



ગુજરાત ગુજરાત GUJARAT

06 OCT 2016.

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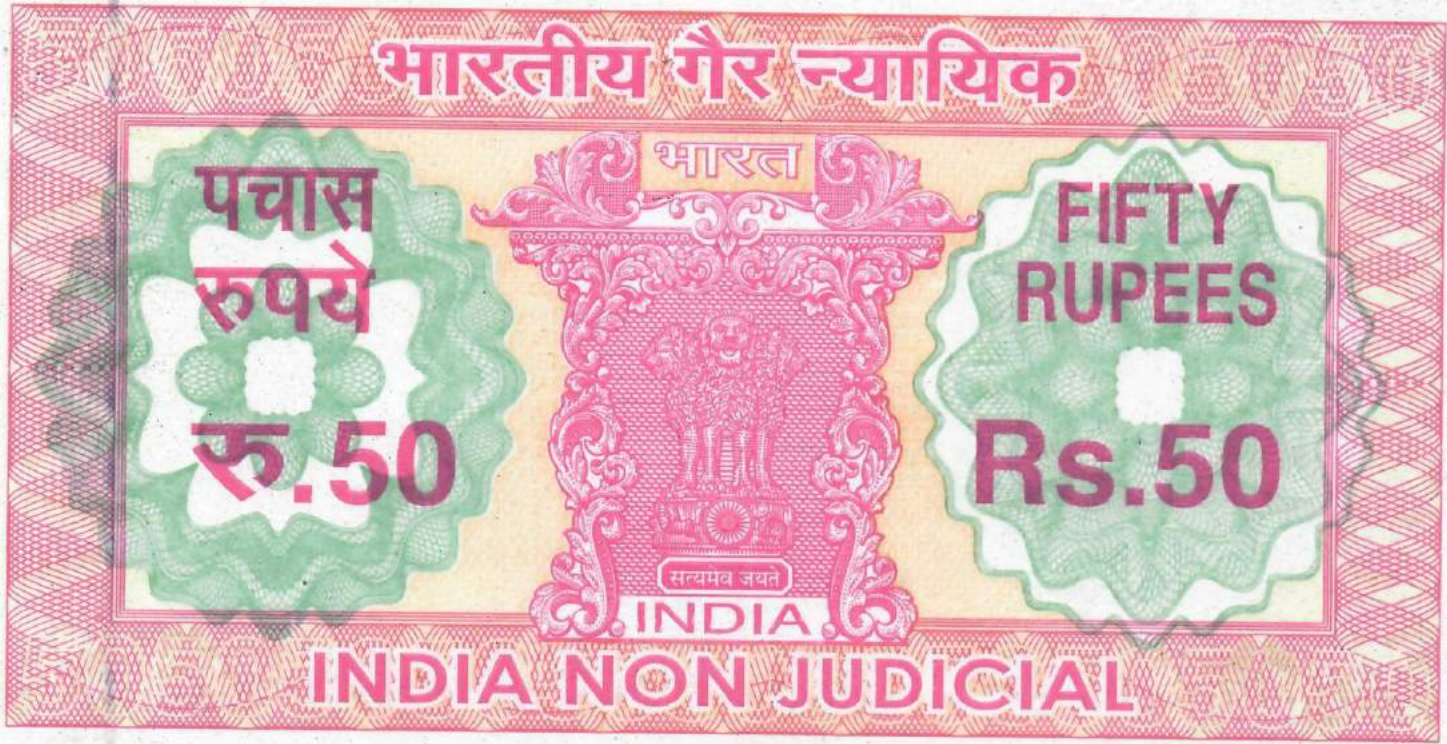
અ.નં. ૩૨૩૬૨.....તારીખ ૦૬/૧૦/૨૦૧૬ રૂ. ૧૦૦/-  
ખરીદનારનું નામ.....રૂરલ ઇલેક્ટ્રીફિકેશન કોર્પોરેશન લિમિટેડ  
સરનામું.....પ્લોટ નં. ૬૪૬, લી.પી.સ્કીમ નં. ૨  
.....પુષ્ટી કોમ્પ્લેક્સ કે પીએ, આર.પી.જ્યોતિ આશ્રમ રોડ  
.....સુભાનપુરા - વડોદરા - ૩૯૦ ૦૨૩  
હસ્તાક્ષર.....

સંજય વસંતરાવ કદમ  
બી-૫, રાજકેસલ કોમ્પ્લેક્સ,  
ઈલોરાપાર્ક, સુભાનપુરા,  
વડોદરા-૩૯૦૦૨૩.

