#### **CHAPTER VI**

#### **COMPLIANCE AUDIT**

#### CHHATTISGARH STATE POWER DISTRIBUTION COMPANY LIMITED

#### 6.1 Consumer Billing and Collection Efficiency in Chhattisgarh State Power Distribution Company Limited

#### 6.1.1 Introduction

Electricity, being one of the key drivers for rapid economic growth and poverty alleviation, its supply is essential for overall development and, at the same time providing reliable and quality power to industries at competitive rates is equally important. To achieve these objectives, any power distribution company (DISCOM) needs to be commercially viable and financially sustainable. The financial sustainability of a DISCOM primarily depends on its efficiency in billing, collection, and minimisation of distribution losses.

The power distribution in the State of Chhattisgarh is carried out by Chhattisgarh State Power Distribution Company Limited (Company). Consequent to the unbundling of Chhattisgarh State Electricity Board, the Company was formed in January 2009. The Company supplies power in the entire State of Chhattisgarh with consumer base of 60.27 lakh, as on 31 March 2022.

#### 6.1.2 Organisational set up

The Company is under the administrative control of the Energy Department, Government of Chhattisgarh (GoCG). It is managed by Board of Directors (BoD) headed by a Managing Director and four other directors. The Managing Director (MD) is the Chief Executive Officer of the Company who looks after day to day functioning of the Company. The day to day activities of the field units are monitored by Executive Directors of Operation & Maintenance (O&M) and Revenue at corporate level. The field activities are performed by Circle offices headed by Superintending Engineers (SE) and their implementing offices (Divisions) headed by Executive Engineers under the supervision of Executive Directors/Chief Engineers of the concerned regions. The field units of the Company are distributed into eight Regions, 18 Circles and 64 Division offices situated across the State.

#### 6.1.3 Audit objectives

The compliance audit was conducted to assess whether:

the accounting and billing for energy was 100 per cent for supply, distribution and sale in accordance with the provisions of Electricity Supply Code and Tariff Orders; and the collection of revenue is being done in an effective and efficient manner for 100 *per cent* of bills raised during the current year and for the arrears of previous years.

#### 6.1.4 Audit criteria

The following sources were adopted as audit criteria to assess the achievement of audit objectives:

- Electricity Act, 2003 (Act).
- Chhattisgarh State Electricity Supply Code, 2011 (Supply Code 2011) as amended from time to time.
- Electricity tariff orders issued by Chhattisgarh State Electricity Regulatory Commission (CSERC).
- Minutes of meetings of the Board of Directors of the Company.
- Circular/orders issued by the Company.
- Orders/guidelines/circulars/instructions issued by the Ministry of Power, Government of India (GoI) and the Energy Department, Government of Chhattisgarh (GoCG) and CSERC.

#### 6.1.5 Audit scope and methodology

Audit was conducted from June 2022 to December 2022, covering the five-year period of 2017-18 to 2021-22. Audit methodology involved a scrutiny of records at the Corporate Office and six circles (O&M circle offices) of the Company. There are 18 circle offices in Company across the State of Chhattisgarh. The selection of 33 *per cent*<sup>1</sup> of total circle offices was done by Random Sampling Method using IDEA software. Details of selected circle offices and its division offices are given in *Appendix 6.1.1*.

Further, records of billing data for the month of March each year during the period 2017 -18 to 2021-22 were selected for detailed scrutiny. Out of a total of 844 High Tension (HT) consumers in the six selected circles, the records relating to 33 *per cent* cases of HT consumers (281 HT consumers) were selected for detailed scrutiny.

The audit findings were reported to the Company and GoCG in January 2023 and discussed in an exit conference held on 22 August 2023. The exit conference was attended by the Secretary (Energy), GoCG and Managing Director of the Company. The reply of the GoCG and minutes of the exit conference were received in October 2023. The views expressed by them in exit conference and reply of GoCG have been considered while finalising the Compliance Audit Report.

#### 6.1.6 Distribution mechanism in the Company

As of 31 March 2022, there were a total of 60.27 lakh consumers having a connected load of 10,301.81 Mega Watt (MW) under all categories<sup>2</sup> serviced by the Company. During the year 2021-22, the peak load and average load were 5,057 MW and 3,674 MW respectively. The Company generates monthly bills

<sup>&</sup>lt;sup>1</sup> Six circle offices with 19 division offices have been selected.

<sup>&</sup>lt;sup>2</sup> Domestic, non-domestic, agricultural, industrial connections & others under Low Tension (LT); and High Tension (HT) consumers.

of the consumers, as per provisions of the Supply Code, 2011 and tariff orders issued from time to time. While finalising the tariff orders, CSERC fixes targets for distribution losses for the Company, and any loss over and above the target fixed is to be borne by the Company. The financial sustainability of Company primarily depends on the minimisation of distribution losses and maximisation of their billing and collection efficiency. The incidence of distribution losses<sup>3</sup> in the power distribution system and billing/ collection efficiency is given in *Chart 6.1.1:* 



Chart 6.1.1: Chart showing activity process of electricity distribution

The position of billing and collection efficiency in the Company with respect to units input during the last five years ending on 31 March 2022 was as given in *Table 6.1.1*.

 Table 6.1.1: Statement showing the details of billing efficiency, distribution losses and collection efficiency in the Company

Year	Units purchase d/Input of energy Million Units <sup>4</sup> (MUs)	Units sold (MUs)	Units lost (MUs)	Units lost (per cent)	Billing efficienc y (per cent)	Demand during the year (includin g subsidy claimed) (₹ in crore)	Arrears <sup>5</sup> at the opening of the year (₹ in crore)	Arrears at the closing of the year (₹ in crore)	claimed	Subsidy received during the year (₹ in crore)	Adjusted revenue from sale of energy on subsidy received basis (₹ in crore)	Collection efficiency (per cent)	Collectio n efficiency as reported by Company (in per cent)
1	2	3	4(2-3)	5 (4/2)%	6 (3/2)%	7	8	9	10	11	12(7- 10+11)	13{(12+8 -9)/7}%	14
2017-18	22,238.70	17,755.02	4,483.68	20.16	79.84	15,144.91	1,941.71	2,054.72	2,685.79	2,599.57	15,058.69	98.68	99.09
2018-19	23,475.07	19,040.36	4,434.71	18.89	81.11	16,110.32	2,397.55	2,933.77	2,314.42	2,141.42	15,937.32	95.60	96.11
2019-20	24,849.53	20,132.75	4,716.78	18.98	81.02	18,836.69	4,246.10	4,316.29	4,249.89	4,651.18	19,237.98	101.76	99.52
2020-21	25,424.20	20,842.22	4,581.98	18.02	81.98	17,818.20	4,316.29	5,405.67	3,787.37	4,194.84	18,225.67	96.17	92.24
2021-22	30,732.00	25,161.00	5,571.00	18.13	81.87	14,737.00	7,450.00	7,524.00	3,931.00	4,725.00	15,531.00	104.89	100.24

(Source: Information compiled from data provided by the Company.)

<sup>&</sup>lt;sup>3</sup> Distribution losses are the difference between energy injected into the Company and the energy billed to the consumers by the Company.

<sup>&</sup>lt;sup>4</sup> One Kilowatt hour (Kwh) is equal to one unit of electricity and 10 lakh units are a Million Unit (MU). MW denotes generating capacity of power plants, its generated electricity is measured in MUs. One MW capacity plant generates 1000 Kwh power in an hour and hence in 24 hours it generates (1MW x 24 hours x 1000 units) 24000 units i.e. 0.024 MUs.

<sup>&</sup>lt;sup>5</sup> Outstanding electricity charges.

As evident from the table, during the period 2017-18 to 2021-22, the billing efficiency ranged between 79.84 *per cent* and 81.98 *per cent* as against the targeted range of 83.50 to 84 *per cent* fixed by CSERC. Similarly, the percentage of collection efficiency ranged between 95.60 and 104.89 as against the target<sup>6</sup> of 99.66 *per cent*. It was also observed that the Company did not apply the formulae prescribed by GoI for calculating its collection efficiency. As a result the collection efficiency was incorrectly reported by (-) 0.51 *per cent* to 4.65 *per cent*.

The cost of units purchased/input energy, lost units and unrealised units during the audit period were as given in *Table 6.1.2*.

Year	Units purchased/ Input of energy (MUs)	Rate per unit (₹)	Cost of power purchased (₹ in crore)	Units sold (MUs)	Units lost (MUs)	Cost of units lost(₹ in crore)	Norms of loss as per CSERC Tariff (in per cent)	Units lost in excess of the norms (MUs)	Selli ng price per unit (₹)	Loss of revenue (₹ in crore)		Unrealised units (MUs)
1	2	3	4 (2 x 3)	5	6 (2 - 5)	7 (6 x 3)	8	9 {6 - (2 x 8 )%}	10	11 (10 x 9)	12	13 (12/10)
2017-18	22,238.70	3.83	8,517.42	17,755.02	4,483.68	1,717.25	16.50	814.29	7.11	578.96	199.91	281.17
2018-19	23,475.07	3.88	9,108.33	19,040.36	4,434.71	1,720.67	16.50	561.32	6.78	380.58	708.85	1,045.51
2019-20	24,849.53	3.94	9,790.71	20,132.75	4,716.78	1,858.41	16.50	616.61	6.58	405.73	-331.53	-503.84
2020-21	25,424.20	4.13	10,500.19	20,842.22	4,581.98	1,892.36	16.00	514.11	6.50	334.17	682.44	1,049.90
2021-22	30,732.00	3.76	11,555.23	25,161.00	5,571.00	2,094.70	16.00	653.88	7.00	457.72	-720.64	-1,029.48
Total	1,26,719.50		49,471.89	1,02,931.35	23,788.15	9,283.38		3,160.21	<u> </u>	2,157.15		

 Table 6.1.2: Statement showing the details of cost of units purchased/input energy, lost units and unrealised units in the Company

(Source: Information compiled from data provided by the Company)

As could be seen from the above table, during the period 2017 -18 to 2021-22, the Company purchased/input 1,26,719.50 MUs at a cost of ₹ 49,471.89 crore, of which 23,788.15 MUs valuing ₹ 9,283.38 crore were lost during distribution of energy to consumers. Out of the total units lost 3,160.21 MUs were in excess of the norms, which otherwise would have earned a revenue of ₹ 2,157.15 crore to the Company. Further, out of the units sold, the Company could not realise 2,376.58 MUs<sup>8</sup> valuing ₹ 1,591.20 crore<sup>9</sup> during the years 2017-18, 2018-19 and 2020-21. The Company realised the units sold during the years 2019-20 and 2021-22.

