



**SUBMISSION OF**

**DRAFT PAPER TO THE UTTAR PRADESH  
ELECTRICITY REGULATORY COMMISSION**

**“REGULATORY OVERSIGHT OF DISCOMS  
UNDER UDAY SCHEME”**

## **BACKGROUND**

There has been a major thrust from the BJP Government at the Centre for introducing reforms in the electricity sector in India. Despite sustained efforts, electricity distribution in India remains amidst complex problems, manifested in the form of loss-making distribution utilities, poor quality of service, governance ambiguities, and absence of reliable data<sup>1</sup>. The BJP Government current wave of reforms seeks to turnaround the sector's performance by transforming the generation mix, strengthening the network infrastructure, ensuring universal access and better consumer experience, and financial revival of discoms. The Central Government has initiated multiple schemes (Refer to Table 1) to improve the distribution segment of electricity supply industry in India. However, while the policy signals from the centre appear to be promising and ambitious, given the past records, execution of these reform plans at the state level is uncertain.

The experience suggests that for effective execution of these policy measures, it is primarily essential to establish appropriate systems of checks and balances to hold the discoms accountable for their non-performance. Thus, empowering the regulators under the scheme to monitor the performance of discoms is a key imperative for ensuring effective adherence to operational guidelines under the schemes.

The policy blueprint of the Ujjwal Discom Assurance Yojana (UDAY) Scheme, introduced by the Government of India in September 2015 for financial turnaround of discoms, represents a clear case of absence of mechanisms of regulatory oversight of discoms' performance. Thus, while the policy has set aside operational milestones to be achieved by the discoms, the policy lacks provisions on transparency and accountability of discoms to ensure that the milestones are appropriately achieved.

Given this backdrop, this paper<sup>2</sup> as prepared by CUTS International aims to advocate for establishing mechanisms for regulatory oversight of discoms' performance under UDAY scheme

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<sup>1</sup> Discussion Paper on 'Beyond a Band-Aid Approach for Electricity Distribution Reforms in India: Political Economy Analysis and its Implications'; Singhvi, S.; CUTS International, 2016

<sup>2</sup> The findings in the paper are based on secondary research and stakeholder consultation meetings (with UPERC officials, consumer representative, energy consultants, etc.) conducted by CUTS Team in Uttar Pradesh, during the month of June – July, 2017

<b>Table I: Currently Active Schemes by Government of India to Improve Distribution Segment in Electricity Sector<sup>3</sup></b>			
<b>Integrated Power Development Scheme (2014)</b>	<b>Deen Dayal Upadhyaya Gram Jyoti Yojana (2015)</b>	<b>24x7 Power for All (2015)</b>	<b>Ujwal DISCOM Assurance Yojana (2015)</b>
<ul style="list-style-type: none"> <li>• <b>Strengthen sub-transmission network</b></li> <li>• <b>Metering at multiple levels</b></li> <li>• <b>IT application in energy accounting</b></li> <li>• <b>Customer care services</b></li> <li>• <b>Completion of the ongoing works of RAPDRP</b></li> </ul>	<ul style="list-style-type: none"> <li>• Rural feeder separation</li> <li>• Strengthening of sub-transmission and distribution infrastructure</li> <li>• Metering in rural areas</li> <li>• Improving rural electrification &amp; access</li> </ul>	<ul style="list-style-type: none"> <li>• State specific power development plan</li> <li>• Round-the-clock access to quality power to all citizens, at affordable cost, by 2019</li> <li>• Enhance the satisfaction levels of the consumers</li> </ul>	<ul style="list-style-type: none"> <li>• State governments will take over 75% over two years</li> <li>• States shall take over the future losses of discoms in a graded manner</li> <li>• States performing as per operational milestones will be given additional/priority funding</li> </ul>

### **UJWAL DISCOM ASSURANCE YOJANA (UDAY)**

As both the successive attempts (Financial Restructuring Scheme, 2012 & Distribution Management Responsibility Bill, 2013) to address the distribution sector’s financial crisis failed to take off, discoms plunged into a deeper crisis<sup>4</sup>. By 2015, accumulated debt of distribution utilities reached Rs. 430 billion. The government came up with a new scheme called the Ujwal DISCOM Assurance Yojana (UDAY), with the same objective as before, of turning around the electricity distribution segment. The scheme builds on the preceding two attempts, drawing more from the Financial Restructuring Scheme of 2012 and some parts from the Distribution Management Responsibility Bill of 2013. On the face of it, UDAY appears an improved scheme, combining the incentives and targets of other ongoing programmes on power sector reforms.