સ્થાપક-ડરની સહી  
લાયસન્સ નં. ૦૨/૨૦૦૨  
Ph. No. 0265-2281981

This stamp paper forms an integral part of the Tripartite Memorandum of Understanding dated 07<sup>th</sup> October, 2016 executed amongst Ministry of Power, Government of India,





गुजरात गुजरात GUJARAT

06 OCT 2016

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अ.न.....३२३६३.....तारीख ३ / १०/२०१६ रू. ५०/-  
अरीद नारुं नाम, रुरल इलेक्ट्रीफिकेशन कारपोरेशन लिमिटेड  
प्लॉट नं० ५८५, ली. बी. स्कॉम नं० २  
सरनामुं..... पुष्टी कॉम्पलेक्स के पीछे, आर्य ज्योति आश्रम, रोड  
सुमानपुरा - वडोदरा : ३९० ०२३  
हस्ते.....प्रकाश.....

संजय वसंतराव कुदम  
बी-५, राजकेशव कोम्प्लेक्स,  
ईलोरापार्क, सुमानपुरा,  
वडोदरा-३९००२३.

संजय वे-डरनी सही  
लायसन्स नं. ०२/२००२  
Ph. No. ०२६५-२२८१९८१

Government of Maharashtra and MAHARASHTRA STATE  
ELECTRICITY DISTRIBUTION COMPANY LTD AT  
VADODARA.

Date:

Place:

.....



**TRIPARTITE MEMORANDUM OF UNDERSTANDING**

**AMONGST**

**Ministry of Power, Government of India**

**AND**

**Government of Maharashtra,**

**AND**

**Maharashtra State Electricity Distribution Company Limited**

**For achieving turnaround of Maharashtra State Electricity Distribution Company Limited**

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**This TRIPARTITE MEMORANDUM OF UNDERSTANDING (hereinafter referred to as the "Tripartite MOU") is made this 07<sup>th</sup> day of October 2016**

**BY AND AMONGST**

Ministry of Power, Government of India, having its Office at Rafi Marg, Sansad Marg Area, New Delhi - 110001 which expression shall unless it be repugnant to the subject or context thereof, include its successors and assigns, of the **FIRST PART;**

**AND**

**Government of Maharashtra** (hereinafter referred to as "**Government of Maharashtra (GoM)**") which expression shall unless it is repugnant to the subject or context thereof, include its successors and assigns, of the **SECOND PART;**

**AND**

Maharashtra State Electricity Distribution Company Limited, (hereinafter referred to as "**MAHADISCOM**") which expression shall unless repugnant to the context or meaning thereof includes its successors and assigns) of the **THIRD PART;**

The **Government of India**, the **Government of Maharashtra**, and the **MAHADISCOM** is hereinafter also referred to collectively as the **"Parties"** and individually as the **"Party"**.

#### **Definitions:**

**"Effective Date"** means the date of signing of the MOU;

**"Cut-off Date"** means 30<sup>th</sup> September 2015;

**"MAHADISCOM"** means Maharashtra State Electricity Distribution Company Limited;

**"Bonds"** mean the bonds to be issued by the **Govt of Maharashtra** and **MAHADISCOM** under UDAY;

**"Outstanding Debt"** means the debt of the MAHADISCOM including Bonds and loan for capital expenditure (capex) as well as short term loans of Banks/ FIs/ GoM.

#### **Preamble:**

- ❖ The MAHADISCOM had the revenue deficit during FY 2013-14 and FY 2014-15 amounting to Rs.280.42 crores and Rs. 365.70 crores<sup>1</sup> respectively. The accumulated losses have reached to the level of Rs. 7087.13 crores. The outstanding debt level of **MAHADISCOM** has reached to Rs.22,097 Crores at the end of September 2015, out of which Medium Term and Short-term Loans (excluding overdraft loan) is Rs. 6,613 Crs. Also the interest cost burden of nearly Rs. 0.31 p.u. during F.Y. 2014-15.

The Government of India, Government of Maharashtra and the MAHADISCOM has entered into a tripartite MOU in order to improve the operational and financial efficiency of the MAHADISCOM to enable financial turnaround of the DISCOM.

NOW IT IS HEREBY AGREED BY AND AMONG THE PARTIES HERETO as follows:

#### **1. Obligations/ Commitments:**

##### **1.1. The Government of India to take following measures:**

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<sup>1</sup>- Revenue Deficit and accumulated deficit figures for FY 2013-14 & FY 2014-15 are audited figures after tax liability as well as appropriation of profits.



