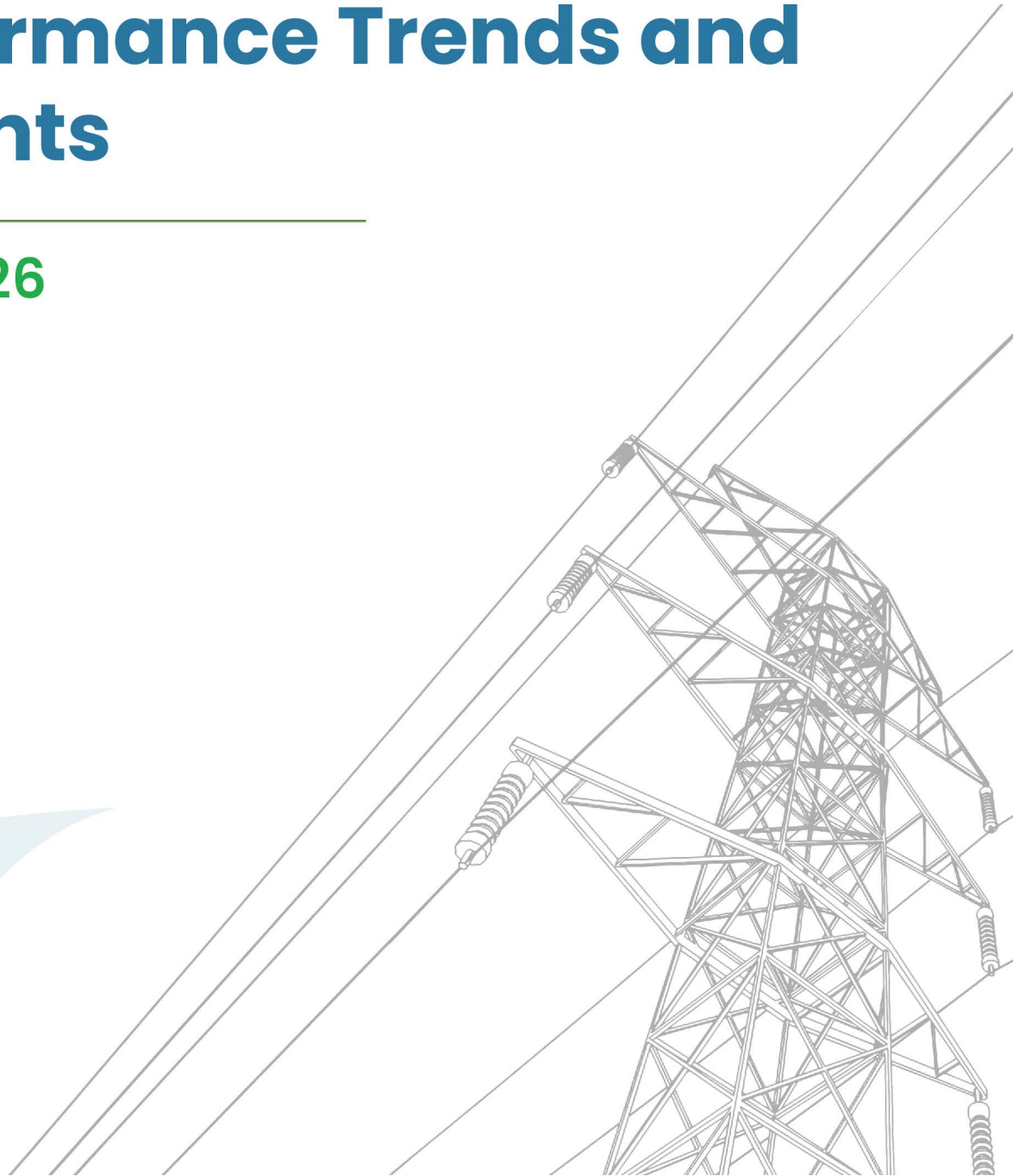




A Study of **Western Region Discoms: Performance Trends and Insights**

May 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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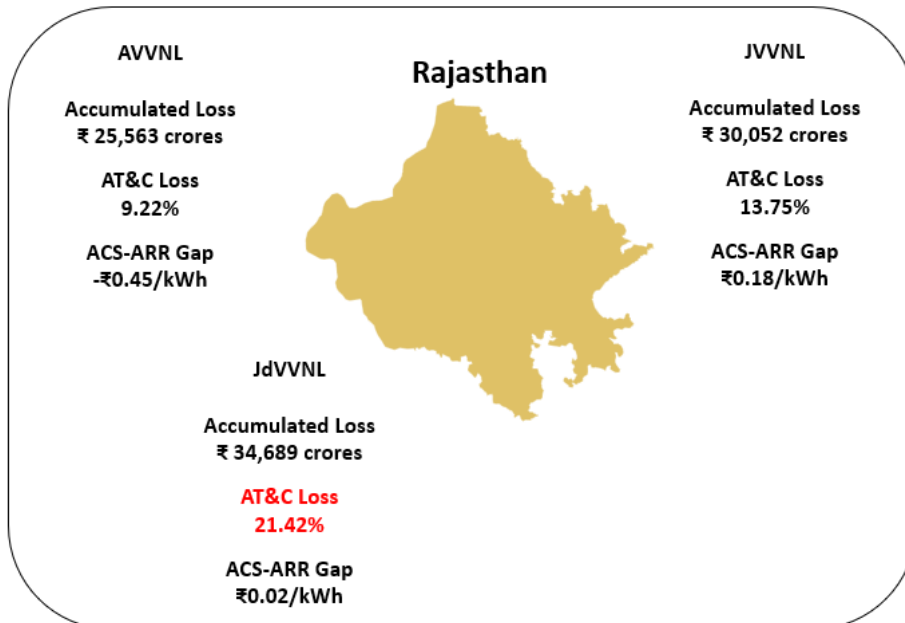
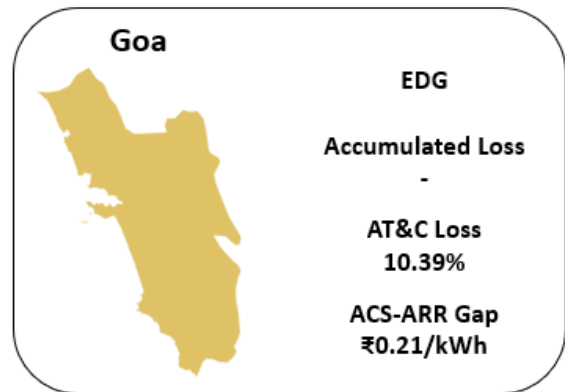
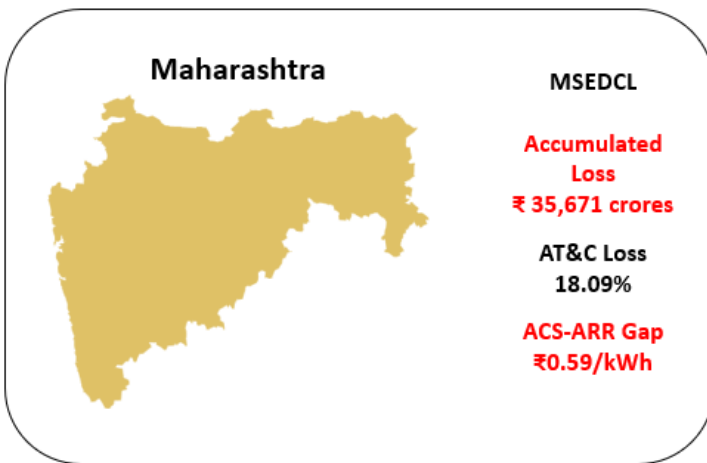
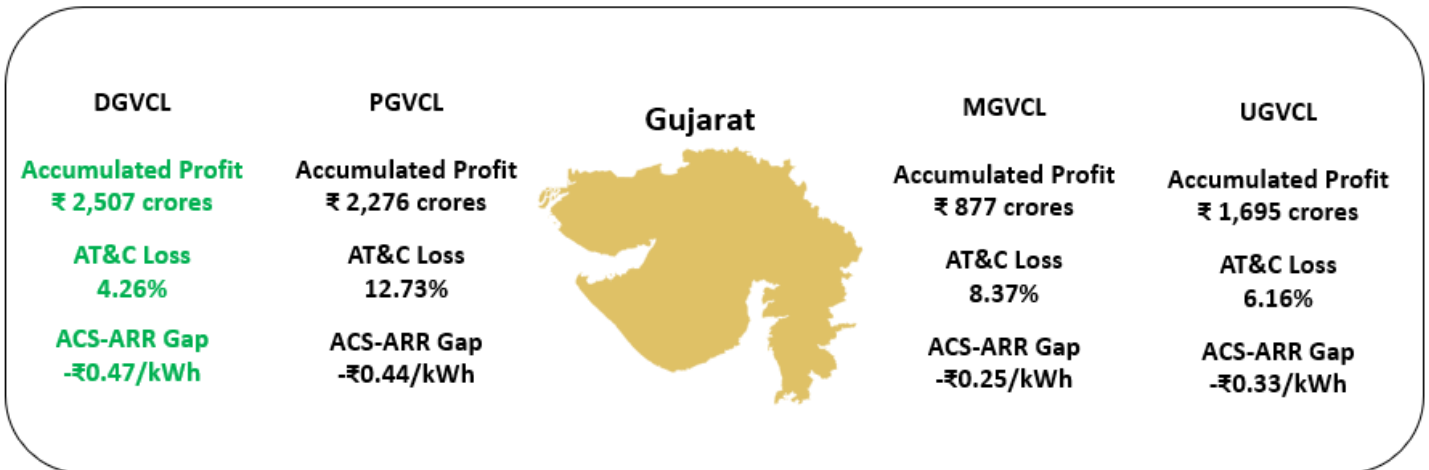
A STUDY OF WESTERN REGION DISCOMS: PERFORMANCE TRENDS AND INSIGHTS

