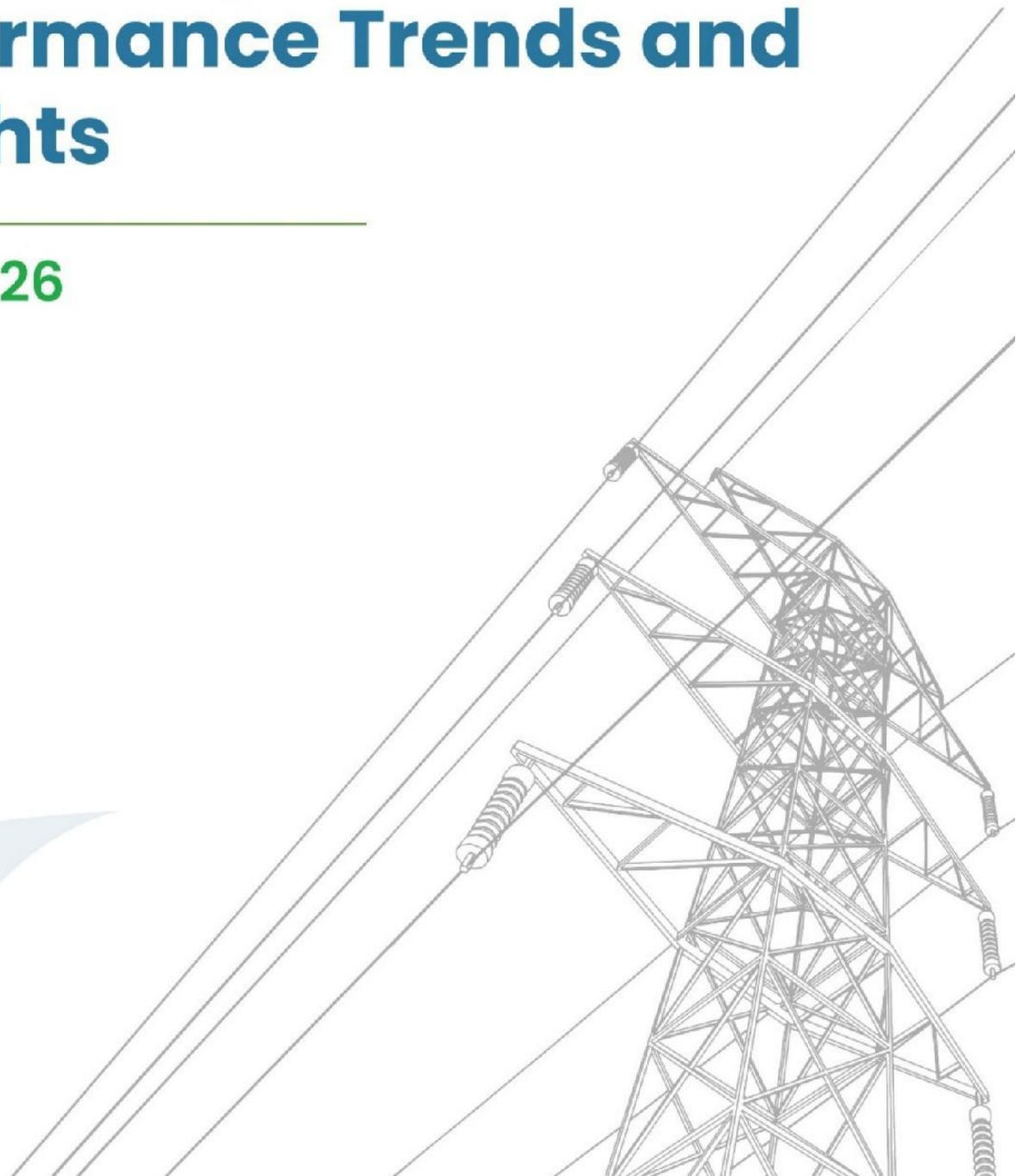


A Study of **Eastern Region Discoms: Performance Trends and Insights**

June 2026



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About Vasudha Foundation

Vasudha Foundation is a non-profit organisation set up in 2010. We believe in the conservation of Vasudha, which in Sanskrit means the Earth, the giver of wealth, with the objective of promoting sustainable consumption of its bounties. Our mission is to promote environment-friendly, socially just and sustainable models of energy by focusing on renewable energy and energy-efficient technologies as well as sustainable lifestyle solutions. Through an innovative approach and data- driven analysis, creation of data repositories with cross-sectoral analysis, along with outreach to ensure resource conservation, we aim to help create a sustainable and inclusive future for India and Mother Earth.

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Contents

A Study of Eastern Region Discoms: Performance Trends And Insights	4
1. Quick Glance at Consumer Details	6
1.1. Category-wise Electricity Sales (BU) for the year 2024-25.....	6
1.2. State-wise Tariff Comparison for Different Consumer Categories for 2024-25 (in ₹/kWh) 7	
2. Performance Review: A Spotlight on DISCOMs Operational and Financial Health	8
2.1. Operational Performance for 2024-25	8
2.2. Financial Health for 2024-25.....	9
3. A Snapshot Of Ratings And Scores For Eastern-Region Discoms	10
4. Mapping Operational and Financial Progress of Eastern-Region Utilities.....	11
4.1 Arunachal Pradesh: Department of Power, Government of Arunachal Pradesh (DoPAP).....	11
4.2 Assam: Assam Power Distribution Company Limited (APDCL).....	14
4.3 Bihar : North Bihar Power Distribution Company Limited (NBPDCCL) & South Bihar Power Distribution Company Limited (SBPDCL)	18
.....	23
4.4 Jharkhand: Jharkhand Bijli Vitran Nigam Limited (JBVNL)	24
4.5 Manipur: Manipur State Power Distribution Company Limited (MSPDCL)	31
4.6 Meghalaya: Meghalaya Power Distribution Corporation Limited (MePDCL) ..	36
4.7 Mizoram: Power & Electricity Department, Government of Mizoram (PEDM) ..	40
4.8 Nagaland: Department of Power, Nagaland (DPN)	44
4.9 Sikkim: Energy and Power Department, Government of Sikkim (EPDS).....	46
4.10 Tripura: Tripura State Electricity Corporation Limited (TSECL)	49
4.11 West Bengal: West Bengal State Electricity Distribution Company Limited (WBSEDCL).....	51

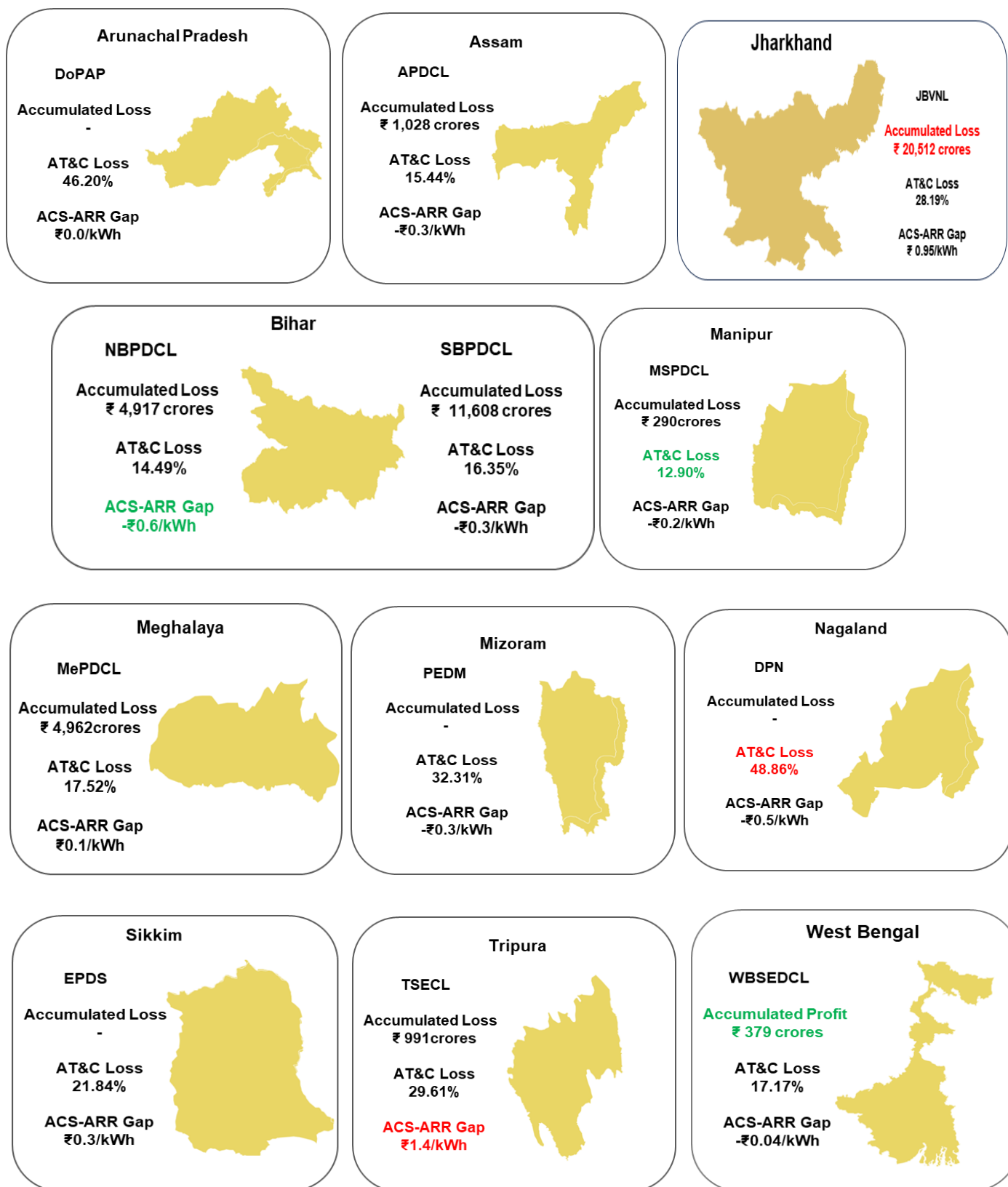
A STUDY OF EASTERN REGION DISCOMS: PERFORMANCE TRENDS AND INSIGHTS

Power distribution in Eastern India operates within one of the country's most diverse and challenging geographical landscapes. The region spans fertile Gangetic plains, mineral-rich plateaus, dense forests and remote hilly terrains in the Northeast and with them, a wide spectrum of socio-economic realities, from dense urban and industrial centres to far-flung tribal hamlets and international border areas. Utilities here grapple with dual responsibilities: meeting the rising demand of rapidly growing cities and industrial hubs while extending reliable, affordable electricity access to communities that are remote, geographically difficult to serve and historically underserved.

This primer on distribution utilities in Eastern India provides a comprehensive, structured overview of the power distribution sector across Eastern Region states — covering Arunachal Pradesh, Assam, Bihar, Jharkhand, Meghalaya, Manipur, Mizoram, Nagaland, Sikkim, Tripura and West Bengal.

Designed as a ready reference, it offers insights into the current performance and ongoing developments in distribution utilities, helping stakeholders and auditors better understand the regional challenges and opportunities shaping the sector.

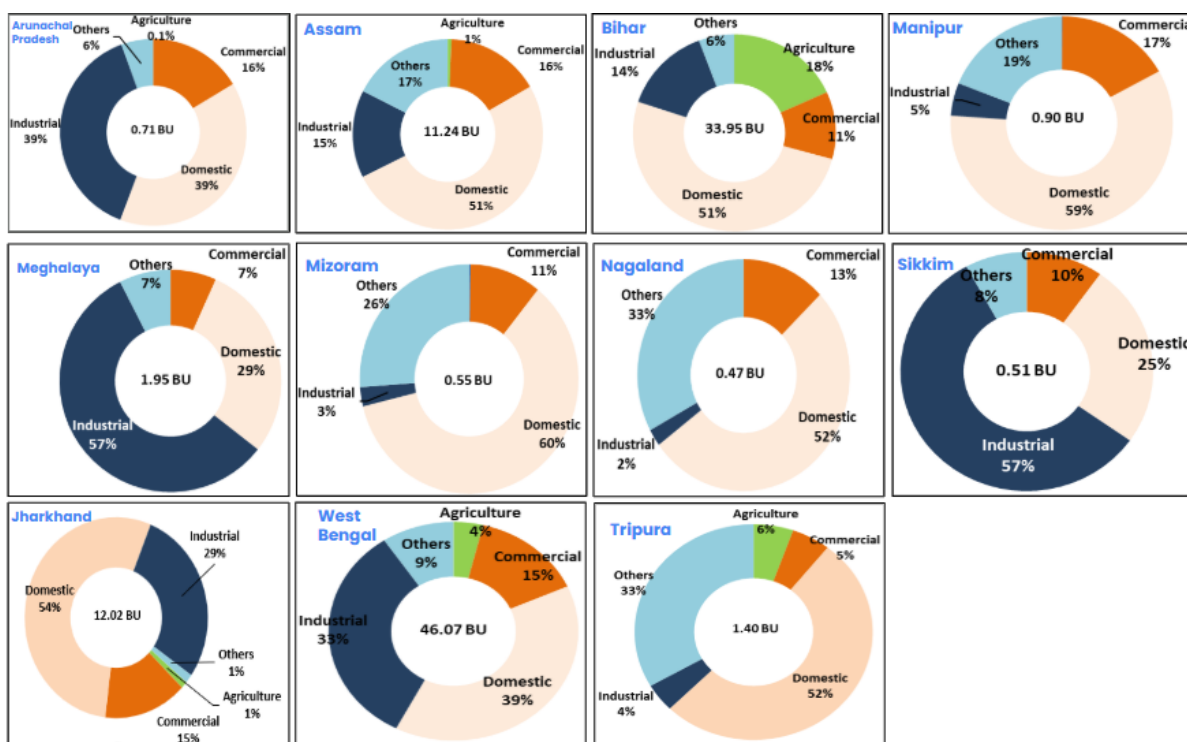




Green: Lowest Value; Red: Highest Value; The data corresponds to the year, 2024-25.; ACS-ARR gap is on the Input Energy basis.

1. QUICK GLANCE AT CONSUMER DETAILS

1.1. Category-wise Electricity Sales (BU) for the year 2024-25



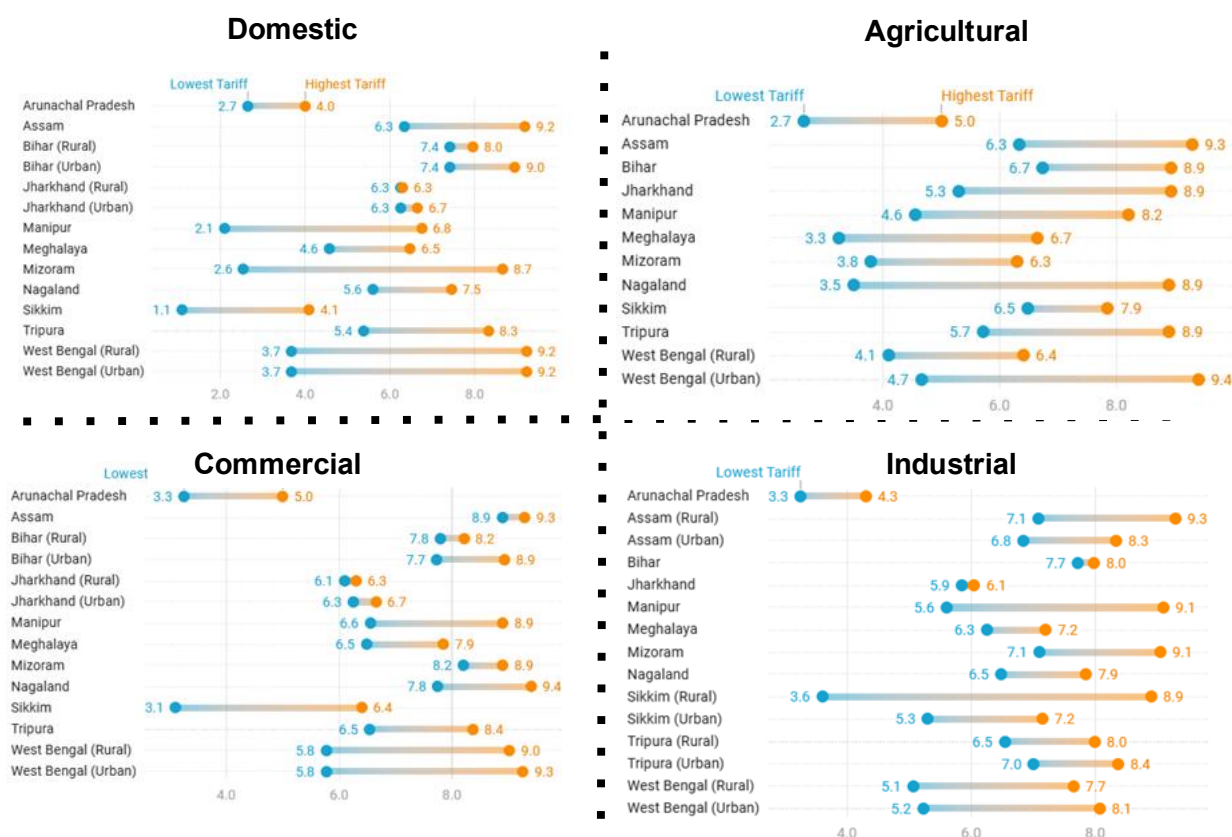
Source: India Climate and Energy Dashboard (ICED);

BU: Billion Units

* Jharkhand covers only JBVNL

- In Sikkim and Meghalaya, industrial consumers account for the largest share of electricity sales, though overall consumption in both states remains modest.
- In Nagaland, domestic consumers account for the largest share of electricity sales, followed by the 'Others' category, which includes single-point metered rural and urban consumers, bulk supply, public lighting and public water works. Commercial consumers contribute around 13% of total sales, industrial consumers account for 2%.
- In Bihar, the domestic category leads in electricity sales, followed by agriculture, industrial, commercial and others. Of all states in the region, Bihar has the highest share of agricultural consumers.
- Mizoram and Tripura are domestic dominant states, followed by 'Others' category that includes bulk supply, public lighting, mobile towers and so on.
- In Manipur, domestic consumers account for the largest share of electricity sales, followed by 'Others' category, which includes bulk supply, temporary supply, public water works and public lighting.

1.2.State-wise Tariff Comparison for Different Consumer Categories for 2024-25 (in ₹/kWh)



Source: ICED

- Manipur and Mizoram exhibit a relatively wide domestic tariff spectrum, with rates ranging from around ₹2/kWh to ₹9/kWh. West Bengal's domestic tariffs follow a similar range, though the lower end starts closer to ₹3.7/kWh.
- In Sikkim, domestic consumers receive free electricity for the first 100 units, though the notified tariff stands at ₹1/kWh, exclusive of subsidy.
- Bihar's domestic tariffs are high, as they exclude government subsidies. Effective tariffs after subsidy range between ₹1.97/kWh to ₹7/kWh¹.
- In Arunachal Pradesh, industrial consumers account for nearly 39% of its total electricity sales, yet applicable industrial tariffs remain relatively low, ranging only from ₹3.9/kWh to ₹4.3/kWh. It indicates that large-volume industrial consumption allows the utility to maintain competitive rates.

¹ https://cea.nic.in/wp-content/uploads/fs___a/2026/03/Book_2025.pdf

2. PERFORMANCE REVIEW: A SPOTLIGHT ON DISCOMs

OPERATIONAL AND FINANCIAL HEALTH

2.1. Operational Performance for 2024-25

States	AT&C Loss* (%)	Billing Efficiency (%)	Collection Efficiency (%)
Arunachal Pradesh	46.20	60.24	89.31
Assam	15.44	84.56	100
Bihar	15.51	86.45	97.73
Jharkhand	28.19	71.81	100
Manipur	12.90	89.41	97.41
Meghalaya	17.52	83.40	98.89
Mizoram	32.31	69.16	97.88
Nagaland	48.86	53.77	95.11
Sikkim	21.84	78.16	100
Tripura	29.61	76.89	91.54
West Bengal	17.17	84.63	97.87

Source: ICED

*AT&C Loss- Aggregate Technical and Commercial Losses

2.2. Financial Health for 2024-25

States	Accumulated Profit/(Loss) [₹ Crore]	Profit/(Loss)* [₹ Crore]	Total Outstanding Debt [₹ Crore]	Regulatory Assets [₹ Crore]	Average Cost of Supply (ACoS) [₹/kWh]	Average Revenue Realised (ARR) [₹/kWh]
Arunachal Pradesh	-	-	-	-	6.28	6.28
Assam	(1,028)	308	1,131	-	7.63	7.89
Bihar	(16,526)	2,096	14,002	-	6.73	7.14
Jharkhand	(20,512)	(1,722)	22,381	-	7.01	6.06
Manipur	(290)	26	745	-	6.97	7.17
Meghalaya	(4,962)	(36)	1,474	-	8.56	8.43
Mizoram	-	32	-	-	9.09	9.43
Nagaland	-	56	-	-	7.46	7.96
Sikkim	-	(37)	-	-	5.73	5.40
Tripura	(991)	(373)	842	-	7.66	6.25
West Bengal	379	205	14,809	20,734	6.51	6.54

Source: ICED

*Profit/(Loss) with Tariff Subsidy Received, Excluding Revenue Grant under UDAY for loan takeover and Regulatory Income.

