

UDAY- State's response reasonable; effective implementation key for the success of biggest ever reform measure in power sector

Background

With Prime Minister's vision of 24X7 Power for all, Government of India announced UDAY (Ujwal DISCOM Assurance Yojana) scheme in November 2015 for operational and financial turnaround of state power distribution utilities (Discoms).

The scheme focuses on four major initiatives viz:-

- Reduction in interest cost of Discoms,
- Improvement in operational efficiency,
- Reduction in cost of power purchase and
- Reinforcing financial discipline.

As per UDAY, with the objective of reducing the interest costs and deleveraging the Discoms, the states opting for UDAY shall take over 75% of total debt outstanding in the books of their respective Discoms as on September 30, 2015, over a period of two years gradually, ie 50% in first year and the remaining 25% in second year.

The debt so taken over by the states is not subject to be included in calculation of fiscal deficit of respective states in first two years though the interest has to be serviced within the FRBM (Fiscal Responsibility and Budget Management) limits. The state governments will issue bonds to pay off the debt taken over. The balance 25% of Discom's total outstanding debt shall be converted by banks into longer dated loans or bond with interest rate not more than bank's base rate plus 10 bps or alternatively this debt (fully or partly) may be issued by Discoms as State guaranteed bonds at prevailing market rates. Recently, the government has extended the timelines for joining UDAY by one year from earlier stipulated date of March 31, 2016; in order to facilitate the joining of the remaining states which could not join the scheme earlier.

Government of India has used carrot and stick approach while making the scheme optional for every state government. The states opting for the scheme and performing as per the operational milestones laid down under the scheme would be given additional/priority funding through Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Power Sector Development Fund (PSDF) or other such schemes of Ministry of Power and Ministry of New and Renewable Energy. On the other hand, the states not meeting operational milestones would be deprived of these benefits. The future losses incurred by the UDAY opted state Discoms would be borne by respective states in a graded manner, from FY18 (refers to the period April 1 to March 31) onwards. Furthermore, the scheme restricts



the funding of future losses by the Banks and restricts the working capital borrowings to a level of 25% of the Discom's previous year revenues.

Over the last 15 years, this is third major initiative by the Government of India to turnaround the distribution sector. First such initiative was announced in 2001 based on the recommendation of Montek Singh Ahluwalia committee. At that time, the accumulated dues of Discoms towards the power generators were securitized (One Time Settlement Scheme) by way of issuance of tax free bonds by the states. The government proclaimed success of the scheme by 2007-08; however, things drifted again resulting in increase in losses and debt levels of state Discoms. Consequently, the second initiative was announced in 2012, when the government had launched Financial Restructuring Plan (FRP) as per which 50% of the short-term liabilities of Discoms were taken over by the respective state governments, whereas the balance 50% short-term liabilities were refinanced by the Discoms into longer maturity loans. However, the losses of 8 states that opted for the FRP increased subsequent to implementation of FRP instead of decreasing as the state Discoms could not report major turnaround in the operational performance. Therefore, many of the FRP states faced liquidity constraints when the moratorium period of loans refinanced under FRP ended as the operational cash flows of the Discoms did not improve as envisaged. Consequently, GoI has launched UDAY scheme which appears to be more comprehensive scheme than the FRP as it entails take-over of 75% of the Discom's total debt and refinancing of remaining of 25% debt while the FRP was restricted to short-term liabilities only. Furthermore, apart from the liability management, UDAY also focuses on improvement in operational efficiency, financial discipline, reduction in costs and better demand side management. Under the UDAY, the state governments have the 'option' to opt for the scheme and the benefits/incentives will flow only on fulfilment of operational milestones laid under UDAY.