Power distribution in Western India operates within a diverse and dynamic landscape. The region encompasses some of India's most industrialised states alongside vast agrarian hinterlands and coastal zones, each presenting its own set of infrastructural and operational demands. Utilities are balancing twin pressures of serving rapidly growing urban and industrial loads while extending reliable access to remote and underserved rural communities.

This primer on distribution utilities in West India provides a comprehensive and structured overview of the power distribution sector across Western Region States (Gujarat, Maharashtra, Rajasthan and Goa).

Designed as a ready reference, this primer 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 latest year, 2024-25.

ACS-ARR gap is on the Input Energy basis.

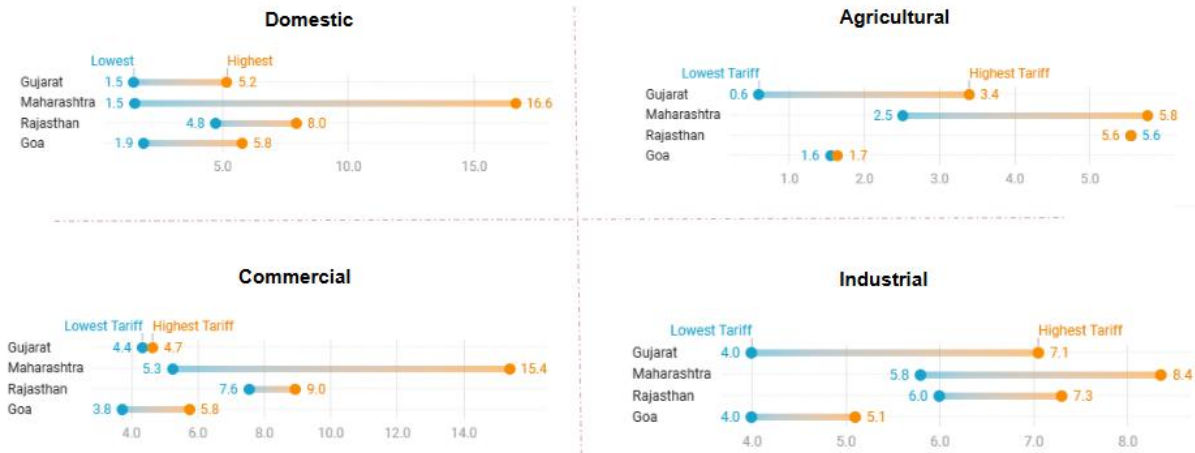
1. A QUICK GLANCE AT CONSUMER DETAILS

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

Consumer Category	Gujarat	Maharashtra	Rajasthan	Goa
Agriculture	22,548	34,823	35,803	44
Commercial	2,945	14,859	6,233	736
Domestic	18,637	34,536	18,261	1,481
Industrial	78,272	53,407	25,473	2,432
Others	2,973	7,864	4,329	168
Total	1,25,374	1,45,489	90,099	4,861
Dominant Category	Industrial (63%)	Industrial (37%)	Agricultural (40%)	Industrial (50%)

Source: India Climate and Energy Dashboard (ICED)

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



Source: ICED

- Maharashtra shows the widest spread across all the consumer categories, reflecting substantial variation across domestic & commercial consumer categories and has the maximum tariff across the states.
- In Maharashtra, MSEDCL charges domestic consumers ₹10.3 per unit for the 101–200 units slab, which rises sharply from ₹4.7 per unit for the 0–100 units slab. And the maximum tariff goes up to ₹16.6 per unit for consumption of 501 units and above.

2. PERFORMANCE REVIEW: A SPOTLIGHT ON DISCOMS

OPERATIONAL AND FINANCIAL HEALTH

2.1. Operational Performance for the year 2024-25

Parameters	Gujarat	Maharashtra	Rajasthan	Goa
AT&C Loss* (in %)	8.25	17.69	15.18	10.39
Billing Efficiency (in %)	91.90	84.56	85.70	92.25
Collection Efficiency (in %)	99.84	97.34	98.96	97.14

Source: ICED.

2.2. Financial Health for the year 2024-25

Parameters	Gujarat	Maharashtra	Rajasthan	Goa
Accumulated Profit/(Loss) [₹ Crores]	11,247	(34,426)	(90,303)	-
Profit/(Loss)* [₹ Crores]	3,870	(7,281)	510	(119)
Total Outstanding Debt [₹ Crores]	3,820	94,477	98,488	-
Regulatory Assets [₹ Crores]	-	-	47,494	-
Average Cost of Supply (ACoS) [₹/kWh]	6.24	8.08	6.56	5.62
Average Revenue Realised (ARR) [₹/kWh]	6.64	7.68	6.61	5.41
ACoS-ARR Gap# [₹/kWh]	-0.40	0.40	-0.05	0.21

Source: ICED

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

#The ACS-ARR Gap is based on the input energy.

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

State	DISCOM	2020-21	2021-22	2022-23	2023-24	2024-25
Gujarat	Dakshin Gujarat Vij Company Limited	A+	A+	A+	A+	A+
	Madhya Gujarat Vij Company Limited	A+	A+	A+	A+	A+
	Paschim Gujarat Vij Company Limited	A+	A+	A+	A+	A+
	Uttar Gujarat Vij Company Limited	A+	A+	A+	A+	A+
	Torrent Power Limited – Ahmedabad	A+		A+		A+
	Torrent Power Limited – Surat	A+		A+		A+
Maharashtra	Adani Electricity Mumbai Limited	A+	A+	A+	A+	A+
	Brihanmumbai Electric Supply and Transport	A	C	B-	B	A+
	Maharashtra State Electricity Distribution Company Limited	C-	B	C	C-	C
	Tata Power Mumbai Limited	A+	A+			
Rajasthan	Ajmer Vidyut Vitran Nigam Limited	C	B	B	B	B-
	Jodhpur Vidyut Vitran Nigam Limited	C-	C	B-	B-	B
	Jaipur Vidyut Vitran Nigam Limited	C	C-	B	B-	B-
Goa	Electricity Department of Goa	B	B-	B	A	A

N.A. C- C B- B A A+

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

Western-region DISCOMs exhibit relatively strong but uneven performance:

- Gujarat** DISCOMs have consistently remained high performers, maintaining an **A+** rating over the years with strong operational and financial performance. The state reported accumulated profits of ₹11,124 crore (as on March 2025) and achieved low AT&C losses of 8.25%, reflecting sustained efficiency and financial discipline.
- Maharashtra’s state utility **MSEDCL** received a low “C-” rating in 2023-24 and “C” in 2024-25 primarily due to persistently high AT&C losses, lower billing and collection efficiency and a growing backlog of unpaid dues. These factors have significantly raised the company’s working capital requirement, forcing it to borrow heavily and incur high interest costs. Additionally, the adverse opinion of the statutory auditor, particularly regarding poor asset records, delayed capitalisation and weak internal controls, has further affected MSEDCL’s rating.
- Rajasthan** DISCOMs have shown gradual improvement, moving into the **B-/B** category; however, performance remains constrained by the state’s agriculture-dominated consumer mix. The utilities face persistent operational and financial challenges, including high agricultural load, inadequate metering and collection efficiency and elevated AT&C losses. Their performance is further impacted by a significant reliance on regulatory assets, grants, subsidies and government loans to

bridge revenue gaps. As of March 2025, the state reported accumulated losses of ₹90,303 crore.

