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

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

PETITIONS FILED BY PSTCL 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 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 transmission business of the Punjab State Transmission Corporation Limited (PSTCL). The petitions filed by PSTCL, facts presented by PSTCL in its various submissions, objections received by the Commission, issues raised by the public in hearings held at Amritsar, Patiala, Ludhiana and Chandigarh, the responses of PSTCL 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 for the integrated utility by the Punjab State Electricity Board (Board) for the years 2002-03 to 2006-07, 2008-09, 2009-10, 2010-11 and by PSTCL 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 2019-20. Tariff Order for FY 2007-08 had been passed by the Commission in suo-motu proceedings.

PSTCL has submitted that it is a Transmission Licensee for transmission of Electricity in the areas as notified by the Government of Punjab vide Notification no. 1/9/08-EB (PR) 196 dated 16.04.2010. The Government of Punjab, in terms of Section 39 of the Act, notified PSTCL as the State Transmission Utility (STU). PSTCL is vested with the function of intra-state transmission of Electricity in the State of Punjab and the operation of State Load Dispatch Centre (SLDC).

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.

PSTCL filed petition for True up for FY 2014-15, Review of FY 2016-17, approval of ARR and Transmission Tariff for MYT control period from FY 2017-18 to FY 2019-20 (Petition No. 89 of 2016) and subsequently filed Petition No. 34 of 2017 for True up for FY 2015-16, which were disposed of vide order dated 23.10.2017 as per the terms stipulated therein.

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

PSTCL has filed the Petition for APR for FY 2017-18 and Revised ARR & Tariff for FY 2018-19 on 30.11.2017.

The petitioner has prayed to the Commission to:

a) admit the petition seeking approval of Annual Performance Review for FY 2017-18, revised ARR for FY 2018-19 and determination of Tariff for FY 2018-19 in accordance with PSERC MYT Regulations, 2014;

b) allow to submit True up for FY 2016-17 as an additional submission in accordance with provisions of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005;

c) approve the estimated Revenue Gap arising on account of APR for FY 2017-18 along with carrying cost and its recovery through Tariff in FY 2018-19, as worked out in this petition;

d) approve the ARR forecast and Tariff for FY 2018-19 for Transmission Business and SLDC;

e) invoke its power under Regulations 66 and 67 in order to allow the deviations from PSERC MYT Regulations, 2014, wherever sought in this petition;

f) allow additions/alterations/modifications/changes to the petition at a future date;

g) allow any other relief, order or direction, which the Commission deems fit to be issued;

h) condone any error/omission and to give opportunity to rectify the same.

On scrutiny of the petition, it was noticed that the Petition was deficient in some respects. The deficiencies were conveyed to PSTCL vide letter no. PSERC/Tariff/T-216/1620 dated 13.12.2017. The reply to deficiencies was furnished by PSTCL vide its Memo. No. 4196/FA/APR-1A/2017-18 dated 20.12.2017. Accordingly, after taking into consideration the reply of PSTCL dated 20.12.2017, the petition was taken on record on 28.12.2017 as Petition No. 65 of 2017.

1.3 Objections and Public Hearings

A public notice in respect of Petition for APR for FY 2017-18 and Revised ARR for FY 2018-19 (no. 65 of 2017) was published by PSTCL in The Tribune (English), Hindustan Times (English), Jagbani (Punjabi), Punjabi Tribune (Punjabi) and Punjab Kesri (Hindi) on 02.01.2018 inviting objections from the general public and stake holders on the petition filed by PSTCL. Copies of the Petition including deficiencies pointed out by the Commission and reply of PSTCL to the deficiencies were made available on the website of PSERC and PSTCL and in the offices of the Financial Advisor, PSTCL, 3rd Floor, Shakti Sadan, Opposite Kali Mata Mandir, The Mall, Patiala, Liaison Officer, PSTCL Guest House, near Yadvindra Public School, Phase-8, Mohali and also in the offices of the Chief Engineer/P&M, PSTCL, Ludhiana and Superintending Engineers, P&M Circles, Ludhiana, Patiala, Jalandhar, Amritsar and Bhatinda.

In the public notice dated 02.01.2018, objectors were advised to file their objections with the Secretary of the Commission within 30 days of the publication of notice, with an advance copy to PSTCL. The public notice also indicated that the Commission, after perusing the objections received, may invite such objector(s) as it considers appropriate for hearing on the dates to be notified in due course.

Public notice mentioning the summary of the submissions contained in Table 26, 27 and 28 of the Petition giving information to the general public/stake holders was published in The Tribune (English & Punjabi), Hindustan Times (English), Jagbani (Punjabi) and Punjab Kesari (Hindi) on 23.01.2018.

The Commission decided to hold public hearings at Amritsar, Patiala, Ludhiana and Chandigarh. A public notice to this effect was published in various news papers i.e. The Tribune, Punjab Kesri, Jagbani, Punjabi Tribune and Hindustan Times on 13.01.2018, as well as uploaded on the website of the Commission. The objectors and consumers whose objections were received by 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 intimated that the Commission will also hear the comments of the Punjab State Power Corporation Limited and Punjab State Transmission Corporation Limited on the objections raised by the public besides Corporations' own point of view at Commission's office i.e. 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 for FY 2016-17

PSTCL filed Petition (04 of 2018) for True up of FY 2016-17 on 09.02.2018, which was admitted and taken on record on 13.02.2018. The Commission noticed certain deficiencies in the petition and conveyed the deficiencies to PSTCL vide letter no. PSERC/2201 dated 16.02.2018. PSTCL vide Memo no. 509/FA/APR-IA/2017-18 dated 19.02.2018 submitted its replies to the deficiencies.

Public notice was published by PSTCL in The Tribune (English), Hindustan Times (English) on 14.02.2018 and in Jagbani (Punjabi), Tribune (Punjabi) and Punjab Kesri (Hindi) on 16.02.2018, inviting objections, if any, together with supporting material within twenty one days from the date of the publication of notice. Public hearing was to be held on 07.03.2018 and comments of PSTCL to the objections raised by Public besides Corporation's own point of view were to be heard on 09.03.2018 at the Commission's office, 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 PSTCL on the objections/comments received from public and other stakeholders were heard by the Commission on 22.02.2018. No member of the public attended the public hearing on 07.03.2018.

1.6 The Government of Punjab was approached by the Commission vide DO letter No. 1878 dated 08.01.2018 seeking its views on the Petition no. 65 of 2017 for APR for FY 2017-18 and ARR for FY 2018-19. Further, the views of the Government on Petition No. 04 of 2018 for True up of FY 2016-17 were sought vide DO letter No. 2193 dated 16.02.2018. In response, Government of Punjab, vide Memo. No. 1/2/2018-EB (PR)/367 dated 28.03.2018, submitted its comments / observations on the same.

1.7 The Commission received 4 written objections including the comments of Government of Punjab. All objections were received after the due date. The Commission decided to take 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.	Industry association	1
2.	PSEB Engineers' Association	2
3.	Government of Punjab	1
	Total	**4**

The complete list of objectors is given in **Annexure-II** to this Tariff Order. PSTCL submitted its comments on the objections, which were made available to the respective objectors. A summary of issues raised in objections, the response of PSTCL and the view of the Commission is contained in **Annexure-III** 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 PSTCL 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 4** of this Tariff Order.

1.10 In this Order, the Commission has dealt with Petition No. 65 of 2017 for Annual Performance Review for FY 2017-18, Revised Annual Revenue Requirement & determination of Tariff for FY 2018-19 and Petition No. 04 of 2018 for True up of FY 2016-17 filed by PSTCL.

Chapter 2
True up for FY 2016-17

2.1 Background

The Commission had approved the ARR and Tariff for FY 2016-17 in its Tariff Order dated 27.07.2016, which was based on costs and revenue estimated by the Punjab State Transmission Corporation Limited (PSTCL) for its Transmission and SLDC functions. PSTCL 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 PSTCL. Now, PSTCL has submitted true up of FY 2016-17, based on audited annual accounts for the year.

This Chapter contains a true up of FY 2016-17, based on figures submitted by PSTCL in Petition No. 04 of 2018.

2.2 Transmission System Availability

2.2.1 PSTCL, in the True-up petition, has submitted its month-wise average Transmission System Availability for FY 2016-17 as shown in Table 2.1.

Table 2.1: Transmission System Availability of PSTCL for FY 2016-17

Sr. No.	Month	Availability (%)
1.	April, 2016	99.97
2.	May, 2016	99.92
3.	June, 2016	99.91
4.	July, 2016	99.94
5.	August, 2016	99.91
6.	September, 2016	99.94
7.	October, 2016	99.98
8.	November, 2016	99.98
9.	December, 2016	99.18
10.	January, 2017	99.72
11.	February, 2017	99.96
12.	March, 2017	99.95
	Average Availability	**99.86**

2.2.2 Incentive on Transmission System Availability

PSTCL's Submissions:

PSTCL has submitted that as per PSERC Tariff Regulations, it is eligible for incentive for over achieving the availability targets for transmission system availability, which has been verified and certified by SLDC.

PSTCL has prayed to approve the incentive of ₹23.94 crore for transmission system availability, for FY 2016-17. PSTCL has submitted the working of incentive on the basis of fixed charges for Transmission Unity as given in Table 2.2.

Table 2.2: Incentive on Transmission System Availability for FY 2016-17 submitted by PSTCL

(₹crore)

Sr. No.	Month	Monthly Transmission Charges	Transmission Charges including Incentive	Incentive
1.	April, 2016	103.59	105.67	2.08
2.	May, 2016	107.04	109.13	2.10
3.	June, 2016	103.59	105.60	2.02
4.	July, 2016	107.04	109.16	2.12
5.	August, 2016	107.04	109.12	2.09
6.	September, 2016	103.59	105.64	2.05
7.	October, 2016	107.04	109.20	2.16
8.	November, 2016	103.59	105.68	2.09
9.	December, 2016	107.04	108.33	1.29
10.	January, 2017	107.04	108.92	1.88
11.	February, 2017	96.68	98.61	1.93
12.	March, 2017	107.04	109.17	2.13
	Total	**1260.28**	**1284.22**	**23.94**

Incentive has been determined as per Regulation 10(3) of PSERC (Terms and Conditions for Determination of Tariff Regulations, 2005.

Commission's Analysis:

Regulation 10(3) of PSERC Tariff Regulations, 2005 regarding excess or under recovery with respect to norms and targets states as under:

"(3) The Transmission licensee shall be paid transmission charge (inclusive of incentive) for a calendar month for a transmission system or part thereof

= AFC x (NDM / NDY) x (TAFM / NATAF)

Where, AFC = Annual fixed cost specified for the year, in Rupees

NATAF = Normative annual transmission availability factor shall be taken as 98%

NDM = Number of days in the month

NDY = Number of days in the year

TAFM =Transmission system availability factor for the month, in %, calculated by the respective Transmission Licensee, got verified and certified by the SLDC."

The Commission vide letter no. 2325 dated 22.02.2017 requested Chief Engineer/SLDC to verify the month wise transmission system availability submitted by PSTCL. Chief Engineer/SLDC vide its letter no. 306 dated 07.03.2018 has verified the same, which has been shown in Column III of Table 2.3. Accordingly, the Commission has determined the incentive for achieving transmission system availability more than the norms laid by the Commission, as per approved ARR of Transmission Business in Table 2.11 of this Tariff Order as shown in Column VI of Table 2.3.

Table 2.3: Incentive on Transmission System Availability for FY 2016-17 determined by the Commission

Sr. No.	Month	Availability (%)	Monthly Transmission Charges (₹ crore)	Transmission Charges inclusive of Incentive (₹ crore)	Incentive (₹ crore)
I	II	III	IV	V	VI
1.	April, 2016	99.98	95.68	97.61	1.93
2.	May, 2016	99.96	98.88	100.86	1.98
3.	June, 2016	99.96	95.68	97.59	1.91
4.	July, 2016	99.98	98.88	100.88	2.00
5.	August, 2016	99.96	98.88	100.86	1.98
6.	September, 2016	99.94	95.68	97.57	1.89
7.	October, 2016	99.98	98.88	100.88	2.00
8.	November, 2016	99.97	95.68	97.60	1.92
9.	December, 2016	99.84	98.88	100.74	1.86
10.	January, 2017	99.91	98.88	100.81	1.93
11.	February, 2017	99.94	89.29	91.06	1.77
12.	March, 2017	99.98	98.88	100.88	2.00
	Total		**1164.17**	**1187.34**	**23.17**

Thus, the Commission approves the incentive of ₹23.17 crore for achieving transmission system availability higher than the norms laid by the Commission during FY 2016-17.

2.3 Transmission Loss

PSTCL had projected the transmission loss at 4.0% for FY 2016-17 in its ARR for FY 2016-17. Since PSTCL had not completed the intra-state boundary metering, the Commission retained the transmission loss at 2.5% for FY 2017-18, and decided that the Commission would revisit the transmission loss in the review/true up for FY 2016-17, after the boundary meters are provided and energy audit is conducted.

PSTCL in the ARR for FY 2017-18, submitted the transmission loss figures from July, 2016 to March, 2017. The Commission in the Tariff Order for FY 2016-17 observed that there was huge variation in the monthly transmission loss figures submitted by PSTCL from July, 2016 to March, 2017, due to non-stabilization of data and it may take more time to stabilize. Accordingly, the Commission had retained the transmission losses at 2.50% as approved in the Tariff Order for FY 2016-17 and had decided that it will be re-visited during true up of FY 2016-17.

PSTCL's Submissions:

PSTCL in the True-up petition submitted that the transmission loss figures were available from July, 2016 onwards till March, 2017. Since, these transmission losses are for a period of nine (9) months only, hence, to normalise the computation of the losses, the transmission losses for the period from April, 2017 to June, 2017 has been taken into account. The transmission losses for the period from July, 2016 to June, 2017 works out as 3.88%. Accordingly, PSTCL prayed to the Commission to approve the transmission losses of 3.88% for FY 2016-17.

Commission's Analysis:

The Commission notes that though PSTCL had completed the boundary metering, the data was yet to stabilize. In the absence of reliable data for the complete year of FY 2016-17, it would not be possible to determine the transmission losses of PSTCL for the year. **As such, the Commission retains the transmission losses for FY 2016-17 at 2.50% as approved in the Tariff Orders for FY 2016-17 and FY 2017-18.**

2.4 Employee Cost

2.4.1 In the ARR Petition for FY 2016-17, PSTCL had projected employee expenses of ₹399.47 crore for its Transmission Business and ₹6.73 crore for its SLDC Business for FY 2016-17. The Commission had approved employee cost of ₹361.48 crore for Transmission Business and ₹7.26 crore for SLDC Business to PSTCL for FY 2016-17.

2.4.2 In the Review Petition for FY 2016-17, PSTCL had submitted revised estimates of employee cost of ₹461.66 crore for Transmission Business and had claimed ₹7.25 crore for SLDC Business for FY 2016-17 The Commission approved the revised employee cost of ₹370.31 crore for Transmission Business and ₹7.24 crore for SLDC Business of PSTCL at the time of Review of FY 2016-17.

PSTCL's Submissions:

2.4.3 In the True Up Petition for FY 2016-17, PSTCL has submitted employee expenses of ₹435.42 crore for Transmission Business and ₹6.54 crore for SLDC Business based on Audited Annual Accounts for FY 2016-17 (net of capitalization of ₹43.43 crore). The detail of Employee Cost claimed by PSTCL for 2016-17 is summarized in Table 2.4.

Table 2.4: Employee Cost claimed by PSTCL for FY 2016-17

(₹crore)

Sr. No.	Particulars	Transmission	SLDC	PSTCL
1.	Terminal Benefits	262.80	0.12	262.92
2.	Other Employee Cost	172.47	6.42	178.89
3.	Arrears of pay revision	0.15	0.00	0.15
Total Employee Cost		**435.42**	**6.54**	**441.96**

PSTCL has further stated that employees recruited by PSTCL are covered under New Pension Scheme (NPS) and are entitled to gratuity under the provisions of Payment of Gratuity Act, 1972. For the purpose of True up, PSTCL has considered the Terminal benefits for employees of erstwhile PSEB. The terminal liabilities towards NPS is considered based on actual payout made. The petitioner has not considered any progressive funding of terminal benefits in view of the pending appeal before Hon'ble Supreme Court. PSTCL has submitted actual claim of ₹172.47 crore as 'Other Employee Cost' for Transmission Business and ₹6.42 crore for its SLDC Business based on Audited Annual Accounts. PSTCL has also claimed ₹0.15 crore as arrear of pay revision for Transmission Business paid during the year 2016-17.

The Petitioner further submitted that it is also entitled for the additional employee cost pertaining to new installations/network for the assets added during the year in accordance with Regulation 28 (3) which allows additional employee cost in case of new installations on case to case basis keeping in view the principles and methodologies enunciated in these Regulations.

The Petitioner submits that the transmission system consisting of substations and lines have increased manifold since April 16, 2010 which needs extra man power to maintain it. The PSERC regulations also support this but no methodologies/principles have been enunciated by the Hon'ble Commission in the Regulations.

Commission's Analysis:

2.4.4 The O&M expenses have been determined as per Regulation 28 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (as amended from time to time).