3. A SNAPSHOT OF RATINGS AND SCORES FOR EASTERN- REGION DISCOMS

State	DISCOM	2020-21	2021-22	2022-23	2023-24	2024-25
Arunachal Pradesh	Department of Power Arunachal Pradesh	C-	C-	C	A	B
Assam	Assam Power Distribution Company Limited	B-	A	B-	A	A
Bihar	North Bihar Power Distribution Company Limited	C-	C-	C	B	A
	South Bihar Power Distribution Company Limited	C-	C-	C	B-	A
Jharkhand	Jharkhand Bijli Vitran Nigam Limited	C-	C-	C-	C-	C-
Manipur	Manipur State Power Distribution Company Limited	C	C	C	B-	B-
Meghalaya	Meghalaya Power Distribution Corporation Limited	D	C	C-	C	B
Mizoram	Power & Electricity Department, Mizoram	C	C-	C	C	A
Nagaland	Department of Power Nagaland	C-	C-	B	B	A
Sikkim	Energy and power department (Govt. of Sikkim)	C-	B-	B-	A	A
Tripura	Tripura State Electricity Corporation Limited	B-	B-	C	C	C
West Bengal	West Bengal State Electricity Distribution Company Limited	C	B	B-	B	A

D C- C B- B A A+

Source: Annual Integrated Rating and Ranking of Power Distribution Utilities, PFC

1. Bihar has steadily improved its performance rating from **C-** in 2020-21 to **A** in 2024-25. This improvement was driven by sustained gains in operational and financial parameters, including lower AT&C losses, higher collection efficiency, a reduced ACS-ARR gap and an improved debt service coverage ratio.
2. Mizoram rating improved from **C** in 2023-24 to **A** in 2024-25, driven primarily by the clearance of long-pending government subsidy dues and the benefits arising from timely payment incentives.
3. Similarly, West Bengal's improved rating in 2024-25 — from **B** to **A** — was supported by revenue grants received from the Government of West Bengal.
4. Assam's rating recovered to A in 2024-25 after dipping to B- in 2022-23, supported by gains in operational and financial performance. . APDCL achieved lower AT&C losses, enhanced collection efficiency and a narrowing of the ACS-ARR gap, contributing to the overall improvement.
5. JBVNL (Jharkhand) received the lowest score of 9.65 and a C- grade (second lowest among all DISCOMs after TGNPDCL). The utility continues to face financial and operational challenges, including poor cost recovery, persistent losses, high AT&C loss, lowest billing efficiency and multiple red-card metrics such as Regulatory Assets, Tariff Cycle Delays, Governance, and Audit Qualifications.

4. MAPPING OPERATIONAL AND FINANCIAL PROGRESS OF EASTERN-REGION UTILITIES

4.1 Arunachal Pradesh: Department of Power, Government of Arunachal Pradesh (DoPAP)

Until 2004, the Department of Power was responsible for generation, transmission and distribution activities in the state. Subsequently, hydroelectric generation was carved out under the Department of Hydro Power Development (DHPD), leaving DoPAP primarily responsible for electricity transmission and distribution. The utility serves a relatively small but highly dispersed consumer base across mountainous terrain, dense forests and remote areas.

As of 2024-25, DoPAP serves approximately 3.26 lakh consumers, with electricity sales of 728.18 MU in 2024-25. The domestic and industrial consumer categories dominate electricity sales, each accounting for around 39% of the total sales. The commercial category accounts for around 16%, agriculture for a negligible 0.01% and the “Others” category (including public lighting, water supply, etc.) makes up the remaining 6%.

Operational Overview -

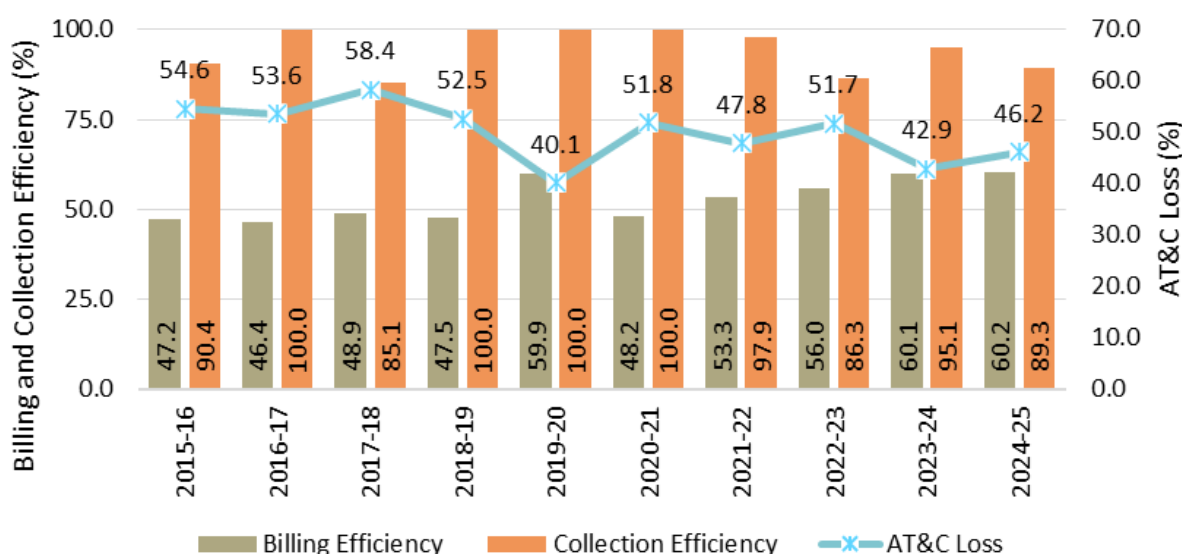


Figure 1: DoPAP AT&C Losses Trends (in %)

Source: ICED

Operational efficiency remains a major concern, driven by persistently high AT&C losses that have stayed at or above 40% over the past decade — far exceeding the

targets set under the Revamped Distribution Sector Scheme (RDSS). In 2024-25, AT&C losses stood at 46.2%, nearly double the Commission-approved target² of 22%.

Several structural and operational factors underlie this performance. DoPAP's distribution network spans extremely difficult hilly terrain, with long low-tension (LT) lines serving scattered rural consumers across one of India's most geographically challenging states. Metering gaps remain large, with a substantial number of consumers still unmetered and 45,034 defective meters reported. Billing efficiency, while the highest recorded in the last ten years, stood at only 60.2% in 2024-25, meaning more than one-third of all energy supplied is never even billed. This is compounded by power theft that further erodes revenue recovery.

To address these deep-rooted challenges, DoPAP is implementing ₹788 crore worth of works under the RDSS, covering smart prepaid metering, network strengthening, feeder bifurcation and the replacement of bare conductors with Aerial Bundled cables.

Financial Performance

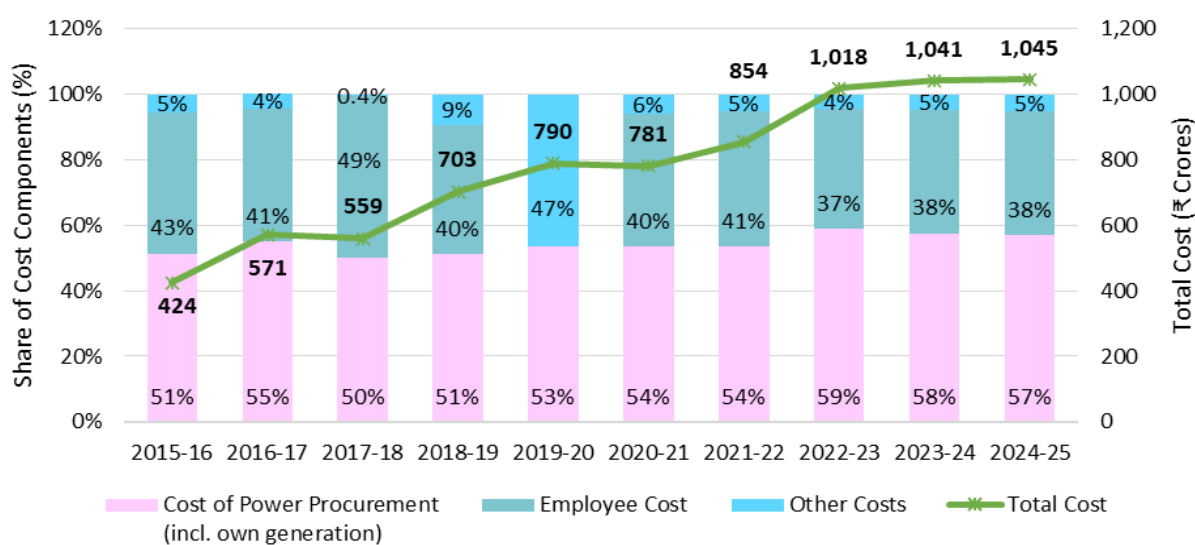


Figure 2: DoPAP Power Purchase Cost Trends (in %)³

Source: ICED

The utility carries the highest employee cost share among all North-Eastern DISCOMs, with employee expenses accounting for around 38-40% of total costs in recent years. This is not incidental — it is a direct consequence of the state's

² <https://apserc.nic.in/pdf/Orders/2026/Order%20on%20Petition%20TP%2010%20of%202025,APDOP.pdf>, Page 37

³ The employee cost data is not separately available for the year 2019-20, included with other costs.

geography and operational reality. Arunachal Pradesh's vast, mountainous terrain, extremely low population density and scattered consumer base require a large field workforce to manage operations across remote locations. Extensive LT networks spread across difficult terrain demand significant labourforce for maintenance, meter reading, billing and loss control. As a result, DoPAP serves far fewer consumers per employee compared to utilities in plains states – making its operations structurally cost-intensive and inherently less efficient on a per-employee basis.

Beyond employee costs, power purchase expenses constitute 57% of total costs, with the remaining 5% accounted for by other operational expenses. These costs cannot be fully passed on to consumers, given the state's affordability constraints and the government's policy of maintaining low tariffs – resulting in a persistent gap between the Average Cost of Supply (ACoS) and Average Revenue Realised (ARR). The State Electricity Regulatory Commission has also flagged that DoPAP has not utilised provisions set aside for staff skilling and training and has recommended instituting a regular training programme ⁴.

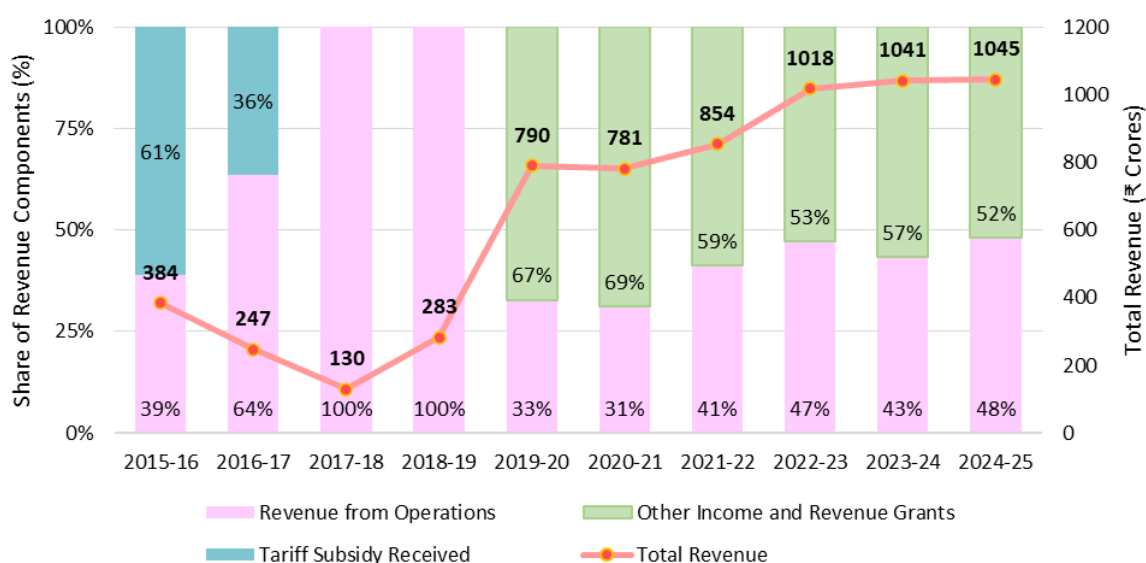


Figure 3: DoPAP Total Revenue and Share of Revenue Components Trends

Source: ICED

Historically, DoPAP's revenue remained low prior to 2019-20, with limited government support. In 2017-18 and 2018-19, no subsidy was received from the state government, resulting in substantial losses. From 2019-20 onwards, revenue increased significantly, driven largely by large government grants. Revenue from

⁴ https://apserc.nic.in/pdf/tariff_order_for_licencees/True%20Up%20ORDER%20for%20APDoP%20for%20%20FY%202017-18%20to%20FY%202022-23.pdf

operations has contributed only 40–48% of the total revenue over the last four years, with the balance coming from other income and revenue grants, which accounted for 52% of total revenue in 2024–25.

The ACoS–ARR gap has been maintained at NIL since 2019–20, entirely on account of substantial Revenue Grants-in-Aid provided by the Government of Arunachal Pradesh. DoPAP treats these grants as a direct revenue source to offset its financial deficiencies. Together with other non-tariff income, government support now constitutes the utility's primary financial lifeline. .

The State Electricity Regulatory Commission has observed that DoPAP is utilising these grants without accounting for the “Cost of Money” principles⁵ (such as Return on Equity, Return on Investment and Interest) in its financial statements. This approach contributes to inefficiency in the state's power ecosystem, including persistently high and uncontrolled AT&C losses⁵. The Commission had directed the utility to assess the true efficiency of utilising Government of Arunachal Pradesh funds through the lens of “Cost of Money,” but compliance on this directive has not been adequately reported.

4.2 Assam: Assam Power Distribution Company Limited (APDCL)

Assam Power Distribution Company Limited (APDCL) is the sole state-owned distribution utility responsible for electricity distribution across Assam. Incorporated in 2009 following the unbundling of the erstwhile Assam State Electricity Board (ASEB), APDCL plays a critical role in ensuring reliable and affordable electricity access while supporting the state's economic growth and development. With a consumer base spanning densely populated urban centres, remote rural regions and geographically challenging areas, the utility faces the dual challenge of ensuring reliable power supply while maintaining operational and financial sustainability.

As Assam's power demand continues to grow, APDCL's role in network expansion, loss reduction, digitalisation and integration of renewable energy resources has become increasingly important.

Power Purchase Quantum & Cost

APDCL's power procurement portfolio has undergone a notable shift over the past decade. The share of gas-based power declined from 43% in 2015–16 to 26% in

⁵ https://apserc.nic.in/pdf/tariff_order_for_licencees/True%20Up%20ORDER%20for%20APDoP%20for%20%20FY%202017-18%20to%20FY%202022-23.pdf

2024-25, while coal-based procurement increased from 15% in 2015-16 to 44% over the same period. In contrast, the contribution of renewable energy sources, including large hydro, remained relatively stable at around 22% of the overall power mix.

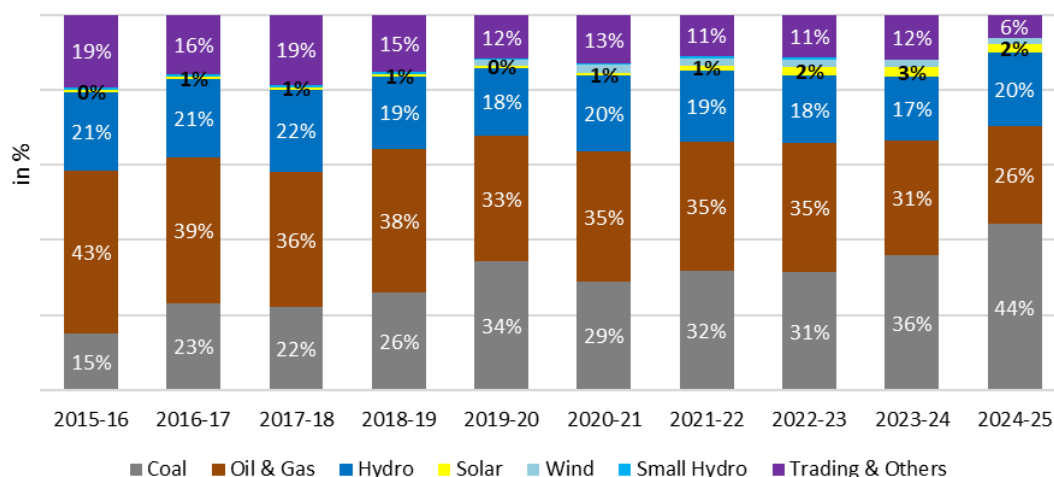


Figure 4: Power Purchase Quantum Share, APDCL (in %)

Source: ICED

In 2024-25, APDCL procured 15,555.9 MU of power, lower than the approved quantum of 16,299.6 MU. Despite the lower procurement volume, the average power purchase cost increased to ₹5.12/kWh against the approved rate of ₹5.02/kWh, resulting in an additional cost implication of around ₹164 crore. The utility's procurement mix included power sourced from unapproved sources such as bilateral sources/traders (at ₹7.19/kWh), Patanjali Solar and BRBCL alongside purchases from long-term contracted generators. Cost claims were also made for NEEPCO (Khandong Hydro) and NTPC (Farakka III) without indicating corresponding energy quantum⁶.

In addition, APDCL included a delayed payment surcharge (DPS) of ₹47.53 crore as part of its 2024-25 power purchase cost claim⁷. However, the surcharge was excluded from the approved power purchase cost, in line with the Commission's direction that such charges should not be passed on to consumers.

⁶ https://www.apdcl.org/website/docs/acts_and_rules/TariffOrderMarch26.pdf

⁷ https://www.apdcl.org/website/docs/acts_and_rules/TariffOrderMarch26.pdf

Resource Planning and Procurement Optimization

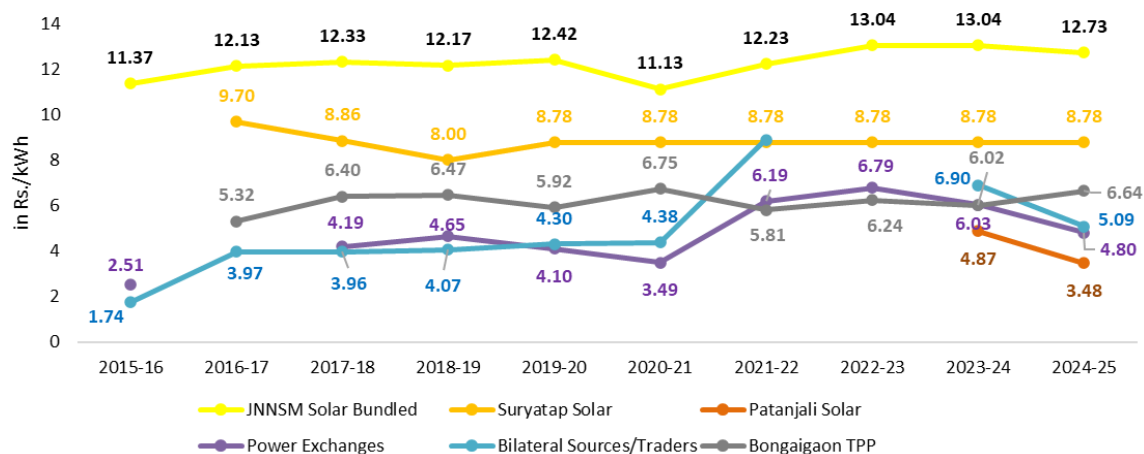


Figure 5: Total Cost of Power Sources, APDCL (in ₹/kWh)

Source: ICED & APDCL Tariff Order 2025-26

APDCL's procurement pattern highlights the increasing importance of robust resource planning and demand forecasting in a rapidly growing power system. Although bilateral source procurement was not part of the approved power purchase plan, the Commission allowed the quantum on grounds of supply reliability and Merit Order Dispatch principles – but capped the allowable rate at APDCL's actual average power purchase cost of ₹5.09/kWh for 2024-25, rejecting the ₹7.19/kWh claimed by the utility.

