

## Key challenges of State DISCOMs in achieving Financial Viability



## Setting the context

- DISCOMs financial stability is dependent primarily on the following two factors:
  - Cost reflective tariff (after adequate Govt. support)
  - Operational performance (reduction in ACS-ARR gap and distribution losses (AT&C losses))
- The operational performance of DISCOMs has significantly improved following various initiatives by the Government of India, such as the UDAY and RDSS programs.
- However, a major challenge for DISCOMs remains the lack of cost-reflective tariffs approved by ERCs, leading to substantial under-recovery of the costs incurred like:
  - O&M expenses including smart meter opex
  - Power purchase cost due to un-realistic distribution loss trajectory
  - Working capital interest
- DISCOMs are trapped in a vicious debt trap, on account of above, having significant adverse impact on the cash gap of DISCOMs.

## Setting the context

- Old infrastructure of DISCOMs has become energy inefficient leading to higher losses. Although capital
  infusion is being done through scheme like RDSS, there is a need for further modernization, which will
  require substantial additional capital investment for replacement of ageing assets.
- Lack of uniform specifications and standards for electrical assets across State DISCOMs, leads to higher capital cost burden.
- Universal supply obligation of DISCOMs, leads to continued losses due to non-cost reflective tariff.
- In the absence of industry specific parameters, the DISCOM financials (whether on accrual or cash basis), do
  not reflect a true picture, making it very difficult to assess their actual financial health.
- Transition to Green Energy Increased banking, driven further by Green Open Access Regulations, have added to the cost burden on DISCOMs.

## Key challenges faced by State DISCOMs



## Energy Banking by consumers- Low-Cost banking, High-Cost withdrawal

#### Present challenges

- 1. Regulatory uncertainty: Many States and Regulators lack clear policies on banking, leading to financial strain on DISCOMs. Inconsistent rules on settlement periods, charges, and withdrawal timelines create challenges for effective power banking.
- 2. Grid Stability Risks: Sudden withdrawal of banked power, especially during peak demand, can cause voltage fluctuations and instability.
- 3. Equipment Stress: Rapid changes in load and the ageing equipment, leads to maintenance issues and increased costs.
- **4. Financial burden due to Time-of-Day (TOD):** Consumers bank surplus power during low-cost hours and withdraw it during high-cost hours. The differential between off-peak and peak prices leads to significant financial burden for DISCOMs during withdrawal.

#### Suggestion

Energy banking allowed as a facility to consumers, should be revenue neutral for DISCOMs and also compensate for cost of service (storage).

## Impact of Green Energy Open Access



Eligibility: Green Open Access is allowed for consumers with a contracted demand or sanctioned load of 100 kW or above.

## **Major challenge for DISCOMs:**

- > Cream skimming Shifting of affluent and revenue consumers, adversely impacts revenue collection of DISCOMs.
- > Cross-subsidization: The cross subsidy should be cost reflective. Besides, the pool for absorption of cross-subsidization cost continues to diminish with increased open access being resorted to by consumers.
- ➤ Infrastructure: Notwithstanding with above, DISCOMs still need to maintain adequate infra to supply to such customers, as and when required.
- > Grid Stability: Increased Green Open Access integration will lead to potential imbalances in demand and supply, particularly during off-peak hours when renewable energy generation is low.
- > **DSM:** Low volume open access being allowed for green energy, could result in substantial DSM charges for DISCOMs, as individual consumers can escape grid discipline enforcement.

## **Net Metering**

☐ Allows consumers to offset their electricity consumption by feeding surplus power back into the grid.

#### ☐ Challenges for DISCOMs

- In addition to financial challenges, it also leads to issues of grid stability and power management challenges including procurement and supply.
- DISCOM end up providing high cost power in lieu of low cost power.
- Reduced revenue as net-metered consumers only pay for net consumption, also impacting cost recovery.
- Expanding net metering to institutional consumer decreases the cross-subsidy pool, which could lead to higher tariffs for residential and agricultural consumers or alternatively cost under-recovery for DISCOMs.

#### ☐ Addressing the issue

- Set the cap for net metering for consumers with max load of 10 kW, to maintain cross-subsidy levels.
- For rooftop solar Net Billing should be considered instead of Net Metering, because of the cost differential between power exported to and imported to the grid.

