Chapter-II

Financial Turnaround

Chapter-II : Financial Turnaround

2.1 Introduction

The UDAY guidelines/MoU stipulate financial and operational efficiency parameters to be monitored for time-bound improvement. The targeted activities under financial parameters along with the targeted benefits were as follows:

Table 2.1: Financial parameters under UDAY scheme and targeted benefits

Sl. No.	Financial parameters	Purpose/envisaged benefits
1.	Taking over 75 *per cent* of Company's outstanding debts as on 30 September 2015 by Government of Punjab (GoP).	Financial support by reducing debts and interest burden of the Company.
2.	Conversion of 25 *per cent* of the Company's debts into loan/Bonds (by the Company) at rates of interest not more than banks base rate *plus* 0.1 *per cent*.	Financial support for reducing interest burden of PSPCL.
3.	Taking over of future losses of the Company (2017-18 to 2020-21) in a graded manner.	Improving financial health and liquidity position for operations.
4.	Quarterly tariff revision to offset fuel price increase.	Such periodic and graded tariff revision will be easier to implement and can be absorbed by consumers.

Source: MoU signed amongst MoP, GoP and the Company. Targeted benefits are as per UDAY scheme.

It was observed that the GoP had spent ₹ 51,326.02 crore on power sector during 2015-20 on account of subsidy to consumers (₹ 35,455.81[1] crore), losses taken over (₹ 241.95 crore) and investment in equity (₹ 15,628.26 crore). The key financial parameters, their targets and achievement there against were as follows:

Table 2.2: Achievements of the Company against financial parameter under UDAY scheme

Sl. No.	Financial position	As on 31 March 2016	Target	Post UDAY position as on 31 March 2020
1.	Outstanding debts of the Company	₹ 20,837.68 crore (as on 30 September 2015)	Debt of ₹ 15,628.26 crore was to be taken over by GoP (up to 2016-17).	Debt of ₹ 15,628.26 crore was taken over by 2016-17 and converted into equity.
			Bonds in respect of remaining 25 *per cent* debt amounting to ₹ 5,209.42 crore to be issued by the Company by 2016-17.	Not issued.

[1] Actually paid during 2015-16 to 2019-20.

2.	Takeover of losses	Not Applicable	5 *per cent* to 50 *per cent* of losses of previous year to be taken over during 2017-18 to 2020-21.	Losses were taken over during 2017-18 to 2019-20 as per MoU.
3.	Annual Gap between ACS and ARR (Excess of cost over revenue)	₹ 0.53 per unit	Elimination of gap by 2018-19.	₹ 0.30 per unit
4.	Annual AT&C losses (in *per cent*)	15.90	14.00	13.98
5.	Quarterly tariff revision, particularly to offset fuel price increase.	Fuel Cost Adjustment (FCA) not carried out since 2nd quarter of 2019-20 (was to be levied in 4th quarter of 2019-20) to 3rd quarter of 2020-21.		

Source: MoU for UDAY scheme and UDAY portal data provided by the Company.

It was observed that the Company, on the direction of the State Government, converted the entire loan into equity whereas only ₹ 3,900 crore was to be converted into equity and remaining was to be treated as a grant. Further, the Company did not issue Bonds for remaining debt (25 *per cent*) of ₹ 5,209.42 crore, to be issued by it up to 2016-17. The Company also failed to eliminate the ACS-ARR gap. The quarterly tariff revision to offset fuel price increase was not done during 2019-20 (2nd quarter) to 2020-21 (up to 3rd quarter) on orders of Government of Punjab. These issues have been discussed in detail in following paragraphs.

The position in respect of future losses projected in MoU and the actual losses of the Company during the five years' period 2015-20 was as follows:

Table 2.3: Achievements of the Company against losses projected under UDAY scheme

(₹ in crore)

Year	Projected losses in UDAY	Actual losses	Previous year losses taken over
2015-16	(-) 1,839.00	(-) 1,694.85	-
2016-17	(-) 1,681.00	(-) 2,836.17	-
2017-18	(-) 220.00	(-) 906.92	₹ 141.81
2018-19	467.00	(-) 37.80	₹ 90.69
2019-20	NA	(-) 1,158.20[2]	₹ 9.45

Source: MoU for UDAY scheme and Annual accounts of the Company.

The actual losses of the Company remained higher as compared to those projected for the years 2016-17 to 2018-19 in the MoU. The Company failed to reduce the losses in line with the projections made in the MoU of UDAY scheme. It was observed that increase in loss to ₹ 1,158.20 crore during 2019-20 was due to increase in power purchase cost at a rate higher than increase in the income of the Company as compared to previous year 2018-19. Taking over of loans and losses by GoP indicated that the GoP was paying for the management inefficiency of the Company.

The financial issues are discussed in detail as follows:

[2] 50 *per cent* of this loss *i.e.* ₹ 579.10 crore was taken over by GoP in 2020-21.

2.2 Loan and equity

2.2.1 *Conversion of loan into equity*

As per the Scheme and MoU signed thereunder, the State Government was required to take over 75 *per cent* of DISCOM's outstanding debt as on 30 September 2015 of ₹ 20,837.68 crore, over two years – 50 *per cent* in 2015-16 and 25 *per cent* in 2016-17. The debt of ₹ 15,628.26 crore taken over, was required to be converted into State Government grant during the period 2015-16 to 2017-18 with a relaxation of two years. In case, DISCOM required equity support, not more than 25 *per cent* of this grant was to be given as equity. The borrowings of ₹ 15,628.26 crore made by the State to takeover Company's debt were thus required to be transferred to the Company in the shape of grant ₹ 11,728.26 crore and equity ₹ 3,900 crore.

Audit, however, observed that the State Government, in non-observance of Rule 6.1 of the UDAY scheme notification which prescribed approval of the MoP/GoI for any amendment to the MoU, decided to convert (March 2020) the entire loan of ₹ 15,628.26 crore into equity. This resulted in understatement of revenue deficit of the State by ₹ 11,728.26 crore for the year 2019-20.

The Company/State Government replied (May 2021/August 2021) that Ministry of Power, Government of India (GoI) had been apprised regarding conversion of loans of ₹ 15,628.26 crore into equity during the UDAY review meetings. The reply is not tenable as GoI's specific approval for deviation from MoU was not obtained.

