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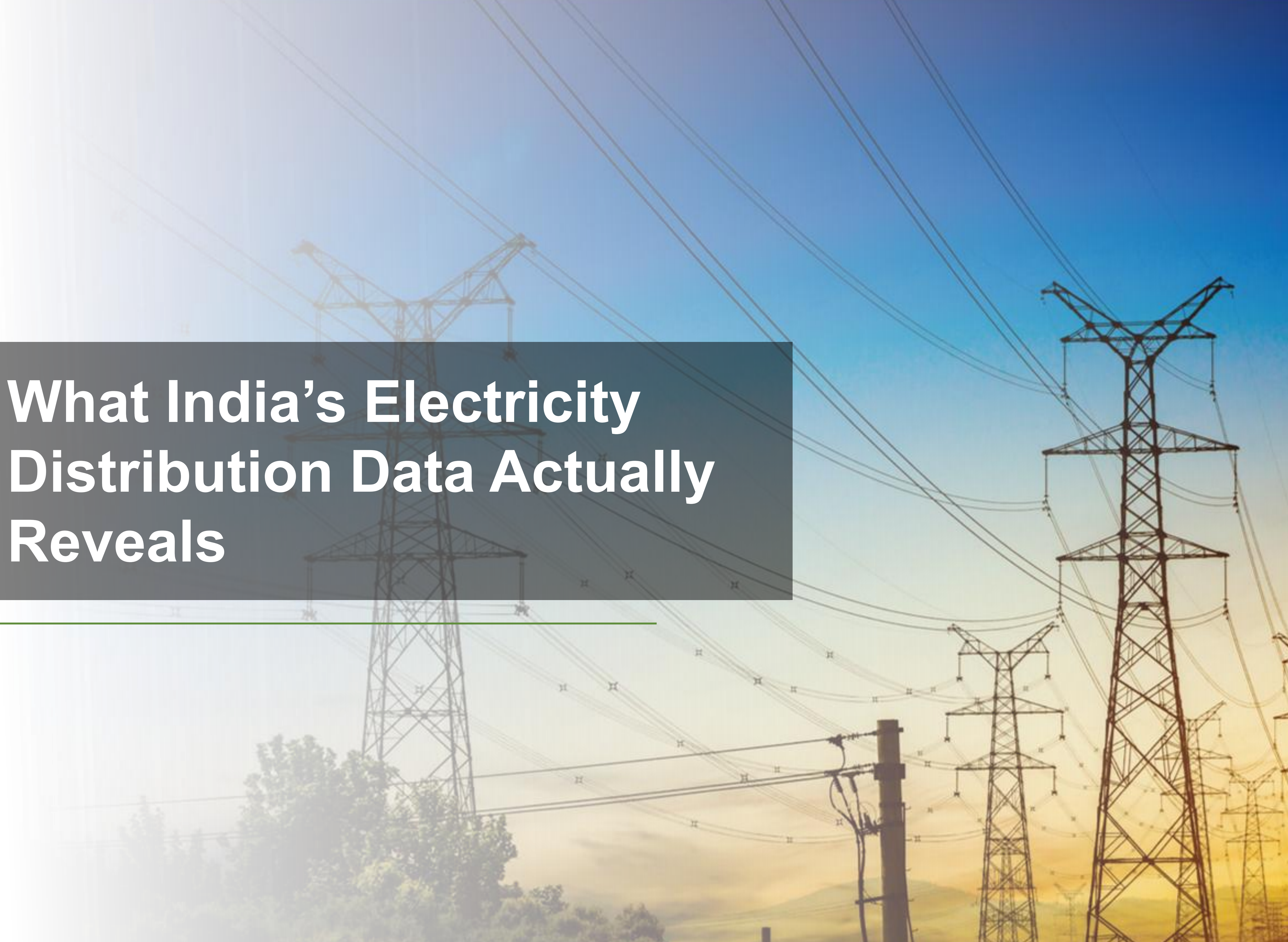
What India’s Electricity Distribution Data Actually Reveals



Key Trends across DISCOMs

- Cost of Supply: National and DISCOM-Level Perspectives
- Power Procurement Planning
- Financial Sustainability
- Tariff Levels across States
- Data Standardisation & Reporting

Regional Capacity Building Sessions 2026: Snapshots

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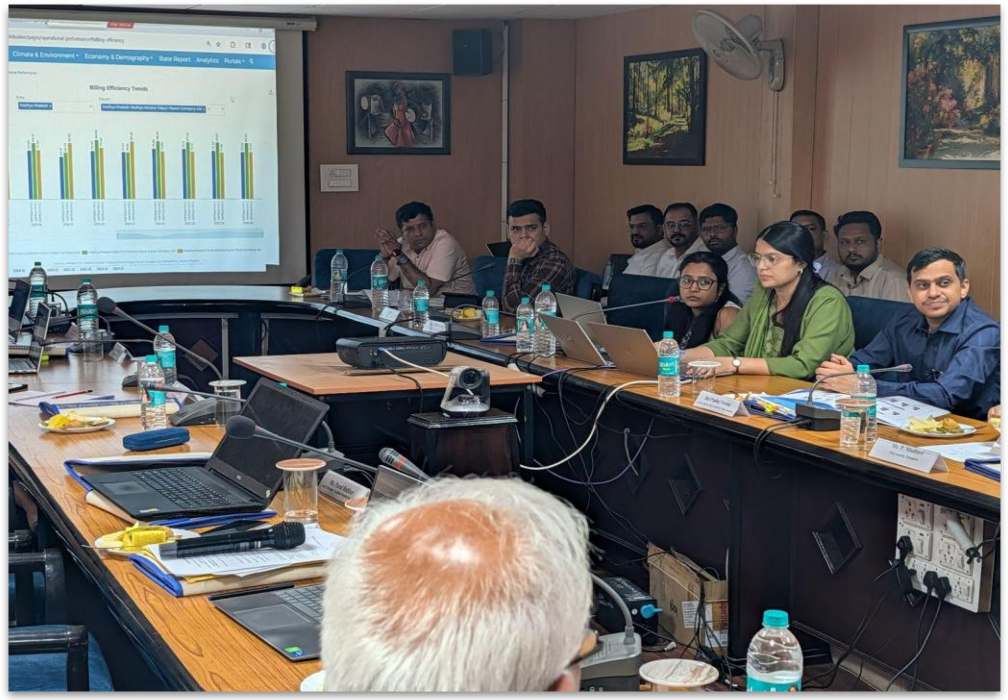

