations notified by the Commission mandate gradual reduction of the cross-subsidy to the level of ± 20 % of the average cost of supply. This milestone has already been achieved. Also refer para 4.6 of this Tariff Order.

Issue No. 9: ARR AND CARRYING COST OF REVENUE GAP

Perusal of the ARRs being presented year after year indicate that the ARR is prepared and submitted for approval of the expenditure incurred on actual plus all incentives which can be thought of by the utility and present inflated ARRs for the ensuing year. Where MYT Regulations support the contention of utility, the same is quoted otherwise request is made for acceptance of the incurred expenditure.

PSPCL has also filed Review Petition No 5 of 2018 for review of TO 2017-18 seeking

i) ROE in the shape of Interest on short term loans of ₹2846.33 Cr for last 7 years worked out on a theoretical financing pattern of capital works (an afterthought) which should be treated as equity as per PSPCL which will work out to around 1200 Cr along with carrying cost (actual not worked out in the review Petition).

ii) Difference of (-81.99-85.05) and (-21.38+25.02) i.e.-167.04+3.64 = - 163.40 Cr towards Generation incentive on account of APTEL order for GNDTP Bhatinda.

Thus the likely Revenue Gap for 2018-19 will work out to Rs 8755.30+1200+163.40 ₹10218.70. Cr and the required increase in the Tariff rates required works out to be 32.4%. (With revenue from existing tariff as 31513.45 Cr as per Format 27-E of APR)

This abnormal gap which is increasing every year clearly indicates total financial indiscipline in PSPCL and that PSPCL is incurring expenditure at their will and leading towards debt trap in spite of relief available under UDAY scheme. The projections of Revenue Gap in ARR/APRs of the respective year are as under:

Year of ARR	Revenue requirement	Gap worked out
2016-17	31262.54 Cr	5140.77 Cr.
2017-18	32718,64 Cr	5576.21 Cr
2018-19	33862.12 Cr	5339.33 Cr

Thus there seems to be a consensus on keeping the Revenue Gap at 5000 to 5500 Crore. Further, in-spite of 9.33% increase in tariff and projected 6.4% increase in sales in 2018-19 over 2017-18, the gap still persists. It clearly indicates that there is something wrong in the operations of PSPCL and it is in debt trap.

If the ARR presented by PSPCL is accepted in toto, the base tariff of LS (PIU) industry which was Rs 6.75 per unit in single part tariff system would be ₹ 8.94 per unit. With 20% of ED+IDF+MT, the tariff would work out to Rs 10.73 per unit for 2018-19 and would further increase for balance MYT period.

It is evident from the above that besides continuing with its inefficiencies, there seems to be a tendency on the part of PSPCL to inflate the figures of ARR to get higher tariff to cover up its continuing losses which need to be looked into by the Commission thoroughly otherwise the industry in Punjab will become totally uncompetitive with the industry of neighbouring states and shall have to close down their factories.

Reply of PSPCL:

In present petition for APR for FY 2017-18 and revised Estimates for FY 2018-19, The revenue requirements based on Actual figures of first half of FY 2017-18, Provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Hence, it would not be correct to say that the revenue gap figures are inflated. It has been observed that during the year FY 2017-18 the main input costs relating to cost of purchase of power from outside sources, establishment cost etc has gone up and therefore will result in increase in revenue gaps. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. It is therefore not appropriate to hold that revenue gap arising out of these expenses is inflated and unrealistic Moreover Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. Further, PSPCL submits that the determination of tariff is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.

View of the Commission:

The ARR is worked out by the Commission after prudence check and carrying cost, if any, is allowed on the revenue gap determined by the Commission in line with PSERC Regulations.

Issue No. 10: Agriculture Tariff less than Cost of Supply

i) The absolute cost of power supplied to agriculture sector has been growing consistently at very high rate. Providing the power at the subsidized rate of Rs 5.06 per unit, which is far less than the actual cost of power (as high as ₹7.92 per unit for 2018-19) will lead to serious financial crisis for the PSPCL and will ultimately seriously affect the interest of industrial consumers in the State, which are already reeling under recession.

ii) It may be pointed out that Induction furnace and Rolling mill industry (PIU Category) to which the Objector consumes power extensively and the cost of power is more than 50% of the operating costs and this is the reason that almost 50% industry is already closed and most of them are running in one shift. The reason for prevailing high tariff for PIU industry is that they have to bear the cross subsidy for cheap power being supplied to agriculture. National Tariff Policy 2016 provides as under:

"While fixing tariff for agricultural use, the imperatives of the need of using ground water resources if; a sustainable manner would also need to be kept in mind in addition to the average cost of supply Tariff for agricultural use may be set at different levels for different parts of a state depending on the condition of the ground water table to prevent excessive depletion of groundwater. Section 62 (3) of the Act provides that geographical position of any area could be one of the criteria for tariff differentiation. A higher level of subsidy could be considered to support poorer farmers of the region where adverse ground water table condition requires larger quantity of electricity for irrigation purposes subject to suitable restrictions to ensure maintenance of ground water levels and sustainable ground water usage."

Hon'ble Commission is requested to fix the quantum of subsidized power to be supplied to agriculture and quantum above that ceiling be charged at full rate so that cross subsidy is kept in manageable levels.

Reply of PSPCL

Objector requests PSERC to fix the quantum of subsidized power to be supplied to agriculture and quantum above that ceiling be charged at full rate. Supply to agriculture tube wells is free as per policy of the Government and capping of the same is at the discretion of the Government of Punjab. Moreover, supply to AP consumers is limited only up to 8 hours that too during the months of June to September for paddy cultivation. As far as supply of power to agriculture category of consumers at COS rate is concerned, the said issue is under the prerogative of Hon'ble Commission. PSPCL would comply with the directions of the Hon'ble Commission. PSPCL only request the Hon'ble Commission to kindly allow to recover the legitimate cost of PSPCL claimed in the Petition.

View of the Commission:

Refer to view of the Commission against Issue No. 8 above.

Issue No. 11: Interest Cost with UDAY Scheme

In spite of GoP taking over 75% of loans for distribution business under UDAY scheme, the interest on loan amount is increasing alarmingly. PSPCL had submitted that with UDAY scheme, the interest cost for 2016-17 would reduce from projected ₹3029.69 Cr to ₹2396.82 Cr resulting in saving of ₹632.87 Cr. However, in the RE 2016-17 submitted with ARR 2017-18, the interest cost was projected as ₹2927.52 Cr and now in Provisional True Up ARR for 2016-17 of APR, the Interest cost has been indicated as ₹2658.66 Cr, thus negating the benefits of UDAY scheme. This needs to be checked and interest cost needs to be restricted to the approved figure of ₹2396.82 Cr.

Reply of PSPCL:

While filing the Revised ARR for the year 2016-17 (after considering the impact of UDAY Scheme) there are various factors in which there are difference in amount of actual value vs. projected value, resulted in increase in interest cost as indicated in Provisional True Up ARR for 2016-17 which are as under:

(i) The outstanding loans as on 31-3-2016 were projected to the tune of ₹ 26568.17 crore whereas as per actual position, the outstanding loans as on 31-3-2016 were ₹27239.58 crore, resulting into additional loan balance of ₹ 671.41 crore.

Further at the time of filing Revised ARR for the Year 2016-17(after considering the impact of UDAY Scheme), the net addition in loans were projected to be ₹ 1381.97 crore whereas vide filing APR for 2017-18, the net addition for loans for the year 2016-17 are ₹ 2289.97 crore resulting into additional loans of ₹ 908.00 crore.

As additional loan of ₹671.41 crore and ₹908.00 crore were added during 2015-16 and 2016-17, this resulted into additional interest cost of ₹132.59 crore. (Rate of interest assumed @11.50%)

(ii) The capitalization of interest cost was projected at ₹ 450.00 crore whereas while filing the APR for 2017-18, the actual capitalization of interest cost for the year 2016-17 is ₹ 283.61 crore resulting into additional interest cost of ₹ 166.39 crore.

(iii) At the time of filing ARR for the Year 2016-17, PSPCL suppose to issue the remaining 25% of PSPCL's own bonds amounting to ₹ 5209.42 crore during 2016-17 at interest rate of approximate 9.60% and in turn PSPCL to repay its existing debt of ₹ 5209.42 crore taken at the rate of 11.10%. But the bonds would not be issued during 2016-17 resulting into excess payment of interest amounting to ₹ 78.14 crore (11.10%- 9.60%).

(iv) The interest and finance charges & Other charges were projected at ₹85.00 crore whereas while filing APR for 2017-18, the actual interest and finance charges & other charges are of ₹ 34.89 crore for the year 2016-17 resulting into deduction ₹ 50.11 crore.

(v) In addition to above, it is also mentioned that ₹215 crore was projected for 'interest to consumer' while filing the revised ARR for the year 2016-17(after considering the impact of UDAY Scheme), whereas actual cost of interest to consumer is ₹152.07 crore resulting into deduction of ₹62.93 crore.

Therefore, difference of amount of interest cost indicated in Provisional True Up ARR for 2016-17.

View of the Commission:

Interest on loan has been allowed in this tariff order after considering UDAY Scheme.

Issue No. 12. Surplus Power and Capacity Charge of Idle Capacity:

i) The surplus power proposed to be surrendered on Merit order Dispatch due to commissioning of new IPP stations of PSPCL has increased the ARR of PSPCL. PSPCL has to bear the capacity/fixed charges for such non purchase of power. This position was predicted by PSERC and in this regard directive given to PSPCL in TO 2013-14 may be referred to, which directed PSPCL to review all the PPAs and surrender costly powers in view of commissioning of IPPs in the state and reiterated the same subsequently but without any result. Now in current APR, in response to Directive no 8.17, PSPCL has only reiterated the earlier position also stating that any change in PPAs can be with mutual agreement only. Such gross laxity in dealing with such important issue affecting the tariff directly for which timely directive had been issued by PSERC in advance way back in 2013-14 and then burdening the consumers on account of such inefficiency year after year is uncalled for and should not be allowed by the Commission as pass through.

ii) Objector requested that there is a need to review of MOD on monthly basis.

Reply of PSPCL:

After reviewing all the Long Term PPAs/ BPSAs, 11no. NTPC/ NHPC generating stations (Anta, Auriya, Dadri,Jhajar, Unchahar-I, Farakka, Kahalgaon-I of NTPC and Sewa-II, Chamera-III, Uri-II &Parbati-III of NHPC) have been recognized for surrender of power share on mutual agreed terms. The same matter is repeatedly being taken up by the Govt. of Punjab with the Ministry of Power, Govt. of India with the latest D.O. letter being written by Secretary Power, GoP to Secretary Power, GoI on dt.9.11.2017.

Also, a legal opinion regarding surrender of power share has been taken by PSPCL and the advocate Mr. M.G. Ramachandran opined that PSPCL cannot treat any agreement as terminated unless the generating company agrees to the same.

Further, regarding review of PPAs of IPPs, it is submitted that there is no provision for review of PPAs signed with IPPs. However, only the Clause ‘Term of Agreement’ which is from the ‘Effective Date’ to ‘Expiry Date’ exists in the PPAs of IPPs.

iii) The surrender of power on Merit order needs to be reviewed/checked every month in view of changing scenario of coal cost due to allotment of coal mines thro' bidding process, variation in imported coal prices and gas prices.

PSPCL already has a practice to review variable costs of projects on monthly basis.

View of the Commission:

Objector may note the response of PSPCL.

Issue No. 13: Employees Cost

Employee Cost as per claims made in the initial ARRs are highly inflated (As high as 1000 Cr app) and actual in true up have come down drastically and even lower than those approved by the Commission. For 2016-17, the Employee cost claimed initially was ₹5715.97 Cr while for provisional true up, it is ₹4552.97 Cr. This fact needs to be taken note of and PSPCL be asked to explain the reason for such mis-declaration and approvals be accorded after thorough scrutiny.

Commission had been allowing increase in employees cost on the basis of Wholesale Price Index as per Tariff Regulations which have been amended now to cover CPI also. Therefore, increase in employees cost on the basis of amended regulations may be allowed during MYT period instead of actual/projections with assumed figures. Any additional expenditure under this head should be met by the PSPCL by way of internal efficiency improvement or by way of reducing their costs over and above the performance levels fixed by the Commission.

Further, as per MYT Regulations, PSERC is bound to consider the employee and other costs of BBMB as actually incurred by PSPCL. However now BBMB has been considered as a utility having composite business of Generation and Transmission covering more than one state and accordingly has been subjected to the CERC (Terms And Conditions for Determination of Tariff) Regulations 2014-2019. BBMB has also submitted its petition(s) for determination of revenue requirement for the period 2009-14 and 2014-19 to CERC. PSPCL has claimed ₹1410.88 Cr in the APR 17-18 towards the impact of PSERC order dated 8-11-17 on BBMB operation and maintenance expenses from the FY 2009-2010 onwards with interest. It is therefore desirable that MYT regulations be amended to cover this development and charging of BBMB expenses as determined be CERC as per Central Regulations.

Reply of PSPCL:

The employee cost is a parameter which cannot be controlled to a great extent by PSPCL. However PSPCL is making constant efforts to reduce burden of employee expenses in its ARR. PSPCL has been consistent in its efforts in curtailing the employee expenses. Further, disallowance of the same

on the basis of normative parameter without considering its impact on the viability would result in deterioration of financial position of PSPCL. Further, expenditure on terminal benefits is a statutory requirement of the Corporation and has to be allowed in to as per actual. Similarly expenditure on funding of terminal benefits as per the Financial Restructuring Plan approved by the State Government on 24.12.12 is also mandatory expenditure to be incurred by the Corporation and hence should be allowed in toto as per actual. In view of above, it is submitted that Hon'ble Commission to consider the detailed justification of employee expenses as provided in the Tariff Petition while allowing the employee expenses as claimed.
Objector also request to Hon'ble Commission to amend the MYT regulation in respect of BBMB, PSPCL submits that amendment of MYT regulation as requested by objector is not directly related to current proceeding of determination of ARR for FY 2018-19 and hence PSPCL is not offering any comment on the same at this stage.

View of the Commission:

Employees cost is approved in line with PSERC Regulations.

Issue No. 14: Provision for DSM Fund

PSPCL is seeking and PSERC is allowing ₹10 Cr every year towards DSM fund but there is either no expenditure under the head or only nominal expenditure is being incurred every year. PSPCL is reiterating the same reason for surrendering the provision at the end of the year. PSPCL is already surplus in power and there are no constrains in the transmission/ distribution system for meeting peak demand. Thus PSPCL also does not seem to be interested in any management of the demand. As such the allocation under this head be reduced to a token amount with a provision to consider the actual during true up exercise.

Reply of PSPCL:

To utilize the DSM Funds approved by Hon'ble PSERC in its previous financial years, various proposals such as replacement of conventional street lights with LED street lights at PSPCL Generating Stations, Replacement of conventional lights with LED lights in the office buildings of PSPCL etc. were submitted to Hon'ble PSERC, for its approval to utilize DSM Funds for these proposals, but Hon'ble PSERC raised objection on these proposals and submitted its views as under:

> "The commission is of the view that the DSM funds are to be used to carry out energy efficiency and DSM programs for the benefit of the consumers of the state. The energy efficiency programs in the office/buildings of PSPCL, may be carried out by PSPCL from its own resources."

Therefore, in compliance to the above views/directives of Hon'ble PSERC, to utilize the DSM Funds of ₹10 Crore (for each year of the Control Period i.e. FY 2017-18, FY 2018-19 and FY 2019-20) approved by Hon'ble PSERC, for the benefit of the consumers of the state and to achieve energy saving targets this office is preparing various proposals such as:

a) **Replacement of conventional incandescent lamps/CFLs/Tube lights and Fans with efficient 9 Watt LED lamps/ 20 Watt LED Tube lights and 50 Watt BEE star rated Energy Efficient Fans in the Rajindra Hospital –** The total cost to of this project would be around ₹ 51.34 Lac. This project would be considered as a Pilot project and on the basis of this project the conventional lighting and Fans of other Govt. Hospitals will also be replaced with energy efficient LED lighting and Fans.

b) **Pilot project on Solarisation of 11 kV Nathu Chahal Agriculture Feeder –** This is a Pilot Project to Solarize a single Agriculture feeder as a DSM Project. To provide 178 no. of Solar Pumps on 11 KV Nathu Chahal Feeder total Funds of approximate ₹ 11.50 Cr. are required. After the implementation of this Pilot project it is proposed to provide solarization of other AP feeders in the state of Punjab on the basis of this Pilot Project.

c) **Ag-DSM -** To implement various energy efficiency programs in the state of Punjab, Govt. of Punjab and PSPCL identified the areas of south zone predominantly having 1 Lac nos. of inefficient submersible Pumps to replace inefficient pumps with BEE 5 star rated motors. So, it was decided to implement a demonstrative pilot project at Chatipeer feeder of 66 KV Achal S/S under Nabha Division, circle Patiala district having 108 no. of pumps to find out the actual energy saving potential and consider it deemed for rolling out the large scale implementation of Ag-DSM project in the State of Punjab. Accordingly, M/s EESL started the execution of Ag-DSM demonstrative pilot project on the selected chattipeer feeder. After replacing only 16 no. of pumps out of 108 nos. of AP consumers, M/s EESL put the project at halt. EESL assured that they will provide a revised proposals on ESCO, PMC mode with Sensitivity analysis at 15%, 17%, 20%, 25% & 30% Energy Savings along with Sensitivity analysis, through separate proposal at the earliest. The same will be presented to the management of PSPCL to select the mode for the implementation of Ag-DSM Project in the state of Punjab.

d) **Distribution of LED Lights among the consumers that falls under the category of BPL, SC & BC category of PSPCL -** It is proposed to distribute 2 no. of 9 Watt LED Lamp and 1 no of 20 Watt LED Tube light among the BPL, SC & BC categories of PSPCL. It is also proposed to give priority to the consumers having load up to 1 KW under these categories. While considering that at least 50% of the consumers under above categories would be covered in this scheme, the total required expenditure would be of ₹29 Cr.

All the above mentioned proposals will cost more than 30 Cr. i.e. the amount approved by Hon'ble PSERC under DSM Funds up to FY 2019-20. So there are various proposals that are under consideration and after the approval of worthy CMD-PSPCL these proposals will be put up before Hon'ble PSERC for its approval, so that the DSM funds may be utilized for the benefits of consumers and to meet the peak load demand.

Therefore, it is requested to keep the funds of ₹10.00 crore for each year of the Control Period i.e. FY 2017-18, FY 2018-19 and FY 2019-20, as claimed by PSPCL for implementation of DSM Programme.

View of the Commission:

Refer para 3.21 of this tariff order & also directive No.5.4 of this tariff order.

Issue No. 15: Expenditure on Normative/Actual basis:

It is also pointed out that the expenditure already denied / methodology already rejected by the Commission in the previous tariff orders should not have been included/reiterated in the APR at all but the PSPCL is continuing the practice. Further, under Op & Mtc. Expenses, R&M and A&G expenses are being claimed on normative while Employee cost is being claimed on actual instead of normative and projections have been based on sub head wise assumed increase. As per MYT Regulations, all these three expenses are to be given on normative basis. Thus PSPCL wants to have the best of all. In our view, there is no reason for admitting the same.

Reply of PSPCL:

PSPCL has not claimed any expenses which were disallowed by Hon’ble Commission in earlier Tariff Orders. However, it is clarified that if any expense is denied by Hon’ble Commission for respective year and PSPCL is in appeal for the same before Hon’ble ATE, then PSPCL has to claim such expenses to maintain their stand before Hon’ble ATE in ensuing years. Further, PSPCL files an appeal before Hon’ble ATE as per Section 111 of the Electricity Act, 2003 only when it is aggrieved by Order of the Hon’ble Commission. Hence, it is not true to say that PSPCL is not bothered to adhere to the approved expenditure.

So for as the employee cost, it is a parameter which cannot be controlled to a great extent by PSPCL. However PSPCL is making constant efforts to reduce burden of employee expenses in its ARR. PSPCL has been consistent in its efforts in curtailing the employee expenses. Further, disallowance of the same on the basis of normative parameter without considering its impact on the viability would result in deterioration of financial position of PSPCL. Further, expenditure on terminal benefits is a statutory requirement of the Corporation and has to be allowed in toto as per actual. Similarly expenditure on funding of terminal benefits as per the Financial Restructuring Plan approved by the State Government on 24.12.12 is also mandatory expenditure to be incurred by the Corporation and hence should be allowed in toto as per actual. In view of above, it is submitted that Hon’ble Commission to consider the detailed justification of employee expenses as provided in the Tariff Petition while allowing the employee expenses as claimed.

View of the Commission:

O&M expenses are approved in-line with PSERC Regulations.

Issue No. 16: Submission of Induction Furnace:

The objector seeks further concessions for survival of Induction Furnace Industry.

Reply of PSPCL:

Refer detailed reply of PSPCL against Issue No.13 of Objection No.6.

View of the Commission:

Refer to view of the Commission against Issue No.1 to 4 & 6 above. Also refer to para 4.1 & 4.3 of this Tariff Order.

Objection No. 3: Sh. P.P.Singh, Vice President (E&U), Nahar Fibres (Prop.Nahar Spinning Mills Ltd., 373, Industrial Area A, Ludhiana.

Section (A)
(General)

Issue No. 1: Initiatives taken for handholding of Industry.
We are thankful to PSERC for helping the industry to enable it to face the competition of the market by taking pro industry steps such as abolition of PLEC, introduction of TOD, increasing the duration of night rebate from 6 months to 8 months, increasing the night rebate from Rs 1.00 to Rs 1.25 per unit, abolition of Continuous Process surcharge and continuation of Threshold consumption rebate.
We request that such hand holding of the industry be continued in future also and ease of doing business strategies be evolved and implemented for industry thro' mutual discussions.
Reply of PSPCL:
The matter is addressed to the Hon'ble Commission. PSPCL in this matter has no comments to offer. However, PSPCL requests the Hon'ble Commission to issue the tariff order for FY 2018-19 on time.
View of the Commission:
The Commission has been addressing the issues raised by the Industry within the ambit of Act & the Regulations framed by the Commission.

Issue No. 2: Uploading the Public Notices & ARR on Website by Licensee.
PSPCL and PSTCL have not uploaded the Public Notice inviting comments on the ARR on their web sites whereas ARRs have been uploaded. However, PSERC have loaded the ARRs with Public Notices for the first time. The initiative of PSERC is commendable. Public Notices printed in the daily newspapers though meet the legal requirement but may be skipped by person interested due to his tour outside the state or other preoccupation or the newspaper he purchases may be different. As such Licensees may be directed to upload all such Public Notices related with ARR and Petitions etc on their web site at a designated link so that it does get noticed by stake holders.
Reply of PSPCL:
PSPCL has followed the procedure defined in the Electricity Act and Regulations of the Hon'ble Commission. The APR petition for FY 2017-18 and RE for FY 2018-19 was admitted by the Hon'ble Commission on 28th December 2017 and within 7 days of the admission of the petition; PSPCL had published a public notice in the widely circulated English and local newspaper in the State. The last date of filling of suggestions/ objections i.e. 02.01.2018 was also intimated in the public notice. It is therefore not correct to say that no information was made available by PSPCL.
View of the Commission:
The Commission agrees with the Objector. PSPCL should upload public notices inviting objections and ARR along with all relevant documents on its website.

Issue No. 3: Availability of comments of Licensee before public hearing:
While we appreciate the efforts of the Commission to stick to the time lines for issue of Tariff order as per Electricity Act 2003 and Regulations, we wish to bring to the notice of the Commission that the reply of PSPCL/PSTCL on the comments given should be available with the objector before the Public Hearing is held so that the Objectors get the view point of the Licensee while preparing their submission for the Public Hearing otherwise the Public Hearing will lose its relevance since Objector will reiterate the objections and PSPCL/PSTCL will seek time to reply. Therefore, sufficient time should be given to the Licensee to send replies of the objections and also to objector for fine tuning his arguments for Public Hearing so that stake holders can contribute in the process.
Reply of PSPCL:
The said issue is addressed to the Hon'ble Commission and therefore PSPCL has no comments to offer.
View of the Commission:
PSERC regulations mandate that Commission issue the order determining the ARR/Tariff within 120 days of receipt of the Petition(s). As such it has to process various activities involved in determination of the ARR and Tariff in a time bound Schedule.
PSPCL is advised to be careful in future and ensure submission of replies to the objectors well in time.

Issue No. 4: Return on Equity:
The Commission has approved 15.5% return on equity for 2012-13 to 2017-18 purportedly as per

PSERC Regulations. As per the FRP approved by GoP, the assets have been re-evaluated and the Consumer Contribution, Subsidies Grants have been merged with GoP equity leading to increase in the equity share capital of PSPCL from ₹2617.61 crore to ₹6081.43 crore which has led to increase of ROE from ₹405.73 crore to ₹942.62 crore i.e. an increase of 232% in both the figures without any fresh investment or infusion of cash by GoP or PSPCL. Similar is the case of PSTCL where the equity base has been increased from ₹328.50 Cr to ₹605.83 Cr as per FRP. APTEL has already directed PSERC to reconsider the issue vide judgment Dated 17-12-14 in Appeal No 168 and 142 of 2013 as under:

"48. -----We direct the State Commission to adjust the excess amount of ROE in the impugned order from the FY 2011-12 onwards in the ARR/ True up for the year to provide relief to the consumers."

"Issue No. (iii) Relating to Return on Equity, Consumers Contributions, Grants, Subsidies etc.

50.3 The findings of this Tribunal in Appeal no. 46 of 2014 shall squarely apply to the present case. The State Commission shall re-determine the ROE as per our directions and the excess amount allowed to the distribution licensee with carrying cost shall be adjusted in the next ARR of the respondent no.2.

PSPCL has again claimed the Return on Equity on the inflated base in this ARR. As per Tariff Order 2015-16, PSPCL has filed Appeal in Supreme Court and order of APTEL has been stayed. Therefore the issue be kept open and true up from 2011-12 onward and Provisional/APR/RE of subsequent years already done/to be done will be provisional till the final outcome of the Appeal.

Reply of PSPCL:

The matter is subjudice in the Hon'ble Supreme Court. Hence, PSPCL has no comments to offer at this stage.

View of the Commission:

The Commission has considered Return on Equity as per PSERC Tariff Regulations, 2005 and as per the Stay Orders of the Hon'ble Supreme Court.

Issue No. 5: Cost of Supply:

The National Tariff Policy stipulates to keep the average realization per unit from each category to the 20% (plus or minus) of combined average cost of supply and the subsidy level should not increase from the previous year levels. Further, APTEL has also given directions to PSERC in Appeal No 142 & 168 of 2013 between Mawana Sugars/Bansal Alloys Vs PSPCL and others in para 14 of the order as under:-

"…….We only want that the cross-subsidy with respect to actual cost to supply should also be shown to reflect the cross-subsidies transparently and to ensure in the future tariff exercise that the cross subsidy with respect to voltage wise cost of supply is not increased. However, the tariffs for different categories have to be within + 20% of the overall average cost of supply as per the Tariff Policy (as ensured in the impugned tariff order). The State Commission is directed to also show the cross-subsidy for each category of consumer with respect to voltage wise cost of supply in the next tariff order."

In a very recent judgment dated 9.1.2017 in Appeal No 134 of 2015 in Spentex Industries Limited Vs MPERC and others, Hon'ble APTEL has made following observations:-

"26 (e)----------The State Commission is required to prepare a road-map for reduction of cross subsidies amongst the various categories of consumers.

27(c). We would like to put a remark on this count that the State Commission while issuing the Retail Supply Tariff orders and avoiding tariff shock to consumers should also identify the road map for reduction of cross subsidy.

Therefore we submit that a) the subsidy level need to be calculated on cost of supply basis also and should be within +/- 20%; b) cross subsidy levels should not exceed the levels of previous year and further road map for reduction of cross subsidies be prepared and notified. Therefore, it is submitted that the tariff of the subsidized class of consumers including agriculture sector and other subsidized domestic consumers be increased suitably.

Reply of PSPCL:

The matter is addressed to the Hon'ble Commission. The determination of cross-subsidy levels and rebate to consumer getting supply on higher voltage is prerogative of the Hon'ble Commission. Hon'ble Commission may decide the appropriate rebate for consumers getting supply on higher voltages.

View of the Commission:

Refer View of the Commission against Issue No.6 of Objection No.2.

Issue No. 6: Transmission Loss Estimation:
PSPCL and PSTCL were constituted in 4/2010 as successor companies to PSEB and since then Transmission losses are being assumed as 2.5% on notional basis. PSTCL has now claimed in its APR that Boundary metering between generators/CTU & PSTCL on one side and PSTCL & PSPCL on the other side has been commissioned in July 2016 after 6 years but the data in the of APR has been given from April 2017 only as under:

Month	Transmission losses of PSTCL (%)
April 2017	3.32
May 2017	2.93
June 2017	2.62
July 2017	1.72
August 2017	3.43
September 2017	3.91
Total for 6 months	2.93

The month wise losses indicated by PSTCL above are not at all consistent and do not fall in any trend. These vary so widely from 1.72 to 3.91% which casts doubt on the authenticity of the boundary metering system. The loss figure of 1.72% indicates that with proper planning, the losses can be reduced and maintained at 2 to 2.5%.
Therefore PSTCL claim of fixing Transmission loss level at 3% on the basis of this data needs to be rejected and loss trajectory approved by Commission in MYT tariff order and depicted in APR 2018-19 i.e. 14.25% for 2017-18 and 14% for 2018-19 be retained and proposed increase of 0.5% by PSPCL need to be rejected. Energy balance for PSPCL needs to be worked out accordingly.
Reply of PSPCL:
Issue raised by objector on transmission loss is related to PSTCL. Hence, PSPCL has no comments to offer. So far as, T&D loss level being increased by 0.5% for FY 2017-18 and FY 2018-19 is concerned PSPCL submits that this is mainly due to change in methodology for the estimation of AP consumption from sample meter to pumped energy as adopted by PSPCL from FY 2016-17 onward. Hereby, it is submitted that the Hon'ble Commission has fixed the trajectory of reduction of T&D losses considering the AP consumption on the basis of sample meter readings. However, the approach of approving the T&D losses based on AP pumped energy consumption is contrary to the Commission's trajectory of reduction in T&D losses, as without revising the trajectory, the same has proved detrimental to PSPCL .Hence, PSPCL prays to Hon'ble Commission to approve T&D losses for FY 2017-18 and FY 2018-19 as submitted by PSPCL in the petition.
View of the Commission:
Refer para 2.3 & 3.4 of this Tariff Order.

Issue No. 7: Delay in CAG Audit and True Up of previous years.
In the ARR of 2014-15, PSPCL failed to submit audited accounts of 2012-13 and in ARR of 2015-16, the data for 2012-13 submitted for true up was only audited by Statutory auditor and CAG audited data and CAG report was not supplied. Additionally, in ARR 2015-16 the audited data of 2013-14 was not supplied as it was yet to be audited. Thereafter in ARR 2016-17, the audited data of 2014-15 was not supplied as it was under audit. Again in the ARR 2017-18, while CAG audited accounts were submitted for 2014-15, but True up of 2015-16 were not submitted, as still to be audited. The true up of 2015-16 was submitted afterwards and accepted as tariff Order got delayed. Now audited ARR of 2016-17 has not been submitted even the reasons for delay have not been submitted.
The delay in compiling the audited data for the previous years is proving disastrous for the consumers in both the scenarios. If the actual / admissible for true up are more, than consumer has to bear the carrying cost of Revenue Gap for 2 years and if the actual/admissible are less, then consumer gets the relief after 2 years and in the meanwhile suffers due to high production costs resulting from higher tariff. Moreover, the Regulations/ Electricity Act 2003 do not permit such laxity and APTEL has already held in OP No 1 that suo motu proceedings be started where the utility fails to present its case. MYT Regulations also provide that for delay, the carrying cost will not be allowed. As such PSERC may initiate action against the utility for willful and continuous violation of regulations and the Act.
Reply of PSPCL
As per notification dated 16th February 2015 by Ministry of Corporate Affairs, Indian Accounting Standard (IND-AS) are applicable to PSPCL from FY 2016-17, as its net worth exceeds ₹500 crore. Further annual accounts as at 01st April, 2015 and 31st March, 2016 also need to be converted as per IND-AS. Further, PSPCL has requested the Hon'ble Commission to allow PSPCL to submit true up

for FY 2016-17 based on Statutory Audit report as auditing is in progress and the CAG report shall be submitted to Hon'ble Commission at later stage.

Further, Hon'ble Commission Vide memo No.2108/PSERC/Dir. M&F/257dated 06.2.2018 allowed to PSPCL to submit True Up for FY 2016-17. In respect to the said direction of Hon'ble Commission PSPCL has submitted the True Up for FY 2016-17 on 12-2-2018.

View of the Commission:

Refer to Directive No.5.14 of this Tariff Order.

Issue No. 8: Revenue Gap and its Financing

PSPCL has submitted ARR to the tune of ₹44294.17Cr comprising of projected ARR for 2017-18 as ₹ 32718.64 crores and a cumulative revenue gap of ₹11575.53 crore which includes annual revenue gap of ₹5576.21 crores for the year 2017-18 and balance ₹5999.32 crore as per the revised estimate for the year 2016-17 & previous years. Objector has worked out to ₹8767 Cr against the APR 2018-19 figure ₹5339 and mentioned that PSPCL is not presenting the correct picture to PSERC. Even the contents of the APR Petitions shows that the information being given in ARR has been considerably reduced and this is becoming a mere formality.

With the Revenue at current tariff projected as ₹31513.45 Cr, the increase in tariff works out to 27.8% on the total gap against 17% projected by PSPCL in APR. The figures therefore need appropriate scrutiny by PSERC as consumers cannot bear any more increase in tariff. With the current tariff being ₹6.55 for the General Industry, the tariff would be ₹8.37 If total gap is passed on to consumers and with ED+IDF+MC of 20%, the final cost of power would be ₹10.05. With such rates, industry cannot compete with neighboring states and will have to shut down.

As per Industrial Policy 2017 notified by GoP, Fixed Charge for the Industrial Category of consumers is to remain constant at the level of 2017-18 and Energy Charge to remain at ₹5/- per unit. Though any increase will have to be borne by GoP thro' subsidy, yet it will increase the subsidy burden on GoP abnormally. Therefore PSPCL has to work more efficiently and contain its expenditure within the extra earnings from rise in consumption. It may be added that there was 9.3% increase in tariff in 2017-18 and the projected increase in sales in 2018-19 over 2017-18 is 7.7%.

