





SECRETARY SPEAKS

A total of 27 states and 5 UTs have adopted UDAY scheme for financial and operational improvement. Under the leadership of the Hon'ble Prime Minister and the Hon'ble Minister of Power, UDAY states' have reduced book losses to Rs. 15,049 Cr. in FY18 from Rs. 51,480 Cr in FY16. The distribution sector is now buzzing with endeavors including smart metering by Uttar Pradesh, prepaid metering by Manipur, IT implementation by Tripura, introduction of Energy Audit Software (EAS) by Madhya Pradesh, constitution of anti-theft vigilance squad by Rajasthan, electricity theft prevention campaigns by Haryana, etc.

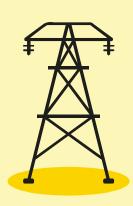


Shri A.K. Bhalla Hon'ble Secretary, MoP speaks

Gujarat and Andhra Pradesh continue to grow from strength to strength. Rajasthan, Haryana, and Maharashtra have shown good results and reported profits in the financial year 2017-18. I congratulate all UDAY participants for their continued efforts and wish to see more encouraging results particularly in operational efficiency measures.

PERFORMANCE HIGHLIGHTS (FY16 vs FY18)

A QUICK GLANCE AT ACHIEVEMENTS



42 PAISE / KWH

Reduction in ACS-ARR Gap From Rs. 0.58 / kWh (FY16) to Rs. 0.17 / kWh (FY18)



~INR 36,000 Cr.
Reduction in book loss

BILLED ENERGY

Increase from 694* BUs to 824 BUs (FY16 vs FY18)



* Data as per PFC report # Progress in UDAY period till Q1 FY19

20.7% to 18.7%

Decrease in AT&C Losses during UDAY period (FY16 vs FY18)



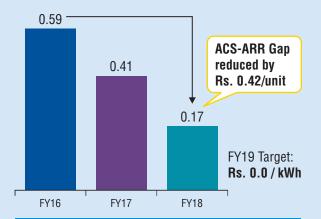
~INR 9000 Cr.
Estimated savings

25,677# FEEDER METERS INSTALLED



Journey of UDAY (Annual Performance)

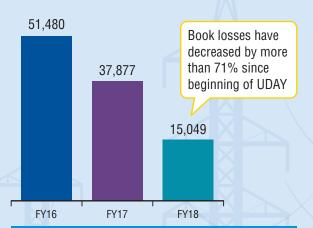
(1) ACS-ARR Gap (Rs./unit)



ACS-ARR gap has come down from Rs. 0.59 per kWh in FY16 to Rs. 0.17 per kWh in FY18.

States like Chhattisgarh, Gujarat, Haryana, Maharashtra, Rajasthan, Himachal Pradesh and Daman & Diu have achieved negative ACS-ARR Gap or a revenue surplus. Further, states like Madhya Pradesh, Uttar Pradesh, Jharkhand, TamilNadu, Goa, and Manipur have also shown a substantial reduction in their gap during UDAY period.

(3) Book Losses (Rs. Cr.)

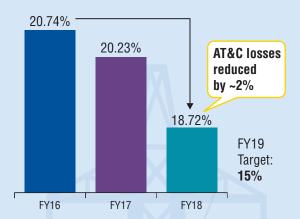


UDAY states have showcased an improvement in book losses from Rs. 51,480 Cr. in FY16 to Rs. 15,049 Cr. in FY18.

States including Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Maharashtra, Rajasthan and Daman & Diu have shown profits during FY'18. Uttar Pradesh, TamilNadu, Punjab, Karnataka, Madhya Pradesh, Tripura and Manipur have also reduced their FY18 book losses by more than 50% in comparison to FY16.

(2) AT&C Losses (%)

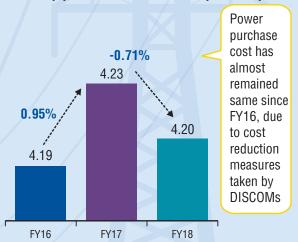
CAGR Net Input Energy: 7.4%; Billed Energy: 8.9%



Post launch of UDAY programme, AT&C losses have been consistently declining and were brought down by 2% from 20.74% in FY16 to 18.72% in FY18.