- **Goa** shows a continuous improvement in ratings from **B- in 2021-22** to **A in 2024-25**, reflecting improvement in its operational efficiency after migrating to a SAP-based billing system. This resolved earlier data discrepancies (like kVAh vs. kWh reporting for HT sales) and ensured almost all power sold was accurately billed, drastically cutting commercial losses.

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

4.1. GUJARAT: Dakshin Gujarat Vij Company Limited (DGVCL), Madhya Gujarat Vij Company Limited (MGVCL), Paschim Gujarat Vij Company Limited (PGVCL) and Uttar Gujarat Vij Company Limited (UGVCL)

Gujarat DISCOMs have set themselves apart from their peers through consistently strong performance. Previously characterized by weak service quality and financial stress, the Gujarat Electricity Board (GEB) underwent a significant transformation driven by sustained efforts to improve operational and financial efficiency and the implementation of wide-ranging power sector reforms. A key differentiator in this journey was Gujarat’s first-mover approach in rolling out initiatives such as the **Jyoti Gram Yojana (JGY)**, which ensured uninterrupted electricity supply to villages and laid the foundation for long-term improvements in the distribution sector performance. The feeder separation component of JGY delivered such strong results that it was subsequently incorporated into the Deen Dayal Upadhyay Gram Jyoti Yojana, **DDUGJY** (the successor to the Rajiv Gandhi Grameen Vidyutikaran Yojana).

Gujarat DISCOMs (DGVCL, UGVCL, MGVCL, PGVCL) have consistently remained high performers, maintaining an A+ rating over the years. This strong performance is driven by low AT&C losses, recorded at **4.26% (DGVCL), 6.16% (UGVCL), 8.37% (MGVCL) and 12.73% (PGVCL) in 2024-25.**

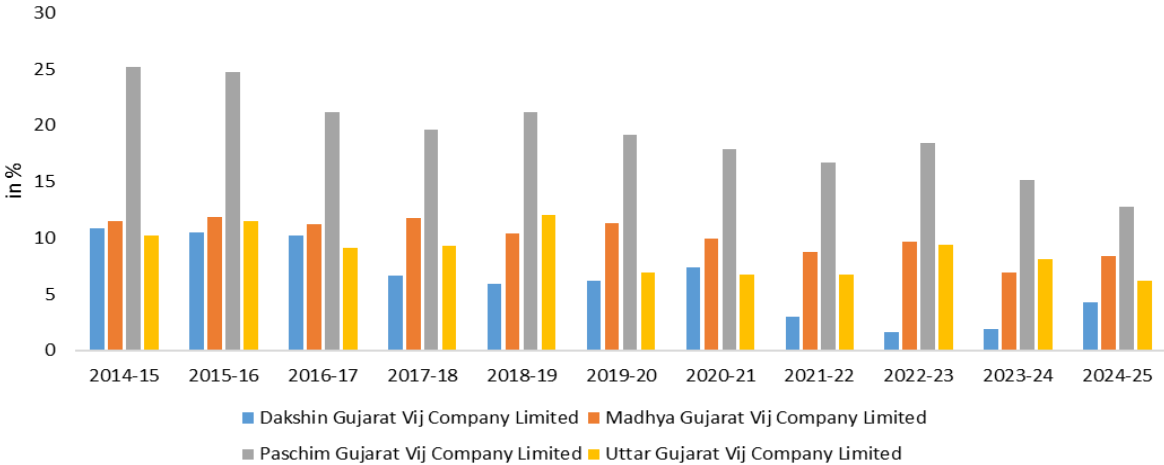


Figure 1: Gujarat DISCOMs AT&C Loss Trends (in %)

Source: ICED

Building on their strong operational performance, Gujarat DISCOMs have also delivered robust financial results, with all state utilities reporting profits in 2024-25 – **DGVCL at ₹1,260 crore, PGVCL at ₹1,264 crore, MGVCL at ₹101 crore and UGVCL at ₹685 crore**. In addition to strong profitability, Gujarat DISCOMs reported the highest accumulated profits, underscoring sustained financial strength. As on March 2025, DGVCL has the highest accumulated profit of ₹ 2,507 crore, followed by PGVCL at ₹ 2,276 crore, UGVCL at ₹ 1,695 crore and MGVCL at ₹ 877 crore.

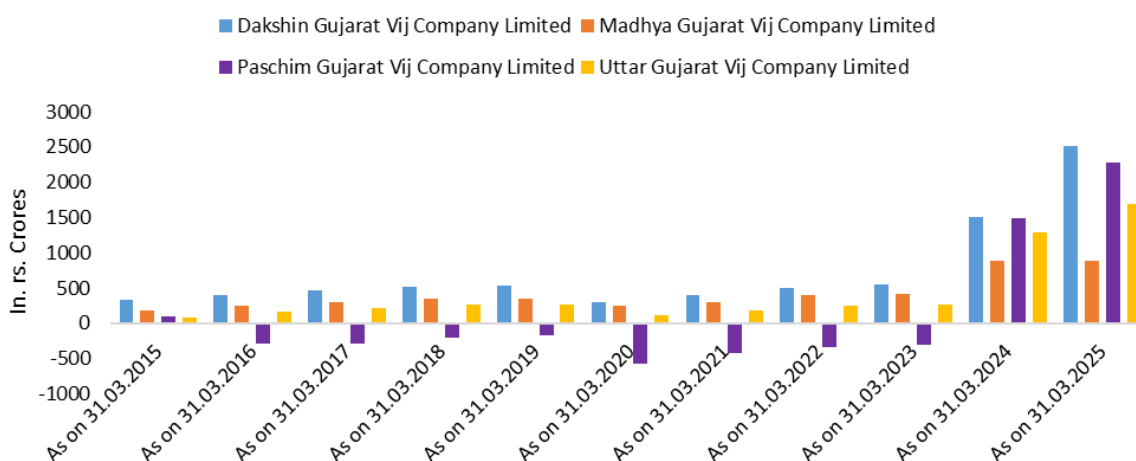


Figure 2: Accumulated Loss/Profit Trends (in ₹ crore)

Source: ICED

Moreover, Gujarat DISCOMs leveraged the Uday Scheme (2015-2020) to improve the operational efficiency¹, resulting in better financial management. Timely subsidy disbursement by the state government, disciplined cost control and efficient power procurement practices have also contributed to maintaining a healthy financial position and minimising revenue gaps

Further, Gujarat DISCOMs have undertaken several initiatives to sustain and strengthen their consistent performance:

- **Data-led Network Planning:** Through platforms such as Akshay Urja Setu and Urja Samvardhan, Gujarat has institutionalized end-to-end data integration across generation, transmission and distribution.
- **Financial Discipline with Public Value Creation:** The only state among Western Region State/DISCOMs which have strong operational and financial performance.
- **Robust Distribution Infrastructure:** Gujarat has embarked on an ambitious plan to underground a significant portion of the distribution network over the next five years, for providing reliable and resilient, safe, prepared for climate and disasters, quality of supply to consumers in next five years.
- **Using Data as a Strategic Asset for better resource planning.**

¹ https://www.nipfp.org.in/media/medialibrary/2017/08/Pages_from_Seminar_papers-2.pdf

- **KHUSHY (Kisan Heet Urja Shakti Yojana):** Deployment of small-capacity transformers to provide individual agricultural connections, contributing to lower technical and commercial losses
- **Metering, Billing and Vigilance Reforms:** 100 percent spot billing, widespread smart metering, active vigilance cells and the e-Vidyut Seva platform for payments, complaints, connections and usage tracking helped reduce losses and curb power theft.

4.2. MAHARASHTRA: Maharashtra State Electricity Distribution Company Limited (MSEDCL)

MSEDCL is one of India's largest power distribution utilities, serving over 2.8 crore consumers across Maharashtra. It has the highest electricity sales in the agricultural and industrial sectors among all DISCOMs in the country. With over 43 lakh agricultural consumers accounting for 27% of the company's electricity sales, MSEDCL launched the **Mukhyamantri Saur Krushi Vahini Yojana (MSKVY)** to provide reliable daytime solar power to farmers. Under this ambitious program, the utility has achieved remarkable progress, commissioning 2,909 MW of decentralised solar capacity², solarising 1,985 agricultural feeders across 537 substations, benefiting nearly 7.75 lakh farmers by shifting subsidised night-time agricultural load to daytime solar supply. The scheme will also result in an annual saving of ₹10,000 crore in power purchase by MSEDCL and an annual burden reduction of ₹13,500 crore in cross-subsidies³.