Electricity Distribution Sector: A Decadal Sneak Peek

A Striking Paradox: Operationally Strong but Financially Strained

Net Accumulated Financial Losses ₹6.47 Lakh Cr (FY25) from ₹3.59 Lakh Cr (FY15) ↑1.8x	**Net Financial Profit:** ₹2,701 Cr (FY25)	**Total Outstanding Debt** ₹7.26 Lakh Cr (FY25) from ₹4.04 Lakh Cr (FY 15) ↑1.8x	**Outstanding Debt (Discom)** Highest: TANGEDCO Lowest: MGVCL (FY25)	**State Govt. Loans** ₹0.57 Lakh Cr (FY25) from ₹0.42 Lakh Cr (FY 15) ↑1.3x	**State Govt. Loans as % of Total Outstanding Debt** 8% (FY25)
ACS-ARR Gap ₹0.06 per kWh (FY25) from ₹0.48 per kWh (FY16) ↓88%	**ACoS > ARR: 27 DISCOMs** Highest - A&N PD Lowest - MPPoKVVCL & JdVVNL (FY25)	**ACoS < ARR: 36 DISCOMs** Highest - AEML Lowest - APSPDCL (FY25)	**Regulatory Assets:** ₹1.04 Lakh Cr (FY25) from ₹0.38 Lakh Cr (FY16) ↑2.7x	**Regulatory Assets State DISCOM** Highest: MSEDCL (45%) (FY25)	**Regulatory Assets Private DISCOM** Highest: BRPL (17%) (FY25)
Tariff Subsidy Received: ₹2.35 Lakh Cr (FY25) from ₹0.46 Lakh Cr (FY15) ↑5.2x	**DISCOM with Subsidy Realised:** Highest: CSPDCL Lowest: HPSEB (FY25)	**DISCOM with Highest Subsidy (Booked):** MSEDCL (₹0.23 Lakh Cr) (FY25)	**AT&C Loss** 15.04% (FY25) from 23.98% (FY15) ↓8.9%	**AT&C Losses** Lowest: TPL Ahmedabad (3.24%) Highest: Nagaland PD (48.86%) (FY25)	**Collection Efficiency** 97% (FY25) DISCOMs with 100% Collection Efficiency: 17
Highest Coal Power Procurement Share within State: Jharkhand (88%) (FY25)	**Highest Power Procurement Share within State** (FY25) Solar: Andhra Pradesh (13%) Wind: Puducherry (13%)	**Highest RE (incl. Large Hydro) Power Procurement Share within State/UT:** Chandigarh (87%) (FY25)	**Highest Industrial Load:** DNHDD, PD (95%) DGVCL (83%) (FY25)	**Highest Domestic Load:** DEL (70%) BRPL (65%) (FY25)	**Highest Agriculture Load:** HESCOM (57%) (FY25)

Key Message

While national AT&C losses dropped by 9 percentage points (FY15–FY25) and collection efficiency reached 97%, financial sustainability remains fragile. Outstanding debt and accumulated losses have nearly doubled, while regulatory assets have grown ~3 times, underscoring persistent challenges in the distribution sector.

Source: ICED & PFC

A Snapshot of Integrated Ratings and Scores for All DISCOMs

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State	Discom	10th IR Grade	11th IR Grade	12th IR Grade	13th IR Grade	14th IR Grade
Andaman and Nicobar Islands	EDAN	C-	C-	C	C	C
Andhra Pradesh	APCPDCL	C	C	B-	C	B
Andhra Pradesh	APEPDCL	C-	B	A	A	B
Andhra Pradesh	APSPDCL	C-	C	B-	C	B
Arunachal Pradesh	DoPAP	C-	C-	C	A	B
Assam	APDCL	B-	A	B-	A	A
Bihar	NBPDCL	C-	C-	C	B	A
Bihar	SBPDCL	C-	C-	C	B-	A
Chandigarh	CPDL	A				
Chhattisgarh	CSPDCL	C	C	B-	B	A
Dadra and Nagar Haveli	DNHPDCL	A+				
Daman and Diu	DDED	A				
Delhi	BRPL	B-	B-	B-	B-	B-
Delhi	BYPL	B-	B-	B-	B-	B-
Delhi	NDMC			B	A+	A+
Delhi	TPDDL	A	A	A	B-	B-
Goa	EDG	B	B-	B	A	A
Gujarat	DGVCL	A+	A+	A+	A+	A+
Gujarat	MGVCL	A+	A+	A+	A+	A+
Gujarat	PGVCL	A+	A+	A+	A+	A+
Gujarat	TPLA	A+		A+		A+
Gujarat	TPLS	A+		A+		A+
Gujarat	UGVCL	A+	A+	A+	A+	A+
Haryana	DHBVN	A+	A+	A+	A+	A
Haryana	UHBVN	A	A+	A+	A+	A
Himachal Pradesh	HPSEB	B-	B	C	B-	B
Jammu and Kashmir	JPDCL	C-				
Jammu and Kashmir	KPDCL	C-				

Source: ICED

NA | C- | C | B- | B | A | A+

Gujarat

DISCOMs maintain a consistent A+ rating. Driven by sustained efficiency and financial discipline, the state reported accumulated profits of ₹11,247 crore (as on March ‘25) and achieved low AT&C losses of 8.25%.

Assam

Following a dip to B- in 2022-23, the rating recovered to A in 2024-25, 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, which contributed to overall improvement.

A Snapshot of Integrated Ratings and Scores for All DISCOMs

State	Discom	10th IR Grade	11th IR Grade	12th IR Grade	13th IR Grade	14th IR Grade
Jharkhand	JBVNL	C-	C-	C-	C-	C-
Karnataka	BESCOM	C-	B-	C	B-	C-
Karnataka	MESCOM	C	A	A	C	B
Karnataka	HESCOM	C	B	C	C	C
Karnataka	CESCOM	C-	B	B	A	B-
Karnataka	GESCOM	C-	B	C	B	C
Kerala	KSEBL	C	B	B-	B	B
Kerala	TCED			A	A+	A+
Ladakh	LPDD	C-	C	C	C	A
Lakshadweep	DEL	C-				
Madhya Pradesh	MPPaKVVCL	C	B-	A	A	A
Madhya Pradesh	MPPoKVVCL	C-	C	B-	C	B-
Madhya Pradesh	MPMKVVCL	C-	C	B	B-	C
Maharashtra	AEML	A+	A+	A+	A+	A+
Maharashtra	BEST	A	B-	B-	B	A+
Maharashtra	MSEDCL	C-	B-	C	C-	C
Maharashtra	TPML	A+				
Manipur	MSPDCL	C	C	C	B-	B-
Meghalaya	MePDCL	C-	C	C-	C	B
Mizoram	PEDM	C	C-	C	C	A
Nagaland	DPN	C-	C-	B	B	A
Odisha	TPCODL	B	B	A+	A+	A+
Odisha	TPNODL	C	B	A+	A+	A+
Odisha	TPSODL	B-	A	B	B-	B-
Odisha	TPWODL	A	A+	A+	A+	A
Puducherry	PED	B-	A	B	A	A
Punjab	PSPCL	B	A	B	A	A+

