

## Action Plan

Applicant DISCOM to prepare an Action plan for strengthening its Distribution system and improving its performance by way of various reform measures, which would result in improvement in its operational efficiency and financial viability as well as improve the quality and reliability of power supply to the consumers. Each DISCOM has to prepare an Action plan, with several subcomponents for strengthening its Distribution system, and to improve their performance. Works that are required for AT&C loss reduction would be given priority. The approach and structure for preparation of the Action Plan is given in following sections.

### A. Action Plan-I

The first part of the action plan will analyze the reasons and identify the root causes for losses and list out the steps which will be taken for the reduction of AT&C losses and ACS-ARR gap, and the time frame for taking these steps. The first part would also include the reform measures for financial viability and operational efficiency of DISCOMs as well as annual Results, Outcomes and Evaluation framework for the scheme period.

#### 1. As- Is Assessment of Financial and Operational Health

Submission of past data on key operational and financial parameters to help identify key issues and set baseline for preparing the action plan and performance evaluations. The relevant information is to be filled up in MS Excel based datasheets and summarised as below.

S. No	Parameter	FY2018	FY2019	FY2020	FY2021	Industry Benchmark
<b>Operational Efficiency</b>						
1)	ACS-ARR Gap					Nil
2)	Billing Efficiency					>90%
3)	Collection Efficiency					>98%
4)	AT&C Losses					<15%
<b>Quality and Reliability</b>						
5)	Hours of Supply					Basis Discom Service Ratings
6)	SAIFI					
7)	DT Failure Rate					
<b>Financial</b>						
8)	Net Profit/ (Loss)					Positive
9)	Subsidy Overdue					Nil
10)	Government Overdues					Nil
11)	Regulatory Assets					Nil
12)	Tariff Petitions Filed Date					As per Regulations
13)	Tariff Orders Issue Date					
14)	True-up Petitions Filed Date					
15)	True-up Orders Issue Date					
16)	Genco Overdues					Nil
17)	Audited Accounts Published Date					September of next FY
18)	Any Other					XYZ

## 2. Root Cause Analysis

Root Cause Analysis and discussion on all areas covered in the table above wherein performance is not aligned with Industry Benchmarks. Discoms are required to critically analyse the issues where performance improvement is necessitated and envisaged to be undertaken under the scheme.

The analysis/ discussion must cover all relevant gap/ issue areas (indicative as below). The descriptive analysis on the gap areas to be presented, to arrive at the works / reforms to be undertaken for addressing the same.

### I. Tariff / Regulatory

- a) Delay in filing of Tariff, True up petitions
- b) Non-Compliance with regulatory requirements and data submission leading to delayed order
- c) If abnormal delay in tariff fixation on account of ERC, whether Electricity Duty can be increased
- d) Analyse whether the tariff is cost reflective and whether regular annual revision exercise is being carried out
- e) Whether Automatic Fuel Cost adjustment is being allowed by the regulator and where it is allowed, whether the same is implemented regularly
- f) Whether Tariff is notified on full cost basis without subsidy?
- g) Liquidation Plan for regulatory assets, if any. Also, whether carrying cost is being allowed?
- h) Whether Return on Equity as per regulation is sufficient and whether it is being claimed and included in tariff?
- i) Assess strengths and weaknesses of Regulatory team/cell

### II. AT&C losses

- a) Analyse reasons for low billing efficiency, if it is less than 90%
- b) Analyse reasons for low collection efficiency, if its less than 99%
- c) Meter reading practices
  - a. Extent of manual meter reading,
  - b. Extent of defective meters
  - c. Extent of billing on average basis without actual meter reading
  - d. Outsourced/departmental
- d) Extent of agriculture feeder segregation
- e) Whether electricity to farmers for more than the agreed hours is leading to high losses in areas where there is free electricity or is charged on flat rates?
- f) Extent of government dues and whether State Government has agreed for liquidation of Government dues and whether a system has been put in place for timely payment of Government dues?
- g) Assessment of vigilance / regulatory enforcement /special police station to address theft, pilferage, tampering etc
- h) Assessment of technical losses due to long feeders / lines, overloading of lines/DTs, etc
- i) Assessment of losses due to low power factor

- j) Identification of high loss areas and measures for loss reduction - Armoured / AB Cabling / HVDS / meter installation practice (eg metering outside premises, on poles or groups of meters in meter box)
- k) Whether there is a dedicated team for handling high value consumers?