States like Gujarat, Himachal Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, Dadra & Nagar Haveli and Daman & Diu have already achieved less than 15% AT&C losses.

(4) Power Purchase cost (Rs./unit)

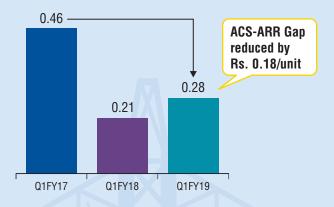


Power purchase cost has almost remained same during the last 2 years of UDAY. States which have shown a reduction in power purchase cost from FY16 to FY18 are Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Meghalaya, Punjab, Telangana and Uttar Pradesh.

With an increasing emphasis on costs, most of the inflationary impact of WPI, Coal price hike and railway freight hike have been absorbed by the efficiency improvements in generation and power dispatch/procurement.

(Quarterly Performance)

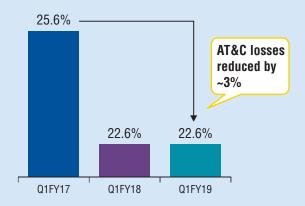
(1) ACS-ARR Gap (Rs./unit)



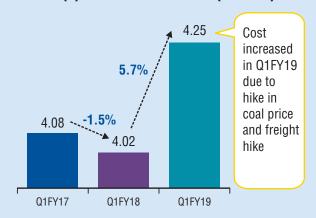
(3) Book Losses (Rs. Cr.)



(2) AT&C Losses (%)*



(4) Power Purchase cost (Rs./unit)



^{*} AT&C losses vary across the year due to seasonal variations of varying demand patterns, revenue collection (as in case of agricultural harvest, sowing season etc), subsidy releases, payment of Government dues etc. The losses are generally high in the first quarters, gradually reducing towards the end of the year. Hence AT&C loss data of one quarter should not be compared with AT&C loss targets of the whole year.

POWER PURCHASE COST

As mentioned earlier, power purchase cost has almost remained same during the last 2 years of UDAY. This has been due to various measures taken by states like coal linkage rationalization, shutting down of old inefficient generating units, better compliance of Merit Order Dispatch (MoD), performance improvement of state GENCOs etc.

However during first quarter of FY19 average power purchase cost of UDAY states have risen to Rs. 4.25 per unit because of various extraneous factors. Few probable reasons are detailed below:

Increase in Cost components

- **Increase in Coal Cost:** Price per tonne for most grades of coal has increased since January 2018. There was 17% price hike in G12 grade of coal in Jan 2018. Similarly, for G6 grade of coal, price increased from Rs. 1900 per tonne to Rs. 2317 per tone, for G14 grade of coal, price increased from Rs. 650 per tonne to Rs. 748 per tone). Further, booking price during coal auctions have also increased for most of the subsidiaries.
- **Increase in price of imported coal:** Imported coal prices has grown significantly in last 2 years. For Indonesian coal, price per tonne has increased from \$48/tonne in July 2016 to \$84/tonne in July 2018 i.e. a CAGR of 32% in last 2 years
- **Increase in Freight charges:** Railway Transportation charges of coal and coke have increased by 21% in Jan 2018 impacting the power purchase cost. Also ocean freight charges has almost trebled in the last 2 years