Source: ICED

NA | C- | C | B- | B | A | A+

Karnataka

MESCOM, the best-performing DISCOM, demonstrated the strongest balance of financial discipline, operational efficiency, lower losses, and regulatory compliance. PSPCL got an A+ in the 14th IR report, 2024-25, due to better financial performance (earned a profit of ₹6,216 crore).

Kerala

Strong operational performance & external environment scores. It achieved near-perfect operational ratings but showed the weakest financial performance, with the highest negative score (-20) on regulatory assets, auditor's adverse opinion, and governance issues.

Jharkhand

JBVNL scored lowest (9.65) – C-Grade; persistent challenges in cost recovery, high losses, lowest billing efficiency, and multiple red-card metrics.

A Snapshot of Integrated Ratings and Scores for All DISCOMs

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State	Discom	10th IR Grade	11th IR Grade	12th IR Grade	13th IR Grade	14th IR Grade
Rajasthan	AVVNL	C	B	B	B	B-
Rajasthan	JdVVNL	C-	C	B-	B-	B
Rajasthan	JVVNL	C	B-	B	B-	B-
Sikkim	EPDS	C-	B-	B-	A	A
Tamil Nadu	TNPDCL	C-	C-	C-	C	B-
Telangana	TGNPDCL	C-	C-	C	C-	C-
Telangana	TGSPDCL	C-	C-	C	C-	C-
Tripura	TSECL	B-	B-	C	C	C
Uttar Pradesh	DVVNL	C-	C-	C-	C-	B-
Uttar Pradesh	MVVNL	C-	C-	C-	C-	B-
Uttar Pradesh	PVVNL	C	B-	B	B	A+
Uttar Pradesh	PuVVNL	C-	C-	C-	C-	C
Uttar Pradesh	KESCO	C-	C-	B-	B-	B-
Uttar Pradesh	NPCL	A+	A+	A+	A+	A+
Uttarakhand	UPCL	B	A	B-	B	B
West Bengal	WBSEDCL	C	B	B-	B	A
West Bengal	IPCL	A+	A	B-	A	A
West Bengal	CESC	A	A			

NA C- C B- B A A+

Uttar Pradesh

PVVNL achieved an A+ rating in FY25, supported by a strong net profit of ₹1,256 crore (more than 2.6 times the previous year), driven by higher subsidy realisation & the lowest AT&C losses among UP DISCOMs.

Source: PFC

Cost of Supply

Cost Components of DISCOMs Impacting Financial Performance

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Types of Cost Components

Power Purchase Cost
Incurred to procure electricity from generators and the market; contributes to the maximum share in total cost.

76%

Depreciation Cost
Annual allocation of the cost of fixed assets over their useful life.

4%

Interest Cost
Finance charges on loans and other borrowings.

7%

Employee Cost
Expenses on salaries, wages, pensions, and employee benefits.

8%

Other Cost
Includes administration, R&M, exceptional items and other operating expenses.

6%

Percentages shown within the circles represent the national average share of each cost component for FY25.

Beyond power purchase costs, several DISCOMs are witnessing rising expenditure on overhead costs and their impact on the total expenditure.