Reply of PSPCL:

In present petition for APR for FY 2017-18 and revised Estimates for FY 2018-19, PSPCL has submitted the revenue requirements based on Actual figures of first half of FY 2017-18, provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. Moreover Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. Further, the determination of tariff is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.

View of the Commission:

Revenue gap is determined by the Commission keeping in view the expenses and income approved by the Commission as per PSERC Regulations.

Issue No. 9: Interest on Short Term Loans

The PSPCL has admitted to raise short term loans to meet the revenue shortfall arising out of non receipt of subsidy from the Government, disapproval of expenses, and delayed payments by consumers etc. It is submitted that interest on such loans should not be passed on to the consumers. The mismatch between the ARR approved by the Commission in the Tariff Order and actual expenses incurred by the PSPCL on its own should be met through internal accrual.

It is also pertinent to point out here that if the request of PSPCL to allow the interest on Short Term Loans taken to meet the disallowances in the previous Tariff orders is accepted, this would automatically approve the actual expenditures on Employee Cost, power purchases, fuel expenses, R&M expenses and other similar disallowances and whole exercise of submitting ARR, submission of comments by stake holders and Public hearings will become farce.

It is also submitted that as per Regulations, PSPCL is to be allowed working capital on normative basis. PSPCL has GPF of the employees and this amount just like Advance Consumption Deposit (Security) is being used by PSPCL for its working capital requirement and therefore funds parked with

PSPCL by employees in the shape of GPF should also be deducted from the Working capital as per Advance Consumption Deposit (Security) and claim of PSPCL for interest on GPF as well as interest on actual amount of short term loans as claimed by PSPCL in ARR need to be rejected.
Further PSPCL is getting carrying cost for late receipt of subsidy from GoP which is being worked out by PSERC. Further, PSPCL is getting Late Payment Surcharge for delayed payments of consumers. So there is no reason for approving interest cost for such loans.

Reply of PSPCL:

PSERC allows interest on Working capital loans on normative basis and also allows interest on the outstanding amount of subsidy recoverable from Govt. of Punjab. As such, the interest burden on excess working capital loans is not being passed on to the consumers rather being borne by PSPCL itself.
Moreover, PSPCL raises Working Capital Loans for meeting its day to day expenditure towards purchase of power, fuel cost etc., by adopting UDAY Scheme, according to which PSPCL can raise Working capital loans upto 25% of the previous year revenue. While submitting the ARR for 2017-18, PSPCL has made the provision of interest on Working capital loans by restricting its working capital loans upto ₹6250 crore only (i.e upto 25% of previous year revenue). So far as ACD is concerned, it is mentioned that PSERC has already deducting the ACD while calculating the working capital requirement. After unbundling of PSEB, GPF Trust has been established GPF subscription of employees is being transferred to Trust by PSPCL on monthly basis.

View of the Commission:

Interest on Working Capital is allowed on normative basis in line with PSERC Tariff Regulations after prudence check.

Section (B)

(Detailed comments on the Annual Performance Review of 2017-18 and Revised Estimates 2018-19)

Issue No. 10: Power Purchase

Issue No.10 (A): Directive regarding review of PPAs etc.

PSPCL was asked vide PSERC directive in TO 2013-14 to review all the PPAs and surrender costly powers in view of commissioning of IPPs in the state. This directive is being pursued every year but PSPCL has not reported any progress so far.
Now in response to Directive no 8.17, PSPCL has only reiterated the earlier position also stating that any change in PPAs can be with mutual agreement only. Such gross laxity in dealing with such important issue affecting the tariff directly for which timely directive had been issued by PSERC in advance way back in 2013-14 and then burdening the consumers on account of such inefficiency year after year is uncalled for and should not be allowed by the Commission as pass through. We may submit that power purchase from all PPAs entered into by PSPCL after 1.4.13 when directive was given by the Hon'ble Commission may be reviewed and power purchase from such PPAs which are not in the interest of the consumers of Punjab need to be totally disallowed.
It is also submitted that facility of prepaid meters is not being made available since PSPCL will have to refund the security amount of the consumers. Remote reading of LS consumers under SAP has been introduced but display units are not being provided to consumers. Such reform measures should not be left at the mercy of PSPCL and time bound action needs to be ensured as it will encourage consumers to plan its consumption in an efficient manner.

Reply of PSPCL:

After reviewing all the Long Term PPAs/ BPSAs, 11 no. NTPC/ NHPC generating stations (Anta, Auriya, Dadri,Jhajar, Unchahar-I, Farakka, Kahalgaon-I of NTPC and Sewa-II, Chamera-III, Uri-II &Parbati-III of NHPC) have been recognized for surrender of power share on mutual agreed terms. The same matter is repeatedly being taken up by the Govt. of Punjab with the Ministry of Power, Govt. of India with the latest D.O. letter being written by Secretary Power, GoP to Secretary Power, GoI on dt.9.11.2017.
Also, a legal opinion regarding surrender of power share has been taken by PSPCL and the advocate Mr. M.G. Ramachandran opined that PSPCL cannot treat any agreement as terminated unless the generating company agrees to the same.
Further, regarding review of PPAs of IPPs, there is no provision for review of PPAs signed with IPPs. However, only the Clause 'Term of Agreement' which is from the 'Effective Date' to 'Expiry Date' exists in the PPAs of IPPs.

View of the Commission:

PSPCL has not replied to the objection on pre-paid metering. Refer to Directive No.5.7 and 5.24 of this Tariff Order.

Issue No.10 (B): Extra cost of short term purchase for Agriculture viz a viz booking of power corridor.

The short term purchase of power is being done during the paddy season for meeting the consumption of agricultural sector – for which industry is not responsible. Consumption of industrial sector remains almost same during the year and is not generally linked with the season whereas PSPCL arranges the short term power and books the interstate/inter regional corridor for open access in advance for Agriculture sector which is dependent on rains and in case of excessive rain, the power has to be surrendered at very cheap rates and in case of shortfall in rain, industry has to suffer power cuts/weekly off days. Justice demands that industrial consumers should not suffer and bear the burden for enhanced power requirement during the paddy season. Hence, such increase in power consumption and extra cost attached to it should be loaded on the sector which is responsible for such consumption of electricity rather than loading the same on the overall tariff including the industrial sector.

Reply of PSPCL:

The Hon'ble Commission is approving the power purchase cost of PSPCL as per its Tariff Regulations and Power Purchase & Procurement Process of Licensees Regulations. Whereas the cost of short term power purchase is allowed to the PSPCL after prudent check by Hon'ble Commission, subject to the provision of the ibid regulations.

View of the Commission:

The Commission notes that, spurt in demand during summer season is due to increase in demand of almost all the categories. Although, Punjab is power surplus but PSPCL resort to short term power purchase mainly due to commercial reasons. Also, refer para 3.9 of this Tariff order.

Issue No.10 (C-1): Year wise Power Purchase

Perusal of year wise power purchase data given reveals that PSPCL is not exercising due care in its planning of power purchases as under:

PSPCL has purchased GF power with variable cost ranging between ₹2.58 to Rs 3.29 per unit and RF power at variable rate of ₹4.58 to ₹5.42 Per unit from gas based stations of Anta, Auriya and Dadri of NTPC whereas, in TO 16-17, no purchase was permitted / approved. This purchase should have been avoided and should be disallowed in the True up.

Reply of PSPCL:

GF Power available were availed as per their lower variable cost in comparison to other stations at times based on requirement as per merit order. PSPCL never avails RF power of Anta/Auriya/Dadri being costlier.

However being the centre sector generating stations, even if power is not requisitioned by PSPCL from these stations, while running on technical minimum, some quantum is booked by NRLDC in order to maintain desirable availability of power in grid depending upon real time operation. The reason for the same is when keeping in view of grid stability/security, NRLDC has to maintain availability of these stations mandatory. Even after PSPCL surrender its share fully from these stations, but to keep these stations running, very small quantum is booked by NRLDC.

PSPCL is following merit order in letter and spirit .It is evident from such minimal quantum of power from costly stations i.e. shown in True-up.

View of the Commission:

Objector may note the response of PSPCL. Also refer para 2.7 & 3.9 of this Tariff Order.

Issue No.10 (C-2): Merit Order of Purchase of power from Unchahar Power Plant.

The variable cost of Unchahar Power Plant has been indicated as 289 paisa per unit. With External losses of 2.47%, the VC at Punjab Periphery works out to 296 ps/unit. Further, with loading of 24 paise/unit towards Power Grid Transmission charges (₹950 Cr / 39375 MUs), the final rate of this power works out to be 320 paisa per unit. In addition there are UI charges and penalty for non lifting of coal etc. Thus the total cost would work out to 330 paisa/unit whereas the variable cost of GGSTP has been worked out by the Commission as 325 paisa per unit. Thus MOD has not been worked out properly while purchasing power from Unchahar. Similar is the case with Dadri-II and Jhajhar stations.

Reply of PSPCL:

Losses & Transmission charges adopted by nodal agencies i.e.; NRLDC/Power Grid are applicable for all generating stations & hence they do not affect the merit order.

View of the Commission:

The Commission is not satisfied with the reply of the PSPCL. It needs to justify the Merit Order w.r.t. intra-State power prices i.e. respective prices of power from its own thermal plants

Issue No.10 (C-3): Costly Short Term Power purchase:
The variable cost of short term purchase through traders is stated as 316.98 paisa per unit. The rate has been applied on gross power. With external losses of 2.47%, the VC at Punjab Periphery for net power works out to 325 paisa/unit.
The Open access bills indicate that open access charges are additional. The Power Grid Charges on short term have been indicated as 39.50 Cr which work out to 20 paise/unit. Thus the final rate of this power works out to 345 paisa per unit.
The bills of traders indicate that power purchase billing is on weekly basis whereas ISGS payments are on monthly basis. Further, open access is being done on 3/2 month advance basis and funds released accordingly whereas Power grid charges are paid in succeeding month.
Perusal of the bills reveals that PSPCL has also paid penalty in some cases due to non drawl of power. PSPCL surrenders power heavily due to sudden rains during paddy under UI at zero rate and even shuts down/surrender the low cost generation to follow the grid discipline. PSPCL also has to pay penalty to Coal India Ltd and Indian Railways or bear interest for advance payments maintained for non-lifting of coal.
PSPCL has not indicated how these charges have been accounted for in short term purchase thro' traders, but some loading has to be there due to these. Thus the final rate will be 349 plus i.e. between 350 to 360 paisa/unit. However, the variable cost of GGSTP and GHTP has been worked out by the Commission in Table 9.8 of TO 2016-17 as 326 and 328 paisa per unit respectively.
This clearly indicates that PSPCL's reliance on short term power thro' traders are not cheaper as it is being made out. PSERC may check the purchase and disallow the difference of cost of purchase and long term contracted power.
Reply of PSPCL:
Cost of short term purchase as indicated is already at Punjab periphery i.e. it is inclusive of all transmission losses /charges. So further calculations are meaningless. PSPCL has paid no penalty due to non drawl of power. PSPCL never intends to purchase of power through UI by overdrawing and sale power by under drawing through UI. Over drawl & under drawl are part of system. PSPCL has already submitted the variable cost of GGSTP& GHTP discovered on actual basis.
View of the Commission:
Objector may note the response of PSPCL. Additional UI Charges are not being allowed.

Issue No.10 (C-4): Net Banking Rate:
Rate of Net banking is indicated as (-) 2769.70 paisa/unit against +385.74 paisa/unit in of TO 2016-17. This needs to be looked into as PSPCL has incurred loss by giving power and money in the process.
Reply of PSPCL:
Rate of net banking as indicated shall not be interpreted in terms of loss as banking cycles are not confined to financial year completion. At times Banking cycle overlaps two consecutive financial years.
View of the Commission:
Objector may note the response of PSPCL. Also, refer to PSPCL's petition for True-up of FY 2016-17.

Issue No.10 (C-5): Surrender of UI Power to UI Pool Account:
PSPCL has surrendered 537.73 MUs under UI and also paid ₹11.14 Cr to UI pool account which is indicative of mismanagement and inefficiency. This transaction should be disallowed.
Reply of PSPCL:
PSPCL never intends to purchase of power through UI by overdrawing and sale power by under drawing through UI. Over drawl & under drawl are part of system, because Punjab being a heavy power consuming State where load variations are frequent & caused by a no. of reasons such as day & night, crops season, winter & summer – domestic load variations. Most of them are dependent on weather. UI cost indicates Net cost of under drawn & over drawn energy. During load crash situations, normally frequency is higher and UI rate is lower, so under force majeure conditions power in grid is injected at very lower rate and during normal periods when energy is drawn from grid even at normal rates, net amount comes out to be irrational. Inspite of such multifarious power system, by putting best efforts PSPCL has managed to keep net UI energy to be very negligible in comparison to total power exchanged by PSPCL for state of Punjab as a whole. In view of this actual cost during True-up shall be considered.
View of the Commission:
Objector may note the response of PSPCL. The Commission is not allowing the additional UI charges. Also, refer to para 2.7of this Tariff Order.

Issue No.10 (C-6): Disallowing late payment surcharge & TDS:
Late Payment Surcharge and TDS need to be disallowed as Early Payment Discount is not being counted in Power Purchase cost and being retained by PSPCL.
Reply of PSPCL:
It is submitted that due to non-availability of funds with PSPCL, late payment surcharge is paid which is beyond the control of PSPCL.
View of the Commission:
Late Payment Surcharge is not allowed by the Commission. Also, refer to para 2.7 of this Tariff Order.

Issue No.10 (D): **<u>ARR for FY 2017-18:</u>**
I) In this year also PSPCL has purchased RF and LF Power from Anta, Auriya and Dadri gas stations at a variable rate of ₹5.10 to ₹8.71 per unit.
II) The variable rate of Unchahar is indicated as 293 paisa per unit. The variable cost of GGSTP is worked out by PSERC as 305 paise per unit of TO 2017-18. Thus comments given in para 10 (C-2) above is also applicable here.
III) The VC for short term power thro' traders has been indicated as 333 paise/unit. Further, the open access charges have been shown as ₹58.09 Cr for 3451.31 MUs i.e. 17 paisa per unit. Further, the VC of GGSTP and GHTP as worked out by the Commission in TO 2017-18 are 306 and 336 paisa per unit respectively. Thus the comments at para 10 (C-3) above are also applicable here also.
IV) The power purchase from Kishan Ganga HE Project need to be disallowed as project is delayed.
V) Late Payment Surcharge and TDS at Sr.no 22 need to be disallowed as Early Payment Discount is not being counted in Power Purchase cost and being retained by PSPCL.

Reply of PSPCL:
Issue has already been replied by PSPCL in section 10 (C) above.
View of the Commission:
Refer to para 3.9 of this Tariff Order.

Issue No.10 (E): RE for 2018-19

Issue No.10 (E-1):Comparison of purchase of power with VC of own Thermals: Purchase of power from Unchahar, Farakka, Dadri II, Meja Raghunath pura, Pargati and GVK power plants may be reviewed keeping in view the VC of PSPCL thermal plants.

Issue No.10 (E-2): Monthly Review of surrender of power w.r.t. bidding of coal cost. The surrender of power needs to be reviewed/checked every month in view of changing scenario of coal cost due to allotment of coal mines thro' bidding process, variation in imported coal prices and increasing gas prices.
Reply of PSPCL against Issue No.10 (E-1) & 10 (E-2):
Issues have already been replied by PSPCL against Issues 10 (C-1 to C-6) above. Moreover, PSPCL has a practice to review variable costs of projects on monthly basis.
View of the Commission:
Refer view of the Commission against Issue No.10 C (1 to 6) of Objection No.3 above.

Issue No. 11: UDAY Scheme benefits: Interest & Finance Charges and Power Purchase Cost
Hon'ble Commission while processing the ARR for 2016-17, directed PSPCL to resubmit the ARR after accounting the benefits of UDAY scheme. PSPCL revised the ARR by reducing the Power purchase Cost and Interest charges on long term loans for distribution function as under:

Description	As per ARR submitted (₹ in Crore)	Revised (₹ in Crore)	Savings (₹ in Crore)
Power Purchase Cost	13527.45	13370.00	157.46
Interest & Finance Charges	3029.69	2396.82	632.87
Total saving due to UDAY			790.33

However the comparison of figures of Provisional True Up of 2016-17 as per APR 2018-19 and Revised ARR with Uday benefit is as under:

Description	Revised ARR with UDAY(₹ in Crore)	Prov True up of 2016-17 in APR (₹ in Crore)	Savings (₹ in Crore)
Power Purchase Cost	13370.00	15910.79	(-) 2540.79
Interest & Finance Charges	2396.82	2658.66	(-) 261.84
Total saving due to UDAY			(-) 2802.63

Hon'ble Commission may look into this mismanagement as there is no benefit accruing to the consumers and at the same time UDAY commits periodical increase in tariff.

Reply of PSPCL:

While filing the Revised ARR for the year 2016-17 (after considering the impact of UDAY Scheme) there are various factors in which there is difference in amount of actual value vs. projected value, resulting in increase in interest cost as indicated in Provisional True Up ARR for 2016-17, which are as under:-

(i) The outstanding loans as on 31-3-2016 were projected to the tune of ₹ 26568.17 crore whereas, in actual position, the outstanding loans as on 31-3-2016 were ₹27239.58 crore, resulting into additional loan balance of ₹ 671.41 crore.
Further; at the time of filing Revised ARR for the Year 2016-17(after considering the impact of UDAY Scheme), the net addition in loans were projected to be ₹ 1381.97 crore whereas, during filing APR for 2017-18, the net addition for loans for the year 2016-17 are ₹2289.97 crore resulting into additional loans of ₹ 908.00 crore.
As additional loan of ₹ 671.41 crore and ₹908.00 crore were added during 2015-16 and 2016-17, this resulted into additional interest cost of ₹132.59 crore. (Rate of interest assumed @11.50%)

(ii) The capitalization of interest cost was projected at ₹450.00 crore whereas while filing the APR for 2017-18, the actual capitalization of interest cost for the year 2016-17 is ₹ 283.61 crore resulting into additional interest cost of ₹ 166.39 crore.

(iii) At the time of filing ARR for the Year 2016-17, PSPCL was supposed to issue the remaining 25% of PSPCL's own bonds amounting to ₹5209.42 crore during 2016-17 at interest rate of approximate 9.60% and in turn PSPCL to repay its existing debt of ₹5209.42 crore taken at the rate of 11.10%, but the bonds would not be issued during 2016-17 resulting into excess payment of interest amounting to ₹78.14 crore (11.10%- 9.60%).

(iv) The interest and finance charges & Other charges were projected at ₹85.00 crore whereas, while filing APR for 2017-18, the actual interest and finance charges & other charges are of ₹ 34.89 crore for the year 2016-17 resulting into deduction ₹ 50.11 crore.

(v) In addition to above, it is also mentioned that ₹215 crore was projected for 'interest to consumer' while filing the revised ARR for the year 2016-17(after considering the impact of UDAY Scheme), whereas actual cost of interest to consumer is ₹152.07 crore resulting into deduction of ₹62.93 crore.

Therefore, difference of amount of interest cost indicated in Provisional True Up ARR for 2016-17 is justified.

View of the Commission:

Interest and Finance Charges are allowed by the Commission as per its Regulation after prudence check.

Issue No. 12: Provision for DSM fund:

Refer Issue No.14 of Objection No.2.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.14 of Objection No.2

View of the Commission:

Refer view of the Commission against Issue No.14 of Objection No.2

Issue No.13: High Employee cost

Refer Issue No.13 of Objection No.2.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.13 of Objection No.2

View of the Commission:

Refer view of the Commission against Issue No.13 of Objection No.2

Objection No. 4: Shri Gaurav Banerji, Manager Electrical, KRBL Ltd., Vill. Bhasaur, Dhuri, Distt.Sangrur, Punjab.

Objection No. 5: Shri Gurmeet Singh, Head (E&I), Khanna Paper Mills Ltd., Fateh Garh Churian Road, Amritsar (Punjab).

Issue No. 1: Relief to consumers having Captive/Cogen Plants

In two part tariff issued vide Tariff Order dated 23.10.2017. Consumers' having Captive/Cogen Plants had submitted their comments on the proposal of two part tariff of PSPCL seeking relief while replacing MMC with fixed charges on the plea that while MMC was not hurting them financially as equivalent power was drawn during tripping of the project, they will have to pay the fixed charges upfront which will increase their cost of production many fold. It was also requested that these plants have been set up under the policies of MoP/MNRE/GoP and provided relief to then PSEB now PSPCL when it was under severe shortage of power and should not be penalized now when PSPCL is surplus in Power. it was also suggested that either the existing single part tariff be continued for them or else the Regulations applicable for such CPPs in Maharashtra and Madhya Pradesh be implemented in Punjab.

Further, Objector has quoted the relevant para of Tariff Order for FY 2017-18 and mentioned that our concerns have not been addressed at all and PSPCL is taking shelter behind CPP Regulations 2009 about which we were not aware at all and even PSPCL had never implemented it as we were never asked to comply with this CPP Regulations. By implementation of the two part tariff with no relief to such consumers with CPP, we are being forced to shut our factories as with such heavy liability of fixed charges, we will not be able to compete in the market' PSPCL is not bothered as its ARR has to be met by corresponding increase in tariff statutorily. We, therefore, request the Hon'ble Commission to amend the relevant regulations suo motu and give relief to CPPs/Cogen plants.

Reply of PSPCL:

The consumers have also filed a separate Petition (Review Petition No. 06 of 2017) before the Hon'ble PSERC regarding keeping CPPs & Co-Gen plants out of the scope of the two part Tariff. The issue is already under consideration of Hon'ble Commission & the order has been reserved.

However, it is submitted that the PSPCL has to keep the capacity reserved to be utilized by CPPs during non-availability of power from CPPs. PSPCL also has to pay the fixed charges of the power/capacity reserved for the CPPs & Co-gen plants. Hence, the fixed charges are required to be paid by these consumers for the power/capacity reserved.

View of the Commission:

The Commission is already in the process of amending its Captive power Regulations.

Refer para 4.4.2 of this Tariff Order.

Objection No.6: Sh.Mohinder Gupta, President, Mandi Gobindgarh Induction Furnace Association (Regd.), Grain Market, Mandi Gobindgarh.

Issue No. 1: Timely issue of Tariff order for 2018-19.

Refer Issue No.3 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.3 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.3 of Objection No.2 above.

Issue No. 2: Cross Subsidization Levels of Agriculture and Industry

i) The National Tariff Policy stipulates to keep the average realization per unit from each category to the 20% (plus or minus) of combined average cost of supply (ACOS). APTEL has also given directions to PSERC in Appeal No 142 & 168 of 2013 between Mawana Sugars & Bansal Alloys Vs PSPCL and others in para 14 of the order to work out the cross subsidy on the basis of voltage wise category wise cost of supply (VCOS) and has also held that the cross subsidy of any category of consumers will not be increased from the level of last year. as under:-

> "…….the cross subsidy with respect to voltage wise cost of supply is not increased. However, the tariffs for different categories have to be within + 20% of the overall average cost of supply as per the Tariff Policy ……."

In compliance to the orders of APTEL, PSERC has determined the cross subsidy levels for both the ACOS and VCOS in the TO 2017-18. It is submitted that while working out the same in TO 2018-19, the tariff of the subsidized class of consumers i.e. agriculture sector and other subsidized domestic consumers be increased suitably so that in the tariff order to be issued for 2018-19:

a) Cross subsidy levels based on cost of supply remain equal to or are less than those of last year.
b) Cross Subsidy levels remain within +/-20% based on average cost of supply as here to fore.
c) Back up calculations and assumptions taken in calculation of VCOS be included in the TO.

Further, APTEL has also ordered that trajectory for gradual reduction of cross subsidies shall also be finalized by the SERCs in line with provisions of the Section 61 of the Act. In this regard, recent Judgment dated 9.1.2017 in Appeal No 134 of 2015 in Spentex Industries Limited Vs MPERC and others may be referred vide which Hon'ble APTEL has made following observations:-

"26 (e)----------The State Commission is required to prepare a road-map for reduction of cross subsidies amongst the various categories of consumers.

27(c). We would like to put a remark on this count that the State Commission while issuing the Retail Supply Tariff orders and avoiding tariff shock to consumers should also identify the road map for reduction of cross subsidy

Accordingly, Hon'ble Commission is also requested to identify the road map for reduction of cross subsidies.

ii) It is further suggested that a limit on consumption should be specified by the Commission for the categories of consumers which are being cross subsidized. Once the consumption of these categories exceed their limit specified in the order, they should be charged at normal tariff rate and not at subsidized rate. Thus if Thus supply of additional power to Agriculture Sector due to draught conditions thro' additional costly spot purchase or imposing cuts on highest tariff categories like industry, it should not be at subsidized but normal tariff and subsidy due from GoP be worked out accordingly.

iii) We would also like to mention that there are only two categories of consumers which are being cross subsidized i.e. AP and lowest slab of domestic category and in real terms the subsidy of both the categories has not been reduced in tariff orders issued by the Commission in last 4-5 years, which is in contradiction to the provisions of the Electricity Act, 2003, National Tariff Policy and orders of APTEL.

In the present scenario, where the market is very competitive, it is very difficult for the industry to take the huge burden of cross subsidizing other categories of consumers. Since now, GoP is subsidizing the Agriculture, Industry and lower end consumers of PSPCL, the effect on overall subsidy would be only nominal if tariff for all categories are brought near to the cost of supply. It is, therefore, proposed that the cross subsidy should be got eliminated in phased manner and a road map may kindly be got drawn by PSERC and should be indicated in the tariff order.

iv) The Objector shall like to highlight that, the cross subsidy burden on LS consumers which had increasing trend till the year 2015-16 has been reversed thereafter needs to be continued, which is evident from the table given below:

Date of tariff order/ tariff year	Average cost of supply as per tariff order (Paise per unit)	Applicable Tariff for LS consumers (Paise per unit)	Average Realization from LS Consumers (Paise per unit)	Cross subsidy per unit for LS KV consumers (Paise per unit)
23rd April 2010 year 2010-11	427	458	489	62
9th May,2011 year2011-12	465	503	539	74
16thJuly2012 year2012-13	538	577	627	89
10th April 2013Year 2013-14	578	633	685	107
22nd Aug 2014 Year 2014-15	588	633	684	96
5th May 2015 Year 2015-16	589	633	689	100
27th July 2016 Year 2016-17	598	622	668	70
23rd Oct 2017 Year 2017-18	642	675	689	47

Reply of PSPCL:

The tariff and level of cross subsidy is determined by Hon'ble Commission. Further, as per Electricity Act, 2003 and provisions of the PSERC Tariff Regulations.

Further, Clause 8.3 of Tariff Policy states as under:

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

As given in the Tariff Policy, there has to be gradual reduction in cross-subsidy, keeping in view the interest of Utility. Hence in light of the same it is requested that while determining the tariff in conjunction with the cross subsidy factor, the Hon'ble Commission has also to keep in mind the interests of PSPCL.

View of the Commission:

Refer view of the Commission against Issue No.8 of objection No.2 above.

Issue No. 3: Return on Equity

Refer Issue No.4 of Objection No.3 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.4 of Objection No.3 above.

View of the Commission:

Refer view of the Commission against Issue No.4 of Objection No.3 above.

Issue No. 4: ARR AND CARRYING COST OF REVENUE GAP

Perusal of the ARRs being presented year after year indicate that the ARR is prepared and submitted for approval of the expenditure incurred on 271ilful plus all incentives which can be thought of by the utility and present inflated ARRs for the ensuing year. Where MYT Regulations support the contention of utility, the same is quoted otherwise request is made for acceptance of the incurred expenditure.

Perusal of the APR 2017-18 and RE 2018-19 indicates that PSPCL has not brought forward/accounted for the Revenue Surplus of ₹ (+) 317.37 Cr of the True UP 2015-16 and Revenue Gap of (-) 849.17 of Provisional 2016-17, Carrying Cost of Gap of the year 2014-15 = 22.29 Cr and Carrying Cost of Cap of the year 2015-16 = 84.92 Cr already determined in TO 2017-18. These have not been included on the pretext that Audited accounts of 2016-17 are yet to be finalized/audited though tentative figures are included in the Formats. Further Carrying Cost of this Net Gap also needs to be added to determine the final Revenue Gap for 2017-18 and 2018-19. If all these are added, the Revenue gap for 2018-19 will work out to (+317.37-849.17-22.29-84.92 =) –639.01Cr plus (-) 135.85Cr as its approximate carrying cost for 2 years plus Gap of two years as worked out in APR Page 68 i.e. -5339.33,Totaling ₹ 6114.19 Crore.

PSPCL has also filed Review Petition No 5 of 2018 for review of TO 2017-18 seeking

i) ROE in the shape of Interest on Loans of ₹ 2846.33 Cr for last 7 years worked out on a new theoretical and imaginative financing pattern towards capital works which need to be treated as equity which will work out to around ₹1200 Cr along with carrying cost (271ilful not worked out in the review Petition)
ii) Difference of (-81.99-85.05) and (-21.38+25.02) i.e.-167.04+3.64 = -₹163.40 Cr towards Generation Incentive on account of APTEL order for GNDTP Bhatinda.

Another claim of ₹ 398 Cr deposited by PSPCL as per Supreme court orders is also likely to be accepted by the Commission as per order dated 19.1.2018 of APTEL in Appeal No 259 of 2015.The amount would now work out to around ₹500 Cr.

Thus the likely Revenue Gap for 2018-19 will work out to ₹6114.19+1200+163.40+500 = ₹7977.59 Cr and the increase in the Tariff rates required works out to be 25.31%.

This is very abnormal and indicates total financial indiscipline in PSPCL. This gap which is increasing every year clearly indicates that PSPCL is incurring expenditure at their will and leading towards debt trap inspite of relief available under UDAY scheme.

PSPCL had projected Net Revenue Requirement of ₹31262.54 Cr for the year 2016-17 with total revenue gap as ₹5140.77 Cr. in the ARR. The figures in the ARR for the year 2017-18 were ₹32718.64 Cr and ₹5576.21 Cr. Now in the APR, after considering Revenue at the now applicable two part tariff for 2018-19, the Revenue Requirement has been presented as ₹33862.12 Cr with Revenue Gap of ₹5339.33 Cr. Thus there seems to be a consensus on keeping the Revenue Gap at ₹5000 to ₹5500 Crore. Further, in-spite of 9.33% increase in tariff and projected 6.4% increase in sales in 2018-19 over 2017-18, the gap still persists. It clearly indicates that there is something wrong in the operations of PSPCL and it is in debt trap.

If the ARR presented by PSPCL is accepted in toto, the base tariff of LS (PIU) industry which was ₹6.75 per unit in single part tariff system would be ₹8.46 per unit. With 20% of ED+IDF+MT, the tariff would work out to ₹10.15 per unit for 2018-19 and would further increase for balance MYT period.

It is evident from the above that besides continuing with its inefficiencies, there seems to be a tendency on the part of PSPCL to inflate the figures of ARR to get higher tariff to cover up its continuing losses which need to be looked into by the Commission thoroughly otherwise the industry in Punjab will become totally uncompetitive with the industry of neighboring states and shall have to close down their factories.

Reply of PSPCL:

In present petition for APR for FY 2017-18 and revised Estimates for FY 2018-19, PSPCL has submitted the revenue requirements based on Actual figures of first half of FY 2017-18, provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Further, so for as the past period gap/surplus is concern PSPCL, has clearly mentioned in the petition that PSPCL has not considered any past period gap/surplus in the Total Revenue Gap of ₹2966.82 Cr.; as projected for FY 2017-18, same shall be considered during true up for FY 2016-17. Hence, it would not be correct to say that the revenue gap figures are inflated. It has been observed that during the year FY 2017-18 the main input costs relating to cost of purchase of power from outside sources, establishment cost etc has gone up and therefore will result in increase in revenue gaps. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. It is therefore not appropriate to hold that revenue gap arising out of these expenses is inflated and unrealistic Moreover Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. Further, PSPCL submits that the determination of tariff is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.

View of the Commission:

Refer view of the Commission against Issue No.9 of Objection No.2.

Issue No. 5: Excess claim not accepted by Commission in Tariff Orders

PSPCL had filed Appeal No 106 of 2013 in APTEL which has been decided vide order dated 16.12.2015. The decision has been further considered by Hon'ble Commission for compliance and order dated have been issued on 04.01.2016. In these orders contentions of the PSPCL on many issues relating to tariff Order 2013-14 were considered:-

Hon'ble APTEL decided all the issues except one against PSPCL and upheld the orders of the Commission as per Tariff Order. This order is applicable for the coming years as well. Therefore this order of APTEL be kept in view while deciding the APR and RE Petition under consideration and all such demand still being repeated in this APR be rejected out rightly.

Reply of PSPCL:

The issue is addressed to the Hon'ble Commission, therefore, PSPCL has no comments to offer.

View of the Commission:

The Commission determines the claim of PSPCL in-line with PSERC Regulations with due consideration to APTEL orders.

Issue No. 6: Cost of Supply for AP as per NTP-2016

Refer Issue No.10 of Objection No.2.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.10 of Objection No.2.

View of the Commission:

Refer view of the Commission against Issue No.10 of Objection No.2.

Issue No. 7: Timely submission of Audited Accounts for True Up

Refer Issue No.7 of Objection No.3 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.7 of Objection No.3 above.

View of the Commission:

Refer view of the Commission against Issue No.7 of Objection No.3 above.

Issue No. 8: **Projections/Expenditure on Normative/Actual Basis**
Refer Issue No.15 of Objection No.2 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.15 of Objection No.2 above.
View of the Commission:
Refer view of the Commission against Issue No.15 of Objection No.2 above.

Issue No. 9.1: INTERST COST WITH UDAY SCHEME
Refer Issue No.11 of Objection No.2 above.
Reply of PSPCL:
Refer Reply of PSPCL against Issue No.11 of Objection No.2 above.
View of the Commission:
Refer view of the Commission against Issue No.11 of Objection No.2 above.