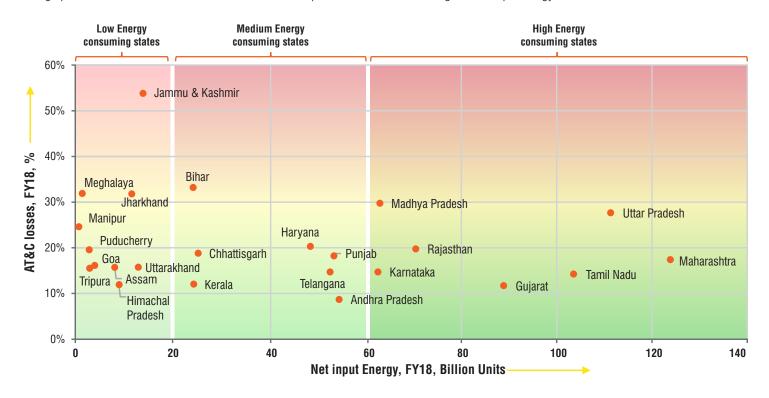
Transient nature of short term prices

Electricity spot prices in the country are transient in nature. In Q2 FY19 average market clearing price(MCP) was at INR 3.82/kWh whereas for Q1 FY19, average MCP reached as high as INR 4.13/kWh

AT&C LOSSES – A CLOSER LOOK

To achieve UDAY target of 15% AT&C loss in FY19, states with high energy consumption must reduce losses substantially. Although most states have shown improvement during last 2 years, states of Uttar Pradesh, Madhya Pradesh, Maharashtra, and Rajasthan which contribute to more than 40% of net input energy in UDAY states need to further gear up to reduce losses during FY19.

The graph below shows the absolute values of AT&C losses plotted on the vertical axis against net input energy on the horizontal axis.



TOP PERFORMERS IN AT&C LOSSES

At the national level, AT&C losses have reduced to 18.72% in FY18 as compared to 20.74% in FY16.

States of Rajasthan, Gujarat, Haryana, Himachal Pradesh, Kerala, Assam, and Manipur have shown remarkable progress in lowering their AT&C losses during UDAY period. Following are the major good practices which have helped them in this journey.

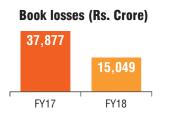
States	Good Practice			
Rajasthan	Enhanced community participation and Anti-theft vigilance squad			
Gujarat	Continuous efficiency improvement measures			
Haryana	Elimination of manual intervention in meter reading, Reward scheme for vigilance work			
Assam	GIS Mapping and systematic augmentation of the distribution system			
Kerala	Computerization of billing, Better manpower deployment			
Manipur	Installation of prepaid meters			



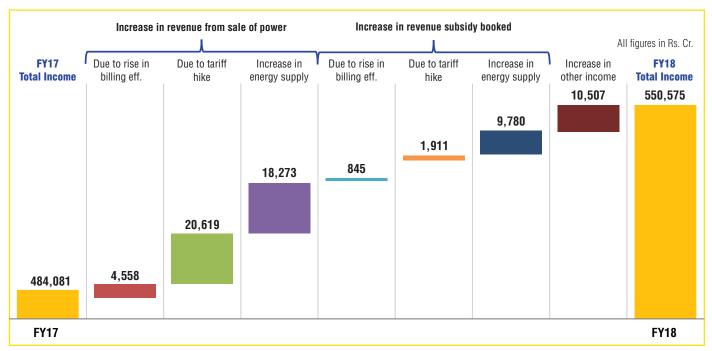
FACTORS CONTRIBUTING TO DECREASE IN BOOK LOSSES

Factors contributing in performance of FY18 when compared to FY17

Aggregated book losses of Rs. 15,049 Cr. was reported during FY18, as compared to book losses of Rs. 37,877 Cr. in FY17. This net reduction in losses was contributable to various factors including improvement in billing efficiency, tariff hike, increase in energy consumption and controlled rise in power purchase cost.