For years, MSEDCL has made efforts to reduce its AT&C losses, the gap between electricity supplied and revenue collected. It has launched smart meter projects, framed a plan to separate agricultural feeders and signed up for the central government's Revamped Distribution Sector Scheme (RDSS). However, the actual loss number remains stubbornly high.

²<https://aida-india.org/wp-content/uploads/2026/01/aida-annual-publication-2025-17-01-2026-final-for-print.pdf>

³<https://www.mahadiscom.in/en/awards/#:~:text=Chief%20Minister%20Ma.,agricultural%20land%20through%20solar%20power.>

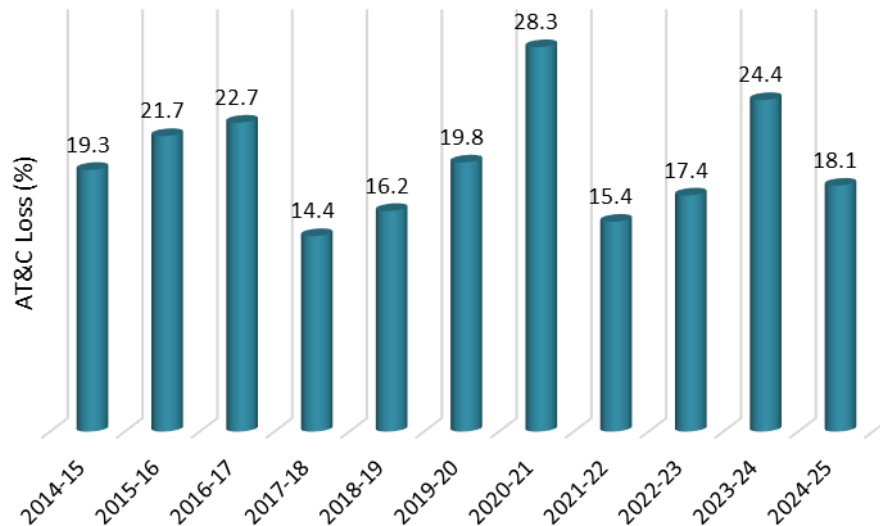


Figure 3: MSEDCL AT&C loss trends (in %)

Source: ICED

The state electricity regulatory commission found that MSEDCL had significantly overstated agricultural power consumption by not following the approved methodology for estimating agricultural sales and distribution losses⁴. While the DISCOM reported losses of around 16–18%, the regulator’s assessment placed actual losses at 22.47% in 2022–23 and 22.04% in 2023–24. Several reasons contributed to this, including the release of over 1.6 lakh new unmetered agricultural connections, despite a ban being in place since 2006. Money spent on repairing the network was far below what was required – only 14% of maintenance spending, against a mandatory⁵ 20%. And the pace at which the company was reducing losses was far too slow, given the scale of the problem.

These high losses directly impacted MSEDCL's finances. With most agricultural consumers unmetered, bills are often not generated and even when they are, low tariffs and free power schemes reduce incentives to pay. This has led to a massive pile-up of unpaid dues, exceeding ₹60,000 crore.

⁴Page 51, https://www.mahadiscom.in/consumer/wp-content/uploads/2025/08/MSEDCL-MYT-Order_Case_no_217-of-2024.pdf

⁵ Page 195, Ibis 5

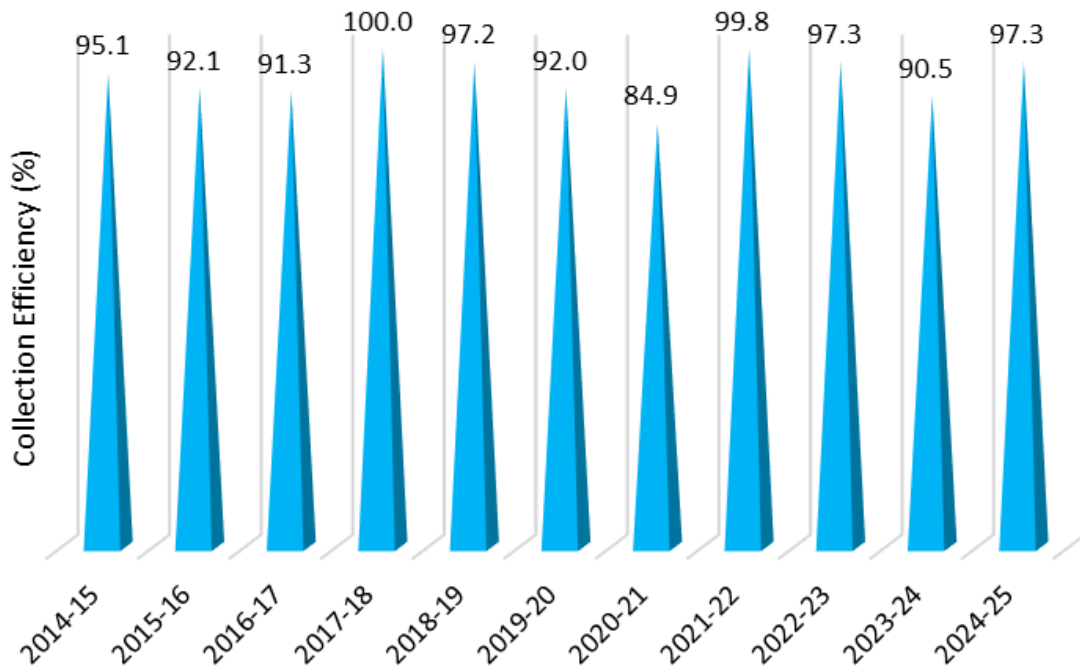


Figure 4: MSEDCL Collection Efficiency trends (in %)

Source: ICED

Mounting arrears have strained cash flows, limiting MSEDCL’s ability to pay power suppliers on time. To maintain supply, it relied on expensive short-term loans, pushing annual interest payments above ₹5,452 crore in 2023–24. Collection efficiency fell sharply from 97% in 2022–23 to 90% in 2023–24. By 2024–25, total receivable were projected at ₹1,01,882 crore – nearly 77% of its entire annual revenue (ARR). The regulator described this situation as "alarming"⁶.

Financial Losses

MSEDCL’s financial losses stem from high operational inefficiencies, and poor financial management.

Severe Cash Flow Crisis Unpaid dues from agricultural consumers crossed ₹60,000 crore. With very little cash coming in, MSEDCL struggled to pay its power suppliers on time and relied on expensive short-term loans to sustain operations, resulting in interest costs of over ₹5,452 crore in 2023–24 alone.

Poor Collection Efficiency: Collection efficiency fell sharply from 97% in 2022–23 to 90% in 2023–24. By 2024–25, total receivables had crossed ₹1,01,000 crore.

Financial Mismanagement: Auditors highlighted serious concerns:

- No physical verification of Property, Plant and Equipment (PPE) has been conducted, raising doubts about the accuracy of asset records.

⁶ Page 304, Ibis 5

- Assets are not capitalised on time, leading to errors in depreciation, interest and return on-equity calculations.
- Weak internal financial controls have persisted since 2015-16, increasing the risk of fraud and revenue leakage.
- *Despite spending Rs. 200-300 crore on an ERP system, critical billing and collection functions remained outside its scope, leading to massive write-offs⁷.
- *MSEDCL maintained excess current account balances of over Rs. 2,100 crore while simultaneously drawing on high-interest overdraft facilities, a basic and avoidable financial inefficiency⁷.

Resource Adequacy

MSEDCL's power procurement and resource adequacy plans for five years (2025-26 to 2029-30) reveals notable shortcomings, including overestimated demand, inefficient scheduling, and flawed cost assumptions⁸.

Excess Contracted Capacity and Surplus Power: The plan projects a surplus of 31% in 2025-26, rising to 71% by 2029-30, indicating substantial over-contracting. This translates into a surplus of 1,16,794 MU, of which only 66,678 MU is planned for trade, leaving nearly 50,000 MU unaccounted for.

Suboptimal Generation Mix and Dispatch: A large surplus during solar hours is planned to be sold at low rates (~₹3/unit), while expensive short-term power is procured during evening peaks. This represents an inefficient and costly arbitrage. No new wind capacity addition was planned despite a shortfall in wind Renewable Purchase Obligation (RPO), which could have helped meet evening demand more cost-effectively. The plan caused thermal plants to operate at technical minimum or be backed down, leading to increase per-unit fixed costs.

Flawed Planning Assumptions: MSEDCL used unrealistic assumptions, such as assigning almost zero capacity credit to new solar projects and excluded upcoming wind power projects from its calculations. Overestimated solar generation by assuming a higher capacity utilisation factor than mentioned in contracts. There were also major inconsistencies in sales figures, costs and loss estimates.