Issue No.9.2: Interest on Short Term Loans
The PSPCL has admitted to raise short term working capital loans to meet the revenue shortfall arising out of various factors stated in the APR i.e. disallowances by the Commission (Reduction in fuel & power purchase cost due to T&D losses etc., employee cost, R&M cost, A&G expenses), non receipt or late receipt of subsidy due from the Government and delayed payments from consumers. The interest on such loans should not be passed on to the consumers. The mismatch due to expenditure made by PSPCL without approval of PSERC year after year should be met through internal accruals and ROE being retained by PSPCL. Similarly, interest on the subsidy due but not received is already being loaded in the due amount of subsidy payable by GoP and recovered from the Government. PSPCL is getting late payment surcharge for delayed payments by consumers. As such the claim of PSPCL is not acceptable.
It is also pertinent to point out here that if the request of PSPCL to allow the interest on Short Term Loans taken to meet the disallowances in the previous Tariff orders is accepted, this would automatically approve the actual expenditures incurred by PSPCL on Employee Cost, power purchases, fuel expenses, R&M expenses and other similar disallowances and whole exercise of submitting ARR, submission of comments by stake holders and Public hearings will become farce. Therefore PSPCL needs to be told in clear terms that it has to stick to the approved expenses in Tariff Orders and any expenditure made over and above will not be reflected and submitted for approval in the next ARR.
Reply of PSPCL:
PSERC allows interest on Working capital loans on normative basis and also allows interest on the outstanding amount of subsidy recoverable from Govt. of Punjab. As such, the interest burden on excess working capital loans is not being passed on to the consumers rather being borne by PSPCL itself.
Moreover, PSPCL raises Working Capital Loans for meeting its day to day expenditure towards purchase of power, fuel cost etc., by adopting UDAY Scheme, according to which PSPCL can raise Working capital loans upto 25% of the previous year revenue. While submitting the ARR for 2017-18, PSPCL has made the provision of interest on Working capital loans by restricting its working capital loans upto ₹ 6250 crore only (i.e upto 25% of previous year revenue).
View of the Commission:
Interest on Working Capital is allowed on normative basis in line with PSERC Tariff regulations after prudence check.

Issue No. 10 (A): SURPLUS POWER AND CAPACITY CHARGE OF IDLE CAPACITY:
Refer Issue No.10 (A) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (A) of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.10 (A) of Objection No.3 above.

Issue No.10 (B): Extra cost of Short Term Power Purchase for AP viz-a-viz booking of corridor:
Refer Issue No.10 (B) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (B) of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.10 (B) of Objection No.3 above.

Issue No.10 ©: Monthly review of surrender of Power w.r.t. bidding of coal cost
Refer Issue No.10 (E) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (E) of Objection No.3 above.
View of the Commission:
Refer view of the Commission against issue No.10 (E) of Objection No.3 above.

Issue No. 11: Employee expenses
Refer Issue No.13 of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.13 of Objection No.3 above.
View of the Commission:
Refer view of the Commission against issue No.13 of Objection No.3 above.

Issue No. 12: COST OF SUPPLY / HT REBATE
In compliance to APTEL orders, PSPCL has carried out the study on Cost of Supply, which was a part of ARR 2013-14 and PSERC accepted methodology II of the study. While submitting the comments on cost of supply study, we had pointed out that the study is based on lot of assumptions and sample feeders taken are quite inadequate.

i) 3619 feeders were identified initially out of 6000+ feeders of PSPCL for study.
ii) Sample size was reduced to 30% i.e.1800 by mutual consent of PSPCL and TERI
iii) PSPCL could supply data for 200 feeders only.
iv) These were further filtered and finally data of only 166 feeders were used for the study.

The study indicated that even with this data, assumptions had to be taken at every step due to absence of one or other parameter required for the study. Further, even the assumptions had been so taken that HT/EHT consumers were loaded with unjustified costs and made to share big burden of the ARR.
The T&D losses for 220 and 132 KV consumers had been taken as 6.6% against 2.5% assumed by the commission in the tariff order. T&D losses for agriculture had been taken as 22% whereas these should have been more than 30% as it is well known that these consumers do not install Capacitors, use high wattage bulbs against CFLs permitted free with pump set, use non ISI motors and indulge in theft of power during paddy season.
It was also pointed out as to how a consumer at 220 KV has been equated with 400 LT domestic consumers is beyond justification.
Even some figures worked out like cross subsidy figure for 132 and 33 KV looked very unconvincing compared with other voltage levels.
It is evident from the above that cost of supply as worked out in Methodology II is not representing the ground realities and needs to be made realistic and fine tuned with more data collection on actual basis.
PSERC had accepted methodology II and had worked out Voltage wise and category wise Cost of supply for 2013-14 in TO 2013-14. The Commission had further observed in para 5.2.10 of TO as under:

> 5.2.10 It would be 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. As such, 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.

Accordingly rebate for EHT consumers was reintroduced. The practice was continued in 2014-15 and PSERC ordered in the TO as under:-

> 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. 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.

The rebate of 30/25 paisa is being continued till date.
The cost of supply for various categories as worked out in MYT ARR does not seem to be realistic as cost of supply for Industrial consumers at 66 KV has been shown higher than agriculture consumers

probably due to assumptions going wrong in view of changing profile of consumers..
In order to make the cost of supply more realistic and reliable, it is requested that PSPCL be asked to firm up the data required for the study since lot of computerization/digitization has taken place and IT practices have been introduced under APDRP schemes in PSPCL/PSTCL. Further as per recent orders of APTEL in an appeal filed by the Objector, it has been ordered that Cross Subsidy Levels be also worked out on the basis of Cost of supply and it should be ensured that these levels remain or are less than those of last year and should not exceed 20% limit. Further, voltage rebate be further enhanced to make it commensurate with the cost of supply.

Reply of PSPCL:

Hon'ble Commission in Tariff Order for FY 2013-14 has accepted Methodology II for computation of voltage wise cost of supply. Hon'ble Commission has adopted this methodology after taking cognizance of the study carried out by PSPCL and recognising the ground realities. In the same Tariff Order, Hon'ble Commission opined that it would be ideal to fix electricity tariff for all consumers on cost to serve basis. The objector has rightly pointed out that, in order to move in the direction of cost of supply.
PSPCL in subsequent Tariff Petitions has adopted the same methodology II and submitted the voltage wise category-wise cost of supply. Hon'ble Commission in respective Tariff Orders had computed the indicative voltage wise category-wise cost of supply and continued to give rebate to consumers getting supply at higher voltage. In past tariff orders, Hon'ble Commission had found the computation of cost of supply submitted by PSPCL prudent. Hence, it had not given any directives to PSPCL regarding the computation of cost of supply. PSPCL strongly negates objection of the Objector on being transparent on cost of supply. At present, PSPCL is submitting the cost of supply as part of ARR Petitions only. The computation is on the basis of best available data, after taking into account all updation in SAP system and other IT initiatives. Hence, PSPCL submits that cost of supply submitted in the Petition is more realistic considering the present level of system automation.
Determination of cross-subsidy levels and rebate to consumer getting supply on higher voltage is prerogative of the Hon'ble Commission. Hon'ble Commission may decide the appropriate rebate for consumers getting supply on higher voltages.

View of the Commission:

Refer para 4.6 of this tariff order.

Issue No.13: Submissions of Induction Furnace Industry

We also submit that Induction furnace industry is passing through a critical phase. The viability of the industry greatly depends on the hand holding of GoP and its departments. As the cost of power constitute around 50 % of the value addition cost, the tariff and rebates of power play vital role in its survival. Savings thro' open access has stopped and industry has started using PSPCL power. We thank the Hon'ble Commission for reducing the tariff and with drawl of PLEC in the last year tariff order. Industry is looking forward to further concessions in power rates. We further request for timely issue of Tariff Order in the first week of April, extension of night rebate to April and May of the year along with winter months, increase in voltage rebate, incentive for high load factor instead of threshold limit and merger of power intensive and general industry into one category for which we request the Hon'ble Commission for 275ilfully275e action.
Further, PSERC has introduced two part tariff system with effect from ¼/2017 which was later shifted to 1/1/2018 due to the difficulties brought to the notice of the PSPCL, GoP and this Hon'ble Commission. One of the adverse impact of the two part tariff has been highlighted as exponential increase in per unit effective cost after considering the impact of fixed charges. Though the fixed charges have been kept lower for low end consumers but per unit impact is still very high for Small and Medium Enterprises having CD above 100KVA. The fixed charges for the consumers falling in the category of 100 KVA – 1000 KVA under PIU category are ₹160/KVA/month. This works out to 22 paise per KVAH for 100 % Utilization Factor and for a consumer running his factory for six hours per day for 6 days a week, this works out to 102 paisa per unit and overall rate as 676paise/unit. The overall rate for usage of 5 hours a day will work out to be 696 paisa per unit. Keeping in view the difficulties of such consumers GoP was kind enough to allow Maximum overall Rate (MoR) to the industry for 3 months of FY 2017-18 with subsidy assistance of Rs 50 Crore.This was on the insistence of the PSERC that tariff order already stands issued and Punjab Govt has to compensate PSPCL if MoR is to be implemented.
Keeping in view the genuine difficulty of the lower end consumers employing thousands of workmen and also as acknowledged by GoP also, we request the Hon'ble Commission to make the MoR as the permanent feature of the two part tariff to give relief to industry operating on the margin otherwise these are bound to become financially unviable and shut their shops causing huge blow to the efforts

of GoP to revive the industry in Punjab.

Reply of PSPCL:

The issue is addressed to the Hon'ble Commission. PSPCL in this matter has no comments to offer. However, PSPCL requests the Hon'ble Commission to issue the tariff order for FY 2018-19 on time. Moreover, the tariff at which electricity can be sold to consumers is determined by Hon'ble Commission. Further, fixation of tariff and application of rebate to particular category of consumer is the prerogative of the Hon'ble Commission as per Electricity Act, 2003 and provisions of the PSERC Tariff Regulations. PSPCL would sell electricity to the consumers at rates specified in the tariff order issued by the Hon'ble Commission.

View of the Commission:

Refer view of the Commission against Issue No.1 to 4 and 6 of Objection No.2 above. Also refer to para 4.5 of this Tariff Order

Objection No.7: **Sh.H.S.Sandhu, V.P. (Works), Siel Chemical Complex, A Unit of Mawana Sugars Limited, 5th Floor, Kirti Mahal 19, Rajendra Place, New Delhi-110125.**

SECTION 'A'

GENERAL SUBMISSIONS:

Issue No. 1: Capital Investment Plan and Business Plan:

As per MYT Regulations, PSPCL and PSTCL are required to submit their Capital investment Plan and Business Plan by 15th April of preceding year to be approved by the Commission within 90 days. MYT Tariff Petitions are to be prepared by the utilities based on such approved plans. However, here, Petition No 46 of 2016 regarding Capital Investment Plan and Business Plan for MYT control period submitted on 27.5.2016 was decided on 11.1.2018 while the APR and RE was submitted by PSPCL on 30.11.2017 Public Notice inviting Comments on the APR appeared in the newspapers on 2.1.2018. Thus the APR 2017-18 and RE 2018-19 has been prepared on unapproved plans. Further, audited Balance sheet and True up for 2016-17 has also not been submitted for approval and PSPCL has sought permission to submit it as additional submissions during the processing of the APR and RE Petition. Thus it is but natural that many important aspects are likely to be skipped due to delayed availability of relevant Data. It is requested that time lines be kept in view for proper participation of stake holders.

Reply of PSPCL:

Present petition for APR for FY 2017-18 and revised Estimates for FY 2018-19, PSPCL has submitted the revenue requirements based on Actual figures of first half of FY 2017-18, Provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations.

As per notification dated 16th February 2015 by Ministry of Corporate Affairs, Indian Accounting Standard (IND-AS) are applicable to PSPCL from FY 2016-17, as its net worth exceeds ₹500 crore. Further annual accounts as at 01st April, 2015 and 31st March, 2016 also need to be converted as per IND-AS. Further, PSPCL has requested to Hon'ble Commission to allow PSPCL to submit true up for FY 2016-17 based on Statutory Audit report as auditing is being progress and the CAG report shall be submitted to Hon'ble Commission at later stage.

Further, Hon'ble Commission Vide memo No.2108/PSERC/Dir.M&F/257dated 06.2.2018 allowed to PSPCL to submit True Up for FY 2016-17. In respect to the said direction of Hon'ble Commission PSPCL has submitted the True Up for FY 2016-17 on 12-02-2018.

View of the Commission:

The Commission has directed PSPCL to strictly adhere to the time line given in the Companies Act, 2013. Also refer to view of the Commission against Issue No.3 of Objection No.2.

Issue No. 2: Proposal for prospective Tariff to meet Revenue Gap

Presently APR only projects the revenue requirement, revenue expected at current tariff and the resultant gap with carrying cost. PSPCL should also project in their APR the prospective tariff for each category to meet the revenue gap and also work out the category wise cross subsidy levels on voltage wise COS and Average COS to fully understand the impact of the ARR.

Reply of PSPCL:

Hon'ble Commission in its Tariff Order for MYT Control Period has issued instruction regarding regularization of load as under:

> "6.3.6 Regularization of load: With the introduction of Two Part Tariff, information on the Load/Demand of the consumer becomes more important as Fixed Charges are linked to the Load/demand of the consumers. It is felt that the consumers while taking connection would have declared a load as per their installation at that time, but with the passage of time may have added more load without getting it regularized from the Utility. Therefore, the Commission directs the Utility to allow voluntarily Disclosure Scheme (VDS) for DS, NRS and SP Category of Consumers, allowing them to get their load regularized without any penalty. The VDS shall remain available for 6 months from date of issue of this Tariff Order".

Further, Hon'ble Commission vide Order dated November 9, 2017 has deferred the implementation of Two-part tariff with effect from January 1, 2018 considering the PSPCL's suggestions and representations received from consumers/consumers organizations that Two-part tariff is being implemented without giving any opportunity to the consumers to revise their Contract Demand/ Sanctioned Load, which may lead to complications at later stage. Therefore a period of at least two months needs to be given to consumers so that they can revise/optimize their Contract Demand/Sanctioned Load.

In view of this Order, two-part tariff was made applicable from January 1, 2018 and sufficient time of two months was given to consumers to revise/277ilfully their Contract demand. The revised Contract demand and billing demand of the respective consumers would be available only after the implementation of Two-part tariff and issuance of Consumers bills from the month of January based on two part tariff structures. Thereafter, PSPCL is not in the position to submit the tariff proposal for FY 2018-19 due to unavailability of revised Contract demand and billing demand.

PSPCL has proposed a cumulative revenue gap of ₹ 5339.33 crore for FY 2018-19. Therefore an appropriate tariff hike would be required to meet the revenue gap. In view of the same PSPCL prays the Hon'ble Commission to take appropriate view on the revenue gap proposed by PSPCL, while determining the tariff for FY 2018-19.

View of the Commission:

Commission notes the objection and directs PSPCL that, in future it should submit the Tariff Proposal also along with its ARR Petition as mandated by PSERC Regulations.

Issue No. 3: Incomplete Data of ARR:

It is also felt that the data being disclosed by PSPCL in ARRs is being reduced every year. PSPCL comes up with actual expenditure during RE and True up widely varying from the approved figures of TO and requests for approval of excess expenditure in relaxation of Regulations but tries to retain the savings. Suggestions on voltage based categorization of tariff, consumption of agriculture sector, road-map towards cross subsidy reduction etc are some of the suggestions which are imperative and convincing, but still being ignored. Details of these points are being touched upon in specific issues highlighted in succeeding paras for consideration of PSPCL/PSERC.

Reply of PSPCL:

PSPCL submits that ARR is being prepared and submitted before Hon'ble Commission as per the regulatory principles set by Hon'ble Commission. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations.

View of the Commission:

The Commission directs PSPCL to disclose requisite data in the ARR for ensuing years. However, where data is deficient, additional information is sought from the Utility.

Issue No. 4: Change in Contract Demand for Optimum Use:

With the introduction of Fixed Charge payable on Sanctioned Contract demand irrespective of usage or non-usage of power will be additional loss to the running industry and the industry will require some time gap to work out the optimum contract demand for efficient operation of the factory. During the period the industry may have to surrender the CD immediately but may have to increase the same after some time for meeting the requirements. The present instructions allow the consumer to reduce the CD but no costs are refunded, However, when CD already surrendered is to be again increased, the consumer has to pay hefty amounts as Service Connection Charges again though these were already paid by the consumer. We request the Hon'ble Commission to allow decrease and thereafter increase in CD up to surrendered CD (If technically feasible} without any refund/charges receivable/payable for at least next two years. This will provide a breathing period to the industry to absorb the liability of Fixed Charges appropriately.

Reply of PSPCL:

The issue is addressed to the Hon'ble Commission. PSPCL in this matter has no comments to offer.

View of the Commission:

The Issue does not relate to ARR. This issue may be discussed in the Review Panel for amendment in Supply Code, if required.

Issue No. 5: Actual Peak Charges & Night Rebate implementations:

Refer Issue No.5 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.5 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.5 of Objection No.2 above.

SECTION 'B'

PRELIMINARY SUBMISSIONS

Issue No. 6: Cross Subsidy Level based on Voltage Wise Cost of Supply

Refer Issue No.6 & 8 of objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.6 & 8 of objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.6 & 8 of objection No.2 above.

Issue No. 7: Determination of Voltage wise Cost of Supply

Objector pointed out that as Section 61(g) of the Electricity Act, 2003 mandates as follows:

> "... The tariff progressively reflects the cost of supply of electricity and also reduces cross-subsidies in the manner specified by the Appropriate Commission".

Objector mentioned that Pursuant to directions of Hon'ble APTEL a Voltage wise cost of supply study was got conducted by PSPCL. Thereafter PSPCL and PSERC are working out the Cost of Supply every year on the same assumptions and data Objector requests for re-fixing the assumptions for determination of COS on realistic basis.

Reply of PSPCL:

Hon'ble Commission in Tariff Order for FY 2013-14 has accepted Methodology II for computation of voltage wise cost of supply. Hon'ble Commission has adopted this methodology after taking cognizance of the study carried out by PSPCL and recognizing the ground realities. In the same Tariff Order, Hon'ble Commission opined that it would be ideal to fix electricity tariff for all consumers on cost to serve basis.

PSPCL in subsequent Tariff Petitions has adopted the same methodology II and submitted the voltage wise category-wise cost of supply. Hon'ble Commission in respective Tariff Orders had computed the indicative voltage wise category-wise cost of supply and continued to give rebate to consumers getting supply at higher voltage. In past tariff orders, Hon'ble Commission had found the computation of cost of supply submitted by PSPCL prudent. Hence, it had not given any directives to PSPCL regarding the computation of cost of supply. PSPCL strongly negates objection of the Objector on being transparent on cost of supply. At present, PSPCL is submitting the cost of supply as part of ARR Petitions only. The computation is on the basis of best available data, after taking into account all pupation in SAP system and other IT initiatives. Hence, PSPCL submits that cost of supply submitted in the Petition is more realistic considering the present level of system automation.

Determination of cross-subsidy levels and rebate to consumer getting supply on higher voltage is prerogative of the Hon'ble Commission. Hon'ble Commission may decide the appropriate rebate for consumers getting supply on higher voltages.

View of the Commission:

Refer to para 4.6 of this Tariff Order.

Issue No. 8: CAG Audit and True up of Previous Years

Refer to Issue No.7 of Objection No.3 above.

Reply of PSPCL:
Refer reply of PSPCL against Issue No.7 of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.7 of Objection No.3 above.

SECTION 'C'

COMMENTS ON APR OF 201 7-1 8 and RE 2018-19:

Issue No. 9: Escalated project requirements:
Objector pointed out that APR of 2017-18 and RE 2018-19 application submitted by the PSPCL does not take into consideration the true up gap of 2015-16 and Prov. 2016-17 and their carrying cost. Objector also pointed out that the abnormal rise in projected requirements seems to be artificially escalated to get very hefty tariff escalations and needs careful consideration by the Commission so that all consumers, like the Objector, are not burdened with undue tariff increase.
Reply of PSPCL:
In present petition for APR for FY 207-18 and revised Estimates for FY 2018-19, PSPCL has submitted the revenue requirements based on Actual figures of first half of FY 2017-18, Provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Further, so for as the past period gap/surplus is concern PSPCL, has clearly mentioned in the petition that PSPCL has not considered any past period gap/surplus in the Total Revenue Gap of ₹ 2966.82 Cr.; as projected for FY 2017-18, same shall be considered during true up for FY 2016-17. Hence, it would not be correct to say that the revenue gap figures are inflated. It has been observed that during the year FY 2017-18 the main input costs relating to cost of purchase of power from outside sources, establishment cost etc has gone up and therefore will result in increase in revenue gaps. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. It is therefore not appropriate to hold that revenue gap arising out of these expenses is inflated and unrealistic Moreover Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. Further, PSPCL submits that the determination of tariff is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.
View of the Commission:
Revenue Gap is determined by the Commission keeping in view the expenses and income approved by the Commission as per PSERC Regulations.

Issue No. 10: Consistent growth of AP consumption:
The power supplied to agriculture sector has been growing consistently of very high rate due to depletion of water table and release of new connections, Supplying power to agriculture sector at the subsidized rate, at far less than the actual cost of supply is leading to serious distortions for the PSPCL also affecting the interest of industrial consumers. Therefore, while adequate rise in agriculture tariff is the need of the hour, it is also imperative to cap the maximum amount of power year wise that can be supplied to agriculture sector at subsidized rate and power supplied above that limit should be billed at COS for agriculture worked out in TO.
Reply of PSPCL:
The issue is addressed to the Hon'ble Commission. PSPCL in this matter has no comments to offer.
View of the Commission:
Refer view of the Commission against Issue No.8 of Objection No.2 above.

Issue No.11: Voltage wise CoS based Tariff for LS consumers.
T&D losses for those receiving supply at 66 KV as per open access regulations were 4.31% for 2017-18. PSTCL claims to have commissioned the Boundary Metering system and have worked

out the Average Transmission Losses of 2.93% for HI of 2017-18 against 2.5% approved by the Commission for 2017-18 and now PSTCL has requested for approval of 3% loss level for 2017-18. Total T&D losses proposed in ARR of PSPCL are 14.75% for 2017-18 (against PSERC approved 14.25%). Distribution losses as per ARR 2016-17 for 66-33-11-0,415 KV by PSPCL for the year 2017-18 work out to 12.11%, based on which the total T&D losses for 66 KV consumers cannot be more than 3 to 4% since PSPCL receives supply at 66 KV from PSTCL and supplies to us on 66 KV itself {involving only bus and lino losses). However the rebate being given to consumers connected at 66/33 KV is of 25 paisa per unit. To give adequate relief to HT and EHT consumers, the LS category may be divided into four separate distinct sub categories based on supply voltage levels Le. 220/132 KV, 66KV. 33KV and 11 KV and voltage wise cost of supply based tariff be implemented for these consumers.

Till implementation of voltage wise COS, the voltage rebate be enhanced appropriately and fixed in percentage terms as per pattern of Voltage Surcharge being charged on percentage. Since voltage Surcharge for consumers eligible for 66 KV but getting supply at 11 KV have to pay 10% Voltage Surcharge, Similarly. Voltage rebate for 66 KV consumers should also be 10%.

Reply of PSPCL:

Issue raised by objector on transmission loss is related to PSTCL. Hence, PSPCL has no comments to offer. So far as, T&D loss level being increased by 0.5% for FY 2017-18 and FY 2018-19 is concerned PSPCL submits that this is mainly due to change in methodology for the estimation of AP consumption from sample meter to pumped energy as adopted by PSPCL from FY 2016-17 onward. Hereby, it is submitted that the Hon'ble Commission has fixed the trajectory of reduction of T&D losses considering the AP consumption on the basis of sample meter readings. However, the approach of approving the T&D losses based on AP pumped energy consumption is contrary to the Commission's trajectory of reduction in T&D losses, as without revising the trajectory, the same has proved detrimental to PSPCL .Hence, PSPCL prays to Hon'ble Commission to approve T&D losses for FY 2017-18 and FY 2018-19 as submitted by PSPCL in the petition.

Furthermore, Determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003. PSPCL has been charging tariff to consumers as prescribed by the Commission from time to time in various tariff orders.

View of the Commission:

Refer view of the Commission against Issue No.6 of Objection No.2 above.

SECTION 'D'

SPECIFIC ISSUES:

Issue No 12: CROSS SUBSIDY

Objector mentioned that as per the mandate given under the Electricity Act, 2003 to the Commission, the cross subsidies have to be progressively reduced. The same provision has been made in the National Tariff Policy also, Central government has advised State Regulatory Commissions to fix time frame for eliminating cross subsidy and declare the trajectory upfront. APTEL is also issuing orders for declaring such trajectories, The Objector requests the Commission to declare the trajectory in the tariff order for 2018-19.

Objector mentioned there are only two categories of consumers which are being cross subsidized i.e. AP and lowest slab of domestic category and in real sense the subsidy of both the categories has not been reduced in tariff orders issued by the Commission in last 3-4 years, which is in contradiction to the provisions of the Electricity Act, 2003. It can be concluded that the concept of gradual elimination of cross subsidy of Agriculture Sector has been badly ignored by the Commission while issuing tariff orders so far, which is mandatory as per raw. In the present scenario, where the market is very competitive, it is very difficult for the industry to take the huge burden of cross subsidizing other categories of consumers. It is, therefore, proposed that the cross subsidy should be got eliminated in phased manner and a road map may kindly be got drawn by PSERC.

Reply of PSPCL:

The issue is addressed to the Hon'ble Commission. PSPCL in this matter has no comments to offer.

View of the Commission:

Refer view of the Commission against Issue No.8 of Objection No.2 above.

Issue No. 13: Agricultural Consumption based on PE:
AP Category of consumers get cross subsidized by the industrial consumers. But, consumption of all consumers earlier increasing exceptionally year by year has suddenly started showing decreasing trends. Objector pointed out that AP consumption being estimated based on sample meters was not correct and being inflated. Probably this is the reason that PSPCL is not ensuring 100% metering of agriculture consumers as per Act 2003 and not complying with repeated directives of PSERC in this regard. This compelled PSERC to estimate the Agriculture Consumption based on Pumped Energy. Thus the increasing trend of agriculture consumption has been arrested and actual consumption has fallen steeply in audited/ actual. The arguments given by PSPCL in the ARR for allowing higher consumption for AP and discarding Pumped Energy methodology are not at all convincing. PSPCL has repeatedly stated that lower AP consumption will result in higher T&D Losses thereby proving that unmetered agriculture sector was being used by PSPCL to inflate AP consumption and lowering T&D Losses. Objector mentioned that PSERC has disallowed a portion of Pumped Energy of PSPCL for 2014-15 to 2016-17 as per Suo Motu Petition No 42 of 2016. PSERC is requested to continue such exercise in future also.
Reply of PSPCL:
The methodology for AP consumption estimations year after year has been well elaborated in the petition of respective years.
The Hon'ble Commission has calculated the T&D losses of PSPCL in previous tariff order (which are higher than actual losses) mainly on account of reduction in AP consumption due to change in methodology from sample meter basis to pumped energy basis. The trajectories for T&D losses were already fixed based on considering AP consumption as per sample meters. However, later on the Hon'ble Commission has changed the methodology of AP consumption in true up i.e. from sample meters to pumped energy without revising the T&D loss trajectory and hence the T&D losses as calculated by Hon'ble Commission have been found to be higher than the fixed trajectory. This has resulted into double loss to PSPCL i.e reduction in revenue due to reduced AP consumption and disincentive on account of higher T & D losses.
Hon'ble Commission needs to follow the methodology of AP consumption based on sample meters instead of AP consumption on Pumped energy as mentioned hereinabove. In any event, in case one methodology for one aspect is changed, all corresponding issues also need to be addressed and the trajectory for T&D losses (which was earlier fixed on basis of AP consumption on sample meters) needs to be revised based on Pumped energy methodology.
Hereby, it is to be noted that for the estimation of agriculture sales PSPCL has adopted AP consumption based on pumped energy from FY 2016-17. For the computation of AP consumptions for FY 2017-18 and FY 2018-19 on pumped energy.
View of the Commission:
Refer para 2.2.2 & 3.2.2 of this Tariff Order

Issue No. 14 (a): Gross financial indiscipline due to increased loans:
PSPCL is increasing the burden of Loans every year. The total loans including working capital loans which were ₹14649.80 Cr on 1.04.2010 have been projected as ₹33320.39 Cr on 31-3-2019. This clearly shows gross financial indiscipline in PSPCL. This tendency has to be curbed by the Commission firmly and PSPCL be asked to freeze the loans and seek prior approval for any additions; loan which should be sanctioned only after studying its pay back benefits.
PSPCL has admitted to raise short term loons to meet the revenue shortfall arising out of various factors viz. Non/late receipt of subsidy from the Government, delayed payments by consumers and Disallowances etc., Under MYT Regulations, most expenses are allowed on normative basis and thus there are no disapprovals. PSERC is allowing carrying costs of delayed payments of subsidy and PSPCL is getting Late Payment Surcharge from consumers for delayed payments. The mismatch between the ARR approved by the Commission in the Tariff Order and actual expenses incurred by The PSPCL should be met through internal accruals and ROE being retained by PSPCL. PSPCL has converted most of short term loans into Long term loans under UDAY. PSPCL is again availing short term loans for meeting expenditure which tendency is evident Interest charges for Working Capital as ₹572.33 Cr for 2016-17 and ₹679.02 Cr. for 2017-18 show an increase of 18.6% in a year. This tendency needs to be curbed or PSPCL will again start loading consumers with interest costs.
PSPCL has also claimed interest of ₹112.64 Cr on GPF amount deposited by employees for 2017-18, Rs 93.46 Cr For 2018-19 in APR and RE. This amount just like Consumer Security deposit has also been used by PSPCL to meet the working capital and as such the Factual WC

being utilized by PSPCL is much more than being reflected here. PSERC may direct PSPCL to give clarity on where these amounts have been utilized or invested and interest charges should be allowed accordingly.

Reply of PSPCL:

In the last Tariff Order for FY 2017-18, the interest on working capital is allowed to PSPCL on normative basis as per PSERC MYT Regulations. However, because of past disallowances and delay in payment of bills by the consumer, the working capital requirements of PSPCL have increased against the normative working capital. The working capital loans are taken for meeting the working capital requirements of PSPCL for carrying on the activities related to business of PSPCL only. Any further increase in disallowances will lead to increase in short term loans and PSPCL will have to face cash deficit. PSPCL would like to add that every financial year undergoes truing up of expenses when the audited accounts for that year are available. The tariff determination process is such that in case Hon'ble Commission had disallowed a cost while approving ARR of a particular year, it may approve the same cost while truing up of that year if the cost is legitimate and justifiable. Further, it is submitted that for meeting the working capital requirement, PSPCL has borrowed short term loans from the banks. Earlier, PSPCL had been utilizing GPF for funding the capital assets and the same had been recognized by Hon'ble Commission while computing the diversion of funds. At present, PSPCL is depositing the GPF amount in GPF trust from 1st April, 2013 as per transfer scheme, a statutory notification dated 24 December, 2012 issued by Government of Punjab. Hence, PSPCL is not utilizing the GPF for meeting its working capital requirement. PSPCL has no other alternative but to meet the cash deficit through short-term borrowings. PSPCL thus, prays to the Hon'ble Commission to allow actual interest on the loans.

So far as difference in interest on loans is concerned, PSPCL has claimed interest charges on the basis of actual interest paid against the loans availed by PSPCL, whereas PSERC allows the same on normative basis.

PSPCL has adopted the Govt. of India's (GoI) UDAY Scheme for financial and operational turnaround of Discom and MOU for this is signed amongst Minister of Power, GoI, Govt. of Punjab (GoP) and PSPCL as on 4-3-2016. As per the provisions of MOU Govt. of Punjab has issued special Bonds amounting to ₹ 9859.72 Cr during 2015-16 and handed over the proceeds to PSPCL as GoP loan. With this proceeds, PSPCL has prepaid its high cost loans. Due to this long term loan of PSPCL has increased and short term loan has been decreased.

Interest on working capital loans is allowed by PSERC on normative basis. As such the interest burden of excess working capital loans is being borne by PSPCL and is not being passed on to the consumers.

View of the Commission:

Interest of working capital is allowed on normative basis in line with PSERC Regulations after prudence check.

Issue No.14 (b): Gross Financial indiscipline due to over estimation of Capital Investment.

Though the efforts to upgrade the system through new/capital investments are praiseworthy, still expenditure submitted for approval and actuals submitted in true up for Capital works show wide difference as usual. Far 2014-15. PSPCL had projected on Capital expenditure of ₹ 4107.62 crore against which PSERC had approved ₹2000 crore. However, PSPCL has revised this amount to ₹ 2505.06 Cr in ARR 2015-16 and now in true up the amount has been shown as ₹1792.20 Cr in ARR RE 2016-17. Similarly for 2015-16, PSPCL had projected an expenditure of ₹3328 Crore under this head against which PSERC had approved 2000 crore. However, PSPCL has revised this amount to ₹1736.53 Cr in ARR RE 2016-17. Again for 2016-17, PSPCL had projected an expenditure of ₹3183.95 Crore under this head against which PSERC had approved 1600 crore. PSPCL has stuck to the figure of 3183.95 Cr whereas PSERC has also kept the approved figure as ₹1600 Cr in RE for 2016-17, The figures are likely to come down when true up is submitted. For 2017-18, PSPCL had projected capital expenditure of ₹ 2774.69 Crore against which PSERC had approved ₹1310.67 crore. PSPCL has now revised the figure to ₹1468.92 Cr.

This practice unnecessarily inflates the ARR and PSPCL recovers the interest charges on the inflated amount from consumers upfront whereas liability actually incurred by PSPCL is much less. Therefore, we submit to the Commission to look into the investment projections given by the PSPCL for a realistic assessment and accordingly approve interest cost for capital works for the APR and RE.

Reply of PSPCL

PSPCL has planned significant capital works on various schemes of Generation, Distribution and Sub-Transmission functions and details of the same are provided in the Tariff Petition. The Capital Expenditure plan has been made on the basis of detailed analysis of requirements of system improvement and infrastructure expansion and it is prayed that the Hon'ble Commission approve the same and allow interest cost on the same so as to ensure power availability to all the consumers in the state and also efficiency improvements such as reduction in losses beyond targets are continued to be achieved.