- a) Facilitating Government of Maharashtra to take over 75% of the outstanding Medium Term and Short Term debt of the MAHADISCOM as on 30<sup>th</sup> September, 2015 in the year 2016-17 in 5 years as tabulated in section 1.2 (c).
- b) Facilitating Banks / FIs not to levy any prepayment charge on the MAHADISCOM debt. Banks/ FI's shall waive off any unpaid overdue interest and penal interest on the MAHADISCOM debt and refund/adjust of any such overdue/penal interest paid since 1st October 2013. 25% of MAHADISCOM Medium Term and Short Term debt as on 30th September, 2015, as reduced by any waivers by Banks/FIs shall be converted into loans or bonds with interest rates not more than the Banks' base rate plus 0.1%. Alternately, this Medium Term and Short Term debt may be fully or partly issued by the MAHADISCOM as State guaranteed DISCOM bonds at the prevailing market rates which shall be equal to or less than Bank rate plus 0.1%.
- c) Facilitating Banks/FIs to lend MAHADISCOM upto 25% of the DISCOM previous year annual revenue for working capital, or as per prudential norms.
- d) Facilitating the State to get additional and priority funding through DDUGJY, IPDS and PSDF and / or other such schemes of MoP and MNRE as outlined in the scheme.
- e) Facilitating through Ministry of Coal, increase in supply of domestic coal to Maharashtra State Power Generation Company Limited (MSPGCL);
- f) Ensuring rationalization of coal linkages;
- g) Liberally allowing coal swaps from inefficient plants to efficient plants and from plant situated away from mines to pithead plants;
- h) Rationalizing coal prices based on Gross Calorific Value (GCV);
- i) Ensuring correction of coal grade slippages through re-assessment of each mine;
- j) Directing Coal India to supply 100% washed coal for G10 grade and above by 1st October 2018;
- k) Ensuring supply of 100% crushed coal from Coal India by 1st April 2016;
- l) Faster completion of ISTN lines;
- m) Allocating linkages to state at notified price based on which the State will go for tariff based bidding. This will help in getting cheaper power and revive stressed assets;
- n) Facilitating NTPC to provide handholding support for improving operational efficiencies of the State Generating Units;

**1.2. The Govt. of Maharashtra to take the following measures:**

- a) Government of Maharashtra shall take over Medium Term and Short Term debt of Rs.4,960Cr (75% of the Medium Term and Short Term debt of MAHADISCOM as on 30th September 2015). The Medium Term and Short Term debt shall be taken over as follows:
- Year 2016-17 – Rs. 992Cr (15% of the outstanding Medium Term and Short Term debt in the form of grant)
  - Year 2017-18 - Rs. 992 Crs (15% of the outstanding Medium Term and Short Term debt in the form of grant)
  - Year 2018-19 - Rs. 992 Crs (15% of the outstanding Medium Term and Short Term debt in the form of grant)
  - Year 2019-20 - Rs. 992 Crs (15% of the outstanding Medium Term and Short Term debt in the form of grant)
  - Year 2020-21 - Rs. 992 Crs (15% of the outstanding Medium Term and Short Term debt in the form of grant)
- b) The Government of Maharashtra shall take over the Medium Term and Short Term debt according to the following timelines:
- Year 2016-17 : Third quarter of the financial year;
  - Year 2017-18: First quarter of the financial year;
  - Year 2018-19: First quarter of the financial year;
  - Year 2019-20: First quarter of the financial year;
  - Year 2020-21: First quarter of the financial year;
- c) The Medium Term and Short Term Debt taken over by the Government of Maharashtra shall be transferred to MAHADISCOM as loan as described in the following table:

Year	75% of Total Medium Term and Short Term Debt.	Transfer to the DISCOM in the form of Grants	Transfer to the DISCOM in the form of Loan	Transfer to the DISCOM in the form of Equity	Outstanding State loan of the DISCOM
2016-17	20% of DISCOM debt Takenover <sup>\$</sup>	Rs. 992Cr	Rs. 3,968Cr*		Rs. 3,968 Crs
2017-18	20% of DISCOM debt Takenover <sup>\$</sup>	Rs. 992Cr			Rs. 2,976Cr
2018-19	20% of DISCOM debt Takenover <sup>\$</sup>	Rs. 992Cr			Rs. 1,984Cr
2019-20	20% of DISCOM debt Takenover <sup>\$</sup>	Rs. 992Cr			Rs. 992Cr
2020-21	20% of DISCOM debt	Rs. 992Cr			-



### Takeover<sup>\$</sup>

\* - Government of Maharashtra to take over the 75% of the Medium Term and Short Term Debt to be adjusted against grant in 5 years;