Thus, it is vital for the Company to improve its billing efficiency<sup>10</sup> to minimise distribution losses by reducing the gap between units injected/purchased by Company and units billed to the consumers. Further, improvement in collection efficiency<sup>11</sup> by strengthening the system of realisation of dues against the units billed including arrears is required for financial sustainability of the Company.

<sup>&</sup>lt;sup>6</sup> In the absence of target of CSERC in respect of collection efficiency, target of UDAY (Ujwal Discom Assurance Yojana) in this regard was considered as benchmark target.

<sup>&</sup>lt;sup>7</sup> Column no. 7 of Table 6.1.1 x (100 - column 13 of Table 6.1.1)/100

<sup>&</sup>lt;sup>8</sup> 281.17 MUs + 1045.51 MUs + 1049.90 MUs.

<sup>&</sup>lt;sup>9</sup> ₹ 199.91 crore + ₹ 708.85 crore + ₹ 682.44 crore.

<sup>&</sup>lt;sup>10</sup> Billing Efficiency is the proportion of units sold/ billed to consumers against the total units of power injected/ supplied.

<sup>&</sup>lt;sup>11</sup> Collection efficiency is the proportion of revenue realised against total revenue billed including arrears.

#### **Audit findings**

The audit findings are discussed in the succeeding paragraphs.

#### 6.1.7 **Consumer billing**

Issuing new connections to prospective consumers, sale of electricity, billing and collection of revenue against the units sold are the main activities of Company. The efficiency of the field units of the Company is also attributable to timely issue of new connection, billing and collection of revenue. The billing of electricity is done as per the relevant rules and provisions envisaged in tariff orders issued by CSERC and Supply Code, 2011.

#### Loss of energy in excess of target fixed for Distribution 6.1.7.1 Loss

Electric power distribution loss includes losses in transmission between sources of supply and points of distribution and during distribution to consumers, including pilferage. The figures of distribution losses directly impact the sales and the purchase demands of power, thus influencing the electricity tariff rates which are fixed by the utility and moderated by the CSERC. During review of records of six selected circles relating to the loss of energy on account of distribution process, it was observed that, the loss of energy in the circle offices viz., Mahasamund, Kawardha and Janjgir-Champa was more than the targets<sup>12</sup> fixed by CSERC. The details of energy input, units sold, units lost and percentage of loss of energy for the period from 2017-18 to 2021-22 are given in *Table 6.1.3* and detailed in *Appendix 6.1.2*.

Circle	Year	Input Units (in MUs)	Sold Unit (in MUs)	Billing efficiency (inper cent)	Lost Units (in MUs)	Distri bution losses (per cent)	Norm as per CSERC tariff order (per cent)	Distribu tion loss in excess of norms (per cent)	Permissi ble loss in units (in MUs)	Units lost in excess of the norm (in MUs)	Rate per unit <sup>13</sup> (in ₹)	Loss of revenue (₹ in crore)
1	2	3	4	5(4/3)%	6 (3 - 4)	7 (6/3)%	8	9 (7-8)	10(3x8)%	11 (6-10)	12	13 (11*12)
	2017-18	1,412.99	1,018	72.05	394.99	27.95	16.50	11.45	233.14	161.85	7.11	115.08
pu	2018-19	1,506.99	1,072.23	71.15	434.76	28.85	16.50	12.35	248.65	186.11	6.78	126.18
Mahasamund	2019-20	1,455.32	1,087.59	74.73	367.73	25.27	16.50	8.77	240.13	127.60	6.58	83.96
has	2020-21	1,638.35	1,169.84	71.40	468.51	28.60	16.00	12.60	262.14	206.37	6.50	134.14
Ma	2021-22	1,898.1	1,382.39	72.83	515.71	27.17	16.00	11.17	303.70	212.01	7.00	148.41
	Sub-total	7,911.75	5,730.05	72.42	2,181.70	27.58			1,287.76	893.94		607.77
	2017-18	701.32	545.45	77.77	155.87	22.23	16.50	5.73	115.72	40.15	7.11	28.55
g	2018-19	712.11	556.09	78.09	156.02	21.91	16.50	5.41	117.50	38.52	6.78	26.12
Irdh	2019-20	663.44	524.11	79.00	139.33	21.00	16.50	4.50	109.47	29.86	6.58	19.65
Kawardha	2020-21	694.22	552.69	79.61	141.53	20.39	16.00	4.39	111.08	30.45	6.50	19.79
K	2021-22	716	517.7	72.30	198.3	27.70	16.00	11.70	114.56	83.74	7.00	58.62
	Sub-total	3,487.09	2,696.04	77.31	791.05	22.69			568.32	222.73		152.72

Table 6.1.3: Statement showing details of billing efficiency, distribution losses and excess losses against the targets fixed by CSERC in selected circles

12 2017-18 to 2019-20 -16.50 per cent and 16 per cent for the years 2020-21 and 2021-22. 13

Average Billing Rate (ABR) as approved by CSERC.

Gr	and total	16,934.88	12,188.88	71.98	4,746.00	28.02			2,757.36	1,988.64		1,353.60
	Sub-total	5,536.04	3,762.79	67.97	1,773.25	32.03			901.28	871.97		593.10
Janjgir	2021-22	1,235.88	827.13	66.93	408.75	33.07	16.00	17.07	197.74	211.01	7.00	147.71
gir-	2020-21	1,196.54	784.19	65.54	412.35	34.46	16.00	18.46	191.45	220.90	6.50	143.59
Cha	2019-20	1,071.08	776.97	72.54	294.11	27.46	16.50	10.96	176.73	117.38	6.58	77.24
mpa	2018-19	1,036.48	718.49	69.32	317.99	30.68	16.50	14.18	171.02	146.97	6.78	99.65
a	2017-18	996.06	656.01	65.86	340.05	34.14	16.50	17.64	164.35	175.70	7.11	124.92

(Source: Information compiled from data furnished by the Company)

The circle offices of Mahasamund, Kawardha and Janjgir-Champa could not increase the billing efficiency and achieve the targets fixed by CSERC during the five years ending 31 March 2022. The distribution losses in the three circles during this period ranged between 4.39 *per cent* (Kawardha) and 18.46*per cent* (Janjgir-Champa) over and above the targets fixed by CSERC. However, distribution losses in Raipur City 1, Bilaspur City and Rajnandgaon circles were within the permissible limits prescribed by CSERC for the period 2017-18 to 2021-22. The percentage of billing efficiency and distribution losses of the selected circles during the period 2017-18 to 2021-22 is given in *Chart 6.1.2:* 

Chart 6.1.2: Billing efficiency and distribution losses in percentage in selected circles



(Source: Information compiled from data provided by the Company).

As could be seen from the table and chart, the percentage of distribution losses in Mahasamund, Kawardha and Janjgir-Champa Circles during the last five years ranged between 20.39 and 34.46 which was higher by 16.00 to 16.50 *per cent*, as fixed by CSERC.

The main reasons for excessive distribution losses observed in audit were the inaction of the Company to expedite metering of Distribution Transformers (DTR), smart metering, non-installation of Automatic Meter Reading (AMR) System and Capacitor Banks (CBs), high incidence of assessed billing and delay in replacement of defective meters, which are discussed in the succeeding paragraphs. Thus, shortfall against the targets fixed by CSERC resulted in losses of 1,988.64 MUs amounting to ₹ 1,353.60 crore. Had the Company executed the above-mentioned preventive measures for loss reduction by incurring an

expenditure of ₹ 258.58 crore, as detailed in *Table 6.1.4*, it would have saved ₹ 1,095.02 crore<sup>14</sup>.

Sl. no.	Particulars	DTR meter	Capacitor Banks	Replacement of defective meters	AMR meter	Smart metering
1	Total units required to be installed (nos.)	45,343	210	1,29,067	4,909	2,79,171
2	Cost per unit (₹)	11,845	15,687	2,624.70	6,444	6,000
3	Total cost required to be incurred for installation (₹ in crore)	53.71	0.33	33.88	3.16	167.50
Т	otal cost ₹ in crore			258.58		

 Table 6.1.4: Statement showing cost to be incurred for improvement in the deficiencies in infrastructure

(Source: Information compiled from data provided by the Company).

The GoCG stated (October 2023) that in order to achieve the State's target, circle/division-wise targets are fixed by the Company based on their input, consumption pattern, present level of losses and previous performances. Accordingly, the overall achievement of the State is the cumulative effort of all the circles and divisions; out of which some achieve the target and some might lag. It was further stated that efforts are being made by the Company to reduce distribution loss.

Reply is not acceptable because though the Company fixed lower targets ranging between 7.07 and 28.52 *per cent* for the circles as compared to targets fixed by CSERC, the same could not be achieved by Mahasamund and Kawardha Circles during the period under review. Further, the remaining four selected circles also did not achieve their targeted losses except Janjgir-Champa (2017-18), Bilaspur City (2019-20), Rajnandgaon (2017-18 and 2019-20) and Raipur City-I (2017-18, 2019-20 and 2021-22), which also contributed to non-achievement of the targets set for the Company in all the five years ended 31 March 2022. Further, the Company did not initiate necessary action to reduce distribution losses as required.

#### 6.1.7.2 Deficiencies in infrastructure

For reduction in distribution losses, the infrastructure i.e. 100 *per cent* meterisation, smart metering and installation of CBs and AMR system for recording and accounting of units injected and units billed should be adequate and efficient. Audit noticed the following deficiencies in respect of DTR meterisation, smart meters and CBs:

#### (a) Non –installation of meters in Distribution Transformers

As per Clause 11.57 of Supply Code, 2011, the licensee shall install meters on all distribution transformers and carry out energy audit so as to identify high loss pockets and take further suitable action for reduction of losses in such pockets.

During audit of selected circles, it was noticed that as on 31 March 2022, out of total 64,451 numbers of Distribution Transformers (DTRs), meter reading was not taken from 52,926 DTRs. Further, out of these 52,926 DTRs, meters were not installed in 45,343 DTRs (70.35 *per cent*) and in case of the remaining 7,583 DTRs (11.77 *per cent*), reading was not being taken, as detailed in

<sup>&</sup>lt;sup>14</sup> Value of distribution loss in excess of norms ₹ 1,353.60 crore – expenditure required to be incurred on preventive measures ₹ 258.58 crore.