Mounting losses and huge debt levels

Ministry of Power, describes Discoms as weakest link in power sector value chain in providing '24x7 Power for all'. The accumulated losses of Discoms stood at about Rs.3.8 lakh crore as on March 2015. Total losses incurred by the Discoms amounted to Rs.3.66 lakh crore in past 6 years, up to FY15. The Discoms of Tamil Nadu, Uttar Pradesh, Rajasthan, Haryana and Madhya Pradesh are the largest loss making Discoms with a share of about 78% in the accumulated losses. These losses have largely been funded through debt thereby resulting in substantial increase in debt levels and interest cost for the Discoms. As per the MoP data, the Discom's total debt was Rs.2.4 lakh crore in 2012 which mounted to over Rs.4.3 lakh crore in September 2015. Due to relatively weak credit profiles, the interest rate on the Discom's borrowings ranges from 12% to 15% as against the State's borrowings rate of about 8%. The



huge interest costs dampen the finances of the Discoms, the most of which, are reporting operating losses due to depressed tariffs, high aggregate technical and commercial (AT&C) losses and lower efficiencies.

Persistently high AT&C loss levels

AT&C losses comprises technical losses which occur due to overloading of existing lines, poor repair and maintenance of equipment, etc, and commercial losses which happens due to low metering/billing/collection efficiency, loss by theft, etc. AT&C losses in India have been persistently high over the years. As per ministry of power, in FY14, AT&C losses stood high at 22.7% at all India level, despite showing an improvement of 275 bps over FY13. Southern and western regions have relatively lower AT&C losses as compared with northern and eastern states as presented below:-

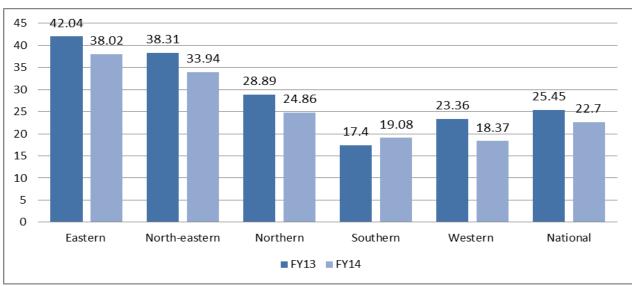


Exhibit 1: AT&C Losses in FY14 (region-wise)

(Source: Power Finance Corpporation Ltd.)

UDAY targets at bringing AT&C loss levels to 15% by FY19 which appears to be challenging task especially for states like Jammu & Kashmir, Bihar, Jharkhand and Haryana where AT&C losses level are more than 30%.



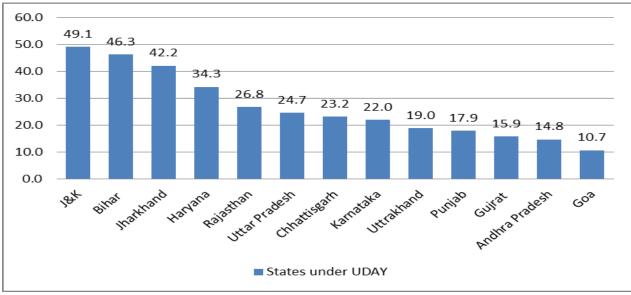
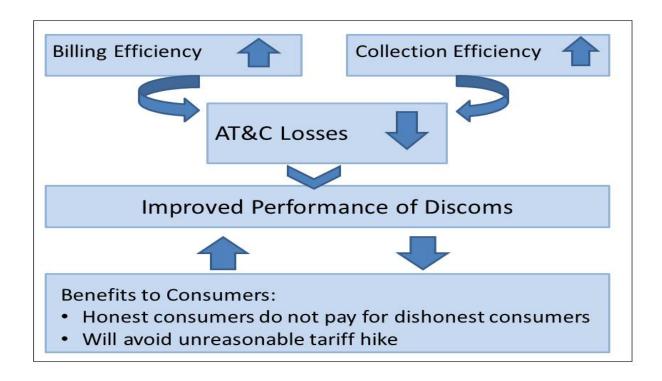


Exhibit 2: AT&C losses level (FY14)

(Source: Power Finance Corpporation Ltd.)

The benefits of AT&C losses reduction will be duely accrued to State Discoms and consumers. It will have a positive impact of financial health of Discoms, allowing them to utilize the funds in other infrastructure activities, and aviod unreasonable tariff hikes.