The need for short-term purchases, despite existing long-term contracted capacity, points to gaps in demand forecasting and procurement optimisation. As electricity demand in Assam continues to rise, strengthening the resource adequacy framework through improved load forecasting, real-time demand monitoring and granular demand-supply assessments will be critical to optimising the procurement mix and reducing dependence on expensive short-term purchases.

Further, the proposed 3,200 MW generation project in Assam, which could potentially meet nearly 80% of APDCL's power requirement, underscores the need to balance supply security with procurement diversification. While the project could significantly enhance self-sufficiency, maintaining a diversified resource portfolio will remain important for preserving procurement flexibility, managing concentration risks and ensuring long-term cost competitiveness.

Building Financial Resilience

Despite the procurement and planning challenges, APDCL has made significant progress on operational efficiency over the past decade. The utility reduced its AT&C losses from 26% in 2014-15 to 15% in 2024-25, in line with the targets under RDSS while collection efficiency improved steadily to reach 100% in 2024-25. Together, these gains have strengthened revenue realisation and cash flows, contributing to a marked improvement in financial performance.

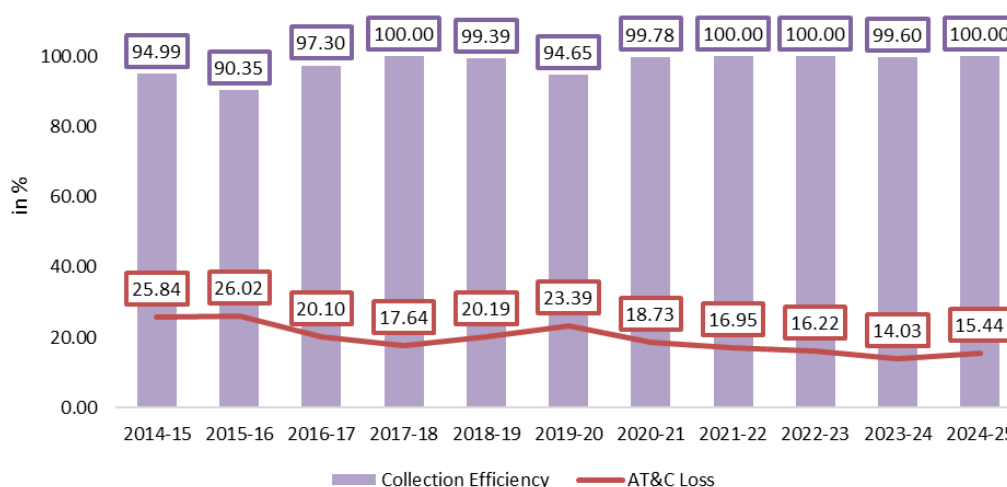


Figure 6: Collection Efficiency & AT&C losses Trends (in %)

Source: ICED

Further, APDCL turned its ACS-ARR gap from a deficit of ₹0.62/kWh in 2022-23 to a surplus of ₹0.26/kWh in 2024-25, reflecting improved cost recovery. The utility's Debt Service Coverage Ratio⁸ (DSCR) stood at 2.91, indicating it generates sufficient cash to meet its annual debt obligations. This liquidity position was supported in part by timely receipt of government subsidies⁹, reinforcing APDCL's ability to comfortably service its debt and maintain financial resilience.

Non-compliance with Renewable Purchase Obligation (RPO)

RPO compliance remains an area requiring continued attention, with shortfalls reported under wind and hydro obligations and a projected shortfall of 302.45 MU under wind and distributed renewable energy (DRE) RPO for 2026-27. No procurement of renewable energy certificates (RECs) has been reported for 2024-

8

https://www.pfcindia.co.in/ensite/DocumentRepository/ckfinder/files/Gol_Initiatives/Annual_Integrated_Ratings_of_State_DISCOMs/14th_Annual_Integrated%20Rating%20and%20Ranking%20of%20Power%20Distribution_Uilities.pdf

⁹ In 2024-25, APDCL booked and received subsidy support of ₹845 crore, the highest level recorded in recent years.

25. However, surplus procurement from other renewable energy sources and the addition of 273.54 MW of DRE capacity are expected to support overall RPO compliance.

4.3 Bihar : North Bihar Power Distribution Company Limited (NBPDC) & South Bihar Power Distribution Company Limited (SBPDCL)

Bihar is served by two distribution companies, namely North Bihar Power Distribution Company Limited (NBPDC) and (South Bihar Power Distribution Company Limited) SBPDCL, established on 1 November 2012 following the restructuring of the erstwhile Bihar State Electricity Board (BSEB), pursuant to notification no. 17 dated 30 October 2012 issued by the Energy Department, Government of Bihar.

Bihar is predominantly domestic-consumer driven Domestic consumers account for 59% of NBPDC's total electricity sales and 44% of SBPDCL's total electricity sales. As of March 2025, NBPDC served around 134.25 lakh consumers, while SBPDCL served around 79.67 lakh consumers.

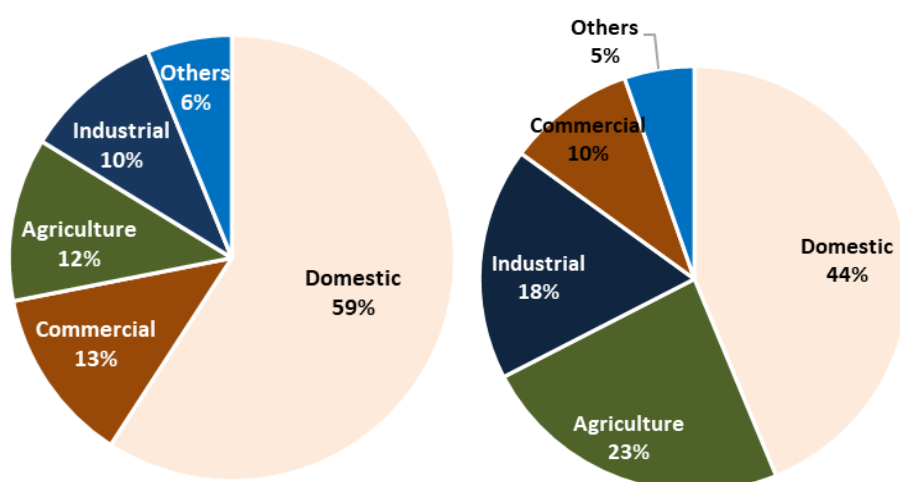


Figure 7: Share of consumer wise sale of electricity for 2024-25 (in %)
(Left: NBPDC, Right: SBPDCL)

Source: ICED

Over the years, Bihar has made significant progress in strengthening its power sector. On 20th May 2026, the state successfully met its peak demand of 8,822 MW without any major load shedding or power shortage. This achievement reflects the state's transition from a historically power-deficit region to one that is now capable of consistently meeting consumer demand through its extensive transmission and

distribution network. The state's power requirement is largely met through thermal power allocations, while it is also pursuing a target of developing 24 GW of renewable energy capacity and 6.1 GWh of battery storage by 2030¹⁰.

Despite this progress, Bihar's demand profile creates operational challenges. The state experiences significant variation between off-peak demand during solar hours and peak demand during the evening and night, primarily due to the dominance of residential consumers. As a result, electricity demand remains relatively low during daytime hours but rises sharply during the evening peak period. This variation creates challenges for thermal power operations: during low-demand periods, coal-based units must be backed down significantly and, in some cases, shut down entirely. Once shut down, these units cannot be restarted quickly, creating supply shortfalls precisely when evening demand surges¹¹.

To manage this, the state's tariff order recommends maintaining a minimum level of thermal generation through low-demand hours to ensure availability at the evening peak. The resulting surplus power during daytime hours is sold in the open market in line with Merit Order Dispatch principles and grid operational requirements.

Power Purchase Quantum & Cost: SBPDCL

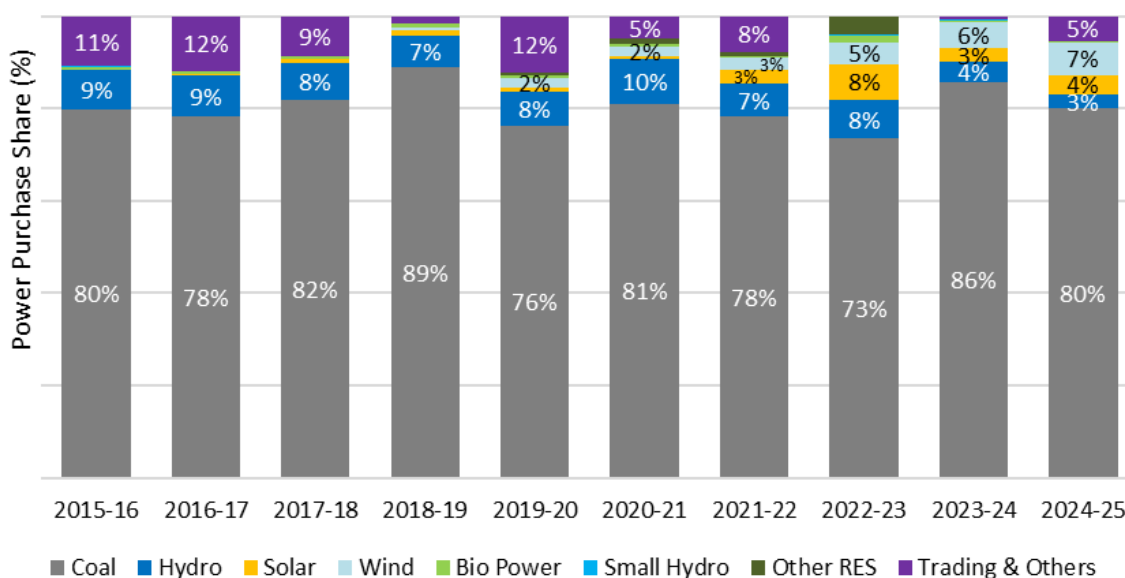


Figure 8: Power Purchase Quantum Trends of SBPDCL (in %)

Source: ICED

¹⁰ https://www.eqmagpro.com/bihar-unveils-ambitious-renewable-energy-policy-to-power-24-gw-green-future-by-2030-eq/?utm_source=chatgpt.com

¹¹ <https://berc.co.in/orders/tariff/distribution/sbpdcl/3293-tarif%20order-of-discoms-nbpdcl-sbpdcl-for-fy-2026-27>

SBPDCL has historically relied heavily on coal-based power, with coal accounting for 75–89% of total procurement over the past decade and 80% in 2024–25. The utility has gradually diversified its power mix by increasing the share of renewable energy. Excluding large hydro, which has declined from 9% to 3%, the combined share of solar, wind and other renewables grew from negligible levels in 2015–16 to around 14% in 2024–25. Solar rose from near zero to 4% and wind from zero to 7%, reflecting a gradual shift toward cleaner sources.

Power purchase costs vary significantly across sources. Solar tariffs range from ₹2.51/kWh to ₹8.73/kWh, with certain solar contracts exceeding the average market purchase cost of ₹8.34/kWh in 2024–25. In contrast, the power purchase cost from coal-based sources ranges from ₹2.82/kWh to ₹7.62/kWh, making coal comparatively more economical than several solar projects. This cost differential has been a key factor behind SBPDCL's continued reliance on coal-based power procurement¹².

Resource Adequacy:

BSPHCL's (Bihar State Power Holding Company Limited) Long-Term Distribution Resource Adequacy Plan (LT-DRAP), prepared in accordance with the Resource Adequacy (RA) Guidelines and aligned with the National Resource Adequacy Framework and the Ministry of Power's RPO trajectory, outlines a roadmap to meet the growing demand.

Generating Sources	Resource Adequacy Estimated Capacity ¹³ (MW) for 2024–25 (RA Plan 2035–36)	Share Allocated Capacity (MW) for 2024–25 (Tariff Order ¹⁴)
Coal	8,227	7,892
Hydro	925	1,209
RE (includes Solar, Wind, Biomass, DRE, Storage)	3,806	2,966

¹² <https://berc.co.in/orders/tariff/distribution/sbpddl/3293-tariff-order-of-discoms-nbpddl-sbpddl-for-fy-2026-27>

¹³ https://cea.nic.in/wp-content/uploads/resource_adequacy_st/2025/11/Report_on_Resource_Adequacy_Plan_Generation_for_Bihar_Up_to_2035_36-1.pdf

¹⁴ <https://berc.co.in/orders/tariff/distribution/sbpddl/3293-tariff%20order-of-discoms-nbpddl-sbpddl-for-fy-2026-27>

Market (SToA/LToA)	1,917	0
Total Capacity	14,875	12,067

For 2024–25, the Resource Adequacy Plan envisaged a total capacity of around 14,875 MW, against an actual allocated capacity of around 12,067 MW. To address the projected shortfall and accommodate future demand growth, the state has planned capacity additions of 4,551 MW of thermal power by 2030–31, 1,251 MW of tied-up solar capacity by 2027–28 and 159 MW of hydro capacity by 2031–32, while also securing consent for power procurement from several upcoming hydro projects¹⁵.

Based on these planned additions and existing tie-ups, the DISCOMs project that Bihar will remain energy-surplus through the study period from 2025–26 to 2035–36 and will meet its Renewable Purchase Obligation (RPO) targets. Nevertheless, considering the inherent variability of renewable generation and the possibility of project commissioning delays, the resource adequacy plan envisages additional coal-based tie-ups along with year-on-year short- and medium-term open access procurements as contingency measures to ensure reliability during peak demand periods, particularly during non-solar evening hours.

Operational & Financial Improvements: SBPDCL & NBPDC

The two DISCOMs, NBPDC and SBPDCL, have substantially improved their operational efficiency over the past decade, driven primarily by a sustained reduction in AT&C losses at a CAGR of 10%. NBPDC brought losses down from 41.8% in 2014–15 to 14.5% in 2024–25, meeting the RDSS target range of 12–15%. SBPDCL reduced losses from 45.3% to 16.4% over the same period and is steadily approaching the RDSS target

¹⁵ <https://berc.co.in/orders/tariff/distribution/sbpdcl/3293-tariff%20order-of-discoms-nbpdc-sbpdcl-for-fy-2026-27>

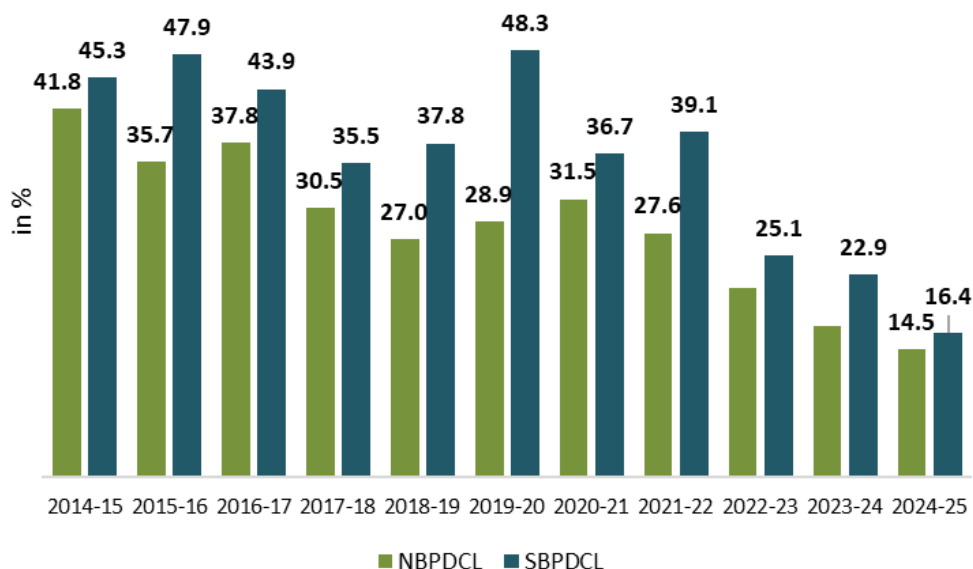


Figure 9: AT&C Losses Trends over a decade for NBPDCCL & SBPDCL (in %)

Source: ICED

Both utilities reported an improvement in their financial performance in 2024-25, with SBPDCL posting a profit of ₹771 crore and NBPDCCL recording a profit of ₹1,324 crore. However, these improvements were supported in large part by higher tariff subsidy receipts. SBPDCL's tariff subsidy received rose from ₹4,178 crore in 2022-23 to ₹8,027 crore in 2024-25, while NBPDCCL's subsidy increased from ₹3,852 crore to ₹7,395 crore during the same period. As a result, subsidies as a share of total revenue rose to 41% for SBPDCL and 43% for NBPDCCL in 2024-25, up from 23% and 27%, respectively, in 2022-23.

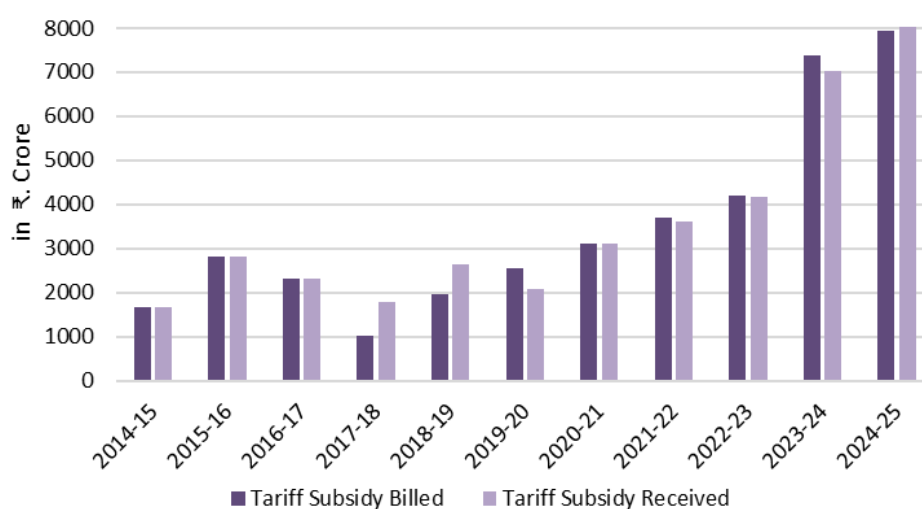


Figure 10: Subsidy Billed & Received Trends over a decade for SBPDCL (in ₹. Crore)

Source: ICED

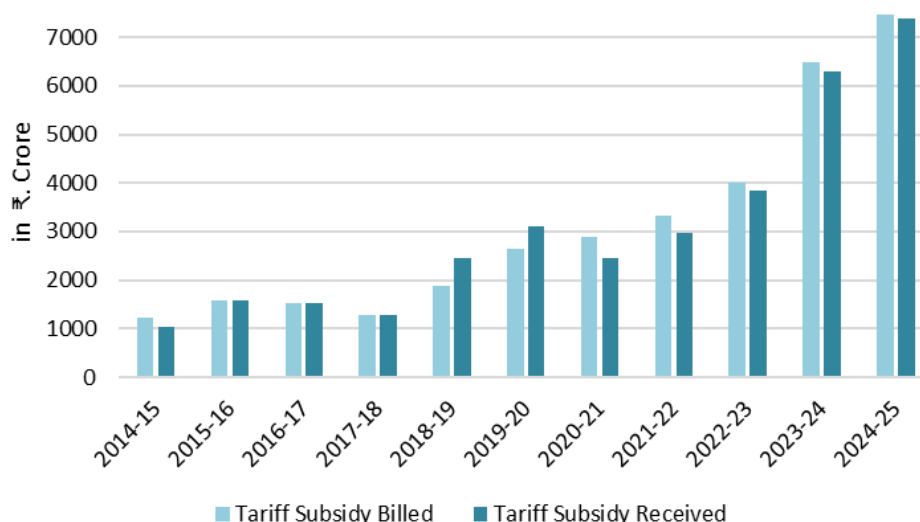


Figure 11: Subsidy Billed & Received Trends over a decade for NBPDCCL (in ₹ Crore)

Source: ICED

Key Reforms Driving NBPDCCL's Performance

In 2024-25, NBPDCCL secured an 'A' grade in the 14th Integrated Rating Report issued by PFC and emerged among the top five state-owned DISCOMs in the country. The utility has invested in smart prepaid metering, data-driven energy management and digital consumer services, establishing a relatively strong track record on technology-enabled operations among peers in the eastern region

Key initiatives undertaken by the utility include¹⁶:

- **Digitalisation of consumer services:** Deployment of the *Suvidha App* and promotion of digital payment platforms improved consumer convenience and collection efficiency.
- **Smart metering and accurate billing:** Large-scale (~60 lakhs smart meters) rollout of smart prepaid meters and Optical Character Recognition (OCR)-based billing enabled real-time monitoring, accurate billing and enhanced revenue realisation.
- **AI-driven energy accounting:** Consumer tagging with feeders and transformers, coupled with AI-based analytics, strengthened energy accounting and facilitated targeted anti-theft drives. During 2025-26, AI tools detected 28,000 cases of electricity theft, resulting in penalties of over ₹83 crore.