*Appendix 6.1.3.* The Company did not take adequate measures to install meters in all DTRs<sup>15</sup> and the in-charge of the Distribution Centres, also did not ensure that meter readings were being taken regularly from installed meters. Further, no energy audit<sup>16</sup> report was found on records for any DTR.

This indicates negligent approach of the Company towards implementation of provisions of the Supply Code, 2011. As a result, the objective of identifying high loss pockets to take further suitable action for reduction of losses in such pockets was not met.

While accepting the audit observation the GoCG stated (October 2023) that as on 31 March 2023 out of total 2,14,762 distribution transformers installed in the State, 76,960 distribution transformers (35.84 *per cent*) have been metered. The work of 100 *per cent* metering of distribution transformer has been included in the Revamped Distribution Sector Scheme (RDSS) which is scheduled to be completed by the end of March 2024.

Though GoCG accepted the audit observation, reply is silent on reading not being taken from DTRs having meters.

#### (b) Non-installation of capacitor banks in Sub-stations

Capacitor Banks (CBs) are the equipment installed at the Sub-stations (SSs) to save energy and minimise distribution loss by reducing reactive power<sup>17</sup> and thereby increasing the power factor<sup>18</sup>.

During audit of selected circles, it was noticed that as on 31 March 2022, CBs were not installed in 210 SSs (50.85 *per cent*) out of total 413 SSs. The total required capacity of CBs for these 210 SSs in which CBs were not installed was 25,410 KVAR<sup>19</sup>. Had the CBs been installed in these 210 SSs at a cost of ₹ 32.94 lakh<sup>20</sup>, the Company could have saved 48.35 MUs energy valuing ₹ 32.74 crore in five years, as detailed in *Appendix 6.1.4*. This amount would compensate the installation cost of CBs.

While accepting the audit observation the GoCG stated (October 2023) that as on 31 March 2023, CBs of total capacity of 5,53,119 KVAR have been installed in 875 SSs out of total 1,352 SSs in the State as per technical requirements. It was further stated that CBs of appropriate capacity would be installed at the remaining SSs as per the requirement.

# (c) Non-installation of Automatic Meter Reading (AMR) system

As per clause 11.58 of the Supply Code, 2011, the licensee shall endeavor to install remote metering devices<sup>21</sup> on all 50 Horse Power (HP) and above connections on priority for the purpose of monitoring of consumption and

<sup>&</sup>lt;sup>15</sup> At a cost of ₹ 53.71 crore (45,343 DTRs at the rate of ₹ 11,845.00 per unit).

<sup>&</sup>lt;sup>16</sup> As per Energy Conservation Act, 2001, Energy audit is the verification, monitoring and analysis of use of energy for improving energy efficiency with cost-benefit analysis and an action plan to reduce energy consumption.

<sup>&</sup>lt;sup>17</sup> Total power generated consists of active and reactive power. Reactive power is unused power while active power is the real power.

<sup>&</sup>lt;sup>18</sup> Power factor is the ratio of active power and total power.

<sup>&</sup>lt;sup>19</sup> KVAR is a measure of reactive power. In simple terms reactive power is the unused power generated by reactive components in a generator.

<sup>&</sup>lt;sup>20</sup> At the rate of ₹ 15,687 per unit.

<sup>&</sup>lt;sup>21</sup> Automatic Meter Reading (AMR) based meter reading is an important tool for increasing billing efficiency, as it avoids assessed billing.

prevention of theft of electricity. The licensee shall further endeavor to install remote metering devices on LT connection up to 25 HP subsequently.

During audit it was noticed that as on 31 March 2022 in selected circles, there were 13,658 numbers of low tension (LT) consumers having individual load of 15 HP and above. Out of these 13,658 consumers, AMR system was not installed in case of 4,909 consumers (35.94 *per cent*) and in case of 4,249 consumers (31.11 *per cent*) meter reading was not being taken from AMR system due to non-working modems of installed AMR systems.

This indicates casual approach of the Company towards implementation of provisions of the Supply Code, 2011. As a result, the objective of monitoring of consumption and prevention of theft of electricity by installing AMR system was not met.

While accepting the audit observation the GoCG stated (October 2023) that all HT connections in the Company are installed with AMR, 79 *per cent* of 50 HP and above, 44 *per cent* of 15-50 HP connections have been completed with AMR. All 15-50 HP connections are covered in RDSS for smart metering.

#### (d) Smart metering

Smart meters are tamper proof and allow remote reading and thus, help in reduction of theft, implementation of Demand Side Management activities and consumer engagement. The Company was to carry out smart metering of 2.79 lakh consumers whose consumption was above 200 unit/ month<sup>22</sup> at a cost of ₹ 167.50 crore<sup>23</sup>. However, the Company could not make any progress in this regard as on 31 March 2022. Justification for the lack of progress was not found in records or not furnished by the Company.

The GoCG stated (October 2023) that pre-paid smart metering for 100 *per cent* consumers (except agriculture consumers, HT consumers and connections with Low Tension Current Transformer meter) has been included in RDSS, for which tenders are under process.

However, the purpose of reduction in distribution loss by installation of smart meters will not be served in case of agriculture consumers as the same has not been included in RDSS.

# 6.1.7.3 Non-compliance of CSERC directives in respect of defective meters and assessed billing

The CSERC in its tariff order for the year 2017-18 directed (March 2017) the Company to ensure timely replacement of stopped/defective meters and reduction of assessed billing. The CSERC also directed (February 2019) that the Company take corrective measures to bring down the percentage of defective meters and assessment-based billing within the prescribed ceiling. Further, CSERC (Standards of Performance in Distribution of Electricity) Regulation, 2006 and 2020 prescribed the ceiling for defective meters at 2.5 per cent of total meters installed.

Audit noticed that the Company could not contain the number of defective meters within prescribed ceiling and resorted to assessment based billing in the

<sup>&</sup>lt;sup>22</sup> As per scheme guidelines of UDAY.

<sup>&</sup>lt;sup>23</sup> 2,79,171 consumers x smart metering cost per unit ₹ 6,000.

following cases, due to which billing efficiency could not be assessed realistically:

#### (a) **Replacement of defective meters**

During review of records of six selected circles for the years 2017-18 to 2021-22, it was observed that percentage of defective meters was beyond the norms and their replacement was poor, as shown in *Table 6.1.5*.

Year <sup>24</sup>	Number of consumers (metered)	No. of defective meters during the year (including opening balance)	Total No. of defective meters replaced	<i>Per cent</i> of replacement	Number of meters replaced (of column 4) within one month	Defective meters at the end of year	Per cent of defective meters
1	2	3	4	5(4/3)*100	6	7(3-4)	8(7/2)*100
2017-18	14,82,043	71,661	55,026	76.79	9,892	16,635	1.12
2018-19	16,08,048	1,23,296	45,115	36.59	8,817	78,181	4.86
2019-20	16,50,274	2,49,616	1,71,953	68.89	19,527	77,663	4.71
2020-21	16,95,011	2,25,714	1,58,821	70.36	21,699	66,893	3.95
2021-22	17,38,957	2,42,845	1,13,778	46.85	9,137	1,29,067	7.42

Table-6.1.5: Statement showing status of replacement of defective meters in selected Circles

(Source: Information compiled from data furnished by the Company)

It could be seen from the above table that the percentage of defective meters during 2017-2018 to 2021-22 in the selected circles ranged between 1.12 *per cent* and 7.42 *per cent*. The percentage of defective meters was higher than the norm of 2.5 *per cent* prescribed by CSERC during the years 2018-19 to 2021-22. This indicates that the Company did not comply with the directives of CSERC.

In case an LT consumer's meter is found defective, it should be replaced within 15 days in urban areas and within 30 days in rural areas. However, in the instant case 4.76 lakh<sup>25</sup> defective meters were replaced beyond 30 days which was not in accordance with the provisions of the Supply Code, 2011 and hence, not in order. The percentage of replacement of defective meters during the period 2017-18 to 2021-22 was poor and ranged between 36.59 *per cent* and 76.79 *per cent* instead of being 90 *per cent*. Further, cost of replacement of 1,29,067 defective meters would be ₹ 33.88 crore<sup>26</sup>.

The GoCG stated (October 2023) that mostly defective meters were of BPL and agricultural consumers which are difficult to replace due to distant locations and locked premises. Besides, replacement of defective meters was hampered due to Covid-19 pandemic. It was further stated that figures given in the audit observation did not match with the R-15 statements of the respective circles. It was also stated that in RDSS all the consumer meters (except agriculture) are to be replaced by smart prepaid meters and therefore problem of defective meter shall be resolved to maximum extent.

<sup>&</sup>lt;sup>24</sup> Data for 2017-18 and 2018-19 not maintained for Mahasamund Circle.

<sup>&</sup>lt;sup>25</sup> 5,44,693 (Total of column 4 of Table 6.1.5) – 69,072 (Total of column 6 of Table 6.1.5) = 4,75,621.

<sup>&</sup>lt;sup>26</sup> At the rate of ₹ 2,624.70 per unit.

The fact remains that not only was the percentage of the defective meters beyond norms but also the replacement of defective meters did not show any improvement. Further, contention regarding mismatch between figures in audit observation and R-15 statements is also not acceptable because observation of audit is based on data maintained and furnished by the selected circles. Moreover, mismatch of figures of defective meters as depicted in R-15 statements with that maintained by the circle offices also indicated lackadaisical approach of the Company.

Besides, as the Company did not replace the defective meters of all BPL and agriculture consumers, the chances of inaccurate energy accounting and energy audit cannot be ruled out.

#### (b) Lack of meter reading led to high incidence of assessed billing of metered consumers

On scrutiny of records, it was noticed that during the period 2017-18 to 2021-22, the Company issued bills without meter reading in 2.08 crore (21.61 *per cent*) cases out of 9.64 crore cases. Out of 2.08 core cases, 0.60 crore cases (28.85 *per cent*) pertain to defective/stopped meters, while the balance 1.48 crore cases (71.15 *per cent*) were billed based on assessment of consumption despite having working meters in all the six selected circles, as shown in *Table 6.1.6*. Justification for assessment of consumption despite having meters was not found on records or not furnished by the Company in reply.

