

Chapter II

Financial Management

Chapter-II

Financial Management

Audit observed that ESCOMs incurred extra expenditure, borrowed funds at higher rates of interest and could not entirely avail all grants offered by Government of India. Audit found that ESCOMs incurred an excess expenditure of ₹ 110.89 crore above the sanctioned cost in implementation of the Scheme, of which ₹ 38.52 crore was due to procurement of materials above guidance rates (Central Procurement Prices provided by MoP). Further, delay in submission of documents for claiming last tranche of grant resulted in additional interest burden on borrowed funds to the extent of ₹ 5.45 crore. Grants to the tune of ₹ 12.80 crore were foregone by BESCO and MESCOM due to delay in finalising tender for feeder metering (by KPTCL), inability to tender and award the work of DTC metering, and non-completion of solar component. Audit found that the billing efficiency (ratio of net energy sold to net input energy) of the ESCOMs generally improved during the scheme period leading to reduction in billing losses, i.e. unbilled energy input was reducing.

2.1 Introduction

The envisaged funding pattern of IPDS included (i) capital grant of 60 per cent of approved DPR cost from Government of India (GoI) (ii) 30 per cent through loans from financial institutions/banks and (iii) the remaining 10 per cent from ESCOMs' own funds. ESCOMs were also eligible for an additional grant of 50 per cent of loan (i.e. 15 per cent of approved DPR cost), receivable on achievement of prescribed milestones. Further, ESCOMs were eligible for a grant of up to 0.5 per cent of approved project cost towards Project Management Agency (PMA) cost.

The Scheme guidelines also stipulated that, 'any cost overrun after approval of the project due to any reason whatsoever shall not be eligible for any grant and shall be borne by the utility/respective State Governments'.

2.2 Financial break-up of the Scheme

ESCOM-wise details of sanctioned cost and actual expenditure incurred under the various components of the Scheme are tabulated below.

Table No. 2.1: ESCOM-wise details of approved project cost and expenditure incurred
(₹ in crore)

| Sl. No. | Name of ESCOM | Approved project cost (including PMA charges) | DWA Cost (including PMA) | Actual Expenditure (as on 31.03.2023) | Excess (-) /Reduction | Percentage of increase (-)/ decrease of implementation cost over approved project cost |
|---------|----------------------|---|--------------------------|---------------------------------------|-----------------------|--|
| | BESCO | | | | | |
| 1 | System strengthening | 459.45 | 509.03 | 488.86 | -29.41 | -8.54 |
| 2 | IT phase-II | 85.4 | 257.53 | 102.53 | -17.13 | |
| 3 | Total | 544.85 | 766.56 | 591.39 | -46.54 | |

| Sl. No. | Name of ESCOM | Approved project cost (including PMA charges) | DWA Cost (including PMA) | Actual Expenditure (as on 31.03.2023) | Excess (-) /Reduction | Percentage of increase (-)/ decrease of implementation cost over approved project cost |
|---------|----------------------|---|--------------------------|---------------------------------------|-----------------------|--|
| | CESC | | | | | |
| 4 | System strengthening | 179.06 | 193.4 | 179.08 | -0.02 | 0.93 |
| 5 | IT phase-II | 11.18 | 13.53 | 9.39 | 1.79 | |
| 6 | Total | 190.24 | 206.93 | 188.47 | 1.77 | |
| | GESCOM | | | | | |
| 7 | System strengthening | 184.33 | 200.43 | 194.3 | -9.97 | -3.21 |
| 8 | IT phase-II | 6.3 | 4.21 | 2.44 | 3.86 | |
| 9 | Total | 190.63 | 204.64 | 196.74 | -6.11 | |
| | HESCOM | | | | | |
| 10 | System strengthening | 229.56 | 257.39 | 260.83 | -31.27 | -12.64 |
| 11 | IT phase-II | 10.27 | 7.88 | 9.31 | 0.96 | |
| 12 | Total | 239.83 | 265.27 | 270.14 | -30.31 | |
| | MESCOM | | | | | |
| 13 | System strengthening | 208.11 | 272.39 | 239.21 | -31.1 | -13.95 |
| 14 | IT phase-II | 4.78 | 5.4 | 3.38 | 1.4 | |
| 15 | Total | 212.89 | 277.79 | 242.59 | -29.7 | |
| 16 | GRAND TOTAL | 1,378.44 | 1,721.19 | 1,489.33 | -110.89 | |

Source: Data furnished by ESCOMs

ESCOMs incurred an additional expenditure of ₹ 110.89 crore over and above the project cost approved by the nodal agency (PFC). Decrease in project cost was noticed only in CESC (0.93 per cent) and increase in project cost ranged from 3.21 per cent in GESCOM to 13.95 per cent in other ESCOMs.