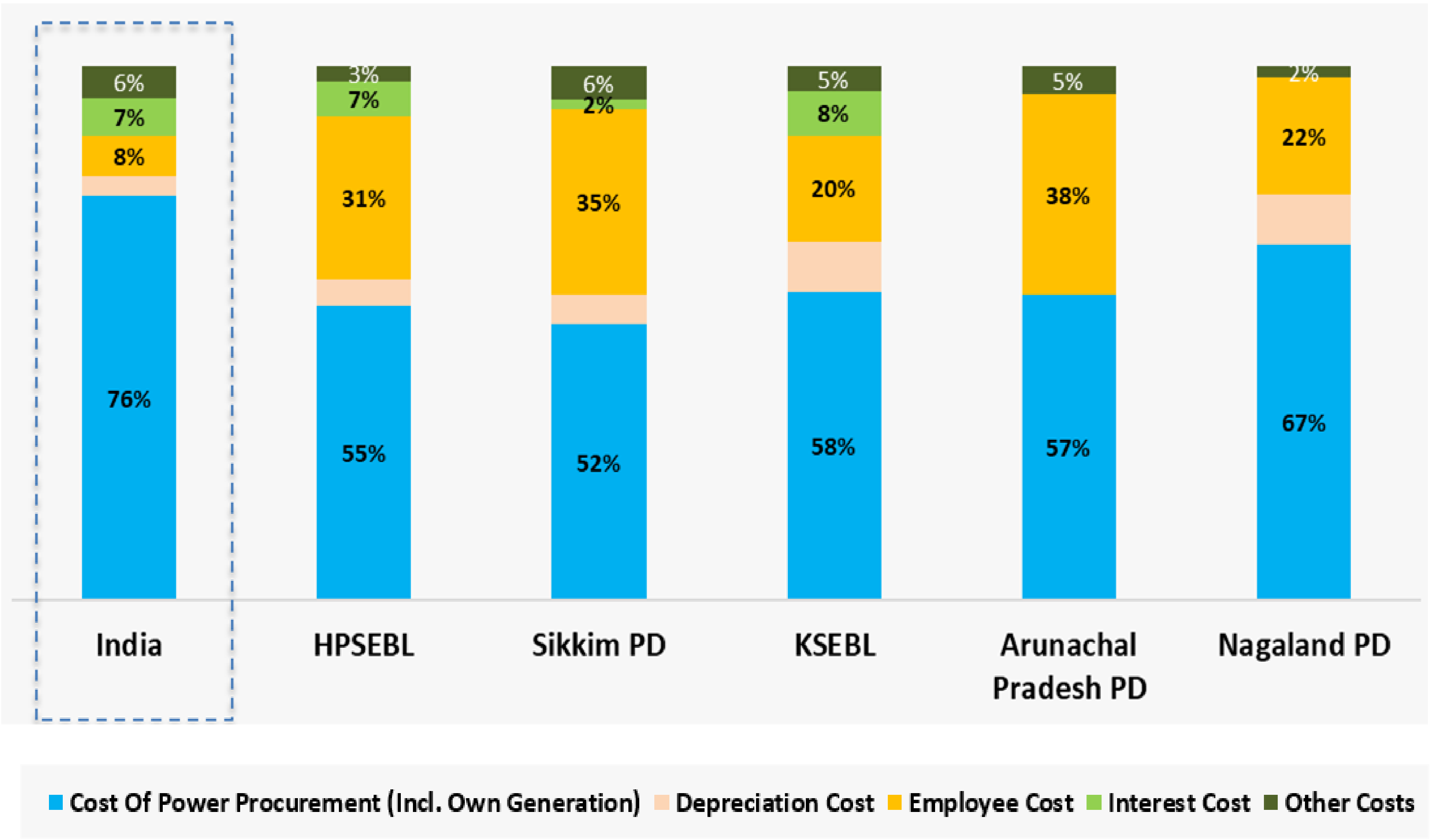
See how

High Employee & Interest Costs Continue to Weigh on Financial Performance (1/2)

National Vs DISCOMs

5 of the 70 DISCOMs reported high employee costs accounting for 20–30% of their total expenditure

2024-25



- Compared with the national average, these 5 DISCOMs allocate a much larger share of their expenditure to employee costs, reducing the share of power procurement in the overall cost structure.
- While employee costs account for only 8% of total costs nationally, they constitute 20-38% in these utilities, reflecting structural challenges such as legacy pension liabilities, difficult terrain and low consumer density.
- Employee costs remain elevated due to a mix of challenging operating conditions, dispersed consumer bases, reduced workforce and talent, and legacy pension and retirement liabilities.

Key Message

Power procurement dominates DISCOMs' cost structure, but high employee costs can further burden them, reflecting structural rather than uniform sectoral challenges.

Source: ICED

High Employee & Interest Costs Continue to Weigh on Financial Performance (2/2)

National Vs DISCOMs

Out of 65 DISCOMs, 8 State DISCOMs & 1 Private DISCOM reported interest costs more than 10% of the total expenditure in 2024-25

Compared to the national average of 7%, these DISCOMs are characterised by a significantly higher interest burden, highlighting the impact of debt and financing costs on their financial performance.

Share of Interest Cost in Total Cost:

TNPDCL- 10.69%

HESCOM: 11.09%

APSPDCL: 11.36%

APCPDCL: 12.1%

AVVNL: 12.11%

JVVNL: 13.45%

JBVNL: 14.21%

BYPL: 14.57%

JdVNL: 16.36%

Key Message

High interest costs generally reflect underlying financial stress, arising from accumulated debt, delayed subsidy reimbursements, persistent revenue shortfalls and heavy reliance on borrowings to finance operations and capital investments.

Source: ICED

Power Procurement Planning

Sub-Optimal Power Procurement Planning by DISCOMs Reduces Efficiency

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	1	2	3	4	5
ISSUES	**Demand Over-estimation & Capacity Over-contracting**	**Costly Long-term Power Procurement**	**Inadequate Energy Storage Planning**	**Procuring Expensive Short-term Power**	**Infrastructure & Project Implementation Challenges**
IMPACT	Leading to surplus power, stranded fixed costs & financial distress	Improper and costly long-term PPAs leading to stranded assets	Surplus renewable energy cannot be stored for peak hours	High PPC due to dependence on market especially during peak hours; when there is high price volatility	Delays in planned projects & infrastructure constraints hinder timely capacity addition and evacuation
CASES	**MSEDCL** Surplus power is projected to increase from 31% (2025-26) to 71% (2029-30). Of the 116.7 BU surplus, only 57% is planned for sale, leaving ~50 BU without a clear utilisation plan for FY 26.	**HPSEBL** HPSEBL paid ₹33.03 crore in fixed charges under long-term gas-based PPAs without procuring any power from these plants.	**Andhra Pradesh** APs DISCOMs were not able to meet the required capacity of energy storage systems due to project commissioning delays.	**CSPDCL** **TNPDCL** **DHBVN** Several DISCOMs are paying high prices for short term market purchases ranging from ₹7/kWh to ₹9/kWh.	**KSEBL** Hydro projects delayed >15 years due to environmental issues, design changes, land acquisition & long timelines. **APSPDCL** Transmission corridor constraints caused delays in a planned 7,000 MW solar procurement programme, reducing the expected available capacity to 3,675 MW.

Key Message
Timely & realistic planning, balanced procurement, renewable and storage integration and robust infrastructure are critical for achieving resource adequacy and ensuring reliable & affordable power supply.

*At least 75% of DISCOMs' capacity requirement should be secured through long-term contracts as per Long-Term Distribution Licensee Resource Adequacy Plan (LT-DRAP) or as specified by the respective SERC/JERC.

Source: Annual Reports/Tariff Orders

Financial Sustainability

Government Financial Support remains a Key Determinant of DISCOM Profitability

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Is it a Good Practice?

Additional borrowing ceiling/permission by Central Government

Provided extra headroom of 0.5% of Gross State Domestic Product under the 15th Finance Commission, adding to states' financial liabilities

PSPCL: Reported profits of ₹2,415 Cr. in 2024-25 with the help of borrowings.

TNPDCL: Under the said framework, the Government of Tamil Nadu agreed to take over **100% of TANGEDCO losses in a phased manner**—covering 60% of FY22 losses in FY23, 75% in FY24, 90% in FY25, and 100% in FY26 onwards. This support contributed to the DISCOM reporting a **profit of ₹2,144 crore in FY 25**.

Tariff subsidy support

Tariff subsidy is an aid provided by the government to lower electricity retail prices

Bihar:
The tariff subsidy for Bihar DISCOMs nearly doubled over two years from FY23 (₹8030) to FY 25 (₹15,422).

Mizoram PD: More than 100% tariff subsidy in FY 25 as compared to FY 24 to recover the losses.

Revenue Grants from State Government

State-provided revenue grant offset year-end operational expenses.

WBSEDCL: Regular revenue grant received from the Government of West Bengal to recover the revenue gap. In FY 25, the DISCOM earned a profit of **₹167 Cr.**

AVVNL: 270% higher revenue grants received in **FY 25 (₹4,803 Cr.)** as compared to **FY 24 (₹1,293 Cr.)**.