### **III. Power Purchase**

- a) Inadequate use of systematic approach or use of IT tools for Demand forecasting, scheduling and procurement
- b) Whether Power Purchase management through adequate mix of Long / Medium / Short term agreements is being done?
- c) Whether DISCOM is being penalized on account of non-fulfilment of prescribed RPO?
- d) Whether requisite DSM initiatives are being undertaken for peak load reduction?
- e) Whether available market-based mechanisms for power purchase cost management are being used? e.g. exchange, banking, bilateral, long / medium / short / real time term etc
- f) Whether DISCOM faces the issue of high power purchase cost due to legacy contracts or high fixed costs?
- g) Whether merit order despatch is being followed for all power plants including state owned power plants?

### **IV. Revenue related measures**

- a) Assessment of revenue loss due to outages and bottlenecks in transmission and distribution
- b) Level of cross subsidies and its impact on industrial development, loss of revenue due to open access and revenue from commercial & Industrial consumers and plan to bring it within 120% of cost of supply, if not already done so

### **V. Accounting**

- a) Level of Energy Accounting
  - whether system metering (Feeders and DTs) completed
  - whether the above are communicable.
  - Status of consumer indexing
  - Whether energy accounts are being prepared and at what frequency
  - Analysis of Energy Accounts and corrective action being taken or not
- b) Preparation and auditing of financial accounts within prescribed timelines.
- c) Whether un-audited quarterly accounts are being prepared?
- d) Status of asset register and mapping

### **VI. IT / OT**

- a) Whether there is a robust unified billing software for the entire utility and the extent of usage of analytics for identifying losses?
- b) Whether ERP System is operational across all areas, through major ERP modules?

- c) Whether requisite dashboards / ready MIS available at various levels, to review the progress of various works, reforms being undertaken?
- d) Whether SCADA / DMS / OMS systems are being effectively used and whether major urban centres are covered under this?

**VII. Operation and Maintenance**

- a) Lack of robust maintenance policy
- b) Inadequate condition monitoring and extent of use of technology for this purpose
- c) Delayed adoption of enabling technologies
- d) Whether any policy for Preventive Maintenance? Can this be outsourced?

**VIII. Governance / Institutional Framework**

- a) Whether DISCOM has a policy for regular trainings of DISCOM executives?
- b) Whether adequate hands-on trainings being provided to dealing officers on relevant areas?
- c) Whether performance-based incentives, e.g., monetary, transfer etc being provided?
- d) Weak HR Performance management and Institutional Governance
- e) Whether 24X7 consumer care centres available to consumers?
- f) Status of making available all consumer services online
- g) Whether the O&M team and Commercial teams are separate (bill generation and rectification being handled by a separate backend team)?
- h) Whether Distribution Franchisee, PPP or other frameworks for improving operational / financial efficiency are being explored?
- i) Whether there is stability of tenure of senior management (CMD / MD) as well as below board level officers (CE / ESE / EEE)?

**IX. Subsidy / Grant Administration**

- a) Whether there is a policy of notifying subsidy per unit and / or per kw, consumer category-wise (not providing subsidy in bulk)?
- b) Whether there is a plan to adopt DBT through consumer accounts maintained with DISCOM, if not already done?
- c) Whether State Government has agreed for liquidation of outstanding Subsidy dues, if any?
- d) Whether State has the practise for making adequate Budgetary provision for advance release of subsidy?
- e) Whether there is a policy for providing subsidy / grant to cover AT&C losses above regulator approved AT&C losses?
- f) Policy for funding of accumulated / yearly losses by State Government

**Note:**

- i) Some of the issues may impact multiple areas, eventually impacting the financial and operational health of Discoms.
- ii) The above gaps as applicable for the respective DISCOMs may be described in detail, which shall also aid in formulation of broad view on the performance of the DISCOM.