View of the Commission:

The Commission allows the Capital expenditure and interest on loans taken in-line with PSERC Regulations after prudence check.

Issue No. 15: POWER PURCHASE COST:

One of the main reasons of increase in expenses in APR of PSPCL is power proposed to be surrendered on merit order principle due to commissioning of new IPP stations of Talwandi Sabo, Rajpura and Goindwal sahib in Punjab and PPAs executed with Interstate Generating Stations which are being commissioned now. This will only save the energy/variable part of tariff but PSPCL has to bear the capacity/fixed charges for such non purchase of power. This position was predicted by PSERC and in this regard directive given to PSPCL in TO 2013-14 directing PSPCL to review all the PPAs and surrender costly powers in view of commissioning of IPPs in the state. The Commission also directed PSPCL, to carry out the exercise in shortest possible time and submit report by Sept 2013. PSPCL had stated that they are appointing a consultant to do the job and proposed surrender of power as a short term measure and bear fixed cost of ₹ 1706 Cr. which worked out to 58 paisa per unit on metered sale of 29176 MUs in 2014-15. However, in TO 2014-15, PSERC allowed all the fixed costs for purchase of power under PPAs and allowed PSPCL lo act judiciously in scheduling/surrender/sale of power.

In ARR 2015-16, PSPCL neither gave the report of consultant on review of PPAs nor worked out the liability for surrender of power. However, in the TO for FY 2015-16, PSERC gave following directive to PSPCL and to submit report along with next ARR:

> "PSPCL is directed to pursue vigorously with regard to directive of the Commission in the matter of Review of PPAs with Generators/Traders for purchase of power from outside the State of Punja. Further, sincere efforts should be made to sell the surplus power at reasonable rates to reduce the burden of fixed charges on the consumers of the State."

PSPCL in ARR 2016-17 stated that the consultant has submitted its report and PSPCL is considering surrendering the Power of Anta, Auriya, Dadri and APPCPL Jhajjar. PSERC reiterated the directions at page 185 of TO 2016-17 to surrender power under MOD and maximizing sale of surplus power etc and simultaneously passed on the cost stranded contracts to consumers.

PSERC while passing on the cost of idle plants and allocations has again directed PSPCL as under:

Review of PPAs with Generators / Traders for purchase of power from outside the State of Punjab.

The Commission notes the action taken regarding identifying plants for surrendering power share on mutually agreed terms with NTPC & NHPC for at least for next five years. The outcome of the action on the issue be shared with the Commission. Further, PSPCL may explore the possibility of reviewing the PPAs of IPPs also.

However as is evident from reply to directives at papa 8.17 at page 202 of APR, there is no progress and matter is still being explored. Thus there is no solution with PSPCL for this excess power and there is no other initiative since it is well known to PSPCL that consumers will continue to bear the capacity charges for idle capacity.

Such gross laxity in dealing with such important issue affecting the tariff directly for which timely directive had been issued by PSERC in advance way back in 2013-14 and then burdening the consumers on account of such inefficiency is uncalled for and should not be allowed by the Commission as pass through.

In spite of such grave situation of surplus power, PSPCL is not changing its mind set to encourage increase in consumption by the industry and other consumers. Instead of bringing reforms in its working friendly practices enabling ease of doing business, it is creating environment in which industry feels suffocated and pressed against the wall. Rebate for Threshold limit to eligible LS consumers at reduced tariff of ₹4.99 in 2016-17 was given in Oct-Nov 2017 i.e. after 7 months of closing of FY, that too after the intervention of PSERC and now reduced tariff of ₹4.23 for 2017-18 is not being given as per orders of the Commission and PSPCL is treating such eligible consumers as though they are a liability for PSPCL. PSPCL is also not refunding ED+IDF collected upfront and offering excuses though the Instruction Manual provisions are clear.

Facility of pre-paid meters is not being made available since PSPCL will have to refund the security amount of the consumers. Remote reading of LS consumers under SAP has been introduced but display units are not being provided to consumers. Such reform measures should not be left at the mercy of PSPCL and time bound action needs to be ensured as it will encourage consumers to plan its consumption in an efficient manner.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.12 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.12 of Objection No.2. Also refer to para 4.1 and 4.3 of this Tariff Order

Issue No. 16: Extra Cost of Short Term Power Purchase for AP & booking of power corridor.

Refer Issue No.10 (B) of Objection No.3 above.

Reply of PSPCL:

Refer reply of PSPCL against issue No.10(B) of Objection No.3 above.

View of the Commission:

Refer view of the Commission against issue No.10 (B) of Objection No.3 above.

Issue No. 17: Actual per unit rate of Power purchase V/s Per unit rate proposed in ARR.

Objector has compared the per unit rate of power purchase and approved as actual and mentioned that the actual rates of power purchase are way below the rate proposed in the ARR. This proves that PSPCL has been inflating the ARR to claim higher revenue.

Reply of PSPCL:

In order to prepare ARR for the projection years various assumptions are being considered. The transmission charges of the projected year are being escalated by 5% from the previous year. Further, new upcoming projects are being considered in the relevant (likely to be commissioned) projected year. But, in case, the project does not get commissioned/ synchronized with grid, the same is not reflected in the actual ARR. Also, UI, Reactive Energy & short term power purchase is treated as Nil in the projected year, however the same are being incorporated in the actual ARR for purchase of power.

View of the Commission:

The Commission agrees with the response of PSPCL.

Issue No. 18: Analysis of Power Purchase Data:

Perusal of year wise power purchase data given reveals that PSPCL is not exercising due care in its planning of power purchases as under:

Provisional 2016-17:

Refer Issue No.10 (C-1) of Objection No.3 above.

Reply of PSPCL:

Refer reply of PSPCL against issue No.10 (C-1) of Objection No.3 above.

View of the Commission:

Refer view of the Commission against Issue No.10 (C-1) of Objection No.3.

Issue No.19: Merit Order of Purchase of Power from Unchahar Power Plant

Refer Issue No.10 (C-2) of Objection No.3 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.10 (C-2) of Objection No.3 above.

View of the Commission:

Refer view of the Commission against Issue No.10 (C-2) of Objection No.3 above

Issue No.20: Costly Short Term Power Purchase:

Refer Issue No.10 (C-3) of Objection No.3 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.10 (C-3) of Objection No.3 above.

View of the Commission:
Refer view of the Commission against Issue No.10 (C-3) of Objection No.3 above

Issue No.21: Net Banking Rate:
Refer Issue No.10 (C-4) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (C-4) of Objection No.3 above
View of the Commission:
Refer view of the Commission against Issue No.10 (C-4) of Objection No.3 above

Issue No.22: Surrender of UI Power to UI Pool Account:
Refer Issue No.10 (C-5) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (C-5) of Objection No.3 above
View of the Commission:
Refer view of the Commission against Issue No.10 (C-5) of Objection No.3 above

Issue No. 23: ARR for FY 2017-18
Refer Issue No.10 (D) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (D) of Objection No.3 above
View of the Commission:
Refer view of the Commission against Issue No.10 (D) of Objection No.3 above

Issue No. 24: Comparison of purchase of Power with VC of own Thermals and monthly review of surrender of Power w.r.t. bidding of coal cost:
Refer Issue No. 10 (E-1 & E-2) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (E-1 & E) of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.10 (E-1 & E-2) of Objection No.3 above

Issue No. 25: TRANSMISSION & DISTRIBUTION LOSSES (T&D LOSS):
PSPCL has projected the combined T&D loss level of 14.75% for RE 2017-18 and 14.5% for 2018-19 against the Target proposed in MYT ARR last year as 14.25% and 14% for the MYT control period of 2017-18 and 2018-19 respectively and accepted in TO for MYT period. Thus, PSPCL has increased the target by 0.50% on its own based on projected loss level of 3% by PSTCL for transmission system against approved level of 2.5%. This needs to be checked 6 month data of PSTCL for Transmission loss measured thro boundary metering is not consistent and cannot be relied up on. If losses in July 2017 could be as low as 1.72%, then the loss figure of 2.5% is reasonable and PSTCL should operate the system in an efficient manner by devising loss reduction strategies. PSTCL should stick to the given targets in view of huge capital investment approved for its expansion and overall loss level for T&D loss be retained as 14.25% for 2017-18 and 14% and 2018-19.
With the huge surplus scenario and huge cost of capital investment for further reduction of T&D loss by merely 0.25% each year, capital investment plan for loss reduction needs to be reviewed for cost benefit analysis taking variable cost of power saved instead of full power purchase cost. The objector feels that it will not be cost efficient to invest further in loss reduction programmes. In this regard, it is also submitted that agriculture supply is the main contributor of T&D loss and any increase in agriculture consumption (over & above approved consumption) should be quantified by the PSPCL and the same should be charged from the consumers on actual cost of supply rate and should not be loaded on other category of consumers in the form of T & D Losses. In case Government does not agree to compensate the additional quantity supplied to the agriculture consumers, the supply should be limited upto the approved hours by the Commission.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.6 of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.6 of Objection No.3 above

Issue No. 26: EMPLOYEES EXPENSES:
Refer Issue No.13 of Objection No.2 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.13 of Objection No.2 above
View of the Commission:
Refer view of the Commission against Issue No.13 of Objection No.2 above

Issue No.27: TARIFF FOR POWER INTENSIVE LS INDUSTRY (PIU) BASED ON POWER FACTOR.
In Tariff Order for 2014-15, PSERC had approved the tariff of Rs 6.33 per KVA for PIU industry against 6.33/KWH prevailing in 2013-14. Thus power factor incentive available to us in 2013-14 was withdrawn. However, the tariff of general industry was lowered from 6.33 to 6.14 paisa per unit. Same tariff has been continued for 2015-16. Thus the PIU industry has been put in a disadvantageous position under two part tariff as in addition to existing 20 paisa per unit, PIU industry has been loaded with Rs 65/KVA/Month also compared with General Industry now. It is unfair to impart undue preference to General Industry consumer's vis-a-vis PIU. PIU industry has higher utilization factor and also better power factor than general industry. As such justice demands that under the present surplus scenario, the tariff for PIU industry should be lower or at least equal to general industry. We submit that tariffs based on KVAH should be rationalized and PSERC may look into it keeping in view the benefit accruing to PSPCL in view of improved voltage profile and reduced line losses and above all, all the expenditure on equipment installed is bone by the consumer.
Reply of PSPCL:
The issue is addressed to the Hon’ble Commission. PSPCL in this matter has no comments to offer. Further, determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003 on the basis of data supplied by PSPCL in the ARR, keeping the interest of PSPCL in view.
View of the Commission:
Refer view of the Commission against Issue No.4 of Objection No.2 above.

Issue No.28: COST OF SUPPLY / HT REBATE
Objector mentioned that in compliance to APTEL orders, PSPCL had carried out the study on Cost of Supply, which was a part of ARR 2013-14 and PSERC accepted methodology II of the study. While submitting the comments on cost of supply study, we had pointed out that the study is based on lot of assumptions and sample feeders taken are quite inadequate.
Further PSERC had accepted methodology II and had worked out Voltage wise and category wise Cost of supply for 2013-14 in TO 2013-14. Accordingly rebate for EHT consumers was reintroduced. The same voltage rebate of 25 Paisa per unit is continuing since then though the gap of cost of Supply is much more, The Hon'ble Commission is therefore requested to:-

a) Direct the PSPCL to be transparent on the cost of supply and make the complete calculations a part of ARR.
b) The cost of supply study be made more realistic and reliable by firming up the data required for the study since lot of computerization/digitization has taken place and IT practices have been introduced under APDRP schemes in PSPCL/PSTCL.
c) As per recent orders of APTEL in an appeal filed by the Objector, it has been ordered that Cross Subsidy Levels worked out on the basis of Cost of supply should be kept less than that of last year, further cross subsidy levels based on average cost of supply basis should not exceed 20% limit.
d) Till the tariffs are determined based on cost of supply, voltage rebate be further enhanced to make it commensurate with the cost of supply.
e) As the Voltage Surcharge is levied on percentage basis, on the same analogy, voltage rebate should also be fixed on percentage basis.

Reply of PSPCL:
Hon’ble Commission in Tariff Order for FY 2013-14 has accepted Methodology II for computation of voltage wise cost of supply. Hon’ble Commission has adopted this methodology after taking cognizance of the study carried out by PSPCL and recognizing the ground realities. In the same Tariff Order, Hon’ble Commission opined that it would be ideal to fix electricity tariff for all consumers on cost to serve basis. The objector has rightly pointed out that, in order to move in the direction of cost of supply.
PSPCL in subsequent Tariff Petitions has adopted the same methodology II and submitted the

voltage wise category-wise cost of supply. Hon'ble Commission in respective Tariff Orders had computed the indicative voltage wise category-wise cost of supply and continued to give rebate to consumers getting supply at higher voltage. In past tariff orders, Hon'ble Commission had found the computation of cost of supply submitted by PSPCL as prudent. Hence, it had not given any directives to PSPCL regarding the computation of cost of supply. PSPCL strongly negates objection of the Objector on being transparent on cost of supply. At present, PSPCL is submitting the cost of supply as part of ARR Petitions only. The computation is on the basis of best available data, after taking into account all updation in SAP system and other IT initiatives. Hence, PSPCL submits that cost of supply submitted in the Petition is more realistic considering the present level of system automation.
PSPCL further submits that determination of cross-subsidy levels and rebate to consumer getting supply on higher voltage is prerogative of the Hon'ble Commission. Hon'ble Commission may decide the appropriate rebate for consumers getting supply on higher voltages.
View of the Commission:
Refer view of the Commission against Issue No.6 of Objection No.2 above.

Issue No. 29: Return on Equity:
Refer Issue No.4 of Objection No.2 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.4 of Objection No.2 above.
View of the Commission:
Refer view of the Commission against Issue No.4 of Objection No.2 above.

Objection No. 8: Sh.H.N.Singhal, President (Corp.HR & Admn.), Nahar Industrial Enterprises Ltd., Focal Point, Ludhiana-141 010.

Issue No. 1: Relief to consumers having Captive/Co gen Plants
Refer Issue No.1 of Objection No.4 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.1 of Objection No.4 above.
View of the Commission:
Refer view of the Commission against Issue No.1 of Objection No.4 above.

Issue No. 2: Escalated Projected Requirements:
Refer Issue No.9 of Objection No.7 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.9 of Objection No.7 above.
View of the Commission:
Refer view of the Commission against Issue No.9 of Objection No.7 above.

Issue No. 3: Tariff order to be effective prospectively:
Refer Issue No.3 of Objection No.2 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.3 of Objection No.2 above.
View of the Commission:
Refer view of the Commission against Issue No.3 of Objection No.2 above.

Issue No. 4: Delay in submission of Audited ARR for True up
Refer Issue No.7 of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.7 of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.7 of Objection No.3 above.

Issue No.5: Expenditure already denied being claimed time and again
Perusal of APR reveals that arguments already considered and rejected by the Hon'ble Commission regarding Technical Parameters for Thermal Plants, inflated long term loans for capital expenditure, Reduction of working capital for Security (Consumption), Employee cost on projections/actual instead of normative income from Late Payment surcharge, interest on Bridge Loans etc have no effect on PSPCL and the expenditure is being claimed again and again in the ARRs/APRs though it is already

denied / methodology already rejected by the Commission in the previous tariff orders. Thus, PSPCL wants to have the best of all. In our view, there is no reason for admitting the same and PSPCL should be imposed exemplary penalty for wasting the time and money of the Hon'ble Commission and of the stake holders and willfully disobeying the Regulations and directions.

Reply of PSPCL:

PSPCL has not claimed any expenses which were disallowed by Hon'ble Commission in earlier Tariff Orders. However, it is clarified that if any expense is denied by Hon'ble Commission for respective year and PSPCL is in appeal for the same before Hon'ble ATE, then PSPCL has to claim such expenses to maintain their stand before Hon'ble ATE in ensuing years. Further, PSPCL files an appeal before Hon'ble ATE as per Section 111 of the Electricity Act, 2003 only when it is aggrieved by Order of the Hon'ble Commission. Hence, it is not true to say that PSPCL is not bothered to adhere to the approved expenditure.

View of the Commission:

Refer view of the Commission against Issue No.5 of Objection No.6.

Issue No. 6: Loading of extra cost of Agriculture Power to other consumer categories.

It is to note that to meet the requirements of paddy, short term purchase of power is being done by PSPCL for which industry is not responsible. For this short term power, PSPCL books the interstate/inter regional corridor in advance but the Agriculture consumption varies and in case of excessive rain, the power has to be surrendered at very cheap rates whereas in case of shortfall in rain, costly spot purchases are made or power cuts are imposed on other categories, Therefore, industrial consumers should not be loaded for the extra cost of meeting the paddy season requirement because their consumption remains continuous during the year and is generally not linked with the season. Hence, extra cost attached to such variation in power consumption should be loaded on agriculture itself rather than loading the same on the overall tariff including the industrial sector.

Reply of PSPCL:

The increase in power consumption by Agriculture tube wells is partly due to increase in the number of tube wells and partly due to weather conditions prevailing during paddy season of June to September. Government of Punjab is effectively pursuing its policy to reduce the area under paddy cultivation and to increase in the area of maize and sugarcane cultivation to reduce electricity consumption by tube wells and drawing less water to sustain underground water level as well. Supply to agriculture tube wells is free as per policy of the Government and capping of the same, is at the discretion of the Government of Punjab. Moreover, supply to AP consumers is limited only up to 8 hours that too during the months of June to September for paddy cultivation.

With regards to supply of power to agriculture category of consumers at COS rate is concerned, the said issue is under the prerogative of Hon'ble Commission. PSPCL would comply with the directions of the Hon'ble Commission. PSPCL only request the Hon'ble Commission to kindly allow recovering the legitimate cost of PSPCL claimed in the Petition.

View of the Commission:

Refer view of the Commission against Issue No.10 (B) of Objection No.3.

Issue No. 7: Maximum overall rate (MOR) for the Industry under Two part tariff system

The objector has requested the Hon'ble Commission to make the maximum Overall Rate for industry as a permanent feature of Two Part Tariff to give relief to industry operating on the margin otherwise these are bound to become financially unviable and shut their shops causing huge blow to the efforts of GoP to revive the industry in Punjab

Reply of PSPCL:

Single Part tariff has been converted into Two Part Tariff at an average utilization factor (U.F.) of each category. Two Part Tariff for respective categories has been split at certain U.F., there may be hundreds of consumers having UF above the Utilization Factor at which the tariff has been designed and hundreds below this designed Utilization Factor. In case we fix MOR tariff equal to Single Part Tariff, all consumers having UF above designed Utilization Factor shall paying less than Single Part Tariff determined by the Hon'ble Commission and all consumers having UF below designed Utilization Factor will be paying to revised Single Part Tariff only, though were required to pay higher than revised Single Part Tariff as per designed Two Part Tariff. This will result in perpetual revenue loss.

In view of PSPCL, there should not be MOR concept in two-part tariff system or it has to be fixed sufficiently higher than Single Part Tariff.

View of the Commission:

Refer view of the Commission against Issue No.1 of Objection No.2.

Objection No. 9: **Sh.Madhu Pillai, Resident Director, PHD Chamber of Commerce and Industry, Regd. Office: PHD House, Sector 31A, Dakshin Marg, Chandigarh-160 031.**

Section 'A'

(General)

Issue No.1: Huge Revenue gaps and Interest on loans to fill Revenue gaps

In APR 2017-18 and RE 2018-19, PSPCL has submitted ARR to the tune of ₹38901.45 Cr comprising of projected RE for 2008-19 as ₹33562.12 Cr and a revenue gap of ₹5339.33 Cr including carrying cost of ₹ 323.84 Cr. However PSPCL has not included the Revenue Gap and Carrying cost prior to the year 2017-18 in the APR. Thus the projected Cumulative Revenue Gap for 2018-19 works out to ₹6079.96 Cr instead of ₹5399.33 Cr after considering true up surplus of 2015-16 requiring an increase of 19.3% on the tariff rates of 2017-18.

The revenue gap projected by PSPCL is increasing every year in ARR whereas surplus is being determined by the Commission. Further, PSPCL projections of ARR of the ensuing year and the final figure in ARR True Up for the same year after two years clearly indicates that either the figures are being inflated or extensive exercise taken up by PSERC for determining the revenue requirement and pegging of expenditure by PSERC has no consideration for PSPCL and they are incurring expenditure at their will. Further, this expenditure is being incurred by PSPCL by drawing interest bearing working capital loans from various sources and incurring finance charges on arranging loans. Perusal of the above figures speaks of the total financial indiscipline.

Reply of PSPCL:

In present petition for APR for FY 2017-18 and revised Estimates for FY 2018-19, PSPCL has submitted the revenue requirements based on Actual figures of first half of FY 2017-18, Provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Further, so for as the past period gap/surplus is concerned, PSPCL has clearly mentioned in the petition that PSPCL has not considered any past period gap/surplus in the Total Revenue Gap of ₹2966.82 Cr.; as projected for FY 2017-18, same shall be considered during true up for FY 2016-17. Hence, it would not be correct to say that the revenue gap figures are inflated. It has been observed that during the year FY 2017-18 the main input costs relating to cost of purchase of power from outside sources, establishment cost etc has gone up and therefore will result in increase in revenue gaps. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. It is therefore not appropriate to hold that revenue gap arising out of these expenses is inflated and unrealistic. Moreover, Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. Further, PSPCL submits that the determination of tariff is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.

View of the Commission:

Revenue Gap is determined by the Commission in view of the income and interest on loans approved by the Commission as per PSERC Regulations.

Section 'B'

(Issues having impact on finalization of ARR)

Issue No. 2: Subsidized rate of AP viz-a-viz Cost of Supply

Refer Issue No.8 & 10 of Objection No.2 above.

Reply of PSPCL

Refer reply of PSPCL against Issue No.8 & 10 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.8 & 10 of Objection No.2 above.

Issue No. 3: **Transmission losses of PSTCL**

Refer Issue No.6 of Objection No.3 above.

Reply of PSPCL:
Refer reply of PSPCL against Issue No.6 of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.6 of Objection No.3 above.

Issue No. 4: Delay in CAG Audit & True Up.
Refer Issue No.7 of Objection No.3 above.
Reply of PSPCL
Refer reply of PSPCL against Issue No.7 of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.7 of Objection No.3 above.

Issue No. 5: Interest on Short Term Loans for Working capital
Refer Issue No.9 of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.9 of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.9 of Objection No.3 above.

Issue No. 6: Employee Cost and Order of APTEL
PSPCL had filed Appeal No 106 of 2013 in APTEL which has been decided vide order dated 16.12.2015. The decision has been further considered by Hon'ble Commission for compliance and order dated have been issued on 4.1.2016. In these orders contentions of the PSPCL on following issues relating to Tariff Order 2013-14 were considered:-

i) Whether the State Commission has correctly calculated the fuel cost to be allowed for the generating stations of the appellant?
ii) Whether the State Commission has correctly calculated the subsidy to be contributed by the Government of Punjab for FY 2012-13?
iii) Whether the State Commission has correctly calculated the Return on Equity (RoE) to be allowed to the appellant in terms of tariff regulations?
iv) Whether the State Commission has correctly calculated the carrying cost to the appellant?
v) Whether the employees cost allowed by the Commission is correct?
vi) Whether the State Commission has correctly allowed the transit loss of coal, generation incentive and transit availability for generation?
vii) Whether the State Commission has correctly calculated and allowed the short term power purchase as claimed by the appellant?
viii) Whether the State Commission has correctly calculated the interest and finance charges to be allowed?
ix) Whether the State Commission has correctly allowed the interest on working capital?
x) Hon'ble APTEL decided all the issues except (v) against PSPCL and upheld the orders of the Commission as per Tariff Order. Therefore this order of APTEL be kept in view while deciding the MYT ARR of 2016-17 and all such demand still being repeated in this ARR be rejected out rightly.

Reply of PSPL:
Matter is addressed to Hon'ble Commission. Hence, PSPCL has no comments to offer.
View of the Commission:
Late payment surcharge and TDS is allowed by the Commission as per PSERC Regulations after prudence check.

Section 'C'

(Detailed comments on the APR FY 2017-18 and RE 2018-19)

Issue No. 7. Return on Equity
Refer Issue No.4 of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.4 of Objection No.3 above.
View of the Commission:
Refer view of the Commission Issue No.4 of Objection No.3 above.

Issue No. 8: High cost of power purchase
Year wise comparison of the rate of power purchase approved by PSERC in the respective TOs and

now proposed by PSPCL in ARR of 2016-17 is tabulated as under:

Year	Total Units (MU)	Total Expenditure (₹ crore)	Rate of power purchase (₹/Unit)	
			Actual	Approved as per TO for the year
2016-17	39374.91	15910.79	4.04	3.96
2017-18	42858.09	17001.58	3.97	4.15
2018-19	46154.61	19120.30	4.14	4.21

As is evident from the above, the actual rate of power purchase is different from the rate approved by PSERC and is exceeding the approved rate for 12-13 and 13-14. The variation seems to be due to excessive dependence on purchase of short term power thro' traders and unfavorable power surrender/drawl under UI.

Reply of PSPCL:

In order to prepare ARR for the projection years various assumptions are being considered. The transmission charges of the projected year are being escalated by 5% from the previous year. Further, new upcoming projects are being considered in the relevant (likely to be commissioned) projected year. But, in case, the project does not get commissioned/ synchronized with grid, the same is not reflected in the actual ARR. Also, UI, Reactive Energy & short term power purchase is treated as Nil in the projected year, however, the same are being incorporated in the actual ARR for purchase of power.

View of the Commission:

The Commission agrees with the reply of PSPCL.

Issue No.9: Surrender of UI Power to UI Pool Account:

Refer Issue No.10 (C-5) of Issue No.3 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.10 (C-5) of Issue No.3 above.

View of the Commission:

Refer view of the Commission against Issue No.10 (C-5) of Issue No.3 above.

Issue No.10: Late payment surcharge & TDS for prov 2016-17 & pre-actual 2017-18

Late Payment Surcharge and TDS has been claimed at Sr. No 23 which needs to be disallowed as PSPCL is retaining Early Payment incentive and TDS is adjustable against overall liability of Income Tax.

Reply of PSPCL:

Due to non-availability of funds with PSPCL, late payment surcharge is paid which is beyond the control of PSPCL.

View of the Commission:

Refer view of the Commission against Issue No.10 (C-6) of Objection No.3 above.

Issue No.11: Reactive Energy Imported by PSPCL for AP for prov.2016-17 and pre-actual 2017-18.

Reactive Energy Charges of ₹9.31 Cr (prov 2016-17 and ₹1.57 Crore pre-actual 2016-17) have been paid to RE pool by PSPCL. The reactive energy is imported by PSPCL during Paddy season only and is due to the Heavy Agriculture load coming on the system. This needs to be recovered from agriculture sector by appropriately increasing their tariff. Industry is maintaining the PF almost unity throughout and rather generate MVARh by installing and maintaining costly equipment at their end and should not be penalized for this.

Reply of PSPCL:

Being a policy matter, PSPCL has no comments to offer at this stage.

View of the Commission:

Refer view of the Commission against Issue No.10 (B) of Objection No.3 above.

Issue No.12: Surrender of Power under UI for 2017-18 (pre-actual):

PSPCL has surrendered 63.45 MU under UI and has also paid ₹50.75 Cr to the UI pool account which is indicative of mismanagement and inefficiency. This amount should be disallowed.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.10 (C-5) of Objection No.3 above.

View of the Commission:

Refer view of the Commission against Issue No.10 (C-5) of Objection No.3 above.

Issue No.13: Late payment surcharge & TDS:
Refer Issue No.10 (C-6) of Objection No.3 above.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.10 (C-6) of Objection No.3 above.
View of the Commission:
Refer view of the Commission against Issue No.10 (C-6) of Objection No.3 above

Issue No. 14: Comparison of cost of Short Term Power purchase and VC of own Thermals.
PSPCL is misleading the stakeholders regarding purchase of Short term power being cheaper than the variable cost of its own thermal plants. PSPCL has purchased 3532.69 MU of short term power at @ ₹3.33 per unit which works out to ₹3.41/unit at Punjab Periphery. PSPCL has also paid ₹11.36 Cr as open access charges for the short term power which is 29 paisa per unit thus totalling ₹3.70 per unit. Further most of power surrendered under UI is out of this power which has also caused loss to PSPCL as per sub para (i) above. PSPCL may have also paid penalty for non drawl of contracted short term power. Further penalty is generally also payable to CIL and railway for non liftment of allocated coal. Thus this short term purchase is not cheap in real terms for which requisite directions need to be given to PSPCL for 2018-19. The extra cost paid to Traders for short term power be recovered from PSPCL or need to be loaded to Agriculture Sector as its is purchased for paddy only.
Reply of PSPCL:
Cost of short term purchase as indicated is already at Punjab periphery i.e. it is inclusive of all transmission losses /charges. So, further calculations are meaningless. PSPCL has paid no penalty due to non-drawl of power. PSPCL never intends to purchase of power through UI by overdrawing and sale power by under drawing through UI. Over drawl & under drawl are parts of system. PSPCL has already submitted the variable cost of GGSSTP & GHTP discovered on actual basis.
View of the Commission:
Refer view of the Commission against Issue No.10 (C-3) of Objection No. 3 above.

Issue No.15: Review of surrender of Power:
The surrender of power for 2016-17 and 2017-18 needs to be reviewed/checked for each month for sourcing power by PSPCL as per Merit Order Dispatch or not in view of changing scenario of coal cost due to allotment of coal mines thro' bidding process, Fall in imported coal prices and lower gas prices.
Reply of PSPCL:
PSPCL already has a practice to review variable costs of projects on monthly basis.
View of the Commission:
The Commission has noted the objectors' suggestion and response of the PSPCL. Also refer para 3.9 of this Tariff Order.

Section 'D'

(Comments on APR FY2017-18)

Issue No.16: Difference in Actual and Approved Expenditure:
The analysis of the different components of the revised estimates for FY 2017-18 reveals that the PSPCL has upwardly revised net revenue requirement by ₹2195 crore i.e. from the approved level of ₹28909 crore to ₹31104 crore (revised estimates).
The explanation for incurring higher expenses than approved are same being repeated every year i.e. mainly all such expenses are beyond control of PSPCL and on actual basis with no reference to the regulations of tariff determination and/or the directive given in the Tariff Order 2017-18. Thus PSPCL wants to have the best of all. Since, APTEL has rejected the contentions of PSPCL against the Tariff Order of 2013-14 which order is equally applicable to the year under consideration. Therefore, there is no reason for admitting the same for the year 2018-19 as well.
Reply of PSPCL:
In present petition for APR for FY 2017-18 and revised Estimates for FY 2018-19, PSPCL has submitted the revenue requirements based on Actual figures of first half of FY 2017-18, Provisional accounts for FY 2016-17 as available at the time of petition filing exercise. The methodology adopted by PSPCL for APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Hence, it would not be correct to say that the revenue gap figures are inflated. It has been observed that during the year FY 2017-18 the main input costs relating to cost of purchase of power from outside sources, establishment cost etc has gone up and therefore will result in increase in revenue gaps. Hon'ble Commission follows a transparent process for determination of tariff and consumers are

given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. It is therefore not appropriate to hold that revenue gap arising out of these expenses is inflated and unrealistic Moreover Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. Further, PSPCL submits that the determination of tariff is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.

View of the Commission:

Revenue gap is determined after prudence check as per PSERC Tariff Regulations.

Issue No.17: Prayer of PHD Chamber to Hon'ble Commission:

1. Carry forward the rationalization of Electricity Tariff towards reduction of cross subsidy in a phased manner.
2. Move towards fixing tariffs on the basis of realistic category wise cost of supply principle as early as possible.
3. Reduce the electricity tariff of the subsidizing class of consumers as per the Act so that the GoP is not unduly burdened for providing power to industry for 5 years at ₹5/-.
4. PSPCL should be directed to :-
   a) Amend its pattern of submitting ARR. Instead of submitting ARR based on actuals with the same bunch of excuses for over expenditure every time, it should limit its expenditure as per Approvals.
   b) For all previous years, figures of approved expenditure as per respective tariff orders should also be reflected along with True up and revised estimates in ARR.
   c) The practice of submitting Accounts duly audited by CAG along with CAG Audit Report for True Up of the previous year be strictly adhered to and for any delay, carrying cost of gap be disallowed to licensee.
5. The peak charge need to be abolished as PSPCL is not purchasing any extra costly power during peak period and rather, selling power during peak period. This will encourage the industry to operate for 24 hours instead of 20 hours presently.
6. More reforms and ease of doing business initiatives be introduced for the industrial consumers.

The Hon'ble Commission to check all the data provided by PSPCL and give some relief to industry by readjusting Voltage Rebate and Night rebate/peak charges and introducing Load Factor rebate.

The inflation in ARR is mainly on account of allowing of ROE by the PSERC as per FRP which was neither as per PSERC regulation 25.4 (which clearly states that ROE will be admissible only on the amount of equity actually infused) nor it was as per standard accounting procedures and APTEL has already directed PSERC to give relief to consumers in the TO of 2015-16 onwards.

This is also necessary so that the industry of Punjab remains competitive viz-a-viz neighboring states otherwise it will have no other alternative but continue shifting to other states.

The Punjab industry is situated in a land locked area and has to face many hardships. We will also bring to your kind notice that the State Govt is also charging 13 % Electricity Duty, 5% Infrastructure Development Fund and 2% per unit as Municipal Tax.

Reply of PSPCL:

The issue is addressed to the Hon'ble Commission. PSPCL in this matter has no comments to offer.

View of the Commission:

The Commission has noted the objector's suggestions. Also refer view of the Commission against Issue No.6 of Objection no. 2 and para 4.2 & 4.3 of this Tariff Order.

Objection No. 10: Shri Amrit Garg, Hon.Secretary, M/s Sangrur Distt. Industrial Chamber, C-9, Industrial Point, Sangrur-148 001.

Issue No.1: Prospective implementation of Tariff:

Refer Issue No.3 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.3 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.3 of Objection No.2 above.

Issue No.2: Period of charging for defective meters
In case of electricity meter getting faulty the charges should not be based on six months, as meter is checked every month during reading.
Reply of PSPCL:
Issue is not related to the current proceeding of ARR for FY 2018-19. Hence, PSPCL has no comments to offer.
View of the Commission:
The issue does not relate to ARR.