Arunachal PD: Government grants & other income accounted for 52% of total revenue in 2024-25

Meghalaya PD: Government grant increased three times in FY 25 (₹646 Cr.) as compared to FY 24(₹346 Cr.) to recover the losses.

Key Message

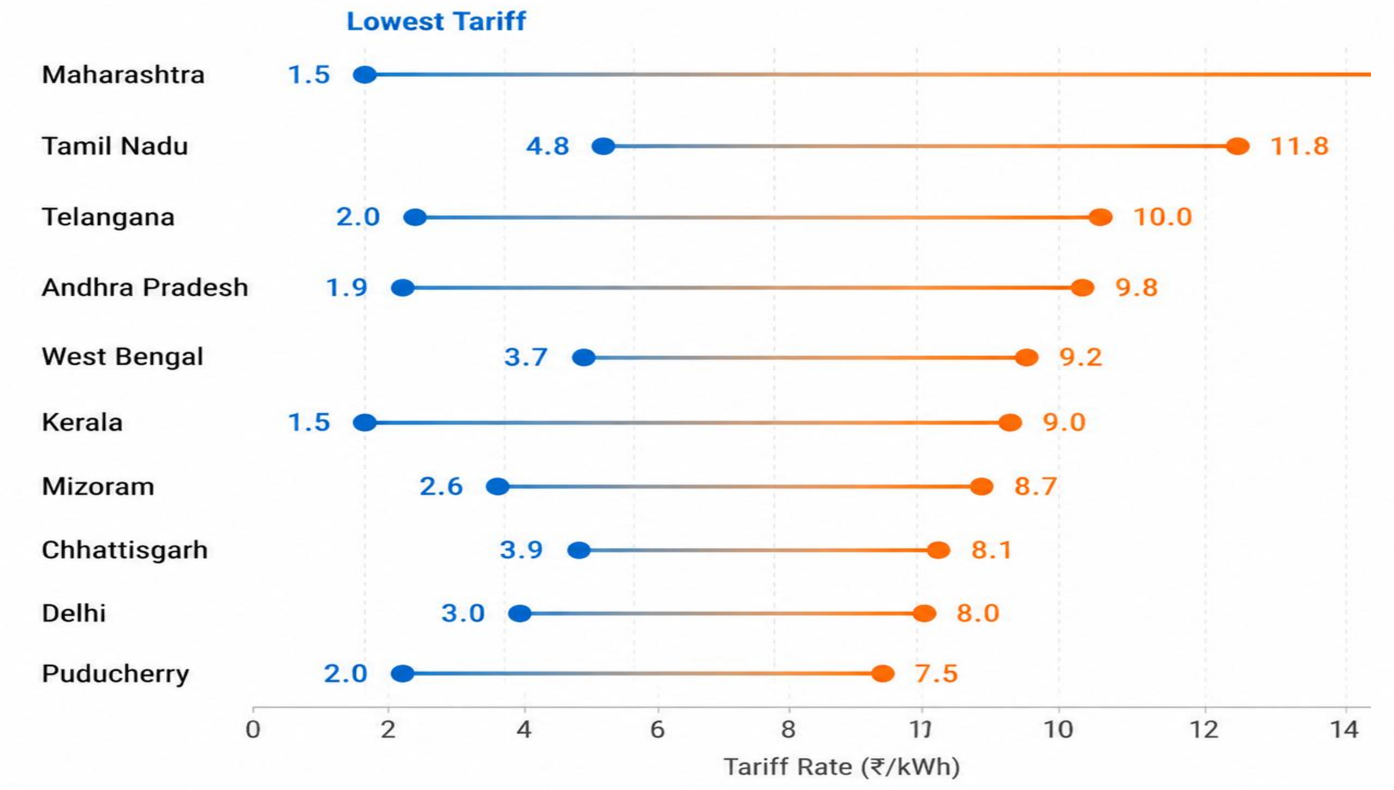
Central and state financial assistance continues to play a key role in strengthening DISCOM finances, leaving enough headroom for operational and technical reforms to restore financial efficiency.