2.4.5 The terminal benefits are required to be apportioned and allowed in the ratio of 88.64% and 11.36% between PSPCL and PSTCL respectively as per Transfer Scheme. PSTCL has claimed Terminal benefits of ₹262.80 crore for Transmission Business and ₹0.12 crore for SLDC Business. An amount of ₹4.57 crore of 'other terminal benefits' relating to provision for Solatium, Gratuity and Leave Encashment in respect of employees recruited by company and ₹4.04 crore for contribution paid for employee towards NPS, CPF, PF, LWF, Miscellaneous-P.F. inspection fees, Solatium, Momento etc. has been depicted in the total amount of terminal benefits of ₹262.92 crore in the Audited Annual Accounts. Provisions for Solatium, Gratuity and Leave Encashment is not allowable as per Regulation 33 of PSERC Tariff Regulations, 2005, which states that with regard to unfunded past liabilities of pension and gratuity, the Commission will follow the principle of 'pay as you go'.

PSTCL's share @11.36% of terminal benefits has been depicted as ₹254.31 (₹254.19 for Transmission Business+₹0.12 for SLDC Business) crore in the Audited Annual Accounts for PSTCL and same is allowed. In addition to the above, ₹4.04 crore for contribution paid for employee towards NPS, CPF, PF, LWF, Miscellaneous-P.F. inspection fees, Solatium, Momento etc is also allowed for FY 2016-17.

Thus, the Commission allows terminal benefits of ₹258.23 crore for Transmission Business and ₹0.12 crore for SLDC Business of PSTCL for FY 2016-17.

2.4.6 The Petitioner claims an addition of 826 employees in the past years from FY 2013-14 onwards. However, as per submissions of PSTCL in its petition, employee strength was 3717 as on 16.04.2010 and 2870 as on 31.03.2017. No proposal for increase of employee's strength from FY 2010-11 onwards has been submitted to the Commission in any of the tariff related proposals, therefore, the claim of additional employees cost does not seem to be justified. The Hon'ble High Court of Punjab and Haryana in Civil Writ Petition No. 4881 of 2011 filed by M/s. Ludhiana Hand tools Association Ludhiana V/S (i) the State of Punjab (ii) PSPCL and (iii) PSERC vide decision dated November 27, 2013 has decided as under:

"It is thus, in the fitness of things that respondent No. 2 must operate within certain frame work while having the leverage as an independent public sector corporation to look its affairs. Thus, in the matter of deployment of personnel, it should obtain guidelines from the Commission, which can always be done at the time of tariff fixation for each year and should, thus, abide by the observations/directions of the Commission qua this aspect as that forms the basis of the tariff fixation. In our view, this is sufficient to protect the interest of the public at large. We make it clear that the issue of Lineman was taken up only as an illustrative one and, thus, these directions are to be applied across the Board for deployment of personnel. This would also save money for the State of Punjab as it is professing financial crunch in respect of various aspects pending before the Court."

2.4.7 As per 28(3)(ii) Regulations, increase in 'other employee cost' is to be limited to average Wholesale Price Index (WPI) and Consumer Price Index on the base 'other employee cost' approved for FY 2011-12. The 'Other Employee Cost' in the true up for FY 2011-12 has been approved at ₹92.20 crore for Transmission Business and ₹5.72 crore for SLDC Business in 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)*100} increase in WPI. Consumer Price Index (CPI) increase is calculated at @41.62% {(275.92-194.83/194.83)*100} (index of base year 2011-12 increased from 194.83 to 275.92 in FY 2016-17). With combination of 0.50 of WPI+0.50 of CPI, there will be an increase of 26.61% [(11.60+41.62/2)} which is applicable for FY 2016-17.

2.4.8 By applying WPI & CPI combined increase @26.61% on 'Other Employee Cost' of ₹92.20 crore approved for the base year FY 2011-12, the 'Other Employee Cost' for FY 2016-17 works out to ₹116.73 ([92.20*126.61]100) crore for Transmission Business and ₹7.24(5.72*126.61/100) crore for SLDC Business. Accordingly, the Commission approves 'Other Employee Cost' of ₹116.73 crore for Transmission Business on normative basis and restrict amount of ₹6.42 crore for SLDC Business as per actual for FY 2016-17.

PSTCL has also claimed ₹0.15 crore as arrear of pay revision for Transmission Business paid during the year 2016-17. The Commission allows ₹0.15 crore as arrear of pay for FY 2016-17 for Transmission Business.

Therefore, the Commission allows total Employee Cost of ₹375.11 (258.23+0.15+116.73) crore for Transmission Business and ₹6.54 (6.42+0.12) crore for SLDC Business for FY 2016-17.

2.5 Repair and Maintenance (R&M) Expenses

2.5.1 In the ARR Petition for FY 2016-17, PSTCL projected R&M expenses of ₹45.76 crore for its Transmission Business and ₹5.96 crore for its SLDC Business for FY 2016-17 against which the Commission approved ₹47.28 crore and ₹4.54 crore as R&M expenses for Transmission Business and SLDC Business of PSTCL respectively.

2.5.2 In the Review of ARR Petition for FY 2016-17, PSTCL revised its claim of R & M expenses to ₹49.11 crore for its Transmission Business and ₹10.05 crore for its SLDC Business. The Commission approved the revised R&M expenses of ₹19.71 crore for Transmission Business and ₹6.45 crore for SLDC Business of PSTCL during the Review of FY 2016-17, based on provisional Annual Accounts submitted by PSTCL.

PSTCL's Submissions:

2.5.3 In the True Up Petition for FY 2016-17, PSTCL has claimed total R&M expenses of ₹26.06 crore (₹25.83 crore for Transmission Business and ₹0.23 crore for its SLDC Business) based on the Audited Annual Accounts for FY 2016-17 (net of capitalization of ₹0.50 crore).

Commission's Analysis:

2.5.4 Regulation 28(2)(b) of the PSERC Tariff Regulations, 2005 provides for adjusting base of 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.

2.5.5 The Commission had approved R&M expenses of ₹25.92 crore for Transmission Business and ₹1.93 crore for SLDC Business for FY 2011-12 in para 3.5.7 of Tariff Order FY 2014-15, on Gross Fixed Assets of ₹5265.17 crore and ₹5.50 crore as on 01.04.2012 for Transmission Business and SLDC Business respectively.

2.5.6 Regulation 28(2)(a) of the PSERC Tariff Regulations, 2005, provides for adjusting base O&M expenses approved by the Commission in the True-up of FY 2011-12 in proportion to increase in Whole Sale Price Index (all Commodities) to determine O&M expenses for the subsequent year. The Gross Fixed Assets as on 01.04.2016 are to the tune of ₹8385.09 crore for Transmission Business and ₹14.78 crore for SLDC Business. Therefore, base R&M expenses for FY 2016-17 works out to ₹41.28 (25.92/5265.17*8385.09) crore for Transmission Business and ₹5.19 (1.93/5.50*14.78) crore for SLDC Business. By applying WPI increase @11.60% on the base R&M expenses of 41.28 crore, the R&M expenses works out to ₹46.07 (₹41.28*111.60/100) crore for Transmission Business and ₹5.79(519*111.60/100) crore for SLDC Business for FY 2016-17.

2.5.7 PSTCL has an addition of assets worth ₹496.56 crore and ₹3.88 crore for Transmission and SLDC Business respectively. The average percentage rate of R&M expenses of ₹46.07 crore for assets of ₹8385.09 crore works out to 0.55%(46.07/8385.09).PSERC vide its letter No. 1746 dated 29.12.2017 has called for the information relating to the assets capitalized during FY 2016-17. PSTCL vide letter no. 282/FA/Comml.-23/Vol-V dated 29.01.2018 has supplied details of assets addition of ₹500.44 crore during FY 2016-17. It has been observed that PSTCL has also capitalized the assets pertaining to previous years during FY 2016-17. PSERC vide its letter no.2421/PSERC/Dir./M&F dated 07.03.2018 has called for the reasons for not capitalizing the assets pertaining to previous years during the respective year of its commissioning. PSTCL vide its Memo No. 698 dated 09.03.2018 has intimated that the requisite information shall be supplied as soon as it is available. However, based on the information provided by PSTCL vide its letter No. 282/FA/Comml.-23/Vol-V dated 29.01.2018, the Commission determines addition of capital assets of ₹324.46 crore for Transmission Business and ₹2.56 crore for SLDC Business for FY

2016-17 as per Regulation 28(6) of the PSERC Tariff Regulations, 2005 on pro-rata basis.

By applying the average rate of 0.55% on addition of assets of ₹324.46 crore, the allowable R&M expenses for FY 2016-17 work out to ₹1.78 [324.46 x 0.55%] crore. Thus, the total R&M expenses for Transmission Business works out to be ₹47.85 (46.07+1.78) crore. However, PSTCL has claimed ₹25.83 crore as R&M expenses for Transmission Business based on Audited Annual Accounts. Hence the expenses are limited to the actual expenses as per Regulation.

The Commission accordingly allows ₹25.83 crore as R&M expenses for Transmission Business.

There was an addition of assets of ₹3.88 crore for SLDC Business during FY 2016-17. The average percentage rate of R&M expenses of ₹5.79 crore for asset of ₹14.78 crore works out to 39. 17% (5.79/14.78*100). By applying the average rate of 39.17% on addition of assets of ₹2.56 crore, the allowable R&M expenses for FY 2016-17 works out to ₹1.00 [(2.56 x 39.17%] crore. Thus, the total R&M expenses for SLDC Business work out to ₹6.79(5.79+1.00) crore. However, the PSTCL has claimed ₹0.23 crore as R&M expenses for SLDC Business based on the Audited Annual Accounts. Hence, the expenses are limited to the actual expenses as per Regulation.

In view of above, the Commission approves ₹26.06 (₹25.83 crore for Transmission Business + ₹0.23 crore for SLDC Business) crore of R&M expense for FY 2016-17.

2.6 Administration and General (A&G) Expenses

2.6.1 In the ARR Petition for FY 2016-17, PSTCL projected A&G expenses of ₹24.90 crore for its Transmission Business and ₹7.06 crore for its SLDC Business crore for FY 2016-17, against which the Commission approved ₹21.74 crore and ₹1.82 crore as A&G expenses for Transmission Business and SLDC Business of PSTCL respectively.

2.6.2 In the Review Petition for FY 2016-17, PSTCL revised its claim of A&G expenses of Transmission Business to ₹22.75 crore and ₹2.91 crore for SLDC Business. The Commission approved the revised A&G expenses as ₹15.58 crore for Transmission Business and ₹1.86 crore for SLDC Business of PSTCL at the time of Review of FY 2016-17.

PSTCL's Submissions:

2.6.3 In the True up Petition for FY 2016-17, PSTCL has claimed total A&G expenses of

₹17.98 crore (₹17.25 crore for Transmission Business and ₹0.73 crore for its SLDC Business) based on the Audited Annual Accounts for FY 2016-17 (net of capitalization of ₹5.13 crore).

Commission's Analysis:

2.6.4 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 approved ₹11.59 crore for Transmission Business and ₹0.56 for SLDC Business for FY 2011-12 on Gross Fixed Assets of ₹5265.17 crore and ₹5.50 crore as on 01.04.2012 for Transmission Business and SLDC Business respectively.

2.6.5 Opening GFA as on 01.04.2016 are to the tune of ₹8385.09 crore for Transmission Business and ₹14.78 crore for SLDC Business. Therefore, base A&G expenses for FY 2016-17 work out to ₹18.46 (11.59/5265.17*8385.09) crore for Transmission Business and ₹1.50 (0.56/5.50*14.78) crore for SLDC Business. As mentioned above, there is WPI increase of @11.60% for FY 2016-17. By applying WPI increase @11.60% on the base A&G expenses of ₹18.46 crore, the A&G expenses work out to ₹20.60 (₹18.46*111.60/100) crore for Transmission Business and ₹1.67 (1.50*111.60/100) crore for SLDC Business for FY 2016-17.

2.6.6 In the Audited Annual Accounts for FY 2016-17, PSTCL has disclosed capitalization of assets worth ₹496.56 crore for Transmission and SLDC Business during FY 2016-17. The opening value of GFA as on 01.04.2016 was ₹8385.09 crore for STU and ₹14.78 crore for SLDC. The average percentage rate of A&G expenses of ₹20.60 crore for assets of ₹8385.09 crore works out to 0.25% (20.60/8385.09). As discussed in para 2.5.7 of this Order, the Commission determines addition of capital assets of ₹324.46 crore for Transmission Business and ₹2.56 crore for SLDC Business on pro-rata basis for FY 2016-17 as per Regulation 28(6) of the PSERC Tariff Regulations, 2005.

2.6.7 By applying the average rate of 0.25% on addition of assets of ₹324.46 crore, the allowable A&G expenses for FY 2016-17 works out to ₹0.81[324.46x 0.25%] crore. Thus, the total A&G expenses for Transmission Business works out to be ₹21.41(20.60+0.81) crore.

Similarly, there was an addition of assets of ₹3.88 crore for SLDC Business during FY 2016-17. The average percentage rate of A&G expenses of ₹1.68 crore for asset of ₹14.78 crore works out to 11.36% (1.68/14.78*100). By applying the average rate of 11.36% on addition of assets of ₹2.56 crore on pro-rata basis, the allowable A&G expenses for FY 2016-17 works out to ₹0.29(2.56 x 11.36%) crore. Thus, the total A&G expenses for SLDC Business work out to ₹1.97 (1.68+0.29) crore.

PSTCL has also claimed an amount of ₹0.28 crore as Audit Fee and ₹0.50 crore as Licence fee. As such, the total amount of A&G expenses for Transmission Business works out to ₹22.19 (21.41+0.28+0.50) crore. The total A&G expenses for SLDC Business work out to ₹1.97 crore. However, PSTCL has claimed ₹17.25 crore in Transmission Business and ₹0.73 crore in SLDC Business, based on the Audited Annual Accounts. Hence the expenses are limited to the actual expenses as per Regulation.

Thus, the Commission approves the A&G expenses of ₹17.25 crore for Transmission Business and ₹0.73 crore for SLDC Business for FY 2016-17.

2.7 Depreciation Charges

2.7.1 In the ARR Petition of FY 2016-17, PSTCL had claimed depreciation charges of ₹321.72 crore for Transmission Business and ₹1.46 crore for SLDC Business against which the Commission had approved depreciation charges of ₹210.46 crore for Transmission Business and ₹0.59 crore for SLDC Business for FY 2016-17**.**

2.7.2 In the Review Petition for FY 2016-17, PSTCL revised its claim of depreciation to ₹308.64 crore for Transmission Business and ₹1.18 crore for SLDC Business for FY 2016-17. The Commission approved revised depreciation charges as ₹263.28 crore for Transmission Business and ₹1.18 crore for SLDC Business at the time of Review of FY 2016-17.

PSTCL's Submissions:

2.7.3 In the true Up Petition for FY 2016-17, PSTCL has claimed ₹260.62 crore as depreciation charges for Transmission Business and ₹0.76 crore for SLDC Business as per Audited Annual Accounts for FY 2016-17 (net of capitalization of ₹0.29 crore). PSTCL has taken the average depreciation rate of 4.56% for Transmission and 6.74% for SLDC Business.

Commission's Analysis:

2.7.4 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).

2.7.5 The Gross Fixed Assets as on 01.04.2016(net of land and land rights) are to the tune of ₹5458.21 crore and ₹14.78 crore for Transmission Business & SLDC Business respectively. PSTCL has shown an addition (net of land and land rights) of ₹496.56 crore for Transmission Business and₹3.88 crore for SLDC Business to Gross Fixed Assets due to capitalization of assets during FY 2016-17. PSTCL has supplied details of assets addition ₹500.44 crore during FY 2016-17. PSERC vide its letter No. 1746 dated 29.12.2017 has called for the information relating to the assets capitalized during FY 2016-17. PSTCL vide letter no. 282/FA/Comml.-23/Vol-V dated 29.01.2018 has supplied details of assets addition of ₹496.56 crore during FY 2016-17. It has been observed that PSTCL has also capitalized the assets during FY 2016-17 pertaining to the previous years. PSERC vide its letter No. 2421/PSERC/Dir./M&F dated 07.03.2018 has called for the reasons for not capitalizing the assets pertaining to previous years during the respective year of its commissioning. PSTCL vide its Memo No. 698 dated 09.03.2018 has intimated that the requisite information shall be supplied as soon as it is available. Based on the information provided by PSTCL vide its letter No. 282/FA/Comml.-23/Vol-V dated 29.01.2018, the Commission determines addition of capital assets of ₹324.46 crore for Transmission Business and ₹2.56 crore for SLDC Business on pro-rata basis for FY 2016-17 as per 28(6) Regulation of the PSERC Tariff Regulations, 2005.

2.7.6 Thus, closing balance of Fixed Assets as on 31.03.2017(net of land and land rights) is ₹5954.77 crore for Transmission Business and ₹18.66 crore for SLDC Business. PSTCL has claimed Depreciation as ₹260.62 crore for Transmission Business as per Audited Annual Accounts. Hence, the Depreciation is allowed at ₹260.62 crore for Transmission Business as per Audited Annual Accounts.

The Commission allows depreciation of ₹260.62 crore for Transmission Business and ₹0.76 crore for SLDC Business based on Audited Annual Accounts of PSTCL for FY 2016-17.

2.8 Interest and Finance Charges

2.8.1 In the ARR Petition for FY 2016-17, PSTCL had claimed interest and finance charges on long term loan of ₹420.52 crore (net of capitalization ₹43.89 crore) for its Transmission Business and ₹1.43 crore for SLDC Business. The Commission approved interest charges of ₹409.47 crore for Transmission Business and ₹1.43 crore for SLDC Business.