2.2.2 *Non-issuance of bonds*

As per the Scheme and the tripartite MoU, DISCOMs were required to convert 25 *per cent* of the debt outstanding of the banks/ financial institutions (FIs) into loan or State Government guaranteed bonds with the interest at rate not more than the banks base rate *plus* 0.10 *per cent*.

It was noticed that the proposal to issue bonds amounting to ₹ 5,209.42 crore, during the year 2016-17, was approved (June 2016) by the Company and a special resolution in extra ordinary general meeting (December 2016) was also passed for the same.

However, even after a lapse of more than four years from the approval for issue of bonds, neither the bonds have been issued nor the debt has been converted into loans at the rates as prescribed in the Scheme. Audit observed that the rating agencies did not provide a rating to the Bonds proposed to be issued.

Resultantly, the Company paid higher rates of interest to banks/FIs, ranging between 8 *per cent* and 12.25 *per cent*, as against the rate of interest for Punjab Government bonds issued under UDAY scheme *i.e.* 8.72 *per cent*. The Company paid excess interest of ₹ 261.09 crore due to banks charging higher rate of interest during the period 2016-17 to 2019-20.

The Company/State Government stated (April/May 2021) that the bonds could not be issued due to rating issues. The fact remains that the target rate of interest *i.e.* banks base rate *plus* 0.1 *per cent* could not be achieved.

2.2.3 *Increase in outstanding debt post UDAY*

The primary objective of the Scheme was to reduce the interest burden of the DISCOMs to help in their financial turnaround. For this purpose, the debts of the Company were taken over by the GoP. The debt position (excluding loans not considered under UDAY scheme *i.e.* GPF loans, Centrally Sponsored Schemes loans, Bonds, Debentures and Cash credit/overdraft limits) of the Company pre and post UDAY are as below:

Table 2.4: Table showing outstanding loans of the Company

(₹ in crore)

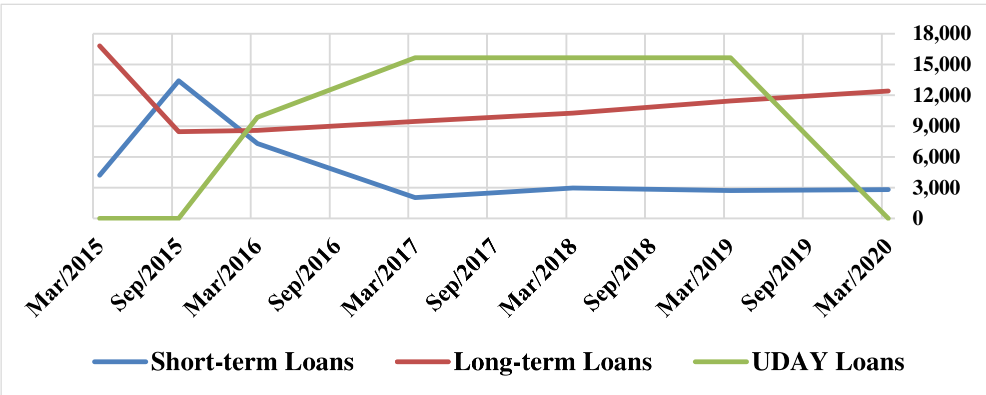
Date (As on)	Short-term loans	Long-term loans	UDAY loans	Total loans
31 March 2015	4,205.64	16,788.61	0.00	20,994.25
30 September 2015	13,381.53	8,445.00	0.00	21,826.53
31 March 2016	7,295.14	8,569.33	9,859.72	25,724.19
31 March 2017	2,030.05	9,454.04	15,628.26	27,112.35
31 March 2018	2,949.60	10,236.50	15,628.26	28,814.36
31 March 2019	2,702.74	11,418.74	15,628.26	29,749.74
31 March 2020	2,806.16	12,402.40	0.00	15,208.56

Source: Annual accounts of the Company.

The total loans of the Company pre-UDAY in September 2015 were ₹ 21826.53 crore. They included loans for generation business amounting to ₹ 988.82 crore. Despite conversion of loans of ₹ 15,628.26 crore into equity, total loans of ₹ 15,208.56 crore still remained outstanding as on 31 March 2020. The upward trend of outstanding loans could not be arrested post UDAY. There was a net increase of ₹ 9,010.29 crore in outstanding loans from September 2015 to March 2020. It was also observed that the outstanding receivable from State Government on account of tariff compensation and dues of Government Departments had increased by ₹ 7,181.41[3] crore during 2015-20 implying that the debt burden had increased primarily due to non-payment of dues on time by Government of Punjab.

Chart 2.1: Short term, long term and UDAY loans from March 2015 to March 2020

(₹ in crore)



[3] Outstanding dues against State Government on account of tariff compensation: ₹ 5,338.54 crore and defaulting dues of Government Departments: ₹ 1,842.87 crore.

As seen from the **Chart 2.1**, the increase in loan extended under UDAY corresponded with a decrease in Short term loans indicating the impact of UDAY scheme. The Long term loans have increased from ₹ 8,569.33 crore as on March 2016 to ₹ 12,402 crore as on March 2020.

The Company/State Government (May 2021/August 2021) replied that during the period April 2020 to February 2021, ₹ 712 crore have been recovered from Government departments and subsidy amounting to ₹ 9,656.95 crore has been received from GoP during 2020-21. The reply is not acceptable as the management failed to lay out concrete steps to prevent the outstanding loans from reaching pre UDAY levels.

2.2.4 *Pending penal interest*

As per MoU, GoI was to facilitate waiver of unpaid overdue interest and penal interest on Company's debt and refund/adjust of any such overdue/penal interest paid since 1 October 2013 to Banks/Financial Institutions.

Audit observed that the Company had paid penal interest amounting to ₹ 56 lakh to various banks after 1st October 2013 on loans availed from them, however, only one bank had refunded an amount of ₹ 8.37 lakh and balance ₹ 47.63 lakh was still (December 2020) pending for waiver and refund. Matter was taken up (October 2018 and December 2020) by the Company with GoI to direct the banks to refund the amount of penal interest to Company, however, response from the MoP/GoI was awaited (March 2021).

The Company/State Government replied (April/May 2021) that efforts are being made to recover the amount from the banks and the matter has also been taken up with Ministry of Power, GoI.