Source: Annual Reports/Tariff Orders

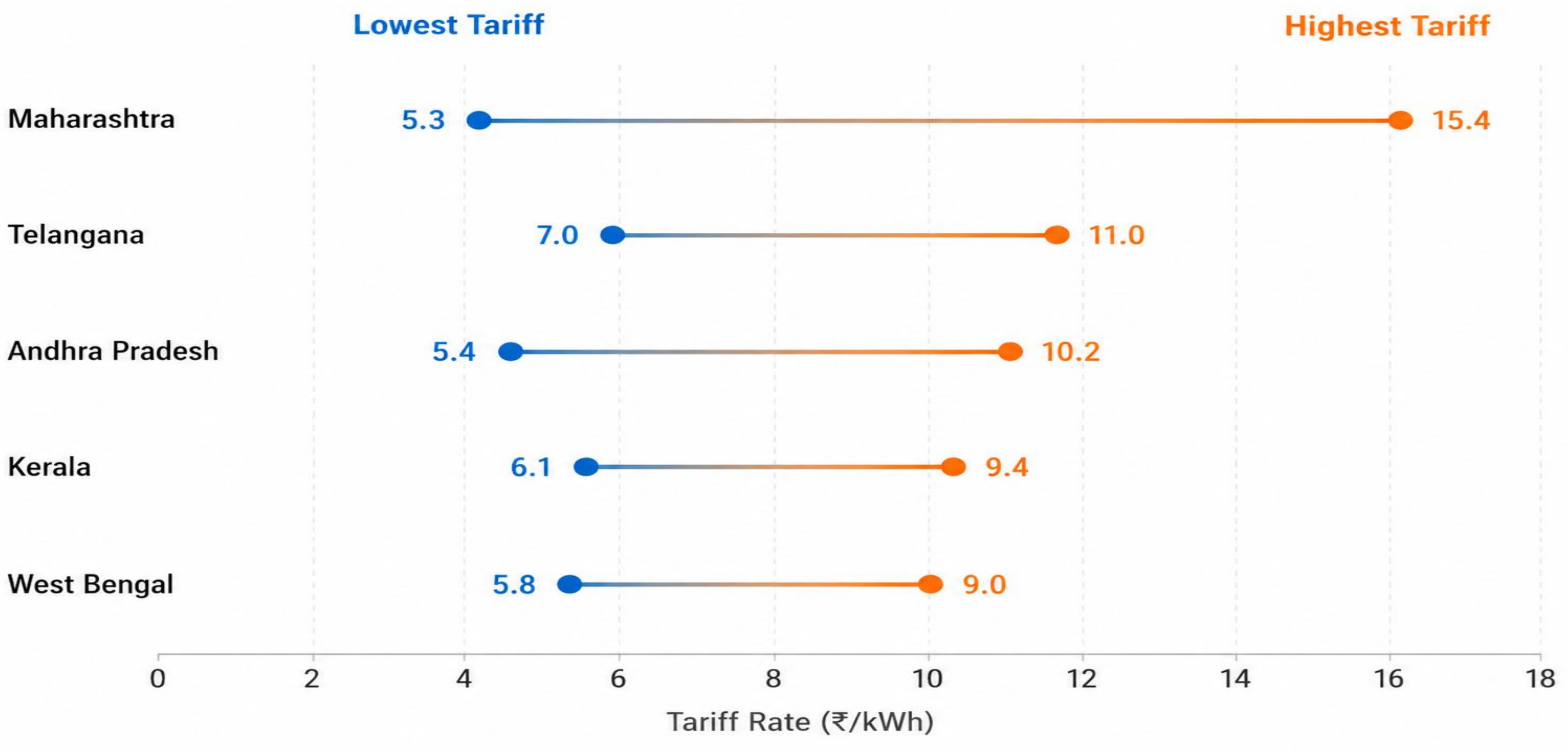
Tariff Levels across States

Tariff Levels Across States

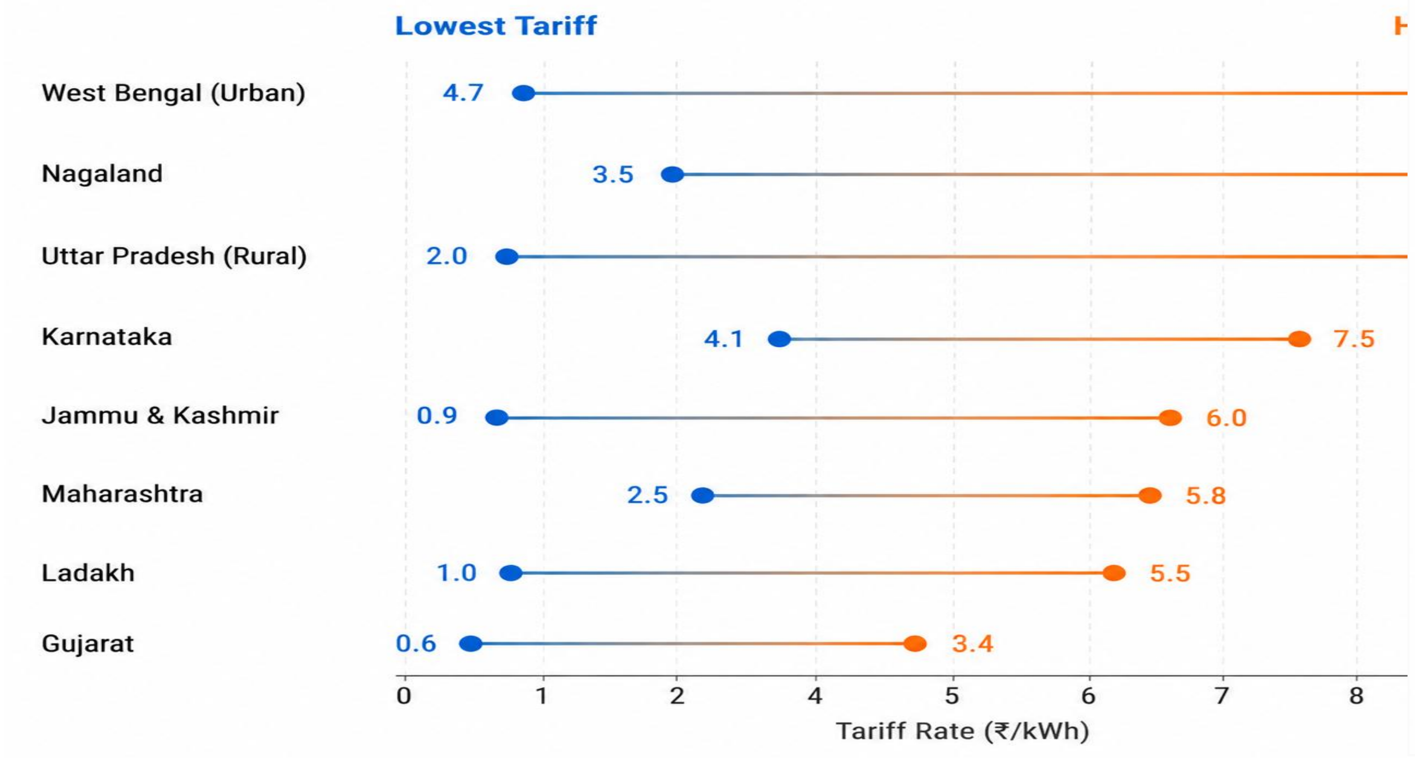
Domestic Category (in ₹/kWh)