2.8.2 In the Review Petition for FY 2016-17, PSTCL had claimed interest and finance charges on long term loan of ₹407.25 crore (other than interest on Working capital loans and net of capitalization of ₹59.60 crore) for its Transmission Business and ₹1.43 crore for SLDC Business. The Commission approved the revised interest and finance charges of ₹373.22 crore for Transmission Business and ₹0.64 crore for SLDC Business at the time of Review of FY 2016-17.

PSTCL's Submissions:

In the True Up Petition for FY 2016-17, PSTCL has claimed the Interest & Finance Charges of ₹411.24 crore for Transmission Business and ₹0.59 crore for SLDC Business based on Audited Annual Accounts for FY 2016-17 (net of capitalization of ₹61.82 crore). The Interest and finance charges allowable to PSTCL are discussed in the following paragraphs.

2.8.3 Investment for Transmission Business

In the ARR Petition for FY 2016-17, PSTCL had estimated a capital expenditure of ₹512.98 crore against which the Commission had approved an investment of ₹500.00 crore for the Transmission Business of PSTCL in Tariff Order of FY 2016-17. PSTCL revised its capital expenditure to ₹473.37 crore for FY 2016-17 in Review Petition for FY 2016-17.

PSTCL's Submissions:

In the true Up Petition for FY 2016-17, PSTCL has claimed an investment of ₹400.20 crore during FY 2016-17 based on Audited Annual Accounts.

As per Audited Annual Accounts for FY 2016-17, the opening Capital Work in Progress as on 01.04.2016 is ₹756.89 crore and ₹4.76 crore for Transmission and SLDC Business respectively. Capital expenditure during FY 2016-17 is ₹397.71 crore for Transmission Business and ₹2.49 crore for SLDC Business. Net asset addition during FY 2016-17 is of ₹496.56 crore in Transmission Business and ₹3.88 crore in SLDC Business. Closing balance of Capital Work in Progress as on 31.03.2017 is of ₹660.78 crore and ₹4.42 crore for transmission and SLDC Business respectively.

Commission's Analysis:

The Commission observes that PSTCL has raised a loan of ₹396.96 crore against the Capital Expenditure of ₹397.71 crore. Loan of ₹50.00 crore taken from Bank of India is not in the nature of long term loan. Accordingly, the Commission determines long term loan of the utility of ₹346.96 (396.96-50) crore. The interest is re-worked by the Commission on allowable loans as ₹427.36 crore as given in Table 2.5.

Table 2.5: Long term loan and interest thereon for Transmission Business

(₹ crore)

Sr. No.	Particulars	Loan as on April 1, 2016	Receipt of Loan during FY 2016-17	Repayment of Loan during FY 2016-17	Loans as on March 31, 2017	Amount of Interest
I	II	III	IV	V	VI	VII
1.	As per data furnished in ARR Petition (other than WCL & GP Fund)	3849.06	396.96	290.27	3955.75	450.64
2.	Approved by the Commission (other than WCL and GP Fund)	3661.72	346.96	268.71	3739.97	427.36

2.8.4 **Interest on GP Fund**

PSTCL has claimed an interest of ₹11.56 crore on GP fund of ₹131.74 crore as on 31.03.2017. The interest of ₹11.56 crore on GP Fund, being statutory payment, is allowed as claimed by PSTCL for FY 2016-17.

2.8.5 **Capitalization of Interest Charges**

In the True Up Petition for FY 2016-17, PSTCL has capitalized ₹61.82 crore interest charges based on Audited Annual Accounts for FY 2016-17.

The Commission, as per past practice, approves capitalization of interest of ₹61.82 crore for FY 2016-17 based on the Audited Annual Accounts.

2.8.6 **Finance Charges and Guarantee Charges**

PSTCL has claimed finance charges of ₹0.36 crore and Guarantee charges of ₹10.00 crore based on Audited Annual Accounts for FY 2016-17 for Transmission Business. **The Commission, accordingly, approves the finance charges of ₹0.36 crore and Guarantee charges of ₹10.00 crore for FY 2016-17 for Transmission Business of PSTCL.**

The approved interest and finance charges for Transmission Business of PSTCL for FY 2016-17 are shown in Table 2.6.

Table 2.6: Interest& Finance Charges for Transmission Business for FY 2016-17

(₹crore)

Sr. No.	Particulars	Interest as Claimed by PSTCL	Amount allowed by the Commission
I	**II**	**III**	**IV**
1.	Interest on Institutional Loans	450.64	427.36
2.	Interest on GP Fund	11.56	11.56
3.	Guarantee Charges	10.00	10.00
4.	Finance charges	0.36	0.36
5.	**Gross Interest on Long Term Loans (1+2+3+4)**	**472.56**	**449.28**
6.	Less Capitalization	61.82	61.82
7.	**Net Interest Charges on Long Term Loans(5-6)**	**410.74**	**387.46**

Therefore, the Commission approves interest & finance charges of ₹387.46 crore on long term loan for FY 2016-17.

2.9 Interest on Working Capital

In the ARR Petition for FY 2016-17, PSTCL had claimed interest on working capital for Transmission Business of ₹40.50 crore for FY 2016-17,on a total working capital of₹345.55 crore against which the Commission approved interest on working Capital of ₹33.99 crore for FY 2016-17on total working capital of ₹290.01 crore.

In the Review Petition for FY 2016-17, PSTCL had revised the claim of interest on working capital to ₹41.79 crore of which the Commission approved the revised interest on working capital of ₹31.13 crore on working capital of ₹280.96 crore at the time of Review of FY 2016-17.

PSTCL's Submissions:

In the True Up Petition for FY 2016-17, PSTCL has claimed interest on working capital of ₹38.24 crore @11.74% on the working capital loan of ₹325.69 crore for Transmission Business. Rate of interest on working capital is required to be calculated as per provisions contained in Regulation 30.1 of PSERC (Terms and Conditions for Determination of Tariff) Regulation, 2005 which has been further amended vide notification dated 17.09.2012.

Commission's Analysis:

The Commission has determined the working capital requirement in accordance with the Regulation 30 of PSERC Tariff Regulations. The details of working capital requirement and allowable interest thereon are depicted in Table 2.7. The Commission approves interest on working capital of ₹34.23 crore @11.74% on working capital requirement of ₹291.61 crore for Transmission Business. The same is discussed in Table 2.7.

Table 2.7: Interest on Working Capital for Transmission Business of PSTCL for FY 2016-17

(₹crore)

Sr. No.	Particulars	Claimed by PSTCL	Approved by the Commission
I	II	III	IV
1.	Receivables equivalent to two months	214.04	194.03
2.	Maintenance spares @ 15% of Operation and Maintenance expenses	71.78	62.73
3.	Operation and Maintenance expenses for one month	39.88	34.85
4.	Working Capital requirement	325.70	291.61
5.	Interest on Working Capital calculated on Weighted Average Rate of Interest @11.74% for FY 2016-17	38.24	34.23

The Commission approves working capital requirements of ₹291.61 crore and interest thereon of ₹34.23 crore for Transmission Business of PSTCL for FY 2016-17.

2.9.1 **Investment for SLDC Business**

In the ARR Petition for FY 2016-17, PSTCL had proposed an investment of ₹16.30 crore for FY 2016-17 against which the Commission had approved ₹16.30 crore in the Tariff Order for FY 2016-17.In the Review of FY 2016-17, PSTCL again claimed an investment of ₹16.30 crore.

PSTCL's Submissions:

In the True Up Petition for FY 2016-17, PSTCL has submitted that it had made capital expenditure of ₹2.49 crore in the SLDC Business. Opening balance of loan is ₹3.73 crore, loan addition of ₹3.24 crore and it has claimed ₹0.59 crore interest charges on long term loan during for FY 2016-17. The Commission allows the loan requirement of ₹2.49 crore for SLDC Business.

Commission's Analysis:

The interest on allowable loans (other than working capital loans) is worked out as indicated in Table 2.8.

Table 2.8: Long term loan and interest there on for SLDC Business FY 2016-17

(₹crore)

Sr. No.	Particulars	Loan as on April 01, 2016	Receipt of loan during FY 2016-17	Repayment of loan during FY 2016-17	Loan as on March 31, 2017	Amount of Interest
I	II	III	IV	V	VI	VII
1.	As per data furnished by PSTCL in ARR Petition (other than WCL)	3.73	3.24	0.27	6.70	0.59
2.	Approved by the Commission (other than WCL)	3.73	2.49	0.27	5.95	0.55

Therefore, the Commission approves interest & finance charges of ₹0.55 crore to PSTCL during FY 2016-17 for SLDC Business.

2.9.2 **Interest on Working Capital for SLDC Business**

In the ARR Petition for FY 2016-17, PSTCL had claimed interest on working capital of ₹1.35 crore on the total working capital of ₹11.29 crore. The Commission approved the working capital of ₹7.49 crore and interest on working capital ₹0.90 crore for FY 2016-17.

In the Review for FY 2016-17, PSTCL had claimed interest on working capital of ₹1.26 crore on the total working capital of ₹10.51 crore for its SLDC Business. The Commission approved the revised working capital of ₹7.43 crore and interest thereon of ₹0.89 crore for SLDC Business.

PSTCL's Submissions:

In the True Up Petition for FY 2016-17, PSTCL has claimed ₹0.49 crore as interest @11.74% on Working Capital of ₹4.14 crore.

Applying the same principle as stated above for Transmission Business, the Commission approves the total working capital requirement of ₹4.13 crore and interest thereon works out to ₹0.49 crore as given in Table 2.9.

Table 2.9: Interest on Working Capital for SLDC Business: FY 2016-17

(₹crore)

Sr. No.	Particulars	FY 2016-17	
		Claimed by PSTCL for SLDC	Approved by the Commission
I	II	III	IV
1.	Receivables equivalent to two months fixed cost	2.39	2.39
2.	Maintenance spares @15% of O&M expenses	1.12	1.12
3.	Operation & Maintenance expenses for one month	0.62	0.62
4.	Total working capital	4.14	4.13
5.	Interest on working capital calculated on Weighted Average Rate of Interest @11.74% for FY 2016-17	0.49	0.49

The Commission approves working capital requirement of ₹4.13 crore and interest thereon of ₹0.49 crore for SLDC Business of PSTCL for FY 2016-17.

2.10 Return on Equity

2.10.1 In ARR Petition for FY 2016-17, PSTCL had claimed RoE of ₹156.71 crore on equity of ₹1011.05 crore for FY 2016-17. The Commission had approved RoE of ₹93.91 crore @15.50% on the equity amount of ₹605.88 crore.

2.10.2 In Review Petition for FY 2016-17, PSTCL has claimed the same Return on Equity of ₹93.91 crore based on equity amount of ₹605.88 crore which had been allowed.

PSTCL's Submissions:

2.10.3 In the True Up Petition for FY 2016-17, PSTCL has claimed RoE of ₹93.91 crore for FY 2016-17 as detailed in Table 2.10.

Table 2.10: Return on Equity for FY 2016-17 as claimed by PSTCL

(₹ crore)

Sr. No.	Particulars	PSTCL
1.	Equity at the opening of FY 2016-17	605.88
2.	Addition of equity during the year	0.00
3.	Equity at the closing of FY 2016-17	605.88
4.	Rate of Return (%) RoE	15.50%
5.	**RoE**	**93.91**

Commission's Analysis:

In accordance with the Regulation 25 of PSERC (Terms and Conditions for Determination of Tariff Regulations, 2005) the Commission allows RoE of ₹93.91 crore @15.50% on the equity of ₹605.88 crore.

The Commission, thus, approves RoE of ₹93.91 crore to PSTCL for FY 2016-17.

2.11 ULDC Charges

2.11.1 In the ARR Petition for FY 2016-17, PSTCL claimed ULDC Charges of ₹16.10 crore for FY 2016-17 for its SLDC Business and the same were approved. In the Review Petition of FY 2016-17, PSTCL claimed ₹16.10 crore towards ULDC charges for FY 2016-17. As per provisional accounts for FY 2016-17 ULDC Charges were ₹9.93 crore which were allowed by the Commission at the time of Review.

Commission's Analysis:

PSTCL has claimed ₹9.93 crore on account of ULDC charges for its SLDC Business based on Audited Annual Accounts for FY 2016-17 and the same is allowed.

Accordingly, the Commission approves ULDC charges of ₹9.93 crore to PSTCL for its SLDC Business for FY 2016-17.

2.12 Non-Tariff Income

2.12.1 In the ARR Petition for FY 2016-17, PSTCL had projected ₹5.00 crore of Non-Tariff

Income for its Transmission Business and ₹0.00 crore for SLDC Business for FY 2016-17 against which the Commission approved the Non-Tariff Income of ₹41.05 crore for Transmission Business and ₹6.72 crore for its SLDC Business for FY 2016-17.

2.12.2 In the Review Petition for FY 2016-17, PSTCL claimed ₹33.63 crore on account of Non Tariff Income for Transmission Business and ₹5.41 crore for SLDC Business against which the Commission had approved the revised amount of ₹54.66 crore for Transmission Business and ₹5.41 crore for SLDC Business at the time of Review of FY 2016-17 based on the Provisional Annual Accounts FY 2016-17.

PSTCL's Submissions:

2.12.3 In the True Up Petition for FY 2016-17, PSTCL has claimed ₹36.24 crore (₹31.32 crore for Transmission Business and ₹4.92 crore for SLDC Business) on account of Non tariff Income based on Audited Annual Accounts for FY 2016-17 including income from Open Access customers as Transmission charges and operating charges. The detail of Non-Tariff Income claimed by PSTCL is in Table 2.11.

Table 2.11: Non-Tariff Income claimed by PSTCL

(₹ crore)

Particulars	Transmission Business	SLDC Business
Rental charges of staff quarters, water charges, hospital ward, guest house etc.	0.40	0.02
Sale of tender forms	0.09	-
Income from O&M of bays of PGCIL	5.76	-
Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and /or wheeling charges, scheduling charges etc.	19.94	3.34
Sale of scrap	0.75	-
Miscellaneous income - NOC charges from Open Access customers	-	1.28
Other miscellaneous income	4.38	0.28
Total	**31.32**	**4.92**

Commission's Analysis:

2.12.4 The non-tariff income has been determined as per Regulation 34 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (as amended from time to time).

The Petitioner has not considered income of ₹0.11 crore towards 'security deposits/EMD forfeited' as Non-Tariff Income. The same is also included as part of

Non-Tariff Income. **Accordingly, the Commission approves ₹31.43 (31.32+0.11) crore for Transmission Business and ₹4.92 crore for SLDC Business as Non-Tariff Income for FY 2016-17.**

2.13 Prior Period Expenses

2.13.1 In the True up Petition for FY 2016-17, PSTCL has submitted ₹7.90 crore as prior period items based on Audited Annual Accounts for FY 2016-17. PSTCL has claimed the prior period expenses under head i.e. ₹7.90 crore under Depreciation.

Commission's Analysis:

2.13.2 With respect to Prior Period Depreciation amounting to ₹7.90 crore claimed by PSTCL, the Commission is of the view that depreciation has been allowed on the sub-head wise assets and disallowed the depreciation provided in excess of 90% of the original cost of assets during the previous year. As such, the Commission finds no merit in the claim of PSTCL for additional depreciation as Prior Period Expenses and no amount is allowed on this account.

Accordingly, the Commission disallows excess depreciation as prior period expenses for Transmission Business as claimed by PSTCL for FY 2016-17.

2.14 Tax on Income

In the True Up Petition for FY 2016-17, PSTCL has claimed income tax paid liability of ₹1.19 crore.

Tax on income is allowable as per Regulation 32 of PSERC (Terms and Conditions for Determination of Tariff) Regulations, 2005 (as amended from time to time).

The Commission allows income tax paid of ₹1.19 crore based on Audited Annual Accounts of FY 2016-17.

2.15 Annual Revenue Requirement

The summary of the Annual Revenue Requirement for Transmission Business and SLDC Business of PSTCL for FY 2016-17 is shown in Table 2.12 and Table 2.13 respectively.

