Ujwal DISCOM Assurance Yojana (UDAY): Revival evident.

Contact:

Madan Sabnavis
Chief Economist
madan.sabnavis@careratings.com
91-022-6754 3489

Ashish K Nainan
Research Analyst
ashish.nainan@careratings.com
91-022-6754 3443

Mradul Mishra (Media Contact)
mradul.mishra@careratings.com
91-022-6754 3515

Scheme objectives

Ministry of Power, GoI launched Ujwal DISCOM Assurance Yojana (UDAY) which was approved by Union Cabinet on 5th November, 2015.

The scheme envisages:

- Financial Turnaround for DISCOMs
- Operational improvement in DISCOMs
- Reduction of cost of generation of power
- Development of Renewable Energy
- Energy efficiency & conservation

Expected Impact of the Scheme

- Financially & Operationally sound DISCOMs
- Increased demand for power
- Improvement in PLF of generating plants
- Reduction in stressed assets of banks
- Availability of cheaper funds for DISCOMs
- Increased capital investment in power
- Development of Renewable Energy sector

Benefits to Participating States

- Reduction in Cost of power through Central Support
  - Increased supply of domestic coal
  - Allocation of coal linkages at notified prices
  - Coal price rationalization
  - Coal linkage rationalization & allowing coal swaps
  - Supply of washed & crushed coal
  - Additional coal at notified prices
- Faster completion of Interstate Transmission lines
- Power purchase through transparent competitive bidding

Scheme objective status:

MOU signed: in total, 26 states and 1 Union territory have signed MoU under UDAY Scheme.

Comprehensive (16 states):

Jharkhand, Chhattisgarh, Rajasthan, Uttar Pradesh, Punjab, Bihar, Haryana, J&K, Andhra Pradesh, M.P., Maharashtra, Himachal Pradesh, Telangana, Assam, Tamil Nadu & Meghalaya

Only operational (10 states, 1 UT):

Gujarat, Uttarakhand, Goa, Karnataka, Puducherry, Manipur, Sikkim, Arunachal Pradesh, Kerala, Tripura & Mizoram.

Orissa and West Bengal have private DISCOMs which are outside the coverage of UDAY currently, but the Power Ministry is considering ways to bring them under the ambit of UDAY in case the discoms are stressed.

Performance review up to March 2017

Power purchase cost

- Power purchase cost has reduced in 6 states. At overall level, the cost has reduced from Rs. 4.20 per unit in FY16 to about Rs. 4.16 per unit in FY17. ***With renewable energy slowly taking a larger pie of the power production mix, we can expect this to go down further.*** Peak power procured from renewable energy is cheaper compared with conventional and fuel based power sources,

Some other efficiency centric measures taken by states are as follows:

- A web portal and mobile apps for Merit Order Dispatch of Electricity (MERIT) has been developed in association with POSOCO. The app displays information regarding the merit order such as daily state-wise marginal variable costs of all generators, daily source-wise power purchases of respective states/UTs with source-wise fixed and variable costs, energy volumes and purchase prices. The app also gives information regarding reasons for deviation from merit order such as must run conditions, transmission constraints etc.
- As per Government data the country has moved from shortage to surplus in terms of coal production. The government has also focused on rationalizing coal linkages, which has helped reduce transportation cost. There has also been an improvement in the quality of coal supplied to power plants, which in turn has reduced the amount of coal burnt per unit power produced. This further helped power producers to lower their costs of electricity production by up to 30 paise per unit electricity produced. This is significant given that cost of coal makes up 54%-60% of the price charged by power producers.
- Few states have increased procurement of power from Power Exchanges (IEX and PXIL)

Interest cost Benefits

- UDAY has been able to re-cast the debt of the distribution companies to eliminate the legacy burden. As per Government data, 16 State Governments have taken over around Rs. 2.32 lac cr debt of the distribution companies as per terms of UDAY MoU. ***Such loans were running at interest rates of around 11-14% p.a., which shall now be serviced by the States at rates ranging from 7%-9%.The savings accrued to DISCOMs on account of interest benefits due to above, takeover & restructuring works out to Rs. 12,000-15,000 crores approximately by March, 2017.***

AT&C loss

- National average (all UDAY states) of AT&C loss has come down to 20.1% in FY17 from 21.1% in FY16. Total 11 states have reduced their AT&C loss from FY16 level.

ACS-ARR Gap

- ***Gap between Average Cost of Supply (ACS) and Average Revenue Realized (ARR) has reduced in 12 states***. It is the combined effect of savings in interest cost, power purchase cost, tariff rationalization, better billing/collection efficiency etc. At overall level, the gap has reduced from 59 paisa per unit in FY16 to about 46 paisa per unit in FY17.

	AT & C losses (%)			ACS-ARR (Rs.)		
States with highest AT & T losses	Mar '17	Dec '16	Improvement (%)	Mar '17	Dec '16	Improvement (%)
J & K	61.34	71.7	**14.4**	2.15	3.32	**35.2**
Bihar	41.75	47.1	11.4	0.7	1.05	**33.3**
Manipur	36.89	42.6	13.4	0.1	1.65	**94**
Uttar Pradesh	30.21	33.84	10.8	0.66	0.88	**25**

NA- States did not sign M-o-U under UDAY. | At&C- Aggregate Technical & Commercial Loss | ACS-ARR – Cost of supply to Revenue Realised

Operational highlights

- 2,528 lakh LED bulbs have been distributed so far under the UJALA scheme.
- Against urban feeder metering target of 2,137 feeders, 4,113 feeders have been metered. In rural areas, 8,669 feeders have been metered against target of 10,744. 87,662 rural feeders are being audited against target of 50,754 feeders. This will help DISCOMs to curb AT&C losses.