UDAY focuses on complete revival of power distribution sector

Unlike the previous two attempts (FRP/OTSS) that focused mainly on liabilities management in Discoms, UDAY not only seek financial turnaround of debt-ridden Discoms but revival of complete power distribution sector. UDAY focuses on both cost efficiencies by reduction in interest burden, operational cost and losses as well as revenue efficiencies through strict discipline in metering, billing and collection and periodic tariff increase to adjust the increase in fuel prices. It targets to bring down the AT&C losses to 15% by FY19 through various administrative and technical measures. It also targets to completely bridge the gap between Average Revenue Realized (ARR) and Average Cost of Supply (ACS), thereby making all the Discoms profitable by FY19. As per the scheme, a tripartite Memorandum of Understanding (MoU) has to be signed between the Discoms, states and the MoP, Government of India clearly defining the targets and responsibilities of all the parties involved to be reviewed by MoP on a monthly basis.

Key obligations and commitments under UDAY

Government of India

- Facilitating the state government in taking over of the Discom's debt as per the provisions of UDAY.
- Facilitating Banks/FIs not to levy any prepayment charges and waiver of any unpaid overdue interest and penal interest.
- Facilitating the refinancing of residual 25% debt of the Discom at lower interest rate of base rate plus 10 bps.
- Facilitate that the state borrowings for take-over of debt is not reckoned against the permissible borrowings ceiling of the state as per Fiscal Responsibility and Budgetary Management Act.
- Facilitate through Ministry of Coal, increase in supply of domestic coal to state power generating company.
- Rationalization of coal linkages and coal prices and liberally allowing coal swaps from inefficient plants to efficient plants
- Ensuring 100% crushed coal supply from April 2016 and 100% washed coal for G10 grade and above from October 2018
- Future allocation of coal linkages to states. The states would go for tariff-based bidding for procurement of power.
- Additional/priority funding through schemes such as DDUGJY, IPDS upon achievement of operational milestones by the Discoms.



UDAY opting states

- Take-over of 75% of the debt of the Discom through issuance of non SLR bonds and transfer of proceeds by way of equity, grant and loans to the Discom.
- Providing state guarantee for refinancing of the remaining 25% debt of the Discom.
- Timely release of equity support for scheduled capital expenditure of the Discom.
- Financial support to the Discom to achieve the turnaround in performance and clearance of outstanding power purchase liabilities.
- Take-over of future losses of the Discom in a graded manner.
- Clearance of subsidy and outstanding dues from state government departments.
- Improvement in efficiency of state power generation company.
- Endeavor to ensure that operational milestones under UDAY are achieved by the Discom.
- Preparation of comprehensive proposal for restructuring of the Discom.

State Discoms

- Issuance of bonds or refinancing for the remaining 25% debt at base rate plus 10 bps. Discom to ensure the timely servicing of bonds/loans remaining with them.
- Timely payment of interest on state government loans extended to them under UDAY.
- Endeavor to achieve the reduction in AT&C losses to 15% by FY19 for high loss making states and 10% for lower loss making states depending on trajectory provided in individual MOUs.
- Elimination of ACS-ARR gap in accordance with detailed action plan submitted by the Discom.
- Compulsory metering of energy feeders and distribution transformers within the stipulated timelines for tracking of losses at feeder/transformer level for corrective action by FY18.
- Consumer indexing and GIS mapping of losses for identification of loss making areas for taking corrective action by FY19.
- Smart metering for all the consumers with consumption above 200 units per month in graded manner by 2019.
- Compliance with Renewable Purchase Obligations (RPOs) outstanding since 2012 within a period to be decided in consultation with MoP.
- Effective demand side management through distribution of LED bulbs, agricultural pumps, fans, etc, and efficient industrial equipment through PAT (Perform, Achieve and Trade) by FY19.
- Quarterly tariff revision, particularly to off-set the fuel price increase.