### 3. Action Plan for performance improvement

- This section shall cover summary discussion on proposed steps to address the challenges analysed in previous section. The steps/ actions shall be classified as under:
  - Consumer and System Metering
    - Indicate works to be undertaken
    - How the above works will address issues discussed in previous section, namely AT&C losses, ACS- ARR Gap, Reliability issues and other issues relating to operational and financial sustainability (as applicable)
  - Infrastructure works for loss reduction
    - Indicate works to be undertaken
    - How the above works will address issues discussed in previous section, namely AT&C losses, ACS- ARR Gap, Reliability issues and other issues relating to operational and financial sustainability (as applicable)
  - Infrastructure works for modernisation
    - Indicate works to be undertaken
    - How the above works will address issues discussed in previous section, namely AT&C losses, ACS- ARR Gap, Reliability issues and other issues relating to operational and financial sustainability (as applicable)
  - Reform initiatives.
    - Indicate reforms to be undertaken.
    - How the above reforms will address issues discussed in previous section, namely AT&C losses, ACS- ARR Gap, Reliability issues and other issues relating to operational and financial sustainability (as applicable).
    - Indicative Reforms are listed in Annexure 1 for reference.
    - Further, the Reforms measure need to be mapped with three (3) stakeholder categories i.e., State Government, Discoms and SERCs to demarcate actions by each stakeholder.
- The details of the metering and infrastructure works as well as reforms shall be provided in the MS Excel based datasheets as per required formats.
- Detailed Project Reports to be prepared for the metering and infrastructure works as per prescribed formats. The broad summary of DPR shall be provided in the Action Plan

#### 4. Result Evaluation Framework

Based on the targeted actions in terms of metering, infrastructure works and reform measures, the targeted results at the ends of scheme period, annual targets as well as baseline data to be summarised as below.

S.No	Result Parameter	Units	Maximum Marks	Base Year and Baseline values (FY20/ FY21)	Targets			
					FY2022	FY2023	FY2024	FY2025
A	<b>Financial Stability (60% weightage)</b>							
1	ACS-ARR Gap	Rs./ kWh	25					
2	AT&C loss - Increase in Billing Efficiency and Collection Efficiency - Reduction in theft and line losses	%	25					
3	Outstanding/ Overdue Subsidy Payment by State Government	Rs. Crore	15					
4	Outstanding/ Overdue Government Dues	Rs. Crore	10					
5	Progress in putting Govt. Offices on prepaid meters	%	10					
6	No. of creditor days (including payment to Gencos for supply of power)	Days Payable	5					
7	No. of debtor days	Days Receivable	5					
8	Unliquidated regulatory assets	Rs. Crore	5					
			100					
B	<b>Outcomes of Infra works (20% weightage)</b>							
1	Hours of supply (Rural) – excluding agriculture	Avg. Hours/ Day	20					
2	Hours of supply (Urban)	Avg. Hours/ Day	20					
3	%age of Feeder Level Energy accounting being published	%	10					
4	%age of DT Level Energy accounting being published	%	10					
5	Reliability of power supply - SAIFI (System Average Interruption Frequency Index)	Nos/ Year	20					

S.No	Result Parameter	Units	Maximum Marks	Base Year and Baseline values (FY20/ FY21)	Targets			
					FY2022	FY2023	FY2024	FY2025
6	Data availability in the National Feeder Monitoring System / NPP	%	20					
			100					
<b>C</b>	<b>Infrastructure Works (10% weightage)</b>							
1	<b>Metering</b>							
a	Consumer Metering	Nos.	10					
b	DT Metering	Nos.	20					
c	Feeder Metering	Nos.	20					
2	Feeder Separation - % of total Agriculture feeders separated (Feeders with Agricultural load of >= 30% of total load of feeder)	%	10					
3	Replacement of existing LT overhead bare conductor lines with AB/UG cable	Ckm	10					
4	% of Consumers with Prepaid Smart Meters (other than Govt. Deptt.)	%	15					
5	Availability of Feeders in NFMS	%	15					
			100					
<b>D</b>	<b>Policy and Structural Reforms (10% weightage)</b>							
1	SCADA	No. of Towns	15					
2	ERP Implementation	Yes/ No	10					
3	Training of Discom Officials	Mandays	5					
4	Corporate Governance (Recommendations Complied)	%	10					
5	Tariff Reforms (MYT/ ToD/ Cross Subsidy)	-	15					
6	Subsidy Delivery Mechanism/ DBT	-	15					
7	Consumer Rights and Grievance Redressal	-	15					
8	Adoption of PPP Mode	-	15					
			100					

## B. Action Plan-II

Based on the analysis in Action Plan – I, DISCOM will spell out major works for components of Part A of the scheme, namely metering including energy accounting and Distribution infrastructure works along-with their estimated cost. The works indicated in Action plan II shall be aligned with the DPRs prepared for the respective works.