Table 6.1.6: Statement showing assessed billing during the period from 2017-18to 2021-22 in test checked circles

Name of Circle	No. of bills issued to consumers	No. of bills raised based on assessed consumption where meters were working	No. of bills raised based on assessed consumption where meters were defective/ burnt	Total No. of assessed cases	Units sold in assessed cases (MUs)	Total units sold (MUs)	Percentage of assessed cases	Percentage of assessed units
1	2	3	4	5(3+4)	6	7	8=(5/2)%	9=(6/7)%
Raipur City-1	1,54,84,882	4,348	74,363	78,711	9.36	4,222.67	0.51	0.22
Mahasamund	2,11,32,847	54,50,421	24,80,582	79,31,003	2,267.97	5,387.53	37.53	42.10
Rajnandgaon	2,29,91,554	19,90,055	21,35,264	41,25,319	815.71	4,063.21	17.94	20.08
Bilaspur City	74,03,147	8,331	1,53,876	1,62,207	18.22	1,929.44	2.19	0.94
Kawardha	1,03,11,127	48,22,274	5,70,477	53,92,751	1,067.62	2,655.89	52.30	40.20
Janjgir-Champa	1,90,42,426	25,22,119	6,14,715	31,36,834	157.64	3,559.18	16.47	4.43
Grand total	9,63,65,983	1,47,97,548	60,29,277	2,08,26,825	4,336.52	21,817.92	21.61	19.88

(Source: Information compiled from data provided by the Company)

It could be seen from the above table that the number of cases in which Company raised assessed bills to consumers ranged between 0.51 *per cent* and 52.30 *per cent* of the total cases. Further, during the years 2017-18 to 2021-22, a substantial portion ranging between 0.22 *per cent* and 42.10 *per cent* of the total units sold/billed to consumers was worked out on the basis of assessment<sup>27</sup>. Out of 21,817.92 Million Units (MUs) sold/billed to consumers during the audit

Prior to the period June 2019 the data regarding units sold to consumers in assessed cases was not maintained by the Company.

period, 4,336.52 MUs (19.88 *per cent*) were based on assessed consumption, as depicted in *Chart 6.1.3*:





The high incidence of assessment based billing and defective/stopped meters are indicative of poor billing efficiency, which adds to the increase in the distribution losses.

While accepting the audit observation GoCG stated (October 2023) that high incidence of assessed cases and assessment of units consumed in such cases were majorly related to Below Poverty Line (BPL) and agricultural consumers wherein taking monthly meter readings is practically difficult. It was further stated that after installation of smart meters assessment cases as well as assessment of consumption will not be required in case of BPL consumers. In exit conference, GoCG stated that replacement of defective meters was hampered due to Covid-19 pandemic and instructions are being given to field offices for speedy replacement of defective meters.

The reply is silent in respect of agricultural consumers and installation of smart meters will serve the purpose of reduction in assessed billing in case of BPL consumers. Further, Supply Code allowed assessment based billing in case of defective meters irrespective of category of consumers.

Besides, as the Company did not ensure meter reading of all BPL and agriculture consumers, the chances of inaccurate energy accounting and energy audit cannot be ruled out.

#### 6.1.7.4 Deficiencies in enforcement activities

Prevention of theft of electricity aims at reduction in line losses and improving billing efficiency. In order to achieve minimal line loss on the distribution network and to protect the Company's financial interest by reducing unauthorised drawl of energy by the consumers/ non-consumers, the vigilance and O&M officials conduct surprise checking of the consumers' premises and impose penalties on the consumers for theft of energy and unauthorised enhancement of load. As per Section 135 of Electricity Act, 2003 (Act) and provision of Supply Code (clause 11.29) theft of energy is an offence, punishable with imprisonment for a term which may extend up to three years or with fine or both. Further, the Supply Code, 2011 (clause 11.31), provided that the licensee, upon detection of theft of electricity, shall lodge a complaint in writing relating to occurrence of such offence in police station within 24 hours. The consumption on account of theft/unauthorised use of electricity

by the consumers is assessed and penal billing is done in accordance with the provisions<sup>28</sup> of the Supply Code, 2011.

During scrutiny of the records of six selected circles, Audit noticed that during the period 2017-18 to 2021-22, the Company fixed targets for performing the raid/checking of the consumers to increase billing efficiency. Separate targets were fixed for checking to be done by vigilance wing and O&M divisions. The details of the targets fixed, raids conducted and the number of theft cases detected, First Information Report (FIR) lodged during the period 2017 -18 to 2021-22 were as given in *Appendix 6.1.5*.

The review of status of cases of theft/unauthorised usage of electricity registered during O&M and vigilance checking during the years 2017-18 to 2021-22 revealed that total 4,08,398 number of cases were checked, where penalty amounting to ₹ 93.83 crore was recoverable. However, the Company could recover only ₹ 39.51 crore and ₹ 54.32 crore (57.89 *per cent*<sup>29</sup>) remained unrecovered till date (October 2022) as depicted in *Chart 6.1.4:* 

Chart 6.1.4: Chart showing amount recoverable and actual recovery made there-against in selected circles



During the review period, 11,221 theft cases were observed by the Company, out of which 2,021 (18.01 *per cent*) cases were intimated to the Police in order to lodge FIR and remaining 9,200 cases were not reported by the Company to the Police. Further, out of 2,021 cases intimated to Police, FIRs were filed by Police in 1,946 cases only. The justification for non-reporting of all theft cases to Police was not found on the records or furnished by the Company. The Company did not take any action to ascertain the reasons for non-filing of FIR by Police in 75 cases. This also adversely affected the Company's collection efficiency.

Further, the Company fixed the targets for raid /checking by the field units and raising of on spot demand for the years 2017-18 to 2021-22 except for the year 2020-21 due to spread of Covid-19 pandemic. The target set for vigilance checking and O&M checking was not achieved for the years 2017-18 to 2021-22 (except for the year 2020-21) by all the selected circles. Despite the significant number of irregularities noticed during raid/checking, the selected circles did not comply with the targets fixed for raid/checking. This also

<sup>&</sup>lt;sup>28</sup> Clauses 11.9 to 11.13 and 11.21 to 11.26 of the electricity supply code.

<sup>&</sup>lt;sup>29</sup> Total amount to be recovered by the Company ₹ 54.32 crore x 100/₹ 93.83 crore (O&M and vigilance checking recoverable amount).

indicated the negligent approach of the Company in the performance of raid/checking.

While accepting the audit observation the GoCG replied (October 2023) that during the period 2022-23 and 2023-24 amount of  $\gtrless$  6.54 crore outstanding against persons involved in theft/malpractice of electricity has been recovered and efforts are being made to recover the balance amount.

# 6.1.7.5 Non-compliance with provisions of Supply Code regarding assessment of energy theft and consequent short billing

The Supply Code, 2011(clause 11.29) stated that theft of electricity shall be punishable under the provisions of Section 135 of the Act. It was further provided (clause 11.33) that the assessment shall be an amount equivalent to two and half times of the rate as per applicable tariff for the relevant category of consumer for a period of twelve months preceding the date of detection of theft of energy or the exact period of theft, if determined, whichever is less.

During scrutiny of records relating to O&M and vigilance checking, it was observed that in five<sup>30</sup> out of six selected circles, the assessment of the energy consumed during theft of electricity by consumers was worked out by the field offices for a period of less than 12 months without recording any reasons/justification. As per the extant codal provisions, the Company should have raised demand based on assessment for a period of twelve months preceding the date of detection of theft of energy. It was also noticed that the penalty amount in some cases was worked out at 1.5 times of the normal tariff as against 2.5 times prescribed in the Supply Code, 2011. Besides, the load factor of less than 100 *per cent* was applied in some cases which was also not in accordance with the provisions of the Supply Code, 2011.

This has resulted not only in non-compliance with the provisions of Supply Code, 2011 regarding assessment of theft of energy done by the consumers but also in short billing amounting to ₹ 2.65 crore<sup>31</sup> and consequent extension of undue benefit to the consumers who indulged in theft of energy. Besides, making assessment on account of theft lesser than that provided in the codal provisions, acts as an inducement to the consumers involved in theft of energy to continue the illicit practice in future.

The GoCG stated (October 2023) that during the year 2016-17, instructions were issued by Company for regularisation of government connections used for public utilities without taking connection by considering earlier period as temporary connection and accordingly billing was to be done 1.5 times of normal tariff. In case period of usage of connection was not established, then billing for six months was to be done. It was further stated that in case of other than government connections additional bills have been raised by Bilaspur City and Janjgir-Champa Circles.

Reply is not acceptable because regularising of the connections of Government offices (using electricity without taking connections) by the Company

<sup>&</sup>lt;sup>30</sup> Mahasamund, Bilaspur city, Rajnandgaon, Kawardha and Janjgir-Champa.

<sup>&</sup>lt;sup>31</sup> Mahasamund ₹ 1.32 crore + Bilaspur city ₹ 0.24 crore + Rajnandgaon ₹ 0.42 crore + Kawardha₹ 0.49 crore + Janjgir-Champa ₹ 0.18 crore = ₹ 2.65 crore.

considering the period of unauthorised usage as temporary connection and billing for six months was not in compliance with provisions of the Electricity Supply Code.

During exit conference (August 2023) the GoCG stated that instructions have been issued by Company to the field offices for ensuring strict compliance to provisions of the supply code in assessment of theft of electricity.

#### 6.1.7.6 Excess claim of subsidy from State Government

The GoCG introduced (2 October 2009) *Krishak Jeevan Jyoti Yojna*(KJJY). In KJJY, 6,000 units and 7,500 units electricity consumption per year was free to farmers using electricity for pump connections up to 3 HP and above 3 HP to 5 HP, respectively. Any additional consumption beyond this was to be billed to the respective connections. Further, farmers belonging to Schedule Caste and Schedule Tribes (SC/ST) categories were to be supplied electricity without any charges and without any consumption limit. Subsequently, GoCG introduced (19 September 2013) flat rate payment option for KJJY consumers. In case of opting flat rate, the consumer had to pay electricity charges at the rate of ₹ 100 per HP per month irrespective of number of units consumed. Bills of electricity consumption under the KJJY were reimbursed by the GoCG.

On scrutiny of System Applications and Products (SAP<sup>32</sup>) software records of the period 2017-18 to 2021-22 related to electricity consumption by KJJY metered beneficiary having agriculture pump connections (opting for non-flat rate) from four tariff categories<sup>33</sup>in four<sup>34</sup> selected circles, it was found that in each category of HP<sup>35</sup>, units billed in a month exceeded maximum rated capacity consumption of units of electricity that would have been billed in a month if these pumps were operated uninterrupted for 24 hours of all 30 days in a month. Consequently, an excess of 213.37 MUs were billed to GoCG over five years and an excess amount of ₹ 145.51 crore was claimed as subsidy, as detailed in *Appendix* 6.1.6.