2.3 Tariff

2.3.1 *Levy of quarterly fuel cost adjustment surcharge*

The Scheme and the tripartite MoU provides for quarterly tariff revisions to offset the increase in price of fuel consumed for generation of power. Periodic tariff revisions being easier to implement, are absorbed by the consumers. Accordingly, based on petition filed by the Company, PSERC fixes fuel cost adjustment (FCA) surcharge quarterly as per Regulation 55 of the PSERC (Conduct of Business) Regulations, 2005. Further, GoP directions (March 2013/January 2020) required Company to seek prior approval of GoP for all such petitions, where tariff was affected, before submitting them to PSERC.

Audit observed that the Company implemented the quarterly tariff revisions on account of FCA upto 1st quarter of 2019-20. Though the Electricity Act did not mandate the State Government to direct a distribution licensee (PSPCL in the State of Punjab), GoP in contravention to the provision of the Act, Scheme and MoU, decided (August 2020) that with effect from 2nd quarter of 2019-20, the FCA surcharge shall be levied on annual basis along with carrying cost. GoP directed the Company to take up the matter with

PSERC for amendment in concerned PSERC Regulations and to file the petition for FCA for 2nd to 4th quarter of 2019-20 at the time of filing aggregate revenue requirement (ARR) for the next year.

Due to these orders of the State Government, the Company could not implement the quarterly FCA tariff revision due for the 2nd to 4th quarters of financial year 2019-20 and respective amounts of FCA could not be recovered from/paid to the consumers as follows:

Table 2.5: Table showing loss of interest due to non-recovery of FCA

(₹ in crore)

FCA surcharge	Dates of applicability of FCA	FCA surcharge to be recovered for the quarter	Total FCA surcharge to be recovered during the quarter	Delay in months	Base rate of interest charged by SBI (in *per cent*)	Loss of interest
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (4)*{(6)/ 100}*{(5)/12}
2nd Quarter 2019-20	1 January 2020	67.22	67.22	3	9.05	1.52
3rd Quarter 2019-20	1 April 2020	7.52	74.74	3	8.15	1.52
4th Quarter 2019-20	1 July 2020	(-) 25.45	49.29	3	8.15	1.00
			Total			**4.04**

Source: Petition for quarterly FCA revision.

Audit observed that the petition made by Company to PSERC for amendment of PSERC regulations enabling yearly FCA tariff revision was rejected (December 2020) by the PSERC. Consequently, Company had to suffer loss of interest amounting to ₹ 4.04 crore due to non timely recovery of FCA.

The Company/State Government replied (April/May 2021) that the FCA shortfall was met in the first quarter of 2020-21 for which the amount of FCA was worked out as (-) ₹ 115.59 crore. The reply is not tenable as the recovery of FCA shortfall did not compensate for the interest cost suffered by the Company thereon.

2.3.2 *Delay in revision of tariff*

The National Tariff Policy (January 2016) of Ministry of Power, GoI provides that requisite tariff changes should come into effect from the date of commencement of each financial year. PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 prescribed that the Company shall file a petition for approval of its Aggregate Revenue Requirement and Tariff, for each financial year on or before 30th November of the year preceding the financial year and the process of issue of tariff orders should be completed by 30th April of each financial year. The MoU for UDAY required the Company to timely file its tariff petition with the PSERC, so that Tariff order may be issued for the year as early as possible.

Audit observed that though the Company filed the tariff petitions within the stipulated timeframe (*i.e.* 30th November each year), there was delay on its part in furnishing further information sought by PSERC. Delay in furnishing State Government's assurances regarding continuation of various subsidies was also observed. Consequently, the tariff orders for the years 2015-16 to 2020-21 were issued with delays ranging between 18 to 205 days. The delay in issue of tariff orders resulted in delayed recovery of increased tariff from consumers which had consequential interest cost of ₹ 45.44 crore during 2017-18 to 2020-21.

The Company/State Government replied (April/May 2021) that the tariff petitions were filed within the stipulated time and the Company cannot influence the PSERC in their decision making. The fact remains that delay in furnishing the information to PSERC and GoP's assurance regarding continuation of subsidies led to delay in issue of Tariff Orders.

2.3.3 *Gap between Average Cost of Supply and Average Revenue Realised*

One of the primary purpose of UDAY scheme was to progressively eliminate the gap between average cost of supply and average revenue realised of the DISCOMs. This was sought to be achieved by rationalising costs and ensuring adequate periodical tariff hikes.

As per MoU, the gap between Average Cost of Supply (ACS) and Average Revenue Realised (ARR) had to be eliminated by the year 2018-19. To eliminate cost and revenue gap, GoP was required to ensure tariff hikes as reflected in the MoU. Actual achievement of Company in elimination of the gap during 2015-20 is given below:

Table 2.6: Table showing targeted and actual gap between ACS and ARR

Year	Targeted ACS minus ARR gap (in ₹)	Actual ACS minus ARR gap (in ₹)
2015-16	0.43	0.68
2016-17	0.37	0.65
2017-18	0.04	0.48
2018-19	(-) 0.09	0.05
2019-20	Not prescribed[4]	0.30

Source: MoU for UDAY scheme and UDAY portal data provided by the Company.

As can be seen the Company could not bridge this gap even by the year 2019-20. Also, the tariff hikes envisaged in the MoU were also not achieved. Audit observed that the non-elimination of gap and non-achievement of tariff hikes were attributed to the disallowance of projected revenue requirements of Company by PSERC who observed that the revenue requirements were outside norms:

[4] In MoU, the targets were prescribed up to the year 2018-19.

Table 2.7: Table showing tariff hike during 2015-20 and disallowance of revenue requirement of Company

Year	Tariff hike envisaged under MoU (in *per cent*)	Tariff hike as per PSERC tariff order (in *per cent*)	Revenue Requirement claimed by Company (₹ in crore)	Revenue Requirement allowed by PSERC (₹ in crore)	Net Disallowance of Revenue Requirement by PSERC (₹ in crore)
2015-16	0.00	0.00	25,867.72	23,547.89	2,319.83
2016-17	5.00	(-) 0.65	27,815.82	26,935.60	880.22
2017-18	9.00	9.33	31,127.52	27,232.40	3,895.12
2018-19	3.00	2.17	33,000.28	30,620.02	2,380.26
2019-20	Not prescribed	1.78	34,813.00	30,424.44	4,388.56
				Total	**13,863.99**

Source: MoU for UDAY scheme and Tariff Orders of PSERC for the years 2015-16 to 2020-21.