Lack of Storage Planning: The state electricity regulatory commission observed that MSEDCL did not adequately plan for energy storage systems (like batteries or pumped storage) to

⁷ Page 101, https://www.mahadiscom.in/consumer/wp-content/uploads/2025/08/MSEDCL-MYT-Order_Case_no_217-of-2024.pdf

* The comment was made by the statutory auditors.

⁸ https://www.mahadiscom.in/consumer/wp-content/uploads/2025/08/MSEDCL-MYT-Order_Case_no_217-of-2024.pdf

store surplus daytime solar power for use during peak evening hours, instead relying on costly short-term purchases.

Measures initiated by MSEDCL to address its operational and financial challenges

Smart Metering Push: The company is rolling out prepaid smart meters across its consumer base as mandated by the regulator. This large-scale exercise is expected to improve energy accounting, reduce commercial losses and resolve disputes over agricultural consumption. The rollout is supported by central funding under the RDSS scheme.

Time-of-Day (ToD) Tariff Reform: MSEDCL has proposed a revised ToD tariff to shift consumption to daytime solar hours through rebates and apply higher charges during evening peak hours. The aim is to reduce costly arbitrage between cheap solar power and expensive peak-hour purchases.

Smarter Power Procurement: The utility is moving towards stricter adherence of Merit Order Dispatch principles and improving transparency by publishing quarterly renewable energy status reports, monthly capacity utilisation data and an annual RE bidding calendar. MSEDCL is implementing demand flexibility to manage evening peaks and integrate renewable energy, driven by Maharashtra Electricity Regulatory Commission (MERC) regulations. Utilising over 2.24 crore sanctioned smart meters, the discom enables Time of Day (ToD) tariffs and incentivizes consumers to shift usage to solar-abundant hours.

Steps Toward Financial Discipline: MSEDCL is working on automating asset capitalization through SAP systems, installing solar rooftops on its own buildings and replacing old fans with energy-efficient models to reduce internal consumption.

After years of distress, the Government of Maharashtra has now stepped in with a restructuring proposal: split MSEDCL into two companies. One will serve industrial, commercial and residential consumers, while a separate entity will be dedicated solely to agricultural power supply. The non-agricultural entity will be listed through an IPO to raise capital. Simultaneously, the state will issue long-term bonds to cover ₹32,679 crore in debt, easing the utility's crushing interest burden⁹.

The hope is that separating the agricultural business, with its opaque consumption and chronic non-payment issues, into a dedicated company under clear government subsidy accounting will make the remaining entity financially transparent and investable. The IPO

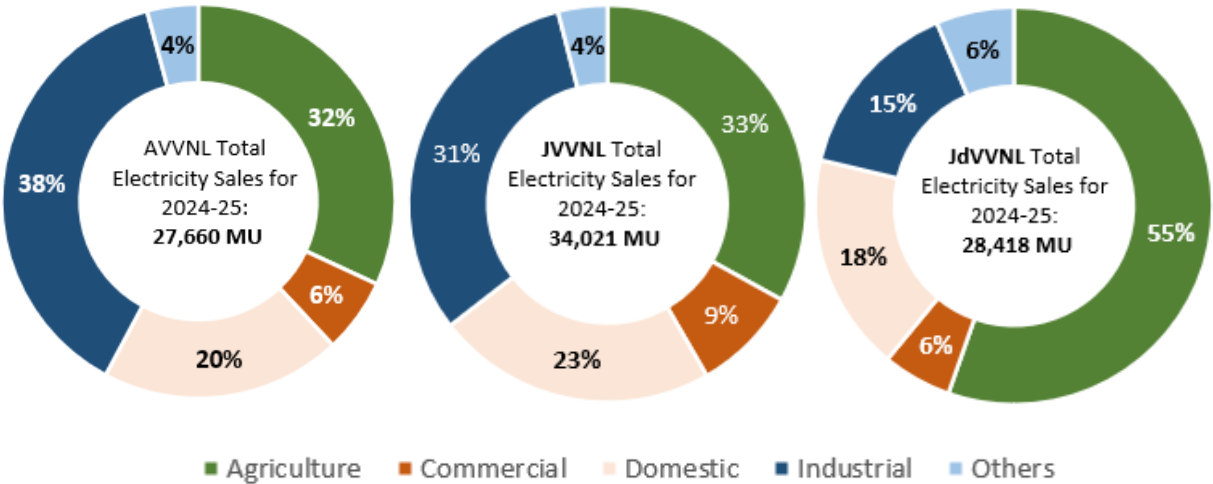
⁹ <https://timesofindia.indiatimes.com/city/nagpur/msedcl-ipo-gets-maha-nod-to-borrow-over-32679cr/articleshow/130096255.cms>

proceeds will fund long-overdue modernisation: smart meters, digital billing and network upgrades that can finally tackle the high AT&C losses.

4.3. RAJASTHAN: Ajmer Vidyut Vitran Nigam Limited (AVVNL), Jaipur Vidyut Vitran Nigam Limited (JVVNL) and Jodhpur Vidyut Vitran Nigam Limited (JdVVNL)

Rajasthan’s power distribution is managed by three state-owned DISCOMs – Jaipur Vidyut Vitran Nigam Limited (JVVNL), Ajmer Vidyut Vitran Nigam Limited (AVVNL) and Jodhpur Vidyut Vitran Nigam Limited (JdVVNL), each serving distinct geographic regions of the state. These utilities are responsible for electricity distribution, billing, and maintaining the power supply network across urban and rural consumers.

The following pie chart presents the distribution of the consumer mix across the three DISCOMs. AVVNL is predominantly driven by industrial consumers, which account for 38% of the total mix, followed by agricultural consumers at 32%, with the remaining share comprising other categories. JVVNL exhibits a relatively balanced consumer profile, with agricultural consumers contributing 33% and industrial consumers 31%. In contrast, the Jodhpur DISCOM, JdVVNL, has a strong skew towards agricultural consumers, who account for 55% of total electricity sales.



Rajasthan being mostly dominated by the agricultural consumers, reflects in its operational and financial performance. Operationally, JdVVNL recorded the highest AT&C losses among the three DISCOMs, at 21% in 2024-25. In contrast, AVVNL (9%) and JVVNL (14%) achieved AT&C loss levels below their respective RDSS targets (12-15%).

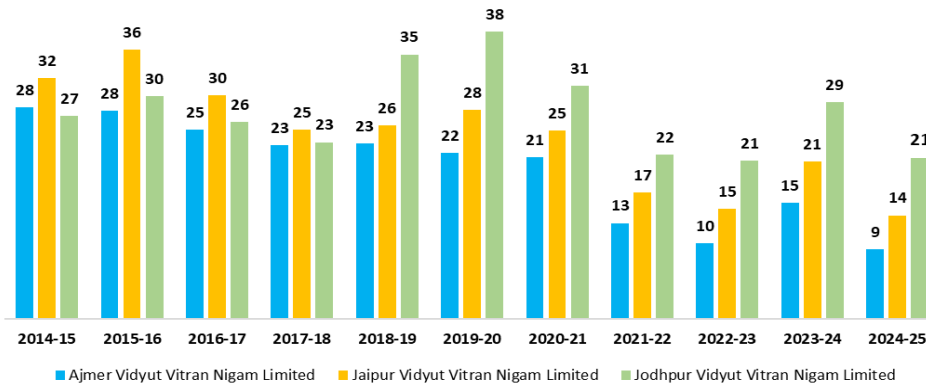


Figure 5: AT&C Loss (%) Trends across Rajasthan DISCOMs

Source: ICED

Financially, all three DISCOMs incurred sustained losses until 2020-21, followed by a brief turnaround in 2021-22, indicating sector-wide improvement. The Ajmer DISCOM shows the strongest recovery, achieving consistent improvement and reporting a profit of ₹1,440 crore in 2024-25, while Jaipur remains loss-making despite reduced deficits. Although Jodhpur improved from peak losses, it continues to be the weakest performer, with only marginal loss reduction and no sustained profitability.