The GoCG stated (October 2023) that on being pointed out by Audit matter was examined and it was found that the agricultural pumps having name-plate rating of 3 HP or 5 HP may not necessarily be of said capacity and also due to rewinding of the motors of the pumps or due to higher depth of water level, 3 HP or 5 HP pumps draw more power and, in such cases, excess units are consumed in comparison to the name plate rating.

Reply is not acceptable because the GoCG intended to benefit the consumers having requirement of pump sets of capacity upto 5 HP only. However, in absence of proper monitoring, the Company allowed the beneficiaries to consume electricity in excess of the maximum possible consumption.

<sup>&</sup>lt;sup>32</sup> SAP software provides multiple business functions with a single view of the truth. This helps companies better manage complex business processes by giving employees of different functional units easy access to real-time insights across the enterprise.

<sup>&</sup>lt;sup>33</sup> LV3AG3MB21, LV3AG3KJ21, LV3AG5MB21 and LV3AG5KJ21.

<sup>&</sup>lt;sup>34</sup> Out of six selected units, this practice was observed in four selected units viz., SE (Circle), Mahasamund, SE (Circle), Rajnandgaon, SE (Circle), Kawardha and SE (Circle), Janjgir-Champa.

<sup>&</sup>lt;sup>35</sup> 1, 2, 3, 4 and 5

Consequently, consumers were extended scheme benefits unduly at the cost of GoCG, which was not in order and hence, irregular.

#### **Collection of revenue** 6.1.8

The revenue billed in respect of all categories is collected at respective Distribution Centres and also by collection agencies appointed by the Company for the purpose. It is imperative for financial viability of the Company to ensure that the revenue due is collected promptly and arrears are not allowed to accumulate.

#### 6.1.8.1 Non-achievement of collection efficiency targets

All the consumers are billed on the basis of energy consumed by them as per meter reading and assessment of unmetered energy consumption of consumers. However, the selected circles could not recover entire amount billed by them resulting in revenue losses. Against the current bills generated and bills in arrear, the Distribution Centres (DCs) of Company realise revenue, including by various online modes by which the consumers made payment to the Company. The collection efficiency is based on the performance in realisation of revenue. Collection efficiency of the Company during the period 2017-18 to 2021-22 ranged between 95.60 per cent and 104.89 per cent (as worked out by Audit in Table 6.1.1) against the target<sup>36</sup> of 99.66 per cent.

Collection efficiency (in percentage) of the sampled circles during the period 2017-18 to 2021-22 (as worked out by Audit) is detailed in Appendix 6.1.7 and depicted in Chart 6.1.5.





(Source: Information compiled from data provided by the Company).

It could be seen from the above chart that none of the sampled units had achieved the target of 99.66 *per cent* collection efficiency<sup>37</sup> during the years 2017-18 to 2021-22. Reasons for non-achievement of collection efficiency target were mainly due to inaction of the Company to disconnect electricity supply of consumers, lack of effective action as per Dues Recovery Act against disconnected consumers, dues from Government departments, non-collection of appropriate security deposit from consumers and lack of

<sup>36</sup> In absence of target of CSERC in respect of collection efficiency, target of UDAY (Ujwal Discom Assurance Yojana) in this regard was considered as bench mark target. 37

Collection during the year/ demand during the year including arrears of previous years.

effective action for recovery against demand raised during O&M and vigilance checking.

While accepting the audit observation, Government stated (October 2023) that collection efficiency was badly affected during the years 2019-20 to 2021-22 due to pandemic Covid 2019. Afterwards all efforts are being made by the Company to achieve the target of collection efficiency. It was also stated that overall collection efficiency of the State during the years 2021-22 and 2022-23 was more than 100 *per cent*. Reply reaffirms that steps are being taken to improve situation, which is showing in improved collection efficiency.

#### 6.1.8.2 **Reporting of collection efficiency by applying incorrect** formulae for calculation of collection efficiency

During audit, it was noticed that during the period 2017-18 to 2021-22, the selected circles reported collection efficiency ranging between 85.26 *per cent* and 110.87 *per cent*. The selected circles had considered recovered arrears amount, as collection of revenue (i.e. in numerator only). However same was not considered in total revenue due (in denominator). By considering the arrears amount in total revenue due, collection efficiency ranged between 63.47 *per cent* and 97.67 *per cent*. As a result of erroneous formula the reported collection efficiency was inflated by 1.36 to 28.26 *per cent* (as detailed in *Appendix 6.1.7*). This indicates that selected circles reported incorrect collection efficiency to show improved performance in realisation of revenue. However, they could not recover the entire billed amount of the current year and the arrears of amount billed in previous years. Moreover, the sampled circles did not apply the formulae prescribed by the GoI for calculating their collection efficiency.

The Government stated (October 2023) that the collection efficiency formula which is being adopted by the Company is in line with the Central Electricity Authority (CEA) guidelines hence there is no error in reporting collection efficiency.

The reply is not acceptable as the sampled circles did not consider subsidy in calculating their collection efficiency which was not in line with the formulae prescribed by the CEA.

During exit conference (August 2023), Audit sought detailed working of collection efficiency as calculated by the Company by applying formula prescribed by CEA in respect of six selected circles for the period 2017-18 to 2021-22. In response, the Company furnished the details for the years 2019-20 to 2021-22, but did not apply the formula prescribed by the CEA for calculating their collection efficiency.

#### 6.1.8.3 Accumulation of arrears in revenue

The success of the company/organisation depends on efficient financial management which should ensure timely collection of dues/arrears. To improve the financial health of the Company, it is required to reduce the arrears of revenue and increase the collection efficiency. However, contrary to this, the review of demand, collection and balance statements of revenue pertaining to consumers for the period from 2017-18 to 2021-22 revealed that huge amount of arrears were outstanding as discussed below.

Analysis of arrears in selected circles revealed that as of 31 March 2022, accumulated arrears outstanding against 7,36,707 consumers were  $\mathbf{\xi}$  603.74 crore, which was high and indicated that there was lack of adequate efforts for minimising the same and the mechanism for recovery of revenue was inadequate. The details of connectivity-wise break-up of arrears as on 31 March 2022 is given in *Table 6.1.7*:

							(₹in crore)	
Sl.	Name of the	Conne	cted	Disconr	ected	Total		
no.	Circles	No. of consumers	Arrears amount	No. of consumers	Arrears amount	No. of consumers	Arrears amount	
1	2	3	4	5	6	7 (3 +5)	8 (4 + 6)	
1	Raipur city-1	59,806	83.45	10,705	9.57	70,511	93.02	
2	Mahasamund	1,94,166	150.18	36,895	26.20	2,31,061	176.38	
3	Rajnandgaon	1,15,206	69.54	22,050	9.71	1,37,256	79.25	
4	Bilaspur city	18,136	30.11	14,622	22.55	32,758	52.66	
5	Kawardha	95,073	45.39	25,277	14.81	1,20,350	60.20	
6	Janjgir-Champa	1,07,235	101.05	37,536	41.18	1,44,771	142.23	
	Total	5,89,622	479.72	1,47,085	124.02	7,36,707	603.74	

Table 6.1.7: Table showing the details of connectivity wise arrears as on31 March 2022 in selected circles

(Source: Information compiled from data furnished by the Company)

## (a) Non-realisation of arrears of revenue from connected consumers

Clause 10.20 of the Supply Code, 2011 provided that it shall be the responsibility of the licensee to ensure that no default in payment is continued beyond a reasonable period subject to a maximum of three months without action for temporary disconnection. It was further provided that, the authorised official of the licensee will ensure that all cases pertaining to default in payment are monitored regularly and timely action is initiated as per prescribed procedure for temporary disconnection and thereafter, for permanent disconnection.

The age-wise analysis of arrears against connected consumers as on 31 March 2022 in selected circles is as shown in *Table 6.1.8*:

Sl. No.	Period of Arrears	Number of connected consumers	Amount of Arrears (₹ in crore)					
1	2	3	4					
1	Upto 6 Months	5,74,493	110.57					
2	6 months to 1 Year	3,06,032	85.64					
3	1 year to 2 years	2,57,488	123.46					
4	2 years to 3 years	2,02,888	82.58					
5	Above 3 years	1,55,907	77.47					
	Total 479.72							

 Table 6.1.8: Age-wise break-up of arrears against connected consumers in selected circles

(Source: Information compiled from data furnished by the Company)

Audit observed (December 2022) that there was huge accumulation of outstanding arrears of ₹ 479.72 crore from the connected consumers which shows that in violation of provisions of the Supply Code, 2011, the Company failed to disconnect the connections of the defaulting consumers and the arrears continued to accumulate in such cases. Further analysis of age-wise arrears revealed that as of 31 March 2022, an amount of ₹ 462.06 crore was due from 3.71 lakh<sup>38</sup> connected consumers which was outstanding for more than six months but the same were not disconnected till 31 March 2022.

The GoCG stated (October 2023) that total active arrears of consumers reduced by 10.77 *per cent* in 2022-2023 as compared to 2021-22. It was further stated that major portion of arrears was related to BPL, domestic and agricultural consumers in whose case it is practically difficult to disconnect the connections. Besides, connections of many consumers could not be disconnected due to ongoing litigations.

The reply is not acceptable because the GoCG failed to furnish reply in respect of selected circles. Further, the Company failed to disconnect the connections not under litigation, resulting in non-compliance of provisions of the Electricity Supply Code. Moreover, Company did not provide information regarding number of disputed cases and amount of arrears involved in such cases in support of the reply.

# (b) Non realisation of revenue of arrears from disconnected consumers

The arrears against disconnected consumers, as on 31 March 2022 ranged between one month and more than three years, as shown in the *Table 6.1.9*:

Table 6.1.9: Age-wise break-up of arrears against disconnected consumers in
selected circles

Sl. No.	Period of arrear	Number of disconnected consumers	Amount of Arrears (₹in crore)
1	2	3	4
1	Upto 6 Months	23,637	5.67
2	6 months to 1 Year	23,308	6.57
3	1 year to 2 years	29,489	12.00
4	2 years to 3 years	35,329	14.46
5	Above 3 years	1,10,500	85.32
		Total	124.02

(Source: Information compiled from data furnished by the Company)

<sup>38</sup> To avoid double counting of one consumer age-wise grouping of arrears was ignored and consumers having arrears in some or all age-groups were counted only once.