¹⁶ <https://indianmasterminds.com/feature-stories-on-bureaucrats-changemakers/bihar-nbpdccl-digital-transformation-top-discom-india-210216/>

- **Consumer-Centric Service Delivery:** Initiatives such as *Sahyog Shivir* camps, a 24×7 helpline (1912) and a two-tier Consumer Grievance Redressal Forum (CGRF) improved consumer engagement, particularly at the village level and provided systematic grievance redressal.
- **Network strengthening and modernisation:** Expansion of Aerial Bunched (AB) Cables, High Voltage Distribution Systems (HVDS), feeder segregation and preventive maintenance practices enhanced network reliability and reduced technical losses. Around 94% of consumers have been digitally tagged to their designated Distribution Transformers (DTs), while all DTs are linked to feeders.
- **Data-driven governance and accountability:** Operational circles were transformed into profit-and-loss centres, with performance-linked incentives and digital monitoring systems improving accountability.
- **Capacity building and workforce strengthening:** Focused recruitment and training initiatives strengthened institutional capabilities and supported sustained operational improvements.

NBPDCL's transformation demonstrates that sustained operational improvements, digital innovation and consumer-centric governance can turn a financially and operationally challenged utility into a top-performing DISCOM. Its experience provides a valuable lesson for other utilities seeking to improve efficiency, accountability and service delivery

4.4 Jharkhand: Jharkhand Bijli Vitran Nigam Limited (JBVNL)

Jharkhand Bijli Vitran Nigam Limited (JBVNL) is the state's largest power distribution company, supplying electricity across the mineral-rich but geographically challenging terrain. It serves approximately 54 lakh consumers across a highly diverse landscape, from dense industrial clusters and urban centres to remote tribal villages and hilly terrain. Rural and tribal users dominate the consumer profile, and the domestic category has accounted for between 47% and 61% of electricity sales over the past decade.

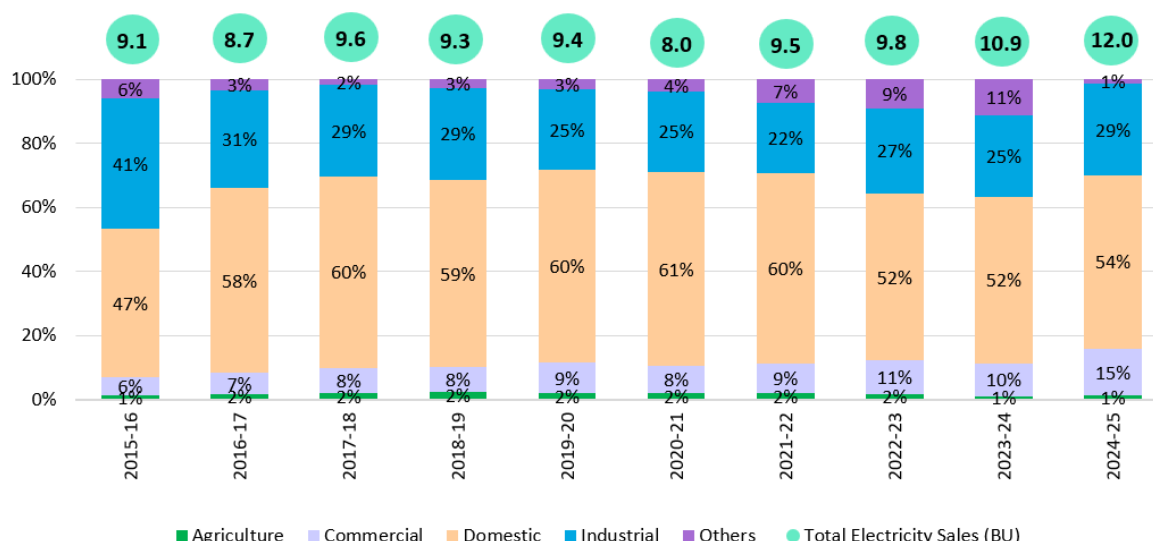


Figure 12: JBVNL Electricity Sales Share Trends

Source: ICED¹⁷

Operational Efficiency:

JBVNL's AT&C losses have remained at 27% or higher every year over the past decade, among the highest in the country. The losses stem from a combination of structural, operational and regional challenges, such as rampant theft, a high LT-to-HT line ratio, scattered rural and tribal consumers in hilly and mining areas, ageing overhead lines and a near-complete absence of smart metering infrastructure. Together, these factors severely compromise billing and collection efficiency.

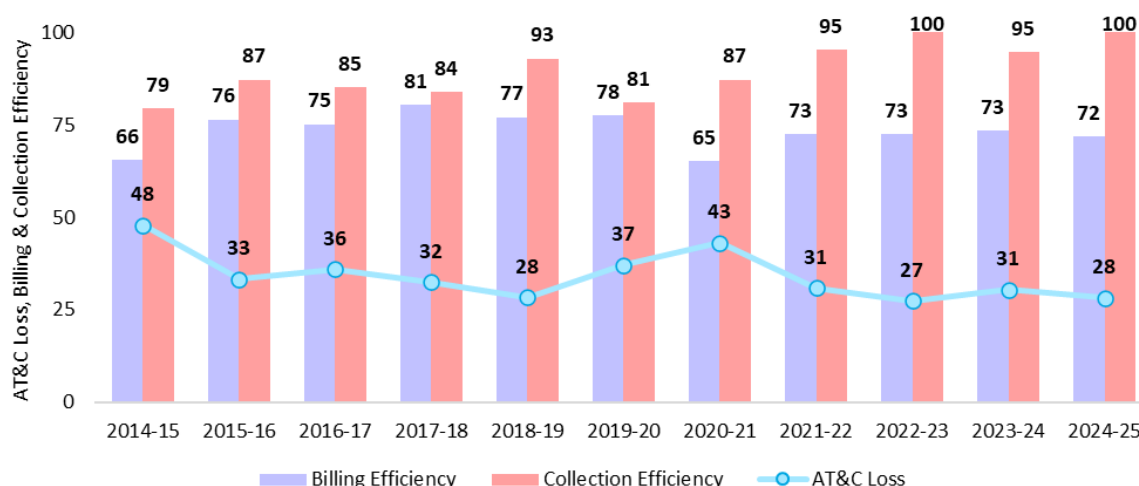


Figure 13: JBVNL AT&C Losses, Billing Efficiency and Collection Efficiency Trends

Source: ICED¹⁸

¹⁷ <https://iced.niti.gov.in/energy/electricity/distribution/pages/consumer-profile#electricity-sales>

¹⁸ <https://iced.niti.gov.in/energy/electricity/distribution/pages/operational-performance#billing-efficiency>

JBVNL's claimed transmission losses also significantly exceeded normative levels: 7.99% against an approved norm of 2.23% for Jharkhand Urja Sancharan Nigam Limited (JUSNL), and 4.30% against 3.00% for Damodar Valley Corporation (DVC). Jharkhand Electricity Regulatory Commission (JERC) found JBVNL's justifications inadequate, suspected incorrect energy accounting and directed a joint reconciliation with JUSNL. It disallowed the excess loss cost rather than passing it on to consumers.

A governance gap compounds the problem. JBVNL has not maintained a Fixed Asset Register¹⁹ and has not physically verified its assets. Without this, it cannot accurately attribute technical losses to specific voltage levels or asset classes, which makes any credible loss reduction strategy difficult to implement.

JBVNL's billing efficiency is among the lowest in the country, excluding the North-Eastern states, a direct reflection of the structural and operational weaknesses described above.

JBVNL's audited accounts show AT&C losses²⁰ dropping sharply from 32% in 2023-24 to 14% in 2024-25. However, this improvement is not a result of operational gains. It stems from the write-off of ₹3,580 crore in domestic consumer arrears²¹ adjusted against a ₹1,810 crore state government subsidy received under the Mukhya Mantri Yojana.

Power Procurement:

JBVNL's actual distribution and transmission losses far exceeded normative targets, resulting in large-scale surplus power procurement. In 2024-25 alone, excess procurement stood at 3,491 MU, leading to a disallowance of over ₹2,243 crore in power purchase costs.

¹⁹ <https://jbvnl.co.in/notice/accounts/Audited%20Standalone%20Financial%20statements%20%20for%20the%20FY%202024-25211025.pdf> (Page 3)

²⁰ <https://jbvnl.co.in/notice/accounts/Audited%20Standalone%20Financial%20statements%20%20for%20the%20FY%202024-25211025.pdf> (Page 66)

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<https://jbvnl.co.in/notice/accounts/Audited%20Consolidated%20Financial%20statements%20%20for%20the%20FY%202024-25211025.pdf> (Page 52)

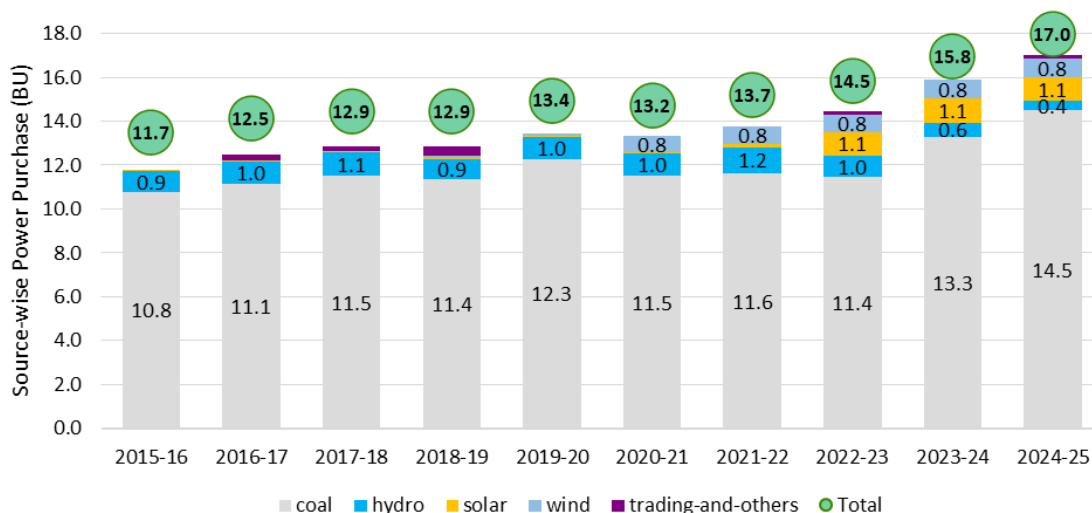


Figure 14: JBVNL Source-wise Power Purchase (BU) Trends

Source: ICED²²

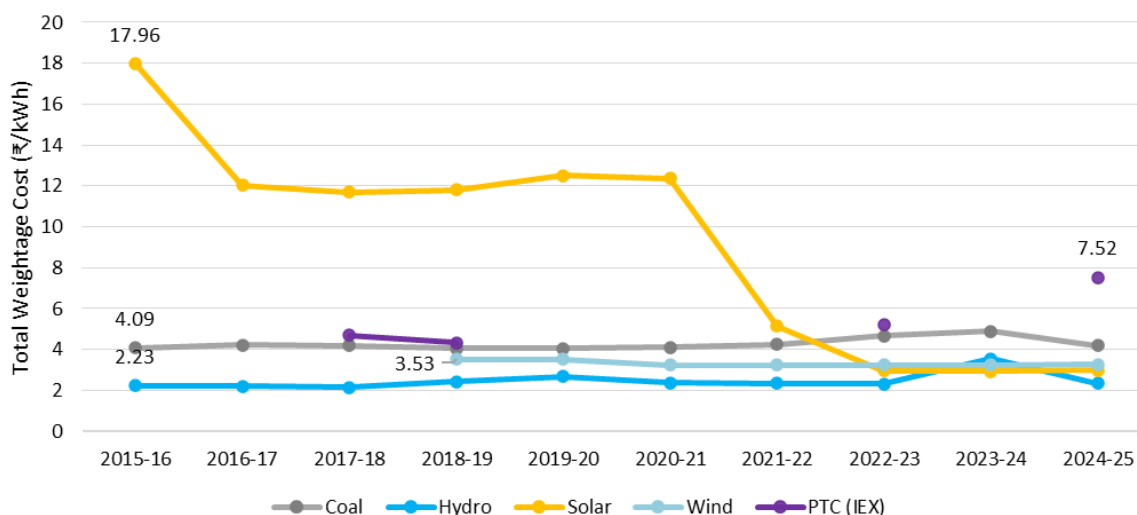


Figure 15: JBVNL Source-wise Total Weightage Cost (₹/kWh) Trends

Source: ICED²³

JBVNL's exchange-based trading shows a costly mismatch: it purchased over 1,000 MU from IEX at an effective rate of ₹7.52/kWh, while simultaneously selling nearly 870 MU at just ₹2.58/kWh – a loss-making spread that reflects poor procurement planning and scheduling discipline.

The root cause lies in JBVNL's inflexible long-term PPAs with fixed capacity charges. Unable to optimise dispatch from tied-up sources, JBVNL is forced to buy expensive short-term power during peak periods – summer months and festive seasons – to maintain supply continuity. High Unscheduled Interchange (UI) charges of over ₹204.63 crore further indicate poor

²² <https://iced.niti.gov.in/energy/electricity/distribution/power-purchase>

²³ <https://iced.niti.gov.in/energy/electricity/distribution/power-purchase>

forecasting and real-time scheduling gaps. The Commission has warned of penal action if deviations continue to exceed permissible limits.

On renewable obligations, JBVNL missed its RPO targets and purchased over 24 lakh Renewable Energy Certificates (RECs) at significant cost to achieve compliance. The Commission also noted that wind power being counted towards RPO was from projects commissioned before March 2024, which no longer qualify under updated regulations.

Late payment surcharges of over ₹15 crore to generators were also disallowed, as working capital provisions were already in place for timely payments — pointing to financial management lapses.

Resource Adequacy²⁴:

JBVNL has submitted a power procurement plan for 2026–27 to 2030–31. As of November 2025, total allocated capacity stands at around 3,989 MW, over 70% coal-based. Key upcoming additions include two units of the Patratu Thermal Power Station (PTPS) expected in August 2026 and a 100 MW floating solar plant at Getalsud, scheduled for April 2026. These projects are expected to enhance self-reliance, reduce dependence on central allocations and expand the RE portfolio.

JBVNL projected power purchase quantum conservatively, based on historical CAGR, actual demand (approx. 11,954 MU and 2,700 MW peak in 2024–25), and slower load growth in the state. The company plans to meet its demand primarily through long-term tied-up sources, following Merit Order Despatch strictly, with technical minimum scheduling and must-run status for renewables. It proposes to surrender the entire allocation from NTPC Korba and 50 MW from NTPC Farakka Stage-III (effective December 2025), thereby avoiding associated fixed charges.

On the renewable front, JBVNL has tied up around 700 MW solar and 500 MW wind capacity through SECI and others. The additional 100 MW floating solar will aid RPO compliance, though the Commission noted that the JBVNL's RE share still falls short of the required trajectory. It has approved no provision for REC purchase; it will true up any shortfall later.

With the commissioning of Patratu units, JBVNL anticipates a power surplus and plans to sell it in the open market to recover costs and reduce the burden on consumers. The Commission approved the power purchase quantum and costs after applying MoD principles, a 5% tariff escalation, and normative distribution loss of 13%, while encouraging optimal surplus sale

²⁴ https://jserc.org/pdf/tariff_order/JBVNL-2026.pdf (Page 255-260)

subject to a prudence check. Overall, the plan focuses on long-term supply security through a balanced mix of state generation, strategic deallocation of costly power, and gradual RE expansion.

However, several critical gaps remain. JBVNL has not integrated Battery Energy Storage Systems (BESS) into its procurement planning – an acknowledged gap, given the utility's own admission that it meets peak demand through expensive exchange purchases due to inflexible long-term PPAs. JBVNL has also not fully demonstrated Resource Adequacy compliance under JSERC Regulations 2024; the Commission merely noted the submission without confirming adherence. .

RDSS implementation – covering smart metering, feeder segregation, and loss reduction works – remains significantly delayed, directly impacting the utility's ability to reduce losses and improve network planning. JBVNL was directed to expedite work and submit updated targets within three months.

Finally, JBVNL's projection of zero manpower growth for the control period, alongside rising dependence on contractors, raises concerns about long-term service quality and operational capacity. The absence of a completed Fixed Asset Register – repeatedly directed by the Commission but still incomplete as of March 2026 – continues to undermine the utility's ability to plan network upgrades and voltage-wise improvements with any accuracy.

Financial Performance

As of 31 March 2025, JBVNL's total accumulated losses stood at ₹20,512 crore. The financial position of the DISCOM remains weak and continues to deteriorate due to persistent revenue gaps, operational inefficiencies and regulatory disallowances.

High distribution losses and regulatory disallowances drive most of this deficit. In the 2023-24 True-up alone, the Commission disallowed ₹2,994.51 crore, of which ₹2,277.39 crore (76%) was on account of excessive distribution losses. Power purchase and O&M expenses have risen significantly year-on-year, but tariffs don't fully recover these costs, leaving a continuous revenue gap.

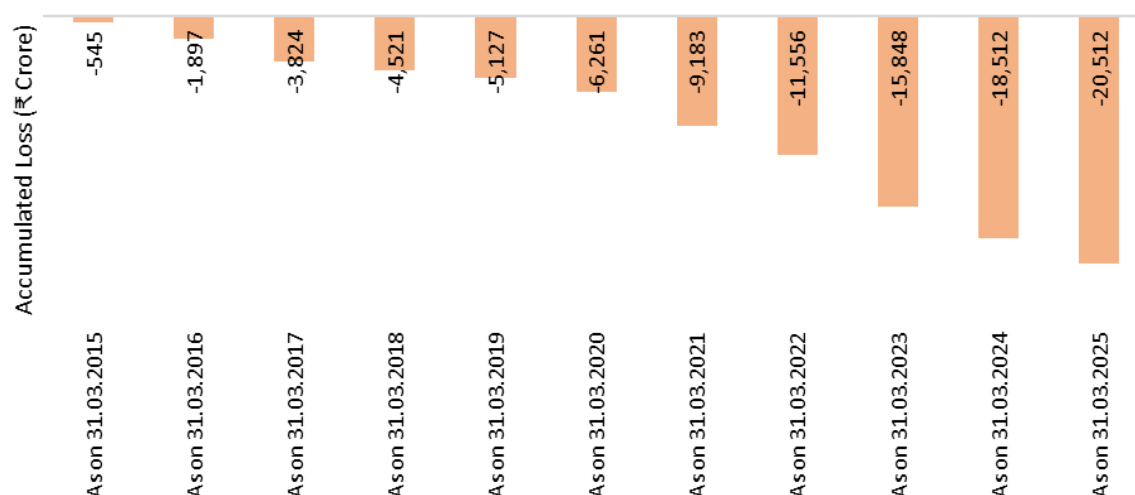


Figure 16: JBVNL's Accumulated Loss (₹ Crore) Trends

Source: ICED

Statutory auditors have repeatedly highlighted serious accounting and operational deficiencies, including non-maintenance of the Fixed Asset Register²⁵, lack of physical verification of assets, non-capitalisation of CWIP (Capital Work-in-Progress) overheads (inflating O&M expenses), non-compliance with Indian Accounting Standard (Ind AS 19) for employee benefits, and absence of ageing analysis for trade receivables.

To bridge the claimed gap, JBVNL proposed an overall tariff increase of 59%, which was viewed as arbitrary and unsustainable. The Commission also rejected JBVNL's proposal to change fixed charges for domestic consumers from a per-connection to a per-kW basis.

Additionally, inefficient working capital management persists, with long-outstanding dues from government departments and consumer defaults. The Commission also noted non-compliance in discharging interest on Consumer Security Deposits, against a provision of ₹150.89 crore, JBVNL credited consumers only ₹42.55 crore in 2024-25. .