- Timely finalization of audited accounts and timely filing of tariff petition with the regulator for timely issuance of tariff order.
- Increased hour of supplies in areas showing reduction in losses and encouraging local participation for loss reduction.
- Identification of key personnel for implementation of scheme and devising key performance indicators for key management personnel of the Discom in areas of AT&C loss reduction, improvement in billing and collection efficiency.
- Procurement of power through tariff-based competitive bidding.
- Monthly monitoring of the performance of the Discom.

Reasonable response from the states

As on June 30, 2016, as many as 13 states have opted for UDAY and the tripartite MoUs have been signed among Discoms, MoP and the States. Apart from this, some more states have expressed their interest in joining the UDAY scheme though a formal MoU is yet to be signed for these states. Jharkhand was the first state to sign the MoU under the UDAY scheme. The other states which have signed the MoUs under UDAY scheme include Haryana, Uttar Pradesh, Bihar, Gujarat, Jammu & Kashmir, Chhattisgarh, Punjab, Uttrakhand, Rajasthan, Goa, Karnataka and Andhra Pradesh. The joining of other states especially the states with larger and highly loss-making Discoms such as Tamil Nadu, Madhya Pradesh, etc, would remain crucial for the complete success of the scheme and revival of power distribution sector. As stipulated under the UDAY, bonds worth Rs.98,960 crore were issued by the state governments during FY16.

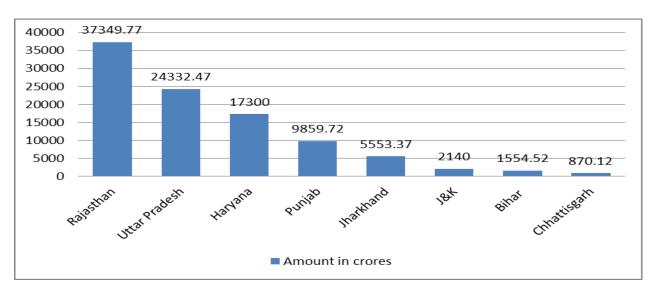


Exhibit 3: State-wise issuance of bonds in FY16



(Source: Ministry of Power)

Take-over of debt and envisaged improvement in operational efficiency of the Discoms of UDAY opting states is expected to result in considerable savings in interest cost and better collection on account of improvement in the billing efficiency with reduced losses. Notably, some of the highly indebted states such as Rajasthan, U.P. and Tamil Nadu are incurring huge interest cost thereby leading to high cost of supply. The share of interest cost in total cost of supply for five highly indebted states are as below:-

2.00 1.80 1.60 1.40 1.20 1.00 0.80 0.60 0.40 0.20 0.00 Tamil Nadu Uttar Pradesh Rajasthan Madhya Pradesh Haryana ■ 2012 ■ 2013 ■ 2014

Exhibit 4: Interest Cost (Rs/Kwh in FY14)

(Source: Power Finance Corporation Ltd.)

Since the bonds issued under the UDAY for 75% of the total debt of the Discoms and refinancing of remaining 25% debt would happen at significantly lower interest rates, Discoms are expected to save a substantial amount on the interest cost. As per MoP, the borrowing rates on the Discom's debt as on September 30, 2015, stood in the range of 12% to 15%, whereas the refinancing of debt as per UDAY is envisaged at base rate plus 10 bps for the 25% of the Discom's debt. For the 75% debt being taken over by states, the Discom would be getting the funds in the form of state loans at lower interest rates, grants and equity thereby resulting in substantial savings on the interest cost. Furthermore, the rationalization of fuel linkages and coal prices as per UDAY would result in considerable reduction in the fuel cost of the power generators which would ultimately result in lower power purchase cost for state Discoms. Notably, India's largest power producer, viz, NTPC has reported 34 paise decline in fuel cost per unit from Rs.2.03 in April 2015 to Rs.1.69 in February 2016 largely attributable to rationalization of linkages and reduced coal imports. The variable cost of generation is expected to reduce further going forward with complete implementation of fuel linkages, coal swaps, rationalization of coal prices, increased domestic coal



production and procurement of power by the state Discoms through tariff-based bidding. However, the positive impact of these measures is expected get partially off-set by recent increase in coal prices by Coal India Ltd. UDAY envisages that the lower interest cost, improved efficiency, lower AT&C losses and other measures under the scheme would fully bridge the gap between ACS and ARR which remained very high for some of the states as presented below:-