Table 2.12: Annual Revenue Requirement for Transmission Business for FY 2016-17

(₹crore)

Sr. No.	Particulars	For Transmission Business				
		Approved in Tariff Order for FY 2016-17	Revised Estimate by PSTCL for FY 2016-17 (RE)	Approved by the Commission in the review of FY 2016-17	Claimed by PSTCL in the true up of FY 2016-17	Approved by the Commission
I	II	III	IV	V	VI	VII
1.	Employee Cost	361.48	461.66	370.31	435.42	375.11
2.	R&M expenses	47.28	49.11	19.71	25.83	25.83
3.	A&G expenses	21.74	22.75	15.58	17.25	17.25
4.	Depreciation	210.46	308.64	263.28	260.62	260.62
5.	Interest charges	409.47	407.25	373.22	411.24	387.46
6.	Interest on Working Capital	33.99	41.79	31.13	38.24	34.23
7.	Return on Equity	93.91	93.91	93.91	93.91	93.91
8.	Prior Period expenses	-	-	-	7.90	-
9.	Tax on Income	-	-	-	1.19	1.19
10.	**Annual Revenue Requirement**	**1178.33**	**1385.12**	**1167.14**	**1291.61**	**1195.60**
11.	Less: Non tariff Income	41.05	33.63	49.25	31.32	31.43
12.	**Net Revenue Requirement**	**1137.28**	**1351.49**	**1117.89**	**1260.28**	**1164.17**
13.	Incentive	-	-	-	23.94	23.17
14.	**Gross ARR**	**1137.28**	**1351.49**	**1117.89**	**1284.22**	**1187.34**

Table 2.13: Annual Revenue Requirement for SLDC for FY 2016-17

(₹crore)

Sr. No.	Particulars	For SLDC Business				
		Approved in Tariff Order for FY 2016-17	Revised Estimate by PSTCL for FY 2016-17 (RE)	Approved by the Commission in the review of FY 2016-17	Claimed by PSTCL in the true up of FY 2016-17	Approved by the Commission
I	II	III	IV	V	VI	VII
1.	Employee Cost	7.26	7.25	7.24	6.54	6.54
2.	R&M expenses	4.54	10.05	6.45	0.23	0.23
3.	A&G expenses	1.82	2.91	1.86	0.73	0.73
4.	Depreciation	0.59	1.18	1.18	0.76	0.76
5.	Interest charges	1.43	1.43	0.64	0.59	0.55
6.	Interest on Working Capital	0.90	1.26	0.89	0.49	0.49
7.	ULDC Charges	16.10	16.10	9.93	9.93	9.93
8.	**Annual Revenue Requirement**	**32.64**	**40.18**	**28.19**	**19.27**	**19.23**
9.	Less: Non tariff Income	6.72	5.41	5.41	4.92	4.92
10.	**Net Revenue Requirement**	**25.92**	**34.76**	**22.78**	**14.35**	**14.31**

The summary of the Annual Revenue Requirement of PSTCL as a whole for FY 2016-17 is shown in Table 2.14.

Table 2.14: Annual Revenue Requirement for PSTCL for FY 2016-17

(₹crore)

Sr. No.	Particulars	For PSTCL				
		Approved in Tariff Order for FY 2016-17	**Revised Estimate by PSTCL for FY 2016-17 (RE)**	**Approved by the Commission in the review of FY 2016-17**	**Claimed by PSTCL in the true up of FY 2016-17**	**Approved by the Commission**
I	**II**	**III**	**IV**	**V**	**VI**	**VII**
1.	Employee Cost	368.74	468.91	377.55	441.96	381.65
2.	R&M expenses	51.82	59.16	26.16	26.06	26.06
3.	A&G expenses	23.56	25.65	17.44	17.98	17.98
4.	Depreciation	211.05	309.82	264.46	261.37	261.38
5.	Interest charges	410.90	408.68	373.86	411.83	388.01
6.	Interest on working capital	34.89	43.05	32.02	38.72	34.72
7.	Return on Equity	93.91	93.91	93.91	93.91	93.91
8.	ULDC Charges	16.10	16.10	9.93	9.93	9.93
9.	Prior Period Expenses	-	-	-	7.90	-
10.	Income Tax	-	-	-	1.19	1.19
11.	**Annual Revenue Requirement**	**1210.97**	**1425.30**	**1195.33**	**1310.87**	**1214.83**
12.	Less: Non tariff income	47.77	39.04	54.66	36.24	36.35
13.	**Total Revenue Requirement**	**1163.20**	**1386.26**	**1140.67**	**1274.63**	**1178.48**
14.	Incentive for Higher Transmission System Availability	-	-	-	23.94	23.17
15.	**Net Revenue Requirement**	**1163.20**	**1386.26**	**1140.67**	**1298.57**	**1201.65**
16.	**Revenue from Tariff**				**1151.01**	**1151.01**
17.	**Gap(-)/ Surplus(+) for the year**				**(-)147.56**	**(-)50.64**

The Revenue from Tariff of ₹1151.01 crore which was approved by the Commission in its Tariff Oder of FY 2016-17 dated 27July, 2016 at the time of projection, was determined at ₹1140.67 crore at the time of review. The consequential carrying cost on Revenue Gap (Surplus) of ₹10.34 (1151.01-1140.67) crore was allowed in Tariff Order FY 2017-18. The Commission had allowed carrying cost of ₹35.05 crore for FY 2014-15, FY 2015-16 and FY 2016-17 in its Tariff Order dated 23.10.2017. Total amount recoverable from PSPCL comes to ₹1236.70 (1201.65+35.05) crore.

The Net ARR after truing up exercise for FY 2016-17 is determined as ₹1201.65 crore and the same is carried forward as Transmission Charges payable. After considering the Revenue Gap (Surplus) of ₹10.34 crore already accounted for in the Tariff Order for FY 2017-18, the net gap works out to ₹60.98(50.64 + 10.34) crore for FY 2016-17, the same has been taken into account for calculating the carrying cost at Para 3.14 of this Tariff Order.

Chapter 3

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

3.1 Background

PSTCL has projected the Annual Performance Review (APR) for FY 2017-18 and Revised Estimates for FY 2018-19, separately for its Transmission business and SLDC business, which the Commission has analyzed in this chapter.

3.2 Transmission System Capacity

The Commission in the Tariff Order for FY 2017-18 had determined the Transmission capacity (net) of PSTCL system from the data submitted by PSTCL as 12278.96 MW for FY 2017-18 and as 12500.78 MW for FY 2018-19, against the capacity (net) of 13647.63 MW and 14660.21 MW projected by PSTCL.

PSTCL has now submitted the revised Transmission Capacity (net) of the system for FY 2017-18 as 13352.67 MW and for FY 2018-19 as 13879.15 MW. The Commission has determined the revised Transmission capacity (net) of PSTCL system from the data submitted by PSTCL as 12027.04 MW for FY 2017-18 and as 11579.39 MW for FY 2018-19 after considering the effect of closure of PSPCL's Generating Stations, GNDTP and Unit-I&II of GGSSTP.

3.3 Transmission System Availability

PSTCL has submitted that Regulation, 55 of PSERC (Terms and Conditions of Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 (PSERC MYT Regulations, 2014) specifies the normative Annual Transmission Availability Factor of 98% for recovery of Annual Fixed Charges and 99% for incentive on account of higher Transmission Availability. PSTCL has further submitted that the average transmission availability during H1 of FY 2017-18 was 99.94% and it will achieve Normative Annual Transmission Availability Factor as specified in PSERC MYT Regulations, 2014, during the Control Period.

The Commission has taken note of the submissions of PSTCL and shall consider its actual Transmission System Availability for FY 2017-18 and FY 2018-19 for incentive, if permissible as per PSERC MYT Regulations, 2014 at the time of true up for the respective years.

3.4 Transmission Losses

PSTCL, in the ARR for MYT Control Period had projected the transmission losses of 2.80% for FY 2017-18 and 2.60% for FY 2018-19. The Commission in the Tariff Order for FY 2017-18, approved the Transmission loss of 2.50% for FY 2017-18 and 2.40% FY 2018-19 respectively.

PSTCL's Submissions:

PSTCL in its ARR has submitted that it has completed the Intra-State Boundary Metering cum Transmission Level Energy Scheme and the actual transmission losses figures are available from July, 2016 onwards. The average transmission losses for the period H1 of FY 2017-18 were 2.93%. PSTCL submitted that the transmission losses in transmission network depends upon various factors such as shift of load centres, energy injection and drawl into the network and the extent of inherent technical loss pertaining to the transmission equipments in use. PSTCL continuously strives to reduce the technical losses in the system. PSTCL is regularly monitoring the loading of transmission lines and power transformers/ICTs and makes all possible efforts to optimize the loading of this equipment to reduce the technical losses in the system. The trajectory approved by the Commission is very low compared to the actual transmission loss. Further, reduction in transmission losses from such low level of transmission loss would be much more difficult and require significant additional capital investment. PSTCL has requested the Commission to approve the Transmission Loss as 3.00% for FY 2017-18 and 2.80% for FY 2018-19.

Commission's Analysis:

The Commission observes that although PSTCL has completed Intra-State Boundary metering cum Transmission Level Energy Scheme, the data is yet to be stabilized. The Commission observes that it is allowing the Capital Investment Plan as projected /asked for by PSTCL since last many years and in Petition No. 44 of 2016 for approval of Capital Investment Plan of PSTCL for MYT Control Period has allowed ₹338.29 crore and ₹258.01 crore for FY 2017-18 and FY 2018-19 respectively, which is almost as per the projections made by PSTCL. Thus, there is no reason to deviate from its earlier targets for transmission loss. As such, the Commission provisionally retains the transmission loss level at 2.50% for FY 2017-18 and 2.40% for FY 2018-19, as approved in the Tariff Order for FY 2017-18.

3.5 Employee Cost

Petitioner's Submissions:

3.5.1 In the current Petition, PSTCL has claimed employee cost for Transmission Business and SLDC Business for FY 2017-18 and FY 2018-19 as per details in Table 3.1.

Table 3.1: Employee Expense claimed by PSTCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18	FY 2018-19
Total Employee Cost – Transmission Business	497.91	533.54
Total Employee Cost – SLDC Business	7.57	8.14
Total Employee Cost (PSTCL)	**505.48**	**541.68**

3.5.2 PSTCL has claimed Employee expenses consisting of Terminal benefits and other employee cost. PSTCL has submitted that this has been claimed, as specified in Regulation-26 of PSERC MYT Regulations, 2014.

3.5.3 Hon'ble APTEL in Judgment dated September 11, 2014 in Appeal No. 174 of 2012 held that when the utility needs to comply with the lawful agreements entered into with the employees, the same cannot be avoided and wriggled out of. Further, Hon'ble APTEL in Judgment dated March 30, 2015 in Review Petition No. 6 of 2015 also held that the Employee cost shall be allowed on actual basis. The PSTCL prays the Hon'ble Commission to approve the projected Employee cost as claimed in Table 3.1.

3.5.4 PSTCL has not considered the impact of wage revision of 6th Pay Commission since these expenses are allowed on actual basis as per Regulation 26 of PSERC MYT Regulations, 2014.

3.5.5 PSTCL submitted that it had claimed the impact of progressive funding towards terminal benefits in ARR & Tariff Petition for FY 2014-15. Since the Commission disallowed the impact of progressive funding and the matter is pending before the Hon'ble Supreme Court, PSTCL has not considered the impact of progressive funding for the Control Period. However, PSTCL reserves the right to claim the impact of progressive funding subject to the decision of the Hon'ble Supreme Court.

Commission's Analysis:

3.5.6 The Commission in the MYT Order dated 23.10.2017, approved total employee cost of ₹437.33 crore for FY 2017-18 and ₹452.67 crore for FY 2018-19, based on Regulation 26 of PSERC MYT Regulations. PSTCL has not submitted Cost Audit Report for FY 2016-17. Since the financial year is not complete, the Financials of FY 2017-18 are also not available. **Accordingly, the Commission allows the employee cost already approved in Order dated 23.10.2017 as reproduced in Table 3.2.** The Commission shall review the employee cost on the availability of aforesaid information during True Up for FY 2017-18.

Table 3.2: Employee Expense approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
(I)	**Transmission**		
1.	Salaries & other employee cost	149.69	154.07
2.	Terminal Benefits	280.89	291.65
3.	Total	430.58	445.72
(II)	**SLDC**		
4.	Salaries & other employee cost	6.75	6.95
5.	Terminal Benefits	0.00	0.00
6.	Total	6.75	6.95
7.	**Grand Total**	**437.33**	**452.67**

3.6 Investment Plan/Capital Expenditure

3.6.1 The Annual Performance Review (APR) is governed by Regulation 11 of PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014. 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].

3.6.2 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).

3.6.3 The Commission in Tariff Order dated 23.10.2017 (of PSTCL) had provisionally approved capital expenditure for Transmission Business of ₹328.29 crore for FY 2017-18 and ₹248.01 crore for FY 2018-19. Similarly, for SLDC Business, the Commission had approved ₹10.00 crore each for FY 2017-18 and FY 2018-19.

Subsequently, the Commission in its Order dated 13.12.2017 in Petition No.44 of 2016, approved the same capital expenditure in Tariff Order dated 23.10.2017.

3.6.4 In the current Petition, under the Transmission Business, PSTCL has claimed ₹375.50 crore for FY 2017-18 and ₹250.61 crore for FY 2018-19. Also, under the SLDC Business, PSTCL has claimed ₹10.00 crore each for FY 2017-18 and FY 2018-19. Neither any reason have been given for changing the approved capital plan nor has any review petition been filed on this count.

Accordingly, the Capital Expenditure approved in Order dated 13.12.2017 in Petition No. 44 of 2016 is kept as it is.

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

Petitioner's Submissions:

3.7.1 In the current Petition, PSTCL has claimed R&M and A&G expenses for Transmission Business and SLDC Business for FY 2017-18 and FY 2018-19 as per details in Table 3.3.

Table 3.3: R&M and A&G Expenses projected by PSTCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
(I)	**Transmission**		
1.	Gross R&M and A&G expenses	57.33	61.90
2.	Add: Audit Fee	1.00	1.00
3.	Add: License / ARR fee	0.50	0.50
4.	Total	58.83	63.40
(II)	**SLDC**		
5.	R&M and A&G expenses	1.85	2.74
6.	Grand Total	60.68	66.14

3.7.2 PSTCL has submitted that R&M and A&G expenses have been linked to "K" and WPI index, where "K" is constant governing relationship between R&M and A&G expenses and Gross Fixed Assets. PSTCL has considered figures of FY 2016-17 for computing "K". Further, PSTCL has considered the escalation index of 2.61% based on WPI increase upto October, 2017 for the purpose of projection of R&M and A&G expenses.

3.7.3 **Commission's Analysis:**

As discussed in para 3.6.4 of this Order, the Commission in its Order dated 13.12.2017 in Petition No.44 of 2016, approved the same capital expenditure as was provisionally approved in Tariff Order dated 23.10.2017. Since no change is made in the already approved capital expenditure of the utility and PSTCL has not furnished the Cost Audit Report for FY 2016-17, to enable verification of the business wise value of assets as on 31.03.2017, **accordingly, the Commission allows the R&M and A&G expenses as were previously approved in Order dated 23.10.2017. The same is reproduced below for ready reference as per Table 3.4.**

Table 3.4: R&M and A&G expenses approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars	FY 2017-18		FY 2018-19	
	Transmission	**SLDC**	**Transmission**	**SLDC**
R&M and A&G Expenses	55.80	1.89	59.24	2.85
Add: Audit fee	1.00	0.00	1.00	0.00
Add: License fee	0.50	0.00	0.50	0.00
Total R&M and A&G expenses	**57.30**	**1.89**	**60.74**	**2.85**

3.8 Depreciation

Petitioner's Submissions:

3.8.1 In the current Petition, PSTCL has claimed depreciation charges for its Transmission Business and SLDC Business for FY 2017-18 and FY 2018-19 as per details in Table 3.5.

Table 3.5: Depreciation claimed by PSTCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
(I)	**Transmission**		
1.	Opening GFA (net of land and land rights)	5954.77	6424.49
2.	Add: Additions during the year	469.72	479.76
3.	Closing GFA	6424.49	6904.29
4.	Depreciation @5.24%	324.45	349.33
(II)	**SLDC**		
5.	Opening GFA	18.66	30.66
6.	Add: Additions to GFA during the year	12.00	10.00
7.	Closing GFA	30.66	40.66
8.	Depreciation @5.24%	1.29	1.87
9.	Total Depreciation	325.74	351.20

3.8.2 PSTCL has considered opening GFA as on 01.04.2017 (i.e. closing balance of FY 2016-17) as per provisional accounts of FY 2016-17. Also, PSTCL has considered the average depreciation rate of 5.24% for Transmission & SLDC Business based on scheduled depreciation rates specified in Regulation 27 of PSERC MYT Regulations and GFA as per provisional accounts of FY 2016-17.

Commission's Analysis:

3.8.3 As discussed in para 3.6.3 of this Order, the Commission in its Order dated 13.12.2017 in Petition No.44 of 2016, approved the same capital expenditure in the Tariff Order dated 23.10.2017. Since no change is made in the already approved capital expenditure of the utility and PSTCL has not furnished the Cost Audit Report of FY 2016-17 to verify the business wise value of assets as on 31.03.2017, **accordingly, the Commission maintains the Depreciation as was previously approved in Order dated 23.10.2017. The same is reproduced below for ready reference as per Table 3.6.**

Table 3.6: Depreciation approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
(I)	**Transmission**		
1.	Opening GFA (excluding land and land rights)	5955.14	6189.77
2.	Add: Additions to GFA during the year	234.63	572.91
3.	Closing GFA	6189.77	6762.68
4.	Average GFA	6072.46	6476.23
5.	**Depreciation @4.61% of average GFA**	**279.94**	**298.55**
(II)	**SLDC**		
6.	Opening GFA	18.18	32.68
7.	Add: Additions to GFA during the year	14.50	10.01
8.	Closing GFA	32.68	42.69
9.	Average GFA	25.43	37.69
10.	**Depreciation @4.61% of average GFA**	**1.17**	**1.74**

3.9 Interest and Finance charges

Petitioner's Submissions:

3.9.1 In the current Petition, PSTCL has claimed interest charges of ₹384.75 crore for Transmission Business & ₹1.10 crore for SLDC Business for FY 2017-18 and ₹385.33 crore for Transmission Business & ₹1.65 core for SLDC Business for FY 2018-19.

3.9.2 The interest on long term loan as claimed by PSTCL for Transmission & SLDC Business is indicated in Table 3.7 and Table 3.8 respectively.