It was observed that as on 31 March 2022, in selected circles total 1,47,085 connections<sup>39</sup> were discontinued permanently due to failure to deposit the billing demand. However, the Company did not take concerted action for recovery of arrears of ₹ 124.02 crore from the permanently disconnected consumers.

While accepting the audit observation the GoCG stated (October 2023) that action is being taken against disconnected consumers by the field offices concerned as per provisions of Dues Recovery Act (DRA).

## (c) Non-recovery of complete dues from government departments

The Company also did not take effective steps for recovery of its dues from various government (Central and State) departments, which increased from  $\vec{\mathbf{x}}$  50.45 crore in March 2018 to  $\vec{\mathbf{x}}$  418.14 crore (728.82 *per cent*) in March 2022, as given below in *Table 6.1.10*:

### Table 6.1.10: Statement showing arrears against government departments in selected circles

					<b>(₹</b> in crore)	
Sl. No.	Name of Department	Amount outstanding as on 31 March	Amount outstanding as on	Increase in outstanding arrears in four years		
		2018	31 March 2022	Amount	Per cent	
1	2	3	4	5(4-3)	6(5/3)*100	
1	Local Bodies	35.78	383.39	347.61	971.52	
2	Education	3.60	9.03	5.43	150.83	
3	Health	1.51	3.91	2.40	158.94	
4	Women and child welfare	1.00	3.89	2.89	289.00	
5	Others	8.56	17.92	9.36	109.35	
	Total	50.45	418.14	367.69	728.82	

(Source: Information compiled from data furnished by the Company)

The GoCG stated (October 2023) that payment of arrears were received normally at the end of the year at headquarters level. During the years 2016-17 to 2022-23 total amount of ₹ 2,011.40 crore have been received from the government departments.

Reply is not acceptable as the reply did not substantiate that all amount due was paid by the government departments. Further, during the period 2017-18 to 2021-22 dues against government departments showed increasing trend which indicate that dues were not fully recovered.

#### (d) Non-compliance of provisions under Chhattisgarh Government Electrical Undertaking (Dues Recovery) Act, 1961

The Supply Code, 2011 (clause 10.30) provides that on permanent disconnection of an electricity connection having outstanding dues, a distribution licensee shall take recourse of Chhattisgarh Government Electrical

<sup>&</sup>lt;sup>39</sup> To avoid double counting of one consumer age-wise grouping of arrears was ignored and consumers having arrears in some or all age-groups were counted only once.

Undertaking (Dues Recovery) Act, 1961 (DRA) towards the recovery of outstanding dues. Further, as per provisions of the DRA, after finalisation of permanent disconnection of the consumers, recovery of the dues should have been done on priority by issue of Revenue Realisation Certificates (RRCs) within six months from the date of permanent disconnection.

A review of arrears of revenue in selected circles showed that as on 31 March 2022, an amount of ₹ 119.70 crore<sup>40</sup> was pending for recovery from 1,31,230 consumers<sup>41</sup> whose electricity connections were permanently disconnected for a period of more than six months. However, RRCs were not issued to any of these consumers which was not in accordance with the provisions of Dues Recovery Act and the Supply Code, 2011.This also adversely affected the Company's collection efficiency.

The GoCG stated (October 2023) that necessary action under DRA is being taken by the field offices against disconnected consumers.

Reply is not acceptable because it was observed that necessary action had not been initiated under DRA for recovery from LT consumers in six selected circles during the period under audit.

# 6.1.8.4 Non-maintenance of requisite security deposit from permanently disconnected consumers and consequent accumulation of arrears

As per the provisions (clause 4.59) of Supply Code, 2011, the Company may release temporary connection to any person requiring supply of electricity for a purpose that is temporary in nature and for a period of one year or less. It was further stipulated in Supply Code, 2011 (clause 4.59 (vi)) that an amount equal to the estimated bill for three months or for the period of temporary connection requisitioned, whichever is less, is payable by applicants before serving temporary connection, subject to replenishment from time to time and adjustment in the last bill after disconnection.

Audit observed (December 2022) that in the selected circles<sup>42</sup>, as on 31 March 2022, electricity charges of ₹ 7.97 crore were outstanding against 70,965 permanently disconnected consumers who had taken temporary connections. However, the Company held security deposit of only ₹ 3.28 crore with respect to these consumers which was not adjusted (December 2022). This resulted in less collection of security deposit from 70,965 consumers who took temporary connections as detailed in *Table 6.1.11*.

<sup>&</sup>lt;sup>40</sup> ₹ 119.70 crore (from Raipur city 1- ₹ 7.65 crore, Mahasamund- ₹ 25.47 crore, Rajnandgaon- ₹ 9.25 crore, Bilaspur city- ₹ 22.25 crore, Kawardha- ₹ 14.35 crore and Janjgir-Champa- ₹ 40.73 crore).

<sup>&</sup>lt;sup>41</sup> Total disconnected/dismantled connections 1,31,230 (from Raipur city 1- 9,233, Mahasamund- 32,551, Rajnandgaon- 18,202, Bilaspur city- 13,748, Kawardha- 22,118 and Janjgir-Champa- 35,378).

<sup>&</sup>lt;sup>42</sup> Excluding Pithora Division of Mahasamund and Akaltara Division of Janjgir-Champa.

			( <b>&lt;</b> in crore)		
Sl. No.	Name of Circle	No. consumers	Outstanding amount	Security deposit held	
1	2	3	4	5	
1	Raipur City-1	2,869	0.39	0.38	
2	Mahasamund	18,531	3.06	0.06	
3	Rajnandgaon	40,118	1.66	2.40	
4	Bilaspur City	1,194	0.49	0.16	
5	Kawardha	2,587	0.82	0.15	
6	Janjgir-Champa	5,666	1.55	0.13	
	Total	70,965	7.97	3.28	

 Table 6.1.11: Statement showing status of permanently disconnected temporary consumers vis-a-vis security deposit held as on 31 March 2022 in selected circles

(Source: Information compiled from data furnished by the Company)

As the supply of these consumers had already been disconnected and agreement period expired, possibility of recovery of the arrears amounting to  $\mathbf{\xi}$  4.69 crore<sup>43</sup> is very remote. The Company did not initiate action for recovery of dues. This indicates that either the assessment of security deposit was incorrect or the requisite security deposit was not collected/replenished by the Company at the time of serving/extending temporary supply to these consumers.

The GoCG stated (October 2023) that field offices are taking action for recovery of dues after assessment of final bill and adjustment of security deposit and consequently, the arrears against permanently disconnected temporary consumers have decreased (June 2023) in four out of six selected circles. Regarding untraceable consumers it was stated that the irrecoverable dues will be duly written-off.

Reply is not acceptable because Electricity Supply Code provided that the regular readings of the meter may be taken during the period of the temporary connection to ensure that the charges payable for actual consumption do not exceed the advance payment received. However, the Company could not ensure compliance with provisions of the Electricity Supply Code and consequently, outstanding dues exceeded the security deposit held.

# 6.1.8.5 Non-compliance with the provisions of Electricity Act regarding grant of subsidy by the State Government

As per scheme guidelines of KJJY, in case of the consumer opting for flat rate, consumer was required to pay electricity charges at the rate of  $\gtrless$  100 per HP per month irrespective of number of units consumed. Further, cost of electricity supply to consumers for 6,000/7,500 units was to be reimbursed by GoCG.

During the period from 2017-18 to 2021-22, CSPDCL sold 10,335.68 MUs electricity valuing ₹ 4,925.99 crore<sup>44</sup> (after considering flat rate charged to consumers). The reimbursable units of electricity were 5,612.93 MUs<sup>45</sup> valuing ₹ 2,762.57 crore. Further, the Company was aware that consumption of electricity more than 6,000 units and 7,500 units in case of 3 HP and above

<sup>&</sup>lt;sup>43</sup> ₹ 7.97 crore – ₹ 3.28 crore.

<sup>&</sup>lt;sup>44</sup> As worked out by the company

<sup>&</sup>lt;sup>45</sup> At the rate of 6,000 units and 7,500 units for agricultural pumps with capacity up to 3 HP and above 3 HP to 5 HP, respectively.

3 HP to 5 HP respectively was non-reimbursable from GoCG. Therefore,  $\gtrless 2,163.43$  crore<sup>46</sup> was to be borne by the Company.

Audit observed (December 2022) that as per provisions of Section 65 of the Electricity Act, 2003, the GoCG was required to pay in advance the amount to compensate the Company to the extent it was affected by the grant of subsidy, as a condition for the Company to implement the subsidy provided by GoCG. Further, during final true-up of tariff order for the year 2016-17 CSERC stated (28 February 2019) that GoCG can provide subsidy to any class of consumer as per enabling provision<sup>47</sup> (Section 65) of the Electricity Act, 2003.

The matter regarding burden to the Company due to consumption of electricity by consumers opting flat rate in excess of ceiling fixed by GoCG for reimbursable units of electricity consumption was pursued with the GoCG from time to time. However, no amount was received (December 2022) from GoCG to reimburse the Company in this regard resulting in burden of ₹ 2,163.43 crore to the Company.

GoCG stated (October 2023) that as per scheme guidelines, cost of electricity supplied to consumers up to 6,000/7,500 units (for 3 HP/5HP Pump) was reimbursed from the State Government. For the excess units consumed by such consumers (beyond 6,000/7,500 units), the Company has made demand from GoCG from time to time. However, no amount has been received so far. It was also stated that the CSERC was very well aware of the matter.

It is evident that the Company did not receive substantial subsidy amount on consumption of electricity in excess of prescribed ceiling resulting in burden of  $\overline{\mathbf{x}}$  2,163.43 crore on the Company. Further, reply is silent on release of subsidy for the excess units consumed beyond 6,000/7,500 units.

#### 6.1.8.6 Loss of revenue due to incorrect categorisation of consumers and short claim of subsidy from the State Government

In KJJY, 6,000 units and 7,500 units electricity consumption per year was free to farmers using electricity for pump connections up to 3 HP and above 3 HP to 5 HP, respectively. In case of the consumer opting for flat rate he was required to pay electricity charges at the rate of ₹ 100 per HP per month irrespective of number of units consumed. Further, cost of electricity supply to consumers for 6,000/7,500 units was to be reimbursed by GoCG.