### 1. Metering Works

Works	Quantity proposed for implementation by December' 23	Quantity proposed for implementation by March' 25	Total Outlay
Prepaid Smart Metering			
DT Metering			
Feeder Metering			

### 2. Distribution Infrastructure works for loss reduction

Works	Proposed Quantity	Total Outlay

### 3. Distribution Infrastructure works for modernisation

Works	Proposed Quantity	Total Outlay



## **Annexure 1: Indicative list of Reforms and expected actions for preparation of action plan**

### **1) Tariff Reforms**

- **Regulatory Assets Liquidation**-Discoms to propose plan for liquidation of regulatory assets through tariff/ regulatory surcharge/ state funding. The trajectory shall also be provided in the Result Evaluation Matrix. In addition, it must be ensured that no new regulatory asset is created in future.
- **Timely issuance of tariff orders**
  - Discoms to file tariff petition, if due, for the current/ ensuing year and ensure that future tariff petitions are filed within the timelines stipulated in the state level tariff/ MYT regulations.
  - SERC to ensure that tariff orders are issued within stipulated timelines and suo-moto tariff orders are issued in case Discoms fail to file the petitions within their stipulated timelines.
- **Timely true-up of tariffs**
  - Discoms to file true-up petitions, if due, for the previous years and ensure that future true-up petitions are filed within the timelines stipulated in the state level tariff/ MYT regulations.
  - SERCs to ensure that true-up orders are issued as stipulated timelines and suo-moto proceeding are initiated in case Discoms fail to file the true-up petitions within their stipulated timelines.
- **Notification of category-wise full cost tariff without subsidies** –For the annual/ multi-year tariff proceedings, SERCs to ensure that tariff is reflective of full cost and not by discounting committed subsidies from ARR.
- **Accounting due subsidy on the basis of the energy supplied to each category from energy accounts**
  - The State Governments to declare unit-wise subsidy for different categories of subsidised consumers.
  - DISCOMs have raised the subsidy bill at least on quarterly based on the estimated energy consumption by different categories of subsidized consumers.
  - Government to make advance payment of subsidy based on subsidy bills raised by Discoms.
  - Direct Benefit Transfer (DBT) of Subsidies through account of consumers maintained with Discoms.
- **Reduce Cross Subsidies to reduce tariff** –Action plan for phasing out cross subsidies in accordance with the National Tariff Policy.
- **Expand Time of Day Tariffs to all Categories** –Introduction of Time of Day (ToD) tariff regime and plan for progressive expansion of ToD regime across all consumer categories.

- **Status of Automated Fuel Cost Adjustment (FCA) charges**—Adoption of FCA Charges in tariff regulations and levy of the charges in monthly consumer bills.
- **Electricity duty** –Levy of Electricity Duty or review of the Electricity Duty rates for different consumer categories, abnormal delay in tariff fixation on account of ERC.
- **Review and monitoring of tariff related amendments** –Establishment of a dedicated cell in Discom to monitor and analyse the state level regulations and orders and represent the interest of Discoms to SERCs in pertinent matters. The cell will also act as single point contact for Nodal Agency (REC/ PFC) in communicating reform status.
- **RoE reflective tariff** – The Discom shall claim RoEas per rates stipulated in SERC regulations to ensure recovery of all prudent costs.

## 2) AT&C Loss Reduction measures

- **Liquidation of arrears (subsidies and govt. dues)** –. Submission of Action Plan and trajectory for the liquidation of arrears.
- **Release of tariff subsidies in advance by state Govt-**
  - Government to make advance payment of subsidy based on subsidy bills raised by Discoms.
  - Direct Benefit Transfer (DBT) of Subsidies through account of consumers maintained with Discoms.
  - Quarterly and Annual Accounts of DISCOMs need to explicitly include details of subsidies.
- **Timely payment of Government department dues -**
  - State Government to ensure that electricity bills are paid by relevant departments/ bodies on time.
  - Quarterly and Annual Accounts of DISCOMs need to explicitly include details of government overdues.
- **Prepaid Smart Metering in high loss areas and Government Offices** – Prepaid smart metering to be prioritised in High loss areas (Electricity Divisions having more than 50% consumers in urban areas and with AT&C losses more than 15% and other Electricity Divisions with AT&C losses more than 25%) and Government offices at block level and above.
- **Electricity police stations to curb theft** –Electricity police stations to be set up in line with the provisions of the Electricity Act, 2003 by State Governments out of its own resources.
- **ERP and Billing Software to improve billing** – IT/ OT works including ERP and Billing Software for improved billing leading to Loss reduction and Modernisation to be taken up. Further, technology and analytics to be leveraged for identifying losses.
- **Improving collection efficiency through robust monitoring and tracking through technology and online interventions.**