As opposed to the 2012 scheme, UDAY puts greater responsibility on the state governments by requiring them to take over a larger share of accumulated debt. The scheme also recognises unsustainable borrowing by discoms and tries to cap it by permitting finance of future losses through discom bonds guaranteed by the state governments. At the same time, it places a limit on working capital loans at 25% of the previous year’s revenue. With the ambitious target of making all

<sup>3</sup> Collated by CUTS International from various government sources

<sup>4</sup> Working Paper on ‘Political Economy of Distribution Reforms In Indian Electricity’; Swain, A.; Centre for Policy Research Publications; 2016

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discoms profitable by 2018-19, the scheme is not a onetime settlement as in case of 2001; rather it seeks to be an ongoing effort to sustain the distribution activity.

### **EFFICIENCY TARGETS FOR UTTAR PRADESH DISCOMS**

Uttar Pradesh, housing one-sixth of Indian population, has one-third of the unelectrified households in the country. Given that household size in UP is the largest among Indian states, about 20% larger than national average, the state possibly houses about 40% of Indian citizen without access to electricity. That makes the state most important for 24\*7 Power for All (PFA) scheme, which the state joined in April 2017.

However, the state of electricity access in UP is much more complex and appalling. Owing to high fertility and population growth rate, there is no accurate estimation of household numbers at present. Subsequently, sources vary on their projection of households yet to be electrified. According to Census 2011, only 36.8% households in the state were using electricity as source of light, second lowest among Indian states & UTs. While GARV Portal reports 15 million unelectrified households in the state, the PFA UP document reports about 20 million households yet to be connected and/or registered, the latter including unauthorised consumers. Size of unauthorised connections is as big as the authorised household connections. While more than two-third of the authorised connections are yet not metered, supply is unreliable and intermittent even for the authorised consumers, with stark rural-urban divide and VIP area prioritisation in quality of service.

To come out of the ailing energy access scenario and ensure round-the-clock reliable and quality supply to all, the PFA UP plan suggests seven steps: 1) connect 11.2 million households to the grid, who do not have any form of access; 2) register, formalise and meter 8.5 million unauthorised domestic consumers; 3) meter another 6.8 million authorised rural consumers; 4) ensure round-the-clock supply to all; 5) almost double the electricity sector asset base; 6) bring down the AT&C losses by half; and 7) achieve financial turnaround for the discoms. All these goals are to be achieved by July 2019.

While the PFA document sets these ambitious targets, it has missed to prescribe a clear strategy for achieving the targets. Though technically it would be a challenge, these targets pose vicious challenges, especially when some of them would work against others and they need to be achieved together and under a tight deadline. Achieving the targets for universal electricity access and round-the-clock supply will be counterproductive for the goals of reducing losses and turning around discoms' finance, the latter goals being set under UDAY and reiterated in the PFA scheme.

Given the high debts of UP discoms and increasing gap between cost and revenue, Uttar Pradesh is a priority state for UDAY scheme. Uttar Pradesh is one of the top three states in terms of power sector debt, while commercial loss of the discoms was as high as 31% of the revenue collected from sales. To come out of the financial crisis in the sector, the state joined the UDAY scheme on 30<sup>th</sup> January 2016. The tripartite MoU is signed by the Ministry of Power (Centre), Government of UP and UP Power Corporation Limited (on behalf of its five subsidiary discoms). While listing the

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responsibilities of the parties, the MoU also sets various performance targets (Refer to Table II and III).

**Table II: Performance Targets Set for UP Discoms under UDAY (%)**

Performance Parameters	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
<b>Tariff Hike</b>	5.47	5.75	6.95	6.80	6.60
<b>AT&amp;C Loss</b>	32.36	28.27	23.63	19.36	14.86
<b>Billing Efficiency</b>	76.43	78.29	80.82	84.10	88.04
<b>Collection Efficiency</b>	88.50	91.64	94.50	95.88	96.71