4.5 3.5 3 2.5 2 1.5 1 0.5 0 Tamil Nadu Uttar Pradesh Rajasthan All India Level Haryana Madhya Pradesh ■ 2012 ■ 2013 ■ 2014

Exhibit 5: GAP subsidy received basis in FY14 (Rs./Kwh)

(Source: Power Finance Corporation Ltd.)

Credit perspective

The credit profile of majority of the state Discoms has remained weak characterized by eroded net-worth due to large accumulated losses and high debt levels attributable due to loans availed to partially fund the losses over the years. The accumulated losses of state Discoms stood at about Rs.3.8 lakh crore as on March 2015 out of which losses of Rs.3.66 crore were incurred by the Discoms between FY10 and FY15. The Discoms of Tamil Nadu, Uttar Pradesh, Rajasthan, Haryana and Madhya Pradesh are the largest loss-making Discoms with a share of about 90% in the accumulated losses. The net-worth of all these large loss-making states has been eroded completely. The state Discoms have been facing liquidity issues resulting in delays in the payment of power purchase liabilities and other equipment suppliers. The weak credit profiles of the state Discoms have resulted in high interest rates on their borrowings which remain in excess of about 12%. The higher power purchase costs, absence of cost reflective tariffs and higher losses have resulted in delays in the payment to creditors by the state Discoms which in turn has impacted the liquidity profile of power generators supplying power to the state Discoms and other



equipment suppliers. The creditor days of the states which have signed MoU under UDAY remained at the stretched levels with Jharkhand having creditor period of 875 days as on March 31, 2014. The All India average of creditors period also remained in excess of three months as shown below:-

Andhra Pradesh Chhatiseath All India

Exhibit 6: Creditor days in FY14

(Source: Power Finance Corporation)

The take-over of debt by the state and refinancing of debt as envisaged under UDAY would result in saving in interest in the range of 3% to 4%, while the longer maturities of the refinanced debt would lead to better free cash flows for the Discoms which can be utilized for strengthening infrastructure to reduce the loss levels. Furthermore, the timely release of subsidies and clearance of outstanding dues of power purchase liabilities by the states would result in better cash flows and liquidity position for the state Discoms. However, a sustained and meaningful turnaround in the operational performance of the Discoms would remain crucial for their long-term credit profile as majority of the state Discoms have been reporting operational losses.

The relatively weak financial health of the state Discoms has adversely impacted the overall energy demand in the country. As per MoP, total power supply has increased by 27.16% from 857.9 billion units in FY12 to 1,090.9 billion units in FY16, whereas the total power demand has increased by only 18.91% thereby leading to bridging of power deficit in the country. The lower demand growth can be largely attributed to subdued demand from the industrial segment and state Discom's poor financial health which impacts their ability to buy and supply more power to the consumers. The consistent increase in the capacities and lower demand has led to continuous decline in All India PLF as presented below:-



80 12 75.1 73.3 69.9 70 65.6 64.46 10 62.29 60 8 50 40 6 30 4 20 2 10 0 0 2010-11 2011-12 2012-13 2013-14 2014-15 2015-16 All India PLF (%) Energy deficit (%) Peak deficit (%)

Exhibit 7: All India PLF& Deficit levels

(Source: MoP)