- **Feeder and DT level automated online energy accounting system** - A feeder and DT level automated online energy accounting system to be put in place.
- **Merit order dispatch** - Merit order dispatch to be followed for all power plants including state owned power plants, to reduce power purchase costs
- **Metering practices** – Metering practices may be reviewed e.g. metering outside premises, on poles or groups of meters; to improve billing efficiency
- **Infrastructural bottlenecks** – Regular assessment to be made of the technical losses due to long feeders / lines, overloading of lines/DTs, etc and revenue losses on account of outages & infrastructural shortcomings.
- **Losses in Agricultural areas** – Analysis to be made whether increased supply hours for Agricultural consumers leads to higher losses, in case of free supply or billing on flat rates, to push state level policy on agricultural supply
- **Extent of Feeder Segregation** – Analysis to be made of the existing Agricultural load being served through dedicated feeders and current status of mixed feeders with > 20% agricultural demand

### 3) Governance Related Measures

- **Takeover of losses by State Govt** – State Government to take over yearly losses of Discoms in accordance with the trajectory stipulated by Ministry of Finance for increasing the borrowing limits of states by 0.5% of GSDP.
- **Timely publishing of Audited Annual Accounts** - DISCOMs to publish audited annual accounts by end of December of the following year during first two years of operation of the scheme (i.e. for FY 2021-22 and FY 2022-23) and thereafter audited annual accounts by end of September of the following year from 3rd year onwards.
- **IT wing for management of IT/OT services** – Creation/ Strengthening of IT wing within DISCOM for management of IT/OT service.
- **Performance linked incentives for DISCOM staff** – Adoption of policy for performance linked incentives for Discom staff. The incentives may be monetary or in form of deputation at key positions/ departments to help drive efficiency and reforms.
- **Training and Capacity Building of existing manpower** – Training need assessment and delivery of training programs for staff across need areas.
- **Enabling Private participation** – Evaluation of options for privatisation and initiating actions, through various modes such as Franchisee, PPP, Privatization, JV etc.
- **Adoption of Balanced Scorecard**- Discoms can effectively assess and monitor the performance at various levels (circles, zones, divisions etc.) using Balanced Scorecard. The approach further helps align the goals/ objects to performance, to assess overall impact at Discom level.
- **Setting up and strengthening specialized functions**- Setting up dedicated wings/ departments/ functions for undertaking specialized activities related to

quality monitoring, power procurement management, business excellence, customer relations (especially for HT/ high consumption consumers), internal monitoring etc. In addition, strengthening of regulatory wing is imperative for timely tariff/ true-up filing, compliance with directives and developing robust petitions/ responses on various matters.

- **Segregation of Technical and Commercial functions-** Discoms to delineate the commercial (billing, collections, arrear recovery, metering etc.) and operational (planned and unplanned maintenance, fault response etc.) roles and ensure that both types of roles are not carried out by same person. Productivity of staff needs to be monitored in each type of role and deputation should be based on best fitment of person with the role.
- **Deployment of technology for efficiency improvement-** Deployment of Information Technology (IT) and Operational Technology for efficiency improvement. For instance, IT implementation comprising Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), workflow and data management system etc. OT implementation comprising SCADA, DMS, OMS, MDMS etc.

#### 4) Consumer Centric Measures

- **Following the spirit of Electricity (Rights of Consumers) Rules, 2020 –** SERC to notify updated Standards of performance (SoP) for Discoms in alignment with the Right of Consumers (RoC) Rules. Discoms to ensure adherence with the updated/ revised SoP.
- **Multi-tier Consumer Grievance Redressal Forum (CGRF) –** Discoms to establish multi-tier CGRF levels to cater the needs of the sub-division, division, circle, zone etc. A mechanism to be set up by Distribution Licensee to monitor grievance redressal. Performance of CGRF to be monitored by SERC.
- **24X7 toll free call centers –** Discom to establish a Centralised 24X7 toll-free call centre for providing common services like new connection, disconnection, reconnection, shifting of connection etc. Discoms to provide all services through a common Customer Relation Manager (CRM) System to get a unified view of all the services requested.
- **Updated consumer data base including phone numbers and emails –** Discom to ensure that consumer database is fully updated to enable communication regarding billing, payment and provision of other services.
- **Dedicated team for bill rectification-** Discoms to create dedicated teams for resolving billing related complaints in a time bound manner as per SOP.