<sup>&</sup>lt;sup>46</sup> ₹ 4,925.99 crore (10,335.68 MUs) - ₹ 2,762.57 crore (5,612.93 MUs)

<sup>&</sup>lt;sup>47</sup> Section 65 of the Electricity Act, 2003 provided that if State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission, the State Government shall give direction for implementation of such subsidy and shall pay in advance. In case payment is not made by the State Government in accordance with the above provisions, the directions of State Government to grant subsidy shall not be operative and the tariff fixed by the State Commission shall be applicable from the date of issue of orders by the State Commission in this regard.

Audit observed (December 2022) that during the period 2019-22<sup>48</sup>, in one out of six selected circles<sup>49</sup> i.e. Kawardha, 15,678 out of total 51,850 instances of billing of pump connections of capacity more than 3 HP were wrongly categorised as upto 3 HP. Since 6,000 units per annum were claimed to GoCG instead of 7,500 units allowed, subsidy on 1,500 units were short claimed for each of incorrectly categorised connection. As a result, Company incurred loss of revenue to the tune of ₹ 15.74 crore as detailed in *Table 6.1.12*:

No. of instances where pumps Short claim in units Average of Year Amount of more than 3 HP were (at the rate of 1,500 billing rate short claim of wrongly categorised as upto 3 units per connection) (₹ per subsidy (in ₹) HP unit) 2 3 4 5 2019-20 5,087 76,30,500 5,02,08,690 6.58 2020-21 5,292 79,38,000 6.50 5,15,97,000 2021-22 79,48,500 7.00 5,299 5,56,39,500 Total 15,74,45,190

Table 6.1.12: Table showing amount short claimed from GoCG by the Company

(Source: Information compiled from data available in Company's SAP system)

GoCG stated (October 2023) that as per monthly ledger generated in SAP system, the number of pump connections wrongly categorised during the period 2019-20 to 2021-22 was 28, as against 15,678 pointed out in audit. It was further stated that during physical verification, it was found that 19 out of the 28 connections of 5 HP were wrongly categorised as 3 HP and nine connections of 3 HP were categorised as 5 HP; which has now been rectified.

Reply is not acceptable as data available in Company's SAP system showed 15,678 instances of 5 HP pump connections wrongly categorised as 3 HP. Moreover, reply was not substantiated with supporting documents.

# 6.1.8.7 Delay in release of subsidy by State Government leading to interest burden

The Government of Chhattisgarh introduced schemes<sup>50</sup> relating to supply of subsidised electricity from time to time which were implemented by Company as per scheme guidelines. The Company received subsidy from GoCG on account of implementation of schemes.

During scrutiny of records of Company, it was noticed that during the period from 2017-18 to 2021-22 the Company claimed ₹ 19,310.20 crore as subsidy towards supply of electricity under various schemes and there was opening balance of ₹ 874.68 crore subsidy as on 1 April 2017 (₹ 9.43 crore in respect of single point connection and ₹ 865.25 crore in respect of *Krishak Jeevan Jyoti Yojana*), against which the GoCG released subsidy of ₹ 17,893.12 crore. Thus, there was unreleased subsidy of ₹ 2,291.76 crore as on 31 March 2022. Ratio of

<sup>&</sup>lt;sup>48</sup> In 2019-20, 5,087 out of 16,295 instances, in 2020-21, 5,292 out of 17,064 instances; and in 2021-22, 5,299 out of 18,491 instances of billing of pump connections of capacity more than 3 HP were wrongly categorised as upto 3 HP.

<sup>&</sup>lt;sup>49</sup> In selected circles Raipur City 1, Mahasamund, Rajnandgaon, Bilaspur city, Kawardha and Janjgir-Champa for the years 2017-18 to 2021-22.

<sup>&</sup>lt;sup>50</sup> Single point connection to Below Poverty Line (BPL) consumers, *Krishak Jeevan Jyoti Yojana* (KJJY), *Half Bijali* Bill Scheme, flat rate to domestic consumers and rebate for steel industries

subsidy received from GoCG during the period 2017-18 to 2021-22 ranged between zero *per cent* and 128.64 *per cent* (as detailed in *Appendix 6.1.8*).

As the GoCG did not release the full amount of subsidy during review period therefore, the Company was forced to avail loan to meet the expenses. During the period 2017-18 to 2021-22 the Company availed loan of ₹ 2,097.44 crore from banks/financial institutions and paid interest of ₹ 214.77 crore (as detailed in *Appendix 6.1.8*) which was allowed to be recovered by the CSERC through tariff orders of respective years. This has resulted in avoidable financial burden of ₹ 214.77 crore on the consumers in form of higher tariff due to payment of interest.

The GoCG stated (October 2023) that due to budgetary constraints of State Government, there was delay/short release of claim. Further, on implementation of Revamped Distribution Sector Scheme (RDSS), the State Government committed to release the entire current claim as well as pending claims. Accordingly, against pending claims of ₹ 2,291.76 crore as on 31 March 2022 the State Government committed to pay ₹ 2,698 crore and it is expected that the balance amount of claim would be released in time and result into saving in interest cost.

As regard interest burden on consumers, it was stated that CSERC allowed interest on loan in tariff on normative basis. Hence, there was no financial burden to the consumers due to non-release of timely subsidy by GoCG.

The reply is not acceptable as the details of amount received by the Company against commitment made by GoCG in May 2022 were neither found on records nor furnished in reply to audit. Further, reply regarding no financial burden on consumers is also not acceptable as due to non-release of subsidy by GoCG the Company was forced to avail loan resulting in interest burden on consumers.

### 6.1.8.8 Non-compliance of CSERC directives regarding online payment of energy bills

As per tariff order issued by CSERC (2021-22), bill amounting to more than five thousand rupees shall mandatorily be paid online, to be effective from 01 August 2021.

During audit, it was noticed that the selected circles<sup>51</sup> accepted 12,505 cheques of more than ₹ 5,000 each instead of online payment from 1 August 2021 to 31 March 2022, against energy bills totaling ₹ 37.36 crore.

This resulted in non-compliance of CSERC order, as well as affected the objective of early realisation of revenue in the Company's account.

While accepting the audit observation GoCG stated (October 2023) that necessary instruction has been issued to the field offices to ensure compliance of CSERC directives in this regard.

# 6.1.8.9 Lack of prompt action to recover payment against dishonoured cheques

As per order<sup>52</sup> (November 2008) of the Company, if the cheque sent by the consumer against payment of electricity bill is returned by the banker unpaid,

<sup>&</sup>lt;sup>51</sup> Excluding East and Central Divisions of Raipur city-1, Pithora and Saraipali Divisions of Mahasamund.

<sup>&</sup>lt;sup>52</sup> Circular No. 05-01/B & CM/4720 dated 7/11/2008

either because amount of money standing to the credit of that account is insufficient to honour the cheque or that it exceeds the amount arranged to be paid from that account by an agreement made with the bank, they shall be kept in safe custody and immediately a notice is to be served to the customer, within 30 days of the receipt of information from the bank regarding the return of cheque unpaid, demanding to make payment, either in cash or by demand draft/bankers cheque only, within 15 days of the receipt of said notice. However, if the consumer fails to make payment of the said amount within 15 days, legal action under section 138 of Negotiable Instrument Act, 1881 should be initiated within 30 days thereafter, to protect the Company's financial interest.

During test check of records of selected six circles<sup>53</sup>, Audit observed (December 2022) that during the period 2017-18 to 2021-22, total 4,731 number of cheques of individual value more than ₹ 5,000 aggregating ₹ 20.66 crore were dishonoured. In case of 587 cheques amounting to ₹ 2.23 crore, the Company informed the consumers regarding dishonour of their cheques after lapse of period ranging between 31 days and 748 days against 30 days prescribed by the Company. Further, in case of 1,943 cheques amounting to ₹ 8.05 crore, the consumers made payment after lapse of period that ranged between 16 days and 1,141 days against the prescribed time period of 15 days. However, no action was taken by the Company to recover the outstanding dues within prescribed time period. Against the dishonoured cheques in 455 cases, the Company again accepted payment of ₹ 2.17 crore in cheques in place of cash or demand draft/bankers cheque in violation of Company's order. It was also noticed that in 103 cases the consumers failed to make payment of ₹ 0.95 crore so far (December 2022) but no legal action was initiated by the Company under section 138 of Negotiable Instrument Act, 1881 to safeguard the Company's financial interest.

This indicates that the Company had not taken expeditious action for recovery of revenue from consumers to protect its financial interest.

While accepting the audit observation the GoCG stated (October 2023) that delay occurred in past due to decentralised process. It was also stated that presently, the Company modified and implemented IT system in such a way where after receipt of intimation from bank regarding dishonour of cheque, within one week, account of consumer is debited at the RAO level itself and simultaneously SMS to consumer on its registered mobile number is being sent. Thus, future happening of such lapses would be insignificant. As regard non-recovery of bills amounting to ₹ 0.95 crore it was stated that matter is being taken up on case to case basis.

# 6.1.8.10 Lack of prompt action by the Company for reconciliation of revenue

As per clause 10.1 of the Supply Code, 2011 the consumers have to make payment every month as per the bills served by the licensee i.e. the Company, for the power used and energy consumed by consumer.

<sup>&</sup>lt;sup>53</sup> Excluding East Division of Raipur city-1, Mahasamund (2017-18 and 2018-19) and Dongargaon Division of Rajnandgaon.

As on 31 March 2022, the Regional Accounts Office (RAO) of the selected circles maintained 12 current accounts with four banks<sup>54</sup> for collection of revenue from the consumers. Energy charges received by the concerned field offices in form of cash are directly deposited in RAOs' bank accounts. In case of payment received by demand draft/cheque, the RAOs present the same to concerned bank for collection and after clearing, the Company's account is credited with the demand draft/cheque amount. For the purpose of monitoring of deposit of cash collected and uncleared cheques, demand drafts etc. Bank Reconciliation Statement (BRS) acts as an essential tool for reconciliation of bank balances of cash book and bank statements.

Scrutiny of BRS revealed that as on 31 March 2022, in 37,555 cases, revenue amounting to  $\overline{\mathbf{x}}$  1,868.98 crore received by RAOs from the consumers during the period 8 March 2006 to 31 March 2022 was shown as 'received in cash books but not credited in the bank accounts'. Similarly, in 22,338 cases an amount of  $\overline{\mathbf{x}}$  1,999.95 crore was shown as 'credited in the bank accounts but not received in the cash books' which is related to period 22 December 2005 to 31 March 2022. However, even after lapse of more than 16 years, the Company failed to ensure reconciliation of  $\overline{\mathbf{x}}$  301.83 crore due to non-reconciliation of the cash books with bank accounts of the Company, as detailed in *Table 6.1.13*.