Issue No. 3: Threshold for MS category:
The MS connection category should have threshold of 200 KW instead of 100 KW, as for expansion sometimes industry needs more power and change in category the complications increases.
Reply of PSPCL:
The classifications of tariff categories are the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined and tariff categories classified in Tariff Orders of the relevant year by Hon'ble PSERC.
View of the Commission:
The Issue does not relate to ARR.

Issue No. 4: Reserve CT/PT Units:
The department should have sufficient reserve CT/PT units, so we change the damaged part immediately, as in some cases industry has to wait for 3-4 days.
Reply of PSPCL:
Issue is not related to the current proceeding of ARR for FY 2018-19. Hence, PSPCL has no comments to offer.
View of the Commission:
The Issue does not relate to ARR. PSPCL should take necessary action to protect the interest of consumers.

Issue No. 5: Two Part Tariff:
As the two part tariff system has come into force, we propose to have minimum tariff on the basis of 50 % load rather than 80% sanctioned load. Also there should be easy procedure to change the sanction load as and when requirement arises.
Reply of PSPCL:
PSPCL submits that the determination of tariff and its applicability is the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.
View of the Commission:
The Commission has noted the Objector's suggestion.

Objection No. 11: M/s Laghu Udyog Bharti Phagwara, Office: 55-Industrial Area, Phagwara-144401.

Issue No.1: General category and PIU category of Industries:
The PSPCL has kept two categories for industry General and PIU. The difference in the rate for two categories is only 4 paisa. The directions about PIU category are very vague and neither most of industries are well informed about it nor the officers are very clear at ground level operations. Therefore, many disputes develop between consumers and PSPCL causing lot of wastage of time and money of consumers without much gain to PSPCL. Now the state has ample power and has paid huge amount to Thermal plants without consuming electricity. In such a situation, we suggest that PIU category should be done away with and there shall be only one category and that is General. Yet if PSPCL wants to make up for the loss of 4 paisa on PIU units it can increase proportionately the rate for General Category which will be as low as 0.5 paisa. This change will reduce unnecessary disputes.
Reply of PSPCL:
Regarding considering Arc Furnace Units & PIU under General Industrial category, it is submitted that it has already been observed by the Hon'ble Commission in the Order dated 28.10.2013 regarding considering Billet Heaters/Surface Hardening Machines as PIU that these industries affect the Distribution System on account of various parameters like Voltage Dip, Voltage flickers and Voltage & current waveform distortion, harmonics, capacity loss of the utility Distribution System, Demand

Factor, Energy loss in Distribution System etc. The main points are listed as under:-

i) The load of these PIU industries is non-linear.
ii) The non-linear nature of these loads distort the voltage waveform and pollutes the power quality.
iii) The presence of harmonics in the system reduce the Distribution capacity of the Utilities. The capacity loss increases with the increase in non-linear load.
iv) As the harmonic current increase, the true maximum demand will increase. But the static energy meters will record only RMS value of maximum demand. The excess demand increases with the increase in non-linear load.
v) The non-linear load will not exhibit true power factor. The true power factor of non-linear load is low where harmonic currents are present.
vi) The presence of harmonics in the system increases the Iron/Energy Losses of Utility Power Transformers. The energy loss in Utility Power Transformer increases with the increase in non-linear load.
vii) The Utility has to invest more to provide higher level of short circuit MVA to absorb the power quality pollutants created by the industry having a large capacity of non-linear loads.

As such the tariff of PIU and Arc furnace consumer is on high side than general industry consumers. In view of above, it is concluded that since the Arc Furnace & Other PIU Industries affect the Distribution System of PSPCL more than that of General Industry, these cannot be considered under the General Category.

View of the Commission:

Refer Para 4.5 of this Tariff Order.

Issue No.2: Enhancement of Maximum demand limit for MS category:

Long back the investment limit in small scale industry was increased from 1 crore to 5 crore that is 5 times and also SSI sector was given incentives for modernization. This increased the Power Load needs of SSI sector. Many SSI sector does not go for expansion to avoid complications of LS load which starts at 100 KVA demand. Many issues arises like transfer/new meters installation and new regulations for new categories. When investment limit is increased from 1 crore to 5 crore and at the same time when Punjab has power available we suggest that MS connection limits be increased from 100 kVA to 300 kVA This will not only help SSI sector to grow but also it will help PSPCL to utilize its available power thus decreasing its loses. If PSPCL still feels there will, be revenue loss it can keep two tariffs one for less than,100 kVA contract demand and one for 100 to 300 kVA contract demand which shall automatically change in there bill once contract demand change without any formality or liability by the consumer.

Reply of PSPCL:

Issue is not related to the current proceeding of ARR for FY 2018-19. Hence, PSPCL has no comments to offer. However**,** the classifications of tariff categories are the prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined and tariff categories classified in Tariff Orders of the relevant year by Hon'ble PSERC

View of the Commission:

The Issue does not relate to ARR.

Issue No. 3: Procedure for change of category:

There are many disputes due to change of category. We submit that any consumer who is using connection sanctioned by PSPCL if found using in different category shall be served notice for 60 days to get its category changed or corrected without any penal action against consumer at least once.

Reply of PSPCL:

The Issue is not related to the current proceeding of ARR for FY 2018-19. Hence, PSPCL has no comments to offer at this stage.

View of the Commission:

The Issue does not relate to ARR.

Issue No. 4: Charging consumers retrospectively:

PSPCL shall never issue any notice/circular demanding any revenue from consumers with retrospect effect. This is a bad business practice often used by PSPCL on various grounds.

Reply of PSPCL:

Issue is not related to the current proceeding of ARR for FY 2018-19. Hence, PSPCL has no comments to offer.

View of the Commission:

PSPCL cannot charge any amount without the approval of the Commission.

Objection No.12: Director, M/s Arora Iron & Steel Rolling Mills (P) Ltd., Dhandari Khurad, Near Phase-VII, Focal Point, Ludhiana-141010.

Issue No.1: ACD as Bank Guarantee:

Objector has raised the issue of advance security consumption amount and mentioned that it may be charged in the shape of Bank Guarantee of equivalent amount thus enabling the industry to utilise this amount for business purpose as it will increase liquidity & industry can utilise this money for increasing the business transactions.

Reply of PSPCL:

This issue is not related to the ARR and tariff for which the current proceedings are undertaken. However, the request made by objector may be deliberated in Supply Code Review Committee meeting to discuss the various implication i.e. BG extension, lapse of BG etc.

View of the Commission:

The Commission agrees with the reply of PSPCL.

Objection No.13: Mr. P.D.Sharma, President, Apex Chamber of Commerce & Industry (Punjab), Room No.204, 2nd Floor, Savitri Complex-1, G.T.Road, Ludhiana-141003.

Issue No. 1: Maximum overall rate (MOR) for the industry under two-part tariff system and differential tariff based on CD for same category.

Refer Issue No.1 & 2 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.1 & 2 of objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.1 & 2 of objection No.2 above.

Issue No. 2: Timely issue of Tariff order for 2018-19.

Refer Issue No.3 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.3 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.3 of Objection No.2 above.

Issue No. 3: Grant of Night Rebate and levy of Peak Charge in monthly bills.

Refer Issue No.5 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.5 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.5 of Objection No.2 above.

Issue No. 4 Cross Subsidization Levels of Agriculture and Industry

Refer Issue No.8 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.8 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.8 of Objection No.2 above.

Issue No. 5: ARR AND CARRYING COST OF REVENUE GAP

Refer Issue No.9 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.9 of Objection No.2 above.

View of the Commission:

Refer View of the Commission against Issue No.9 of Objection No.2 above.

Issue No. 6: Agriculture Tariff less than Cost of Supply

Refer Issue No.10 of Objection No.2 above.

Reply of PSPCL

Refer reply of PSPCL against Issue No.10 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.10 of Objection No.2 above.

Issue No. 7: Interest Cost with UDAY Scheme.

In spite of GoP taking over 75% of loans for distribution business under UDAY scheme, the interest on loan amount is increasing alarmingly. PSPCL had submitted that with UDAY scheme, the interest cost for 2016-17 would reduce from projected ₹3029.69 Cr to 2396.82 Cr resulting in saving of ₹632.87 Cr. However, in the RE 2016-17 submitted with ARR 2017-18, the interest cost was projected as ₹2927.52 Cr and now in Provisional True Up ARR for 2016-17, the Interest cost has been indicated as ₹2658.66 Cr, thus negating the benefits of UDAY scheme. This needs to be checked and interest cost needs to be restricted to the approved figure of ₹2396.82 Cr.

Reply of PSPCL:

So far as difference in interest on loans is concerned, PSPCL has claimed interest charges on the basis of actual interest paid against the loans availed by PSPCL, whereas PSERC allows the same on normative basis.

PSPCL has adopted the Govt. of India's (GoI) UDAY Scheme for financial and operational turnaround of Discom and MOU for this is signed amongst Minister of Power, GoI, Govt. of Punjab (GoP) and PSPCL as on 4-3-2016. As per the provisions of MOU Govt. of Punjab has issued special Bonds amounting to ₹ 9859.72 Cr during 2015-16 and handed over the proceeds to PSPCL as GoP loan. With these proceeds, PSPCL has prepaid its high cost loans. Due to this long-term loan of PSPCL has increased and short-term loan has been decreased.

Interest on working capital loans is allowed by PSERC on normative basis. As such the interest burden of excess working capital loans is being borne by PSPCL and is not being passed on to the consumers.

View of the Commission:

Interest on loan has been allowed in this tariff order after consideration of UDAY Scheme.

Issue No. 8: Surplus Power and Capacity Charge of Idle Capacity

i) The surplus power proposed to be surrendered on Merit Order Dispatch due to commissioning of new IPP stations of PSPCL has increased the ARR of PSPCL. PSPCL has to bear the capacity/fixed charges for such non-purchase of power. This position was predicted by PSERC and in this regard directive given to PSPCL in TO 2013-14 wherein the Hon'ble Commission directed PSPCL to review all the PPAs and surrender costly powers in view of commissioning of IPPs in the state and reiterated the same subsequently but without any result. Now, in response to Directive no 8.17, PSPCL has only reiterated the earlier position also stating that any change in PPAs can be with mutual agreement only. Such gross laxity in dealing with such important issue affecting the tariff directly for which timely directive had been issued by PSERC in advance way back in 2013-14 and then burdening the consumers on account of such inefficiency year after year is uncalled for and should not be allowed by the Commission as pass through.

ii) The surrender of power on Merit order needs to be reviewed/checked every month in view of changing scenario of coal cost due to allotment of coal mines thro' bidding process, variation in imported coal prices and gas prices.

Reply of PSPCL:

The purchase from central generating stations and IPPs is based on the long-term power purchase agreement made/signed between PSPCL and NTPC. As per these PPA's, PSPCL is liable to pay fixed charges even if no energy is purchased from these stations. As per these PPA's, fixed charges are obligations that are to be paid, which cannot be avoided. The generation in these plants is based on availability of fuel and is not in control of PSPCL. However, in any case fixed charges are to be paid to these generators based on the availability of the plants.

PSPCL is the incumbent distribution licensee in the State of Punjab having Universal Service Obligation (USO) as per Electricity Act, 2003 and hence, planning for power purchase to meet the demand is to be done considering the overall demand in the State. In accordance with the same, PPAs with Generators are signed under long term contract so that the consumers of Punjab do not have to face power deficit situation. Since PPA's signed by PSPCL are on long term basis (around 25 years) it becomes very difficult to terminate these PPA's due to decrease in demand. However, PSPCL has been following merit order dispatch principle and has been curtailing high cost power from its power portfolio, it has to bear the fixed cost of the generators as per the terms of the PPA. PSPCL would like to submit that since the cost of this surrender power is very high and is an unnecessary burden on the consumers of PSPCL.

PSPCL has scheduled its procurement from various CGSs and IPP's on the merit order principles. Following-factors have been considered for deciding the procurement/ generation schedule:

i) Load profiles during various seasons;

ii) Technical constraints;
iii) Avoidable costs after giving due consideration to contractual obligations.

The power purchase expenses as determined through such optimal merit order dispatch after due consideration for contractual obligations and technical constraints, have been proposed for approval. The Merit Order of a process indicates the order in which power from various available sources shall be utilized. In the process, sources of power have been considered in ascending merit order of variable cost. Sources of power with the lowest variable cost/ unit have been scheduled to be procured first (base load) and those with the highest cost/unit at last (peak load). Sources with equal merit order have been considered together in proportion to their available capacity.

View of the Commission:

Refer view of the Commission against Issue No.12 of Objection No.2 above.

Issue No. 9: Category wise Cost of Supply / HT Rebate

Refer Issue No.6 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.6 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.6 of Objection No.2 above.

Issue No. 10: Employees Cost

Refer Issue No.13 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.13 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.13 of Objection No.2 above.

Issue No. 11: Provision for DSM Fund:

Refer Issue No.14 of Objection No.2 above.

Reply of PSPCL:

Refer Issue No.14 of Objection No.2 above.

View of the Commission:

Refer Issue No.14 of Objection No.2 above.

Issue No. 12: Expenditure on Normative/Actual basis:

Refer Issue No.15 of Objection No.2 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.15 of Objection No.2 above.

View of the Commission:

Refer view of the Commission against Issue No.15 of Objection No.2 above.

Issue No. 13: Submissions of Induction Furnace:

Refer Issue No.13 of Objection No.6 above.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.13 of Objection No.6 above.

View of the Commission:

Refer view of the Commission against Issue No.13 of Objection No.6 above.

Objection No.14: Sh. P.P.Singh, Vice President (E&U), Nahar Fibres (Prop.Nahar Spinning Mills Ltd., 373, Industrial Area A, Ludhiana.

Issue No.1: Vote of Thanks

We are thankful to Government of Punjab (GoP), Punjab State Electricity Regulatory Commission (PSERC) and Punjab State Power Corporation Limited (PSPCL) for the timely relief given to the industrial consumers of the state.

Reply of PSPCL:

Matter of record.

View of the Commission:

Noted.

Issue No.2: True Up for FY 2016-17:

PSPCL and PSTCL have now submitted the True Up of FY 2016-17 on 14.2.2018 and comments are to be submitted in 21 days. Another Public Hearing will be conducted for this submission sometime in last week of March 2018. We request for the issue of Tariff Order for 2018-19 by 23.3.2018 to give clear 7 days for implementation w.e.f. 1.4.2018. The true up should be considered in APR 2019-20.

Reply of PSPCL:

Matter of record. However, True Up for the FY 2016-17 was filed on 12.02.2018 not on 14.02.2018 as stated by the objector.

View of the Commission:

Refer view of the Commission against Issue No.3 of Objection No.2 above.

Issue No. 3: **Reply of PSPCL on Objection No.8:**

The reply of PSPCL on objection No.8 raised by us has not been received till date and our submission already made need to be considered which are not being repeated here.

Reply of PSPCL:

Reply to objection no. 8 has already been sent to PSERC as well as the objector vide this office memo no. 270-71/ARR/Dy.CAO/251/Obj.8 dated 05.03.2018.

View of the Commission:

The objector may note the response of PSPCL.

Issue No. 4: HT Rebate

In compliance to APTEL orders, PSPCL carried out the study on Cost of Supply, which was a part of APR 2013-14 and PSERC accepted methodology II of the study. PSERC accepted the study and introduced Voltage Rebate of 25 paisa per unit for 66 KV which is still continuing.

In order to make the cost of supply more realistic and reliable, it is requested that PSPCL be asked to firm up the data required for the study since lot of computerization/digitization has taken place and IT practices have been introduced under APDRP schemes in PSPCL/PSTCL.

The cost of supply for 66 KV has been worked out to be ₹5.98 per unit against ₹6.60 per unit for 11 KV as per APR i.e. a difference of 62 paisa per unit.

The voltage surcharge is being levied in percentage terms i.e. a consumer required to take supply at 66 KV but taking supply at 11 KV is levied voltage surcharge of 10% i.e. 65.5 paisa per unit but voltage rebate is flat 25 paisa per unit. Therefore, we request that Voltage rebate of 25 paisa for 66 KV consumers be increased proportionately and fixed in percentage terms.

Reply of PSPCL:

PSPCL in its petition never proposed either any rates for the tariff or any cross subsidization. All these factors such as slab and category wise tariff rates, cost of supply, cross subsidy etc. are in the purview of the Hon'ble Commission while keeping in view Electricity Act, 2003 and provisions of the PSERC Tariff Regulations and Acts. As given in the Tariff Policy, there has to be gradual reduction in cross-subsidy, keeping in view the interest of Utility. Hon'ble Commission has always endeavored to reduce the cross subsidy as provided under the Electricity Act, 2003 and the Tariff Policy. Further, Tariff Policy and Tariff Regulations notified by the Commission mandate gradual reduction of the cross-subsidy to the level of ±20% of the average cost of supply. Hence in light of the same it is requested that while determining the tariff in conjunction with the cross subsidy factor, the Hon'ble Commission has also to keep in mind the interests of PSPCL.

The determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003 on the basis of data supplied by PSPCL in the ARR, keeping the interest of PSPCL in view.

View of the Commission:

Refer view of the Commission against Issue No.6 of Objection No.2 above.

Issue No 5: Threshold Rebate Proposal:

PSERC introduced rebate for incremental consumption above the threshold limit for increasing the usage of surplus power by industry in lean season in 2014-15 (rebate of ₹1/-), 2016-17 (Rate of ₹4.99) and 2017-18 (Rate of ₹4.23). The rebate was not allowed in 2015-16 since PSERC agreed with PSPCL submission that it has caused losses to PSPCL.

PSPCL is implementing the threshold rebate proposal half heartedly as it thinks that the consumers get the benefit without any extra effort and their consumption would have remained the same weather threshold rebate is granted or not. The rebate is also delayed on one pretext or other and the consumer has to run after PSPCL to get its dues. People had to approach the Hon'ble Commission for clarifications and relief causing undue hardship to consumers and wastage of precious time of officers of Commissions and PSPCL.

The consumers have been trying to increase the consumption over the last year for previous two years now and there is no further scope to increase the consumption without adding extra machinery. But in case the new machinery is added, the threshold limit is also increased thus denying the grant of rebate.

Therefore, the Threshold Rebate proposal needs to be modified and simplified to allow the rebate if the consumption increases over the consumption of the same month of last year.

Reply of PSPCL:

The concept of consumption of power above threshold limit with concessional rates was introduced with a view to encourage consumption of surplus power in order to reduce the burden of fixed charges of surrendered power on the consumers of the State. In view of this, the incentive was given to the consumers and it resulted in terms of increased consumption subsequently. The Hon'ble PSERC had decided to continue this concept in Tariff Order for FY 2017-18 @ ₹4.45 per kWh for Small Power and ₹4.23 per kVAh for Large Supply/Medium Supply consumers. Hon'ble PSERC has already been requested to issue the clarification regarding calculation of threshold in case of contact Demand reduction.

The proposal of objector may be considered by the Hon'ble Commission keeping in view the spirit of rebate on consumption above threshold limit.

View of the Commission:

The Commission has noted the objectors' suggestion. Refer para 4.1 of this Tariff Order**.**

Issue No 6: Load Factor Rebate:

Hon'ble Commission may introduce Load Factor Rebate as prevalent in other states, under which if the load factor of the consumer increases beyond a percentage, rebate is permitted for the incremental consumption.

In view of the heavy surplus scenario, the load factor rebate may be allowed at 2 stages, for example 10 paisa per unit beyond 60% load factor and 15 paise per unit beyond 70% load factor. This will allow the consumer to pre plan usage of power and cost of production in the month itself and there will be no litigation and billing complaints will be eliminated.

Reply of PSPCL:

In Two-part tariff, the consumers with higher utilization factor are to be benefitted as their effective bill in two part tariff shall be reduced for higher utilization. Moreover, in Tariff order of FY 2016-17 & FY 2017-18, there was provision of Threshold rebate for consumers who consume power beyond threshold limit determined by considering consumer of last two financial years. As such there is no requirement of another rebate on the same basis.

View of the Commission:

By the inherent nature of the Two Part Tariff, consumers having higher load factor i.e. who consumes more than the utilization factor at which the tariff has been designed, gets automatically benefitted by having over all lower rate of electricity as marginal costs/energy charges under two-part tariffs are lower, resulting in lower electricity bills under the Two Part Tariff as compared to the existing single part bills.

Issue No 7: Computation of AP consumption from PE with 8% Sub Distribution loss level.

PSERC is allowing Agriculture Consumption to PSPCL in the TO based on pumped energy. Under this energy is metered at the 11 KV panel of the Agriculture feeder and further increased with T&D losses (of 66 KV and above system) to arrive at energy input for Energy balance and reduced by sub distribution system losses (11 KV under HVDS) to work out the energy utilized by consumer for energy sold & revenue purposes. PSPCL has submitted in Para 3.2 (c) of the APR that the AP consumption is being worked out with sub distribution system losses of 15% where as these losses are not more than 6% to 10% due to conversion of AP supply on HVDS. There is merit in the PSPCL contention as the voltage loss level while designing 11 KV feeder is kept as 6% at the tail end and there is only 0.5% to 1% loss at the 11/.415 KV transformer. Thus the average loss of 11 KV AP feeders cannot be more than 6 to 10% depending on the length and load of the feeder. Therefore, agriculture consumption be worked out with 8% sub distribution loss level and the agriculture revenue be worked out accordingly.

Reply of PSPCL: Matter of record, However, PSPCL requests Hon'ble Commission to kindly consider PSPCL's submission in petition for estimation of AP consumption.

View of the Commission:

Refer para 2.2.2 of this Tariff Order and also Directive No.5.23.

Objection No.15: President, Punjab Unaided Technical Institutions Association, C-124, Phase VIII, ELTOP, Near PCL Chowk, Mohali.

Issue no. 1: Increase in Tariff and levy of Fixed Charges for Educational Institutions.

Objector submits that vide our previous letter No. PUTIA/2017-18/ 870 dated 31.8.2017; we had made a request to your good self to kindly include educational institutions under the categories of industries for giving concessional rates of power tariff. However, it came as a shocking surprising that contrary to our that request, power tariff rates have been rather increased to a great extent and additionally exorbitant fixed charges are also imposed on educational institutions vide the new tariff structure made effective from FY 2017-18. Fixed charges which were never charged on Contract Demand are imposed to be charged from educational institutions w.e.f. 1.1.2018 at the rate of ₹195 per KVA. It is pertinent to mention that in case of Bulk Supply all the service charges of the 66 KV line, 66 KV bay at both the ends i.e. sending end and receiving end have been paid by Bulk Supply consumers for getting 66 KV supply. As such no expenditure has been incurred by the Corporation and there is no rationale to impose these fixed charges. Moreover, in case of Educational Institutions, there is vacation period of about 3-4 months in a year when the load reduce to 5-10% and therefore, levying of fixed charges is not at all justified. This increase in tariff rates and levying of fixed charges will ultimately increase the cost of education and put undue additional burden on the students and parents.

Reply of PSPCL

The Two Part Tariff has been worked out by only splitting the existing tariff as applicable to various categories into fixed and energy charges. The determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003 on the basis of data supplied by PSPCL in the ARR, keeping the interest of PSPCL in view. The Commission processes the ARR as per its notified Regulations & determines the revenue gap after prudent check of expenses. Tariff rates are determined to cover this revenue gap & cross subsidy.

View of the Commission:

The Commission has kept the Fixed Cost component at the bare minimum level and is only about 9-10% of the Fixed Cost of the Utility.

Issue no. 2: Arrears of retrospective increase in Tariff w.e.f. 01.04.2017:

Similarly, power tariff rates are also increased from earlier ₹6.09 per unit to ₹6.76 per unit w.e.f. 1.04.2017 unnecessarily without giving any proper justification and without seeking and considering concerns of the institutions and other stakeholders. Moreover the amount of arrears for power consumed from April 2017 to November 2017 has been charged in the bills issued for the month of December 2017 to January 2018 onwards also. In this case the arrear amount should be cut by 50% and balance in twelve installments as done for industry. This will give some relief to educational institutions at least.

Reply of PSPCL

The determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003 on the basis of data supplied by PSPCL in the ARR, keeping the interest of PSPCL in view. The Commission processes the ARR as per its notified Regulations & determines the revenue gap after prudent check of expenses. Tariff rates are determined to cover this revenue gap & cross subsidy.

Deputy Secretary, Power, Department of Power, GoP has intimated that State Government of Punjab has decided that the State Government shall bear 50 percent financial implication of the increased tariff retrospectively i.e. from April to October, 2017 for MS and LS industrial category, which is around ₹300 Crore and the balance 50 percent will be borne by the industry. The industry will deposit the arrears in 12 equal monthly installments. No interest will be charged on it. The concurrence of Finance Department has been obtained.

As per Section 65 of the Electricity Act, 2003 (Provision of subsidy by State Government), if the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under Section 108 (Directions by State Government), pay, in advance.

View of the Commission:

In case of Industry, arrears of bills have been subsidized by Government of Punjab.

Issue no. 3: kWh Tariff instead of kVAh

Implement kWh tariff instead of kVAh tariff. Earlier any power factor more than 0.9 was in favour of consumers for which some incentives/rebate were given. But strangely now even a power factor of 0.97 is derogatory and will remain so unless and until this is made 1 power factor. Charging of tariff @ per KVH is not justified at all and it should be @ per kVAh as one unit of consumption is 1 KW for one hour not for 1 KVA. As such levy of tariff on KVA basis is virtual and not real. So, it is requested that power tariff kindly be charged on KWh.

Reply of PSPCL

In tariff order for FY 2014-15 (dated 22.08.2014), the Hon'ble Commission approved 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 w.e.f. 01.04.2014. In Tariff Order for FY 2015-16, PSERC has further approved the KVAH Tariff for DS/NRS consumers with load more than 50 kW & up to 100 kW w.e.f. 01.10.2015.

As discussed in Tariff Order for FY 2017-18, the kVAh & Contract demand system ensure better quality of power as improved power factor of the system translates into less voltage excursions beyond the prescribed limits, less system breakdowns. Further, if a consumer improves/maintains his power factor more than conversion factor fixed for that category of consumers, then his energy consumption gets reduced. The, kVAh Tariff and Contract Demand system is advantageous to the consumers in the sense, that it give them flexibility in installation of additional electricity consuming equipments provided they keeps their demand within the sanctioned limits.

View of the Commission:

kVAh tariff is derived from the kWh tariff by applying the normative power factor (pf) of the respective category. Any over achievement of the pf results in reduction in the consumption in kVAh resulting in lower electricity bills to the consumer.

Issue no. 4: Treat Educational institution under Bulk Supply Category at par with Industry:

Objector requested PSERC that like the Industry, Education is as of now the biggest catalyst of growth of our State giving a big push to employment and generating revenue in form of direct and indirect taxes, cess, charges etc. for the State Government. Furthermore, Education is primarily a State responsibility and unaided institutions are sharing that responsibility of the government. So the educational institutions, if not be given more preference, should be treated at least at par with the industry. This would also be helpful to boost the upcoming universities of corporate houses and foreign countries in the State of Punjab.

Reply of PSPCL

The determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003 on the basis of data supplied by PSPCL in the ARR, keeping the interest of PSPCL in view. The Commission processes the ARR as per its notified Regulations & determines the revenue gap after prudent check of expenses. Tariff rates are determined to cover this revenue gap & cross subsidy.

View of the Commission:

The Commission has noted the objector's suggestion.

Objection No.16: Capt. S.S.Dhillon, IAS (Retd.), Chairman, I.N.A.Rural Development Society, H.No.1528 (1st Floor), Sector-34, Chandigarh.

Issue no. 1: New Category @ A.P. Tariff for Poultry, Goatry, Piggery, Fish Farming, Dairy Farming etc.

Objector submitted to PSERC that Poultry, Goatry, Piggery, Fish Farming (exclusive) &Dairy Farming are the diversification activities of Agriculture and thus there is no justification to include these activities in the SCHEDULES OF TARIFF FOR LARGE INDUSTRIAL POWER SUPPLY (LS), FOR MEDIUM INDUSTRIAL POWER SUPPLY (MS) & FOR SMALL INDUSTRIAL POWER SUPPLY (SP). These activities should be excluded from the SCHEDULES relating to LS, MS & SP categories and these should be included in a NEW SCHEDULE OF TARIFF. Rather other activities like OPEN FIELD GROWING OF VEGETABLS & HORTICULTUREAL ACTIVITES should also be included in this proposed NEW SCHEDULE which may be made applicable to consumers with connected load not exceeding 50 KW. The Energy Rate for all these activities as mentioned above and proposed to be included in NEW SCHEDULE should be charged the same which is applicable to AP Category and Two Part Tariff, Fuel Cost Adjustment (FCA) Charges and Power Factor Surcharge/Incentive conditions should not be made applicable.

Reply of PSPCL:

Poultry, goatery, piggery, fish farming (exclusive) & dairy farms are covered under respective Industrial Supply tariff. As per Hon'ble Commission order dated 18.11.2014 in Petition no. 49/2013, to encourage diversification in the agriculture sector and promote livestock farming 'Goat Farming' and other new categories i.e. Pig Farming, AP High Density Farming etc were introduced. These categories are covered under relevant schedule of Industrial Tariff, however, the consumers of these categories are billed under AP metered tariff subject to payment of advance monthly subsidy (difference of Industrial tariff and AP metered tariff) by the State Government.

It important to mention here that AP category tariff is most cross-subsidized among other categories and considering Poultry, Goatery, Piggery, fish farming (exclusive) & dairy farms under AP category Tariff will burden the other category consumers. The determination of tariff, rebate or surcharge to any category is prerogative of the Hon'ble Commission as per Electricity Act, 2003 on the basis of data supplied by PSPCL in the ARR, keeping the interest of PSPCL in view.

View of the Commission:

The Issue already stands considered by the Commission in Petition No.49 of 2013.

Issue no. 2: Diversification of Crops viz-a-viz Supply of Power:

Objector submitted that this is a known fact that PSPCL does not supply the electricity to Agriculture Pumps even for 2/3 hours during the period Mid-June i.e. till transplantation of paddy starts. Though the electricity is supplied for about 8 hours for the paddy crop but the supply hours are again reduced to less than 8 hours during wheat growing season. When literally no power is supplied during the period March-June, the farmers cannot irrigate the land and grow crops like Maize, Folder, Pulses and Vegetables and other horticultural crops during this period. The Government of Punjab has been laying lot of stress on diversification of agriculture i.e. asking farmers to grow crops other than wheat/Paddy/Cotton etc. But due to non-supply of power, growing of such crops is not possible and farmers of the State are suffering huge losses. Non-supply of power by the PSPCL is totally unjustified and uncalled for. Government of Punjab makes the payment of the amount of subsidy to PSPCL on behalf of the farmers. When PSPCL is paid the money by the Govt. of Punjab (instead of farmers) as per demand of PSPCL, then PSPCL has no legal right to not to supply the electricity power to the farmers for agriculture as per the requirements of the farmers. Moreover as per Section 23 of the Electricity Act 2003, the Commission can issue directions to licensee (i.e. PSPCL) for regulating supply, distribution or use for maintaining the efficient supply, securing the equitable distribution of electricity. All the industrial units of the State are provided continuous power supply throughout the year while on the other hand; the power supply to the farmers is restricted to few hours and that too at odd hours of the days and nights. This is highly unjustified and is an act of discrimination on part of PSPCL towards the farmers of the State who are feeding not only the State but the people of the whole country. Moreover the Govt. of Punjab is also earning a huge revenue/income from the amount of sale of food grains byway of various levies and taxes i.e. Mandi fee, infrastructure Development fund etc.

Reply of PSPCL:

The AP category power schedule is determined by State Government. As per AP category schedule determined by State Govt., supply is being given to AP consumers.

View of the Commission:

PSPCL must ensure supply to AP sector strictly as per AP Policy of the State Govt.

Objection No.17: General Manager (Project/Horticulture), Punjab Mandi Board, Punjab State Agriculture Marketing Board, Punjab Mandi Bhawan, Sector-65A, SAS Nagar (Mohali).

Issue no. 1: Maize Drying Centres as Seasonal Industry.

Maize drying centers may also be declared as "SEASONAL INDUSTRY" at par with the rice shellers and ice factories, so that Mandi Board will get the benefit of adjusting the seasonal minimum electricity bill in the main seasonal period.

Reply of PSPCL

The determination of tariff and classifications of categories is prerogative of the Hon'ble Commission as per Electricity Act, 2003. Furthermore, PSPCL proposed that maize dryer plants may be considered under Seasonal Industry category.

View of the Commission:

The Commission has noted the objectors’ suggestion and response of the PSPCL.

Refer para 4.5 of this Tariff Order.

Objection No. 18: PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.

Issue No 1: One unit of GGSSTP and one unit of GHTP on must run basis.

One unit of GGSSTP and one unit of GHTP was required to run continuously irrespective of the merit order. This decision has not been implemented by PSPCL.

Reply of PSPCL:
Best efforts are being made to run one unit of each plant i.e. GGSSTP & GHTP, except when demand of power is less due to weather conditions etc. However, keeping these units running continuously, out of merit order, would cause surrender of cheaper power from IPPs.
View of the Commission:
Objector may note the response of PSPCL.