Table 3.7: Interest on loan claimed by PSTCL for Transmission Business for FY 2017-18 and FY 2018-19

(₹crore)

Sr. No.	Particulars	FY 2017-18	FY 2018-19
1.	Opening balance of long term loan	4087.49	4073.20
2.	Add: Receipt of loan during the year	284.58	175.43
3.	Less: Repayment of loan during the year	298.87	324.09
4.	Closing balance of loan	4073.20	3924.54
5.	Gross Interest	428.09	423.10
6.	Less: Capitalization	53.50	47.93
7.	Add: Mic. Charges and Guarantee Charges	10.16	10.16
8.	**Net Interest Charges**	**384.75**	**385.33**

Table 3.8: Interest on loan claimed by PSTCL for SLDC Business for FY 2017-18 and FY 2019-20

(₹crore)

Sr. No.	Particulars	FY 2017-18	FY 2018-19
1.	Opening balance of long term loan	6.70	11.59
2.	Add: Receipt of loan during the year	7.00	7.00
3.	Less: Repayment of loan during the year	2.11	2.71
4.	Closing balance of loan	11.59	13.74
5.	**Net Interest Charges**	**1.10**	**1.65**

3.9.3 The outstanding existing loan includes loan from REC, LIC, Commercial banks, Loan from PSPCL and GPF Liability. The repayment of these existing loans and interest expenses has been considered as per their repayment schedule.

3.9.4 PSTCL has proposed new loans for the proposed investments from Banks/Financial Institution at actual weighted average rate of Interest.

Commission's Analysis:

3.9.5 As discussed in para 3.6.3 above, the Commission has approved the same capital expenditure previously sanctioned to the utility vide Order dated 11.01.2018 in Petition No.46 of 2016. Consequently, asset additions for FY 2017-18 and FY 2018-19 as approved in Order dated 23.10.2017 remains the same and requires no change. Loan addition for the year is in accordance with the capital expenditure and capitalization which is kept same as were approved in Order dated 23.10.2017. **Accordingly, the Commission maintains the same interest and finance charges as were approved in Order dated 23.10.2017. Further, interest on GPF, Finance Charges and interest capitalization previously allowed by the Commission is maintained and the same is re-produced in Table 3.9, Table 3.10 and table 3.11.**

Table 3.9: Interest on long term loan for Transmission Business approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
1.	Opening balance of loan	3740.88	3665.90
2.	Add: Receipt of loan during the year	229.80	173.61
3.	Less: Repayment of loan during the year	304.78	319.09
4.	Closing balance of loan	3665.90	3520.42
5.	Average Loan	3703.39	3593.16
6.	**Interest Charges**	**411.08**	**403.87**

Table 3.10: Interest on long term loan for SLDC Business approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
1.	Opening Loan balance	6.96	11.85
2.	Add: Receipt of loan during the year	7.00	7.00
3.	Less: Repayment of loan during the year	2.11	2.71
4.	Closing Loan balance	11.85	16.14
5.	Average Loan	9.41	14.00
6.	**Interest Charges**	**1.13**	**1.68**

Table 3.11: Total Interest and Finance charges approved for Transmission Business for FY 2017-18 and FY 2018-19.

(₹crore)

Sr. No	Particulars	FY 2017-18	FY 2018-19
1.	Interest charges	411.08	403.87
2.	Add: Finance charges	1.22	1.21
3.	Total Interest charges	412.30	405.08
4.	Less: Interest capitalized	53.50	52.14
5.	**Net Interest charges**	**358.80**	**352.94**

3.10 Interest on Working Capital

Petitioner's Submissions:

3.10.1 PSTCL has claimed interest on working capital of ₹40.46 crore for FY 2017-18 & ₹43.04 crore for FY 2018-19 for Transmission Business, on normative basis, on a total working capital of ₹361.04 crore for FY 2017-18 & ₹384.02 crore for FY 2018-19. The details of total working capital requirement and Interest on working capital for FY 2017-18 and FY 2018-19 as shown in Table 3.12.

Table 3.12: Interest on working capital for Transmission Business for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
1.	Receivables for two months	231.14	244.73
2.	Maintenance spares @15% of O&M expenses	83.51	89.54
3.	O&M expenses for one month	46.40	49.74
4.	Working capital requirement	361.04	384.02
5.	**Interest on working capital**	**40.46**	**43.04**

3.10.2 Similarly, PSTCL has claimed interest on working capital of ₹0.56 crore for FY 2017-18 & ₹0.65 crore for FY 2018-19 for SLDC Business, on normative basis, on a total working capital of ₹5.01 crore for FY 2017-18 & ₹5.81 crore for FY 2018-19. The details of total working capital and Interest on working capital for FY 2017-18 and FY

2018-19 are shown in Table 3.13.

Table 3.13: Interest on working capital for SLDC Business for FY 2017-18 and FY 2018-19

(₹crore)

	Particulars	FY 2017-18	FY 2018-19
1.	Receivables for two months	2.82	3.26
2.	Maintenance spares @15% of O&M expenses	1.41	1.63
3.	O&M expenses for one month	0.78	0.91
4.	Working capital requirement	5.01	5.80
5.	**Interest on working capital**	**0.56**	**0.65**

3.10.3 PSTCL has submitted that it has computed the working capital requirement in accordance with Regulation 54 of PSERC MYT Regulations, 2014 for Transmission and SLDC Business.

3.10.4 PSTCL has considered the actual weighted average rate of rate of interest based on actual working capital loans.

Commission's Analysis:

3.10.5 The Commission has computed the interest on working capital considering the average rate of interest for the respective year of Transmission Business. The detailed calculation of Interest on working capital approved is shown in Table 3.14.

Table 3.14: Interest on working capital for Transmission Business approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
1.	Receivables for two months	202.83	210.61
2.	Maintenance spares @15% of O&M expenses	73.18	75.97
3.	O&M expenses for one month	40.66	42.20
4.	Working capital requirement	316.67	328.78
5.	Rate of Interest (%)	11.95%	11.95%
6.	**Interest on working capital**	**37.84**	**39.29**

The Commission, thus, approves ₹37.84 crore for FY 2017-18 & ₹39.29 crore for FY 2018-19 on working capital requirement of ₹316.67 crore for FY 2017-18 & ₹328.78 crore for FY 2018-19 for Transmission Business of PSTCL.

Similar to Transmission Business, the Commission approves interest on working capital for SLDC business as is shown in Table 3.15.

Table 3.15: Interest on working capital for SLDC Business approved for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
1.	Receivables for two months	2.67	3.04
2.	Maintenance spares @15% of O&M expenses	1.30	1.47
3.	O&M expenses for one month	0.72	0.82
4.	Working capital requirement	4.69	5.33
5.	Rate of Interest (%)	11.72%	11.72%
6.	**Interest on working capital (4*5)**	**0.55**	**0.62**

The Commission, thus, approves ₹0.55 crore for FY 2017-18 & ₹0.62 crore for FY 2018-19 on working capital requirement of ₹4.69 crore for FY 2017-18 & ₹5.33 crore for FY 2018-19 for SLDC business of PSTCL.

3.11 Return on Equity (RoE)

Petitioner's Submissions:

3.11.1 In the current Petition, PSTCL has claimed RoE of ₹101.19 crore for FY 2017-18 and ₹114.34 crore for FY 2018-19 as per details given in Table 3.16.

Table 3.16: Return on Equity claimed by PSTCL for FY 2017-18 and FY 2018-19

(₹crore)

Particulars		FY 2017-18	FY 2018-19
Transmission			
1.	Opening Equity	605.88	699.79
2.	Add: Addition of equity during the year	93.91	78.18
3.	Closing Equity	699.79	777.97
4.	Rate of RoE	15.50%	15.50%
5.	**Return on Equity**	**101.19**	**114.53**

3.11.2 PSTCL has submitted that it has computed Return on Equity for the Control Period in accordance with Regulation 20 of PSERC MYT Regulations, 2014.

3.11.3 PSTCL has considered the addition of equity equivalent to 30% of capital expenditure to the extent for Return of Equity.

Commission's Analysis:

3.11.4 Return on Equity is being calculated @15.50% on the opening balance of equity for full year and @15.50% on the addition to equity during the year for half year. The detail of RoE calculation is shown in Table 3.17.

Table 3.17: Return on Equity

(₹crore)

Sr. No.	Particulars	FY 2017-18	FY 2018-19
	Transmission		
1	Opening Equity	605.88	707.37
2	Add: Addition to equity during the year	101.49	77.40
3	Closing Equity	707.37	784.77
4	Average Equity	656.63	746.07
5	Rate of RoE	15.50%	15.50%
6	**Return on Equity**	**101.78**	**115.64**

The Commission, thus, approves RoE of ₹101.78 crore for FY 2017-18 and ₹115.64 crore for FY 2018-19 and ₹126.58 crore for FY 2019-20.

3.12 ULDC Charges

PSTCL has claimed ₹9.93 crore each for FY 2017-18 and FY 2018-19 towards ULDC charges based on Audited Annual Accounts of FY 2016-17. Since ULDC Charges are decided by CERC from time to time, **the Commission finds it appropriate to allow ULDC charges same as actual ULDC charges based on Audited Annual Accounts of FY 2016-17 of ₹9.93 crore each for FY 2017-18 and FY 2018-19.**

3.13 Non-Tariff Income

Petitioner's Submissions:

3.13.1 PSTCL has claimed Non-Tariff Income of ₹20.77 crore each for FY 2017-18 & FY 2018-19 for Transmission Business and ₹5.41 crore each for FY 2017-18 and FY 2018-19 for SLDC Business.

3.13.2 PSTCL has submitted that income from late payment surcharges is also considered under Non-tariff income, the objective being bringing discipline in payments by Licensees.

3.13.3 PSTCL has submitted that the mechanism of payment security is completely outside the purview of Regulated ARR, which permits only normative working capital interest. Therefore, PSTCL submits that either the late payment surcharge should not form part of ARR, or if revenue from late payment surcharge is included in non-tariff income, corresponding higher interest on working capital should be allowed as the late payments of bills affects the cash flows of the utility.

Commission's Analysis:

3.13.4 The Commission maintains Non-Tariff Income as was previously approved for MYT Control period in tariff order dated 23.10.2017. **Accordingly, Non-Tariff Income of ₹49.25 crore each for FY 2017-18 and FY 2018-19 is approved for Transmission Business. Also, Non-Tariff Income of ₹5.41 crore each for FY 2017-18 and FY**

2018-19 is approved for SLDC Business.

3.14 Carrying Cost on Revenue Gap

True up of FY 2016-17

As discussed in para 2.15 of this Order, the Commission has determined a deficit of ₹60.98 crore in True Up of FY 2016-17. Accordingly, the Commission allows carrying cost on the revenue deficit of ₹60.98 crore @11.95% for six months of FY 2017-18 (i.e. ₹3.64 crore) and @11.95% for six months of FY 2018-19 (i.e. ₹3.64 crore). Thus, the total allowable carrying cost for FY 2016-17 works out to ₹7.28 crore.

APR of FY 2017-18

The Commission has determined Net Revenue Requirement (NRR) of ₹1233.00 crore in the APR of FY 2017-18 against the NRR of ₹1234.87 crore in the ARR / Projections of FY 2017-18 (Para 3.15 of this Tariff Order). Accordingly, the Commission determines carrying cost on the revenue surplus of ₹1.87 (1234.87-1233.00) crore @11.95% for six months of FY 2017-18 [i.e. (-) ₹0.11 crore] and @11.95% for six months of FY 2018-19 [i.e. (-) ₹0.11 crore]. Thus, the total carrying cost for FY 2017-18 works out to (-) ₹0.22 crore.

Thus, the net recoverable carrying cost of ₹7.06 (7.28-0.22) crore of FY 2016-17 and FY 2017-18 is recoverable by PSTCL from PSPCL in FY 2017-18.

3.15 Aggregate Revenue Requirement (ARR)

The summary of the ARR for Transmission Business, SLDC Business and for overall PSTCL for FY 2017-18 and FY 2018-19 is shown in Table 3.18, Table 3.19 and Table 3.20.

Table 3.18: Aggregate Revenue Requirement of Transmission Business

(₹ crore)

Sr. No.	Particulars	FY 2017-18		FY 2018-19	
		Claimed by PSTCL in APR of FY 2017-18	Approved by the Commission for FY 2017-18	Claimed by PSTCL in RE of FY 2018-19	Approved by the Commission for FY 2018-19
I	II	III	IV	V	VI
1.	Employee cost	497.91	430.58	533.54	445.72
2.	R&M and A&G expenses	58.83	57.30	63.40	60.74
3.	Depreciation	324.45	279.94	349.33	298.55
4.	Interest charges	384.75	358.80	385.33	352.94
5.	Interest on working capital	40.46	37.84	43.04	39.29
6.	RoE	101.19	101.78	114.53	115.64
7.	**Total Revenue Requirement**	**1407.59**	**1266.24**	**1489.17**	**1312.88**
8.	Less: Non-Tariff Income	20.77	49.25	20.77	49.25
9.	**Net Revenue Requirement**	**1386.82**	**1216.99**	**1468.40**	**1263.63**

Table 3.19: Aggregate Revenue Requirement of SLDC Business for FY 2017-18 and FY 2018-19

(₹crore)

Sr. No.	Particulars	FY 2017-18		FY 2018-19	
		Claimed by PSTCL in APR of FY 2017-18	Approved by the Commission for FY 2017-18	Claimed by PSTCL in RE of FY 2018-19	Approved by the Commission for FY 2018-19
I	II	III	IV	V	VI
1.	Employee cost	7.57	6.75	8.14	6.95
2.	R&M and A&G expenses	1.85	1.89	2.74	2.85
3.	Depreciation	1.29	1.17	1.87	1.74
4.	Interest charges	1.10	1.13	1.65	1.68
5.	Interest on working capital	0.56	0.55	0.65	0.62
6.	ULDC charges	9.93	9.93	9.93	9.93
7.	**Total Revenue Requirement**	**22.30**	**21.42**	**25.00**	**23.77**
8.	Less: Non-Tariff Income	5.41	5.41	5.41	5.41
9.	**Net Revenue Requirement**	**16.89**	**16.01**	**19.59**	**18.36**

Table 3.20: Aggregate Revenue Requirement of PSTCL for FY 2017-18 and FY 2018-19

(₹crore)

Sr. No.	Particulars	FY 2017-18		FY 2018-19	
		Claimed by PSTCL in APR of FY 2017-18	Approved by the Commission for FY 2017-18	Claimed by PSTCL in RE of FY 2018-19	Approved by the Commission for FY 2018-19
I	II	III	IV	V	VI
1.	Employee cost	505.48	437.33	541.69	452.67
2.	R&M and A&G expenses	60.68	59.19	66.14	63.59
3.	Depreciation	325.74	281.11	351.20	300.29
4.	Interest charges	385.85	359.93	386.99	354.62
5.	Interest on working capital	41.03	38.39	43.69	39.91
6.	Return on Equity	101.19	101.78	114.53	115.64
7.	ULDC charges	9.93	9.93	9.93	9.93
8.	**Total Revenue Requirement**	**1429.90**	**1287.66**	**1514.17**	**1336.65**
9.	Less: Non-Tariff Income	26.18	54.66	26.18	54.66
10.	**Net Revenue Requirement**	**1403.72**	**1233.00**	**1487.99**	**1281.99**

The Commission vide Order dated 23.10.2017 had approved the Net Revenue Requirement (NRR) of ₹1234.87 crore for FY 2017-18 and NRR of ₹1283.86 crore for FY 2018-19. The same has now been re-determined ₹1233.00 crore for FY 2017-18 and ₹1281.99 crore for FY 2018-19. The surplus of ₹1.87 (1234.87-1233.00) crore is considered for calculating the carrying cost at para 3.14 of this Order.

Also, the Commission has determined carrying cost of ₹7.06 crore (in para 3.14 of this Order) of FY 2016-17 and FY 2017-18 which is recoverable by PSTCL from PSPCL in FY 2017-18. Accordingly, Annual Revenue Requirement for FY 2017-18 works out to ₹1240.06 (1233.00+7.06) crore and the same is carried forward in APR of PSPCL of FY 2017-18 as Transmission Charges payable and Net Revenue Requirement is ₹1281.99 crore for FY 2018-19.

Chapter 4
Directives

Compliance of Commission's Directives

The Commission has been issuing various directives to PSTCL through Tariff Orders to ensure development of an efficient, coordinated & economical system of intra-State transmission lines for uninterrupted flow of power available from different sources to the load centres in the State as envisaged in the Act. 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 comments of the Commission and further directives for compliance by PSTCL during FY 2018-19 is summarized as under:

Directive No. 4.1: Boundary metering, Energy Audit and Reduction in Transmission Losses.

Directive for FY 2017-18

Commission observes that the transmission losses are very high for 132/220/400 kV network in a geographically very small State. The transmission loss of 7.09% & 6.03% in Dec. 2016 & Jan. 2017 respectively needs to be explained. The voltage wise transmission losses i.e. losses at 400/220/132 kV& transformation losses etc needs to be examined to pin point high loss segments. The Commission directs PSTCL to submit the necessary information to the Commission along with reasons for high transmission losses. PSTCL shall submit the roadmap to reduce these losses to below 2.5%, within one month of the issue of this Tariff Order.

Reply of PSTCL:

1. The permanent/Fixed Technical losses component such as corona losses, Leakage current losses, Dielectric losses, continuous load of measuring elements & continuous load of control elements become significant under low load conditions during winter period. The corona losses, leakage current losses are predominant during the winter months due to foggy conditions when system high voltage conditions prevail due to lightly loaded transmission system.