The increase in project cost was, inter alia, due to;

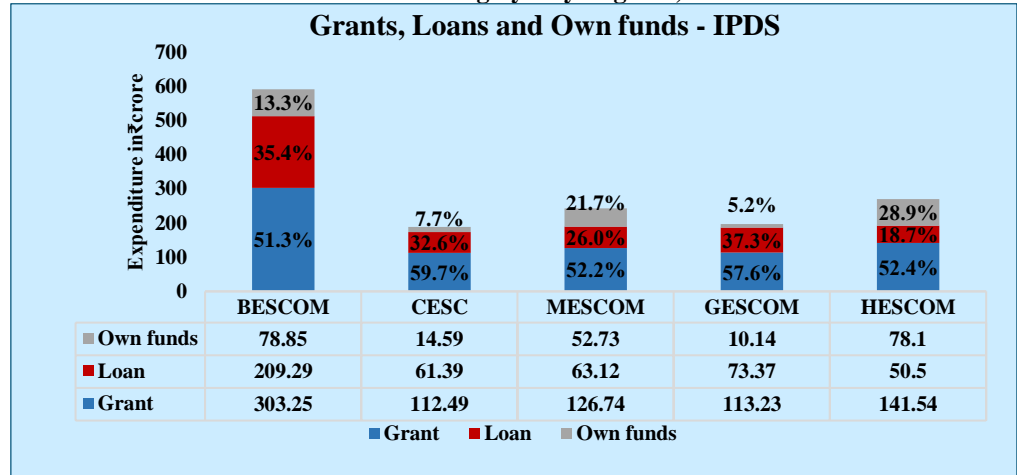
- Extra expenditure on procurement of materials due to non-adoption of CPP rates (*Paragraph 2.8.1*);
- Awarding of works to contractors at high tender premium (*Paragraph 3.5.2*).

Further, this additional expenditure of ₹ 110.89 crore was met out of borrowings or through own funds by ESCOMs.

2.3 Funding Pattern

Audit analysed the actual pattern of expenditure by ESCOMs as against the envisaged funding pattern of 60 per cent grants, 30 per cent loans and balance 10 per cent own funds. The results of the same are depicted in the chart No.2.1.

Chart No. 2.1: Details of funding by way of grant, loan and own funds



Source: Data furnished by ESCOMs

The actual amount of grants received was less than 60 per cent in all ESCOMs and varied from 51.3 per cent (BESCOM) to 59.7 per cent (CESC). The shortfall was met by either borrowings or deployment of own funds. Audit observed that BESCOM, CESC and GESCOM borrowed loans beyond the envisaged 30 per cent. Further, BESCOM, MESCOM and HESCOM spent more than 10 per cent of the project cost from internal resources to fund the project. During the years under review, the ESCOMs were mostly making losses⁶.

2.4 Issues pertaining to Loans

The para 1.2 of chapter IV of scheme guidelines envisaged availing loans from PFC and other financial institutions/ banks. ESCOMs availed loans from Rural Electrification Corporation⁷ (REC) and PFC considering the rate of interest and other terms and conditions. The quantum of loans sanctioned and loans availed by ESCOMs is tabulated below:

Table No. 2.2: Quantum of loans availed by ESCOMs for implementing IPDS

(₹ in crore)

| Sl. No. | Particulars | Agency from which loan availed | Sanctioned project cost | Loan sanctioned | 30 per cent of sanctioned project cost | Loan availed | Excess loan availed | Rate of Interest (Per cent) |
|---------|--------------|--------------------------------|-------------------------|-----------------|--|---------------|---------------------|-----------------------------|
| 1 | BESCOM | REC | 459.45 | 137.39 | 137.84 | 137.39 | No excess | 9.75 |
| 2 | | REC | 85.40 | 96.00 | 25.62 | 71.90 | 46.28 | 9.5 and 9.75 |
| 3 | CESC | REC | 190.24 | 90.72 | 57.07 | 61.39 | 4.32 | 9.75 |
| 4 | MESCOM | REC | 212.89 | 63.12 | 63.87 | 63.12 | No excess | 9.75 |
| 5 | GESCOM | REC | 190.63 | 73.37 | 57.19 | 73.37 | 16.18 | 9.75 |
| 6 | HESCOM | PFC | 239.83 | 51.10 | 71.95 | 50.50 | No excess | 10 |
| | TOTAL | | 1,378.44 | 511.70 | 413.53 | 457.67 | | |

Source: Data furnished by ESCOMs

⁶ For the period from 2016-17 to 2022-23.

⁷ A central Public Sector Undertaking under the Ministry of Power.

As against the eligible loan amount of ₹ 413.53 crore (30 *per cent* of sanctioned project cost), REC/PFC sanctioned ₹ 511.70 crore and ESCOMs availed loan of ₹ 457.67 crore at rates of interest ranging from 9.5 to 10 *per cent*. BESCOM, CESC and GESCOM availed excess loans (beyond 30 *per cent* of sanctioned project cost) amounting to ₹ 66.78 crore. An amount of ₹ 19.69 crore was adjusted towards interest payable on RAPDRP loan⁸ out of grant released to BESCOM for ERP and IT Phase II. To overcome the shortage of funds due to this, BESCOM availed additional loans from REC (₹ 46.28 crore). HESCOM and MESCOM did not avail the loan entirely to the extent of eligibility.