State government intervention remains the primary factor sustaining JBVNL's operations. In 2024-25, the DISCOM received ₹3,727 crore as tariff subsidy from the Government of Jharkhand, out of which ₹3,521 crore was passed on to eligible consumer categories²⁶. Additionally, under the Mukhyamantri Urja Khushali Yojna, the State Cabinet approved waiver

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<https://jbvnl.co.in/notice/accounts/Audited%20Consolidated%20Financial%20statements%20%20for%20the%20FY%202024-25211025.pdf>

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<https://jbvnl.co.in/notice/accounts/Audited%20Consolidated%20Financial%20statements%20%20for%20the%20FY%202024-25211025.pdf>

of arrears for domestic consumers consuming up to 200 units, amounting to approximately ₹3,620.09 crore.

Statutory auditors have explicitly highlighted that JBVNL's ability to continue as a going concern is entirely dependent on continued financial support, subsidies, and equity infusion from the Government of Jharkhand.

Overall, despite substantial government subsidies, JBVNL continues to grapple with massive accumulated losses, operational inefficiencies and weak financial discipline, raising serious concerns about its long-term sustainability.

4.5 Manipur: Manipur State Power Distribution Company Limited (MSPDCL)

MSPDCL serves approximately 5.3 lakh consumers²⁷ as of March 2025, of whom 99.7% are low-tension (LT) consumers and only 0.3% are high-tension (HT) consumers. The utility is responsible for retail power supply across the state through its LT distribution network at 11 kV and below²⁸, while the 33 kV and above transmission network is operated separately by Manipur State Power Corporation Limited.

The consumer mix in the utility is heavily dominated by the domestic category, which accounts for 59% of total electricity sales, followed by the 'others' category at 19% — comprising bulk supply (12%) and public lighting (7%). Commercial consumers contribute 17% of sales, while industrial consumption stands at 5% and agricultural consumption at just 0.1%. This consumer profile is a clear indicator of the state's limited level of industrialisation and its predominantly residential and semi-urban character.

²⁷ICED

²⁸ <https://mspdcl.in/uploads/tariff/files/01KS7DWHNHDES7ZFWZXQG5TMIF.pdf>

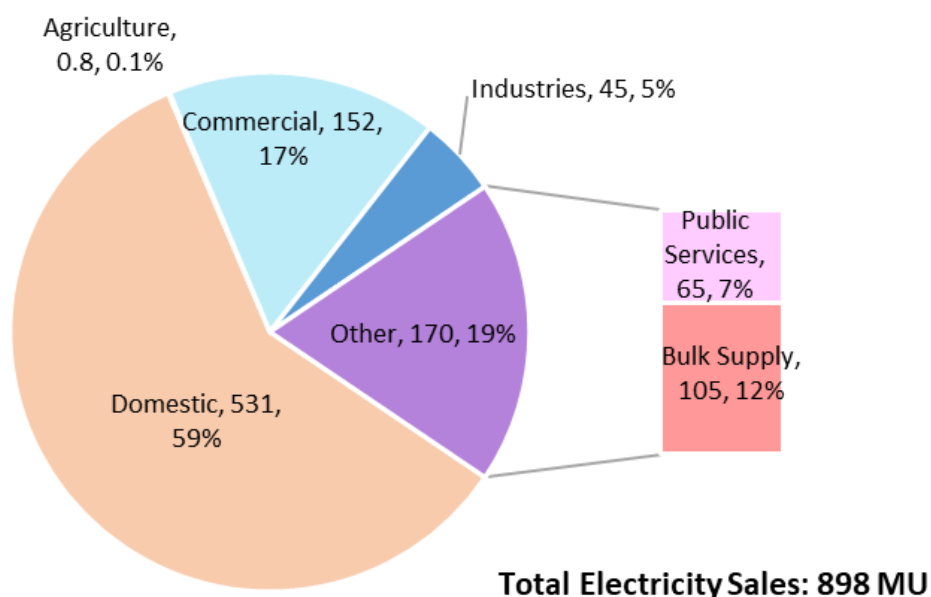


Figure 17: MSPDCL Electricity Sales in 2024-25 (Numbers are in MU)

Source: ICED

Operational Performance

The utility has significantly reduced its AT&C losses from 48% in 2014-15 to 13% in 2024-25, a reduction of nearly 35 percentage points, well within the RDSS targets. The historically high losses were primarily attributable to the long LT lines traversing difficult hilly terrain, rapid expansion of rural electrification that added large numbers of low-density consumers to the network and persistent power theft and unauthorised consumption in certain areas.²⁹

²⁹<https://jerc.mizoram.gov.in/uploads/attachments/2023/02/1b0c46b4c420a6dab1a4fdc20e410a33/trueup-order-2018-19-mspdcl.pdf>

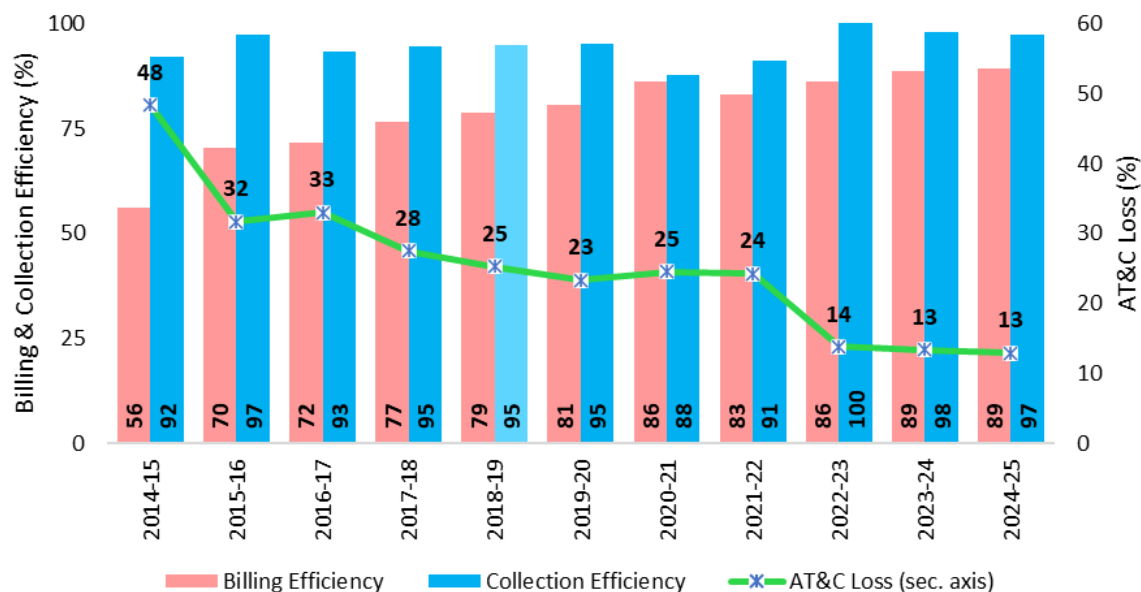


Figure 18: MSPDCL AT&C Losses Trends

Source: ICED

To address these challenges, MSPDCL implemented loss reduction measures under RDSS, including reconductoring of 11 kV lines, bifurcation of overloaded feeders and most significantly, the state-wide replacement of bare LT conductors with AB Cables – a key technical intervention that directly reduced theft and losses .

Metering coverage was also expanded systematically. Between March 2019 and February 2022, 1,42,751 unmetered consumers were identified, regularised under the post-paid billing system and brought into the billing fold, resulting in the recovery of ₹156.62 crores. As of 2025, prepaid meter installation had reached 92% of consumers³⁰, further strengthening metering accuracy and billing efficiency.

These measures drove AT&C losses down to a stable range of 13–14% from 2022–23 onwards. Notably, collection efficiency reached 100% in 2022–23, a 9 percentage point improvement over 2021–22.

Power Purchase

MSPDCL's power procurement strategy is heavily dependent on external sources owing to the state's limited indigenous generation capacity. The utility currently procures power from multiple central generating stations, including Bongaigaon Thermal Power Station (NTPC), NHPC, NEEPCO, ONGC Tripura Power Corporation (OTPC) Units I and II and the Baramura Gas Turbine Power Project (BGTPP). The

³⁰ <https://mspdcl.in/uploads/tariff/files/590304f48f59f09ecd8a8a2b97f513b4.pdf>

power mix is predominantly based on natural gas (42–54%) and hydro sources, with a conscious preference for these over coal-based power due to greater availability and accessibility in the region.

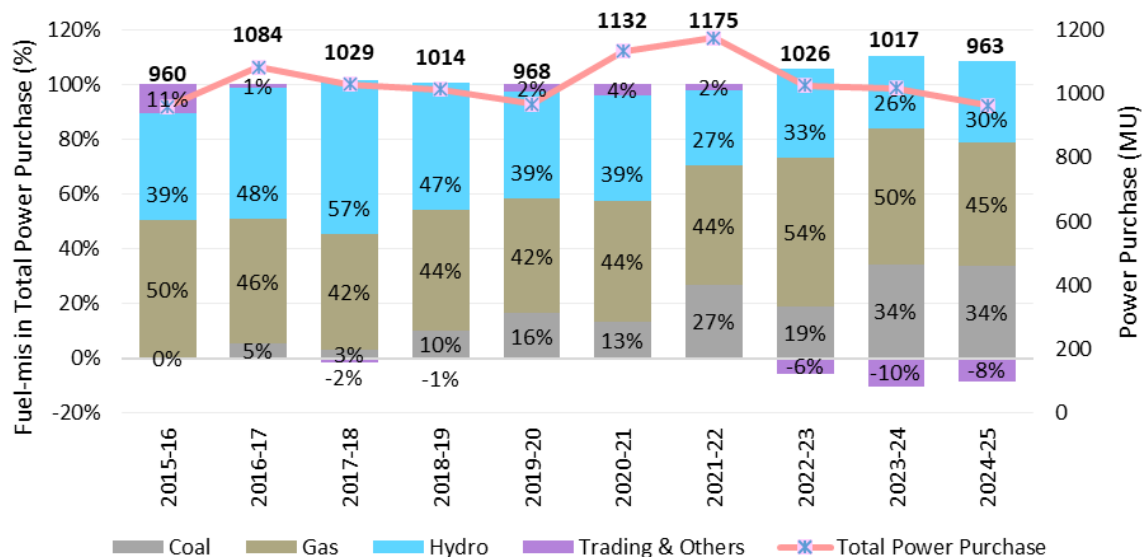


Figure 19: MSPDCL Power Purchase Trends

Source: ICED

The state experiences higher demand during winter months when hydro generation typically declines. To bridge this seasonal shortfall and ensure reliable supply to consumers, MSPDCL supplements procurement through market purchases and has planned use of the banking mechanism to optimally manage seasonal demand-supply variation.

Financial Performance

MSPDCL has historically faced persistent financial losses in most years from 2015–16 to 2020–21. The utility reached break-even in 2021–22, supported by a tariff subsidy of ₹11 crore from the Government of Manipur.

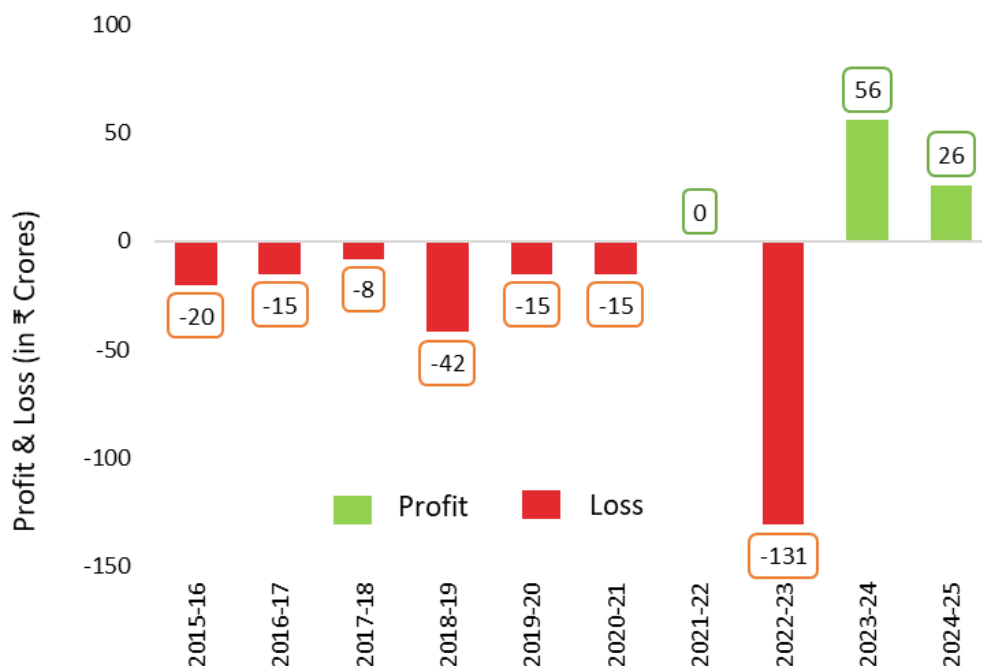


Figure 20: Profit & Loss Trends for MSPDCL (in ₹ crore)

Source: ICED

However, 2022-23 witnessed a sharp deterioration, with loss widening to ₹131 crore. Three factors drove this: a 17% increase in per-unit gas prices, which was particularly impactful given that gas-based sources met 54% of the state's power requirement; supplementary bills from generators amounting to ₹83.52 crore, as approved by the regulator; and a 62.7% rise in employee costs due to 7th Pay Commission arrears and provisions for gratuity, leave encashment and commutation benefits.

Despite these setbacks, the utility MSPDCL achieved a strong financial turnaround in 2023-24 by recording a profit of ₹56 crore. This recovery was underpinned by ₹367 crore in government grants, comprising ₹310 crore in tariff subsidy from the Government of Manipur, ₹52.56 crore toward intra-state transmission charges paid to MSPCL (provided due to the absence of a valid billing mechanism for certain transmission claims), ₹4.09 crore as a special grant for the Sangai Festival and ₹0.58 crore as a Bureau of Energy Efficiency (BEE) grant.

The positive trend continued in 2024-25, with the utility recording a surplus of ₹26 crore. This performance was further strengthened by robust Non-Tariff Income³¹ of ₹114.38 crore, in addition to ongoing government subsidies.

³¹ <https://mspdcl.in/uploads/tariff/files/01KS7DWHNHDES7ZFWZXQG5TM1F.pdf>

4.6 Meghalaya: Meghalaya Power Distribution Corporation Limited (MePDCL)

Meghalaya's power distribution is handled primarily by MePDCL, a subsidiary of the state-owned Meghalaya Energy Corporation Limited (MeECL). MeECL oversees the integrated power sector (generation via MePGCL, transmission via MePTCL and distribution via MePDCL). The DISCOM serves over 7 lakh consumers, making it the third-largest distribution utility in the North Eastern region in terms of consumer base, after Assam and Tripura. In terms of electricity sales, however, Meghalaya ranks second in the region, surpassed only by Assam.

The sales mix is dominated by the industrial sector, which accounts for a significant 56.9% of total electricity sales, followed by domestic consumers with a share of 28.9%, with commercial and other consumer categories making up the remainder.

Operational Performance

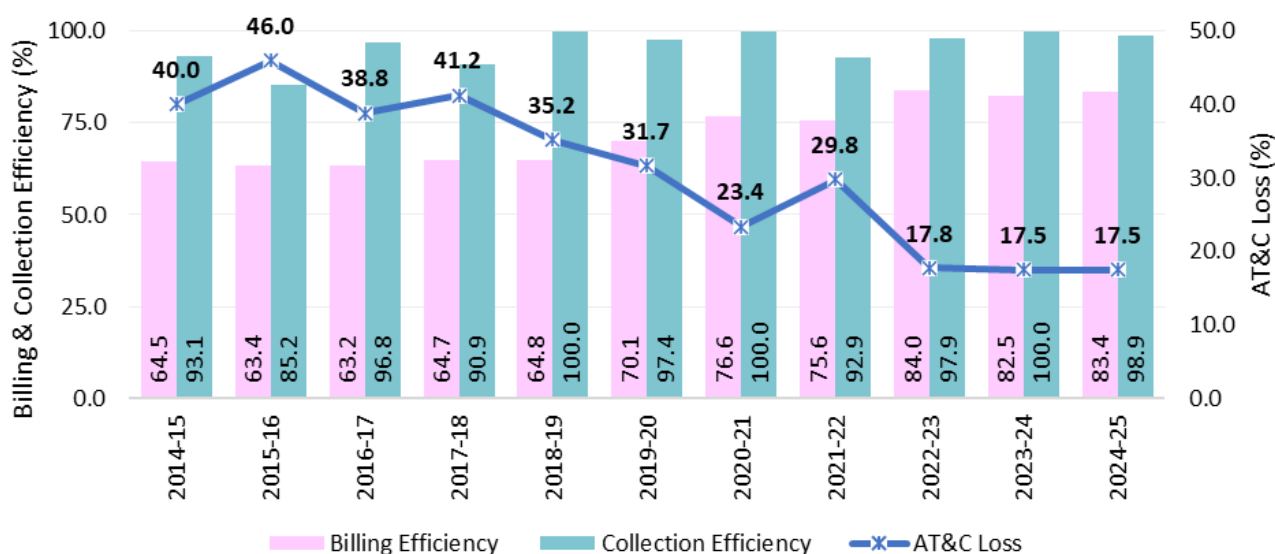


Figure 21: MePDCL AT&C losses Trends (in %)

Source: ICED

Over the past decade, MePDCL has significantly reduced its AT&C losses from around 40% in 2014-15 to 17.5% in 2024-25. This improvement was achieved despite several structural challenges, including rapid rural electrification and a substantial increase in LT domestic and Kutir Jyoti (KJ) consumers, which led to a higher LT-to-HT sales ratio. While LT sales expanded due to electrification initiatives and

improved power supply, HT sales declined as several large industrial consumers shifted to open access³².

To address these issues, MePDCL undertook multiple targeted interventions. It strengthened repairs and maintenance activities, improved billing efficiency by charging KJ consumers for consumption above 30 units at the normal domestic rate³³. Additionally, launched a major capital expenditure plan³⁴ of ₹2,423 crore (2020-21 to 2023-24), largely funded by government grants (₹2,419 crore) with a small loan component (₹4 crore). Key initiatives under this plan included converting LT overhead lines to (AB) Cables to curb theft and technical losses, augmenting and modernising distribution transformers, re-conductoring 33 kV and 11 kV lines and constructing new lines and substations.

Building on these efforts, the completion of works under the North Eastern Region Power System Improvement Project (NERSIP) and RDSS, alongside strict anti-theft measures, further accelerated loss reduction. As part of ongoing modernisation, MePDCL has installed 1.04 lakh smart meters with Time-of-Day (ToD) capability under the Asian Development Bank scheme, which is expected to deliver additional gains in energy accounting and operational efficiency.

Power Procurement

Hydropower has historically been Meghalaya's dominant power source, accounting for 46-62% of the total mix at a low procurement cost of around ₹3/kWh, followed by gas at 25-31% (~₹3.7/kWh).

³² https://www.mserec.gov.in/orders/2016-17/TrueUp_Order_MePDCL_2016-17.pdf

³³ https://mserec.gov.in/orders/2020-21/MePDCL_Review_TrueUp_Order_2020-21.pdf

³⁴ https://mserec.gov.in/orders/Orders_2021/TariffOrder_ARR_2021-22_MePDCL.pdf

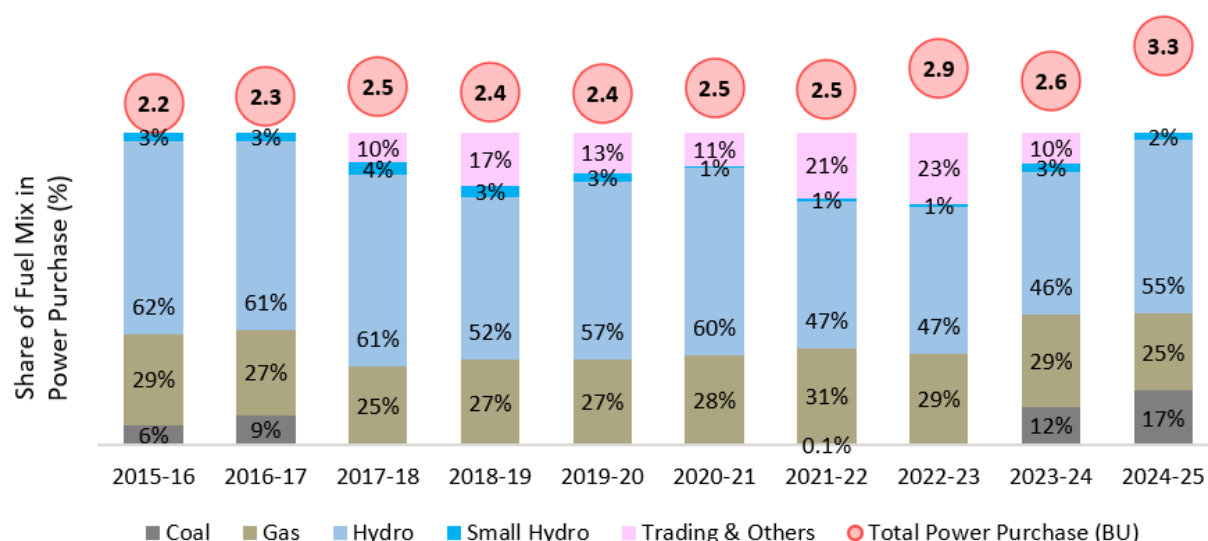


Figure 22: Power Purchase Quantum Share (in %)

Source: ICED

Short-term power procurement is primarily needed during winter months (November–March) when hydropower generation declines significantly. Initially, these deficits were met through NTPC thermal allocations, from 2017–18 to 2022–23, however, NTPC imposed power regulation³⁵ due to outstanding dues, forcing MePDCL to rely on high-cost short-term market purchases. From 2023–24 onwards, power drawal from NTPC Bongaigaon resumed after the utility cleared the dues, providing much-needed stable base-load support amid rising industrial demand in the state.