**Table III: Discom-wise Loss Reduction Targets (%)**

Utility	FY 2015			FY 2016	FY 2017	FY2018	FY 2019	FY 2020
	T&D Loss	Collection Efficiency	AT&C Loss	AT&C Loss	AT&C Loss	AT&C Loss	AT&C Loss	AT&C Loss
<b>DVVNL</b>	28.69	85.60	38.95	35.94	30.30	24.83	20.44	15.35
<b>MVVNL</b>	24.11	85.05	35.46	33.13	27.80	23.20	19.45	14.89
<b>PVVNL</b>	22.62	96.89	25.02	24.63	22.99	20.63	17.53	14.01
<b>PuVVNL</b>	23.99	76.25	42.04	38.87	34.19	26.92	20.65	15.49
<b>KESCO</b>	26.10	90.89	32.83	35.25	29.44	24.11	19.37	14.45
<b>Total UPPCL</b>	<b>25.06</b>	<b>87.78</b>	<b>34.22</b>	<b>32.36</b>	<b>28.27</b>	<b>23.63</b>	<b>19.36</b>	<b>14.86</b>

As on 30<sup>th</sup> September 2015, the discoms in UP had accumulated debts worth Rs 53,211 crores<sup>5</sup>. As part of the agreement, GoUP has agreed to take over 75% of this debt over two instalments: first 50% in 2015-16 and another 25% in 2016-17. Moreover, the GoUP shall takeover future losses of discoms in a graded manner (Refer to Table III). In 2017-18, the state government will pay for 5%

<sup>5</sup> KESCO Tariff Order 2016-17, UPERC

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of loss of previous year; in 2018-19 it will pay for 10%, which will increase to 25% in 2019-20. From 2020-21 onwards, the state government will take responsibility and pay for 50% of discoms' losses.

Table III: Graded Takeover of Discom Losses by State Government						
Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
<b>Previous Year's DISCOM loss to be taken over by State</b>	0% of the loss of 2014-15	0% of the loss of 2015-16	5% of the loss of 2016-17	10% of the loss of 2017-18	25% of the loss of 2018-19	50% of the previous year loss

### THE GAP

All the performance parameters highlighted and emphasised in the scheme are being already monitored and reviewed by the SERCs as part of the ARR review and tariff determination process. Unfortunately, the SERCs are kept outside the scheme. Even after a year since UP joined the scheme, there has been no communication to the SERC regarding the scheme, neither from the GoUP and/or from the Centre. As of now, there is no clarity regarding what will be the role of the SERCs in implementation of Uday reforms. However, UPERC has already co-opted the UDAY performance targets in its 2016-17 tariff order. An initial level interaction with relevant stakeholders in UP has brought forth a few key areas for regulatory oversight which must be brought under the UDAY Scheme. These have been elaborated below.

**Calculations in Tariff Determination:** Given that the GoUP is expected to take over 75% of the debts by now, the SERC must calculate and allow the interest costs accordingly in the tariff determination exercise. Similarly, the state government must pay for 5% of previous year's loss in 2017-18; the loss has to be calculated accordingly. In that regard, the UPERC needs to receive systematic information from both the discoms and the state governments on their performance and contributions.

**Monitoring of Discoms Performance:** In general, the discoms in Uttar Pradesh have a poor track record of collection efficiency and AT&C loss (Refer to Table IV and V). The current AT&C loss stands at 30.21%<sup>6</sup> and the target is to achieve 15% by 2019. The Commission has consistently been setting targets and seeking compliance from the discoms through various measures. For instance, the commission in its tariff orders has stated that if the utilities do not achieve their distribution loss targets, then their regulatory surcharge for the next year will be cut down by 10%. Unfortunately, these targets are never met by the underperforming utilities. Though the Commission is empowered to levy penalties on non-performance or underperformance, there is no record of penalisation in the public records.

<sup>6</sup> <https://www.uday.gov.in/home.php#modal-three>, visited on 07<sup>th</sup> July, 2017

Table IV: Collection Efficiency (%)								
Utility	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
DVVNL	80.8	73.79	74.8	68.57	84.26	74.84	89.09	84.85
KESCO	67.82	65.83	118.33	93.38	103.71	90.97	95.02	91.91
MVVNL	68.9	74.98	79.84	90.53	75.48	72.08	114.03	84.15
Pashchim VVNL	95.61	97.5	98.77	93.68	90.53	92.72	99.47	96.69
Poorva VVNL	66.11	66.45	96.09	77.88	64.54	64.07	106.17	75
<b>Total</b>	<b>79.62</b>	<b>79.51</b>	<b>90.26</b>	<b>84.45</b>	<b>80.9</b>	<b>78.26</b>	<b>101.09</b>	<b>86.78</b>

  