2.4.1 Borrowing of funds at higher rates of interest

BESCOM availed term loan⁹ from REC at a negotiated interest rate of 9.75 *per cent*, with an interest rebate of 125 bps¹⁰ and an interest reset option after every three years from date of disbursement.¹¹ The loan amount sanctioned and availed was ₹137.4 crore (₹ 134.4 crore in July 2017 and ₹ 3.00 crore in August 2017). The details of loan released, rate of interest at the time of disbursement and interest rate reset by REC after three years are detailed in **Appendix – 2**.

The actual interest rates on the loan varied from 9.25 *per cent* (November 2019) to 10.11 *per cent* (March 2019) for the first three years from the date of disbursement and ranged between 9.25 *per cent* (March 2022) to 10.35 *per cent* (October 2022) after three years from the date of disbursement.

Audit observed that interest rates on the long-term loans availed¹² by BESCOM ranged from 7.3 *per cent* to 9.35 *per cent* during period 2019-20 to 2022-23, which were lower than the rate of interest charged by REC. BESCOM also did not explore the option of availing loan for IPDS from any of the banks/financial institutions and arbitrarily decided to avail loan from REC at a higher rate. The decision of BESCOM to avail loan from REC for IPDS resulted in additional interest burden of ₹ 7.00 crore for the period from 2019-20 to 2022-23. In addition, BESCOM has to incur additional interest burden for subsequent years also.

BESCOM replied (October 2024) that loan was availed from a Government agency to have better co-operation with the Nodal agency of GOI till completion of project and that it was beneficial to avail loan from the nodal agency of GOI for conversion of Loan into Grant. The reply is not acceptable as BESCOM had availed loan from REC which was not the nodal agency for IPDS. Further, the

⁸ RAPDRP Part A scheme (closed during 2017) was fully funded by loan from Government of India, which was to be converted into grant, including interest. The loan funds were released in advance, through PFC. While assessing RAPDRP funding for conversion of loans to grant, PFC discovered that an amount of ₹ 35.92 crore was due from BESCOM towards interest accrued beyond project capitalisation date and interest earned by BESCOM on GoI funds before same was expended.

⁹ Tenure-13 years, moratorium-3 years.

¹⁰ Basis points.

¹¹ REC had the right to reset the interest rate on each instalment of disbursement on the date occurring immediately after the expiry of three years (as opted by the borrower) from the date of disbursement of the instalment and on the expiry of every three years thereafter, till the loan is fully repaid.

¹² ₹ 266.77 crore for 13 years tenure from Canara Bank was sanctioned during 2019-20.

scheme guidelines did not contain any restrictions on obtaining loans from other financial institutions and BESCOM also did not explore the most economical option available. Further, the additional interest expenditure would be passed on to consumers through tariff.

2.5 Issues pertaining to Grants

Though the ESCOMs were eligible for 60 *per cent* of approved DPR cost as grant, they were unable to avail the entire sanctioned amount of grant. ESCOMs were also eligible for a grant of up to 0.5 *per cent* of approved project cost towards Project Management Agency (PMA) cost.

Against ₹ 830.60 crore of grant sanctioned by Nodal agency, ESCOMs received an amount of ₹ 795.46 crore, resulting in a short receipt of ₹ 35.14 crore. Further, this should be viewed in light of fact that ESCOMs spent more than the approved DPR cost under the Scheme. The grants approved and received by the ESCOMs under the Scheme are tabulated below:

Table No. 2.3: Grants sanctioned, received and forgone by ESCOMs for IPDS
(₹ in crore)

| Sl. No. | Name of ESCOM | Approved project cost (including PMA charges) | Grant Sanctioned | Grant received | Grant forgone |
|---------|----------------------|---|------------------|----------------|---------------|
| | BESCOM | | | | |
| 1 | System strengthening | 459.45 | 276.58 | 264.31 | 12.27 |
| 2 | IT Phase-II | 34.09 | 20.52 | 20.52 | 0.00 |
| 3 | ERP | 51.31 | 30.89 | 18.42 | 12.47 |
| | Total | 544.85 | 327.99 | 303.25 | 24.74 |
| | CESC | | | | |
| 4 | System strengthening | 179.06 | 107.79 | 106.42 | 1.37 |
| 5 | ERP | 4.35 | 2.62 | 2.58 | 0.04 |
| 6 | IT Phase-II | 6.83 | 4.11 | 3.49 | 0.62 |
| | Total | 190.24 | 114.52 | 112.49 | 2.03 |
| | GESCOM | | | | |
| 7 | System strengthening | 184.33 | 110.96 | 110.96 | 0.00 |
| 8 | IT Phase-II | 6.30 | 3.76 | 2.27 | 1.49 |
| | Total | 190.63 | 114.72 | 113.23 | 1.49 |
| | HESCOM | | | | |
| 9 | System strengthening | 206.38 | 124.24 | 124.24 | 0.00 |
| 10 | GIS | 23.18 | 13.96 | 12.45 | 1.51 |
| 11 | IT Phase-II | 10.27 | 6.18 | 4.85 | 1.33 |
| | Total | 239.83 | 144.38 | 141.54 | 2.84 |
| | MESCOM | | | | |
| 12 | System Strengthening | 168.43 | 102.22 | 101.40 | 0.82 |
| 13 | GIS | 39.68 | 23.89 | 22.78 | 1.11 |
| 14 | IT Phase-II | 4.78 | 2.88 | 2.56 | 0.32 |
| | Total | 212.89 | 128.99 | 126.74 | 2.25 |
| | GRAND TOTAL | 1,378.44 | 830.60 | 797.25 | 33.86 |