Industrialisation has driven strong growth in electricity demand, with the industrial sector's share of sales rising sharply from 30.3% in 2019–20 to 56.93% in 2024–25. The Meghalaya Power Policy³⁶ 2024 underscores the importance of reliable thermal base-load capacity to safeguard the state against monsoon-related shortages.

In 2024–25, MePDCL procured 3.3 BU of power while selling approximately 2.0 BU to its consumers, leaving around 1.3 BU, or 39.4%, as surplus. This significant over-procurement reflects an over-reliance on hydro during surplus months and weak alignment between procurement plans and realistic sales projections, highlights gaps in resource adequacy and demand forecasting³⁷. Rather than optimising the power mix to match actual demand, the strategy of selling surplus power at the

³⁵ https://www.msrec.gov.in/orders/Orders_2022/TrueUp_Order_2019-20_MePDCL.pdf

³⁶ <https://investmeghalaya.gov.in/resources/homePage/17/megeodb/policies/mpp2024.pdf>

³⁷ https://msrec.gov.in/discussion/trueup_petition_2022-23/MePDCL_TrueUp_2022-23_MYT_Petition.pdf

weighted average cost of procurement ultimately passes the inefficiency on to consumers through higher tariffs.

Financial Performance

MePDCL's financial losses stem primarily from historically high AT&C losses, elevated power purchase costs driven by seasonal hydropower variability and heavy reliance on expensive short-term market purchases during winter deficits. Despite notable operational improvements, including sustained reduction in AT&C losses and a rising share of industrial consumers, the utility has recorded losses in every year of the decade.

The 2023-24 deterioration was driven by a sharp decline in revenue from operations³⁸, from ₹1,093.51 crore in 2022-23 to ₹968.98 crore, largely because several large HT and EHT industrial consumers, particularly Ferro Alloys units, shifted to open access, reducing MePDCL's sales volumes³⁹.

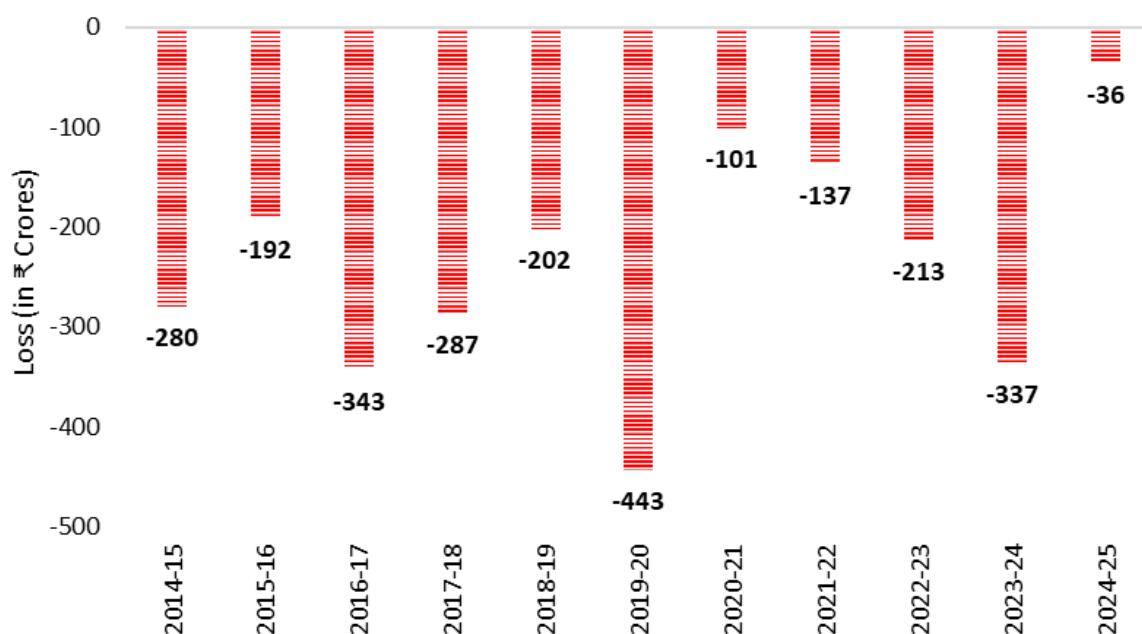


Figure 23: Profit & Loss Trends for MePDCL (₹ Crore)

Source: ICED

³⁸ https://mserc.gov.in/orders/Orders_18October2024/MePDCL_True-Up_Order_2022-23_18-10-2024.pdf

³⁹ https://mserc.gov.in/orders/TrueUpOrders_2023_2024/MePDCL%20True-Up%20Order%20FY%202023-24.pdf

In contrast, the financial position improved in 2024-25, with the annual loss narrowing to ₹36 crore (from ₹337 crore in the previous year). This improvement was driven by three key factors⁴⁰:

- Strong revenue from the sale of surplus power (₹562.21 crore), reflecting higher monetisation of excess hydropower during the monsoon season.
- Receipt of a ₹32.45 crore government revenue grant for other expenditure (treated as non-tariff income).
- Lower power purchase costs, supported by an increase in coal's share of the procurement mix (from 12% in 2023-24 to 17% in 2024-25) and a 16% reduction in coal prices (from ₹6.06/kWh to ₹5.10/kWh), even as total procurement volume rose⁴¹.

These gains helped offset the impact of lower-than-expected consumer sales and one-time adjustments related to the Special Tariff.

4.7 Mizoram: Power & Electricity Department, Government of Mizoram (PEDM)

Mizoram's power sector is shaped by its unique topography, characterised by steep mountain ranges, dispersed habitations and limited accessibility. With ⁴² 85.34% of its area under forest cover, the distribution network extends around rugged mountains, distant villages and sparsely populated regions, serving more than 3 lakhs consumers as on 2024-25⁴³.

The state's unique geography, characterised by scattered settlements and remote habitations, necessitates an extensive network of transmission and distribution infrastructure to ensure reliable electricity access. These geographical constraints, coupled with limited industrial demand and dependence on imported power, have posed significant operational and financial challenges for the utility.

Operational Efficiency: Persistently High AT&C losses & Low Billing Efficiency

⁴⁰

https://mserc.gov.in/orders/TrueUpOrders_2025_2026/Case_No_8_MSERC_MePDCL_True_Up_Order_FY_2024_25_26_03_2026.pdf

⁴¹ <https://iced.niti.gov.in/analytics/power-purchase-quantum-and-cost>

⁴² <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2086742&utm®=48&lang=2>

⁴³ <https://mzerc.mizoram.gov.in/uploads/attachments/2026/03/7be5860da7dbbda3560a7e255caff169/ped-to-26-27-khp27mar26-evng-with-sign.pdf>

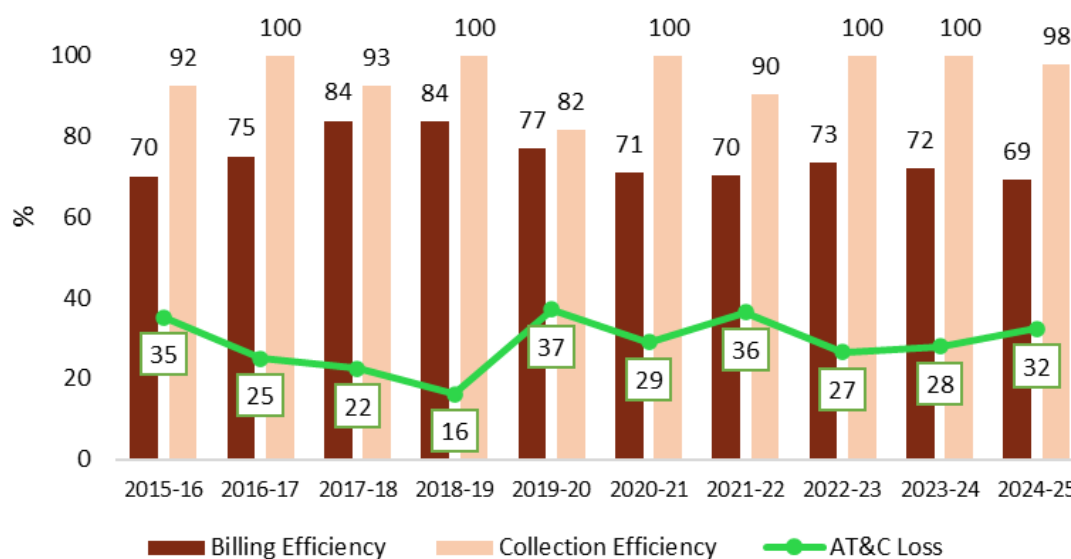


Figure 24: AT&C Loss, Billing Efficiency & Collection Efficiency (in %)

Source: ICED

AT&C losses have remained high throughout the decade, ranging from a low of 16% in 2018–19 to a peak of 37% in 2019–20, before settling at 32% in 2024–25. The losses are driven by both technical and commercial factors. Long LT lines traversing mountainous terrain and serving sparsely populated rural areas have contributed to elevated technical losses. In addition, metering gaps, power theft, illegal tapping of lines, meter tampering and inadequate energy auditing have resulted in significant commercial losses. Weak monitoring and limited field-level vigilance have further aggravated the challenge, leaving a substantial portion of energy supplied by the utility unaccounted for.

Further, over the past decade, billing efficiency has largely remained in the range of 69–84%, with the highest level of 84% recorded in both 2017–18 and 2018–19. Partially computerised billing, irregular billing cycles and inefficient bill management practices have constrained accurate revenue assessment and collection, affecting the utility's overall financial and operational performance⁴⁴.

Measures to improve operational performance:

In order to address these inefficiencies, PEDM is implementing a range of reforms primarily under the RDSS scheme including installation of smart meters. As of February 2026, 34,000 smart meters have been installed, 398 sub-station feeder meters and 2,300 DT meters which are currently under installation to identify highly

⁴⁴ <https://mzerc.mizoram.gov.in/uploads/attachments/2026/03/7be5860da7dbbda3560a7e255caff169/ped-to-26-27-khp27mar26-evng-with-sign.pdf>

affected areas for targeted actions⁴⁵. Additionally, the Department is also working toward universal metering, improved energy audits, strengthened revenue collection mechanisms, expanded computerised billing systems and enhanced anti-theft enforcement. These measures are expected to improve billing accuracy, reduce commercial losses, strengthen cash flows and support the utility's long-term operational sustainability.

Power Purchase

Mizoram is heavily dependent on outside-state energy sources to meet its power demand, with allocated shares from Central Generating Stations of NEEPCO, NHPC and NTPC. In 2024-25, the utility purchased 0.95 BU while selling only 0.54 BU within the state, resulting in surplus procurement of around 43%. Of this, it sold 0.18 BU (approximately 19% of total purchases) outside the state, primarily through IEX/trading. This pattern reflects chronic over-procurement relative to domestic demand.

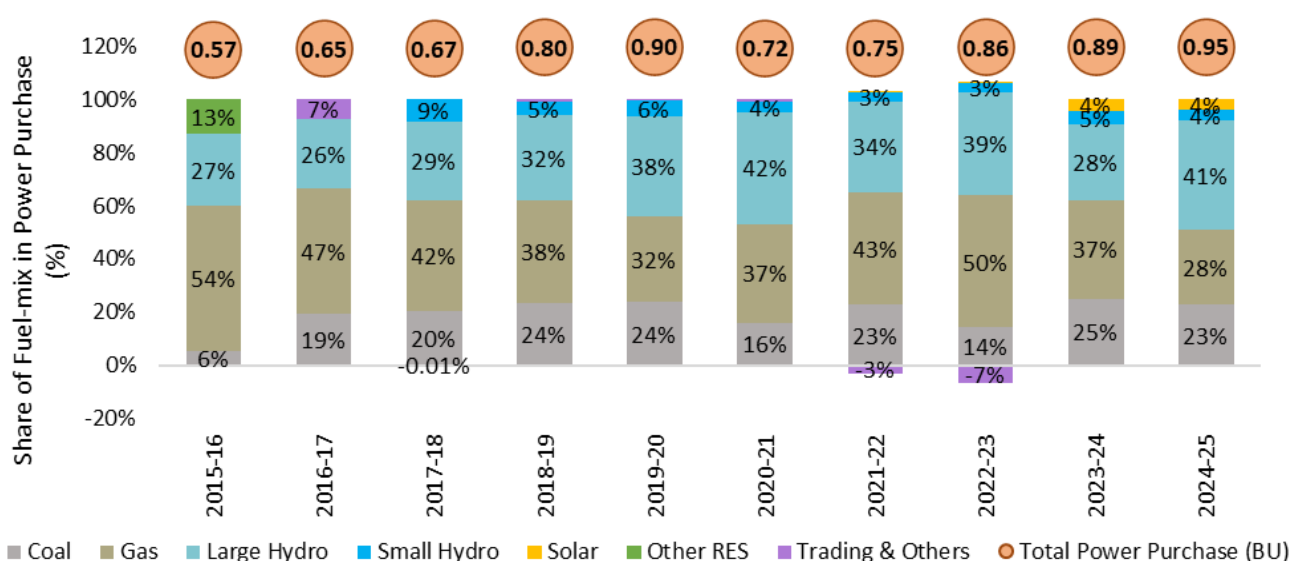


Figure 25: PEDM Power Purchase Trends (%)

Source: ICED

Over the years, thermal power has consistently dominated the mix (typically 50–66%), though the share of gas-based power has declined from 54% in 2015–16 to 28% in 2024–25, while large hydro has risen significantly from 27% to 41% over the past decade. Solar purchases have also begun contributing around 4%. Despite

⁴⁵

<https://mzerc.mizoram.gov.in/uploads/attachments/2026/03/7be5860da7dbbda3560a7e255caff169/ped-to-26-27-khp27mar26-evng-with-sign.pdf>

this diversification, the portfolio remains expensive due to heavy reliance on costlier stations.

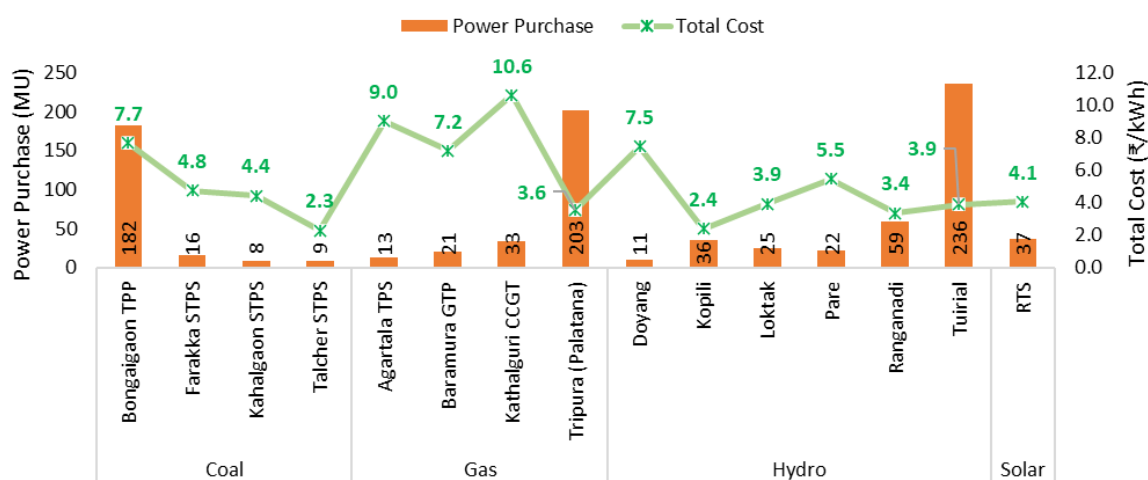


Figure 26: Plant-wise Power Purchase Quantum and Cost in 2024-25

Source: ICED

In 2024-25, among all coal-based purchases, ~85% came from NTPC's Bongaigaon TPS, supplying a large quantum of 182 MU at a high average cost of ₹7.7/kWh. This is markedly higher than cheaper coal stations such as Farakka, Kahalgaon and Talcher STPS (₹2.3-4.8/kWh). Bongaigaon's dominance in both volume and cost significantly inflates the overall power purchase expense, a trend observed consistently in recent years.

Additionally, the utility relies on several high-tariff sources, including gas-based plants priced between ₹7-11/kWh (except Palatana at ₹3.6/kWh). Doyang Hydro, at ₹7.5/kWh, also adds to the high average cost despite contributing only 11 MU. Although these stations contribute lower quantum, they further add to the high average cost of power.

Financial Performance

The DISCOM continues to grapple with high AT&C losses, consistently above 30%, which significantly affect revenue. The consumer base is heavily skewed toward subsidised categories, with domestic consumers accounting for around 60% of retail electricity sales at average rates of ₹5-7/kWh. In contrast, industrial sales remain minimal at just 2-3%, resulting in a structurally weak revenue base that struggles to recover the high cost of power procurement.

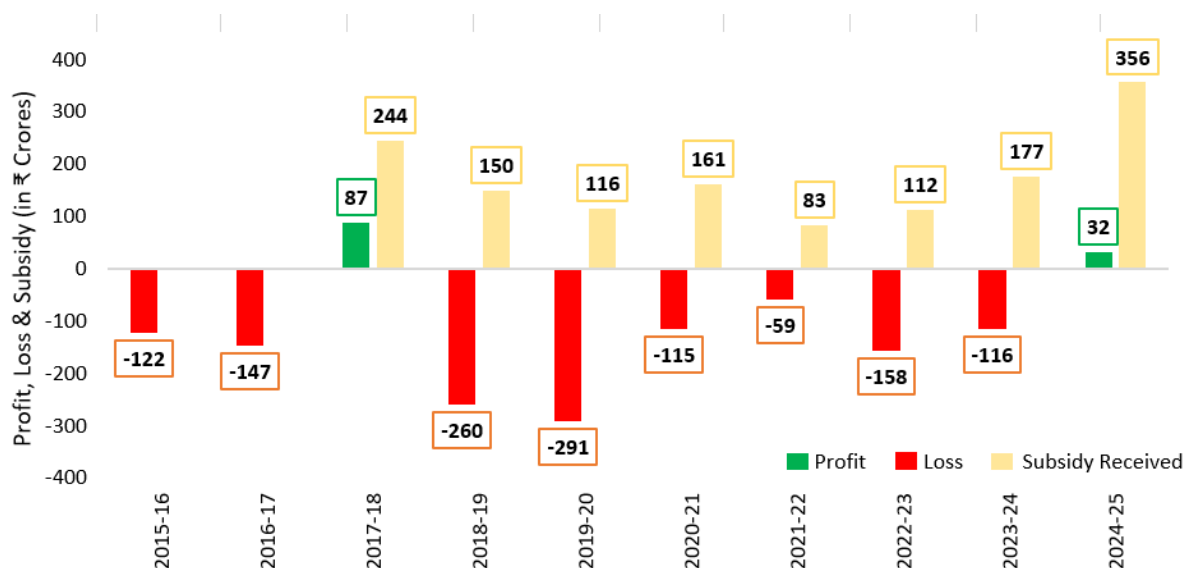


Figure 27: PEDM Profit, Loss and Subsidy Received Trends

Source: ICED

The situation is further compounded by the consistently high share of employee costs (22–23%) and depreciation (5–6%), which together accounted for nearly 28–29% of total expenses over the last five years. The utility reported a profit of ₹32 crore in 2024–25, but this was driven entirely by a government tariff subsidy of ₹356 crore. A similar pattern occurred in 2017–18, when a profit of ₹87 crore was recorded on the back of a ₹244 crore subsidy. In the years between, losses persisted despite subsidy support, peaking at ₹291 crore in 2019–20 and in 2023–24, a subsidy of ₹177 crore was insufficient to prevent a deficit of ₹116 crore.