## Implementation of Fuel Surcharge Adjustment in true spirit

## Crucial for timely recovery of prudent power purchase cost incurred by DISCOMs

- **A)** Uniform formula across the States: Any modification in guidelines issued by MOP, would lead to under-recovery of Power purchase cost for DISCOMs.
- B) Essential for managing cash flow of DISCOMs on real time basis and reducing further interest burden.
- **C)** Regulatory compliance and predictability: Having a standardized FSA structure ensures that states adhere to national policies without deviations.

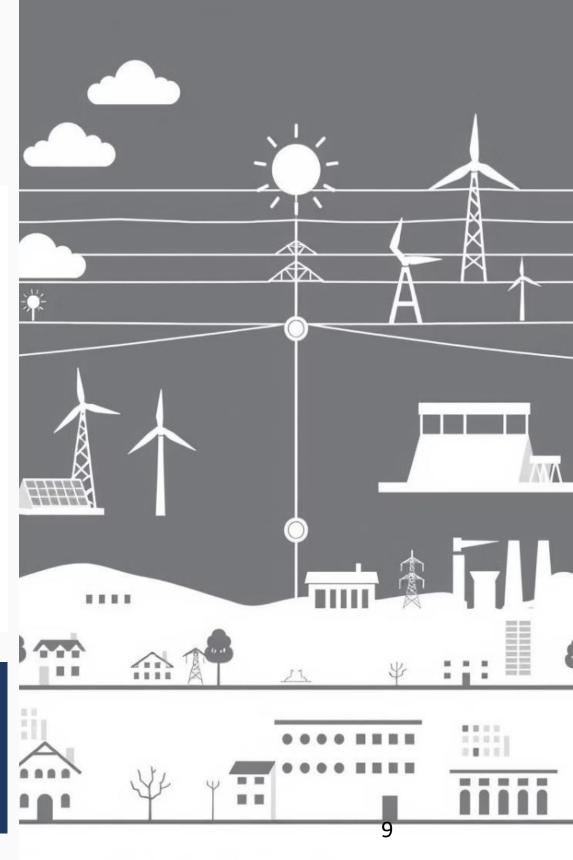
#### Suggestion

- The guidelines issued by Ministry of Power should be implemented in true-spirit by all the State Regulatory Commissions.
- DISCOMs should be allowed to create corpus for managing FSA, with carrying cost which should be benchmarked with rate of interest applicable for consumer security deposit.
- The quantum of such corpus may be left to the discretion of DISCOMs, subject to a ceiling.

## State specific Renewable Purchase Obligations (RPOs)

## Why there is a need for State specific RPO Targets?

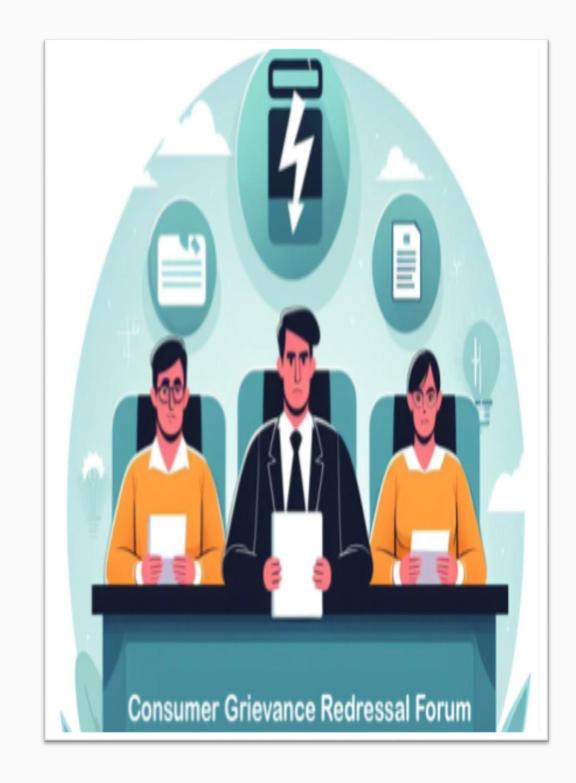
- **A. Diverse regional potential:** Different states have varying renewable energy potential based on their geographical and climatic conditions.
- **B. State-Specific Load Profiles:** Each state has unique consumption patterns and energy demands.
- **C. Financial and Infrastructure Readiness:** States with financially weaker DISCOMs or inadequate infrastructure may struggle to meet uniform RPO targets, leading to penalties rather than productive investment in renewable energy sources.
- **D. Policy Integration:** State-level renewable energy policies, such as net metering, rooftop solar incentives, and green energy corridors, are not uniform.
- A one-size-fits-all RPO approach does not account for seasonal variations and availability of RE options within the States.
- RPO targets should be aligned with state-specific policies and initiatives to ensure a cohesive and practical approach.