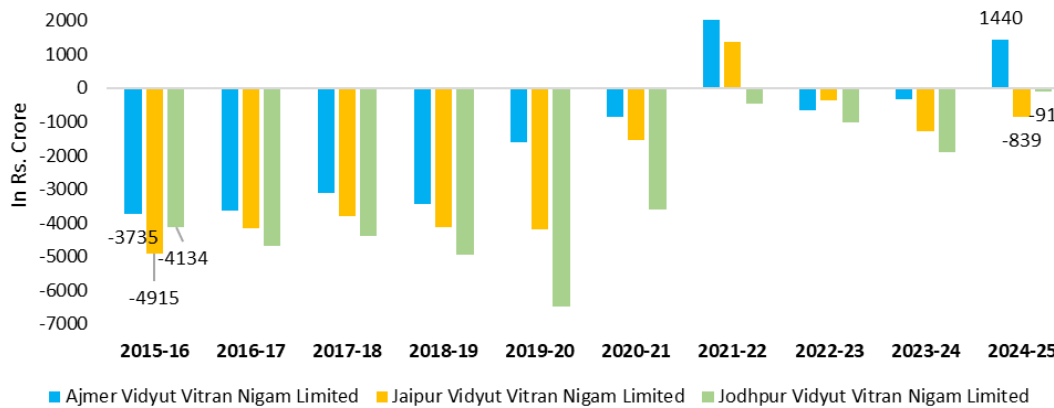


Figure 6: Profit & Loss Trends across Rajasthan DISCOMs

Source: ICED

All the three DISCOMs are undertaking continuous efforts to enhance operational efficiency through sustained investments in network strengthening, improvement in the HT/LT ratio and deployment of smart meters in place of defective meters. They are also leveraging GIS-based asset mapping and AI-driven tools for real-time monitoring of feeders, transformers and load patterns. In high-loss and theft-prone areas, measures such as the deployment of Aerial Bunched Cables and targeted vigilance actions are being implemented, supported by an active Vigilance Department to address electricity theft.

Further, feeder-level and distribution transformer (DT)-level energy audits are being conducted, along with DT metering, to ensure accurate energy accounting and complete consumer identification with functional metering. The DISCOMs monitor progress through regular review meetings and submit periodic energy audit reports, while also undertaking consumer engagement initiatives to improve billing and collection efficiency and curb unauthorized consumption¹⁰.

4.4.1 Jaipur Vidyut Vitran Nigam Limited (JVVNL)

JVVNL serves around 5.5 million consumers, with a diverse mix of domestic, commercial, agricultural and industrial users. Being an agriculture-dominated DISCOM¹¹, it has witnessed fluctuations in its operational performance over the years; however, its losses reduced from 21% in 2023-24 to 14% in 2024-25 due to several initiatives undertaken by Jaipur DISCOM.

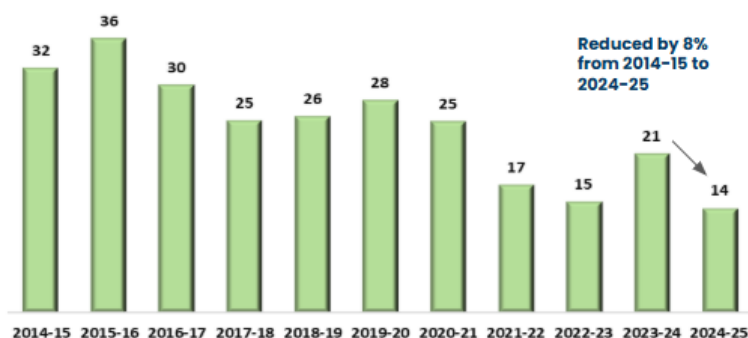


Figure 7: AT&C Loss (%) Trends of JVVNL

Source: ICED

Good practices by JVVNL to improve its operational efficiency:

- Initiated **Pilot Project in Digital Twin¹² (Digital Utility Enhancement and Transformation (DUET) programme)** of the Distribution Network: With technical and operational support from Global Energy Alliance for People and Planet (GEAPP) and JVVNL has built a digital twin covering 3.2 Lakh distribution transformers, 40 Lakh poles and feeder segments and 1,650 grid substations. This has digitised 75 per cent of the entire network, with a target of 85 per cent coverage by December 2025.
- **Drone-Based Surveillance:** JVVNL deployed drones to detect and eliminate illegal power connections, significantly curbing power theft and reducing transmission and distribution losses¹³.

¹⁰ Tariff Order 2026-27- <https://rerc.rajasthan.gov.in/rerc-user-files/tariff-orders>

¹¹ 33% share in Agricultural Sales out of total Energy Sales, ICED

¹² <https://www.linkedin.com/feed/update/urn:li:activity:7403352904809832448/>

¹³ <https://www.ndtv.com/india-news/india-s-first-drone-based-cloud-seeding-launched-in-rajasthan-9070576>

- Virtual & Group Net Metering¹⁴:** For the first time, the DISCOM has implemented virtual net metering and group net metering schemes, allowing consumers without rooftop space to participate in solar energy generation, lower their electricity bills and support distributed renewable energy adoption.
- Innovative Land Mobilization via SKAY Portal¹⁵:** It enabled feeder-level solarisation by using the SKAY digital platform, allowing farmers to register and lease land near substations for solar projects, streamlining land aggregation and developer participation, a practice still uncommon across most DISCOMs.

Power Procurement by JVVNL:

JVVNL’s power procurement mix has evolved over time, with the share of solar increasing from about 4% in 2015-16 to 12% in 2024-25, alongside a decline in solar power cost from ₹4.5/kWh to ₹3.4/kWh. In contrast, dependence on coal-based power has remained largely stable at around 65-70% over the decade. Notably, short-term power procurement has risen from 1% to 8% during the same period.

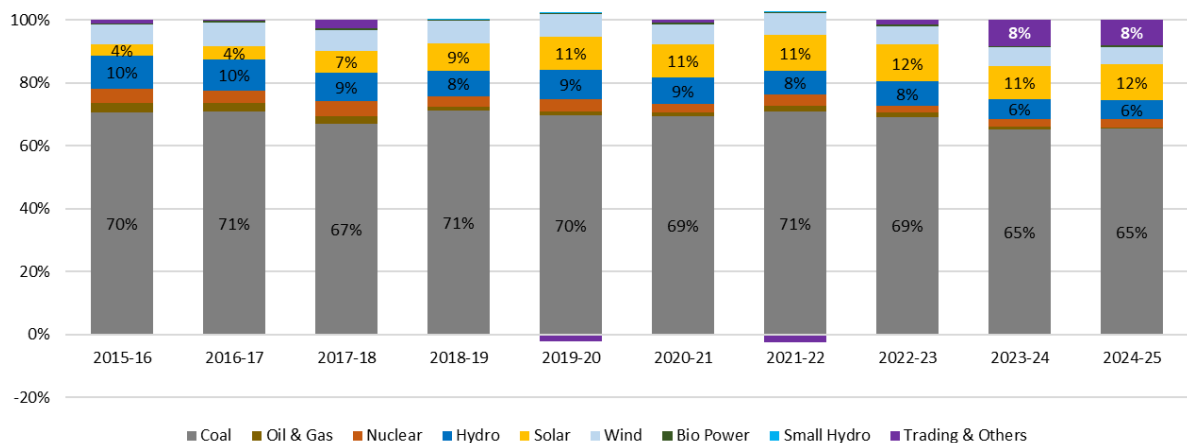


Figure 8: Trends of Share of Power Purchase Quantum (%), JVVNL
Source: ICED

¹⁴ <https://timesofindia.indiatimes.com/city/jaipur/discoms-issue-guidelines-for-virtual-group-net-metering/articleshow/126259159.cms>

¹⁵ <https://www.rear.org.in/skay>

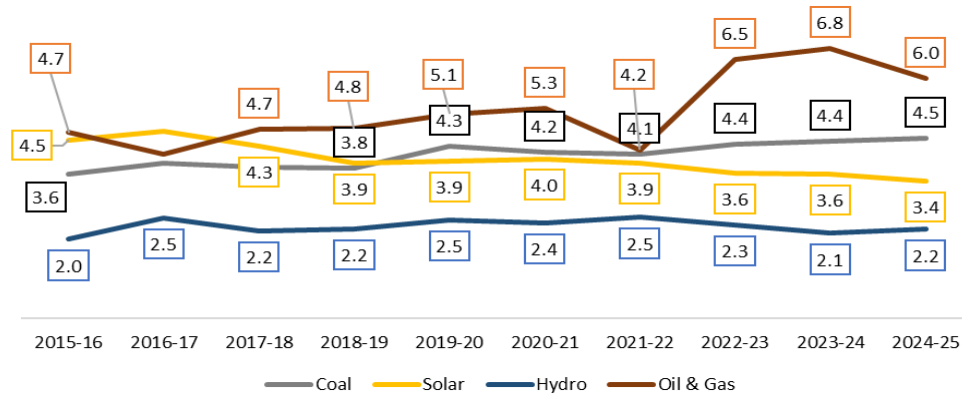


Figure 9: Trends of Share of Power Purchase Cost (₹/kWh), JVVNL
Source: ICED

The sudden increase in the power purchase was primarily driven by higher-than-anticipated energy demand, with actual sales reaching 35,395 MU against the approved 34,021 MU. Consequently, the total power purchase cost increased from the approved ₹20,219 crore to an actual ₹22,181 crore.