2. Monthly transmission losses of PSTCL are being calculated with the data remotely available from the ABT meters installed at PSTCL Boundary points under Boundary Metering scheme. The voltage wise transmission losses are not measureable as some additional meters are yet to be procured and installed at the interface of 220KV

network with 400KV and 132KV system. The meters procured under the scheme for new locations have been installed but procurement of meters for replacement of existing conventional meters for audit purposes is pending due to some issue with the firm regarding integration of third party meters.

3. Accordingly, the Road map to reduce transmission losses below 2.5% can be drawn after installation of meters for audit purposes across all transmission elements.

PSERC Comments & Directive:

The Commission notes the reasons explained for high losses during low load conditions during winter period. The audit/analysis of voltage wise transmission losses needs to be calculated with proper installation of ABT meters on boundaries of different voltage levels. The roadmap to reduce the transmission losses below 2.5% along with the roadmap to complete installation of requisite ABT meters on the boundaries of different voltage levels may be submitted to the Commission within 2 months.

Directive No.4.2: a) Man power:

Directive for FY 2017-18

The Commission notes the action taken and directs PSTCL to share the reduction of employee cost achieved with implementation of revised organizational structure made effective from 01.04.2016.

Reply of PSTCL:

PSTCL revised its manpower structure vide order no. 225 dated 22.03.2016 which was effective from 01.04.2016. Sanctioned strength of PSTCL as on 31.03.2016 was 6707 and was revised to 5138 as per above said office order, so PSTCL has reduced its sanctioned strength by 1569 employees. The total working strength against the sanctioned strength is 3507 which is already less by 1631 employees.

Employee cost as on 31.03.2016 is ₹403.97 Cr. and as on 31.03.2017 is ₹441.98 Cr. There is a total increase in employee cost of about 9.40% during the FY 2016-17 which is due to annual increment, arrear of pay, interim Relief and Time bound scales etc. in spite of reduction in manpower as above.

PSERC Comments & Directive:

Detailed explanation for increase in employee cost despite the reduction in actual employee strength should be submitted to the Commission. A year wise chart of actual employee strength plus additions and minus attrition by way of retirement and employee cost & terminal costs from 2010 onwards, may be supplied to the Commission within a month.

Directive No.4.2: b) Unmanned Sub-stations:

PSERC Directive for FY 2017-18

The Commission notes with serious concern that PSTCL in its submissions in the ARR for FY 2016-17, assured that project for 5 number grid sub-stations will be completed by Nov. 2016. The target date was revised to March 2017. The reasons for not taking up the work at other three grid substations along with commissioning schedule of two grids be shared with the Commission within one month of issue of T.O. 2017-18.

Reply of PSTCL:

The material against the work order has reached the respective sites. As per the information received from the company, two teams have been deployed for commissioning work at two sites (Lalru and Derabassi) and the retrofitting work for relays is going on. Company has been pursued to take up the execution work of other three substations in the project. As shutdowns are involved for retrofitting of the relay, company is preparing complete schedule for shutdowns required. Soon the erection work of these substations (namely Mohali-I, Mohali-II and Kharar) will also be taken up.

PSERC Comments & Directive:

The commission observes that there is no tangible progress in the execution of work in the last one year. The work of three substations is yet to start. PSTCL is directed to supply timelines for completion/commissioning of all the five Sub Stations.

Directive No.4.2: c) Training:

PSERC Directive for FY 2017-18

The Commission directs PSTCL to submit the timelines for setting up of Advanced Training Centre at 220 kV Substation, Ablowal within one month of issue of T.O.2017-18.

Reply of PSTCL:

CMD/PSTCL has desired to explore the modalities for Common sharing facilities of PSPCL & PSTCL. In this regard, a committee of PSPCL and PSTCL officers has been constituted. Regarding Advance training and Research Institute at 220 kV Sub Station, Ablowal, agenda has been sent for putting up in the next meeting of Committee of WTDs , PSTCL for final decision in the matter.

PSERC Comments & Directive:

From the scrutiny of the reply of PSTCL, it appears that the licensee does not have any definite roadmap for training of its employees/officers. PSTCL is directed to submit its plan for training of their employees/officers.

Directive No.4.2: d) Implementation of ERP

PSERC Directive for FY 2017-18

The Commission notes that no tangible progress has been made to implement ERP project except inviting bids, evaluating bids and finally scrapping the bids without deciding further action on the project. The action plan on the ERP project be shared with the Commission within one month of issue of the Tariff Order for FY 2017-18.

Reply of PSTCL:

Board of Directors was requested to decide on further course of action, "Board decides that proposal for ERP implementation in PSTCL shall be taken up later."

Meanwhile PSTCL is considering implementation of various ERP modules as per the Functionality Matrix prepared by the ERP consultant for ERP project with help of outsourced manpower for programming of some modules and testing wherever necessary.

PSERC Comments & Directive:

No tangible progress has been made by PSTCL after scrapping of bids of ERP work in March, 2017. The Commission directs PSTCL to submit the action plan on ERP project within a month of issue of this Tariff Order.

Directive No.4.3: Loading Status of PSTCL Transmission lines and Substations:

PSERC Directive for FY 2017-18

The Commission observes that over-loading status for 1st, 2nd and 4th quarter of FY 2016-17 has not been uploaded on the website. The Commission directs PSTCL to supply status of over-loading of Substations and lines, if any, to the Commission regularly and ensure that website of PSTCL is updated regularly. Ensure that there is no overloading of any line/sub-station during next paddy season.

Reply of PSTCL:

The loading status of transmission lines and Substations of PSTCL is uploaded on the website and a copy of the same is supplied to the Commission.

PSERC Comments & Directive:

The Commission observes that 220 kV Dhandari-PGCIL, Ludhiana and 220 kV Lalton-PGCIL, Ludhiana ckt-1 are overloaded by 116.3% and 104.4%, respectively and all other 220 kV and 132 kV transmission lines and Substations of PSTCL remained below 100% loading during paddy 2017. PSTCL should share the timelines to deload the overloaded lines within one month of the issue of this tariff order. PSTCL should regularly upload the quarterly status of loading conditions of Sub-stations and Transmission lines on its website also.

Directive No.4.4: Maintenance of category wise details of fixed assets:

PSERC Directive for FY 2017-18

The Commission is not convinced with the reply of PSTCL for slow progress in preparation of Assets Cards and Record. The Commission directs PSTCL to complete the task of preparing the Fixed Assets Cards/Record and submit its status Report within one month of the issue of this Tariff Order.

Reply of PSTCL:

The fixed asset register as on 31.03.2016 category wise, location code wise, value wise (without quantity wise detail) has been prepared at corporate level and is being finalized as on 31.03.2017. Further, the components of Fixed Assets have been finalized. The matter regarding preparation of Fixed Asset Register (FAR) quantity wise as well as value wise has been taken up with the consultants in respect of two sub stations namely P&M Mandi Gobindgarh and P&M Ablowal for preparing a draft sample/model.

PSERC Comments & Directive:

The Commission is not satisfied with the reply of PSTCL and further directs to complete the task and submit status report within one month from the issue of Tariff Order.

Directive No. 4.5: Audited Annual Accounts.

PSERC Directive for FY 2017-18

Audited Annual Report for FY 2015-16 has been supplied to the Commission. PSTCL is directed to ensure timely submission of audited accounts.

Reply of PSTCL:

Annual account of FY 2016-17 is pending due to implementation of Ind AS (Indian Accounting Standards). Finalization of these is in progress.

PSERC Comments & Directive:

The Commission notes the compliance and hence directive is dropped.

Directive No.4.6: Reactive Compensation.

PSERC Directive for FY 2017-18

The Commission notes that as per Reactive Compensation report submitted by CPRI for 220 kV & 132 kV levels, the voltage profiles are low for 26 nos. of 220 kV, 45 nos. of 132 kV, 13 nos. of 66 kV and 54 nos. of 11 kV nodes and three nos. of 33 kV nodes. PSTCL has not submitted any action taken by the licensee to implement the recommendation of CPRI. The Commission directs PSTCL to submit the action taken report within one month of issue of Tariff Order.

Reply of PSTCL:

Reactive Compensation Study report submitted earlier (conducted by PSTCL) has been superseded by a fresh study regarding "Capacitor bank study report for NRPC for Northern Region" conducted by CPRI to ascertain capacitive compensation required by various states of Northern Region. Soft copy of the report received in August 2017 from CPRI.

This study has been carried out on behalf of NRPC by CPRI and the funds required for installation of the capacitor banks based on the capacitive compensation recommended for PUNJAB state in the study report shall be provided under PSDF scheme. In the meanwhile DPR for securing funds for the installation of 66 KV capacitor banks has already been forwarded to NLDC, the nodal agency for PSDF funding. Certain clarifications have been sought from CPRI through NRPC on the study report. Reply from CPRI is still awaited. After receiving clarification from CPRI on the study report, DPR to avail funds under PSDF shall be revised accordingly. Since the DPR for the procurement/installation of 66 KV capacitor banks is already under the consideration of Techno-Appraisal committee for PSDF funding, PSTCL is unable to procure/install 66 KV capacitor banks through its own resources.

11 KV capacitor banks are already available with PSTCL. 20 such banks are under installation and all these banks are targeted to be commissioned before onset of paddy 2018, thereby providing a total reactive compensation of 27.22 MVAR in the system.

PSERC Comments & Directive:

PSTCL is directed to share the timelines for implementing the recommendations of the latest study report of CPRI.

Directive No.4.7: Transmission System for evacuation of power from IPPs.

PSERC Directive for FY 2017-18

PSTCL submitted in the ARR for FY 2016-17 that 220 kV line from Goindwal Sahib TPS to 220 kV Bottianwala shall be completed by Dec., 2016 but work is still under progress. PSTCL is directed to complete the work at the earliest, under intimation to the Commission

Reply of PSTCL:

The work on 220KV line from Goindwal Sahib (TPS) to 220KV Botianwala got delayed due to late commissioning of Goindwal Sahib Thermal Power Plant as priorities were shifted to commissioning of other transmission line projects under TS Organization. This was done in order to avoid unnecessary blockage of funds. Now, the work is under progress & the status of this work as on 02.02.2018 shows that out of 203 towers for the above line, 202 towers have been erected and stringing of 80 ckt Kms out of 64.73 Kms of 220 kV double ckt line has been completed. The target has been further postponed from 31.12.2017 to 28.02.2018.

PSERC Comments & Directive:

The Commission observes that the target of November, 2016, which was earlier shifted to December, 2017 has now been postponed to 28.02.2018. Only about 61% stringing work has been completed. PSTCL is directed to intimate the commissioning of the above circuit immediately.

Directive No. 4.8 Calculation of depreciation as per straight line method

PSERC Directive for FY 2017-18

The depreciation rates as per CERC (Terms and Conditions of Tariff) Regulations, 2014 are applicable to PSTCL. Remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets. The Commission directs PSTCL to prepare accounts accordingly.

Reply of PSTCL:

PSERC MYT Regulations 2014 are applicable from the FY 2017-18. Depreciation will be calculated as per the regulation while finalizing the annual account of FY 2017-18.

PSERC Comments & Directive:

The Commission notes the compliance and **hence directive is dropped.**

Directive No.4.9: Replacement of defective energy meters:

PSERC Directive for FY 2017-18

The Commission notes with concern that despite directions in T.O. for FY 2015-16 and FY2016-17, PSTCL has failed to share even a single checking report regarding verification of multiplying factors of 11 kV feeder meters or reasons for defective meters.

The Commission reiterates its direction to PSTCL to ensure replacement of defective energy meters of 11 kV feeders within 10 working days and keep full record of nature of defects and their duration on real time basis. PSTCL is also directed to share the checking reports of multiplying factors of energy meters on its Substations with the Commission.

Reply of PSTCL:

In compliance to PSERC directive, it is informed that total 32 meters of AP feeders became defective in 2017-18, out of which 5 were replaced within 10 days and remaining meters were replaced beyond 10 days of becoming defective. However, the remaining 27 meters were generally replaced within a month of becoming defective. The nature of defects analysed were dead stop, RTC defective, jumping back of reading, erroneous one phase contribution and faulty display. Efforts are being made to replace defective meters within 10 days.

PSERC Comments & Directive:

The Commission in its order dated 19.04.2017 in Petition No. 42 of 2016 (Suo-moto) read with letter dated 15.10.2015 had issued various directions to PSPCL/PSTCL for accurate recording of pumped energy of AP feeders. PSTCL should ensure its implementation.

Directive No. 4.10: Preventive maintenance of transmission lines.

PSERC Directive for FY 2017-18

In order to avoid tripping of transmission/sub-transmission lines, PSTCL is directed to replace Disc Insulators with Anti-Fog Disc Insulators or to adopt hot line washing system for insulators, as adopted by PGCIL & some other states, to prevent tripping of transmission lines during foggy months. PSTCL is further directed to submit compliance report of the same to the Commission within one month of the issue of this Tariff Order.

Reply of PSTCL:

Most of the Disc insulators of transmission lines falling under polluted area have been replaced with anti-fog Disc insulators. Further, the cleaning work of Disc insulators shall be replaced shortly by arranging anti-fog Disc insulators. Further the cleaning work of Disc insulators had been completed before the onset of winter 2017. This practice shall continue to be adopted in future.

PSERC Comments & Directive:

PSTCL is directed to clarify the percentage of Disc Insulators replaced with Anti-Fog Disc Insulators in polluted areas and timelines to replace remaining Disc Insulators with Anti-Fog Disc Insulators in polluted areas.

Chapter 5
Determination of Transmission Charges and SLDC Charges

5.1 Annual Revenue Requirement

The Commission has determined the ARR for PSTCL for FY 2018-19 at ₹1281.99 crore, comprising of ₹1263.63 crore for Transmission business & ₹18.36 crore for SLDC business.

5.2 Determination of Transmission Tariff

5.2.1 PSERC MYT Regulations, 2014 specify that transmission tariff will have the following components:

i) SLDC Operation Charges

ii) Reactive Energy Charges

iii) Charges for use of network

5.2.2 The Commission has approved the ARR of SLDC business for FY 2018-19 at ₹18.36 crore in Table 3.19 of this Tariff Order. The transmission system capacity (net) projected by PSTCL for FY 2018-19 is 13879.15 MW. PSTCL has submitted that it has projected the transmission capacity on the basis of data provided by PSPCL. The Commission has determined the Transmission capacity (net) of PSTCL system from the data submitted by PSTCL and PSPCL (in Format 6 of APR Petition) as 11579.39 MW for FY 2018-19, after considering the effect of closure of PSPCL's Generating Stations, GNDTP and Unit-I&II of GGSSTP.

At present, there is only one distribution licensee (PSPCL) in the State of Punjab. Thus, whole of the SLDC charges determined by the Commission for the year will be borne by PSPCL during FY 2018-19. **The Commission thus approves SLDC charges @ ₹1.53 crore per month for PSPCL and ₹1321/MW/month for Long Term/Medium Term Open Access Customers for FY 2018-19.**

5.2.3 As provided in Regulation 24(2)(c) of the Open Access Regulations, 2011, Short Term Open Access customers shall pay to the SLDC, composite operating charge at the rate of ₹2000 per day or part of the day for each transaction.

5.2.4 The reactive energy charges raised by NRLDC on PSTCL will be directly recoverable by PSTCL from PSPCL.

5.2.5 The ARR for Transmission Business of PSTCL has been determined at ₹1263.63 crore for FY 2018-19 as shown in Table 3.18 of this Tariff Order.

At present, there is only one Distribution Licensee (PSPCL) in the State of Punjab. Thus, whole of the transmission charges of ₹1263.63 crore will be borne by PSPCL during FY 2018-19, which works out to ₹105.30 crore per month.

The Commission thus approves the transmission charges @ ₹105.30 crore per month payable by PSPCL during FY 2018-19.

5.3 Determination of Open Access Transmission Charges

5.3.1 On the basis of ARR for Transmission Business of PSTCL for FY 2017-18, the Open Access Transmission Charges during FY 2018-19 as per the Open Access Regulations notified by the Commission are computed in Table 5.1.

Table 5.1: Open Access Transmission Charges for FY 2018-19

Sr. No.	Particulars	Quantum
I	II	III
1.	Annual Revenue Requirement (ARR) for FY 2018-19 (₹ crore)	1263.63
2.	Transmission System Capacity (net)(MW)	11579.39
3.	Transmission Tariff (₹/MW/month)	90940
4.	Long Term and Medium Term Open Access Charges (₹/MW/Month) of the contracted capacity (same as above)	90940
5.	Transmission Charges based on 57087.74 MU of energy at transmission boundary for sale in the State, as approved in Table 3.5 B of PSPCL Tariff Order for FY 2018-19 (paise/kWh)	22

5.3.2 As per clause (2)(b) of Regulation 23 of the Open Access Regulations, 2011, full Open Access Transmission charges for Short-term Open Access will be levied, which works out to 22 paise/kWh (20paise/kVAh) for FY 2018-19. For Long Term and Medium Term Open Access customers, these charges shall be ₹90940/MW/Month of the contracted capacity.

5.4 Date of Effect

The Commission, therefore, decides to make the Transmission Charges and SLDC Charges determined above applicable from April 01, 2018 and these charges 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 16th April, 2010.

ANNEXURE - II

LIST OF OBJECTORS

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.	PSEB Engineers’ Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala
3.	Additional Objections by PSEB Engineers’ Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala
4.	Comments/Observations of Govt. of Punjab, Department of Power (Power Reforms Wing), Chandigarh.