## Implementation of CGRF Regulations

## Introduction of District-Level Forums, instead of establishing forums at multiple administrative levels

- A. Current proposed structure is complex, litigation prone and multilayered.
- B. It leads to higher O&M expenditure on DISCOMS, which if not allowed in tariff, add to additional borrowing for DISCOMs.
- C. It is suggested that company and district-level forums shall be introduced.
- D. This consolidation will streamline the grievance redressal process and reduce administrative burden.



Current multilayered structure should be simplified

0 10

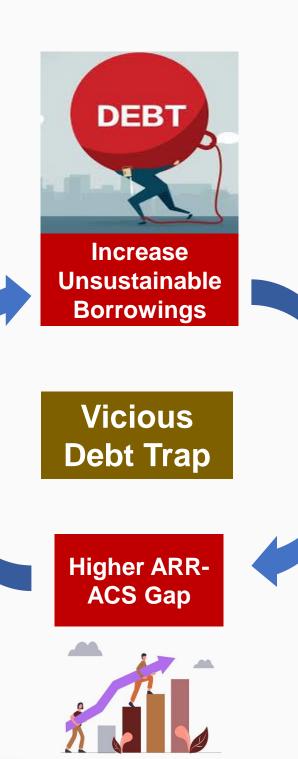
Un-realistic distribution loss trajectory, leads to non-recovery of actual power purchase cost

Disallowance of O&M
Cost (employee
expenses, contractual
employees, A&G and
R&M expenses)

Disallowance of actual capital cost expenses and Smart Meter Opex

Disallowance of Working Capital Interest

Non-Recovery of actual Cost



To avoid debt trap, the tariff should be cost-reflective

In conclusion...

While the ERCs need to ensure that the cost of service to consumers is optimised along with the quality of services, it is also incumbent upon the ERCs to ensure adequate recovery through tariff to the Discoms to ensure their financial viability and enable them to provide the expected level of service.

Balanced approach is the key.

# AIDA (All India DISCOMs Association)



## **Objectives**

- Unite DISCOMs to promote cooperation and best practices.
- Advocate for policies to improve electricity distribution.
- > Drive innovation and support Smart Grid deployment.
- Standardize equipment specifications and pricing models.
- > Address skill development needs in the power sector.
- Monitor global trends and prepare for future advancements.
- Organize events and publish reports to foster collaboration.
- Facilitate resource sharing among DISCOMs during emergencies.
- > Establish Centers of Excellence in emerging technologies.

## Membership & Fees

### Eligibility:

- . DISCOMs (Govt. & Private) licensees & franchisees
- Municipal corporations
- Power distribution departments
- Special invitees (non-voting): PFC, REC, CEA, BEE, ISGF, CPRI, MNRE, IEEMA

### Joining Process:

Submit formal application with basic organizational details

#### > Fees:

- Category 1: Rs. 5 lakhs corpus + Rs. 5 lakhs annual
   (State DISCOMs, Govt. Depts or entities engaged in power distribution in NE states,

   Sikkim, HP, J&K, Uttarakhand, UTs)
- Category 2: Rs. 10 lakhs corpus + Rs. 10 lakhs annual
   (Other DISCOMs, govt. holding companies, franchisees, licensees)

## Structure of the Association

#### **General Body (GB)**:

- Members: DISCOMs (Govt. & Private), licensees, franchisees, municipal corporations, power distribution departments
- Special invitees (non-voting): PFC, REC, CEA, BEE, ISGF, CPRI, MNRE, IEEMA

#### **Director General:**

- Full-time role for a retired senior power sector official or eminent person
- Appointed by EC and works under EC's guidance

#### **Executive Committee (EC):**

- President: DISCOM Chairperson/CMD
- General Secretary: CMD/MD/CEO of DISCOM
- 10 rotating members from DISCOMs (2 from each of 5 regions)
- Nominated/elected/appointed by GB

#### Secretariat:

Permanent body handling daily operations

Website: <a href="https://aida-india.org/">https://aida-india.org/</a> (Under Development)

## Thank You!

17 17