Progress Sheet

Activity	Expected timeline for achievement	Status
Feeder Metering	30 June 2016	100% Achieved
DT Metering	30 June 2017	**Rural (42%) & Urban (54%)**
Smart meter for consumers	> 500 Unit by Dec 17; >200 unit by Dec 2019	**3% and 1 % respectively.**
AT&C losses	15% by FY 2019	**Currently at 20.51%**
Elimination ACS-ARR gap	FY 2019	**46 paise per unit**
Distribution of LEDs under UJALA	-	Over 25 crore bulbs distributed
Electricity Access	100%	80% achieved
Bonds to be issued	Rs. 2,60,057 cr.	To be taken over by state discoms
Bonds issued	Rs. 2,32,163 cr.	**86.29% of bonds to be issued**

Source: UDAY website, REC and pib.nic.in

- 91 lakh domestic households have been electrified post UDAY. AP, Gujarat, Karnataka, Maharashtra, Manipur, Assam and Uttarakhand have exceeded UDAY targets for household connections. Bihar alone has achieved 40 lakh domestic connections.
- During UDAY period, Renewable Energy capacity has increased from 42,849 MW in March 2016 to 57,260 MW in March 2017
- Tariff revision order has been issued in 26 out of 27 states.

States/UTs	No. of LED bulbs distributed	Estimated Energy Saved per year(MUs)	Estimated avoided peak demand(MW)*
Andhra Pradesh	2,16,77,316	2,818.02	563.04
Bihar	1,39,36,861	1,806.39	360.92
Chhattisgarh	84,60,396	1,089.87	217.76
Delhi	1,16,15,917	1,507.74	301.25
Gujarat	3,59,88,490	4,671.01	933.27
Haryana	1,26,63,682	1,639.07	327.49
Himachal Pradesh	76,27,735	991.61	198.12
J & K	76,89,954	999.69	199.74
Jharkhand	1,01,88,680	1,324.11	264.56
Karnataka	1,65,04,010	2,138.93	427.36
Kerala	1,01,19,390	1,315.52	262.84
Madhya Pradesh	1,40,20,204	1,814.84	362.61
Maharashtra	2,12,92,816	2,768.07	553.06
Odisha	1,07,68,272	1,395.46	278.81
Rajasthan	1,36,22,341	1,768.22	353.29
Uttar Pradesh	1,96,68,086	2,543.85	508.26
West Bengal	52,88,707	678.43	135.55
Total	**25,28,60,899**	**32,846.78**	**6,575.81**

* Data exhibited for States with avoided peak demand over 100MW

Reduced trend in State subsidy dependence:

- Twelve (12) Discoms from seven (7) states have reduced subsidy dependence (subsidy booked/Total revenue) from last year.

CARE View:

- The Scheme *"UDAY"* was announced in November 2015. The scheme has completed over 18 months and there are signs of revival and improvement across the board on most targeted parameters. The Government has been constantly reviewing and bringing in changes. The revival may be marginal or very small compared to the overall picture ***but the scheme seems to be making definitive in-roads in terms of operational improvements and efficiency targets which is vital for the sustainable operation of state DISCOMs.***
- ***Renewable energy would act as a breather for discoms*** given the fact that marginal costs for renewable energy generated electricity is substantially lower or negligible compared to fuel powered plants. States could use more of renewable based power going forward during peak season/hours to bring down the cost of electricity procured. This would not only save costs but would also help discoms reduce the ACS-ARR gap.

- The two biggest challenges:
    - ***Strengthening infrastructure for higher penetration of distribution network*** across the geography especially rural consumers which would bolster demand and ***increase in tariff to cut on losses*** and covering up for the subsidies provided by the Government still remain unaddressed.
    - In order to make up for this higher capex for infrastructure and network expansion, it is expected that states may gradually push for hike in tariffs. Few states, like Bihar have in hiked their tariffs substantially while adopting Direct Benefit Transfer in case of subsidy.
- DT Metering targets which were to be met by June 2017 and could well aid in curbing power theft, are far from being achieved with 42% of the metering being completed in rural areas and 54% in urban areas. Distribution Transformer metering could help discoms to identify, monitor and improve collection efficiency in theft prone areas. A DT meter as the name suggests, accounts the power flowing through a distribution transformer. ***State Discoms need to focus on achieving metering targets along with gradual improvement of distribution network especially to cover rural domestic consumers.***
- ACS-ARR Gap of 46 paise at the end of FY17 against previous reported 59 paise in FY16. ACS-ARR Gap is the combined effect of savings in interest cost, power purchase cost, tariff rationalization, better billing/collection efficiency etc. ***We expect each of these to improve gradually and FY19 target of zero gap is achievable barring for few states.***

CORPORATE OFFICE:
CARE Ratings Limited
(formerly Credit Ratings and Research Limited)
Corporate Office: 4th Floor, Godrej Coliseum, Somaiya Hospital Road,
Off Eastern Express Highway, Sion (East), Mumbai - 400 022.
Tel: +91-22-6754 3456 I Fax: +91-22-6754 3457
E-mail: care@careratings.com I Website: www.careratings.com