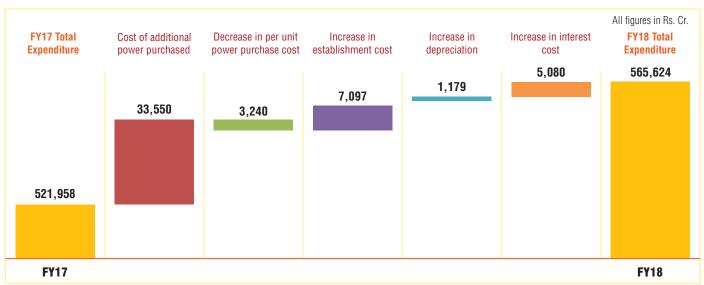


Factors contributing to increase in Total revenue



- An improvement of 1% billing efficiency has resulted in an increase in revenue of ~Rs. 4,558 Cr from non-subsidized consumers and ~Rs. 845 Cr. from subsidized consumers at the national level due to higher billed energy for the same amount of input energy
- Rs. 22,530 Cr. (Rs. 20,619 Cr + Rs. 1,911 Cr.) rise in total revenue could be attributed to tariff hike i.e. additional income generated due to higher billing rate at the same amount of input energy
- 42% of the total incremental income was due to a rise in energy consumption over the year

Factors contributing to increase in Expenditure



- Per unit power purchase cost has increased by less than 0.23%, contributing to only 2% of total incremental expenditure i.e. Rs. 904 Cr.
- Overall, book losses decreased by Rs. 18,097 Cr. during the last financial year

IMPRESSIVE PERFORMANCE IN OPERATIONAL PARAMETERS

UDAY States have shown great commitment towards achieving UDAY targets and after Q1 FY19, progress on operational parameters has been commendable. The cumulative progress is as under:

S. No.	Parameter	Unit	Total no. to be achieved	Overall Achievement	% Overall Achievement
1.	Feeder Metering (Rural)	(In no.)	109,052	106,693	98
2.	Feeder Metering (Urban)	(In no.)	46,854	46,641	100
3.	DT Metering (Rural)	(In no.)	4,604,732	2,447,365	47
4.	DT Metering (Urban)	(In no.)	1,655,964	962,352	58
5.	Rural Feeder Audit	(In no.)	224,715	203,718	90
6.	Feeder Segregation*	(In no.)	63,951	40,506	63

^{*} Feeder segregation work is being intensified under Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

Regular monitoring of UDAY through various forums like Monitoring committee meetings, Power Minister Conference, Minister review meetings, Review, Planning and Monitoring (RPM) meetings to ensure effective and timely results.



Hon'ble Prime Minister Shri Narendra Modi reviewing progress of UDAY programme among other reviews

The Minister of State (I/C) for Power and New and Renewable Energy, Shri Raj Kumar Singh addressing the Conference of Power and New & Renewable Energy Ministers of States & UTs, in Shimla, HP on July 3rd, 2018





Shri A.K. Bhalla, Secretary, Ministry of Power, reviewing DISCOM-wise performance during recently conducted RPM Meeting on 10th August 2018.

CAPACITY BUILDING INITIATIVES BY THE MINISTRY OF POWER

As part of various capacity building initiatives under UDAY programme, regular knowledge sharing workshops are organized for state DISCOMs; state visits are conducted by central UDAY team to monitor progress and suggest improvement measures; case-studies on best practices are prepared and disseminated across states and a networking platform has also been launched on pilot basis for states to share good practices, launched on pilot basis to help states share good practices and resolve their queries faster.

During the recently conducted state visits to Uttar Pradesh and Bihar, a team comprising of REC officials and consultants visited the state DISCOMs to understand their key concerns and highlight the areas which requires immediate attention. Further, a report covering key challenges, improvement initiatives, best practices and recommended measures have been circulated with the state.



Visit to Uttar Pradesh DISCOMs organized from 14th June 2018 to 16th June 2018 in Lucknow to understand ground level challenges and assess key areas of improvement



Meeting with officials during Bihar state visit in progress Date: 24th, 25th Jul'18 | Venue: Patna