Audit observed that Company failed to keep its costs within PSERC norms. The significant costs disallowed by PSERC, noticed during audit and reasons thereof were as follows:

- Interest and finance charges on working capital loans were disallowed by PSERC on normative basis as the working capital loans raised by Company were in excess of the requirement determined as per PSERC norms.
- The fuel/generation cost was disallowed on normative basis due to high operation parameters over and above the norms *i.e.* high station heat rate and high consumption of oil per unit of electricity generated.
- The power purchase was disallowed on account of unscheduled interchange (deviation) charges, late payment surcharges and excess power purchased due to higher transmission & distribution losses.

Due to disallowance, these expenses could not be passed to the consumers through tariff and the Company had to absorb them, resulting in loss at least equivalent to expenses.

The Company/State Government replied (April/May 2021) that the orders of PSERC were challenged in APTEL and the decision was awaited. Audit observed that the Company had not been able to get any relief on disallowances in the latest decision of APTEL pertaining to the year 2017-18.

Some of the disallowances are discussed as follows:

2.3.3.1 *Transmission and Distribution losses*

(i) *Transmission losses*

As per MoU, GoP was to make efforts to reduce transmission losses from 3.80 *per cent* in 2014-15 to 2.50 *per cent* by 2018-19. PSERC fixed norm of

2.50 *per cent* as transmission loss allowed during the years 2015-16 to 2018-19 for Punjab State Transmission Corporation Limited (PSTCL).

Audit observed that the actual transmission losses reported by PSTCL during the period 2016-19 ranged between 2.87 and 4.24 *per cent* which were higher than the target prescribed in the MoU and norm approved by the PSERC. PSTCL achieved the targeted level of reduction in transmission losses in the year 2019-20 when the losses stood at 2.22 *per cent*. The failure to contain the transmission losses within norms during 2016-19 resulted in loss of energy of 1,136.02 MUs valuing ₹ 466.05 crore as shown below. These excess transmission losses during 2016-19 were disallowed as part of overall transmission and distribution losses of the Company as shown in **Table 2.9**:

Table 2.8: Excess transmission losses

Year	Transmission losses approved by PSERC (in *per cent*)	Actual transmission losses of PSTCL[5] (in *per cent*)	Excess transmission losses[6] (in MUs)	Cost of power purchase (₹ per unit)	Cost of excess transmission losses (₹ in crore)
2016-17	2.50	4.24	612.37	3.97	243.11
2017-18	2.50	3.12	306.00	4.22	129.13
2018-19	2.50	2.87	217.65	4.31	93.81
2019-20	2.50	2.22	-	-	-
		Total	**1,136.02**	**-**	**466.05**

Source: Management Information Reports and information provided by the Company.

(ii) *Distribution Losses*

PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 stipulate that the Company shall bear the entire losses on account of its failure to achieve the norms/targets for transmission and distribution business, as laid down by the PSERC from time to time. The Committee on Public Undertaking (CoPU) while discussing paragraph 2.2.19 of Audit Report 2010-11 also recommended (March 2015) that the Company should make efforts to reduce its distribution losses.

PSERC in its Tariff Orders for the Company for the years 2015-16 to 2019-20 fixed the targets of transmission and distribution (T&D) losses which ranged between 13.75 and 15.50 *per cent*. However, the actual T&D losses of the Company remained higher than the targets prescribed by the PSERC who consequentially disallowed the power purchase cost of the Company as shown in **Table 2.9**:

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5 The boundary metering of PSTCL was operationalised *w.e.f.* July 2016 and the transmission losses were calculated thereafter.

6 {Energy inflow into the system of PSTCL (in MUs) x (Actual transmission losses of the PSTCL (in *per cent*) *minus:* losses approved by the PSERC for the respective year (in *per cent*))}/100.

Table 2.9: Year-wise T&D losses of the Company and disallowance of the power purchase cost of the Company

Year	Target fixed by PSERC (in *per cent*)	T&D losses reported by Company (in *per cent*)	Power disallowed by PSERC (in MUs)	Power purchase cost disallowed by PSERC (₹ in crore)
2015-16	15.50	14.71	450.00	175.80
2016-17	14.50	15.26	1,046.63	331.78
2017-18	14.25	13.68	1,360.36	495.17
2018-19	14.39	14.20	662.52	228.57
2019-20	13.75	16.00	1,751.04	578.98
		Total	**5,270.55**	**1,810.30***

***Source:** Tariff orders of PSERC for the years 2015-16 to 2020-21.*
***Note:** * includes cost of excess transmission loss of ₹466.05 crore at Table 2.8*

PSERC observed that the under-achievement of the targeted distribution loss level by the Company had resulted in additional short term power purchases which were avoidable. PSERC worked out difference of 5,270.55 MUs between energy requirement and energy availability and disallowed ₹ 1,810.30 crore against the same during the period 2015-20. The T&D losses increased from 14.71 *per cent* in 2015-16 to 16.00 *per cent* in 2019-20.

The Company/State Government replied (April/May 2021) that efforts were being made to keep the T&D losses at minimum level and to control the theft of power by checking of connections. The reply is not acceptable as steps taken by the Company proved inadequate to contain the distribution losses within the norms fixed by the PSERC.

2.3.3.2 *Deviation charges*

To maintain grid discipline and grid security, charges for deviation are imposed under Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014, on the companies which deviate from their scheduled generation or scheduled drawal of power from the electricity grid. These charges are payable depending upon the extent of deviation from the schedule subject to the grid condition *i.e.* frequency at that time of deviation.

The Committee on Public Undertaking (CoPU) of State Legislature while discussing paragraph 2.2.18 of Audit Report 2010-11 recommended (March 2015) that the Company should plan the possibility of purchase of power from economic sources and stay within the limits approved by PSERC by controlling various costs and reducing losses.

It was noticed that the Company deviated from its power drawal schedules and paid deviation charges of ₹ 146.65 crore during 2015-20. The PSERC disallowed recovery of these deviation charges in the form of tariff terming them as additional expenses incurred for its non-performance. Besides, an amount of ₹ 2.06 crore paid by the Company during 2017-18 against delayed payment of Deviation charges was disallowed by PSERC.