Source: Data furnished by ESCOMs

The Nodal Agency, Power Finance Corporation (PFC), however, stated that the final tranche of IPDS GoI grant was released to the DISCOMs based on the

eligible project cost *i.e.* minimum of sanctioned cost, award cost, closure cost and final admissible utilization and there was no short disbursal on part of the nodal agency (PFC).

Despite spending more than the approved DPR cost under the Scheme, the entire sanctioned grants were not received due to awarding works at higher rates (Refer **Paragraph 2.8.1 and 3.5.2**) and because of not executing all the items of works sanctioned under the Scheme before closure of the Scheme. Some of the cases of works dropped or executed outside the scheme observed during Audit are discussed in the following paragraphs.

2.5.1 Metering

BESCOM submitted proposal for ₹ 28.24 crore for metering components under IPDS, which was approved by PFC. An amount of ₹ 15.00 crore¹³ could not be utilised by BESCOM due to delay in finalisation of tenders, as detailed below:

2.5.1.1 Feeder metering in BESCOM

The work of feeder metering for facilitating automatic meter reading of feeders to be taken up by ESCOMs was entrusted (August 2016) by Government of Karnataka to Karnataka Power Transmission Corporation Limited¹⁴ (KPTCL). The work was to be carried out by using the budget allotted for feeder metering under IPDS, which was to be transferred from ESCOMs to KPTCL. BESCOM included this work under IPDS and DPR for ₹ 5.31 crore was approved by nodal agency. The first two tenders invited by KPTCL during November 2016 and April 2017 were without defining the pre-qualification of the bidders and did not evoke any response. KPTCL took six months (July 2017 to January 2018) to cancel the second bid after it was found techno-commercially non-responsive (July 2017). Thereby, the invitation of third tender was delayed. The third tender was invited only during February 2018 and Letter of Intent was issued during March 2019. As the IPDS scheme had to be closed by 31 March 2019, BESCOM decided (November 2019) to take up feeder metering work using its own funds amounting to ₹ 5.75 crore.

Thus, delay in finalising tender by KPTCL for feeder metering work resulted in foregoing grant of ₹ 3.19 crore¹⁵.

2.5.1.2 DTC metering in BESCOM

BESCOM decided (December 2017) to utilise ₹ 6.33 crore for metering of 1,311 Distribution Transformer Centres (DTCs). The Company called six tenders between December 2017 and December 2018, of which the first, second and fourth tenders failed to elicit any bids. The third tender could not be opened due to change in tender inviting authority after calling the tender and the fifth tender was considered non-responsive, due to non-fulfilment of tender conditions by lone bidder. The sixth tender was cancelled due to high rates and

¹³ ₹ 5.31 crore plus ₹ 9.69 crore.

¹⁴ A Government of Karnataka power utility dealing in transmission of power in the State.

¹⁵ 60 per cent of ₹ 5.31 crore (amount included in the DPR and transferred to KPTCL for feeder metering by BESCOM).

inability to complete the work within the scheduled time of March 2019. Thus, BESCOM could not utilise ₹ 9.69 crore for metering DTCs due to non-finalisation of tenders within time, resulting in forgoing grant of ₹ 5.81¹⁶ crore for this component.

2.5.2 Non-completion of Solar works

Of the five ESCOMs, BESCOM and MESCOM could not complete the allocated/awarded works under the Solar component. The grant foregone due to non-completion is detailed below:

- BESCOM awarded (September 2017) the works for installation of 1,125 kWp Solar panels for an amount of ₹ 7.91 crore. However, the contractor could not complete the installation of 451.5 kWp of Solar capacity valued ₹ 4.08 crore, resulting in loss of opportunity to get grant of ₹ 2.45 crore¹⁷ (*detailed in paragraph no. 3.9.3*).
- MESCOM awarded (May 2017) contract to install 1,671 kWp of Solar panels at ₹ 11.74 crore, against which the contractor could only execute 1,351.44 kWp¹⁸, due to non-receipt of permissions from the site owners. The non-installation of 319.56 kWp capacity valued ₹ 2.25 crore resulted in forgoing an opportunity to receive grant of ₹ 1.35 crore (*detailed in paragraph no. 3.9.3*).