Issue No 2: Power Purchase issue from Teesta-3 HEP
Teesta-3 Hydel Project of 1200 MW has a commissioning schedule of Mar-2017. The energy from this project and cost thereof is included in the PSPCL statements of power purchase for 2017-18 onwards. This project was constructed and commissioned by Teesta Urja Limited (now with 51% equity of Sikkim Govt.). It has sufficient storage to provide peaking power during lean season while in high flow/ monsoon season, it is supposed to run at 100% capacity on 24 × 7 basis. This project was originally sanctioned with capital cost of ₹5705 crore which is now escalated to ₹14000 crore. The originally estimated tariff of about ₹2 per unit is now about ₹ 6 per unit.
PSPCL is not taking any energy from Teesta-3 HEP of 1200 MW (with PSPCL share being 340 MW) as per decision taken in 191st Meeting of WTDs. Even though PSEB signed PPA with PTC for 340 MW out of 1200 MW station Teesta-3, PSPCL is not taking any power from this project which claimed COD from 28.2.2017. CERC issued provisional tariff order on 23.5.2017 for ad-hoc tariff, the project has several anomalies.

i) Capital cost has escalated 245% and the initial tariff estimate of Rs 2 per unit is now over Rs 5 per unit.
ii) COD declaration done without commissioning of 400 KV line for evacuation of 1200 MW power from the project.
iii) MYT-TO shows power purchase from Teesta-3 as under:

2017-18	Mu	= 1363.23
	₹ crore	= 557.85
	Rate	= Rs 4.09 per unit
2018-19	Mu	= 1363.23
	₹crore	= 557.85
	Rate	= Rs 4.09 per unit

iv) The procurer States of Teesta-3 are:

Punjab	340 MW
Haryana	200 MW
UP	200 MW
Rajasthan	100 MW

None of the other States is taking any power from this project due to capital cost escalation and tariff increase. However while Punjab is actually not taking any power from this project, the entitlement and cost figures have been included in the power purchase component of ARR for 2017-18 and 2018-19.

v) PSPCL is required to jointly take up this issue with the other three procurer States so as to ensure that the tariff is reduced to the range of Rs 2 per unit instead of the present billing rate of Rs 4.09 per unit.
vi) PSPCL should be directed to take up with TUL and Govt. of India to reduce the tariff to the original estimate of ₹2 per unit since the cost escalation was due to the lapse on part of project developers and this escalation should not be passed on to the procurer States through higher tariff.

Reply of PSPCL:
It is intimated that PSA between PTC and PSPCL (erstwhile PSEB) was signed on dt.15.09.2006 for 340MW power from Teesta-III HEP of TUL. As per the WTDs decision taken in its 191st meeting held on 06.04.2017, PSPCL is not scheduling power from Teesta-3 HEP
View of the Commission:
The objector may note the response of PSPCL.

Issue No 3: Power Purchase Cost for GVK
The figure of fixed charges for GVK has been stated as 192.6 paisa per unit assuming that the station runs at normative 80% capacity. The data of power purchase quantum shows PLF of 26% and as such the rate works out to ₹8.70 per unit. Similar figures have been adopted for FY 2018-19.
Reply of PSPCL:
In case of GVK, the Quantum of power for FY 2017-18 is 1223 .00 MUs with Variable Rate as 294.00

Paise/ unit and Fixed rate at normative capacity as 192.6 Paise/ Unit. Similar is for the FY 2018-19.

View of the Commission:

The determination of GVK tariff is under the consideration of the Commission in a separate petition.

Issue No 4: Power Purchase Cost for NPL and TSPL

In case of NPL and TSPL, the comparison is as under:

a) As per MYT-TO for 2017-18, the rate of NPL is ₹ 3.80 per unit and the rate of TSPL is ₹ 5.40 per unit

b) As per MYT-TO for 2018-19, the rate of NPL is ₹ 3.78 per unit and the rate of TSPL is ₹ 5.52 per unit

PSPCL may give the actual billing and energy data for period 1.4.17 to 31.1.2018 in respect of the IPPs, GVK, NPL, TSPL indicating

a) Energy billed

b) Total billed amount

c) ₹ per unit overall rate

The following data of ARR Petition of PSPCL for IPPs may be compared with actual data for the period April 2017 to January, 2018:

Station	MU	₹ Crore	Rate (₹per unit)
GVK	757.98	604.68	7.98
NPL Rajpura	8946.98	3326.27	3.72
Talwandi Sabo	7257.97	3044.25	4.19

Reply of PSPCL:

The generation data for Energy declared, energy scheduled, energy charges, capacity charges, Total charges, per unit rate has been supplied for all the IPPs for the period April 2017 to January, 2018. The energy data for NPL, TSPL and GVK for April, 2017 to January, 2018 is as under:

Plant	Energy declared (MU)	Energy Scheduled (MU)	Revised Energy Charges (₹in Cr)	Capacity Charges (₹in Cr)	Revised Total Charges (₹in Cr)	Revised Rate (₹/Unit)
NPL	8016.93	6991.27	1635.64	1130.77	2766.41	3.9569.
TSPL	8325.08	6398.89	1830.30	988.19	2818.49	4.40
GVK	1642.20	1164.22	351.65	296.43	648.08	5.56

View of the Commission:

The objector may note the information supplied by PSPCL.

Issue No 5: **Own generation – Thermal stations**

During 2017-18 and 2018-19, own thermal stations would be required to run at low PLF with repeated start/ stop operation. The CERC notified IEGC (4th amendment) Regulations 2016 on 8.4.2016 by which the operational norms have been modified so as to compensate the generator for operating the unit at low load and low PLF.

The compensation is by way of allowing 1% extra auxiliary consumption and up to 6% extra station heat rate on account of low load or load PLF operation.

Further, 20 to 50 Kilo litre extra oil consumption has been allowed for hot/ warm/ cold start.

The amendments have been made by CERC which recognizes that thermal units are required to operate at low capacity and repeated start/stop. The amendments notified by CERC are applicable and required to be adopted by PSERC and may be made functional from 1.4.2017.

Reply of PSPCL:

PSPCL agree with above observation. However PSPCL request the Hon'ble Commission to consider relaxed parameters for state owned Thermal Plants while truing up for FY 2016-17 also.

View of the Commission:

The amendments in the State Grid Code are under the consideration of the Commission.

Issue No 6: Relaxed performance parameters for own thermal as per CERC Regulations

The relaxation in SHR norm and auxiliary consumption norms of thermal units was accepted by CERC as a measure to compensate the generator for low PLF operation and extra backing down which adversely reflects upon the SHR and auxiliary consumption. Once, this principle has been accepted and notified by CERC, it is required to be implemented for PSPCL thermal units without further delay.

Reply of PSPCL:

It is true that the PSPCL thermal stations have been operated at low capacity during the period under reference. The PLF achieved by the GHTP plant during FY 2015-16, FY2016-17 and FY 2017-18 (upto Jan-2018) was 38.79%, 33.95% and 35.27% respectively and for GGSSTP during FY 2015-16, FY 2016-17 and FY 2017-18 (up to Jan-2018) was 35.77%, 25.15% and 21.17% respectively for GNDTP PLF for FY 2015-16 ,22.73% for FY 2016-17 17.34% and for FY 2017-18 up to December is 9.92% . This low PLF is due to low system demand and power scenario of Punjab state. When the Units are being run at low capacity, the performance of the plants will not be up to the mark and operating parameters are bound to be deteriorated. In these conditions, parameters deviate from the norms set by the regulator. So in view of the above, the norms like station heat rate, auxiliary power consumption and specific oil consumption must be relaxed and similar to the norms notified by CERC. PSPCL also prayed to Hon'ble commission to allow relaxed parameters for PSPC owned thermal plants.

View of the Commission:

Refer view of the Commission against Issue No.5 of Objection No.18 above.

Issue No 7: Cost of Own generation at reduced PLF due to commissioning of IPPs

The variable rate, ₹ per kWh for FY 2017-18:

Quantity	Bathinda	Ropar	Lehra
Gross Mu	301.31	2302.11	2601.25
Net Mu	265.72	2093.77	2367.66
Total Coal cost ₹ crore	95.10	682.25	824.0
V.C. Rs/unit Gross	3.16	2.96	3.17
V.C. Rs/unit Net	3.58	3.26	3.48

MYT-TO has summarized the total energy charges (a) assuming station operation at normative PLF (b) assuming PLF as per schedule given for 2017-18

The comparative figures for scheduled PLF case are as under:

Station	Fixed paisa per unit	Variable paisa per unit	Total paisa per unit
Ropar	152.61	305.62	458.23
Lehra	236.43	335.89	572.32

The comparison of variable charges is as under (PSPCL figure and PSERC figure)

Station	PSPCL	PSERC
Ropar	326	305
Lehra	348	335.89

It is observed that with the commissioning of IPPs – NPL and TSPL, the PLF of PSPCL thermal stations reduced and resulted in increase of total cost per unit as under:

Year	2012-13	2013-14	2014-15	2015-16	2016-17
PLF Ropar	83.05	72.53	52.11	35.77	25.15
₹ per unit	3.06	3.61	4.43	5.59	5.68
PLF Lehra	89.53	82.70	55.93	38.79	33.95
Rs per unit	3.49	3.27	3.95	5.50	6.42

To reduce overall cost per unit (FC + VC), it is critically important to improve the merit order by reducing the variable cost (VC) in ₹ per unit.

In the past years, with about 60% coal supply from PSPCL captive coal PANEM, PSPCL stations could operate at reasonable PLF because the PANEM coal had the double advantage of higher GC and lower ₹per tonne rate.

Reply of PSPCL:

With the commissioning of IPP's in Punjab, the PLF of GHTP and GGSSTP has dropped drastically because of low system demand. It is true that when the PLF drops, the total cost per unit increases as at low PLF, the operating parameters get deteriorated, resulting in increase in fuel consumption, thereby increasing the fixed and variable costs of generation.

The variable cost of generation depends mainly on the cost of coal and oil. At low PLF and due to frequent start/stops of Units, the consumption of oil increases, which affects the variable cost. Once, the coal supplies from PSPCL's own captive mine i.e. Pachwara Central coal mine starts, the landed cost of coal will reduce by 10-15%. Further, the GCV of Pachwara coal being higher than CIL coal, the specific coal consumption would reduce. This will result in low variable cost, thus improving GHTP's and GGSSTP's merit order.

View of the Commission:

Objector may note the response of PSPCL.

Issue No 8: Issue of Pachhwara coal mines

(i) The allocation of captive coal mine to Punjab was a long outstanding issue with the Govt. of India and Ministry of Coal due to the fact that Punjab / PSEB had three thermal stations for which the coal had to be transported over 1300-1400 KM with corresponding freight charges which were higher than the cost of coal itself. To give economic relief and benefit to Punjab on account of this locational disadvantage of long distance from coal mine, the Govt. of India took the decision to allocate the captive coal mine Pachhwara to Punjab so that Punjab could get some relief due to lower cost and higher quality of coal which could be mined from Pachhwara. Thus, while Govt. of India could not give any relief on the railway freight component, the relief was given to Punjab by the allocation of Pachhwara coal mine so that higher quality and cheaper coal could be made available to Punjab State thermal stations.

However there were other allocations of coal mines to non-Govt. parties which became a subject before the Supreme Court which cancelled all the allocations made earlier including Pachhwara. However recognizing the justification for allocation of captive coal mine for State Thermal stations, the Court gave an option that the State could get back the allocation of captive coal mine by making payment for the quantity of coal earlier taken from this mine. This quantum of payment i.e. ₹ 390 crore was made by PSPCL and thereby PSPCL / Punjab got back the allocation and ownership of the captive coal mine – Pachhwara. While the supply of coal from Pachhwara was up to about 60% of the total requirement of Punjab State Thermal Stations, from 1.4.2015, the supply of coal from this captive mine stopped. However in the tariff petitions, the cost of taking the loan of ₹ 390 crore from REC has been incorporated. The loan taken for PANEM mine is as under:-

Amount	₹ 390 crore
Interest	₹ 9.8 to 11.9%
Interest 2016-17	₹ 16.43 crore

The following payments are shown on account of additional levy of PANEM coal mine

2014-15	₹ 11.0 crore
2015-16	₹ 45.85 crore
2016-17	₹ 14.10 crore

(ii) However even after depositing ₹390 crore, PSPCL was unable to get the mine back into operation. PSPCL should be directed to give the time bound action plan for restoring Pachhwara Coal Mine to operation so that PSPCL gets coal at more economic rate and variable cost parameter is reduced so that the merit order of PSPCL stations improves resulting in higher capacity in PLF which in turn will reduce the overall ₹ per unit rate.

(iii) Since the payments on account of PANEM coal mines are still continuing and are incorporated in the ARR petitions of PSPCL, the PSPCL may be directed to give the following data and details:-

a) All interest payments made regarding the loan of ₹ 390 crore.
b) Re-payment schedule of loan (to REC)
c) Interest payments relating to 2017-18

(iv) On the other hand, PSPCL / Punjab has been deprived of the benefit of high quality, low cost coal from this mine. On the other hand, PSPCL has been importing costly coal to meet the shortage resulting from non-supply of PANEM coal. PSPCL may give following data

Quantity imported
Dates of import
Cost and rate per tonne
GCV of imported coal

Reply of PSPCL:

(i) The Pachhwara Central Coal Mine is a valuable asset for the State of Punjab for the decades to come as this mine is having adequate coal reserves for meeting the day to day coal requirements of the thermal power stations under State Sector for at least 30 years and that too at economical rates vis-à-vis coal supplies from other sources i.e. CIL subsidiaries.

(ii) PSPCL was in critical need of the allotment of the Pachhwara Central Coal Block, therefore as a matter of abundant caution to become eligible for allotment of coal mine, PSPCL after getting the opinion of PSPCL's legal counsel deposited a sum of ₹ 391.46 Crore (to the extent of PSPCL's share in JV Company i.e. M/s Panem) i.e. 26% of ₹295/- MT of the coal extracted upto 24.09.2014 from Pachhwara Central coal block.

After payment of additional levy amount by PSPCL corresponding to its share in JV Company i.e. M/s Panem, the Pachhwara Central Coal Mine has been re-allotted to PSPCL on 31.03.2015, which is a valuable asset for the State of Punjab having adequate coal reserves, sufficient for economically meeting the coal requirements of its thermal power stations for decades to come.

Since PSPCL thermal power stations are highly dependent on coal supplies from Pachhwara Central coal mine, so vigorous & timely actions have been taken by PSPCL for starting the operation at the mine after its allotment to PSPCL. However, the selection process of MDO is held up due to the stay orders of Hon'ble Punjab & Haryana High Court Chandigarh in the CWPs filed by the participated bidders against the Global tender enquiry floated by PSPCL on 31.08.2015, which is not in the control of PSPCL, the matter being sub-judice. The brief position regarding actions already taken by PSPCL for restoring operations at Pachhwara Central Coal Mine, is given as under:

- Global Tender Enquiry for selection of MDO for development and operation of Pachhwara Central coal mine was floated on 31.08.2015. However, due to inter-party litigation by the participated bidders in the tender enquiry, the price bid opening scheduled on 11.02.2016, was stayed by Hon'ble Punjab & Haryana High Court.
- PSERC directed PSPCL to apprise the Hon'ble Punjab and Haryana High Court regarding each day loss to PSPCL due to non-operationalization of Pachhwara Central Coal Mine.
- Accordingly, an affidavit was filed in Punjab and Haryana High Court intimating the daily loss of Rupees one Crore which PSPCL is incurring due to non-operation of mine.
- Applications were also filed in Punjab and Haryana High Court with the prayer to allow PSPCL to open financial bids and to short list the bids submitted by the bidder.
- Out of five bidders, only one bidder i.e. M/s Adani was left in fray as other bidders' stand disqualified for not fulfilling the eligibility criteria.
- Inspite of all these efforts made by PSPCL no final decision has been given by Hon’ble High Court and arguments are still going on and next date of hearing is on 15.03.2018.
- Due to pending litigations & on-going stay on opening of price bids which delayed selection of MDO resulting into non-operationalization of Coal Mine, BODs in its meeting held on 30.06.2017 resolved to drop the Global Tender Enquiry dated 31.08.2015 floated by PSPCL for selection of MDO and accorded approval to float the fresh tender enquiry, without prejudice to the rights of PSPCL of forfeiture of EMD of disqualified bidders.
- The draft tender document along with agreement prepared in consultation with consultant M/s KPMG has been finalized and was sent to Advocate General Punjab on 30.11.2017 for legal vetting.
- Legal opinion from Ld. Advocate General Punjab was received on 30.12.2017, whereby AG Punjab advised PSPCL to incorporate the provision of "Swiss Challenge Method" in the tender enquiry.
- Agenda No. 244/ CE/ Fuel/ C-300(II) dated 27.12.2017 alongwith Supplementary information was put before the Board of Directors of PSPCL to consider and decide on the proposal contained in the agenda based upon the opinion of Ld. Advocate General Punjab and viewpoint of M/s KPMG on legal opinion.
- The agenda alongwith supplementary information was discussed by BOD of PSPCL in its meeting held on 09.01.2018 at Mohali. The decision taken by the BODs as conveyed through Company Secretary U.O. No. 288/ BOD-Spl.63.1/ 2018/ PSPCL dated: 30.01.2018 is reproduced as under:

"RESOLVED THAT the matter be taken up with the AG Punjab with respect to the recommendation to incorporate "Swiss Challenge Method" in the clause and thereafter the Agenda be placed after the views of AG Punjab on the issue."

- As per decision taken by BOD, the case has been submitted to AG Punjab to review his recommendations on the introduction of “Swiss Challenge Method” in tender documents.
- Legal opinion from Ld. Advocate General Punjab was received on 20.02.2018, whereby AG Punjab has opined that "Swiss Challenge Method" was merely suggested as a possible alternative solution to reduce/negate any possible litigation, so it is open to PSPCL to take any decision keeping in mind its commercial and business interest of which it is always the best judge."
- In the meanwhile, during the hearing held on 01.02.2018 in the pending litigations in Punjab & Haryana High Court, the Hon'ble Court has passed the following order:

(1) Mr. Atul Nanda, learned senior counsel, on the basis of written instructions dated 31.01.2018 received by his assisting counsel from the Punjab State Power Corporation Ltd. states that in case the petitioners, namely, EMTA Coal Ltd. and PANEM Coal Mines Ltd. submit representation-cum-claim as raised in the instant writ petition, the same shall be considered by the respondent-PSPCL in accordance with law/policy provided that the petitioners do not press this writ petition at this stage and till such time an appropriate decision is taken by PSPCL.

(2) On our asking, Mr. Nanda, on further instructions, states that such a decision shall be taken by PSPCL before finalizing the fresh tender process for allotment of Coal Mines at Pachhwara

Central. The aforesaid offer is acceptable to learned senior counsel for the petitioners.

(3) Consequently, the instant writ petition is dismissed as withdrawn, at this stage with liberty to the petitioners to submit comprehensive representation(s)-cum-claim which shall be considered by PSPCL within three weeks from the date of submission thereof, but before finalization of the process of fresh tender. The final decision shall be duly conveyed to the petitioners.

(4) Disposed of.

In view of the above order of Hon'ble High Court, EMTA vide letter dated 20.02.2018 has submitted representation on 21.02.2018, which is under consideration.

The other important aspect for resumption of mining operations at the mine is grant of mining lease by the Jharkhand state government and getting other approvals and clearances from various departments of the Central/State Govt. The applications alongwith relevant documents for grant of Mining Lease and other approvals/clearances in the name of PSPCL already stand submitted with the concerned departments. PSPCL is regularly pursuing the issue with State Govt. of Jharkhand and Ministry of Coal for early grant of Mining Lease.

The position brought out above depicts that PSPCL is making sincere and vigorous efforts for appointment of MDO for undertaking the mining operations at Pachhwara Central Coal Mine. However, the selection process of appointment of MDO has been held up due to various CWPs filed by the participated bidders against the Global tender enquiry floated by PSPCL on 31.08.2015, which is not in the control of PSPCL, the matter being sub-judice.

(iii) Regarding loan, it is intimated that loan taken for PANEM coal mine are classified under Bridge loans in APR petition. All the bridge loans including loan taken for PANEM mine are distributed in proportion with normal Working Capital Loans. It is further submitted that all the working capital loans of PSPCL amounting to ₹ 13381.49 crore (including Bridge Loans) outstanding as on 30.9.2015 were shown as repaid under UDAY scheme during for FY 2015-16 & 2016-17.As such, all the Bridge loans (including loan for PANEM Coal Mine) has NIL outstanding balance as on 31/3/2017.

(iv) The payments details regarding the loan of ₹390 crore is as under:

The Point wise details is as under:			
a)	Year wise detail of interest booked on proportionate basis		
	Financial Year	Interest booked	
	2014-15	11.00 crore	Loan raised during the year.
	2015-16	45.85 crore	Full year interest
	2016-17	16.43 crore	Loan repaid during the year
b)	Loan is shown as repaid under UDAY scheme during FY 2016-17.		
c)	As stated above, the loan is shown as repaid under UDAY scheme during FY 2016-17, no interest is booked for FY 2017-18.		

(v) Regarding imported coal, it is mentioned that PSPCL intends to meet the coal requirement of its thermal power stations under 'State Sector' during FY 2017-18 and FY 2018-19 from indigenous sources only and presently there is no plan to import coal.

PSPCL agrees that Pachwara coal is of high quality and low cost. In the absence of coal supply from Pachwara, PSPCL has to purchase coal from CIL sources to meet the shortage. once the coal supply from Pachwara mine starts for thermal plants of PSPCL, the variable cost will decrease resulting in improvement in the merit order.

View of the Commission:

Objector may note the response of PSPCL and refer Directive No. 5.15 of this Tariff Order.

Issue No 9: PANEM coal viz a viz CIL coal

A comparison is made of the economics of PANEM coal viz a viz CIL coal for 2013-14 and 2014-15 as under:

The data sheet of coal cost and GCV parameters also attached by objector. The parameters compared are

a) Average GCV over the year
b) Average cost in ₹ per tonne over the year
c) The heat value parameter in ₹ per million Kilo Calories

Parameter	**2013-14**		**2014-15**	
	PANEM	**CIL**	**PANEM**	**CIL**
GCV	4647	4303	4597	4092
₹/ tonne	1136	1873	1197	1976
₹/Mln K.Cal	705	952	809	1054

Reply of PSPCL:

PSPCL agrees that the Pachwara coal is better than CIL coal in terms of average GCV. However, Pachwara being a captive mine of PSPCL, the average coal cost for supply from this mine to PSPCL thermal plants is less. Further, once the coal supply from Pachwara mine starts for thermal plants of PSPCL, the variable cost will decrease resulting in improvement in the merit order.

The comparison of weighted average GCV and Wt. average price of Panem coal and CIL coal for GNDTP is as under:

Year	GCV(Kcal/Kwh)		Coal cost (₹/MT)	
	Panem	CIL	Panem	CIL
2013-14	4644	4311	1134	1326
2014-15	4644	4170	1228	1723

From the above table it is clear that the GCV of the Panem coal was higher and cost was less as compared to CIL coal. Accordingly use of Panem coal will reduce the variable cost of generation.

View of the Commission:

Objector may note the response of PSPCL and refer Directive No.5.15 of this Tariff Order.

Issue No 10: Impact of PANEM coal on merit order of PSPCL thermal stations

The 2014-15 parameters for PANEM coal is ₹809 per million K.Cal.

The variable charge parameters for the IPPs as taken by the Commission are as under:

TSPL 265.05 paisa per unit
NPL 227.8 paisa per unit
GVK 294 paisa per unit

a) Variable charge of Bathinda with SHR 2750 and auxiliary 11%.
K.Cal required to generate 1 KWH net = 2750 / 0.89 = 3090 K.Cal
Fuel cost, PANEM coal = 250 paisa per unit

b) Ropar with SHR 2600 and 8.5% auxiliary
K.Cal required to generate 1 KWH net = 2600/ 0.915 = 2841.5 K.Cal
Cost (PANEM coal) = 230 paisa per unit

c) Lehra with SHR 2450 and 8.5% auxiliary
K.Cal required to generate 1 KWH net = 2450/ 0.915 = 2677.6 K.Cal
Cost (PANEM coal) = 216.6 paisa per unit

(i) Hence, if PSPCL stations operate on PANEM Coal, all three stations, Bathinda, Ropar and Lehra have lower VC and better merit order than TSPL and GVK.

(ii) Ropar would have lower VC than GVK and TSPL and match VC of NPL/ Rajpura.

(iii) Lehra would have lower VC (better merit order) than all three IPPs

Hence, the fact that the super critical IPPs are having better merit order than PSPCL stations is mainly due to the fact that PSPCL is not getting the PANEM Coal. The merit order ranking table where PSPCL stations operate on PANEM Coal would be as under:

Station	Variable charge (Paisa per unit)
GVK	294
TSPL	265.05
Bathinda	250
Ropar	230
NPL	227.8
Lehra	216.6

Reply of PSPCL:

If at PSPCL own thermal plants , 50% PANEM coal and other 50% of CIL coal is used, then the average cost of coal comes down by about 8-10%. This will bring the variable cost down by about the same percentage. For example currently the variable cost of GHTP is about 358 paise per unit, which if PANEM coal is used, will be about 322 paise per unit. This will definitely improve the merit order of GHTP Lehra Mohabbat.

View of the Commission:

Objector may note the response of PSPCL and refer Directive No.5.15 of this Tariff Order.

Issue No 11: **ARR Summary, FY 2017-18 and 2018-19**

The gap for previous years has not been shown. However in the PSERC MYT-TO (Review of 2016-17), the revenue gap as proposed by PSPCL has been shown as ₹5999.32 crore while Commission has approved a revenue gap of ₹531.80 crore. Hence, PSPCL in its ARR Summary (PSPCL APR) should have indicated the previous year's gap as 531.80 crores.

Reply of PSPCL:

PSPCL in its petition for APR for FY 2017-18 and RE for FY 2018-19 has clearly mentioned that

“PSPCL has not considered any past period gap/surplus in the Total Revenue Gap of ₹ 2966.82 Cr.; as projected for FY 2017-18, same shall be considered during true up for FY 2016-17”. Subsequently PSPCL has filed true up for FY 2016-17 along with past revenue gap and carrying cost as approved by Hon’ble Commission and same has been admitted by the Hon’ble Commission on dated 13-02-2018 as Petition No.5 of 2018.

View of the Commission:

PSPCL subsequently filed its Petition for True up of FY 2016-17. The cumulative gap up to FY 2018-19 claimed by PSPCL has been considered in Table 3.53 of this T.O.

Issue No. 12: PSPCL APR data of GNDTP Bathinda viz-a-viz performance of GNDTP

PSEB (Full Board) Memorandum dated 3.4.2003 for approval of R&M works of units 3 and 4 of GNDTP state the following objectives:-

a) Restore rated capacity
b) Improve plant availability
c) Improve load factor
d) Extend life by 15-20 years
e) Enhance operational efficiency and safety
f) To meet environmental standards
g) Energy conservation

Copy of the PSEB Memorandum and the Board decision approving the memorandum also attached by objector Purchase order was placed on 14.11.2006 wherein the following parameters were stipulated to be achieved by BHEL under this R&M project.

a) Capacity of 120 MW
b) Turbine gross heat rate of 1990 K.Cal/KWH
c) Boiler efficiency of 87.5%

With turbine heat rate of 1990 and boiler efficiency of 87.5%, the overall unit heat rate becomes 1990/ 0.875 i.e. 2274 K.Cal/KWH.

Against this design heat rate of 2274, the unit-3 achieved 2353.32 and unit-4 achieved 2349.78 in Sep-2017 whereas these units were renovated and put back into operation in 2012 and 2014. This actually achieved heat rate of 2353.32 and 2349.78 was for the month of Sep-17 when the units were able to operate for higher period of paddy season. These figures also indicate the success of the R&M project.

The Memorandum of PSEB also states the objective of extending the life of the units by 15-20 years. According to this, the units which were renovated in 2012 and 2014 were fit for operation up to 2032 and 2034 respectively. The memorandum also states that the payback period of the project was approximately six years.

Unit	1	2	3	4
Date of R&M	May-2007	Jan-2006	Dec-2012	Sep-2014
Life Extension	20 years	20 years	20 years	20 years
Extended Life	2027	2026	2032	2034

Penalty conditions in case the guaranteed parameters are not attained as under:

Parameter	Penalty
Decrease in MW below 120	₹ 1.5 lac per KW
Increase in turbine cycle gross heat rate above 1990	₹ 53 lac per 1 K.Cal/KWH
Decrease in boiler efficiency below 87.5%	₹145 lac per 0.1% decrease in efficiency
Increase in auxiliary consumption above 8.5%	₹ 3 lac per KW
SPM level increase above 90 mg/Nm^3	₹ 1 crore per 10 mg

(i) In 2017-18, H-1 GNDTP Bathinda had actual gross generation of 301.31 MU against which the fuel cost of ₹95.1 crore has been shown by PSPCL (Actuals). Against station heat rate, the PSPCL has given a figure of 2522.48 K.Cal per KWH and specific oil consumption of 3.33 ml per KWH and auxiliary of 11.81%.

PSPCL figure of SHR as 2522.48 for the 6 months period, H-1 shows that the GNDTP Bathinda has operated at a SHR comparable with PSPCL stations having 210 or 250 MW units.

This data sheet shows that unit 3 of GNDTP operated at SHR of 2353.23 K.Cal per KWH and unit-4 had SHR of 2349.78 K.Cal per KWH. For Sep-17, the station had SHR of 2378.55 while the progressive SHR for 6 months (i.e. Apr to Sep, 2017) was 2522.48 K.Cal per KWH. It is this figure of 2522.48 K.Cal/ KWH given in the data sheet of Bathinda TPS which is appearing as the SHR figure for H-1, 2017-18 for GNDTP.

These SHR figures of units 3, 4 and GNDTP stations show that this station is running much better

than the approved SHR norms of 2750 K.Cal/ KWH.
The issue to be examined is that when GNDTP operated at very competitive SHR of 2522.48K.Cal/KWH during the period Apr to Sep-2017 (H-1), then on what consideration / grounds, the Govt. of Punjab took the decision in Dec-17 to retire all the four units of GNDTP with effect from 1.1.2018 when the performance level for H-1 of 2017-18 was well known and on record.
It is established that while the units were operating at highly improved SHR as compared to the approved norm of 2750 and practically these units were in the process of achieving the payback period of six years, the operational life of these units has been suddenly cut short by the Govt. decision to retire these units on 1.1.2018. The extended life period as stated in the memorandum of PSEB was 15-20 years, which is based on the normal operation at around 80% capacity. However if these units are operated at lower capacity, the extended life in terms of running hours would be much more than 20 years even.
The operational data of past years shows how the GNDTP units PLF reduced from year to year while the overall cost of generation correspondingly increased from year to year, 2012-13 to 2016-17 as under:

Year	2012-13	2013-14	2014-15	2015-16	2016-17
PLF	65.83	54.91	37.40	22.79	17.34
₹/Unit	4.37	4.65	5.43	7.79	9.43

PSPCL continued to give low merits to scheduling and loading of GNDTP at low priority, whereas after R&M of units 3, 4 in 2012 and 2014, high priority should have been given.
Reply of PSPCL:
It is a matter of record. Closure of GNDTP is policy decision of GoP. Hence, no comments to offer at this stage.
View of the Commission:
The GoP policy decision is based on the recommendation of the Board of Directors of PSPCL. Refer to reply of PSPCL on issue no. 5 of objection no. 20.

Issue No 13: **Ageing of GNDTP Bhatinda Plant**
In the Tariff Order for MYT, the Commission stated as under:
"PSPCL has projected gross thermal generation at 3500.90 MU, 3468.60 MU and 3774.88 MU for FY 2017-18, FY 2018-19 and FY 2019-20 respectively for GGSSTP and 2093.20 MU, 2103.23 MU and 2387.12 MU for FY 2017-18, FY 2018-19 and FY 2019-20 respectively for GHTP. PSPCL has not projected any generation from GNDTP station for the Control period from FY 2017-18 to FY 2019-20. PSPCL has submitted that the Commission issued directions to PSPCL that the surrender of energy should be as per merit order dispatch from all the thermal generating stations, including PSPCL's own thermal generating stations. As such, PSPCL has projected own thermal generation based on merit order rather than plant availability. Further, GNDTP is an old generating station, whose units have already outlived their useful life of 25 years. Furthermore, as per power demand scenario in the State of Punjab, GNDTP units remained under reserve outage for longer periods………………………………………………………..
PSPCL has submitted that the generation plan for PSPCL generating stations for the control period i.e. from FY 2017-18 to FY 2019-20, has been projected on the basis of various parameters, such as Plant Load Factor, Heat Rate and Auxiliary Consumption. The performance parameters for PSPCL's Generating stations shall be as per CERC norms".
From the above quotation of the Commission order, it is clear that PSPCL has wrongly informed the Commission that GNDTP "is an old generating station whose units have already outlived their useful life of 25 years". PSEB has not taken into account the effect of R&M which was to increase the useful life of the station by 15-20 years.
Reply of PSPCL:
PSPCL is scheduling power in MOD methodology which depends on variable cost rather than age of plant. Furthermore, Closure of GNDTP is policy decision of GoP. Hence, no comments to offer at this stage.
View of the Commission:
The GoP policy decision is based on the recommendation of the Board of Directors of PSPCL.

Issue No 14: Ropar Thermal Plant
The Govt. of Punjab decision to retire units 1, 2 of GGSSTP Ropar needs to be reviewed and withdrawn on account of the following:-
a) Ropar units are capable of full load operation on sustained basis even now.
b) Ropar units are due for renovation so that further life extension can be achieved.

c) As per CEA data, four units of Ropar were due for R&M in 12th Plan and remaining two units in 13th Plan. To get maximum benefit out of investment, as per CEA, it is essential to go in for R&M and LE by which the life of the units can be extended by 15-20 years above the normal 25 years.

d) Unit 1 of RTP is already undergoing R&M with an expenditure of Rs 131 crore incurred. The air pre-heater component was due to be replaced and the new Pre-heater was received in Ropar RTP stores at a cost of ₹ 24 crore. However even before this pre-heater could be installed, the order was issued to retire unit-1 as well as unit-2 of Ropar from 1.1.2018.

Reply of PSPCL:

PSPCL agrees that Ropar Units are capable of running on full load operation. If renovation of GGSSTP units are done these would run with improved parameters. Air Pre heater of unit 2 was replaced and Unit 1 was to replace but due to retirement of Stage-1 units these cannot be completed.

View of the Commission:

Objector may note the response of PSPCL.

Issue No 15: CEA Guidelines, norms and instructions regarding R&M of Thermal Units

Para 5.0 of CEA norms & instructions regarding R&M of Thermal Units, is reproduced hereunder:

"5.0: RETIREMENT OF VERY OLD UNITS:

A very large number of small size units of 100 MW or less capacity are in operation. The average Plant Load Factor of most of these units is very low, even less than 50%. These units are of non-reheat type having very low design efficiencies. Further, because of their ageing & technological obsolescence, these units are performing at further lower efficiency than their design value. Such units need to be retired in a phased manner. The following approach for non-reheat units and other higher size reheating units may be followed for the purpose:

- Consider for retirement of all non-reheat units of 100 MW or less rating. However, those units on which major R&M/LE activities have been undertaken and are performing well, such units may continue to operate for another 10 years from the date of post R&M/LE to enable them to recover the expenditures incurred.
- Larger size units can also be considered for retirement on economically no viability on case to case basis.
- The retirement may be prioritized according to their level of performance, say unit heat rate deviating more than 20% to be retired first and subsequently those units with deviation of 15% & 10% from their design heat rate".