The Company/State Government replied (May 2021/August 2021) that deviation was unavoidable due to many factors like sudden weather changes, load variation, etc. and every effort was made to control it. The reply is not acceptable as PSERC also specifically attributed these charges to the non-performance of the Company.

2.4 Billing and collection of revenue

2.4.1 *Aggregate Technical & Commercial Losses*

Aggregate Technical & Commercial (AT&C) Losses are the sum total of technical and commercial losses. Technical losses primarily take place due to transformation losses at transformer level, losses on distribution lines due to inherent resistance and poor power factor in electrical network. Commercial losses occur due to wrong metering, incorrect billing of power supplied and collection inefficiency. AT&C losses provide realistic picture of the loss situation in a particular period.

As per the UDAY scheme, the distribution utilities were required to bring down their AT&C losses to 15 *per cent* by 2018-19 as per the loss reduction trajectory finalised by Ministry of Power and the States. The MoU between Company, GoP and GoI, however, envisaged that the Company shall endeavour to bring its AT&C losses to 14 *per cent* by 2018-19 and provided year-wise AT&C loss reduction targets for its 98 distribution divisions individually and for the Company as a whole for the years 2014-15 to 2018-19 for the purpose.

The year-wise targets of AT&C losses and achievements there against of the Company as a whole were as follows:

Table 2.10: Year-wise achievements against targets of reduction of AT&C losses

(in *per cent*)

Year	Target AT&C losses as per MOU	AT&C losses reported on UDAY portal	AT&C losses as per Management Information Reports
2015-16	16.16	15.90	15.08
2016-17	15.30	14.46	14.63
2017-18	14.50	17.26	13.88
2018-19	14.00	12.04	13.78
2019-20	Not prescribed	13.98	14.56

***Source:** MoU for UDAY scheme, UDAY portal data provided by the Company and Management Information Reports of the Company.*

The Company achieved the targets prescribed in MoU for reducing AT&C losses. However, data reported on UDAY portal did not match with the data in the Management Information Reports of the Company. The Management did not offer reasons for the differences.

It was further observed that against the overall targeted level of bringing AT&C losses to 14 *per cent*, the target in respect of as many as 16 divisions was kept above 20 *per cent*. The performance of 98 distribution divisions with respect to achievement of year-wise targeted reduction in AT&C losses is given in **Table 2.11**:

Table 2.11: Table showing achievement of AT&C losses by distribution divisions

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Total number of divisions	98	98	98	98	98
Number of divisions achieving yearly target of reduction of AT&C losses	45	43	39	36	46
Number of divisions which did not achieve the targeted AT&C losses	53	55	59	62	52
Maximum AT&C Loss of a division observed during the year (in *per cent*)	43.60	42.84	49.47	49.92	57.65
Minimum AT&C Loss of a division observed during the year (in *per cent*)	(-) 6.08	(-) 4.09	(-) 2.74	(-) 13.83	(-) 10.65

Source: Management Information Reports of the Company.

The above **Table 2.11** shows that the number of divisions which did not achieve the targeted reduction in AT&C losses ranged from 52 (53 *per cent*) to 62 (63 *per cent*) during 2015-20. Whereas minimum AT&C losses achieved by the divisions during 2015-20 ranged between (-) 2.74 *per cent* and (-) 13.83 *per cent*, the maximum AT&C losses ranged between 42.84 *per cent* and 57.65 *per cent* ***(Annexure 1)***. This indicated that performance of underperforming divisions was absorbed by efficiently performing divisions. The wide gap between the maximum and minimum AT&C loss between divisions had increased during 2015-20 which showed that the better performing divisions were getting better and the performance of non-achiever divisions had not improved.

The Company/State Government attributed (April/May 2021) the higher level of AT&C losses to load switching between temporary/permanent feeders, outstanding payments from connections to defaulting Government entities, faulty boundary meters and non-adjustment of high billed amount against sundry charges.

Audit, however, observed that all these factors were controllable on part of the Company. This showed failure to implement remedial actions to achieve the targeted levels of AT&C losses in divisions. Further, the Company did not analyse the reasons for negative figures of AT&C losses.

2.4.2 *Billing and Collection efficiency*

AT&C losses are calculated on the basis of billing and collection efficiency. Thus, it was imperative to improve billing and collection efficiency upto the benchmark percentage so as to bring down the AT&C losses.

2.4.2(a) *Billing efficiency*

Billing efficiency is an indicator of proportion of energy billed to consumers with respect to the total energy supplied to an area.

As per MOU, improvement in the overall billing efficiency was targeted at 84.68 *per cent* to 86 *per cent* during 2015-16 to 2018-19. The division-wise targets were not fixed for each division. The achievement of billing efficiency against the targets set in MoU was as follows:

Table 2.12: Achievement of billing efficiency by the distribution divisions

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Targeted billing efficiency (in *per cent*)	84.68	84.70	85.50	86.00	Not prescribed
Actual achievement (in *per cent*)	87.29	87.10	88.10	88.79	88.55
Number of divisions which achieved the targets	63	62	59	61	62
Number of divisions which did not achieve the targets	35	36	39	37	36
Minimum billing efficiency recorded amongst all divisions (in *per cent*)	61.73	54.07	54.80	52.86	51.25

Source: Management Information Reports of the Company.

It was noticed that the billing efficiency of Company remained higher than the targets prescribed in the MoU, however, during 2015-20, 35 to 39 divisions performed below the envisaged company targets and the lowest annual billing efficiency in the divisions decreased from 61.73 *per cent* in 2015-16 to 51.25 *per cent* in 2019-20. The Company needs to analyse the reasons for lower billing efficiency in these divisions and take corrective actions to ensure achievement of targeted billing efficiency.

The Company/State Government stated (May 2021/August 2021) that during checking of connections, Company's staff faced stiff resistances from local public and various Kisaan unions. Inspite of the resistance, massive checking of the connections had been conducted to improve billing efficiency and efforts were made to seek the help of District administration to carry out checking. The reply is not acceptable and the Company/GoP needs to strengthen the controls in the field offices having low billing efficiency.