Table 6.1.13: Statement showing cash/demand drafts /cheques unreconci between cash book and bank accounts in RAOs of the selected circles	

										( <b>₹</b> in crore)
Sl. No.					sh book but	Amount shown as received in bank but not in cash book				Unreconciled amount
		No. of cases	Amount	Period for which amount remained unreconciled		No. of cases	Amount	Period for which amount remained unreconciled		
				From	То			From	То	
1	2	3	4	5	6	7	8	9	10	11 (4-8)
1	Bilaspur	1,462	112.59	08 Mar-06	31-Mar-22	2,987	38.87	22-Dec-05	31-Mar-22	73.72
2	Raigarh	6,069	1,084.91	16-Oct-15	31-Mar-22	7,854	1,279.66	19-Oct-15	31-Mar-22	194.75
3	RAO 2, Raipur	28,377	667.32	03-Oct-11	31-Mar-22	7,497	655.61	10-Oct-11	31-Mar-22	11.71
4	Rajnandgaon	1,647	4.16	01-Apr-13	31-Mar-22	4,000	25.81	02-Jan-09	31-Mar-22	21.65
	Total		1,868.98			22,338	1,999.95			301.83

(Source: Information compiled from data furnished by the Company)

Despite occurrence of cases of misappropriation/embezzlement of revenue as reported by the Company in the past<sup>55</sup> the Company had not learnt from these instances and did not take prompt action to reconcile the revenue realisation between cash book and bank account. Hence, in the absence of timely reconciliation, the chances of fraud/misappropriation of Company's revenue in future also cannot be ruled out. This indicates poor financial management of revenue realisation in the Company.

<sup>&</sup>lt;sup>54</sup> State Bank of India (SBI), Union Bank of India (UBI), Punjab National Bank (PNB) and Chhattisgarh *Gramin* Bank (*Gramin* Bank).

<sup>&</sup>lt;sup>55</sup> The Company's employees misappropriated cash of ₹ 3.64 crore received from the consumers on account of energy charges: ₹ 18.01 lakh Dhamtari Division (2016-17), ₹ 1.10 crore Bilaspur Region (2018-19) and ₹ 2.36 crore Akaltara Division (2020-21).

While accepting the audit observation the GoCG stated (October 2023) that as on 31 March/April/June 2023 unreconciled amount was ₹ 75.99 crore. It was also stated that continuous efforts are being made by the RAOs to resolve and minimise the unreconciled amount and progress on minimisation of difference would be intimated to audit in due course.

As regards misappropriation of cash, it was stated that the Company has recently developed an auto clearing system under SAP which is reviewed by Head Office from time to time. Thus, the chances of occurrence of misappropriation/ fraud of revenue would be minimised.

# 6.1.8.11 Joint physical verification of electricity connections of disconnected consumers

In order to assess how, Permanently Disconnected (PD) Low Tension (LT) consumers were surviving without power supply post disconnections and whether they were getting new connections without paying previous dues, joint physical verification of electricity connections of 642 number of consumers disconnected for a period of one year and above as on 31 March 2022 was conducted (December 2022) with Distribution Centre In-charge during the audit of selected circles. For this purpose, minimum 100 consumers were selected randomly from each selected circle covering all 19 division offices.

During physical verification, Audit observed that out of 642 consumers,131 consumers were using electricity by direct hooking from poles, 434 consumers were found not connected, 33 consumers were found using electricity unauthorisedly by taking connection from other consumers, 36 consumers were provided new connections out of which 19 were provided connections without payment of previous arrears. Eight consumers whose connections were disconnected on account of non-payment of energy bills, were found connected even though the outstanding dues were not paid as per the Company's records.



(Picture showing direct hooking of electric lines by consumers)

This indicates inability of the Company to monitor unauthorised use of electricity by disconnected consumers without payment of previous arrears.

The GoCG while giving partial reply stated (October 2023) the following:

While accepting the audit observation it was stated that in Kawardha Circle 12 connections have been reconnected after payment of arrears and arrears has been recovered against 20 PD connections. On physical verification it was found that in Mahasamund Circle the premises of all four PD connections were same and there was no unauthorised use of electricity. Similarly, in Saraipali, connection was served in 2013 but not after disconnection as stated by Audit.

The reply is not acceptable as during joint physical verification four connections were found disconnected but consumers of said connections were using electricity unauthorisedly by taking connection from other consumers and reply was not substantiated with supporting documents. Further, reply regarding new connection provided without payment of previous arrears is also not acceptable because despite having outstanding arrears as per records of the Company the said connection was found connected during joint physical verification. Further, during joint physical verification, audit results were accepted by the Company.

➤ While accepting the audit observation GoCG stated that in Janjgir-Champa Circle out of five new connections provided without payment of previous arrears, two connections are presently connected on payment of previous arrears, three connections were disconnected. Similarly, three no. connections which were found using electricity by direct hooking by Audit were reconnected after payment of previous arrears.

It is further stated that one connection which was reported by Audit as using electricity from another connection was found disconnected on physical verification. Reply is not acceptable as during joint physical verification one connection was found using electricity from another connection and same was accepted by the Company during joint physical verification.

- While accepting the audit observation GoCG stated that in City Circle, Bilaspur out of two connections served without payment of PD arrears, the amount of arrear has been recovered. Out of three connections found using electricity from nearby connection, one no. new connection was provided after payment of PD arrear and two no. connections have been disconnected. Out of two no. connections found using electricity by direct hooking, one no. new connection was served after payment of PD arrears and one connection has been disconnected.
- While accepting the para the GoCG stated that in Raipur City Circle -1, appropriate action has been taken against six no. of direct hooking cases, supply of nine no. connections have been disconnected which were found using electricity from nearby connections and against two no. cases where new connections were served without payment of previous arrears, lines have been disconnected.
- As regard Rajnandgaon Circle GoCG stated that all the PD connections pointed out by Audit have been physically verified and use of electricity was not found. It is further stated that few connections have been served after following due procedure and recovery of old arrears.

Reply is not acceptable as during joint physical verification of permanently disconnected consumers, it was observed that out of 110 consumers, 10 were using electricity by direct hooking from poles, nine consumers were found using electricity unauthorisedly by taking connection from other consumers, five consumers were provided new connections without payment of previous arrears and connections of three consumers were found connected though same were disconnected on account of non- payment of energy bills as per records of the Company. Further, during joint physical verification audit results were accepted by the Company.

Further, during exit conference the GoCG stated that instructions have been issued by Company to field offices for necessary action.

#### 6.1.9 Conclusion

Billing efficiency during 2017-18 to 2021-22 ranged between 79.84 *per cent* and 81.98 *per cent* as against the targeted range of 83.50 to 84 *per cent* fixed by CSERC. The Company did not apply the formulae prescribed by GoI for calculating its collection efficiency. As a result the collection efficiency was incorrectly reported by (-)0.51 *per cent* to 4.65 *per cent*. During 2017-18 to 2021-22, the Company purchased/input 1,26,719.50 MUs at a cost of ₹ 49,471 crore, of which 23,788.15 MUs valuing ₹ 9,283.38 crore were lost during distribution of energy to consumers. Out of the total units lost 3,160.21 MUs were in excess of the norms, which otherwise would have earned a revenue of ₹ 2,157.15 crore to the Company. Further, out of the units sold, the Company could not realise 2,376.58 MUs valuing ₹ 1,591.20 crore during the years 2017-18, 2018-19 and 2020-21.

The main reasons for excessive distribution loss were inability of the Company to expedite metering of DTR, smart metering, non-installation of AMR System and CBs, high incidence of assessed billing and delay in replacement of defective meters which resulted in loss of 1,988.64 MUs energy valuing  $\overline{\mathbf{x}}$  1,353.60 crore. The Company extended undue benefit to consumers by short billing of  $\overline{\mathbf{x}}$  2.65 crore. Under *Krishak Jeevan Jyoti Yojana* the electricity consumption was in excess of the maximum rated capacity of agriculture pump. Consequently, an excess of 213.37 MUs was billed to GoCG over five years and an excess amount of  $\overline{\mathbf{x}}$  145.51 crore was claimed as subsidy under the scheme.

None of the sampled circles achieved the target of 99.66 per cent collection efficiency during the period under review. Reasons for non-achievement of the target of collection efficiency were inaction of the Company to disconnect electricity supply of defaulting consumers, lack of effective action as per Dues Recovery Act against disconnected consumers, dues from government departments, non-collection of appropriate security deposit from consumers and lack of effective action for recovery against demand raised during O&M and vigilance checking. The Company had to bear the burden of ₹ 2,163.43 crore due to non-reimbursement of subsidy under KJJY by GoCG towards consumption of electricity by consumers who opted flat rate. The Company availed loan of ₹ 2,097.44 crore from banks/financial institutions during the period 2017-18 to 2021-22 to meet the expenses and paid interest of ₹ 214.77 crore thereon due to delay in release of subsidy by the GoCG. The Company suffered loss of revenue of ₹ 15.74 crore due to incorrect categorisation of consumers and consequent short claim of subsidy from the State Government. The Company not only could not ensure compliance of standing instructions regarding dishonoured cheques resulting in delayed revenue realisation but also did not carry out reconciliation of cash-books and

bank accounts. As a result, amount of ₹ 301.83 crore remained unreconciled, as on 31 March 2022.

6.1.10 Recommendations

- 1. The Company needs to expedite metering of distribution transformers, smart metering, installation of Automatic Meter Reading System and Capacitor Banks, replacement of defective meters and also ensure correct billing to achieve higher billing efficiency and reduce distribution loss.
- 2. The Company needs to fix responsibility for incorrect billing to consumers, non-compliance of standing orders in respect of dishonoured cheques and non-reconciliation of the cash book and bank account timely.
- 3. Appropriate steps need to be taken expeditiously to recover the dues by disconnection of defaulting consumers, vigorous persuasion with the government departments and defaulting consumers for realisation of dues to achieve higher collection efficiency.

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(MOHD. FAIZAN NAYYAR) Accountant General (Audit) Chhattisgarh

The: 11 June 2025

Raipur

Countersigned

New Delhi The: 13 June 2025

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(K. SANJAY MURTHY) Comptroller and Auditor General of India