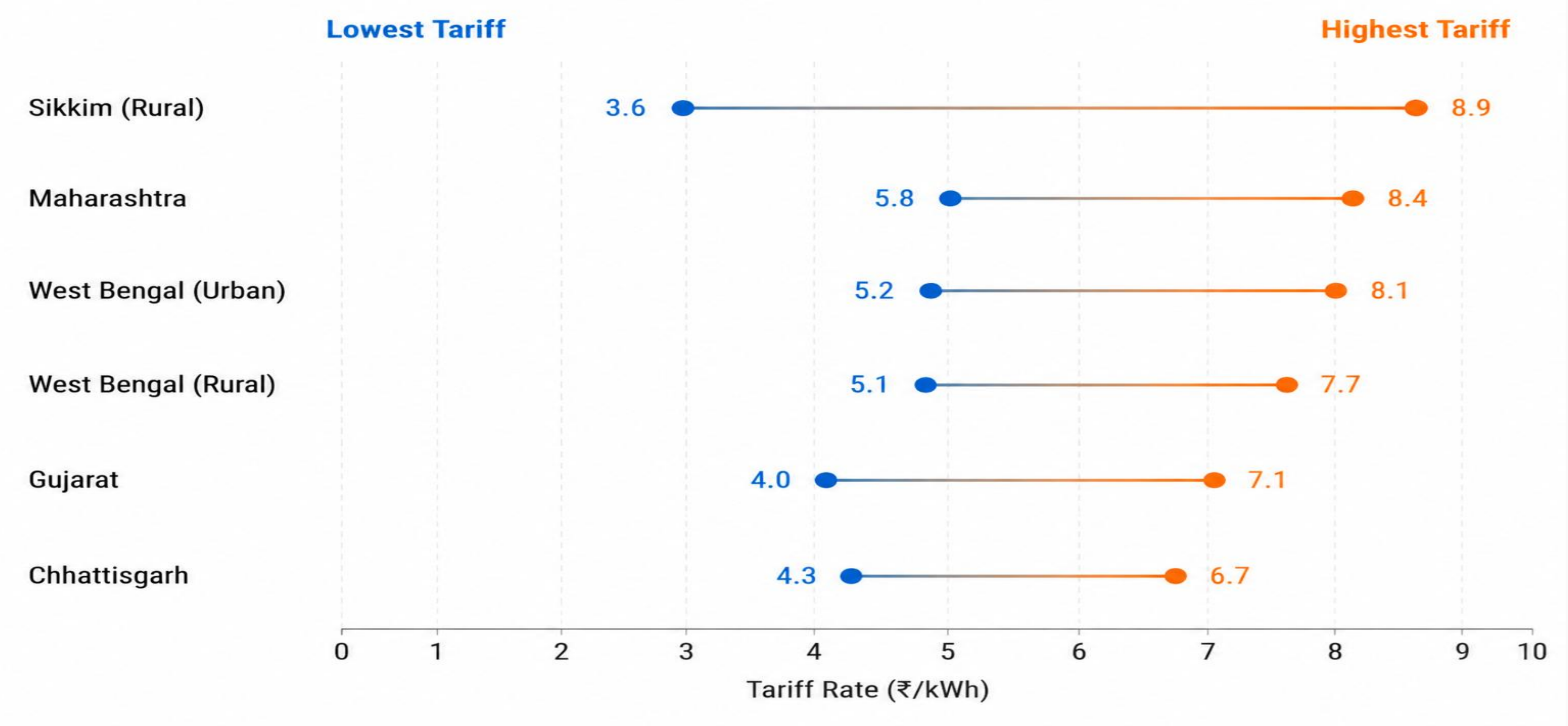
Commercial Category (in ₹/kWh)



Agriculture Category (in ₹/kWh)



Industrial Category (in ₹/kWh)



Maharashtra

Exhibits the widest spread across all consumer categories, reflecting substantial variation across domestic & commercial consumer categories, with maximum tariff across the states.

Source: DISCOMs/Tariff Orders

Data Standardisation & Reporting

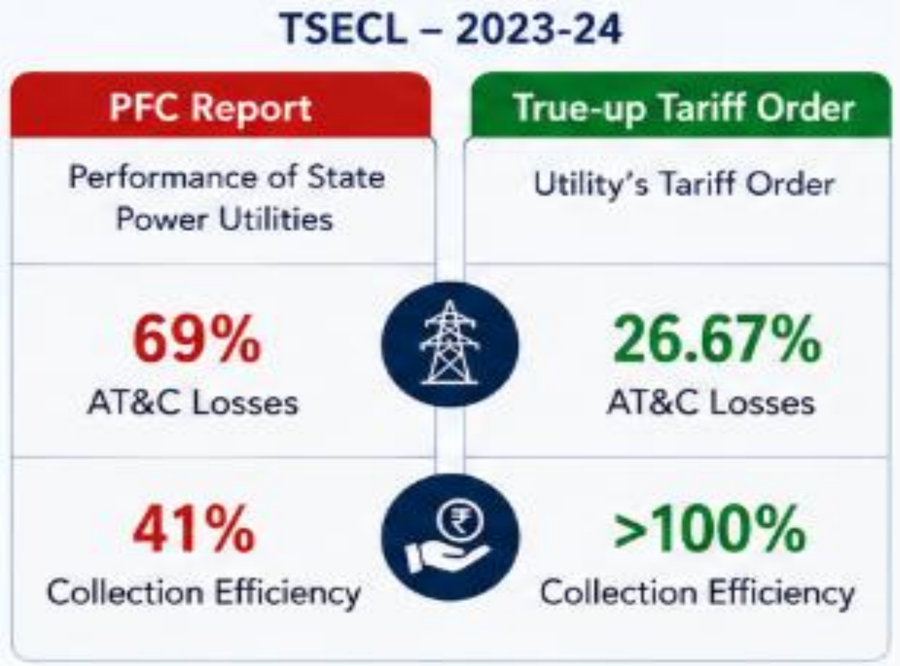
Data Standardisation & Reporting (1/3)

Reliable operational data is the foundation for effective planning, performance monitoring, and evidence-based decision-making. Discrepancies in data restrict the ability to benchmark utilities and track performance improvements over time.

Data reporting variations between PFC and DISCOM Orders

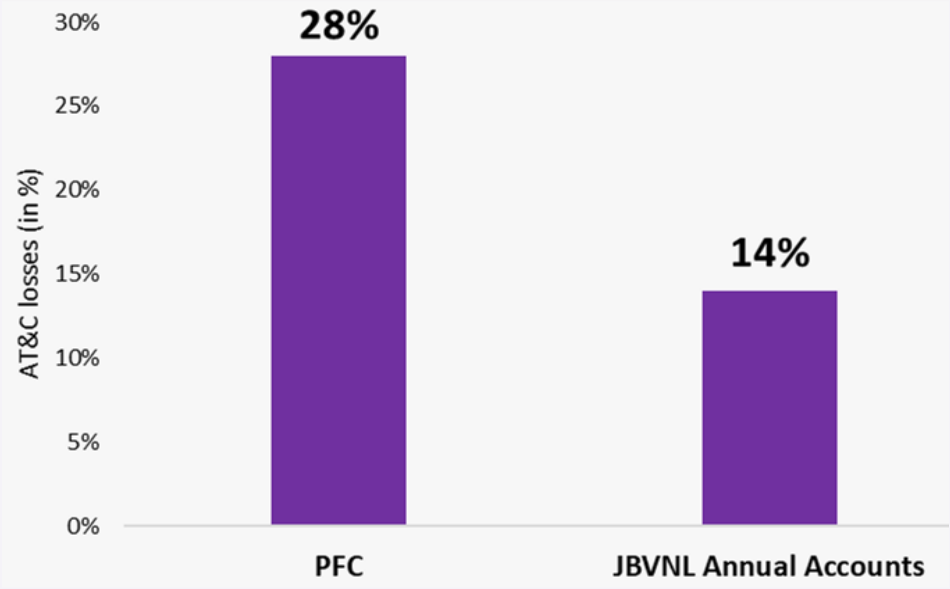
Tripura State Electricity Corporation Ltd. (TSECL)