2.4.2(b) *Collection efficiency*

Collection efficiency (CE) is an indicator of proportion of amount that has been collected from consumers with respect to the amount billed to them. UDAY MoU envisaged improvement in collection efficiency from 99 *per cent* in 2015-16 to 100 *per cent* in 2016-17 to 2018-19. The actual achievement was as follows:

Table 2.13: Table showing achievement of collection efficiency by the Distribution divisions

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20
Targeted collection efficiency (in *per cent*)	99	100	100	100	Not prescribed
Actual achievement (in *per cent*)	97.29	98.01	97.75	97.11	96.49
Amount not realised during the year (₹ in crore)	618.61	509.55	353.23	655.51	894.50
Minimum collection efficiency recorded amongst all divisions (in *per cent*)	84.24	79.14	80.12	81.27	76.06

Source: Management Information Reports of the Company.

The Company was required to decrease its defaulting amount and ensure zero default from 2016-17. However, Company could not achieve the envisaged collection efficiency in even a single year during the period 2015-16 to 2018-19. Out of 98 divisions, 72 to 90 divisions performed below the targets of the Company as a whole. The lowest annual CE in the divisions decreased from 84.24 *per cent* in 2015-16 to 76.06 *per cent* during 2019-20. The decreasing trend indicated failure to improve the realisation of billed revenue.

The methodology for calculation of AT&C losses as approved by MoP provides that for computing Collection Efficiency, the revenue collected shall exclude the arrears of revenue and the Collection efficiency shall be capped at 100 *per cent*. During review of selected divisions, it was observed that AT&C losses were understated due to incorrect calculation of collection efficiency by the Company as the Company did not capture the data relating to collection of arrears of revenue and the arrears collected were not excluded from computation of collection efficiency. Further, the collection efficiency was not capped at 100 *per cent.* It was seen that collection efficiency exceeded 100 *per cent* in 8 to 24 divisions during 2015-20. As such AT&C losses were understated and even showed minus figures in eight divisions.

The Company/State Government (May 2021/August 2021) replied that low collection efficiency was due to Government departments defaulting in payment of their electricity dues and that efforts were being made to recover this defaulting amount.

2.4.2(c) *Electricity supply dues of Government departments*

As per MoU, all outstanding dues from the State Government departments to the Company for supply of electricity were required to be paid by March 2016. As per the ESIM of the Company, (i) the outstanding dues were to be referred to the Head of the Department for early liquidation of arrears and in event of no tangible response, the matter was to be referred to the concerned Secretary and then to the Chief Secretary.

The defaulting amount from State Government Departments formed a substantial part of total defaulting amount of the Company and contributed to collection inefficiency. The position of total defaulting amount of the Company and share of defaulting amount outstanding against the Government offices during the period 2015-20 was as follows:

Table 2.14: Details of default by Government offices and disconnections made

Year	Total defaulting amount of Company (₹ in crore)	Number of defaulting Government offices	Defaulting amount of Government offices (₹ in crore)	Defaulting amount of Government offices to total defaulting amount (in *per cent*)	Number of Government office connections disconnected	Percentage of disconnection
1	**2**	**3**	**4**	**5=(4)*100/(2)**	**6**	**7=(6)*100/(3)**
2015-16	1433.68	6,204	524.78	36.60	84	1.35
2016-17	1,910.05	7,406	747.53	39.14	128	1.73
2017-18	2,603.31	9,460	1,185.66	45.54	118	1.25
2018-19	3,694.94	11,504	1,746.86	47.28	217	1.89
2019-20	4,111.58	11,855	2,183.49	53.11	165	1.39

Source: Management Information Reports and information provided by the Company.

As against the GoP commitment to clear the outstanding dues of Government offices by March 2016, the dues increased from ₹ 524.78 crore (6,204 offices) in March 2016 to ₹ 2,183.49 crore (11,855 offices) in 2019-20. In percentage terms, the share of dues of Government offices in total defaulting amount increased from 36.60 *per cent* to 53.11 *per cent*. Company, however, disconnected the electricity supply of negligible number of such Government offices. The Ministry of Power, GoI also observed (October 2019) the high outstanding dues of Government Departments and urged for realisation of the dues.

The Company/State Government replied (May 2021/August 2021) that matter has been taken up with Government Departments to impress upon them to deposit the outstanding dues. The reply is not acceptable as the defaulting amount continued to increase substantially each year.

2.4.3 *Delayed recovery of Fuel Cost Adjustment surcharge*

PSERC (Conduct of Business) Regulations, 2005 provides for Fuel Cost Adjustment (FCA) formula to allow recovery of increased fuel costs. Recovery of FCA is approved by PSERC based on the petition filed by the Company every quarter. After PSERC's decision on the petition, Company recovers the FCA by levying surcharge through regular energy bills of the consumers.

Table 2.15 shows the FCA amount calculated by Company and allowed by PSERC *vis-à-vis* the FCA amount actually billed by the Company to consumers, along with the consequential loss of interest[7] due to delayed recovery:

Table 2.15: Table showing delayed recovery of FCA and loss of interest thereon

(₹ in crore)

Year	FCA amount due as per Tariff orders	FCA amount billed	Delay in recovery[8] (in days)	Loss of interest up to date of true up of financial year by PSERC
2015-16	169.71	78.21	661 to 936	20.03
2016-17	(-)150.74	34.98	473 to 748	--
2017-18	159.47	11.16	511 to 786	23.51
2018-19	499.24	294.01	517 to 792	37.07
2019-20	60.81	149.34	455 to 730	4.47
Total	**738.49**	**567.70**		**85.08**

Source: Petitions approved by PSERC for levy of FCA and information provided by the Company.

Audit observed that the amount billed was much lower (except 2016-17 and 2019-20) than the amount due for recovery as per quarterly revisions allowed by the PSERC for the years 2015-16 to 2019-20. Audit observed that the Company did not ensure accurate and timely billing of the FCA allowed by PSERC. The Company failed to update its billing system to ensure levy of FCA across all Distribution zones. The recovery of FCA was not done through billing but through PSERC (in True-up petition) and included in the next Tariff order. The primary reasons for non-billing was failure of centralised

7 Calculated at Base rate of SBI as on 1st April of each financial year for the period of delay in recovery.

8 Difference between the date since when the FCA was due for recovery and date of true up of ARR of the financial year by PSERC wherein the fuel costs for that particular year are finalised based on the audited accounts.

monitoring in SAP/Non-SAP Billing software being used in distribution zones. Resultantly, the Company suffered an irrecoverable interest cost of ₹ 85.08 crore.