Thus, non-completion of awarded work under Solar component under IPDS resulted in forgoing grant to the extent of ₹ 3.80 crore.

2.5.3 ERP

BESCOM could spend only ₹ 30.89 crore out of the sanctioned project cost of ₹ 51.31 crore towards ERP implementation within the scheduled project completion date (December 2021). Against this, BESCOM received a grant of ₹ 18.42 crore. Due to non-completion of the work, the Company was unable to spend the sanctioned cost fully within the stipulated time and this resulted in loss of opportunity to receive grant of ₹ 12.47 crore (*detailed in paragraph no. 3.10*).

During the exit conference, BESCOM stated that for ERP implementation under IPDS, only three modules were to be considered. They added that BESCOM was implementing seven modules and informed that the ERP rollout could not happen as envisaged due to COVID.

The reply is not acceptable, since it took two years from approval (February 2018) to issue of DWA (March 2020), whereas the guidelines warranted awarding within six months. Though the implementation period overlapped the Covid period, the overall delay of 18 months could be attributed to the company

¹⁶ 60 per cent of ₹ 9.69 crore.

¹⁷ Being 60 per cent of ₹ 4.08 crore (as no payments were made to PPEL).

¹⁸ 31 December 2018 to 30 June 2019.

being unable to finalise its requirements (modules) and award the work within time.

2.6 Delay in receipt of final tranche of grant

As per the IPDS guidelines, the last tranche of 10 *per cent* of grant was to be released on submission of Project Completion Certificate and PMA report ¹⁹. Audit observed delays in finalising the closing formalities by BESCOM, CESC and MESCOM for claiming the last tranche of grant amounting to ₹ 15.59 crore, ₹ 19.04 crore and ₹ 10.14 crore respectively.

The details of delay in submission of project completion certificate and additional interest burden due to the delays are given below:

Table No. 2.4: Additional interest burden due to delay in submission of documents

| Sl. No. | Name of ESCOM | Date of declared completion | Date of submission of documents for claiming last tranche of grant | Delay in no. of months after considering three months allowed for submission | Date of receipt of grant | Amount claimed (in ₹ crore) | Additional interest burden (in ₹ crore) |
|---------|---------------|-----------------------------|--|--|---|-----------------------------|---|
| 1 | BESCOM | March 2019 | January 2021 | 19 months | 03 April 2021 07 June 2021 ²⁰ | 15.59 | 2.28 ²¹ |
| 2 | CESC | December 2019 ²² | March 2021 | 12 months | 02 December 2021 | 19.04 | 1.76 ²³ |
| 3 | MESCOM | June 2019 | March 2021 | 18 months to 24 months | 06 July 2021 | 10.14 | 1.41 ²⁴ |
| | | | Total | | | | 5.45 |

Source: Data furnished by ESCOMs.

The delay in submission of documents in time resulted in ESCOMs incurring an additional interest burden of ₹ 5.45 crore on borrowed funds. Timely submission of documents to PFC could have prevented the additional interest burden on BESCOM, CESC and MESCOM.

BESCOM and CESC replied (October 2024) that due to COVID-19, there was a delay in reconciling the draft copies and closure formats, which resulted in delay in submission.

The reply may be viewed against the fact that the works had been completed during March and December 2019 and the COVID-19 pandemic occurred in March 2020. Accordingly, BESCOM and CESC had sufficient time to reconcile draft copies and submit project completion report.

¹⁹ Regarding project completion and expenditure incurred along with recommendation for release of grants.

²⁰ ₹ 14.51 crore was released on 03.04.2021 and ₹ 1.08 crore was released on 07.06.2021.

²¹ Calculated at the rate of 9.25 *per cent* on ₹ 15.59 crore for 19 months.

²² Works related to system strengthening work including metering, and Solar.

²³ Calculated at the rate of 9.25 *per cent* on ₹ 19.04 crore for 12 months being the least period.

²⁴ Calculated at the rate of 9.25 *per cent* on ₹ 10.14 crore for 18 months being the least period.

MESCOM attributed the delay to belated communication of closure formats by PFC (received only on 22 December 2020), due to which it could submit the documents only after 22 December 2020.

PFC stated that there was no delay on its part in processing of last tranche of GoI grant to the ESCOMs of Karnataka under IPDS, as the closure formats were readily available on IPDS website before 29 June 2020 and ESCOMs of Karnataka could only provide the DRC recommendation for closure of IPDS ST&D projects after DRC meeting held on 30 December 2020.

2.7 Additional Grant foregone

As per the Scheme Guidelines²⁵, ESCOMS were eligible for additional grant of 50 *per cent* of loan component (*i.e.* 15 *per cent* of project cost) subject to fulfilment of following three conditions *viz*;

- (a) Timely completion of the scheme within approved time schedule;
- (b) Reduction in AT&C losses as per trajectory finalised²⁶ by Ministry of Power (MoP) in consultation with State Governments (ESCOM wise); and
- (c) Upfront release of admissible revenue subsidy by State Government based on metered consumption.