The SEBs/ GENCOs may identify new generating capacity to be added as substitute for older units so that overall installed capacity is not affected.

As per the above quoted instructions, unit-1 of RTP was not eligible or qualified for retirement from 1.1.2018 particularly as it was already undergoing R&M. This unit does not meet any of the terms or conditions specified by CEA for retirement of very old units.

Reply of PSPCL:

Closure of Unit I & II of RTP is a decision of GoP. Hence, no comments to offer at this stage.

View of the Commission:

The GoP policy decision is based on the recommendation of the Board of Directors of PSPCL.

Issue No 16: O&M Cost of RSD Power Plant

(i) During construction of RSD Project/ Dam, the cost of dam and construction charges were to the account of Punjab Irrigation Branch while the RSD power plant was a separate entity. For construction of RSD power plant, the entire cost was borne by PSPCL / PSEB including civil works as well as electrical and mechanical generation equipment, substation etc.
The O&M staff at RSD power plant is entirely from PSPCL / PSEB and their salary is being paid by PSPCL and not by Punjab Irrigation department. The maintenance charges on account of PSPCL operation and maintenance staff deployed at this power plant are to be reimbursed to PSPCL through tariff and there is no connection with Punjab Irrigation or with RSD authorities.

(ii) (ii) On the other hand, there are some portions of the RSD which relate to the Power House and its operation. These portions of the dam are the intake works from where the reservoir water is taken for the power house and other works such as tunnel/ penstock by which the water is supplied to the power house and intake gates.
The interface between irrigation wing and power wing is the scroll casing of power house turbine. At this point, the water from tunnel and penstock coming from the dam is delivered to the power house turbines starting at the scroll case. The works of the dam relating to intake, tunnel and penstock etc. up to the point of scroll case were originally constructed by the Irrigation Wing and form a part of the total project cost which was in any case apportioned with the major component

being loaded on the power wing / electricity wing. Thus, as far as O&M is concerned, the entire staff and expenditure being incurred at the power house is borne by PSPCL while in comparison the O&M expenditure of the tunnel, penstock and gates etc. is negligible as these components of the dam do not have any wear and tear and require minimum maintenance or staff. The O&M expenditure of RSD power plant is justified to be allowed and included in the ARR as it is a justified activity without which the power house cannot run.

Reply of PSPCL:

(i) The 4X 150 MW generating units of RSD Power house are in operation since the year 2000. The generating units and associated machinery/equipment have completed more than i 7 years of their life. The residential and non-residential buildings at RSD under PSPCL control are even more older. There has been power generation of approximately 26800 million units from RSD power house. Due to continuous operation, considerable wear and tear of generation units and associated machinery/equipment, have occurred. The RSD project is to be operated for much longer period in future. For enhancing the life of generating units, associated machinery/equipment and buildings under PSPCL, their replacement, capital maintenance and repair is required so that generation is not affected in future. The O&M staff at RSD power plant is entirely from PSPCL and their salary is being paid by PSPCL and not by Punjab irrigation department. PSPCL also release funds to Punjab irrigation Department at RSD (Now Water Resource Department) in compliance to notifications of Punjab Govt. Earlier funds were released based on 3 % of income from sale of power from RSD (w,e,f 2010-11) in compliance to notification No. 3/13/2009-OS-2/50 dated 8-1-2010 signed by Principal Secy./ Power, GoP. Now funds are released @ ₹12 cr per annum as lump-sum Operation and Maintenance Charges with an increase of 5% per annum over the previous year (staring from FY 2017-18) as per notification no 3/12/2009-PE2/1465 dated 24.05.17 and notification no /12/2009-PE2/3271 dated 9.10.17 of Punjab Govt. These funds are released for maintenance and safety of dam, which is under irrigation Department.

PSPCL agrees with the point raised by PSEBEA. The O&M staff at RSD power plant is entirely from PSPCL and their salary is being paid by PSPCL and not by Punjab irrigation department. The maintenance charges on account of PSPCL operation and maintenance staff deployed at this power plant are to be reimbursed to PSPCL through tariff and there is no connection with Punjab irrigation or with RSD authorities w.r.t royalty being paid by PSPCL to PID as per Punjab Government notification no. 3/12/2009-PE(2)/1465 dated 24.05.17 & 3/12/2009-PE(2)/3271 dated 9.10.17.

(ii) The interface between irrigation wing and power wing is the MIV (Main inlet valve at pen stock) of power house turbine. At this point, the water from tunnel and penstock coming from the dam is delivered to the power house turbines starting, at the scroll case. The civil works of project were originally constructed by the irrigation Wing and form a part of the total project cost which was in any case apportioned with the major component being loaded on the power wing / electricity wing. Thus, as far as O&M is concerned, the entire staff and expenditure being incurred at the power house is borne by PSPCL while in comparison the O&M expenditure of the tunnel, penstock and intake gates etc. is negligible as these components of the dam do not have any wear and tear and require minimum maintenance or staff.

View of the Commission:

O&M expenses of power plants of RSD, which includes Employees Cost, have been allowed in tariff order. However, it is as per the policy of the State Government that maintenance funds for Irrigation Wing are being paid to the irrigation department.

Issue No 17: Royalty paid to RSD

The royalty being claimed by Irrigation Wing of RSD project from PSPCL may be due to the capital works and there maintenance, relating to the components of intake, intake gates, penstocks and tunnel etc. but this expenditure of the order of Rs 20 crore does not appear to be justified in any way. Nevertheless, PSPCL has to make the expenditure for O&M staff who are operating and maintaining Ranjit Sagar Power Plant and this expenditure cannot be equated or offset against the amounts paid to the Dam authorities.

Reply of PSPCL:

PSPCL submits that the matter may consider as below

14.3 So it appears that the royalty being claimed by irrigation Wing of RSD project from PSPCL is due to the capital works and their maintenance, relating to the components of intake, intake gates, penstocks, tunnel & safety of dam etc. In compliance of Punjab Government notifications, PSPCL was earlier paying 3 % of sale of power from RSD project to PID and now as per new notification PSPCL is paying 12 Crore per year with an annual increase of 5% to PID starting from 2017-18;

Nevertheless, PSPCL has to make the expenditure for O&M staff who are operating and maintaining Ranjit Sagar Power Plant and this expenditure cannot be equated or offset against the amounts paid to the Dam authorities which is exclusive for DAM & not for PSPCL Power house and PSPCL occupied buildings.

View of the Commission:

It is as per the policy of the State Government that maintenance funds for irrigation works are being paid to the irrigation department and allowed as an expense in the Tariff Order.

Issue No 18: Delay in construction and commissioning of 2 × 9 MW units of Mukerian-2 Extension Project.

A deduction of Rs 14 crore has been indicated due to delay in construction and commissioning of 2 × 9 MW units of Mukerian-2 Extension Project. This project was delayed due to factors beyond the control of PSPCL as under:

a) Artesian well was found at the Power House Project site by which there was continuous flooding of the construction area making it impossible to take up the civil works relating to foundation. It took long time to control and plug the artesian well so that the flooding of the power house construction area could be eliminated and only after this was achieved, the foundation works and civil works relating to foundations could be taken up.
b) Delayed working of BHEL in supply of equipment and erection of the power house equipment.
c) Both the above factors are force majeure conditions beyond the control of PSPCL. The deduction of ₹14 crore on account of delay and loss of generation of these units may not be imposed in the True-Up of 2015-16.

Reply of PSPCL:

PSPCL also agreed with the point raised by PSEB Engineers Association. The key reasons for delay in commissioning of project are summarized as under:

EPC Contract for Electro-Mechanical works & substation of 2x 9 MW, MHP-II HEP was awarded to BHEL on turnkey basis in year 2004 but was abandoned due to high sub soil water. During the construction and excavation activities, problem of excess underground water due to an artesian well was experienced due to which the work of civil foundations got delayed. This project was conceived to tap the potential available between MHP PH-IV and the river bed near Terikiana village. So, the Power House had to be located near the river bed which was a new project of its kind, due to which the project had to face problems of high sub soil water resulting into repeated occurrence of aquifier & artesian wells, which abnormally prolonged the civil works of the project site. The arising of such situation was beyond the control of PSPCL.

Also the head available was very low due to which the bulb type of turbine generator had to be used. The bulb type of turbine generators are horizontally immersed in the flowing water. This was a new technology for BHEL & PSPCL as well and the main components were required to be imported by BHEL.

PSPCL, had rectified the site related civil works problems in 2011 & again allowed BHEL in 08/2011 to complete the project in Sept, 2013 i.e. by allowing 24 months period as allowed initially prior to 2011. The completion period of the project was extended upto 08.09.2014, the completion date for Unit #1 was 8/2014 and Unit #2 was 9/2014. But M/s BHEL has from time to time submitted the revised completion schedule .The revised schedule has been allowed by PSPCL with penalty & without any other compensation.

Unit# 2 was commissioned/ synchronized with the Grid on 19.05.2017 and put on commercial operation w.e.f 06.06.2017 and Unit # 1 has been commissioned/ synchronized on 03.02.2018.

In light of the above, it is pertinent to mention here that PSPCL had to suffer by granting repeated time extensions to BHEL. The delay in commissioning of this project was beyond the control of PSPCL. Therefore, it is humbly requested that the deduction of ₹ 14 Cr on account of delay and loss of generation of these Units may not be imposed in the True- Up of 2015-16.

View of the Commission:

The true up of 2015-16 had already been carried out in MYT tariff order for FY 2017-18 to FY 2019-20 and thus is a closed chapter.

Issue No 19: **Power Purchase cost of 2016-17**

PSPCL has stated about paying ₹11.87 crore as late payment surcharge which the Commission provisionally disallowed.

Since, late payment surcharge relates to delay in payment of power purchase bills and this in turn relates to shortage of funds which is due to the non-payment or delayed payment of subsidy by the Govt. of Punjab, Commission may not disallow the late payment surcharge of Rs 11.87 crore.

Alternately, Commission may direct that this amount should be paid by the Govt. of Punjab as it is related to the late payment of subsidy.

Reply of PSPCL:

PSPCL agree with the points raised by objector and prays to Hon'ble Commission kindly allow the said amounts.

View of the Commission:

Refer to para 2.7 of this Tariff Order.

Issue No 20: Regarding RPO compliance for 2016-17

Regarding RPO compliance for 2016-17 Commission has stated that the four Micro Hydel Stations of PSPCL with total capacity of 3.9 MW are non-functional, it has resulted in shortfall in RPO compliance and Commission has disallowed ₹ 14 crore on this account.

It is suggested that Commission may direct PSPCL to revive and bring into operation the four Micro Hydel Projects so that the RPO requirements can be met and PSPCL can get the benefit of increased generation. The Micro Hydel Power Stations have suffered due to lack of maintenance and are in urgent need of R&M so as to restore the units into operation.

Reply of PSPCL:

The PPAs for leasing NIHPs Thuhi, Nidampur and Daudhar were signed by PSPCL with M/S Kotla Renewables Pvt. Ltd. on 16th December 2016. These Projects are expected to be commissioned in the FY 2018-19 while the negotiations for allocation of the fourth MHP i.e.; Rohti are in progress by the O/o CE/Civil Design & Construction, PSPCL, Patiala.

View of the Commission:

The Commission notes the efforts made by PSPCL for reviving 4 micro hydel projects at Daudhar, Nidampur, Rohti and Thuhi.

Issue No 21: The year-wise energy generation from 2 × 9 MW units of Mukerian-2.

The date of commercial operation of 2 × 9 MW units of Mukerian-2 Extension Project may be informed by PSPCL. The year-wise energy generation from these units may be determined after taking into account the date of COD. The COD of the 2nd unit of 9 MW was achieved in the 4th quarter of 2017-18 and so its generation may not be assessed for the full year of 2017-18.

Reply of PSPCL:

Date of Commercial operation of 2X9 MW MHP stage –II

1. Unit No.2 was commissioned /synchronized with the Grid on 19.05.2017 & date of commercial operation is 06.06.2017
2. Unit No.1 has been commissioned /synchronized on 03.02.2018 the date of commercial operation has not been declared yet due to various faults in the machine and same shall be declared after the rectification of faults by BHEL.

PSPCL also agree with the point raised by PSEB engineers Associations

View of the Commission:

The generation from Unit II has been considered for the period after COD on 06.06.2017.

Issue No 22: Variable charges of IPPs

It is stated in the TO that variable charges have been assumed as 294 paisa per unit (GVK), 264.05 paisa per unit for TSPL and 227.80 (NPL). Since variable charge is the most critical parameter for billing and tariff of the IPPs, particulars in the case of TSPL and NPL where the competitive bid rate was in terms of station heat rate and not in terms of ₹ per unit. PSPCL should therefore closely monitor the parameters of coal GCV and coal cost since the entire billing for IPP energy depends upon these two parameters. In case the cost or GCV figure gets inflated, it would directly result in over charging of PSPCL. PSPCL should give details of present system of fuel costing by IPP.

a) To ensure that the GCV is not reduced or shown as reduced whereby IPP would be entitled to bill for a higher quantity of coal.
b) To ensure that there is no over invoicing of coal cost as this straightway reflects in higher billed rate of energy (variable charges)
c) Similar precautions are required in the case of GCV also.

PSPCL to ensure that the parameters of coal which impact upon the billing rate of energy (variable charges) are closely checked and monitored so that there is no scope of over-charging.

The present scheme of checking and verification of coal parameters should be informed by PSPCL.

Apart from the parameters which directly impact billing and recovery of fuel charges, the other parameters are equally important to be checked and monitored by PSPCL.

a) MOEF norms that ash content of coal must not exceed 34% for stations located more than 1000

KMs from the coal mine.

b) TSPL is known to have used coal with ash content as high as 40% or even higher which impacts the quantum of railway freight and has direct financial implication. PSPCL may be directed to give the data in context of ash content for 2017-18 in respect each of the IPPs.

c) The environmental norm of suspended particulate matter (SPM) is important from view of norms /limits as well as public health. PSPCL is required to monitor the IPPs on this aspect also particularly in the case of environmental pollution caused by TSPL.

Reply of PSPCL:

GCV measurement at the plants of M/s TSPL & M/S NPL is being carried out by committees constituted by the O/o GHTP, Lehra Mohabbat & GGSSTP Ropar respectively.

In case of GVK, the measurement of GCV at project site of GVK is being conducted by a third party appointed by M/s GVK. In this regard, proposal for creation of posts for sampling and testing of coal on, as received' & 'as fired' at the premises of 3 No. IPPs of Punjab is also under consideration.

View of the Commission:

Objector may note the response of PSPCL.

Issue No 23: **Details of variable charges of GVK**

PSPCL has provisionally accepted the fixed cost of GVK Goindwal as ₹704.72 crore resulting in fixed charges of ₹1.926 per unit. Power purchase data as given by PSPCL shows that the overall energy rate of GVK Goindwal is ₹8.70 per unit for the three years period of MYT-TO. PSPCL should give the details of how the fixed tariff cost of the GVK project has been taken as ₹704.72 crore. The details of variable charge components of charge for GVK should also be supplied by PSPCL for cross verification by the Commission.

Reply of PSPCL:

The calculation for Fixed Tariff cost of GVK as ₹1.926/kWh has been submitted.

View of the Commission:

The determination of GVK tariff is under the consideration of the Commission in a separate petition.

Issue No 24. ARR of Thermal Stations

The ARR figures of PSPCL thermal stations were worked out by the Commission as on 23.10.17 while Govt. of Punjab has taken a decision to shut all the four units of Bathinda and two out of six of Ropar from 1.1.2018. However in view of the three year MYT-TO of the Commission, the operational status as on 23.10.2017 should be maintained and all the thermal units should be kept in operation as this was the basis on which the tariff was calculated.

Reply of PSPCL:

PSPCL schedules the required power out of all the available resources strictly in the order of merit. The decision of strutting down / Surrendering of any share in power allocations solely falls under purview of GoP and taking the cognizance of the financial impact of same on the ARR lies with the Hon'ble PSERC. As the decision of closing down the generating units was taken after submission of APR 2017-18 & revised Estimates for 2018-19, so the corrective measures (if any) shall be taken care of during truing up of ARR for the relevant year.

View of the Commission:

Objector may note the response of PSPCL. GoP’s policy decision is based on the recommendation of Board of directors of PSPCL.

Issue No 25: Review of PPAs with generators and traders for purchase of power from outside the State of Punjab.

The directive has been given by the Commission for review of PPAs with generators and traders for purchase of power from outside the State of Punjab. The objective is to surrender high cost/ unwanted power from those sources for which PSPCL has to pay the capacity charged without taking any energy.

Reply of PSPCL:

After reviewing all Long term PPAs/BPSAs, 11 no. NTPC/NHPC generating station (Anta, Auriya, Dadri, Jhaar, Unchahar-I, Farakka, Kahalagon -1 of NTPC an Sewa-ii, Chamera-iii, Uri-ii& Prabati-iii of NHPC) have been recognized for surrender of power share on mutual agree term. The same matter is repeatedly being taken up by the Govt. of Punjab with the Ministry of Power, GoI with the latest D.O. letter being written by Secretary Power, GoP to Secretary Power, GOI on dt. 9.11.2017.

Also, a legal opinion regarding surrender of power share has been taken by PSPCL and the advocate Mr. M.G. Rmachandran opined thet PSPCL cannot treat any agreement as terminated unless the generating company agrees to the same.

Analysis wing was created in the Planning Organisation vide O/o No.03/SE/Plg-3 dated 2.1.2015 in compliance to the directive of PSERC issued against the suo-moto petition No. 54/2014.

View of the Commission:

Objector may note the response of PSPCL.

Issue No 26: Review of PPAs with IPPs of State of Punjab.

The same principle and directive for review of PPAs for stations located outside Punjab would equally apply to the IPPs located within the State of Punjab and accordingly the PPAs of these three IPPs would also require to be reviewed / revised particularly taking into account the principles contained in the Power Policy of Gujarat dated Jan-2009 which gives the home State the option to surrender the unwanted power on yearly basis for which the capacity charges are not to be paid by the Home State while the IPP is free to utilize that surrendered capacity to generate and sell power in the market to any purchaser of its choice.

Reply of PSPCL:

Regarding review of PPAs of IPPs, it is submitted that there is no provision for review of PPAs signed with IPPs. However, only the Clause “Term of Agreement” which is form the “Effective Date” to “Expiry Date” exists in the PPAs of IPPs.

Also as per PPA clause 4.4 of IPPs “if the procurer does not avail of power upto the available capacity provided by the seller and provisions of Article 4.4.2 have been complied with, the seller shall be entitled to sell such Available Capacity not procured, to any person without losing the right to receive the capacity charges from the procurer for such Un-available Capacity"

View of the Commission:

Objector may note the response of PSPCL.

Issue No 27: Directive of load flow study, stability and contingency analysis, monitoring of voltage and losses.

Regarding system analysis wing, PSPCL should seriously implement the Commission’s directive as it is extremely important for purpose of load flow study, stability and contingency analysis, monitoring of voltage and losses etc. This analysis would also be useful in checking the transmission losses which are a very important parameter being watched and monitored by the Commission.

Reply of PSPCL:

System Analysis wing was created in the Planning Organisation vide O/o No.03/SE/Plg-3 dated 2.1.2015 in compliance to the directive of PSERC issued against the suo-moto petition No. 54/2014.The process of Expression of Interest for getting more information about the various options from different firms offering Load flow studies is underway and will be floated shortly.

View of the Commission:

Refer to Directive No. 5.16 of this Tariff Order.

Issue No 28: Plan to meet future load growth

The directive No.7.35 of MYT-TO states as under:

As per the Demand Supply scenario submitted by PSPCL in petition No. 41 of 2016 (Suo-moto) to the Commission, PSPCL is surplus in terms of Peak Demand (MW) up to FY 2019-20 and in terms of energy (MU) up to FY 2020-21. It is expected to become deficit in Peak Demand from FY 2020-21 onwards and in energy from FY 2021-22 onwards. PSPCL is directed to submit its action plan for the next 15-20 years."

In view of above directive the units of GNDTP and GGSSTP that have been retired on 01.01.2018 need to be restored to operation.

Reply of PSPCL:

On the subject cited above, Punjab State Govt vide memo no. 1/15/17- EB(PR)/832 dated 21.12.2017 decided permanent closure of all units of Guru Nanak Dev Thermal Plant and 2 units of GGSSTP, Ropar with effect from 01.01.2018. This decision was taken in line with the guidelines of Central Electricity Authority (CEA) to retire inefficient and economically unviable power plants in operation for more than 25years. Accordingly PSPCL implemented the above decision through issuing notification memo no. 464/76 dated 09.02.2018 of CE/Th, PSPCL Patiala. As per the Demand-Supply scenario submitted by PSPCL in petition no.41 of 2016 (Suo-moto) to the PSERC commission, it is expected to become deficit in Peak Demand / Energy requirement for 4-5 months (June-October) from FY 2021-22 onwards. Thus, to meet the power deficiency scenario, PSPCL may continue to go for short term purchase of Power.

Therefore, as soon as the decision to reinstate the closed units is taken by the Punjab Govt. in future, it will be implemented by PSPCL.

View of the Commission:
Refer to Directive No.5.34 of this Tariff Order.

Issue No 29: Subsidy burden on PSPCL and advance subsidy payable
Vide MYT-TO dated 23.10.17, Commission has worked out the subsidy payable as ₹8007.98 crore and balance subsidy of previous year as ₹2909.42 crore totaling ₹10917.40 crore. Subsidy payment is to be done in advance monthly installments.
Since Govt. of Punjab has totally failed to pay the subsidy amount in advance monthly installments for current financial year 2017-18, in terms of section 65 of Electricity Act 2003, the Govt. instructions for subsidy will not be operative and the tariff without subsidy should be made applicable by the Commission.
The Govt. of Punjab has admitted that it is unable to make the advance monthly payment of subsidy since
a) State Govt. revenue has been disrupted/ reduced due to introduction of GST
b) State Govt. has to pay amount of ₹ 3000 crore per year on food account.
These problems and constraints stated by Govt. of Punjab for 2017-18 would be equally applicable next year 2018-19 also. In view of the admission of the Govt. of Punjab for reduced/ delayed subsidy payments for 2017-18, the Commission is requested to ensure that subsidy payment default does not repeat in 2018-19 as it has occurred in 2017-18. A simple method is to inform Govt. the subsidy for 2018-19 can be allowed only if the subsidy amount of 2017-18 is fully paid as per Commission order. In case, the subsidy defaults for 2017-18 continuous beyond 31.3.2018, then the subsidy should not be allowed for next financial year 2018-19.
Reply of PSPCL:
PSPCL agree with the issue raised by Objector and request to Hon'ble Commission to ensure that subsidy payment will be made in advance as per of section 65 of Electricity Act 2003.
View of the Commission:
The manner of the payment of subsidy has been advised in para 6.52 of this Tariff Order.

Issue No 30: IPPs Fuel cost payments should be scrutinized/ checked properly.
It is observed that all the parameters and factors that have bearing upon the ARR and impact the ARR and which are to be included for recovery through tariff are being closely scrutinized and verified/ checked by the Commission. However two major parameters are not being scrutinized/checked, and these two parameters have the maximum financial impact. These two parameters are:
a) Fuel cost of IPPs b) Fuel GCV of IPPs
Clearly, the IPP cannot be expected or relied upon to determine the billing figures by itself which would give a large scope for increased or inflated billing.

When the competitive bidding for IPP was based on Station Heat Rate basis then clearly for converting the SHR to Rs per unit variable charges, the only relevant parameters are required viz
a) GCV of coal
b) ₹ per tonne rate of coal
The measurement and verification of these parameters is of utmost importance in view of the quantum of billing involved. PSPCL which has to pay the energy bill of IPPs must have a foolproof and vigorous / correct system of verifying the billing data on the basis of which the bills have been raised. In particular, the sampling of coal and measurement of GCV has to be monitored and cross checked by PSPCL in addition to verification of coal cost invoices. In the past, the Commission has been cross checking and verifying the fuel data including GCV and cost in respect of PSPCL thermal stations. On similar basis and even more stringent and effective checking/ verification has to be done by PSPCL and monitored by the Commission so that there is no chance of scope of increased billing.
Reply of PSPCL:
Matter is addressed to Hon'ble Commission. However, at present GCV measurement at the plants of M/s TSPL & M/S NPL is being carried out by committees constituted by the O/o GHTP, Lehra Mohabbat & GGSSTP Ropar respectively.
In case of GVK, the measurement of GCV at project site of GVK is being conducted by a third party appointed by M/s GVK. In this regard, proposal for creation of posts for sampling and testing or coal on, as received' & 'as fired' at the premises of 3 No. IPPs of Punjab is also under consociation.
View of the Commission:
The suggestion of the objector has been noted.

Issue No. 31: Prayer to Hon'ble Commission

It is requested that Hon'ble Commission may consider and take action as deemed fit on the various proposals /suggestions submitted during hearing of 16 Feb 2018 and in particular to advise State Govt under Sec 86(2) of the Electricity Act 2003 to restore the units of GNDTP and GGSSTP to operational status keeping in view the extended life under R&M- L/E policy of CEA as well as expenditures incurred in R&M-L/E.

Reply of PSPCL:

Point is addressed to Hon'ble Commission. Hence, no comments to offer.

View of the Commission:

The suggestion of the objector has been noted.

Objection No.19: Er.Gaurav Singh, House No.594, Mohyal Nagar, Jalandhar City-144001

Issue no. 1: Policy Framework for Rooftop SPV Systems.

Objector has proposed a policy framework for the installation of Rooftop solar system.

Reply of PSPCL:

1. For the installation of Rooftop solar system, PSPCL has already issued commercial circular no. 22/2015 dated 08.06.2015 in which the instructions/guidelines for grid interactive Rooftop solar power system under Net metering have been laid down. As per this circular, the consumers of PSPCL who intend to set up Rooftop solar PV plants in their premises shall be eligible to do so with project capacity ranging from minimum 1 KWp upto 1 MWp (AC Side).
2. Increasing of capacity more than 30% rated capacity of Distribution Transformer may increase the level of difficulty in regulating the power. Since the roof-top solar energy shall be available only during day time, that too for a comparatively shorter duration, they will pose great challenge to the regulation of power which shall be difficult to surmount.
3. For allowing the consumers to install Rooftop Solar system upto their 100% load capacity then PSPCL will have to back down their generating plants as well as Pvt. IPPs for which huge amount of fixed charges will have to be paid by PSPCL which in turns will burden the consumers.
4. PSPCL has observations on addition of RE Power into PSPCL System as under:-
   a) Punjab is power surplus State (Conventional Power), Conventional Power projects shall be backed down & surrender other cheaper power totally especially in the winter seasons.
   b) The fixed charges have to be borne by the PSPCL/Consumers of Punjab for the Conventional Power, for which long term PPAs have already been signed.
   c) The power generation from all the Renewable Energy Sources is infirm power and cannot be relied upon to meet the load profile of the system.
   d) PSPCL is dependent upon the Thermal Plants for meeting its base load and practically it is not possible to frequently ramp up & ramp down the Thermal Plants during the day.
   e) Scheduling of power is another problem in case of more Solar and Non-Solar RE Power.
   f) The addition of more and more NRSE Power especially solar power in the state of Punjab will make the system unstable/unreliable and PSPCL may face operational problems in managing the power from conventional and non conventional sources simultaneously.
   g) PSPCL has purchased excess solar power from solar developers than the target fixed for RPO. Moreover, PSPCL is surplus in power so addition of any infirm solar power will add to cost of power to PSPCL and no increase in revenue.

View of the Commission:

The response of PSPCL is self explanatory. The Policy for Rooftop SPV system is framed by the State Government. However, the Commission has already notified PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering) Regulations, 2015 in this regard.

Objection No.20: PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.

Issue No. 1 (A): Composition of power purchase system of PSPCL

The present composition of power system is such that the major portion of energy is supplied through power purchase and the contribution from own thermal stations has reduced over the years The power purchase component includes ISGS of Central sector, as well as IPP of Punjab.

Issue No. 1 (A-1): Advantages of own Thermal Stations:

Even though the scheduling may be done as per merit order, nevertheless own thermal station have clear advantage when fixing of power is required, say due to weather changes, Load crash etc.;

These are advantages as described hereunder:
Whereas there is limit to backing down of ISGS/Central Sector Stations/Pvt Sector IPPs there is no limit to flexing of own thermal generation. If Ropar TPS, is operating at say 5x200 MW in case of load crash in state , PSPCL has the option to immediately order shutdown of units without delay as per grid loading conditions so as to avoid penal UI regime payments. On the other hand IPPs in Punjab would be entitled to time gap of 4 time blocks even if Punjab reduces their schedule and the response will not be as quick as in case of Punjab's own thermal stations.

Issue No. 1(A-2): Grid Operation particularly in matter of UI:
Gird operation can be practically economized, particularly in matter of UI only if the capacity, of PSPCL generation is significant. In the past year, non paddy season, there were extended periods when all the units in all the 3 TPS of Punjab were shut down on low demand. Under these conditions if there is any overdraw then PSPCL would have no option of increasing own thermal generation and would have to resort to extra load shedding to control the overdraw UI.
Reply of PSPCL to Issue No.1 (A), 1(A-1) & 1(A-2):
CEA conveyed minutes of meeting held on 9th and 10th June 2016 regarding retirement/renovation /replacement of old and inefficient subcritical units by supercritical units. In these MOMs, it was intimated that CEA is carrying out an exercise for the future plan of action in respect of thermal power plant units which are at least 25 years old as on 31.03.2016 and are not operating efficiently to consider for retirement or explore the possibility of replacement by supercritical units. CEA exercise was based on four parameters viz age of unit, unit heat rate, PLF and variable charges. But the retiring of units is also based on other factors like requirement for installation of FGD as per MOEF guidelines issued during Dec.2015, Power surplus scenario in the state, operation of units as per merit order based on per unit cost and base load etc.
View of the Commission:
Objector may note the response of PSPCL.

Issue No 2: Maximization of Own Thermal Generation
The advantages of retaining full capacity at Ropar and Bhatinda have been stated in NRLDC letter of 1-2-2018, in matters of grid operation. PSPC will be able to draw extra power from the grid in case the generation from PSPCL thermal stations is maximized.
Reply of PSPCL:
Northern Regional Power Committee of Ministry of Power, Govt. of India issued MoM vide letter no. NRPC/Comml/209/TCC (36th)/2017 dated 4.10.2017 supplied a list of Units identified for retirement which included unit 1 &2 of GNDTP Bathinda and unit 1 & 2 of GGSSTP Ropar. The phasing out plan for these units was up to Dec 2017. GNDTP Bathinda does not meet the new guidelines issued by MOEF&CC in Dec., 2015 in terms of emission norms mandatorily required Flue Gas Desulphurization system. The same cannot be installed at GNDTP for the want of required space/area and if installed anywhere this will further increase the per unit cost of energy.
View of the Commission:
Objector may note the response of PSPCL.

Issue No.3: Decision to shut down/retire all the 4 units at GNDTP and 2 units at GGSSTP
As regards the decision to shut down/retire all the 4 units at GNDTP and 2 out of 6 unit at GGSSTP the statement in CEA document may be seen and further objector has quoted CEA references w.r.t. above decision.
Reply of PSPCL:
The Merit Order of a process indicates the order in which power from various available sources is utilized. In this process, sources of power are being considered in ascending merit order of variable cost. Sources of power with the lowest variable cost/unit are required to be scheduled first (Base load) and those with the highest cost/unit at last (Peak load). GNDTP, Bathinda has highest variable cost.
View of the Commission:
Objector may note the response of PSPCL.

Issue No. 4: PLF reduction of OWN thermal generations
The PLF of Ropar and Bhatinda units has reduced in past years not due to unit problems but simply due to reduced schedule because of IPPs having surplus availability. Thus the decision to retire the Bhatinda and Ropar units was not due to poor performance but due to low scheduling caused by surplus capacity of IPPs
Reply of PSPCL:
The Performance sheet including all major Performance parameters of the GGSSTP related to

performance of the plant is given below from Financial Year 2010-11 to 2016-17.

Fin. Year	Total Gen.	PLF	Aux.		Sp. Coal	Sp. oil cons.	Heat Rate	Th. Efficy.	Reserve Outage + Back-down		Cost at Bus. As MIR
	MUs	(%)	MUs	(%)	Kg./Kwh	ml/Kwh	(Kcal/ Kwh)	(%)	MUs	(%)	Paise/ Kwh
2010-11	9717.85	88.04	788.10	8.11	0.649	0.37	2566	33.52	657.32	5.96	239.31
2011-12	9563.96	86.41	807.46	8.44	0.648	0.46	2564	33.54	649.99	5.87	257.80
2012-13	9166.57	83.05	767.23	8.37	0.625	0.47	2538	33.89	1155.47	10.47	306.20
2013-14	8005.87	72.53	675.68	8.44	0.626	0.72	2575	33.39	1978.78	17.93	361.03
2014-15	5751.42	52.11	490.71	8.53	0.705	0.93	2682	32.07	4433.02	40.16	443.02
2015-16	3959.00	35.77	358.30	9.05	0.688	1.11	2847	30.21	6508.32	58.80	558.89
2016-17	2776.32	25.15	268.21	9.66	0.669	1.49	2802	30.69	7554.92	68.45	559.96

It is clear from the above data that Generation at GGSSTP Ropar has decreased from 9717.85 MUs in 2010-11 to 2776.32 MUs in 2016-17 due to Reserve Outage and back down which has increased from 657.32 MUs (5.96%) in 2010-11 to 7554.92 MUs (68.45%) in 2016-17.

Due to increase in Reserve Outage and Back down which is imposed by Power Controller, PSPCL according to demand the Performance parameters like PLF, Aux. Consumption, Specific Oil Consumption, Heat Rate, Thermal Efficiency of the GGSSTP deteriorates. Heat rate which was 2566 Kcal/ Kwh in 2010-11 deteriorated to 2802 Kcal/ KWh in 2016-17. Auxiliary Consumption increased from 8.11% in 2010-11 to 9.66% in 2016-17. PLF deteriorated from 88.04% in 2010-11 to 25.15% in 2016-17. Specific oil consumption increases due to continuous shutdown and start operations of the GGSSTP Units. Thermal Efficiency of the plant also decreased during this period.