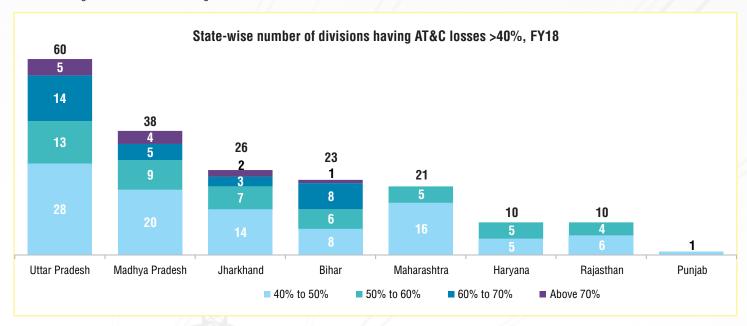
Workshop on Power Sale & Purchase Decision Support Tool was held on in 26th October 2018 in New Delhi. The workshop saw participation from senior-level representatives from state power holding companies, power management committees, and DISCOMs of Assam, Bihar, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Manipur, Odisha, Punjab, Rajasthan, Telangana, and Uttarakhand.

Feedback from participants

"As per the presentation, the tool seemed to have a holistic data capturing, which could certainly help the DISCOMs in taking appropriate decision"

MONITORING OF ASPIRATIONAL DIVISIONS TO REDUCE AT&C LOSSES

To achieve FY19 loss reduction targets under UDAY programme, the Ministry of Power has requested states to focus their loss reduction efforts towards high loss divisions. During FY18, 189 divisions have AT&C losses greater than 40% across DISCOMs in 8 states. It is worth noting that reducing their losses by half, from \sim 40,000 MUs to \sim 20,000 MUs shall save more than Rs 8,500 Cr. / annum. Following graph shows the number of high loss divisions in eight identified states during FY18.



States have started strengthening their infrastructure, allocating adequate manpower, using AB cables, installing smart meters, optimizing billing cycle, segregating agricultural feeders, conducting raids, educating public, establishing anti-theft police stations, conducting special drives to correct bills, shifting to HVDS system, and metering all connections among various focused activities targeting these divisions.

CONCERNS/CHALLENGES

High outstanding dues from Government departments: Total outstanding dues have increased from Rs. 29,286 crores in FY17 to Rs. 35,603 crores in FY18. States such as Uttar Pradesh, Maharashtra and Kerala have high government department dues affecting their operations. States would have to make provision from their fiscal space for outstanding dues as well as fresh accruals.

DISCOM Bonds: As of June 2018, DISCOMs are to issue bonds worth Rs. 36,894 Crore. The capacity of the market to absorb these bonds would have to be watched.

Inconsistent tariff hike: States should regularly file tariff petitions with the regulator to address the need to make tariffs more reflective of the costs incurred. Few states like Andhra Pradesh, Assam, Chhattisgarh, Maharashtra, Telangana and Uttar Pradesh have not increased tariff as per the hikes envisaged in the MoUs signed under UDAY for FY18.

High power purchase cost: Although there has not been much increase in cost in the last 2 years, there is a scope of further reduction. States of Assam, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Puducherry, Tamil Nadu and Uttarakhand have increased their cost by more than 5% in last 2 years.

Rise in sales via open access: The number of open access consumers have increased by 4.3% in Mar'18 as compared to Mar'17*. This sales migration has significantly impacted DISCOM's revenue as well as operations and power procurement planning, because it adds to demand uncertainty and makes the management of the DISCOM's thermal fleet a challenging task.

*Source: Report on Short-term Power Market in India, 2017-18

UDAY IN THE NEWS



UDAY IN THE SOCIAL MEDIA







financialexpress.com

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The XIth monitoring committee of UDAY met on 6th April, 2018 to review the performance of participating states.

Quarter 3 performance evaluation suggests that states will perform much better when information of whole FY18 is made available.



PV Ramesh and 2 others

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The UK Government's Department for International Development, in partnership with the Ministry of Power (MoP), Government of India, has undertaken a Technical Assistance Programme titled, 'Supporting Structural Reforms in the Indian Power Sector (Power Sector Reforms Programme)'. The programme is supporting the MoP on various aspects of UDAY programme including laying out information & data collection protocols, defining focused measures & review framework for AT&C loss reduction, power purchase optimization and capacity development of key stakeholders.



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