Audit observed the following with respect to fulfilment of the above conditionalities:

- Only BESCOM had declared the system strengthening portion of the scheme as completed on 31 March 2019, as per timelines fixed by PFC (*Appendix 3*).

CESC, GESCOM, HESCOM and MESCOM could not complete the system strengthening work within the scheduled timeline and completed the same within the extended period. MESCOM had taken extension and could complete the work only in June 2019 whereas CESC, GESCOM and HESCOM completed the work after taking further extension (*Appendix 3*).

- Reduction in AT&C losses as per agreed trajectory was not achieved by the ESCOMs. During the period of 2016-17 to 2020-21, BESCOM and CESC achieved the AT&C loss targets only in 2017-18, GESCOM during 2016-18 and 2019-21 and HESCOM during 2019-21. MESCOM could not achieve the targets in any of the years. An analysis of AT&C Losses of the ESCOMS is made in *Para 2.7.1*.
- The ESCOMs could not fulfil the third condition in any year as the payment of revenue subsidy by GoK was made based on assessment, instead of metered consumption as the Irrigation Pump (IP) set installations were not fully metered.

²⁵ Chapter IV- Fund Disbursement Guidelines, Para 14.1.

²⁶ The AT&C losses as determined by Power Finance Corporation (PFC) in the “Report on Performance of State Power Utilities” as per the formula of MoP shall be the source for examining the compliance of this condition.

As none of the ESCOMs could fulfil the conditions stipulated under the scheme, they did not receive additional grant to the extent of ₹ 205.74²⁷ crore.

The ESCOMs replied (October 2024) that, for revenue subsidy for IP sets, metering was done at feeder level and not at consumer level owing to resistance from consumers. CESC, GESCOM, HESCOM and MESCOM stated that the works were completed by them within the extended completion period. HESCOM and GESCOM claimed that they had achieved the AT&C loss trajectory fixed under the scheme.

2.7.1 AT&C losses

As per the Scheme documents, Aggregate Technical and Commercial losses (AT&C Losses) were defined as the percentage of difference between net input energy and energy realised to net input energy. The energy realised is product of net sale of energy and collection efficiency. The collection efficiency is percentage of net revenue from sale of energy adjusted for change in debtors for sale of energy to net revenue from sale of energy.

Thus, AT&C loss is the percentage of energy not realised (net energy input *minus* energy realised) to net energy input. This depends upon the extent of energy billed to consumers (billing efficiency) and efficiency of revenue collection (collection efficiency).

The AT&C loss trajectory fixed as per the scheme and their achievement by ESCOMS are given in Table No. 2.5 below:

Table No. 2.5: AT&C loss trajectory fixed and their achievement by ESCOMS

| Sl. No. | Year | ESCOM | BESCOM | CESC | GESCOM | HESCOM | MESCOM |
|---------|---------|----------------------------------|--------|-------|--------|--------|--------|
| 1 | 2016-17 | As per MoP trajectory for IPDS | 14.23 | 14.92 | 23.92 | 18.99 | 12.08 |
| | | AT&C loss as reported by Company | 14.81 | 20.41 | 17.33 | 18.35 | 12.11 |
| 2 | 2017-18 | As per MoP trajectory for IPDS | 13.37 | 14.27 | 23.41 | 18.56 | 11.65 |
| | | AT&C loss as reported by Company | 10.28 | 9.02 | 16.39 | 22.84 | 13.36 |
| 3 | 2018-19 | As per MoP trajectory for IPDS | 12.72 | 13.59 | 22.84 | 17.96 | 11.28 |
| | | AT&C loss as reported by Company | 15.92 | 18.72 | 28.41 | 24.88 | 11.91 |
| 4 | 2019-20 | As per MoP trajectory for IPDS | 11.87 | 12.99 | 22.44 | 17.43 | 10.79 |
| | | AT&C loss as reported by Company | 17.62 | 21.45 | 21.29 | 14.64 | 14.85 |
| 5 | 2020-21 | As per MoP trajectory for IPDS | 11.51 | 12.51 | 21.72 | 17.00 | 9.92 |
| | | AT&C loss as reported by Company | 13.70 | 20.05 | 20.22 | 14.16 | 11.71 |