This trend indicates gaps in demand forecasting, leading to reliance on costlier short-term power. The underestimation of demand can be attributed to factors such as the inherent volatility in agricultural consumption and improvements in metering and data capture over time. Going forward, there is a clear need to strengthen demand forecasting methodologies. In parallel, the DISCOM has indicated efforts to better manage short-term procurement to secure power at more competitive rates¹⁶ through platforms such as the DEEP portal and power exchanges.

4.4.2 Ajmer Vidyut Vitran Nigam Limited (AVVNL)

Ajmer Vidyut Vitran Nigam Limited reported a profit of ₹1,440 crore in 2024-25. This improvement in profit was not driven by higher operational revenue, but largely due to a significant increase in grants received during the year. The DISCOM received ₹4,803 crore in 2024-25, nearly 270% higher than ₹1,293 crore in the previous year. Despite reporting a profit, the DISCOM did not witness any improvement in its grading; rather, its rating declined in the 14th Integrated Rating report¹⁷.

At the same time, the “other cost” category rose sharply from 4% in 2023-24 to 13% in 2024-25, primarily due to unplanned debt obligations that were not accounted for at the time of

¹⁶ Tariff Order 2026-27: <https://rerc.rajasthan.gov.in/rerc-user-files/tariff-orders>

¹⁷

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_Utili ties.pdf

submission¹⁸. These additional liabilities adversely impacted the *adjusted quick ratio* where short-term liabilities exceeded liquid assets. This implies that DISCOM’s ability to meet short-term obligations weakened, reflecting constrained cash flows, delays in receivables and a continued reliance on external financial support.

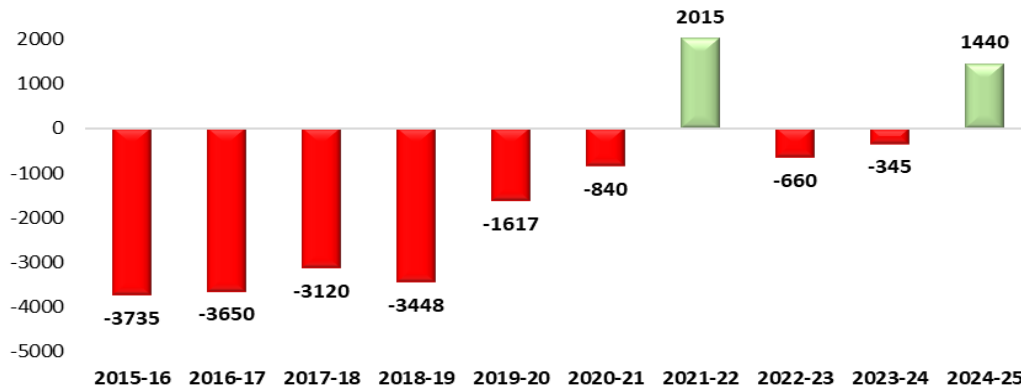


Figure 10: Profit & Loss Trends (₹ Crore) of AVVNL
Source: ICED

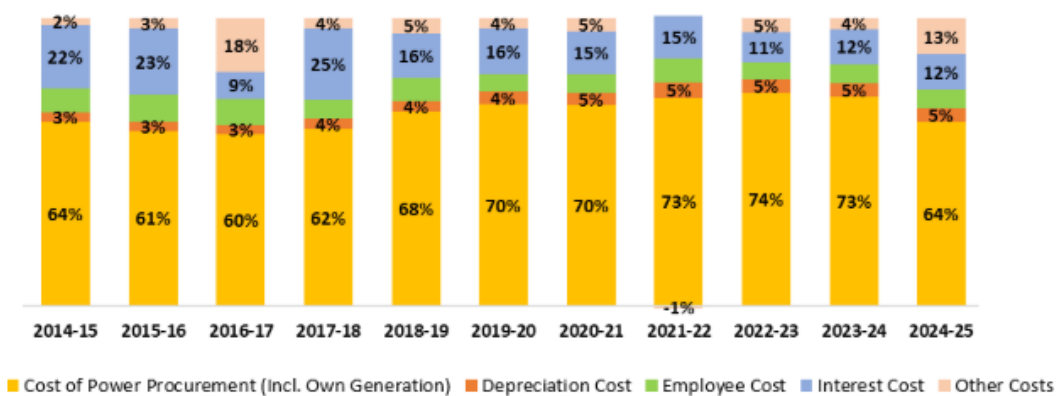


Figure 11: Trends of Cost Structure (%) of AVVNL
Source: ICED

4.4.3 Jodhpur Vidyut Vitran Nigam Limited (JdVVNL)

JdVVNL is a state-owned electricity distribution utility responsible for supplying power across western Rajasthan, serving a predominantly rural and agriculture-oriented consumer base alongside urban and industrial segments. The DISCOM being agricultural dominated, reflects in its operational as well as financial performance. JdVVNL has consistently experienced the billing efficiency below 80%. The key factors driving the fluctuation include a high share of agricultural consumers, the challenges of serving a sparsely populated desert region, gaps in metering and poor meter quality, delayed or limited implementation of smart

¹⁸ Tariff Order 2026-27: <https://rerc.rajasthan.gov.in/rerc-user-files/tariff-orders>

metering and weak energy accounting along with inadequate feeder-level monitoring.

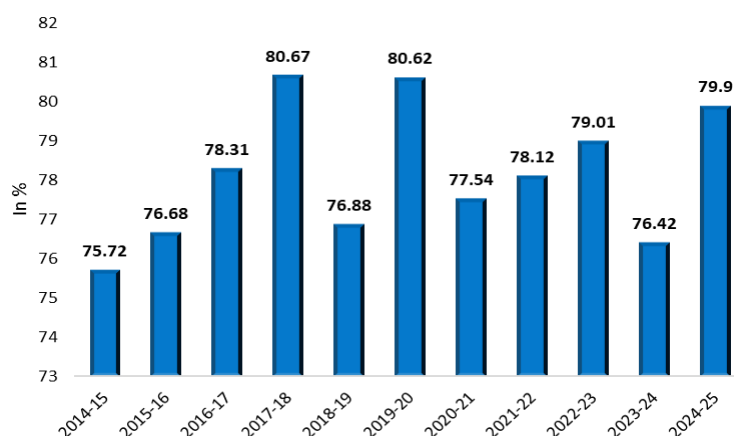


Figure 12: Trends of Billing Efficiency (%) of JdVVNL

Source: ICED

Jodhpur DISCOM (JdVVNL) has been undertaking a mix of technical, operational, and reform-oriented measures to address low billing efficiency and the underlying issues. The measures includes, network strengthening, feeder segregation, smart metering, IT-enabled monitoring, timely new connections and intensified vigilance and anti-theft drives in high-loss areas¹⁹.

Data Discrepancy and Transparency Concerns in Rajasthan DISCOMs

In Rajasthan, regulatory assets have emerged as a prominent feature of the power distribution sector under the tariff framework of the Rajasthan Electricity Regulatory Commission (RERC). These assets primarily arise due to the deferral of cost recovery – especially when DISCOMs are unable to fully recover their approved revenue requirement in a given year and the gap is carried forward for future recovery.

Over the years, Rajasthan has witnessed a significant accumulation of regulatory assets, largely driven by under-recovery of power purchase costs, delays in tariff revisions and gaps in subsidy realisation. This has contributed to persistent financial stress across the state’s DISCOMs.

A key concern in the Rajasthan context is the lack of data availability around regulatory assets at the DISCOM level. The DISCOMs do not consistently disclose detailed and updated figures related to regulatory assets in the public domain. Though the tariff order provides year-wise regulatory assets for the State, it does not include DISCOM-level details.

¹⁹ Tariff Order 2026-27: <https://rerc.rajasthan.gov.in/rerc-user-files/tariff-orders>

Additionally, in national-level datasets published by the Power Finance Corporation (PFC)²⁰ regulatory asset data for Rajasthan DISCOMs is also not reported.

While the 13th Integrated Rating Report²¹ provides an aggregate estimate of regulatory assets for states such as Tamil Nadu, Rajasthan, Delhi, Kerala, and Puducherry, it does not offer a detailed breakdown or methodology, further constraining meaningful analysis.

This creates a discrepancy and limits the ability to accurately assess the true extent of deferred costs in the state, thereby raising concerns around transparency, data availability, and informed regulatory oversight.