The lower PLFs have resulted in generation losses for the power generating companies. For example, India's largest power generating company NTPC reported a generation loss of about 63 billion units in FY16 (PY: 44 billion units) due to grid restrictions largely caused by lower demand from the state Discoms. The expected improvement in financial health of state Discoms, due to UDAY, and government's initiative such as '24×7 power to all' would result in higher energy demand from state Discoms. The same is expected to result in higher PLFs for the power generating companies thereby positively impacting their credit profile. The stipulation with respect to infusion of funds by the states under UDAY, for clearance of outstanding dues of power generators would ease the cash flows of power generators. Furthermore, a large number of renewable projects based on Renewable Energy Certificates (RECs) are facing liquidity issues due to non-compliance with the RPO obligations by the state Discoms which has resulted in a glut in REC market on the power exchanges. As per the data from the energy exchanges, only 2.71% of the bids for the sale of RECs were cleared during 2015 (PY: 2.56%), whereas the remaining RECs remained unsold due to lack of demand from state Discoms. The situation has improved marginally during the current year with clearance ratio improving to 3.33% during the period from January to June 2016.



7.00 450.00 6.27 400.00 387.21 6.00 350.00 5.00 290.95 300.00 3.33 4.00 250.00 200.00 2.71 2.56 3.00 150.00 122.68 2.00 100.00 1.00 31.54 50.00 0.00 0.00 2013 2014 2015 2016* Accumulated (REC) in millions Cleared (REC)-%

Exhibit 8: Supply Glut in REC Market

(Source: Indian Energy Exchange and Power Exchange of India)

The compliance with outstanding RPOs and clearance of large number of RPOs by the state Discoms, as stipulated under UDAY, is expected to positively impact the renewable energy projects especially the projects based on non-preferential tariffs wherein the developers have huge accumulated balances of unsold RECs.

Road ahead

The success of UDAY scheme is critical for the India's economic growth aspiration and government's vision of supplying affordable and accessible '24×7 power to all'. Efforts towards 24X7 affordable power supply cannot be achieved without turnaround in the operational and financial performance of Discoms. In addition, default on bank loans by financially stressed Discoms has the potential to seriously impact the banking sector and the economy at large. The comprehensive UDAY focuses on revival of power sector by luring the Discoms and state governments to perform efficiently through various incentives. The states have to forgo their claims on the IPDS and DDUGJY grants if the operational milestones under the UDAY are not achieved and also, the states have to bear a part of future losses of Discoms, if any, in a graded manner. To ensure performance of Discoms under UDAY, monthly monitoring mechanism has been formulated under the tripartite Memorandum of Understanding (MoU) signed between the Discoms, states and the MoP. CMD/MD of the respective Discoms shall monitor the performance of Discom on monthly basis based on financial, operational and managerial parameters.



As per MoP, if the milestones under UDAY are achieved on time as determined, almost all DISCOMs will be profitable by FY19. Achieving the milestones under UDAY may not be an easy affair, especially the reduction of AT&C loss to 15% by FY19. Achievement of other target likes reducing power theft, installation of smart meters, improvement in collection of dues, and upgradation of power supply infrastructure will require strict and aggressive measures by states. The government has extended the timelines for joining UDAY by one year to March 31, 2017, in order to facilitate all states which could not join the scheme in 2016. Going forward, the joining of the remaining states especially the larger states with highly loss making Discoms such as Tamil Nadu, Madhya Pradesh, etc. would remain crucial for the complete revival of power distribution sector. As a whole, the success of UDAY scheme would remain dependent upon the active participation, effective implementation and monitoring by all stakeholders, in the absence of which, it may end up becoming a financial revival scheme instead of a comprehensive reform measure.

Contact:

Ajay Dhaka Senior Manager ajay.dhaka@careratings.com

Kanwalpreet Singh

Analyst

kanwalpreet.singh@careratings.com 91-11-45333267

Disclaimer

91-11-45333218

This report is prepared by the Rating Division of Credit Analysis & Research Limited [CARE]. CARE has taken utmost care to ensure accuracy and objectivity while developing this report based on information available in public domain. However, neither the accuracy nor completeness of information contained in this report is guaranteed. CARE is not responsible for any errors or omissions in analysis/inferences/views or for results obtained from the use of information contained in this report and especially states that CARE (including all divisions) has no financial liability whatsoever to the user of this report.