These trends highlight persistent and widening gaps between the aggregate revenue requirement and the revenue realisable at subsidised tariffs, making the DISCOM's financial sustainability heavily reliant on unpredictable state support rather than operational efficiency.

4.8 Nagaland: Department of Power, Nagaland (DPN)

DPN is responsible for electricity distribution across the state, serving more than 3 lakh consumers, predominantly in the domestic category, spread over difficult and mountainous terrain. Despite relatively low electricity demand, the utility plays a crucial role in ensuring reliable power supply while grappling with several structural challenges, including extensive low-tension (LT) networks, a large number of single-point metered consumers, limited industrial demand and heavy dependence on power procured from outside the state.

These structural challenges have significantly impacted DPN's operational performance. In 2024-25, the utility's actual T&D losses rose to 46%, far exceeding the 33.6% level envisaged under the RDSS framework⁴⁶. Similarly, AT&C losses remained elevated at nearly 49%, driven by low billing efficiency of 54%, despite a relatively high collection efficiency of 95%. The persistence of high losses can be attributed to several factors, including the absence of regular energy audits, electricity theft, meter tampering, obsolete metering infrastructure and the failure to identify and address high-loss pockets⁴⁷.

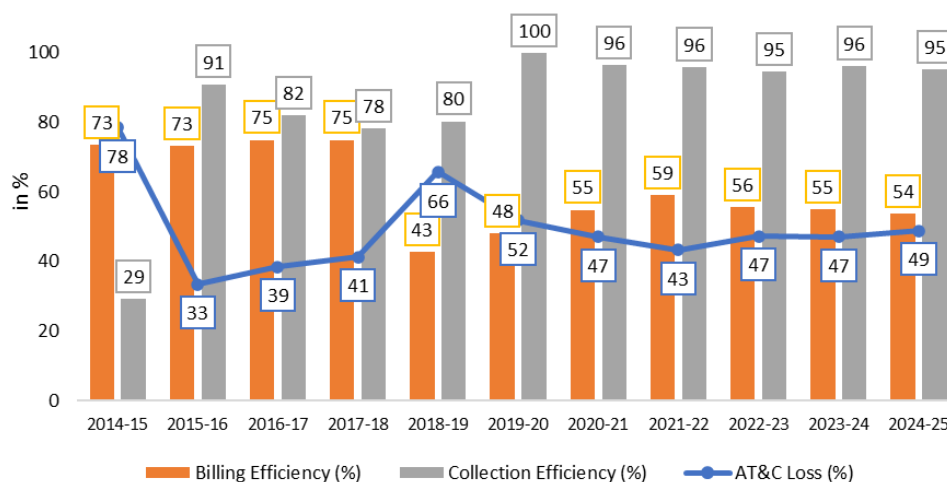


Figure 28: Operational Parameters Trends, DPN (in %)

Source: ICED

To address these challenges, the utility has undertaken several initiatives aimed at improving operational efficiency and modernising the distribution system. Key measures include the gradual transition from conventional meters to smart prepaid meters and the phased elimination of Single Point Metering (SPM). In line with the Additional Conditions of Supply of Electricity to Villages (First Amendment) Rules, 2024, the utility plans to replace existing SPM arrangements with individual smart meters, thereby enhancing energy accounting, billing efficiency and consumer accountability⁴⁸.

Financial Improvement:

Despite persistently high AT&C losses, DPN, reported a standalone profit of ₹56 crore in 2024-25. The true-up tariff orders indicate that the gap between the Average Cost of Supply (ACoS) and the Average Revenue Realised (ARR) is largely bridged through revenue subsidies provided by the Government of Nagaland. Such

⁴⁶ http://www.nerc.org.in/images/doc/TRUE_UP_FY_2022-23_APR_FY_2024-25_.pdf

⁴⁷ http://www.nerc.org.in/images/doc/TRUE_UP_FY_2022-23_APR_FY_2024-25_.pdf

⁴⁸ http://www.nerc.org.in/images/doc/TRUE_UP_FY_2022-23_APR_FY_2024-25_.pdf

support has enabled the utility to maintain profitability despite operational inefficiencies and relatively weak billing performance⁴⁹.

4.9 Sikkim: Energy and Power Department, Government of Sikkim (EPDS)

Sikkim occupies a unique position among the north-eastern states owing to its abundant hydropower resources and its status as a power-surplus state. EPDS serves around 1.4 lakh consumers as of 2024-25, the smallest consumer base in the region. Unlike most north-eastern states where domestic demand dominates, Sikkim's electricity consumption is led by the industrial sector, which accounts for nearly 57% of total sales, followed by the domestic category at 25% and the commercial category at 8%. This consumption pattern reflects the state's hydro-driven industrial activity and relatively modest residential and commercial demand.

Power Purchase Quantum and Cost

EPDS's power procurement portfolio has witnessed a marked transformation over the past decade. The share of large hydro power in the procurement mix declined sharply from 45.3% in 2015-16 to just 6.0% in 2024-25, largely due to the Glacial Lake Outburst Flood⁵⁰ (GLOF) in October 2023, which severely affected several hydropower stations. Key projects, including the 96 MW Dikchu HEP, 510 MW Teesta-V HEP and 1,200 MW Teesta-III HEP, have remained non-operational following the disaster. Consequently, the utility was compelled to rely increasingly on alternative sources to meet demand. In 2024-25, coal-based power became the dominant source of procurement, with its share rising from 31% in the previous year to 55%, while dependence on market purchases also increased from 29% to 39%.

⁴⁹ True up Tariff Orders of Nagaland

⁵⁰ <https://www.sserc.org/pdf/orders/tariff-order-2025-26-final-corrected-1744092574.pdf>

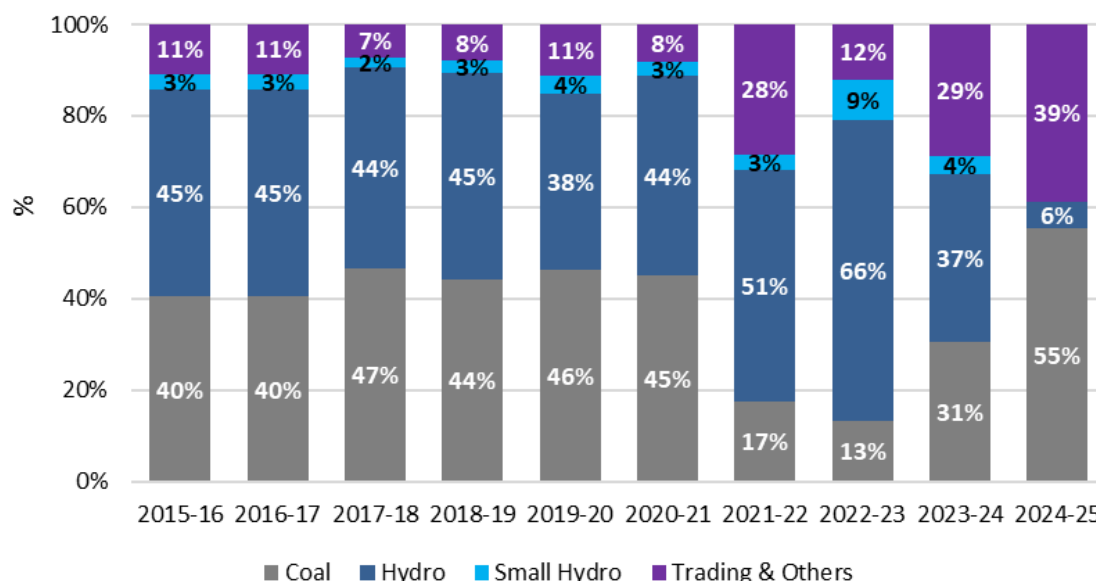


Figure 29: Power Purchase Quantum Share, EPDS (in %)

Source: ICED

Further, the damage to hydro stations reduced the dependency on state's free power and compelled the utility to procure power from the market and other generating sources at relatively higher tariffs, resulting in a significant rise in power purchase costs. However, in 2022-23, the power purchase cost was around 41%, majorly due to maximum power procurement from free power, followed by the power procured from other generating sources and market at reasonable prices in comparison to previous years.

High Employee Cost Share:

Apart from power purchase expenses, employee costs constitute another major component of the DISCOM's overall cost structure. Historically, the utility has incurred relatively high employee costs; in 2022-23, employee expenses accounted for 46% of the total cost, exceeding the share of power purchase cost. In 2024-25, employee expenses accounted for 35% of the total cost, while power purchase costs constituted 52%. The relatively high employee cost can be attributed to the utility's small consumer base, mountainous terrain, low population density and dispersed load centres, which necessitate a sizable field workforce. Moreover, extensive low-tension networks spread across difficult hilly terrain require significant manpower for system maintenance, meter reading, billing and loss management.

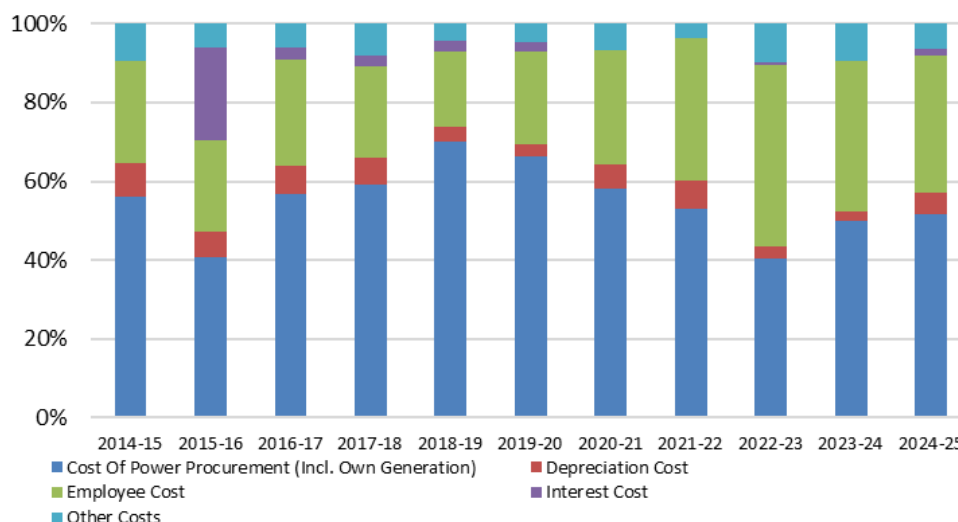


Figure 30: Cost Structure Trends, EPDS (in %)

Source: ICED

Gradual shift in AT&C losses:

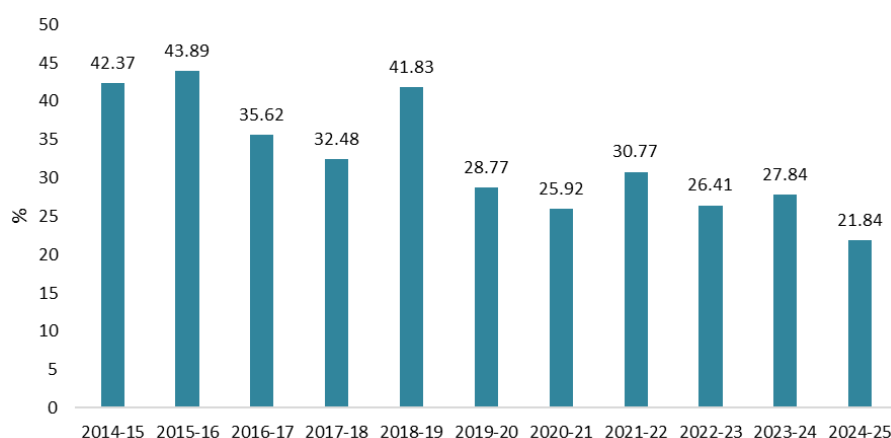


Figure 31: AT&C Losses Trends, EPDS (in %)

Source: ICED

DISCOM has witnessed a gradual improvement in its operational performance over the past decade, as reflected in the steady reduction in AT&C losses. From levels exceeding 42% in 2014-15 and 2015-16, losses declined to below 30% in subsequent years, aided by improvements in metering, billing and collection practices. After fluctuating in the range of 26-31% between 2019-20 and 2023-24, AT&C losses fell to 21.84% in 2024-25, the utility's lowest recorded level.

Financial Position:

EPDS's financial position presents a contrasting picture when viewed with and without cash adjustments. On a standalone basis, the utility reported a profit of ₹76 crore in 2022-23, followed by losses of ₹19 crore and ₹37 crore in 2023-24 and 2024-25, respectively. Incorporating cash adjustments altered the financial outcome

significantly, resulting in a loss of ₹33 crore in 2021-22, followed by profits of ₹25 crore in 2022-23, ₹12 crore in 2023-24 and a substantial ₹257 crore in 2024-25. This divergence indicates that non-operational receipts, grants, previous year expense on power cost and other cash adjustments⁵¹ (payments received from consumers) played a significant role in supporting the utility's finances.

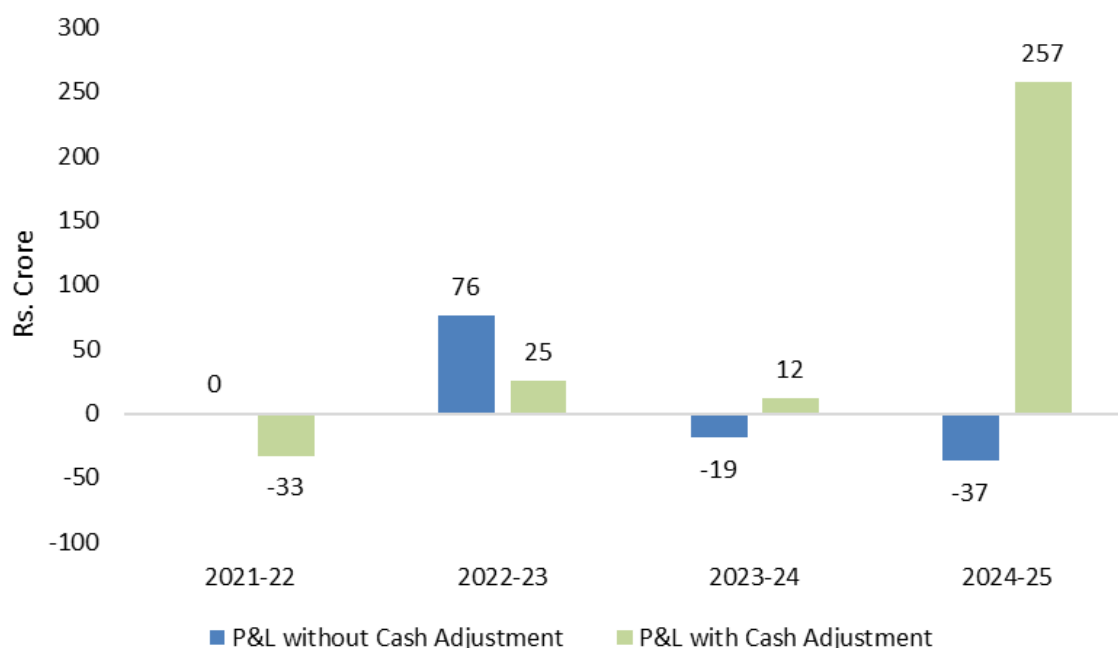


Figure 32: Profit & Loss Trends, EPDS (in ₹ Crore)

Source: ICED & PFC

4.10 Tripura: Tripura State Electricity Corporation Limited (TSECL)

TSECL serves around 11.7 lakh consumers, with domestic consumers accounting for nearly 52% of total electricity sales. The state's electricity supply has traditionally relied on indigenous natural gas resources, with oil and gas-based sources meeting a significant share of the demand. However, the power procurement mix has gradually become more diversified. In 2024-25, the share of oil and gas-based power procurement declined to 77% from 80% in the previous year, accompanied by a notable increase in solar power procurement from 0.22% to 5%, while hydro contributed around 1% of the total power purchased. Dependence on market purchases also moderated, with their share declining from 9% to 7% over the same period. This gradual shift towards cleaner sources is expected to support the DISCOM in meeting its Renewable Purchase Obligation (RPO) targets.

⁵¹

https://www.pfcindia.co.in/ensite/DocumentRepository/ckfinder/files/Gol_Initiatives/Annual_Integrated_Ratings_of_State_DISCOMs/14th_Annual_Integrated%20Rating%20and%20Ranking%20of%20Power%20Distribution_Uilities.pdf

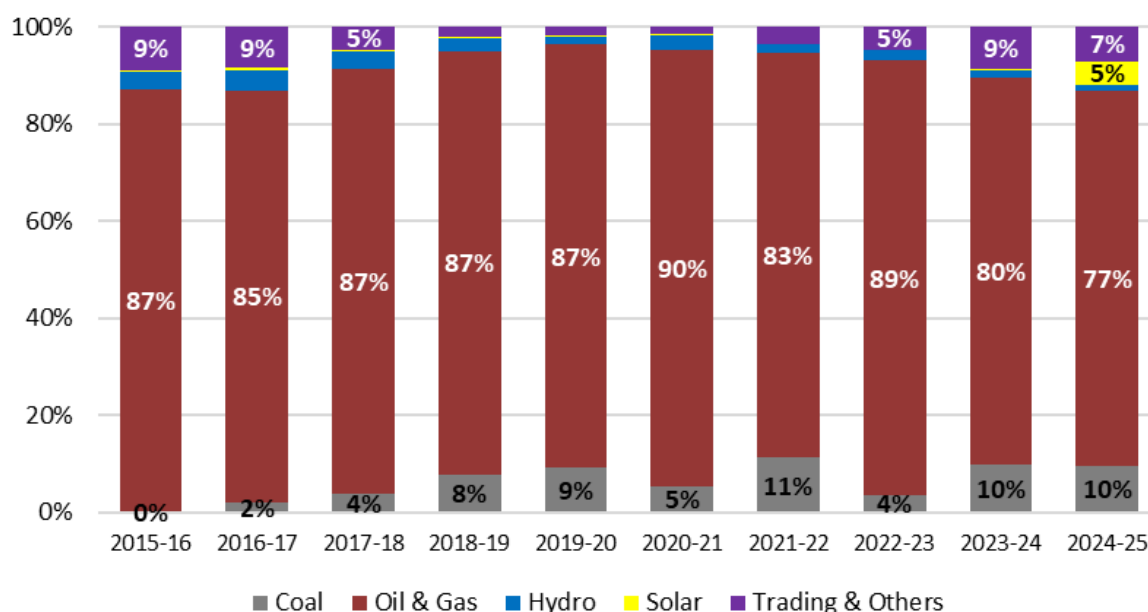


Figure 33: Power Purchase Share across Generating Sources, TSECL (in %)

Source: ICED

Looking ahead, Tripura is pursuing a long-term resource adequacy strategy to ensure reliable power supply through a more balanced and diversified generation mix. By 2031-32, the state envisages a portfolio comprising 508 MW of gas-based capacity, supplemented by 190 MW of hydro, 320 MW of solar, 27 MW of wind and 321 MW of market-based resources⁵². As part of its generation modernisation efforts, the ageing 63 MW open-cycle gas plant at Rokhia is being replaced by a more efficient 120 MW Combined Cycle Gas Turbine (CCGT) unit, scheduled for commissioning in 2027-28. The state has also tied up around 74 MW from the Subansiri Hydro Electric Project, expected to be available from 2026-27 onwards. In parallel, Tripura is accelerating the expansion of its renewable energy portfolio. With solar accounting for about 3.5% of the installed capacity in 2026-27 (39.7 MW), the state aims to scale up solar capacity to nearly 750 MW by 2035-36, supporting both supply diversification and renewable energy obligations.

Operational Performance:

TSECL's AT&C losses stood at consistent high for years, at around 251% to 38% from 2015-16 to 2022-23. However, according to PFC, in 2023-24, it spiked to 69% and again dropped to 29% in 2024-25. Similarly, the collection efficiency stood at only 41% during the same period, as stated in PFC.