ANNEXURE-III

OBJECTIONS - PSTCL

Objection No. 1: Sh.Balbir Singh Kharbanda, General Secretary, Cycle Trade Union (Regd.), Kharbanda Complex, Gill Road, Miller Ganj, Ludhiana.

Issue 1: Audited Balance Sheets:
Our Association is willing to have the Audited Balance sheets of PSPCL & PSTCL for the years 2015-16 & 2016-17 to know the truth & irregularities of your Corporations.
Reply of PSTCL:
PSTCL has filed True up Petition for FY 2016-17 (Petition No. 4 of 2018) with the Hon'ble Commission. Balance Sheet for FY 2016-17 (with previous year figures) is annexed to the said Petition. Copy of the same may please be inspected/ obtained from PSTCL website or from the offices of CE/P&M, PSTCL, Ludhiana and/or SE/P&M, PSTCL, Ludhiana.
View of the Commission:
The Objector may note the response of PSTCL.

Objection No.2: PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala.

Issue No. 1: Assets commissioned/capitalized in FY 2016-17 as per APR:
For 2016-17, assets worth ₹493.82 crore were capitalized i.e. commissioned. PSTCL may give the details/list of major items of assets commissioned and capitalized such as lines, sub stations and transformers.
Reply of PSTCL:
Consolidated List of Transmission Lines, Sub-Stations & Transformers commissioned during FY 2016-17 is enclosed herewith for your reference please.
View of the Commission:
The information may be supplied to the Objector under intimation to the Commission.

Issue No. 2: Weekly Transmission Loss computation:
Actual transmission loss for H-1 2017-18 is given as 2.93% average on monthly basis. In case of RLDCs (i.e. NRLDC), the transmission system losses of Regional Grid are worked out on weekly basis with the losses of previous 52 weeks being displayed on the RLDC website. PSTCL may carry out the loss determination on weekly basis, on the pattern of RLDC, initially on parallel basis along with the monthly system presently adopted. Introduction of weekly loss determination may be decided later, depending upon the technical feasibility and acceptance of PSTCL.
Reply of PSTCL:
The monthly transmission losses are calculated manually by collecting data from field offices spread across Punjab. This involves subsequent compilation/processing of voluminous amount of data. Further the matter regarding calculation of transmission losses on weekly basis shall be reviewed after the SAMAST Scheme gets operational in Punjab.
View of the Commission:
The online data from AMR compatible boundry meters installed on the system can be used to compute transmission losses on weekly basis. Therefore, PSTCL should determine losses on weekly basis on the pattern of RLDC as suggested by the objector.

Issue No. 3: Availability for H-1 of 2017-18:
Availability figure given is 99.94%. PSTCL may give the abstract of significant / major equipment outages during H-1 of 2017-18 such as transmission line outages with days/ period of outage, substation outage and power transformer outage in days. In particular, the outages of 400 KV power transformers (if any) may be indicated.
Reply of PSTCL:
Abstract of significant/major equipment outages during H-1 of FY 2017-18 will be submitted later.
View of the Commission:
The Commission does not agree with the reply of PSTCL. The information sought may be supplied directly to the Objector under intimation to the Commission.

Issue No. 4: Capitalization for FY 2017-18 & FY 2018-19:
Capitalization has been shown as ₹469.72 crore (2017-18) and ₹479.76 crore (for 2018-19). PSTCL may give details of main items of equipment proposed to be capitalized during 2017-18 and 2018-19 i.e. transmission lines substations and power transformers proposed to be commissioned in this period.
Reply of PSTCL:
Transmission System Work list of Transmission Lines, Sub Stations & Transformers Commissioned during FY-2017-18 (UPTO 31.01.2018) & likely to be commissioned up to 31.03.2018 is submitted.
View of the Commission:
The information sought by the objector be supplied directly under intimation to the Commission.

Issue No. 5: Employee Cost viz-a-viz Manpower in PSTCL:
The comparison of employee costs as per PSTCL and as approved by the Commission for the 3 year tariff period is as under (in ₹crore per annum):

Employee Cost	2017-18	2018-19	2019-20
As per PSTCL	538	564	596
As approved by the Commission	437	452	473

5.1 There is a huge shortage of manpower (employee strength) as shown in PSTCL. The shortage of manpower i.e. actual strength of employees as compared to the sanctioned strength of employees indicates a huge shortage as under:
Manpower shortage is 2268 (FY 2017-18 H-1), 2079 (FY 2017-18 H-2) and 2003 (FY 2018-19).

5.2 With actual strength of manpower being about 60% of the sanctioned strength, it becomes very difficult to manage the O&M function. The sanctioned strength may have been determined as per the previous or old work load norms whereas, with the expansion of the transmission system and substations, the work load to be handled would be far in excess. The position of manpower shortage compounded with increase in work load is a major problem which needs to be examined and corrected by the Commission.

5.3 In view of the above situation of shortage and increased work load norms, the employee cost as claimed by PSTCL may be allowed without any deductions.
PSTCL statement that a mere 2.27% increase in employee expenses is grossly inadequate and needs to be addressed by allowing the manpower expenses as claimed by PSTCL.

Reply of PSTCL:
Relates to Hon'ble Commission
View of the Commission:
Employee cost is allowed by the Commission in line with PSERC Regulations.
Also refer to directive No.4.2 (a) of this Tariff Order.

Issue No. 6: Interest on Loan:
The ARR figures of PSTCL vis-a-vis MYT-TO are as under (₹ in crore):

Financial Year	Transco	MYT-TO
2017-18	384.75	358.8
2018-19	385.33	352.94

The difference in interest on loan claimed by PSTCL as compared to the interest on loan allowed by Commission is around 7%. The claim of PSTCL may be provisionally allowed by the Commission as it would be subject to further verification and review at the time of true up.
Reply of PSTCL:
Relates to Hon'ble Commission
View of the Commission:
Interest on loan is allowed in line with PSERC Regulations after prudent check.

Issue no. 7: Employee shortage/sanctioned strength:
PSTCL may give the details of employee shortage at 400 KV and 220 KV Grid Substations giving the comparative data of sanctioned strength vis-a-vis actual strength as this factor impacts the safety and operational reliability.
Reply of PSTCL:
Information regarding vacancy position of 400 KV substations & 220 KV Substations under PSTCL as on 31.01.2018 is given below:

Substation	Sanctioned posts	Regular posted	Re-employed	Outsourced	vacant
400 KV	110	67	0	2	41
220 KV	1470	883	77	69	441

View of the Commission:
The objector may note the information supplied by PSTCL.

Issue no. 8: Unmanned Substations:
Implementation of unmanned Substations can be considered if the original design and procurement of equipment was done with objective of setting up unmanned/ automated Substation. Conversion of conventional manned Substation to unmanned Substation involves huge cost and reduces reliability. Cost analysis of earmarked automated/unmanned Substations needs to be examined as some of the functions are to be manned. Unmanned Substation would put extra burden on workload of O&M and protection agencies.
Transco may provide a detailed cost - benefit analysis as well as a detailed write up/justification on converting conventional substation into unmanned/ automated substation. In particular, it may be detailed whether Power Grid Corporation is having unmanned/ automated substations and if so, there experience thereon.
Further IEGC has an important provision in Regulation 5.1 (h) which states as under:
The control rooms of the NLDC, RLDC, all SLDCs, power plants, substation of 132 kV and above, and any other control centres of all regional entities shall be manned round the clock by qualified and adequately trained personnel. Training requirement may be notified by the Commission from time to time, by order".
Transco be directed to get feedback and experience in the field of unmanned Substations from other Transmission utilities as well as PGCIL which may be examined by the Commission.
Reply of PSTCL:
Substation automation is achieved by integration of Bay control units (BCUs), communicable relays & other equipments and binary inputs/outputs switchgears/ non-communicable equipments. Human Machine Interfaces (HMI) work stations) are used to control switchgears and monitor functions and parameters of a substation. All elements are integrated through optical fibre, LAN cables and control cables as per requirement and application. Further digitization of analogue signals (process bus technology) etc. are some of the advantages of Substation Automation System (SAS) which will make necessary (in future) implementation of SAS on all the old and new Substations. This is a pilot project which includes old substations and new substations which are having SAS compatible C&R also, in order to have experience.
View of the Commission:
The Commission finds that the reply of PSTCL is incomplete. The detailed reply with proper cost benefit analysis and experience of other utilities be shared with the Objector under intimation to the Commission.

Issue no. 9: Reactive Compensation:
From the summary given in APR, it appears that the problem of low voltage is due to inadequate reactive compensation at Distribution level which is causing the low voltage problem at the feeding 220 KV and 132 KV substations. PSTCL must coordinate with PSPCL so that the reactive power problem and resulting low voltage is solved in an optimum manner. In particular whenever there is excessive reactive power demand on the Distribution System, it would result in high flow of reactive power on the 220 KV and 132 KV Transformers which results in low voltage. The Transco should coordinate and examine this problem with Powercom so that the instances of high reactive load of Distribution System reflecting upon the Transmission System are identified and corrected. The compensation of high reactive demand must preferably be done at the load point itself or at the most at 11 KV level and the reactive power should not be allowed to flow back into the 220 or 132 KV Transmission System.
Reply of PSTCL:
PSTCL will coordinate with PSPCL to examine and rectify the problem of excessive reactive power demand on the distribution system. It is further added that, PSTCL, is already installing Capacitor banks at 11 kV level in various 132 kV and 220 kV Substations. At present, 39 Nos., 11 kV Capacitor banks of around 53 MVAR are already under installation at various 132 kV and 220 kV Substations of PSTCL and are likely to be commissioned before the onset of paddy season 2018.
View of the Commission:
Refer Directive No.4.5 of this Tariff Order.

Issue no. 10: Updated status of 220 kV line from Goindwal to Botianwala:
Transco may give the updated status of construction, commissioning of 220 KV line from Goindwal to Botianwala.
Reply of PSTCL:
Latest status of construction, commissioning of 220KV line from Goindwal Sahib to Bottianwala is as under:

Sr. No.	Name of Work	Total No. of Towers	No. of towers Stubbed	No. of towers Erected	Stringing & Sagging (in Ckt km.)	Expected DOC
1.	220 kV Goindwal- Bottianwala DC line. Line-Length=64.735 km	203	203	202	80	28.02.2018

View of the Commission:
Refer Directive No.4.6 of this Tariff Order.

Issue no. 11: Important Grid Elements of PSTCL System:
The details of lines and substations have been provided by giving numerical values of line length and substation capacity etc. but the details list of lines and substations has not been provided.
As per IEGC Regulation 5.2 (c) at RLDC level a comprehensive list of important grid elements has to be prepared and put on the RLDC website. The purpose is that none of the important grid elements contained in the list should be switched off or removed from the grid without the prior consent of RLDC.
On a similar pattern, the State i.e. SLDC should compile and put on its website the list of important grid elements of PSTCL system which should be regularly updated from time to time. This list will indicate those grid elements and lines, Transformers and substations that are important for grid operation and should be removed only with the consent of SLDC.
Reply of PSTCL:
Required detailed list of lines and substations has been provided. Regarding regular updating of important grid elements on website, PSTCL will take up matter with NRLC to identify grid elements of PSTCL system which are to be uploaded on SLDC website.
View of the Commission:
The list of important grid elements finalized with NRLC be supplied to the Commission and website be updated accordingly.

Issue no. 12: Follow up of MYT - TO
(i) **True up of 2014-15 of the MYT - TO**
As per audited accounts, it is stated that there was net asset addition of ₹1462.50 crore during 2014-15.
The list of assets commissioned / added corresponding to ₹1462.50 crore may be given i.e. the list of new lines, sub stations and transformers commissioned during 2014-15.
(ii) **Incentive of higher availability**
At present, it appears that the incentive amount is simply pooled into the total revenue income of the Transco and there is no earmarking for linking this amount with the achievement of high availability.
Reply of PSTCL:
(i) True up of 2014-15
Consolidated List of Transmission Lines, Sub-Station & Transformers commissioned during FY-2014-15 & 2015-16 is supplied.
(ii) Incentive of higher availability:
The Transmission Availability Incentive is allowed by the Commission for over achievement of Transmission Availability than target specified in Tariff Regulations. This incentive is allowed at time of True-up for the respective year based on actual performance. Transmission Availability Incentive has been computed as percentage of Annual Fixed Charges allowed after True-up. Any disallowance in Annual Fixed Charges in True-up also lead to disallowance of Transmission Availability Incentive. No regulations have specified regarding the utilisation of this incentive. However, the PSTCL has the right to utilise this incentive at its own discretion. Some of the points regarding utilisation of Transmission Availability Incentive are as below:
a) **Gap Funding** - At present, Transmission Availability Incentive is utilised for gap funding. In the past tariff Orders, actual expenses are being disallowed by the Commission. Hence, the gap between actual expenses and approved expenses has been initially met by approved Return on

equity and Incentive. For remaining gap, the short-term loans (working capital loans) have been borrowed at interest rate of approx. 11%. If this incentive is passed on to employees as incentive, the additional loans need to be borrowed for gap funding.

b) **Profit Making company –** As an industry benchmark, the incentives are given to the employees, where in the Company is making the profit on annual basis. It is observed that PSTCL has incurred loss in past years. PSTCL has achieved marginal profits in FY 2016-17. At this stage, it would be appropriate to socialise the incentive by utilising for reducing the financial burden.

c) **Incentive vs Productivity –** In general, Incentives are given to employees against for annual target set by Management i.e., Key Results Areas. In case of PSTCL, no annual targets for individual employee have been set and performance of individual employee has not been assessed against such target. Also, the productivity for each employee is not being monitored.

d) **State of Art of System –** PSTCL has been achieving Transmission Availability more than Target specified. It may be the case that system configuration (N-1, N-2, etc.) lead to minimum level of Transmission availability. Hence, the additional efforts required to achieve this level of Transmission availability apart from regular assigned work/responsibility need to be assessed.

View of the Commission:

The Commission agrees with the reply of PSTCL.

Issue no. 13: 2015-16 True up

It is stated that net addition of new assets was of Rs 330.88 crore. Similarly for 2016-17, it is stated that 220 KV and 132 KV works of ₹ 415.49 crore are to be taken up. List of new assets commissioned or completed during 2015-16 and 2016-17 may be given by Transco.

Reply of PSTCL:

Information for FY 2015-16 and capitalization for FY 2016-17 has been supplied.

View of the Commission:

The objector may note the information supplied by PSTCL.

Objection No.3: PSEB Engineers Association (Regd.), 45, Ranjit Bagh, Near Modi Mandir, Passey Road, Patiala (additional objections).

Issue No.1: Problem of UI and deviations from schedule

As per CERC deviation settlement mechanism regime and regulations, in case of any State utility/ discom when there is a deviation or difference between actual drawl and schedule the corresponding frequency linked deviation charges are leviable to be paid or received. As directed by the Commission during hearing of 16.02.2018, some issues relating to UI and deviation settlement mechanism are clarified.

1.1 The SEM data collected from the interstate metering points of the northern grid is downloaded and sent to NRLDC (weekly) which compiles the energy drawl figures as well as schedules for each state discom on 15 minutes basis.

1.2 While the energy drawl figures are based on the relevant SEMs, the energy scheduled data is taken from the NRLDC schedules over the day.

1.3 The UI (DSM) data of each state is compiled on 15 minute time blocks and sent to NRPC secretariat for issue of UI accounts on weekly basis.

1.4 The NRPC issues the weekly UI accounts for each state. The abstract of UI billing of Punjab for the period April 2017 to 28.01.2018 is summarized as under:

Month	UI in LU	UI Amount in ₹ Lac
April, 2017	-529.72	357.53
May, 2017	205.34	708.59
June, 2017	-393.65	1101.78
July, 2017	211.10	1726.74
August, 2017	-40.64	361.21
September, 2017	31.55	768.89
October, 2017	262.08	1027.66
November, 2017	-81.64	122.96
December, 2017	60.49	627.37
January 28.01.2018	33.27	1016.08
Total	-241.81	7818.76

In months of April, June, August & November there was net surrender of energy and in addition payment had to be made by Punjab State Power Corporation Limited into the regional UI account. Over the entire period April, 2017 to 28.01.2018, a payment of ₹7818.76 lac had to be made by Punjab State Power Corporation Limited and in addition Punjab State Power Corporation Limited had to surrender 241.81 LUs into the grid. This is a situation of double loss. Surrender of energy indicates Punjab has either purchased the energy from Grid or from IPPs or by own thermal generation and unable to utilize it while overall the payment has to be made to the UI pool account.

1.5 The anomalous situation of surrendering energy into the grid as well as making payment can be avoided by:

i) Adhering to the drawl schedules.
ii) Avoiding surrender of energy at high frequency
iii) Avoiding over drawl of energy at low frequency

2. The power regulation and control of the state is done on the basis of telemetered, online display of data in the SLDC control room which gives the online display of MW drawl by the State from the Northern Grid. In case the telemetered MW drawl figures do not tally with or match the energy figures of SEM meters, it will directly impact the UI accounts financially. The practical problem is that while SLDC grid operation and control/regulation is done based on online display of telemetered data the commercial account and billing of DSM figures is done after a time gap of over 10 days, and if there is a mismatch or difference between telemetered values and metering values (SEM) the billing and payment has to be based on metered values.

a) Actual drawal of Punjab as per SEM meters:

Date	**15.01.2018**	**16.01.2018**	**17.01.2018**
Drawl	190.72	221.18	225.50

b) Schedule as per NRLDC schedules:

Date	**15.01.2018**	**16.01.2018**	**17.01.2018**	**18.01.2018**
Schedule	153.54	192.42	02.57	199.21

c) UI account prepared by NRPC gives the following:

i) Schedule for the day
ii) Drawl for the day
iii) Net deviations in ₹ lac.