\$ - Rs. 4,960Cr (75% of total outstanding Medium Term and Short Term debt) will be taken over in the form of grant in equal ratio in 5 years from F.Y. 2016-17 to F.Y. 2020-21;

- d) For the borrowings made by the State to takeover MAHADISCOM Medium Term and Short Term debt, Government of Maharashtra shall take prior permission of Department of Expenditure, Ministry of Finance under Article 293<sup>2</sup> of the Constitution of India before approaching Reserve Bank of India to raise loans;
- e) The borrowings made by the State to take over MAHADISCOM Medium Term and Short Term debt during FY 2016-17 shall not be reckoned against the normal permissible net borrowings ceiling of the state determined by department of Expenditure, Ministry of Finance under the recommendations of 14th Finance Commission for the whole tenure of the debt. However any borrowings made by the state after 31/03/2017 to takeover MAHADISCOM debt shall be reckoned as part of the Net Borrowings ceiling of the State;
- f) The Government of Maharashtra shall issue non-SLR bonds to raise funds for providing Grant/Loan to the MAHADISCOM;
- g) The takeover of the Medium Term and Short term debt shall be in the order of debt already due, followed by debt with highest cost;
- h) There is no gap in the ACS and ARR of the MSEDCL as per the MYT petition filed by the company for the years 2016-17 to 2019-20. The apparent gap in the first year which is made up in the later years of the MYT period will be taken care of during the implementation of UDAY. Future losses shall however be taken over by the Government of Maharashtra in a graded manner as follows :

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Previous Year's DISCOM loss to be taken over by State	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

### <sup>2</sup>293. Borrowing by States

(1) Subject to the provisions of this article, the executive power of a State extends to borrowing within the territory of India upon the security of the Consolidated Fund of the State within such limits, if any, as may from time to time be fixed by the Legislature of such State by law and to the giving of guarantees within such limits, if any, as may be so fixed

(2) The Government of India may, subject to such conditions as may be laid down by or under any law made by Parliament, make loans to any State or, so long as any limits fixed under Article 292 are not exceeded, give guarantees in respect of loans raised by any State, and any sums required for the purpose of making such loans shall be charged on the Consolidated Fund of India

(3) A State may not without the consent of the Government of India raise any loan if there is still outstanding any part of a loan which has been made to the State by the Government of India or by its predecessor Government, or in respect of which a guarantee has been given by the Government of India or by its predecessor Government

(4) A consent under clause ( 3 ) may be granted subject to such conditions, if any, as the Government of India may think fit to impose CHAPTER III PROPERTY, CONTRACTS, RIGHTS, LIABILITIES, OBLIGATIONS AND SUITS



- i) Operational Funding Requirement (OFR) of the MAHADISCOM will be met by MSEDCL as per OM of the UDAY scheme.
- j) All outstanding dues from the State Government departments to MAHADISCOM for supply of electricity shall be paid expeditiously;
- k) Government of Maharashtra shall guarantee repayment of principal and interest payment for the balance Medium Term and Short Term debt remaining with MAHADISCOM / bonds issued by MAHADISCOM through an appropriate mechanism.
- l) Henceforth, Banks / FIs shall not advance short term debt to MAHADISCOM for financing losses. However, Banks/FIs can finance working capital up-to 25% of the previous year annual revenue of DISCOM as allowed under UDAY. Government of Maharashtra shall guarantee the bonds issued by MAHADISCOM or issue bonds itself to meet current losses after 1st October 2015, if any, within the limit of loss trajectory as finalized by MoP.
- m) Replacement of street lights with LEDs in all municipal towns through Nagar Nigam/ Municipal Corporations;
- n) Improving efficiency of State Generating Units.
- o) Government of Maharashtra shall endeavor to ensure that tariff hikes as reflected in **Annexure B** are undertaken.
- p) Government of Maharashtra will endeavor to ensure that all operational targets as enumerated in Section 1.3 are achieved.
- q) The Current transmission losses are 3.89% and State Government of Maharashtra will endeavor to reduce the transmission losses to 3.75% by FY 2019.
- r) Review of MAHADISCOM performance shall be done on monthly basis at State Government level in the presence of State finance representative.