There is a wide variation in AT&C losses and collection efficiency for 2023-24 between PFC-reported data and Tariff Order Data:



Jharkhand Bijli Vitran Nigam Ltd. (JBVNL)

A similar issue is evident in JBVNL, where AT&C losses for **2024-25** reported in the utility's audited financial statements (**14%**) differ significantly from PFC report (**27%**):



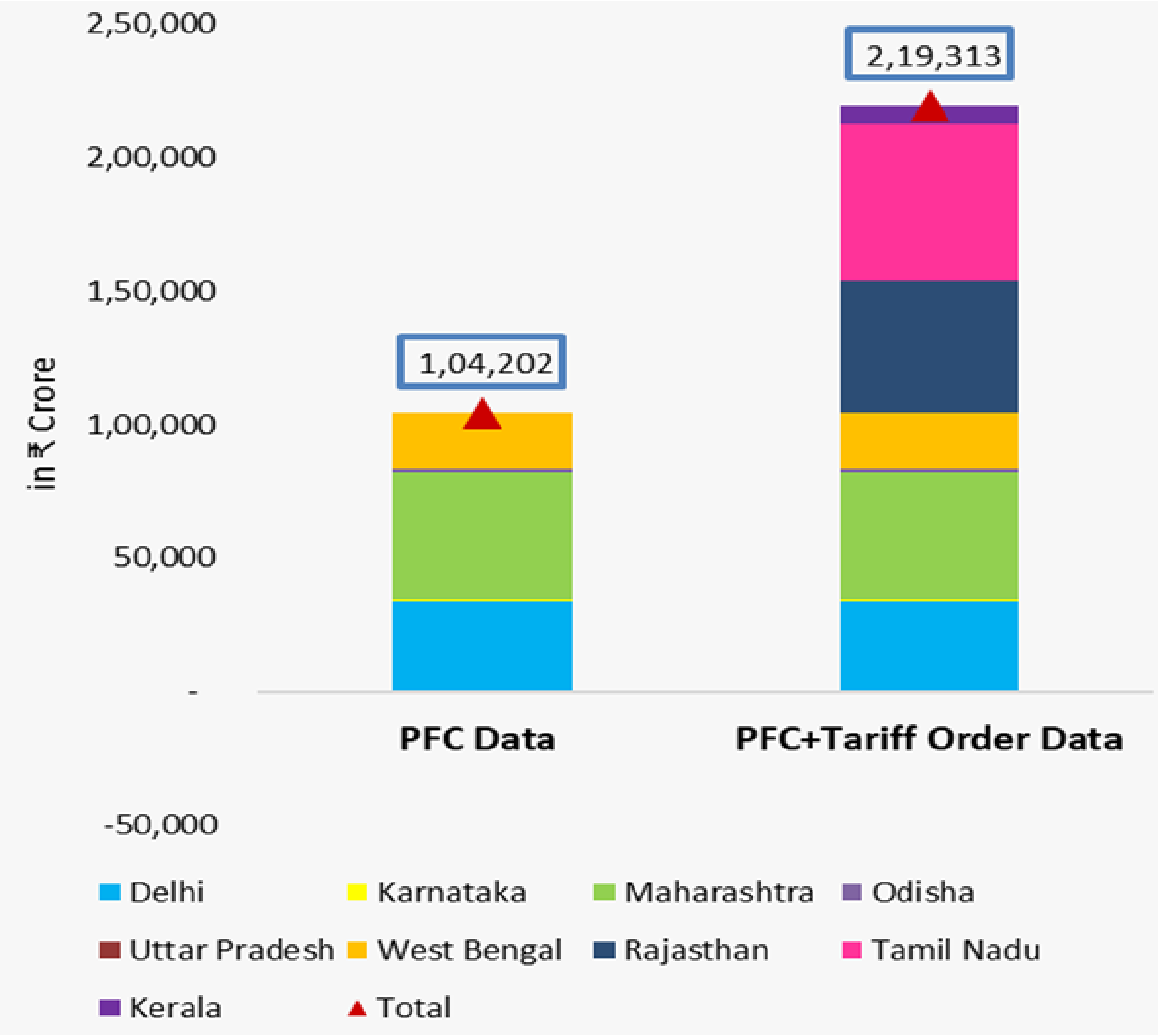
Key Message

Consistent and granular data reporting is essential to enable accurate assessment, accountability and informed decision-making in the power sector.

Source: PFC, Tariff Orders/Annual reports/ Financial statements

Data Standardisation & Reporting (2/3)

State-wise Distribution of Regulatory Assets, FY 2025



PFC data alone significantly understates the extent of regulatory assets due to incomplete state or DISCOM level disclosures.

- PFC reported ₹1.04 lakh crore of regulatory assets in FY25, concentrated in Maharashtra (46%), Delhi (33%), and West Bengal (20%).
- Key states such as Tamil Nadu, Rajasthan, and Kerala were not covered in the PFC disclosure, indicating gaps in the reported data.
- Incorporating state tariff order data increases total regulatory assets to ₹2.19 lakh crore, more than double the amount reported by PFC.

Key Message

The financial sustainability of DISCOMs can not be accurately assessed without proper disclosure of the regulatory assets data. It will also become difficult to assess whether the current tariffs are cost-reflective or whether tariff hikes may be required, since the regulatory assets represent deferred revenue recovery.

Disclaimer: Regulatory asset data may not be available for several states. Therefore, the absence of data should not be interpreted as the absence of regulatory assets.

Source: PFC, Tariff Orders/Annual Reports

Data Standardisation & Reporting (3/3)

Issue	DISCOM Level
Fragmented data across entities	DISCOMs' operational, billing, outage and consumer data are maintained in different systems without a unified framework.
Inconsistent metadata	Similar datasets are published using different metadata structures, making comparisons difficult.
Different definitions for the same data	Performance indicators such as AT&C losses, outages, reliability indices, and billing metrics may not be uniformly defined across DISCOMs.
No standardised dataset classification	DISCOM datasets are not consistently classified, resulting in uneven disclosure practices.
Limited access to data	Researchers, regulators and policymakers have limited access to comparable DISCOM datasets.
Lack of standardised data formats	Tariff Orders and ARR filings often follow different data formats and reporting structures, making it difficult to compare information across DISCOMs.
Lack of machine-readable standardised formats	DISCOM datasets are often not interoperable across platforms. The framework mandates standardised formats prescribed by CEA.