⁵² https://cea.nic.in/wp-content/uploads/resource_adequacy_st/2025/12/RA_Report_Tripura_2035_36.pdf

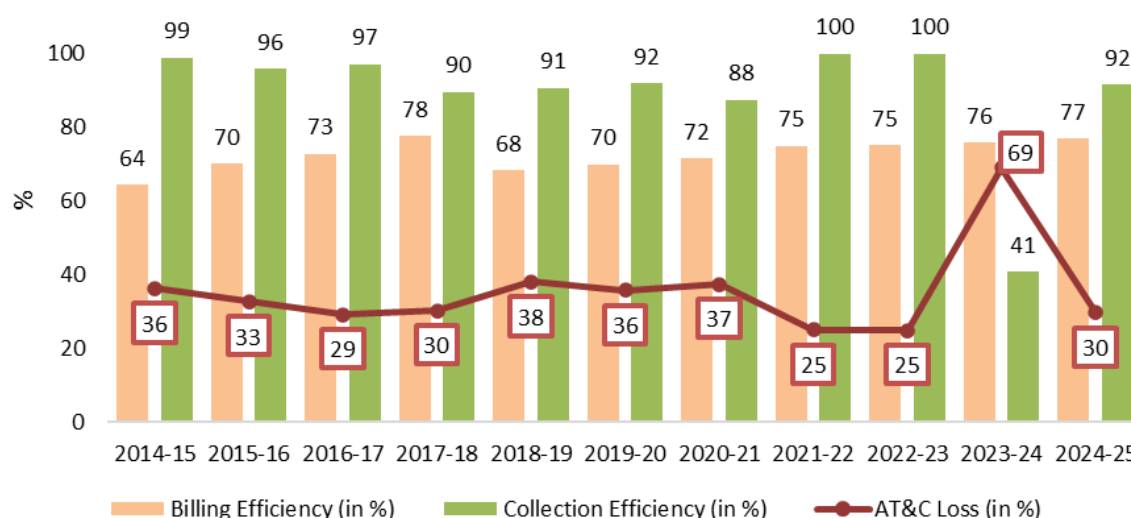


Figure 34: Operational Parameters, TSECL (in %)

Source: PFC

However, this figure differs significantly from that reported in the utility's true-up tariff order⁵³, which stated that AT&C losses at 26.67% and collection efficiency at 102% in 2023–24. This highlights the data inconsistency between PFC and DISCOMS tariff order. If PFC's numbers are correct, TSECL is facing very high AT&C losses and if the DISCOMS numbers are correct, performance looks far better. Such discrepancies make it difficult to accurately assess the true financial and operational health of the utility.

Notwithstanding this data gap, several initiatives undertaken by TSECL have contributed to the reduction in AT&C losses. Under the ADB-funded Tripura Power Distribution Masterplan and the RDSS, the utility carried out consumer and network surveys to identify inaccurate billing, rectify defective meters and minimise manual errors. In addition, TSECL strengthened anti-theft measures, accelerated smart meter deployment and improved revenue realization through targeted door-to-door collection campaigns, resulting in enhanced operational performance⁵⁴.

4.11 West Bengal: West Bengal State Electricity Distribution Company Limited (WBSEDCL)

WBSEDCL is one of the largest power distribution utilities in Eastern India, serving over 2 crore consumers across urban and rural areas — from residential and

⁵³ Tripura Tariff Order 2025–26: <https://terc.tripura.gov.in/tariff-order>

⁵⁴ <https://terc.tripura.gov.in/sites/default/files/documents/TERC%20Tariff%20Order%20for%20FY%202026-27.pdf>

industrial hubs in Kolkata and surrounding districts to villages and agricultural fields spread across all districts of the state.

The company's electricity sales reflect a balanced consumer mix. Domestic consumers account for approximately 39% of sales, while industrial consumers contribute around 33%. The remaining share is distributed among commercial, agricultural and other categories.

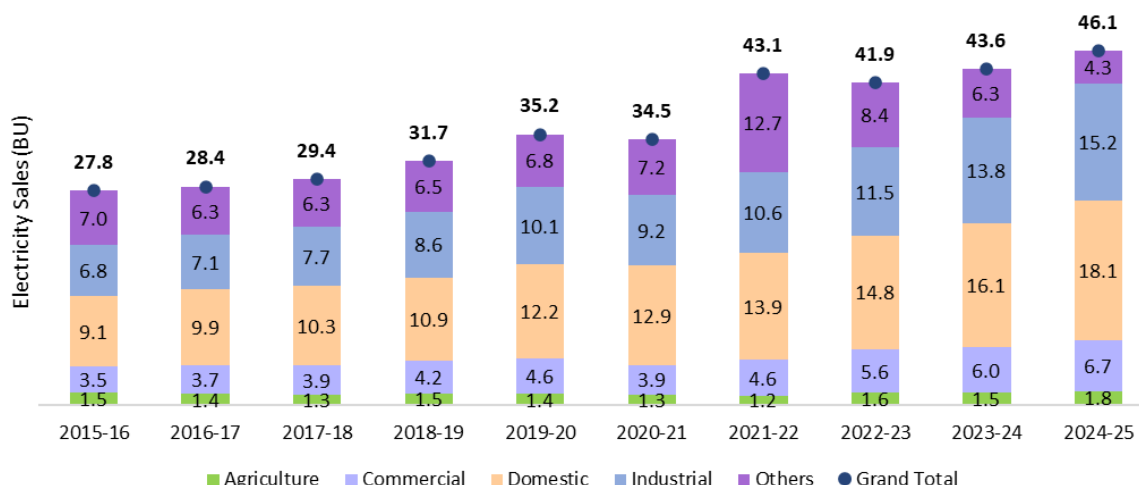


Figure 35 (a): WBSEDCL Electricity Sales (in BU) Trends

Source: ICED

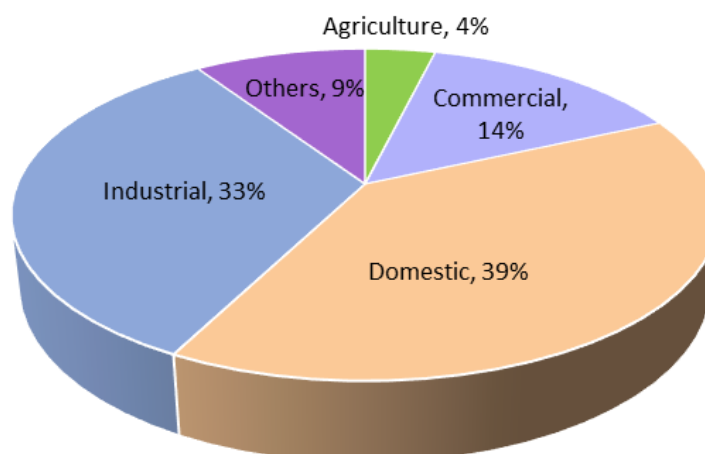


Figure 35 (b) : WBSEDCL Electricity Sales Share for the 2024-25

Source: ICED

Operational Efficiency and Customer Service Improvements

Over the years, WBSEDCL has made notable progress in operational efficiency. The AT&C losses have declined from 35.4% in 2014-15 to 17.2% in 2024-25. Billing efficiency currently stands at 84.62%, though it remains relatively lower in rural

areas. Collection efficiency has improved steadily, supported by a rise in digital bill payments, especially among urban consumers.

The DISCOM has also transformed customer service delivery and network management through extensive IT-based applications, supported by remote call centres and mobile units for fuse call management and line maintenance. Customer-facing offices were modernised, web-based bill payment and new connection facilities were introduced and trained customer care executives were deployed to improve service quality⁵⁵. These measures enabled WBSEDCL to not only reduce AT&C losses significantly but also achieve financial profitability, universal rural electrification, improved reliability indices (SAIDI & SAIFI) and maintain tariffs at reasonable levels.

Financial Performance

On the financial front, WBSEDCL presents a mixed picture. While the company has reported accumulated profits since March 2020, yearly performance has fluctuated. In 2019-20, the DISCOM recorded strong profit⁵⁶, supported by high revenue from power sales along with one-time gain, ₹119 crore from Power Purchase Fund, ₹166 crore from write-back of provisions and ₹70.4 crore from sale of land. These factors collectively contributed around ₹567 crore to the bottom line.

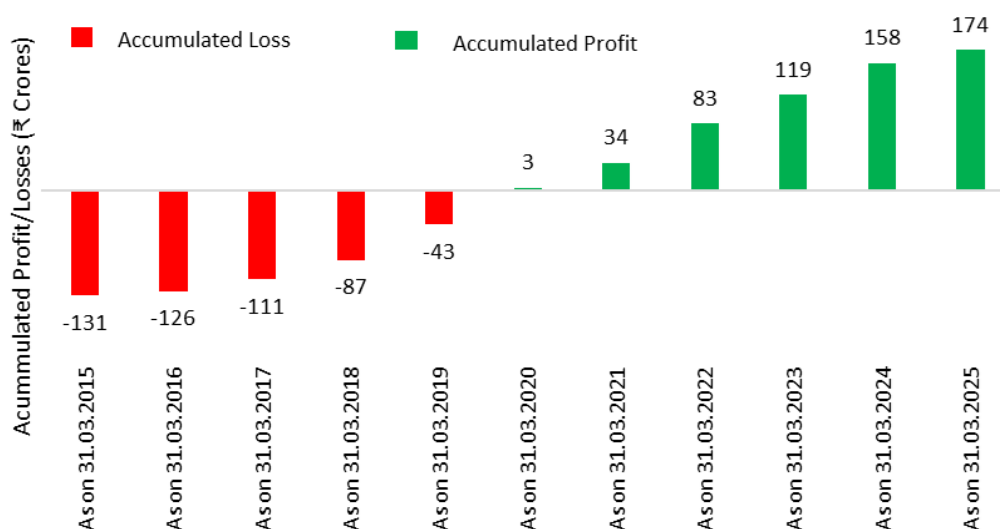


Figure 36: WBSEDCL Accumulated Profit and Loss Trends

Source: ICED

⁵⁵ <https://aida-india.org/wp-content/uploads/2026/01/aida-annual-publication-2025-17-01-2026-final-for-print.pdf>

⁵⁶ https://www.wbsecl.in/irj/go/km/docs/internet/new_website/pdf/Consolidated%20Financial%20Statements%20and%20Notes.pdf

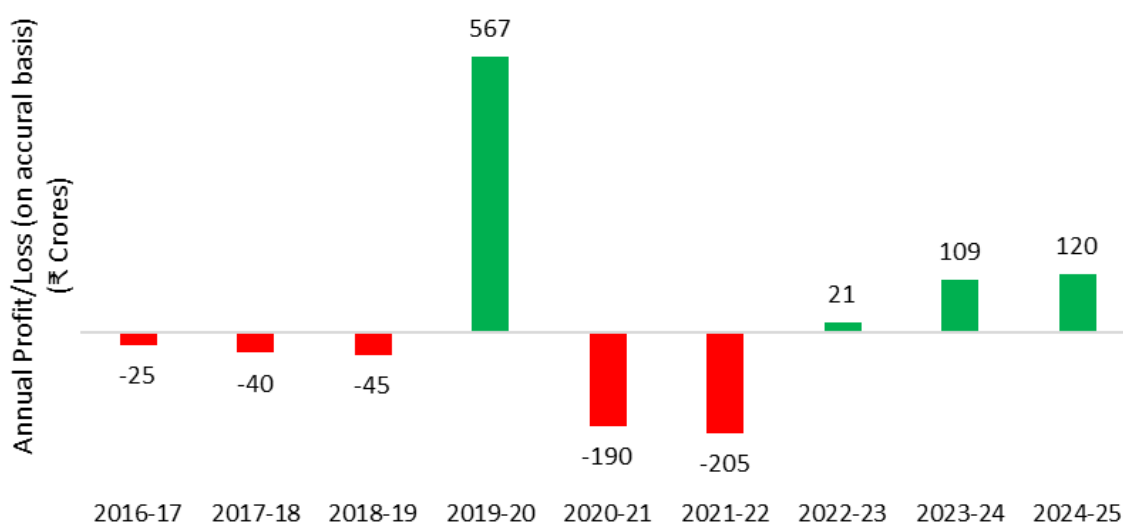


Figure 37: WBSEDCL Annual Profit and Loss Trends

Source: ICED

However, the company incurred net losses in 2020-21 and 2021-22. These losses were primarily due to adverse regulatory adjustments⁵⁷, particularly the substantial negative impact of Annual Performance Review and tariff orders, which significantly exceeded the amounts realisable through tariffs. This reflects the persistent challenge of cost under-recovery and regulatory lag, which has also led to the accumulation of large regulatory assets.

From 2022-23 onwards, WBSEDCL has largely returned to profitability, mainly due to regular revenue grants received from the Government of West Bengal to bridge the revenue gap⁵⁸.

However, this profitability masks deep underlying stress. The company continues to grapple with a massive accumulation of regulatory assets, which stood at ₹20,467 crore as of March 31, 2025. West Bengal ranks third nationally in terms of regulatory assets (contributing nearly 20% of the country's total) and WBSEDCL itself is the second-highest among all power discoms in this regard.

⁵⁷ https://www.wbsedcl.in/irj/go/km/docs/internet/new_website/pdf/NS.pdf

⁵⁸ https://www.wbsedcl.in/irj/go/km/docs/internet/new_website/pdf/6-Standalone%20Financial%20Statements.pdf

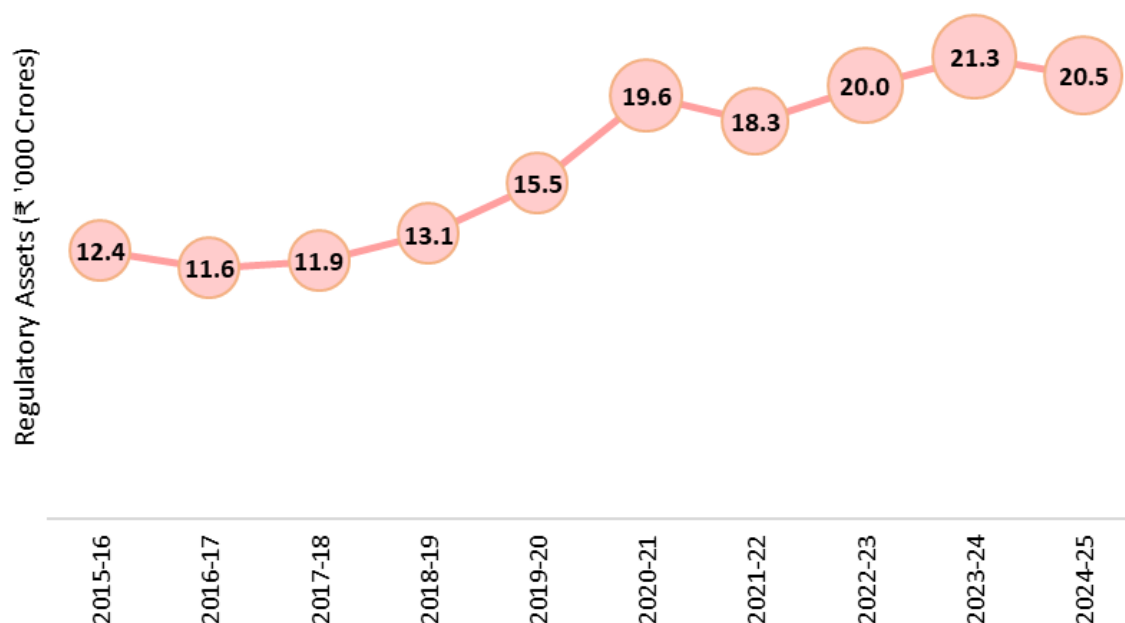


Figure 38: WBSEDCL Regulatory Assets Trends

Source: ICED

This build-up stems primarily from systemic under-recovery of costs. When determining tariffs, the regulator has kept uncontrollable expenditures (such as average power purchase cost, which has increased significantly over the last 8 to 9 years) at lower levels to accommodate admitted regulatory assets. Although the regulatory framework provides a mechanism for recovering power purchase cost variances through Monthly Variable Cost Adjustment, WBSEDCL has not fully exercised this option, leading to further accumulation of regulatory assets⁵⁹.

Despite the large accumulation, WBSEDCL and WBERC have initiated a structured liquidation plan⁶⁰ in line with the Hon'ble Supreme Court's judgment dated August 6, 2025. As of the date of the affidavit (September 2025), WBSEDCL has a balance regulatory asset of ₹35,596 crores, after liquidating ₹6,507 crores during 2024-25 and 2025-26. Complete liquidation by March 31, 2028, with equal annual targets of ₹17,798 crores for 2026-27 and 2027-28. Liquidation is being done along with carrying cost, protecting WBSEDCL's time value of money. WBERC will consider consumer tariff impact while determining tariffs for 2026-27 and 2027-28.

⁵⁹ https://www.wbsedcl.in/irj/go/km/docs/internet/new_website/pdf/6-Standalone%20Financial%20Statements.pdf, Page

⁶⁰ <https://wberc.gov.in/sites/default/files/OP%20No.%201%20of%202025-AffidavitWBERC.pdf>

Adding to the liquidity pressure are outstanding dues from various West Bengal Government departments, parastatals and local bodies⁶¹, which totalled ₹1,258 crore as on March 31, 2025.

To bridge the revenue deficit caused by under-recovery in tariffs, the Government of West Bengal sanctioned ₹3,700 crore as revenue grants. During the year, the company received ₹1,500 crore and a sanction letter for the remaining ₹2,200 crore was obtained. Even after appropriating these grants to reduce the regulatory deferral account, the balance remains alarmingly high at ₹20,467 crore. Independent auditors have described this situation as “quite alarming”⁶².

A substantial portion of pending Annual Performance Review applications relates to fuel and power purchase costs. Additionally, the new Fuel & Power Purchase Adjustment Surcharge³⁷ mechanism introduced under the Electricity (Amendment) Rules, 2022, has not yet been directed by WBERC for implementation, limiting another potential route for cost recovery.

Additionally, timely finalisation of the pending 2023-24 true-up order is critical for the roadmap.

Several other issues compound the financial strain:

- **Delayed Capitalisation and CWIP Issues:** During the year, Capital Work-in-Progress (CWIP) amounting to ₹4,485.69 crore was capitalised to property, plant and equipment. However, there are persistent delays in updating the capitalisation date in the SAP system compared to the actual date of installation or commissioning. Although the company has developed system controls to prevent further delays, these lags continue to affect the accuracy of depreciation calculations⁶³.
- **Inventory and Reconciliation Issues:** Inventory lying with third parties stands at ₹283.25 crore. Of this, ₹80.80 crore has remained unadjusted for more than one year and balance confirmations have not been obtained from the concerned parties¹⁷.
- **Default in Debt Repayment:** The company defaulted on payments against Government Guaranteed Pension Trust Bonds 2016 to the extent of ₹473

⁶¹ https://www.wbsecl.in/irj/go/km/docs/internet/new_website/pdf/6-Standalone%20Financial%20Statements.pdf, Page 68

⁶² https://www.wbsecl.in/irj/go/km/docs/internet/new_website/pdf/6-Standalone%20Financial%20Statements.pdf, Page 2

⁶³ https://www.wbsecl.in/irj/go/km/docs/internet/new_website/pdf/6-Standalone%20Financial%20Statements.pdf, Page 23

crore, which were due by March 31, 2022. Due to acute fund shortages, timely repayment of these 100% state government-guaranteed bonds could not be made. However, WBSEDCL has since initiated systematic repayments starting from 2023-24. In 2024-25 alone, it repaid ₹306 crore of these bonds⁶⁴.

- **Mismatch in Fund Utilisation:** There has been a noticeable mismatch in the deployment of funds. Long-term borrowings amounting to ₹112 crores (intended for capital expenditure) were used for working capital purposes. Conversely, working capital borrowings of ₹1,420.71 crores were utilised for capital expenditure. Additionally, unutilised State Government funds for long-term projects were deposited in the cash credit account to reduce interest burden instead of being held in current accounts or fixed deposits. In some cases, short-term loans were raised against the lien of fixed deposits (meant for projects) and parked in the cash credit account. While the company states that project funds are generally used as per guidelines, these practices have impacted overall fund outflow and financial discipline.

The company also reported five cases of fraud or misappropriation by employees and officers involving a total amount of ₹73.01 lakhs. Independent auditors have highlighted several weaknesses in internal financial controls that require urgent strengthening. Key areas include: review of security deposits from consumers, methodology for determining Expected Credit Loss, documentation for emergency material issues, physical verification of Property, Plant & Equipment and balance reconciliation with vendors and customers.

The auditors have recommended further strengthening of the audit process, particularly to include power procurement areas and better identification of operational gaps.

⁶⁴ https://www.wbsecl.in/irj/go/km/docs/internet/new_website/pdf/6-Standalone%20Financial%20Statements.pdf, Page 31