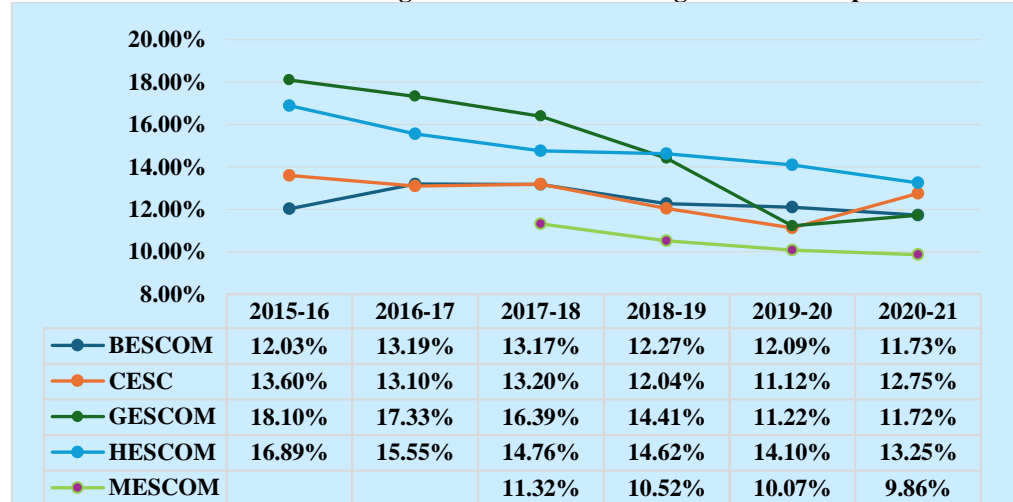
Source: Data furnished by ESCOMS

²⁷ ₹ 1,371.57 crore (Total sanctioned cost excluding PMA) × 15 per cent.

Audit observed that the individual ESCOM-specific targets were not achieved in all years. Over a five-year period, AT&C losses displayed a fluctuating pattern.

Audit analysed the AT&C loss of the ESCOMs during the scheme period and found that the billing efficiency (Ratio of net energy sold to net input energy) of the ESCOMs generally improved during the scheme period resulting in reduction in billing losses, *i.e.* unbilled energy input was reducing. The percentage of billing losses for the five ESCOMs are depicted in the Chart 2.2.

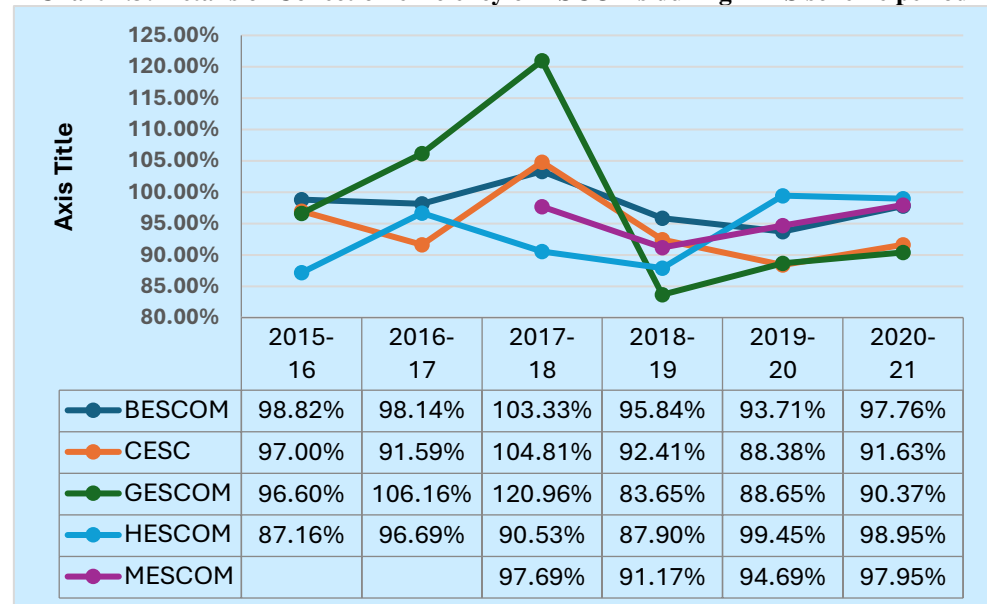
Chart 2.2: Details of billing loss of ESCOMs during IPDS scheme period



* Billing data in respect of MESCOM for years 2015-16 and 2016-17 were not available.

Though there was reducing trend in billing losses, the AT&C losses fluctuated and did not show a consistent reducing trend, as collection efficiency varied as shown in the Chart 2.3. This variation in collection efficiency was influenced mainly by delay in release of subsidy by Government of Karnataka.

Chart 2.3: Details of Collection efficiency of ESCOMs during IPDS scheme period



* Billing data in respect of MESCOM for years 2015-16 and 2016-17 was not available.

During the exit conference, BESCOM stated that almost all the ESCOMs had achieved the targeted AT&C by the end of the five-year period. The statement

may be viewed in light of the fact that the reduction in AT&C losses was not consistent across years in any of the companies as per the published data of the Companies and AT&C losses were higher than the targets in most of the years as shown in Table No. 2.5.

Recommendation:

- 1. The Government of Karnataka may ensure that ESCOMs reduce AT&C losses as per the trajectory fixed by the MoP for the IPDS. It may also ensure timely release of subsidy for irrigation pump sets as per metered consumption.**

2.8 Issues relating to Financial Prudence

2.8.1 Extra expenditure on procurement of materials

In order to facilitate States in mobilisation of quality equipment/ materials at competitive price under IPDS, Ministry of Power (MoP) decided (August 2015) to constitute a committee to finalise technical specification and rates for various items like Transformers, Conductors, AB cables and UG cables centrally at Central Procurement Prices (CPP). The rates and vendors discovered in this regard for the State of Karnataka were communicated in April 2016. MoP reviewed (29 June 2016) the issues pertaining to rates discovered under the new initiatives for materials mobilisation and decided that States were free to procure the materials of their own, if it was felt that their rates were less than CPP rates duly ensuring prescribed technical specifications.