View of the Commission:

Objector may note the response of PSPCL.

Issue No.5: Closer of GNDTP and 2 units at GGSSTP

In case of Rajasthan Suratgarh TPS while 6x250 MW capacity is operational addl MW unit is under construction. Similarly in case of Chabra TPS after 4x250 MW units running, 2x660 MW units are being completed. In case of Gujarat Wanakbori and AP Vijaywada in addition to old 210 MW units being retained extra 800 MW super critical units have been completed. There is clear evidence how States other than Punjab are retaining old units and adding supercritical capacity Punjab is the reverse example of retiring running units (in good condition) without adding any super critical capacity. There is no clear strategy or plan of Punjab to meet future load growth and the plan is being executed in reverse direction by reducing/retiring existing capacity. Power purchase expenses, being highest /largest component of ARR would certainly shoot up further with retirement of 460+420 MW capacity.

Reply of PSPCL:

CE/Thermal Designs Agenda No.222 dated 26.06.2017 for retirement of unit No. 1 & 2 of GNDTP Bathinda and unit No. '1 & 2 GGSSTP Ropar and Agenda No.223 dated 04.08.2017 for retirement of unit 3 & 4 of GNDTP, Bathinda was put up to BODs of PSPCL for consideration and decision. Agenda No. 223 was considered by BODs of PSPCL in their 58th meeting held on 11/08/2017 at Mohali and it was decided as under:

> "RESOLVED THAT administrative approval for the retirement of unit no 3 & 4 of GNDTP Bathinda be and is hereby accorded and it is recommended that case be put up to the Cabinet, Govt, of Punjab for consideration and approval for retirement of unit 1 to 4 of GNDTP, Bathinda and unit-I & 2 of GGSSTP, Ropar.
>
> FURTHER RESOLVED THAT intimation to CEA, Govt. of India regarding retirement of units be sent thereafter."

View of the Commission:

Objector may note the response of PSPCL.

Issue No.6: Detailed study required for future capacity requirements for own generation

Under Sec 86 (2) of Act, Commission is requested to advise GoP to retain the thermal units and make detailed study of future capacity requirements.

Reply of PSPCL:

OSD/ Power reforms, Govt. of Punjab vide his office memo no.1/15/2017 V 18(PR)/832 dated 21.12.2017 has intimated that the Cabinet, Govt. of Punjab in its meeting held on 20/12.2017 has taken following decisions regarding permanent closure of 460MW GNDTP Bathinda and unit no. 1 & 2 GGSSTP Ropar which are being reproduced (translated in English) hereunder:

"After deliberations on memorandum of Power Wing dated 19.12,2017, the proposal given at its Para-2.0 is approved, The Cabinet also appraised that in para 2 (iii) and 2 (iv) favour may be given to natural gas also along with other sources."

2.0 Para -2.0 of memorandum referred above discussed by the Cabinet, Govt. of Punjab on 20.12.2017 is reproduced as under:

"2.0 The Cabinet is requested to consider and approve following proposal,-

i) Keeping in view the guidelines of CEA for retiring in-efficient plants which are in operation for more than 25 years and their uneconomical operation, all units of GNDTP Bathinda and unit no. 1 & 2 of GGSSTP Ropar be permanently closed w.e.f . 01 .01 .2018.
ii) After closing the units permanently the regular employees working there be adjusted in PSPCL and contractual workers should not be retrenched and surplus contractual employees in the same capacity be adjusted in PSPCL, PSTCL, IPPs i.e. GVK, TSPL and NPL as near as possible.
iii) To meet with shortage of power in the State, generation capacity be added from wind power, solar power and renewable energy sources.
iv) PSPCL to explore feasibility study in the near future for establishing 5xB00MW plant with supercritical technology at Ropar"

View of the Commission:

Objector may note the response of PSPCL.

Issue No.7: Operating stress on own thermal plants to operate at low capacity during day hours due to solar power.

Under GoI policy to add 175 GW capacity in country by 2022 (100 GW solar, 60 GW wind and 15 GW small hydro) Punjab must make assessment of how much capacity would be taken by Punjab and how the grid would be managed under the scenario of non conventional capacity addition. In view of 100 GW solar target the operating stress would be on own thermal plants to operate at low capacity during day hours and ramp up very fast with the reduction of 'solar power in evening. Such flexibility cannot be expected from Private sector IPPs like TSPL etc. Retirement of running units would not be the solution.

Reply of PSPC:

Matter is not related to current proceeding of ARR. Henceforth, no comments to offer at this stage.

View of the Commission:

Since the matter is not related to current ARR the objection and reply of PSPCL is noted for consideration of the Commission separately.

Objection No. 21: Government of Punjab, Department of Power (Power Reforms Wing)

Issue No.1: APR for FY 2017-18 and RE for FY 2018-19

PSPCL has submitted Annual Performance Review (APR) for the year 2017-18 and revised estimates for the year 2018-19. The Commission may scrutinize claims of PSPCL keeping in view the commercial interests of PSPCL and interests of consumers. PSERC may kindly pass the final order.

View of the Commission:

The Commission examines the ARR and determine the tariff as per Regulations after prudence check of all expenses of the distribution licensee.

Issue No.2: Strict compliance of Directives of the Commission

The attention of Commission is drawn to Chapter 7 – Directives in the Tariff Order for the Financial Year 2017-18 wherein it has been reported that PSPCL is yet to comply with large number of directives issued by the Commission. Majority of the directives are aimed at improving the efficiency of PSPCL and addressing the grievances of the consumers. It is requested that Commission may ensure strict compliance of the directives and if necessary through invocation of the penalty provisions of the Indian Electricity Act.

View of the Commission:

The Commission notes the concern of GoP. The implementation of directives is monitored and action is taken as & when required. Refer Chapter 5 of this Tariff Order.

Issue No.3: Excess claim of Pumped Energy of AP

The attention of Commission is also drawn to Chapter 2 – True up for the Financial Year 2014-15 and Chapter 3 – True up for the Financial Year 2015-16. It is a matter of regret that as many as 40% Divisions of PSPCL have claimed AP consumption more than the actual pumped energy. As can be seen from the tariff order, Powercom has claimed excess pumped energy to the extent of 35% and 43% during the year 2013-14 and 2014-15 respectively. Powercom has been erroneously claiming that the AP feeder meters were faulty whereas on checking by PSERC it was found that meters were in perfect working condition. Moreover there is little chance of high accuracy AMR Feeder Meters not working. Powercom officials have been wilfully claiming excess power subsidy.

Similarly for the year 2015-16 the excess subsidy claimed was about 26%. PSERC may kindly have the concerned officers identified and exemplary punishment be awarded to them. It is quite possible that the excess claim was not limited to the feeders checked by the PSERC and the practice may have been rampant throughout the State.

View of the Commission:

In order to curb the tendency of the field officers to inflate pumped energy of AP feeders, the Commission has already issued detailed guidelines/directions in its order dated 19.04.2017 in Suo-moto petition no. 42 of 2016. PSPCL was also directed to identify the delinquent officials/officers for submitting wrong pumped energy data to the Commission and initiate disciplinary proceedings against them. PSPCL should submit the latest status in this regard to the Commission.

Petition No.05 of 2018

True Up for FY 2016-17

Objection No. 1: Sh. P.P. Singh, Vice President (E&U), Nahar Fibres (Prop.Nahar Spinning Mills Ltd., 373, Industrial Area 'A', Ludhiana-141003.

Issue No.1: True Up without CAG Audit Report

The true up ARR of 2017-18 now supplied is only audited by statutory auditor and CAG audit report and action there on has not been supplied along with ARR

Reply of PSPCL:

PSPCL has not submitted the true up for FY of 2017-18. However, PSPCL has submitted the true Up for FY 2016-17 as per statutory Audited Account. As per notification dated 16th February 2015 by Ministry of Corporate Affairs, Indian Accounting Standard (IND-AS) are applicable to PSPCL from FY 2016-17, because its net worth exceeds ₹500 crore. Further annual accounts as on 01st April, 2015 and 31st March, 2016 also need to be converted as per IND-AS. Further, PSPCL has requested Hon'ble Commission to allow PSPCL to submit True Up for FY 2016-17 based on Statutory Audit report as CAG Auditing is in progress and the CAG report shall be submitted to Hon'ble Commission at later stage.

Moreover, Hon'ble Commission has allowed PSPCL to submit True Up for FY 2016-17. PSPCL has submitted the True Up for FY 2016-17 on 12-2-2018.

View of the Commission:

The Commission has issued directive to PSPCL for timely submission of CAG report for FY 2016-17.

Issue No.2: Relaxation of SHR and Aux Consumption parameters for frequent backing down of Thermal Plants.

PSPCL has not maintained separate stand alone accounts for the twin activities being performed by it and also not provided/providing daily availability of its thermal plants to SLDC as per state grid Code and not backing down/ shut down the plants as per MOD. Objector also claimed that PSPCL is not ready to subject its thermal plants under intra state UI mechanism its plants were kept shut down as their variable cost is very high and PSPCL purchased short term power from bilateral sources/power exchange being cheaper than variable cost. PSPCL has claimed improved/relaxed parameters for its thermal plants in addition to normal fixed charges towards Depreciation, ROE, Employee cost and Op and Mtc. charges. If relaxed parameters are to be approved then the variable charge for thermal plants needs to be worked out accordingly for comparison with the cost of short term bilateral/IEX power before certifying that the short term power is really cheaper, since PSPCL purchased short term power though plants were available. The liability of relaxed norms would not have accrued, if these plants would have operated and thus this is a charge for intentionally not operating the plant and therefore variable charge would reduce by that amount.

Reply of PSPCL:

PSPCL is monitoring the record of energy imported & exported at its 220KV grid substations and also the schedule of daily availability of thermal plants is available with Power Controller, Patiala> If any unit is unavailable due to any of the reason Operation Circle of the plant informs the Power Controller, Patiala regarding unavailability. The backing down/ shutting down of the thermal plant Units is done strictly as per the instructions of Power Controller, Patiala. Further, Annual/ Capital Maintenance jobs are carried out only as per the approved maintenance schedule & no maintenance jobs are being done during shutting down. Since PSPCL Thermal Plants are kept available throughout the year to cater to the power demand, except when the Units are under annual/ capital maintenance jobs which are as per approved maintenance schedules, which means Plant Availability Factor of plants is near to 100%. In view of above PSPCL requested the Hon'ble commission to allow relaxed performance parameters for state own generating stations. PSPCL mentioned in the petition that as per power demand scenario in the State of Punjab, State Thermal Generating Units remained under reserve shutdown for longer period and even during operational period the units were backed down for maximum time as per directions of Power Controller (PC), Patiala. Frequent stop/start after reserve shutdown and running of units under backing down affects the performance of units. PSPCL also submitted that the relaxation is being provided by other SERCs for their State Generating Companies based on the ground realities.

View of the Commission:

Refer to para 2.6 of this Tariff Order.

Issue No.3: Return on Equity

PSPCL has increased in the equity share capital from ₹2617.61 crore to ₹6081.43 crore which has led to increase of ROE from ₹405.73 crore to ₹942.62 crore.

Reply of PSPCL:

As the matter is subjudice in the Hon'ble Supreme Court, hence, PSPCL has no comments to offer at this stage.

View of the Commission:

The Commission has considered Return on Equity as per PSERC Tariff Regulations, 2005 and as per Stay Order of the Hon'ble Supreme Court.

Issue No 4: Revenue Gap and its Financing

Wide revenue gaps every year in true up clearly indicate that either the figures are being inflated or revenue requirement determined by PSERC has no consideration for PSPCL which is incurring expenditure at their will. The expenditure already denied by the Commission in the previous tariff has been again claimed by PSPCL.

Reply of PSPCL:

In APR for FY 2017-18, Revised Estimates for FY 2018-19 and True Up for FY 2016-17, the methodology adopted by PSPCL for True up for FY 2016-17, APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the regulatory principles set by Hon'ble Commission and PSERC MYT Regulations. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case there is any change in the expenditure with respect to the proposed expenditure the same is adjusted during the truing up process. Moreover Hon'ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon'ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. The determination of tariff is prerogative of Hon'ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant year by Hon'ble PSERC.

PSPCL has not claimed any expenses which were disallowed by Hon'ble Commission in earlier Tariff Orders. If any expense is denied by Hon'ble Commission for respective year and PSPCL is in appeal for the same before Hon'ble ATE, then PSPCL has to claim such expenses to maintain their stand before Hon'ble ATE in ensuing years. Further, PSPCL files an appeal before Hon'ble ATE as per Section 111 of the Electricity Act, 2003 only when it is aggrieved by Order of the Hon'ble Commission. Hence, it is not true to say that PSPCL is not bothered to adhere to the approved expenditure.

View of the Commission:

Revenue Gap is determined by the Commission keeping in view the expenses and Income approved by the Commission as per PSERC Regulations.

Issue No 5: Interest and Finance Charges

Working capital loans of PSPCL are reducing however long term loans are increasing in nature. Interest on such loans should not be passed on to the consumers. The mismatch between the ARR approved by the Commission in the Tariff Order and actual expenses incurred by the PSPCL on its own should be met through internal accruals and ROE being retained by PSPCL.

Reply of PSPCL:

PSPCL has adopted the Govt. of India's (GOI) UDAY Scheme for financial and operational turnaround of Discom and MOU for this is signed amongst Minister of Power, GOI, Govt. of Punjab (GoP) and PSPCL as 4-3-2016 As per the provisions of MOU Govt. of Punjab has issued special

Bonds amounting to ₹9859.72 Cr during 2015-16 and ₹ 5768.54 Cr. during 2016-17 and handed over the proceeds to PSPCL as GoP loan. With this proceeds, PSPCL has prepaid its high cost loans. Due to this long term loan of PSPCL has increased and short term loan has been decreased during 2015-16.

As the long term loan, has increased during 2015-16 due to UDAY Scheme, the ratio of equity and long term has decreased from 0.57 to 0.29.

As far as difference in interest on loans is concerned, PSPCL has claimed interest charges on the basis of actual interest paid against the loans availed by PSPCL, whereas PSERC allows the same on normative basis. As such the interest burden of excess working capital loans is being borne by PSPCL and is not being passed on the consumers.

Breakup of other interest charges of ₹ 12.39 cr. is as under:

Sr. No.	Particulars	Amount in Cr.
1	Interest to Supplier	2.19
2	Interest on refunded amount decided by DSC	0.42
3	Bank guarantee charges	2.71
4	Other bank charges	6.82
5	Misc Charges	0.25
Total		**12.39**

View of the Commission:

Interest on Working Capital is allowed on normative basis in line with PSERC Tariff Regulations after prudence check.

Issue No 6: High cost of power purchase

PSPCL is purchasing costly powers form CGS and it is evident that PSPCL is not following merit order surrender/purchase of power and PSERC directives.

Reply of PSPCL:

As rate of power purchased on short term basis is ₹3.43/ KWH. it is well below the rate approved by commission i.e. ₹3.90 so cost of power purchased on short term basis cannot contribute to increase in the per unit energy cost of ARR. As surrender energy in ARR figure indicates the net surplus energy of whole year while True-up is indicating actual purchase of power on short term basis as per deficit of peak demand or variation in availability due to various reasons during different parts of year as per requirement. So it is not relevant to compare the figure during True-up.

(i) PSPCL never intends to purchase of power through UI by overdrawing and sale power by under drawing through UI Over drawl & under drawl are part of system, because Punjab being a heavy power consuming state where load variations are frequent & caused by a number of reason such as day & night, crops season, winter & summer domestic load variations. Most of them are dependent on weather. During load crash situations, normally frequency is higher and UI rate is lower, so under force majeure conditions power in grid is injected at very lower rate and during normal periods when energy is drawn from grid even at normal rates, net figure of cost per unit of both under/over drawn energy comes out to be higher which results in net high per unit rate of UI, In view of this actual cost during True-up shall be considered.

(ii) Power available from Farraka, Kahalgaon, IGTPS Jhajjar and Dadri.ll are only availed as per their lower variable cost in comparison to other stations. Being the central sector generating stations, even if power is not requisitioned by PSPCL from these stations, while running on technical minimum, some quantum is booked by NRLDC in order to maintain desirable availability of power in grid in view of grid stability/security NRLDC has to maintain availability of these stations mandatory. Even after when PSPCL surrender its share fully from these stations. But to keep the stations running, very small quantum is used to be booked by NRLDC, depending upon real time operation. PSPCL is following merit order in letter and spirit. It is evident from such minimal quantum of power from costly stations i.e. RF power of Anta/Auriya/Dadri shown in True-up

View of the Commission:

Objector may note the response of PSPCL. Also refer to para 2.7 of this Tariff Order.

Issue No 7: Duplicacy in Claims of PSPCL

PSPCL has claimed early payment discount as Non Tariff Income and reduced late payment surcharge for power purchase payments from Non tariff Income. PSPCL is claiming two months receivables in working capital which includes Power Purchase payments also. Further, it also receives interest on shortfall in subsidy. Thus there is duplicity in claims which may be looked into.

Reply of PSPCL:

PSPCL has requested to the Hon'ble Commission not to consider the amount against the Late

Payment Surcharge as a part of the Non-Tariff Income for the purpose of truing-up for FY 2016-17. The interest on working capital is allowed on normative basis which is lower and does not include the actual interest which PSPCL has to fund on account of late payment. Also Late Payment Surcharge as Non-Tariff/ Other Income adversely impacts the cash flow position of the PSPCL.

PSPCL has never claimed working capital on Normative, under format 33 it is clearly mentioned that information has been provided just to compliance of format. PSPCL in true up petition for FY 2016-17 submits to the Hon’ble Commission that the total Interest & Finance Charges for the FY 2016-17 at ₹2656.51 Cr. are as per actual, in accordance with the audited annual accounts for the year be approved by the Hon’ble Commission.

View of the Commission:

The Commission determines the claim of PSPCL in-line with PSERC Regulations.

Issue No.8: RSD payments and DSM:

Payments to GoP for RSD were claimed and allowed but in true up it is shown as NIL. Similarly DSM fund of ₹10 Cr was claimed and allowed but there is no expenditure. These amounts have been recovered but used to reduce the working capital. As such these amounts be adjusted with interest.

Reply of PSPCL:

In the true up petition for FY 2016-17 PSPCL has clearly mentioned that payments to GoP for RSD are claimed under R&M expense as per methodology adopted by Hon’ble Commission. Further, PSPCL did not claim any expenditure against DSM Funds.

So far as the DSM fund utilization is concerned, it is informed that to utilize the DSM Funds approved by Hon'ble PSERC in its previous financial years, various proposals such as replacement of conventional street lights with LED street lights at PSPCL Generating Stations, Replacement of conventional lights with LED lights in the office buildings of PSPCL etc. were submitted to Hon'ble PSERC, for its approval to utilize DSM Funds for these proposals, but Hon'ble PSERC raised objection on these proposals and submitted its views as under:

> "The commission is of the view that the DSM funds are to be used to carry out energy efficiency and DSM programs for the benefit of the consumers of the state. The energy efficiency programs in the office/buildings of PSPCL, may be carried out by PSPCL from its own resources."

Therefore, in compliance to the above views/directives of Hon'ble PSERC, to utilize the DSM Funds of ₹10 Crore for each year of the Control Period i.e. FY 2017-18, FY 2018-19 and FY 2019-20) approved by the Hon'ble PSERC, for the benefit of the consumers of the state and to achieve energy saving targets this office have prepared proposals such as:

- Replacement of conventional incandescent lamps/CFLs/Tube lights and Fans with efficient 9 Watt LED lamps / 20 watt LED Tube lights and 50 Watt BEE star rated Energy Efficient Fans in the Govt. Hospital
- Pilot project on Solarisation of 11 kV Nathu Chahal Agriculture Feeder
- Ag-DSM
- Distribution of LED Lights among the consumers that falls under the category of BPL, SC & BC category of PSPCL

All the above mentioned proposals will cost more than 30 Cr. i.e. the amount approved by Hon'ble PSERC under DSM Funds up to FY 2019-20. So there are various proposals that are under consideration and after the approval of worthy CMD-PSPCL these proposals will be put up before Hon'ble PSERC for its approval, so that the DSM funds may be utilized for the benefits of consumers and to meet the peak load demand.

Therefore, it is requested to keep the funds of ₹10.00 crore for each year of the Control Period i.e. FY 20L7-1.8, FY 2018-19 and FY 2019-20, as claimed by PSPCL for implementation of DSM Programme.

View of the Commission:

O&M expenses are approved in line with PSERC Regulations.

Issue No.9: Donations to Director/Cultural Affairs, Punjab

Donation of ₹5.00 Cr to Director/ Cultural Affairs Punjab needs to be disallowed as such spending under Corporate Social Responsibility are to be incurred only when Company is in Profit for last 3 years whereas here PSPCL is incurring losses as per balance sheet.

Reply of PSPCL:

Making such donations is in the benefit of the society which is also a responsibility while running a business. The Hon’ble Commission is therefore, requested to allow this amount as a pass through to the consumers.

View of the Commission:

Donations claimed by PSPCL are disallowed in line with PSERC Regulations. Refer para 2.10 of this Tariff Order.

Objection No. 2: Sh. Mohinder Gupta, President, Mandi Gobindgarh Induction Furnace Association (Regd.), Grain Market, Mandi Gobindgarh.

Issue No.1: Return on Equity

Refer Issue No.3 of Objection No.1 of True up for 2016-17.

Reply of PSPCL:

Refer reply of PSPCL against Issue No.3 of Objection No.1 of True up for 2016-17.

View of the Commission:

Refer view of the Commission against Issue No.3 of Objection No.1 of True up for 2016-17.

Issue No 2: ARR AND CARRYING COST OF REVENUE GAP

Wide revenue gaps every year in true up clearly indicate that either the figures are being inflated or revenue requirement determined by PSERC has no consideration for PSPCL which is incurring expenditure at their will. The expenditure already denied by the Commission in the previous tariff has again claimed by PSPCL. Objector also raised the issue of higher industrial tariff due to ED+IDF+MT and shown his concern that if GoP withdraws the industrial subsidy, the industry in Punjab will become totally uncompetitive with the industry of neighbouring states and shall have to close down their factories.

Reply of PSPCL:

In APR for FY 2017-18 and Revised Estimates for FY 2018-19 and True up for the FY 2016-17, methodology adopted by PSPCL for True up for FY 2016-17, APR for FY 2017-18 and RE for FY 2018-19 is very well elaborated in the Petition and is in line with the Regulatory principles set by Hon’ble Commission and PSERC MYT Regulations. Hon'ble Commission follows a transparent process for determination of tariff and consumers are given every opportunity to present the facts in their objections. In case, there is any change in the expenditure with respect to the proposed expenditure, the same is adjusted during the truing up process. Moreover Hon’ble Commission will perform its own prudence check while approving the ARR for FY 2018-19. Further, PSPCL has requested the Hon’ble Commission to take an appropriate view on the revenue gap proposed by PSPCL as per PSERC MYT Regulation, 2014 while determining the tariff for FY 2018-19. The determination of tariff is the prerogative of Hon’ble Commission. PSPCL sell energy at the rates determined in Tariff Orders of the relevant years by Hon’ble PSERC.

PSPCL has not claimed any expenses which were disallowed by Hon’ble Commission in earlier Tariff Orders. If any expense is denied by Hon’ble Commission for respective year and PSPCL is in appeal for the same before Hon’ble ATE, then PSPCL has to claim such expenses to maintain their stand before Hon’ble ATE in ensuing years. Further, PSPCL files an appeal before Hon’ble ATE as per Section 111 of the Electricity Act, 2003 only when it is aggrieved by Order of the Hon’ble Commission. Hence, it is not true to say that PSPCL is not bothered to adhere to the approved expenditure.

Further, the tariff at which electricity can be sold to consumers is determined by the Hon’ble Commission. PSPCL sell electricity to the consumers at rates approved in the tariff order issued by the Hon’ble Commission.

View of the Commission:

Carrying cost, if any, is allowed on the Revenue Gap determined by the Commission after prudence check in line with PSERC Regulations.

Issue No. 3: Excess claim not accepted by Commission in Tariff Orders

While deciding the True up ARR for 2016-17 APTEL Order dated 16.12.2015 kept in view.

Reply of PSPCL:

Said issue has been addressed to Hon’ble PSERC. Henceforth, PSPCL has no comments to offer.

View of the Commission:

APTEL Order dated 16.12.2015 is being kept in view.

Issue No.4: Cross Subsidization of Agriculture Supply

In view of National Tariff Policy 2016 provides in para 8.3.3 PSPCL needs to think of innovative ways to restrict agriculture supply in areas where the ground water levels have reached alarming levels. Such a move will force the farmers to adopt water conserving crops, will help sustain ground water level, reduce agriculture consumption and the cross subsidy load on industry.

Reply of PSPCL:
The above issue is not related with the current proceeding of true up for FY 2016-17. Hence, no comments to offer at this stage.
View of the Commission:
Refer view of the commission against Issue No.8 of Objection No. 2.

Issue No.5: True Up without CAG Audit Report:
Refer Issue No.1 of Objection No.1 of True up for FY 2016-17.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.1 of Objection No.1 of True up for FY 2016-17.
View of the Commission:
Refer view of the commission against Issue No.1 of Objection No.1 of True up for FY 2016-17.

Issue No. 6: Higher expenses than approved for 2016-17
PSPCL has incurred higher expenses than approved for 2016-17 and same is with no reference to the regulations of tariff determination and/or the directive given in the Tariff Order 2016-17.
Reply of PSPCL:
The higher expenses incurred against those approved by the Commission for FY 2016-17, PSPCL has very well elaborated in the Petition and requested the Hon'ble Commission to kindly consider the submission of PSPCL while truing up for FY 2016-17.
View of the Commission:
The Commission determines the claim of PSPCL in-line with PSERC Regulations and with due consideration to APTEL orders.

Issue No 7: INTERST COST WITH UDAY SCHEME
Refer Issue No.5 of Objection No.1 of True up for FY 2016-17.
Reply of PSPCL:
Refer reply of PSPCL against Issue No.5 of Objection No.1 of True up for FY 2016-17.
View of the Commission:
Refer view of the Commission against Issue No.5 of Objection No.1 of True up for FY 2016-17.

Issue No 8: SURPLUS POWER AND CAPACITY CHARGE OF IDLE CAPACITY:
Objector mentioned PSERC directive to review of PPAs and pointed out that due to surrender of power consumers are being loaded with liability of Capacity charges for surplus/idle capacity and requested to the Hon'ble PSERC that scrutinize the claims and allow it after prudent check.
Reply of PSPCL:
As rate of power purchased on short term basis is ₹3.43/ KWH. It is well below the rate approved by Commission i.e. ₹3.90 so, cost of power purchased on short term basis cannot contribute to increase in the per unit energy cost of ARR.

(i) PSPCL never intends to purchase of power through UI by overdrawing and sale power by under drawing through UI. Over drawl & under drawl are part of system, because Punjab being a heavy power consuming state where load variations are frequent & caused by a number of reason such as day & night, crops season, winter & summer domestic load variations. Most of them are dependent on weather. During load crash situations, normally frequency is higher and UI rate is lower, so, under force majeure conditions power in grid is injected at very lower rate and during normal periods when energy is drawn from grid even at normal rates net figure of cost per unit of both under/over drawn energy comes out to be higher which results in net high per unit rate of UI. ln view of this, actual cost during True-up shall be considered.
(ii) Power available from Farraka, Kahalgaon, IGTPS Jhajjar and Dadri-ll are only availed as per their lower variable cost in comparison to other stations. Being the central sector generating stations, even if power is not requisitioned by PSPCL from these stations, while running on technical minimum, some quantum is booked by NRLDC in order to maintain desirable availability of power in grid in view of grid stability/security NRLDC has to maintain availability of these stations mandatory. Even after when PSPCL surrender its share fully from these stations. But to keep the stations running, very small quantum is used to be booked by NRLDC, depending upon real time operation. PSPCL is following merit order in letter and spirit. lt is evident from such minimal quantum of power from costly stations i.e. RF power of Anta/Auriya/Dadri shown in True-up.

View of the Commission:
Objector may note the response of PSPCL.

Punjab State Electricity Regulatory Commission
SCO No.220-221, Sector-34A, Chandigarh
Tel.0172-2648321, Fax:0172-2664758.

PARNEET MAHAL SURI, IRS
Secretary

D.O. No PSERC/M&F/267/2422

Dated: 7.03.2018

Dear Sh. Karan Avtar Singh ji,

Subject: Annual Performance Review for FY 2017-18 and revised estimate for FY 2018-19 in the Multi Year Tariff (MYT) for FY 2017-18 to FY 2019-20 of PSPCL and PSTCL – Payment of Subsidy by the State Government for FY 2018-19.

The Commission has finalized the true-up for FY 2016-17, APR for FY 2017-18 and ARR for FY 2018-19 respectively of both the Utilities and Tariff for various consumer categories has been determined.

2. The State Government vide its Memo. No 11/24/2013-PE2 (PF-1)/3382, dated 17.10.2017 and Memo No. 2/5/2015-PE2/6161 dated 17.10.2017 respectively conveyed its commitment to supply free power to AP consumers, 200 units per month to SC DS, Non-SC BPL DS and BC DS consumers with a connected load upto 1 KW subject to the condition that subsidy on account of free supply of 200 units per month with a connected load upto 1 KW shall be provided only to BPL SC DS, BPL Non-SC DS and BPL Backward classes consumers only provided that their total consumption in the preceding years has not been more than 3000 units per annum.

3. The State Government vide Memo No.11/24/2013-PE2(PF-1)/3382 dated 17.10.2017 decided regarding subsidised power to industry as under:

"iv. Further, the state shall continue to provide power at the rate of Rs.4.99 per unit to all new/prospective industries that have applied to Invest Punjab after 31st October, 2015 and to that extent the state shall provide Rs.16.22 Crore for Medium supply and Rs.97.09 Crore for Large Supply industries.

Further, the Council of Ministers in its meeting held on 16.10.2017 has approved to provide power at a variable tariff of Rs.5.00 per KVAH for five years with no increase in the existing fixed electricity tariff. The variable electricity tariff shall be applicable to all manufacturing and IT & ITES industries. The State shall provide the necessary budgetary support to PSPCL for providing power at this subsidised rate to the industry."

4. The Government further vide its Memo No. 2/5/2015-PE2/6161 dated 17.10.2017 has decided to provide subsidised power to industry as under:

   "It is further intimated that SP consumers may be charged at a variable tariff of Rs.5.00 per KWH for five years with no increase in the existing fixed electricity tariff. For other MS and LS consumers, it may be read as Rs.5.00 per KVAH as per our earlier letter dated 17.10.2017."

5. Assuming that the Government of Punjab will continue with its commitment, the requirement of subsidy for the year FY 2018-19 will be approximately as follows:

Particulars	**Amount (₹ Crore)**
Subsidy on account of Agricultural Supply (AP)	6256.09
Subsidy on account of free supply up to 200 units per month to SC DS (₹1107.69) and Non-SC BPL DS (₹69.21) consumers with a connected load up to 1 kW	1176.90
Subsidy for Electricity Concession of 200 units per month to Other Backward Class DS consumers with sanctioned load up to 1 kW	75.43
Subsidy for consumers under Freedom Fighters category	0.83
Subsidy amounting to ₹61.11 crore for Small Supply, ₹174.90 crore for Medium Supply & ₹1204.94 crore for Large Supply Industry	1440.95
Total subsidy payable during FY 2018-19	**8950.20**

The Commission has determined the payment of subsidy of ₹8950.20 crore (approximate) by the GoP to PSPCL for FY 2018-19. The subsidy of ₹8950.20 crore is required to be paid in advance in 12 equal monthly instalments during FY 2018-19.

6. The subsidy payable by GoP on account of levy of Fuel Cost Adjustment (FCA) surcharge, if any, will be in addition to the amount worked out in para 5 above.
7. Further, the State Government is required to pay the balance subsidy of FY 2017-18 before 31st March, 2018.

It is further requested that advance instalments on the 1st of the every month for FY 2018-19 (of the amount as determined in Para 5) be released to PSPCL.

GoP may kindly inform about its commitment to pay the subsidy as mentioned above by 20th March, 2018.

With warm regards,

Yours sincerely,

Parneet

(Parneet Mahal Suri)

Sh. Karan Avtar Singh, IAS
Chief Secretary to Govt. of Punjab,
Chandigarh.

Endst. No : PSER/MSP/267/2423 Dated : 7.03.2018

CC:

Sh. Satish Chandra, IAS
Addl. Chief Secretary to Govt. of Punjab,
Department of Power
Punjab Civil Secretariat –II Sector-9,
Chandigarh.

Secretary

Annexure-IX

GOVERNMENT OF PUNJAB
DEPARTMENT OF POWER
(Energy Branch)

To

The Secretary,
Punjab State Electricity Regulatory Commission,
SCO No.220-221, Sector 34-A,
Chandigarh.

Memo.No.7/71/2017-PR2/1736
Dated, Chandigarh, the 18 April, 2018

Subject: - **Annual Performance Review (APR) for 2017-18 and Revised Estimates for FY 2018-19 in the Multi Year Tariff (MYT) for FY 2017-18 to FY 2019-20 of PSPCL and PSTCL – Payment of Subsidy by the State Government for FY 2018-19.**

Kindly refer to your D.O. No.PSERC/M&F/267/2423 dated 7.3.2018 on the subject cited above.

2. The State Government has decided as under: -

i) Free power to AP section would continue as in 2017-18.

ii) Concessional Power Subsidy to DS consumers belonging to SC, BC and Non-SC BPL would continue as per the Policy in 2017-18.,

iii) Subsidised power to industry would also continue as in 2017-18.

iv) Subsidised power to new industry through Invest Punjab also to continue as in 2017-18.

The concurrence of Finance Department has been obtained vide their I.D.No.10/34/2016-2FE4/1212426/1 dated 17.4.2018.

18/4/18
Superintendent

CC:

The Chairman-cum-Managing Director,
Punjab State Power Corporation,
Patiala.