Date	**15.01.2018**	**16.01.2018**	**17.01.2018**	**18.01.2018**
Schedule	154.84598	191.7109	200.5025	200.8111 LU
Drawl	190.72487	221.17752	225.49867	217.16182 LU
Amount	89.39529	98.98965	100.32023	49.89145 lac

d) The telemetered drawl vs schedule is given in enclosed.

e) NRLDC figures of drawl (actual) as compared with metered data (i.e. UI figures of NRPC) are as under:

Date	**15.01.2018**	**16.01.2018**	**17.01.2018**	**18.01.2018**
NRLDC 3a-3d	172.13	198.29	203.56	194.38
Metered Annex-2	190.72	221.18	225.50	217.16
Difference	18.59	22.69	21.94	22.78

The LU actual drawl figures of NRLDC would be the actual as telemetered on the basis of which on line control is done while the SEM figures are those on basis of which UI billing is done. The difference is of the order of 10/days which is quite substantial and a major reason for high quantum of UI billing.

Conclusion: In case the telemetered figures are LOWER than the ACTUAL SEM metered figure, it will result in higher quantum of over drawl and billing while finalising/issuing UI accounts. On certain days when there is sudden rainfall/stormy weather the actual drawal crashes while schedule remains high, resulting in under drawal at high frequency. There was under drawal i.e. surrender of energy and at the same time payment made to UI account during months of April, June, August, November. Thus over total period April, 2017 to 28th January, 2018 Punjab surrendered 241.81 energy LUs and also made payment of ₹78.1876 Cr.

Reply of PSTCL:

The SLDC maintains the stability of the Grid within the parameters of Grid Code & IEGC. As the load, weather and outages of load/generation are highly vibrant in nature so such situations sometime arise for surrendering power and making UI payments to UI pool to protect stability of the Grid.

SLDC/PSPCL exercise full control as far as possible over points (i), (ii) & (iii) of para 1.5 of the objector. Such gaps in demand and availability as per telemetered data and SEM data are part of the system and depends upon real time scenario. Regarding time gap of 10 days between telemetered and SEM data, the matter shall be taken up with NRLDC to sort out the problem.

It is pertinent to mention here that presently overdrawl/underdrawl and UI/deviations from schedule, surrendering of power, scheduling is managed by office of Chief Engineer/PP&R, PSPCL being only Discom in Punjab control area.

View of the Commission:

The Commission agrees with the reply of PSTCL to some extent and directs PSTCL/PSPCL to adopt more scientific approach to minimize UI payments. The Commission further desires that action plan to reduce gap of 10 days between telemetered and SEM data be shared with the Commission**.**

Issue No.2: Role of Power generating stations to meet grid contingency resulting from outages of IPP stations/units:

During the period 01.10.2017 to 17.10.2017 there was a simultaneous outage of IPP units:

a) NPL Rajpura during 01.10.2017 to 06.10.207 and 12.10.2017 to 17.10.2017 when one out of 2 units was on outage.
b) TSPL during period 03.10.2017 to 17.10.2017, station operated with 2 out of 3 units, at about 30 MU/day or about 1250 MW against 1980 MW capacity (i.e. 2 units out of 3 running). On the days indicated there was a capacity outage of 700 MW (NPL) and 660 MW (TSPL).
c) Response of Punjab State Power Corporation Limited stations to outage of IPP Units:
    i) GNDTP plant had been made deliberately inoperative by PSPCL which had reduced coal stock to Zero in end September, 2017. So during crisis of IPPs outage in October, Punjab State Power Corporation Limited did not have the option to run GNDTP units due to NIL coal stock.
    ii) GNDTP responded to the crisis of IPP units outage by increasing generation from 4.7 MU/day on 01.10.2017 to cover 20 MU/day on 05.10.2017 and maintaining over 16 MU/day upto 16.10.2017.
    iii) GHTP during crisis period 05.10.2017 onwards, GHTP generated upto 19.8 MU/day i.e. 825 MW.
    iv) Due to response by Punjab State Power Corporation Limited thermal units the over drawl (UI) was kept under control and corresponding UI charges were controlled.
    v) This instance indicates that in the coming paddy season of 2018 there will be a generating capacity shortfall of 460 MW (GNDTP) plus 420 MW (GGSSTP) and this will make the grid operation/SLDC operation more difficult. Any unscheduled outage of IPP units will be more difficult to manage and result in following consequences:
    i) Power cuts of extended duration
    ii) UI billing on account of over drawal at low frequency.

Reply of PSTCL:

Simultaneous outage of IPPs is the rare phenomenon which can be tackled with load shedding and increasing TTC and ATC of Transmission System in future.

View of the Commission:

The Commission notes the view point of PSTCL. PSTCL/PSPCL shall jointly evolve a contingency plan to tackle the scenario highlighted by the objector.

Issue No.3: Impact of shutting down of Powercom Thermal Units on EHV Grid Stability and reduction of Transfer Capability

Impact of shutting down of two units of Ropar Thermal and four units of Bathinda
Thermal on grid operation and interstate power drawal capability:

a) With the removal/shutting down of 460 MW capacity at Bathinda and 420 MW capacity at Ropar, the impact is of reduced thermal generation at load centres in Punjab with the result that equivalent power would have to flow additionally through the 400 kV and 220 kV transmission system of PSTCL.
b) The impact of additional loading on the transmission system of PSTCL would be to reduce the available transfer capability of power which Punjab can draw from the Northern Grid to meet the state power demand.
c) The NRLDC/POSOCO have addressed a ‘letter dated 01.02.2018 wherein the following observations have been made:

i) With the shutting down of Bathinda and two units of Ropar the total import capability of Punjab will reduce from 6700 MW to 6100 MW. The available transfer capability will reduce from 6100 MW to 5500 MW. The total load in MW which can be met in Punjab will reduce from 11700 MW to 11000 MW.

2. In case of the strategically located GGSSTP Ropar Station power is given to several load centres in Punjab viz Mohali, Gobindgarh, Ludhiana and Jalandhar through double circuit 220 kV lines from Ropar TPS to these load centres. Also power is fed to 132 kV load centre Ropar/Asron. NRLDC has observed that in case generation at Ropar is increased to full capacity of 1260 MW, it improves the total load import capability of Punjab by around 200 MW and TTC increases from 6100 MW to 6300 MW. Full loading of RTP station reduces the loading of 400/220 kV power transformers (ICTs) at Ludhiana.
   By keeping full generation at Ropar and Bathinda it significantly improves the voltage profile of Punjab and increases the reliability.
3. NRLDC has cautioned that 400 kV transformers at Ludhiana, Amritsar and Makkhu are highly loaded and upgrading of 315 MVA ICTs at Ludhiana to 500 MVA should be considered.

3.1 Full generation at Ropar will enhance the import capability of Punjab. Increased generation at 220 kV level (Ropar, Lehra Mohabbat and Bathinda) will help in meeting the high demand, expected at the time of paddy season as well as improvement in reliability due to increased voltage support.

4. The clear cut observations and recommendations of NRLDC point out to the advantages of retaining the full generation capacity at Ropar and Bathinda. The NRLDC has pointed out about the loading conditions in the Punjab EHV system of 400 kV and 220 kV and how the extra power can be availed from the grid in case Punjab retains the full capacity of Ropar and Bathinda Thermal stations.
5. It is requested that the Commission may advise the GoP to retain the units of Bathinda and Ropar on account of above factors relating to UI, optimum and management and ensuring stable and reliable operation of EHV system to meet the high power demand of State in the coming paddy months this year as well as subsequent years.

Reply of PSTCL:

The case has been studied on account of load flow with the following consideration:

Punjab's load considered	=	12290MW (as intimated by PSPCL)
Punjab's own generation:		
Own (Hyrdo)	=	700 MW
Own (Thermal	=	1510 MW (without GNDTP plant and 2 units of 210 MW of GGSSTP out)
IPP's:		
Talwandisabo (TPS)	=	1473 MW
Goindwal (TPS)	=	394 MW
Rajpura (TPS)	=	1320 MW Data supplied by PSPCL
Total	=	**5397 MW**

As per the load flow study carried out with the above data, the load generation balance comes out to be:-

Generation	=	5397.2 MW
Load	=	12291.7 MW
Losses	=	229.8 MW
Drawl from outside	=	7124.4 MW (outside drawl includes share from BBMB as well as central sector share, and drawl from ICTs of Power Grid)

With this, the following 220 KV network of PSTCL has been found overloaded as:

220 KV Kartarpur- 400 KV Jalandhar (220 KV Bus) PGCIL	=	150.7%
220 KV Ganguwal – Bhakhra (Left) (3 Ckt.)	=	103.2%
220 KV GGSSTP – 220 KV Ghulal (SC)	=	108.3%
220 KV GGSSTP – 220 KV Gaunsgarh (SC)	=	147.6%
220 KV Lalton Kalan – 400 KV PGCIL Ludhiana	=	131.7%
220 KV Dhandari Kalan – 400 KV Dhuri (220 KV bus) (DC)	=	102.4%

In addition to above loading of 400 KV S/Stn. Amritsar and 400 KV Ludhiana comes out to be above 75% and under (N-I) contingency it becomes 119% and 102% respectively.

Bus voltage of 220 KV Sahnewal, 220 KV Mansa, 220 KV Kohara, 220 KV Ghulal and 220 KV Jhunir has been evaluated as below 198 KV.

However, in case 2 units of GGSSTP and full generation of GNDTP Bathinda is retained then load generation balance comes out to be as:

Generation	=	6200 MW
Load	=	12291.2 MW
Looses	=	195.6 MW
Drawl from outside	=	6286.8 MW

This outside drawl includes share of BBMB, Central Sector share as well as drawl from ICT's of Power Grid. With this load generation balance, following 220 KV network of PSTCL shall be over loaded as:

220 KV Kartarpur – 400 KV PGCIL Jalandhar	=	140.6%
220 KV GGSSTP – 220 KV Gaunsgarh	=	135.9%
220 KV DhandariKalan – 400 KV Ludhiana (220 KV Bus)	=	109.9%
220 KV LaltonKalan – 400 KV Ludhiana (220 KV Bus)	=	125.2%

With this system the bus voltages of 220 KV Kohara, 220 KV Ghulal, 220 KV Gaungarh, 220 KV Sahnewal shall remain less than 198 KV.
From the above two cases it can be said that:-
Availability of 2x210 MW power of GGSSTP and full plant capacity of GNDTP (4x110 MW) shall reduce the overloading of the PSTCL system.
Power Scenario from April-2018 to Sep-2018 (without GNDTP & 2 Units of GGSTP) is submitted.
View of the Commission:
The objector may note the reply submitted by PSTCL.

Objection No.4: Govt. of Punjab, Department of Power (Power Reforms Wing)

Issue No.1: Revenue Gap:
Presently, the financial position of PSTCL is not so good. While PSTCL has been showing improvement in its fiscal health, this trend needs to be supported and encouraged. A utility can best serve its consumers when it is financially viable. In the Revised Estimates for FY 2017-18, PSTCL has depicted revenue gap as ₹187.78 Crore approximately. The increase in the gap is mainly because of increase in Employee Cost, depreciation, Return on Equity etc. It is the statutory duty of the State Government to promote the Financial, Operational and Technical viability of PSTCL. Hence, in terms of Section 86 of the Electricity Act, 2003, the Commission in pursuance to its duties is requested to suggest a road map to meet this goal.
View of the Commission:
The Commission examines the ARR and determines the Net Revenue Requirement as per PSERC Regulations.

Issue No.2: Disallowances:
The Commission while determining electricity tariff has been making some disallowances. These have been mainly related to employee costs, interest charges and also on account of non-achieving of various norms, performance parameters and targets fixed by the Commission. Disallowance in Actual expenses such as Employee Costs, Interest Charges etc. affects financial position of Utility and erode its capacity to make investments that would help it provide quality and affordable power to the consumers in the State.
View of the Commission:
The Commission examines the ARR as per the norms, parameters and targets specified in the Regulations and accordingly determines the ARR after prudence check of the expenses projected in the ARR. PSTCL has been allowed an incentive for over achieving transmission system availability target as verified and certified by SLDC.

Issue No.3: Employee Cost:
The Commission has been consistently disallowing the Employee Cost to the Utility, which can in no way be reduced, since the terms and conditions of an employee once recruited cannot be changed to his disadvantage during the course of his service. Further, the employees who are retiring are also contributing to increase in employee cost of PSTCL by way of payment of Gratuity, Pension etc. The actual employee cost should be allowed as pass through as it is a legitimate historical component of the cost of supply and a committed liability of PSTCL.
PSTCL has proposed employees cost for 2018-19 at ₹541.69 Crore against 2017-18 (RE) of ₹505.48 Crore. PSTCL is striving hard to reduce employee cost and bring in efficiency, but it will take time for

PSTCL to reduce the employee cost and bring it at par with other advanced State Utilities. Till then, the Employee Cost, which is a genuine cost of Utility, must be passed on to the end consumers on an actual basis keeping in view the APTEL Judgments and genuine requirements which are statutory in nature. Therefore, Commission is requested to allow employee cost as projected by PSTCL.

View of the Commission:

The Commission allows employee cost as per PSERC Tariff Regulations/APTEL Judgment dated 30.03.2015 in Review petition No. 6 of 2015. PSTCL has been asked to give certain details to justify claim and the matter will be re-examined after receipt of the information. Also refer paras 2.4 and 3.5 of this Tariff Order.

Issue No.4: A&G Expenses/R&M Expenses:

The PSTCL has submitted the Administration and General (A&G) expenses and Repair & Maintenance (R&M) expenses and to provide quality, uninterrupted and affordable power to its valuable consumers in the State, special Repair & Maintenance works in addition to General Repair & Maintenance has to be carried out. Repair & Maintenance of Transmission System with appropriate replacements of equipments and renovations is of great importance so that uninterrupted supply can be maintained and grid failure be avoided. The Commission is requested to allow Administration and General (A&G) expenses and Repair & Maintenance (R&M) Expenses as submitted by PSTCL.

View of the Commission:

The Commission allows R&M/ A&G expenses as per Regulation 26 of PSERC MYT Regulations, 2014, after prudence check. Also refer paras 2.5, 2.6 and 3.7 of this Tariff Order.

Issue No.5: Capital Expenditure/Capacity Addition:

The PSTCL has submitted Capital Expenditure of ₹385.50 Crore and ₹260.61 Crore during FY 2017-18 and FY 2018-19 respectively which includes works related with construction of new Sub-Stations, new lines, addition and augmentation of transmission system to cope up with the growing demand, Automation of Five 220 KV Sub-Stations, ERP, Interstate Boundary Metering-cum-Transmission Level Energy Audit Scheme etc., laying of transmission network for evacuation of power from generation projects in the State as well as for evacuation of power share of Punjab from various Central Sector Projects. Because of the capacity addition in the State Generation, appropriate Transmission capacity is also required to be created. The Commission is requested to allow these expenses keeping in view the overall expenditure of the utility.

View of the Commission:

The Commission allows the capital expenditure after prudence check. Refer para 3.6 of this Tariff Order.

Issue No.6: SLDC Business:

PSTCL is discharging the statutory functions of the State Load Despatch Centre (SLDC) in the State of Punjab. SLDC in Punjab has started working independently since FY 2011-12. PSTCL has submitted the revised estimates for SLDC to the tune of ₹16.90 Crore for FY 2017-18 and total revenue requirement of ₹19.59 Crore for FY 2018-19 for monitoring grid operations, supervision and control over the intra state transmission system, carrying out real time operations for grid control and dispatch of electricity within the state through secure and economic operation of the State grid in accordance with Grid Standards and State Grid Code. The SLDC is pivotal to the State’s power sector. Its financial, operational and technical viability has to be maintained at every cost. The Commission is requested to approve the expenditure as detailed in the ARR for smooth functioning of SLDC.

View of the Commission:

The Commission separately approves the expenses projected in the ARR for SLDC business of PSTCL in accordance with PSERC Regulations after prudence check.

Issue No.7:

The Commission is requested to keep in view above aspects, overall expenditure of the utility and various guidelines/ instructions issued by Ministry of Power, Government of India and various Judgments by APTEL and other Courts so that a financial, operational and technical viability of PSTCL is maintained while finalizing the tariff for FY 2018-19.

View of the Commission:

The expenses projected in the ARR are allowed as per the PSERC Regulations after prudence check.

ANNEXURE-IV

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. <u>Sh. Bhupinder Singh Mann:</u>

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. <u>Principal Secretary, NRSE (CEO, PEDA):</u>

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 13^{th} 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 MU and cost of purchasing RECs@1500 is noted to be ₹326.96 crore. Non-solar REC inventory stands at ₹67.60 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 item wise.

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. <u>Sh.Mohinder Gupta, President, Mandi Gobindgarh Induction Furnace Association.</u>

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. Er P.S. Virdi, President, the Consumer Protection federation:

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. **Thermal Plants:**

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. Shri Bhagwan Bansal, Cotton & Ginning Industry (Special Invitee).

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.