Table 1: Year-wise Regulatory Asset data for Rajasthan

Year	Regulatory Assets (Rs. Cr.)
2022-23 (True up)	53824
2023-24 (True up)	49842
2024-25 (True up)	49428
2025-26 (ARR)*	40214
2026-27 (ARR)*	33298

* subject to true up.

Source: RERC Tariff order 2026-27

State Sector	Net Tangible Assets	Capital Work in Progress	Non-Current Assets	Regulatory Assets	Receivables for Sale of Power	Other Current Assets	Total Assets	Receivables for Sale of Power (Days)
State Sector	5,55,671	1,12,988	56,868	68,035	2,61,209	3,16,009	13,70,780	121
Rajasthan	55,344	4,267	9,100	3,815	39,172	1,08,698	86	21

Figure 13: Image of Regulatory Asset data for 2024-25

Source: PFC

State	INR Crore
Tamil Nadu	1,01,727
Rajasthan	47,114
Delhi	27,200
Kerala	6,408
Puducherry	445

Figure 14: Image of Regulatory Asset data at State level for 2023–24

Source: 13th IR Report, PFC

A lack of regulatory asset data raises several serious concerns from regulatory, financial, and governance perspectives. Lack of financial transparency, weak regulatory oversight, incomplete assessment of tariff adequacy, more regulatory surcharge on consumers, data inconsistency & reduced accountability of DISCOMs.

4.4. GOA: Electricity Department, Government of GOA (EDG)

Being a geographically unique state with limited in-state generation capacity and only a small share of renewables, the EDG remains highly dependent on power procurement from other states to meet its electricity needs. The state's electricity consumption is predominantly driven by the industrial segment, which accounts for nearly 50% of total sales²² (as of 2024–25).

Reflecting on its financial trajectory, the EDG has been consistently tackling the gap between the cost of supplying power and the revenue it collects, although the Profit & Loss trend indicates phases of gradual improvement. A marked deterioration was observed in 2023–24, losses rose sharply, increasing by approximately 2.4 times compared to the previous year.¹

²² <https://iced.niti.gov.in/energy/electricity/distribution/pages/consumer-profile#electricity-sales>

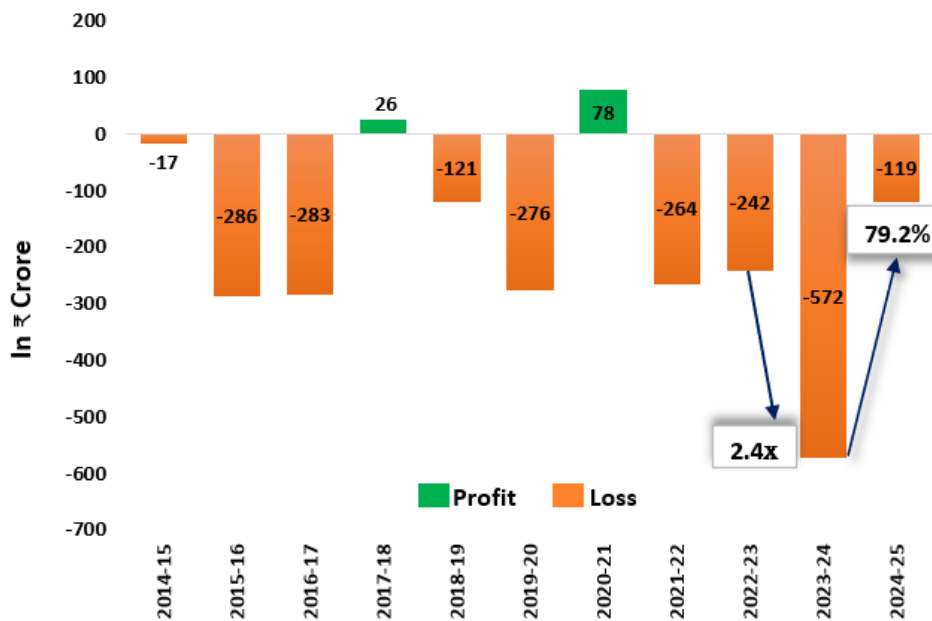


Figure 13: EDG Profit/Loss Trends (in ₹ Crore)

Source: ICED

This decline was largely driven by reasons pertaining to High Power purchase costs (PPC) accounting for 79% of total ARR expenses in 2023-24 along with supply shortfall. The projected PPC saw a rise by 481% over the control period. A significant addition to this gap is the high average cost of supply which was ₹5.87/unit, far exceeding the domestic ABR of ₹3.23/unit, leading to a loss of ₹2.64 per unit. The evolving cost structure of the DISCOM highlights mounting pressure from controllable operational inefficiencies, particularly with operation and maintenance (O&M) expenses exceeding approved normative limits²³ (total of 82.20 Cr).

Although AT&C losses reduced substantially to 9.09% in FY 2023-24, they were as high as 17.09% in FY 2022-23 causing an extended revenue leakage for years, furthermore an outstanding due of ₹600 Cr rest unrecovered from C&I consumers as highlighted by public stakeholders. The structural imbalance is further reflected in the inadequate tariff levels which made the DISCOM reliant on state support with ₹336.49 crore (FY 2023-24 true-up gap) funded by the Government of Goa.⁹

²³https://jercuts.gov.in/wp-content/uploads/2025/09/ED-Goa_TARIFF_ORDER_True-up-for-the-FY-2023-24-APR-for-FY-2024-25-and-ARR-and-Determination-of-Retail-Tariff-for-FY-2025-25-to-FY-2029-30.-D-O-O-30_09_2025.pdf

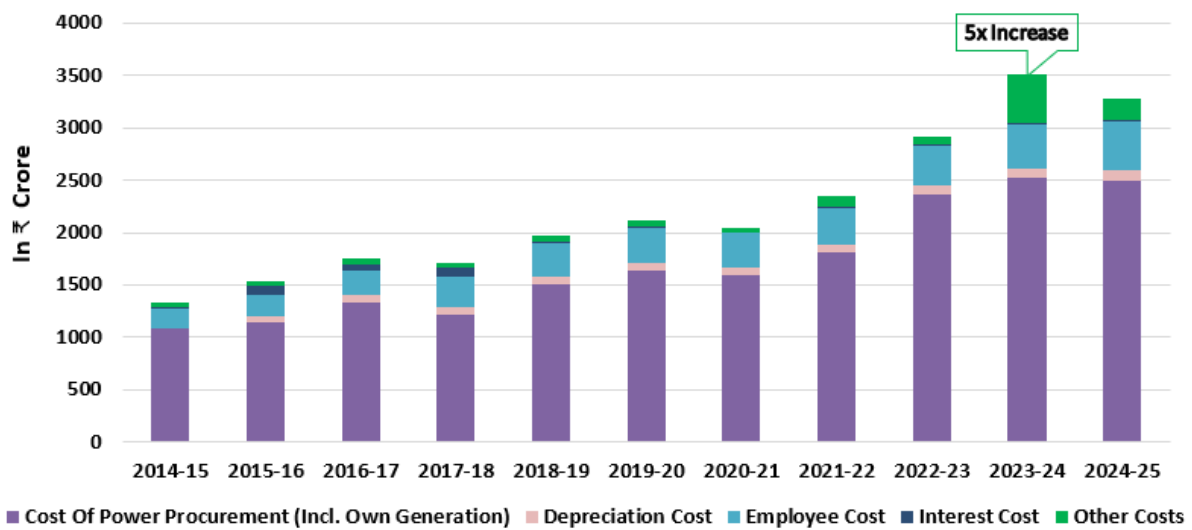


Figure 14: Cost Structure of EDG (in ₹ Crore)

Source: ICED

To address these issues, EDG took various initiatives, such as a 3.5% tariff hike²⁴, with subsidised consumers getting slightly higher tariff hikes and cross-subsidising consumers getting lower or minimal increases to balance tariffs. It also implemented efficiency measures such as System, Application, and Products (SAP) and Restructured Accelerated Power Development and Reforms Programme (R-APDRP) schemes⁹, streamlined billing through SAP, transitioned billing and collection agencies and adopted RDSS-led infrastructure upgrades, smart metering and tighter O&M controls which improved overall operational efficiency and resolved billing issues. As of FY 2024-25, the Financial Loss declined by 79.2%²⁵ compared to FY 2023-24.

²⁴<https://jercuts.gov.in/wp-content/uploads/2024/06/True-up-for-the-FY-2022-23-APR-for-FY-2023-24-ARR-for-FY-2024-25-and-determination-of-Retail-Tariff-for-FY-2024-25.-Petition-No.-115-2023.-D-O-O-13.06.2024.pdf>

²⁵ <https://iced.niti.gov.in/energy/electricity/distribution/pages/financial-performance#cost-components>

NOTES