Table V: AT&C Loss (%)								
Utility	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
DVVNL	44.69	45.95	49.62	55.39	40.5	45.69	36.47	40.18
KESCO	56.12	53.44	25.2	41.45	30.48	37.61	34.29	32.02
MVVNL	48.16	40.64	37.58	34.99	44.42	45.83	14.43	35.18
Pashchim VVNL	31.29	26.63	27.68	31.61	35.95	33.39	23.49	22.19
Poorva VVNL	51.91	49.75	27.86	41.62	52.37	52.37	20.09	42.91
<b>Total</b>	<b>43.09</b>	<b>40.12</b>	<b>34.45</b>	<b>39.96</b>	<b>41.95</b>	<b>42.85</b>	<b>24.67</b>	<b>33.82</b>

However, there are evidences that discoms have denied data disclosure to the Commission on the grounds that does not link to annual revenue requirement. In a particular incident, the UPERC had asked KESCO to furnish with division level loss and other performance indicators, to use it for naming and shaming the poor performing divisions<sup>7</sup> and thus, build a pressure for improving their performance. The utility did not respond on the first instance. On repeated requests, the utility responded that division level data is not relevant to annual revenue requirement and therefore it will not provide the requested data.

**Effective Utilisation of Cost Savings:** After more than a year of the launch of the scheme, there is a clear indication of discoms making huge savings on interest cost and power procurement cost. However, concerns have been raised about the utilisation of cost savings. The findings from the stakeholder interactions in UP suggest that little has been done in building the appropriate infrastructure for loss reduction.

Almost 64 lakh rural connections are still unmetered in the state of UP. Due to this, there is a gap of almost 30 percent between the actual load and the sanctioned load. The commission in its orders has clearly mentioned that one of the major reasons for high distribution losses is higher number of unmetered connections which ultimately lead to disallowance of power purchase cost on one hand

<sup>7</sup> <https://kesco.co.in/wss/downloads/datagap1.pdf>

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and loss of revenue on other hand. Thus, the utilities are expected to ensure that they achieve the target of 100% metering within their distribution area.

There are several such incidents where the utilities have dismissed the requests or orders of the Commission. The Commission has been asking loss estimation study to be conducted by the discoms. The utilities, however, have been delaying it. In a recent hearing, the utilities have claimed that consultant have been contracted to conduct such a study. In addition, the Commission, in its orders, has suggested working on individual accountability of discom officers for under performance of their units. However, it has still remained in rhetoric.

## **WAY FORWARD**

The SERCs in general have potential to play a strong role in implementation of the UDAY scheme. However, that potential has been undermined by both the governments at Centre and state. The Commission can play an important role in holding the discoms accountable for the performance targets they have agreed in the MoU. On the other hand, they can seek the state government to perform on their commitments. While reviewing the ARR and determining the costs, the Commission can balance between the commitments, obligations and responsibilities of discoms and the state government on various performance indicators. Though there is no clear guideline pertaining to the UDAY scheme, existing mandate of the SERCs allows them to take that action pro bono.

Moreover the UDAY scheme lacks a specific performance-monitoring and compliance mechanism. Past experiences suggest that lack of a publicly accessible monitoring mechanism has led to delay or non-compliance with performance targets. SERCs can fill the gap by putting relevant information and data in public domain for mass awareness and information. Regulatory hearings will then provide the platform for holding the discoms accountable on grounds of available data.

To do this, the Commission need to receive regular data from discoms and maintain a record of it. As of now, most Commissions receive annual data from the discoms. There is a need to get more sustained and timely data from the discoms, on regular intervals. We propose a template below to seek monthly data from the discoms.



**Division/Circle Wise Statement of Energy Supply & Realisation**

SN	Division/Circle	Energy Received (MU)	Energy Sold (MU)	T&D Loss (%)	Billing Efficiency (%)	Collection Efficiency (%)	AT&C Loss (%)	ACS (Rs/kWh)	ARR (Rs/kWh)	Revenue Gap (Rs/kWh)	Total Revenue Gap (Rs Crore)

**Consumer Category wise Statement of Energy Supply & Realisation**

SN	Consumer Category	Energy Sold (MU)	Billing Efficiency (%)	Collection Efficiency (%)	Commercial Loss (%)	ACS (Rs/kWh)	ARR (Rs/kWh)	Revenue Gap (Rs/kWh)	Total Revenue Gap (Rs Core)	Subsidy Received (Rs Crore)
1.	Domestic									
2.	Non domestic									
3.	Agricultural									
4.	Industrial (LT)									
5.	Industrial (HT)									
6.	Public Lighting									
7.	Public water works									
8.	Bulk									
9.	Railways									

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