The Company/State Government replied (April/May 2021) that as the quarterly FCA tariff is decided on the basis of projected sales, there is bound to be a gap between the FCA due and FCA billed. The reply is not acceptable as the gap should have been on higher side since the actual energy sales were higher than the projected sales (2015-19) which should have resulted in higher billing than the amount due. This is indicative of poor functioning of billing system.

2.4.4 *Non-compliance of PSERC regulations*

The MoU provided for Customer Service Strategy for timely resolution of consumer complaints relating to no electricity, theft, safety, technical matters including harassment by the officials. The Committee on Public Undertaking (CoPU) taking note of paragraph 2.2.31 of Audit Report 2010-11 and paragraph 3.5 of Audit report 2013-14 of Audit Reports (Commercial) Government of Punjab recommended (March 2016/March 2018) to fix responsibility for non-recovery of dues from consumers and for forcing the consumers to approach the Courts.

To deal with the consumer grievances, the Company has two Redressal Forums (CGRF). In test checked 100 cases out of 546 decided by CGRF, Ludhiana in the months[9] of November 2018, March 2019 and March 2020, it was observed that in 58[10] cases involving 62 instances and financial implication of ₹ 5.90 crore, there was negligence on part of Company staff due to which the consumers were forced to approach the Court and these cases were decided against the Company. The breakup of 62 instances, amount involved therein and reasons has been tabulated as follows:

Table 2.16: Table showing details of Court cases and reasons thereof

Sl. No.	Number of instances	Disputed amount (in ₹)	Particulars of the cases
1.	13	7,71,009	Delayed levy of Power Factor surcharge – resulted in non-recovery of Power Factor surcharge.
2.	12	48,58,315	Advanced Consumption Deposit not updated in consumer accounts and interest thereon not allowed to the consumers.
3.	21	4,27,73,637	Wrong billing due to wrong overhauling of account, Tariff rebates not given, defective meter, wrong reading, wrong multiplying factor, etc.
4.	6	39,68,530	Excess service connection charges taken from consumers.
5.	2	8,60,698	Wrong billing due to abnormal Maximum demand indicated.
6.	2	33,26,495	Wrong SAP reversals.
7.	2	7,12,491	Non-granting of the refund due.
8.	2	4,23,451	Accumulation of meter reading
9.	2	13,34,761	Others - Fraudulent refund, Online payment, etc.
Total	**62**	**5,90,29,387**	

Source: CGRF orders in respective cases as accessed from the Company's website.

9 random selection of months.

10 Out of remaining 42 cases, 23 cases were also decided against the Company but no negligence on part of Company staff was observed, 16 cases were decided in favour of Company and 3 cases were withdrawn/compromised/referred to other authority.

The Company was directed to overhaul the accounts of the consumers and issue revised bills which is indicative of the fact that litigations were avoidable had the Company acted with due diligence as per Electricity Supply Code, 2014 and other relevant instructions.

The Company/State Government replied (April/May 2021) that the disputes arose due to different interpretations of the instructions and were being resolved timely. The reply, however, did not intimate action taken on specific cases.

2.4.5 *Subsidy from Government of Punjab*

Section 65 of the Act provides for State Government to grant subsidy to any class of consumers provided subsidy amount is paid to the distribution entity in advance and in such manner as directed by the State Electricity Regulatory Commission.

Government of Punjab provides subsidy to various categories of consumers *viz.* Agriculture Pumpset (AP) consumers, Domestic supply (DS) consumers belonging to scheduled castes and Below Poverty Line (Non-SC) consumers Backward class DS consumer, Industrial consumers (concessional tariff at the rate of ₹ 4.99 per unit for Small Power, Medium Supply and Large Supply Consumers), Freedom fighters and Dairy/Fish/Goat/Pig Farming consumers.

The subsidy determined by PSERC in the yearly tariff orders for the Company was as follows:

Table 2.17: Table showing subsidy payable by GoP to Company for various categories of consumers

(₹ in crore)

Sl. No.	Category	2015-16	2016-17	2017-18	2018-19	2019-20	Total
1.	Agriculture Pumpset (AP)	4,957.16	5,289.17	6,084.17	5,669.51	6,090.52	28,090.53
2.	Scheduled Caste (SC)/ Domestic Supply	1,053.07	1,196.68	1,233.91	1,193.22	1,552.53	6,229.41
3.	BPL (Non-SC) DS consumers	70.28	75.87	76.91	71.20	86.09	380.35
	Sub Total (A)	**6,080.51**	**6,561.72**	**7,394.99**	**6,933.93**	**7,729.14**	**34,700.29**
4.	Backward class DS consumer free power	0	7.12	102.72	163.55	225.20	498.59
5.	Small Power	0	38.49	103.95	138.4	130.17	411.01
6.	Dairy and Fish/Goat/ Pig Farming	0	1.08	1.05	0	0	2.13
7.	Freedom fighter	0	0	0	0.02	0.04	0.06
8.	Medium Supply Consumers	0	0	52.54	175.82	169.35	397.71
9.	LS supply consumers	0	0	425.35	1,140.96	1,180.12	2,746.43
	Sub Total (B)	**0**	**46.69**	**685.61**	**1,618.75**	**1,704.88**	**4,055.93**
	Total (A+B)	**6,080.51**	**6,608.41**	**8,080.60**	**8,552.68**	**9,434.02**	**38,756.22**

Source: Tariff orders of PSERC for the years 2015-16 to 2020-21.

The status of subsidy determined by PSERC and subsidy actually paid by the GoP during the years 2015-16 to 2019-20 was as follows:

Table 2.18: Table showing details of subsidy received from the GoP

(₹ in crore)

Year	Subsidy determined by PSERC as per latest Tariff Order	Interest on delayed payment of subsidy	Total Subsidy payable for the year	Subsidy received during the year	Adjustment	Shortfall for the year	Cumulative shortfall as per PSERC
						Opening balance	260.06
2015-16	6,080.51	109.60	6,190.11	4,847.00	0	1,343.11	1,603.17
2016-17	6,608.41	307.79	6,916.20	5,600.70	0	1,315.50	2,918.67
2017-18	8,080.60	463.85	8,544.45	6,577.57	(-) 57.65[11]	1,909.23	4,827.90
2018-19	8,552.68	556.54	9,109.22	9,036.43	0	72.79	4,900.69
2019-20	9,434.02	658.00	10,092.02	9,394.11	0	697.91	5,598.60
Total	**38,756.22**	**2,095.78**	**40,852.00**	**35,455.81**			

Source: Tariff orders of PSERC for the years 2015-16 to 2020-21.