Government of Karnataka directed (August 2016) to procure high value materials centrally for all ESCOMs. However, ESCOMs took up the system strengthening works under IPDS on total turnkey basis. The following table indicates the details of high value materials *viz.* Distribution Transformers and Conductors used in system strengthening work for IPDS works and the cost incurred by ESCOMs:

Table No. 2.6: Additional cost due to procurement of high value material under turnkey
(₹ in Crore)

| Sl. No. | ESCOM | Material used | Total cost as per CPP rates | Actual procurement cost under turnkey | Additional cost |
|---------|--------|--|-----------------------------|---------------------------------------|-----------------|
| 1 | BESCOM | 25, 63, 100, 250 kVA Transformers, ACSR Weasel and Rabbit conductors | 28.60 | 35.01 | 6.41 |
| 2 | HESCOM | | 28.43 | 36.63 | 8.20 |
| 3 | MESCOM | | 27.87 | 35.25 | 7.38 |
| 4 | CESC | | 28.29 | 36.71 | 8.42 |
| 5 | GESCOM | | 25.63 | 33.74 | 8.11 |
| Total | | | 138.82 | 177.34 | 38.52 |

Source: Data furnished by ESCOMs.

The rates obtained for high value items under total turnkey contracts were higher than the CPP rates. Procurement (between September 2016 to January

2018) of high value items under total turnkey contracts, disregarding MoP directions resulted in avoidable extra expenditure of ₹ 38.52 crore.

The ESCOMs replied (October 2024) that tenders were invited incorporating the maximum CPP rates in Total Turnkey basis, but the actual awarded cost was more due to addition of tender premium. The reply confirms that the companies could not procure the materials at the MoP discovered rates since they went for total turnkey.

2.8.2 Appointment of Project Management Agency without calling tender

Clause 11 of Chapter - II of guidelines stipulated the appointment of Project Management Agency (PMA) utility-wise, to assist in project formulation, bidding process and monitoring physical and financial progress of the scheme. The main responsibility of the PMA was to assist the utility and to ensure timely implementation of the project. Appointment of PMA was a pre-requisite for release of funds from the Nodal Agency under the Scheme. GoI allowed 100 *per cent* grant towards expenditure incurred on PMA, limited to 0.5 *per cent* of sanctioned cost of works. Any fee payable to PMA beyond 0.5 *per cent* of the project cost had to be borne by ESCOMs.

The guidelines (*Clause 3*) allowed appointment of PMA from any of the Central Public Sector Undertakings (CPSUs) or through bidding.

Based on representation (January 2015) by the Energy Department, Government of Karnataka (GoK), Finance Department of GoK gave exemption under Section 4(g) of Karnataka Transparency in Public Procurement Act, 1999 (KTPP Act) to REC Power Development Corporation Limited (RECPDCL), a subsidiary of REC. Based on this exemption, all the five ESCOMs appointed RECPDCL as PMA (between June 2015 and October 2015)²⁸, without inviting tenders and fixed fees at 1.50 *per cent* (the rate quoted by RECPDCL) of the approved project cost as against 0.5 *per cent* mentioned as reimbursable, in the guidelines. Incidentally, Audit observed that MESCOM received an offer for PMA work at 0.94 *per cent* of the sanctioned cost for Gas Insulated Sub-stations as additional work under IPDS scheme, when it went for competitive bidding.

BESCOM and HESCOM responded that many other ESCOMs across India had awarded PMA work to RECPDCL at rates of 1.5 *per cent* and above. However, Audit observed that there were instances of awarding works at rates lower than 1.5 *per cent* in other ESCOMs²⁹. Further, MESCOM stated that PMA work was awarded to RECPDCL as it had exemption under sec 4(g) of KTPP act and it was a subsidiary of REC. The argument cannot be accepted as sec 4(g) exemption was secured solely for the purpose of awarding the work to the agency without tendering. Further, the probability of getting the work done at lower rates through tendering also could not be ruled out.

²⁸ BESCOM – June 2015, CESC - September 2015, MESCOM – October 2015, HESCOM – September 2015, GESCOM- September 2015.

²⁹ Paschimanchal Vidyut Vitaran Limited: PMA-RECPDCL- Rate: 1.05 *per cent* of approved project cost; Durgapur Projects Limited: PMA-RECPDCL-Rate:1.35 *per cent* of total project cost as per approved DPR.; Eastern Power Distribution Company of AP Limited: PMA-M/s PFC Consulting Limited- Rate:1.00 *per cent* of the project cost as per approved DPR.