It was seen that the GoP failed to fully pay the subsidy dues determined by the PSERC, in advance. The cumulative shortfall of subsidy payable by GoP to the Company increased from ₹ 1,603.17 crore at the end of 2015-16 to ₹ 5,598.60 crore at the end of 2019-20. Audit observed that during 2015-20, the State Government had sanctioned sufficient budgets for full amount of subsidy as decided by the PSERC, however, only partial payments were made to the Company. The Company/State Government replied (May 2021/August 2021) that more consumer subsidy had been received during 2020-21 as compared to previous year. The Company, despite the continuous shortfalls in receipt of subsidy, continued the implementation of State Government schemes.

2.5 Power purchase

2.5.1 *Payment of fixed capacity charges*

One of the objectives of the Scheme was to reduce cost of power. During 2015-20, the Company had surplus power available with it as its net installed capacity was higher than its maximum unrestricted power demand (except 2019-20) and the average demand. Total gross installed capacity (including contracted through long term PPAs), net installed capacity, maximum unrestricted demand and average demand of the Company during the years 2015-16 to 2019-20 is given in **Table 2.19**:

[11] PSERC reduced (December 2019) the subsidy payable for AP consumption of year 2017-18 along with interest thereon. Accordingly, an adjustment of ₹ 54.88 crore and ₹ 2.77 crore was carried out in the subsidy payable by GoP for 2017-18.

Table 2.19: Gross installed capacity, net installed capacity, maximum unrestricted demand and average demand of the Company during 2015-20

Year	Gross installed capacity (MW)	Net installed capacity (MW)	Maximum unrestricted demand[12] (MW)	Average demand (MW)	Surplus capacity (MW)
(1)	(2)	(3)	(4)	(5)	(6) = (3)-(4)
2015-16	11,995.82	11,330.48	10,851.87	5,727.73	478.61
2016-17	13,960.97	13,182.75	11,408.00	6,060.43	1,774.75
2017-18	13,391.12	12,708.48	11,705.00	6,265.62	1,003.48
2018-19	13,465.74	12,780.36	12,638.00	6,293.25	142.36
2019-20	13,902.30	13,205.62	13,606.00	6,435.92	(-) 400.38

Source: Data provided by the Company.

The Company sold small share (3,720.62 MUs) of the surplus power through power exchange during 2015-20 after meeting its demand. The Company surrendered the remaining surplus power of 53,541.65 MUs against which it paid fixed capacity charges of ₹ 6,210.63 crore to the power producers for capacities contracted as shown below:

Table 2.20: Year-wise details of surplus power surrendered and fixed capacity charges paid

Year	Surplus power sold (in MUs)	Surplus power surrendered (in MUs)	Fixed charges paid (₹ in crores)	Energy sales (MUs)	Impact on tariff (₹ per unit)
(1)	(2)	(3)	(4)	(5)	(6)=(4)*10/(5)
2015-16	62.49	11,276.78	1,283.07	43,200	0.297
2016-17	356.44	10,597.30	1,250.78	44,724	0.280
2017-18	1,218.68	7,550.48	820.46	47,332	0.173
2018-19	1,801.80	8,570.94	976.87	49,561	0.197
2019-20	281.21	15,546.15	1,879.45	50,152	0.375
Total	**3,720.62**	**53,541.65**	**6,210.63**		

Source: Management Information Reports of the Company.

Out of total power surrendered during last five years, the share of three[13] IPPs ranged between 50.74 *per cent* (in 2017-18) to 71.92 *per cent* (in 2019-20). The power surrendered to three IPPs during 2015-16 to 2019-20 ranged between 17.64 *per cent* (in 2017-18) to 38.63 *per cent* (in 2019-20), of entitled power from them. The surrendering of available power to the respective IPPs along with payment of fixed capacity charges amounting to ₹ 6,210.63 crore during 2015-16 to 2019-20 made the power costly (ranging between ₹ 0.17 to ₹ 0.38 per unit) for the Company and consumers thereby defeating the objective of the Scheme.

2.5.2 *Purchase of power without approval of Power Purchase Agreements*

Electricity Act, 2003 *inter alia* provides that the State Regulatory Commission shall regulate the process of purchase and procurement of electricity by the distribution licensees, including the price at which electricity shall be procured

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[12] On a particular day of the year at a particular time.

[13] Nabha Power Limited: 1,400 MW; Talwandi Sabo Private Limited: 1,980 MW; and GVK Power Limited: 540 MW.

from the Generating Companies or other sources through agreements for purchase of power for distribution and supply within the State. PSERC (Conduct of Business) Regulations, 2005 states that the Company shall not enter into a contractual commitment of such long term power purchase till the PSERC approves the procurement of electricity by the Company.

It was noticed that the Company signed 66 power purchase agreements of New and Renewable Source of Energy for 778.09 MW during the period March 2005 to May 2019. Of these, in case of 50 PPAs, the Company did not obtain prior approval of PSERC, before signing the PPAs. In violation of provisions of Electricity Act and PSERC Regulations, *post facto* approval of the PSERC to 37 PPAs was obtained during November 2010 to December 2020, after delay ranging between six months (203 days) and eleven years (4,081 days). Further, in remaining 13 cases, period of more than two years (999 days) to twelve years (4,409 days) had already elapsed but approval of the PSERC is still awaited (December 2020). It is worthwhile to mention that against these unapproved PPAs, total power of 1,085.75 MUs valuing ₹ 465.31 crore was purchased during the period 2010-11 to 2019-20.

The Company/State Government in its reply (May 2021/August 2021) stated that the PSERC did not approve the tariff and the contracted capacity due to various reasons. The Company, however, did not furnish the reasons for not obtaining prior approval of PSERC before signing the PPAs.