**1.3. The Maharashtra DISCOM to take the following measures:**

- a) +For the 25% of the Medium Term and Short Term debt remaining with it, MAHADISCOM to fully/partially issue state government guaranteed bonds or get them converted by Banks/FIs into loans or bonds with interest not more than the Banks base rate plus 0.1%. MAHADISCOMs and the Government of Maharashtra to ensure timely payment of lender's dues towards principal/interest for the balance Medium Term and Short Term debt remaining with MAHADISCOM.
- b) The MAHADISCOM shall pay interest to the Government of Maharashtra, in future, if any, on the outstanding Government of Maharashtra Loan in a financial year at the rate at which Government of Maharashtra issued non-SLR Bonds.



- c) The MAHADISCOM shall endeavor to reduce AT&C losses from 18.71% in FY 2014-15 to 14.39% by FY 2018-19 as per the following trajectory:

Year	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
AT&C loss <sup>3</sup>	17.31%	16.74%	15.61%	14.39%

However, if the target in a particular year is not met, then MAHADISCOM shall strive to achieve the targets in the subsequent years so as to achieve the desired target of 14.39% AT&C losses by FY 2018-19. The Division wise targets have been finalized as indicated in Annexure A.

- d) The MAHADISCOM shall eliminate the gap between ACS and ARR by FY 2018-19. Detailed computation of year wise ACS-ARR gap along with financial projections has been attached as Annexure B.
- e) MAHADISCOM shall submit the detailed action plan to achieve the projected trajectory for AT&C loss and ACS-ARR gap.
- f) The MAHADISCOM shall achieve operational milestones as specified in DDUGJY & IPDS ;
- g) The MAHADISCOM shall take the following measures for Loss Reduction:
- Undertaking name and shame campaign to control power theft from time to time;
  - Preparing loss reduction targets at subdivision/ division/ circle/ zonal level and making concerned officers responsible for achieving the loss reduction targets; the loss reduction targets at the Division level have been attached as Annexure A of MOU.
  - Implementing performance monitoring and management system MIS for tracking the meter replacement, loss reduction and day to day progress for reporting to top management;
  - Achieve 100% Distribution Transformer (DT) metering by 30st June 2018;
  - Achieve 100% feeder metering by 31<sup>st</sup> December 2016;
  - Undertake energy audit up-to 11kV level in rural areas by 31st March 2017;
  - Undertake Feeder Improvement Program for network strengthening and optimization, to be completed by March 2017;
  - Undertake Physical Feeder Segregation by March 2018.

<sup>3</sup>AT&C Loss target considered in line with the submission to Mop dated 29<sup>th</sup> July 2015.



- ix. Installation of Smart Meters for all consumers other than agricultural consumers consuming above 500 units / month by 30st June, 2018 and consumers consuming above 200 units/ month by 30st June, 2020.
  - x. Provide electricity access to 1479991<sup>4</sup>unconnected households as per trajectory finalized in the 24x7 Power for All document by FY 2019;
  - xi. ERP system for better and effective inventory management, personnel management, accounts management etc to reduce costs and increase efficiencies has already been implemented in the year 2014-15.
- h) The MAHADISCOM shall undertake the following measures for Demand Side Management and Energy Efficiency:
- (i) Provide LED for domestic and other category consumers under DELP program through EESL;
  - (ii) Undertake consumer awareness programs for optimum utilization of resources and to foster long term behavioral changes;
  - (iii) Replace at least 10% of existing agriculture pumps with energy efficient pumps by March 2019;
  - (iv) Implement PAT scheme of BEE for improving energy efficiency in Industries
- i) The MAHADISCOM shall undertake the following tariff measures:
- (i) Quarterly Tariff Revision particularly to offset fuel price increase;
  - (ii) Timely filing of Tariff Petition before the MERC so that Tariff Order may be issued for the year as early as possible;
  - (iii) Timely Prepare annual accounts of the MAHADISCOM which shall also enable timely filing of the Tariff Petition;
- j) The MAHADISCOM shall undertake the following measures to increase employee engagement:
- (i) Initiate capacity building of employees to enhance technical, managerial and

<sup>4</sup> In Maharashtra almost all feeders are separated. However 3104 nos. of feeders are virtually separated (single phasing programme). Out of this, 2012 feeders are considered for physical separation. Due to limited funds approved by Govt, 837 feeders are proposed for physical separation under DDUGJY Phase-I scheme in 2016-2018. 1175 feeders are proposed for physical separation under DDUGJY Phase-II (Additional DDUGJY). 1451 feeders are not considered for physical segregation as they are not financially viable or having RoW issues.




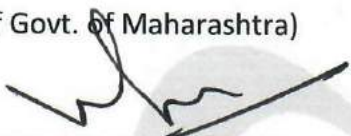

professional capabilities at induction level in subsequent refresher trainings;

- (ii) Devise Key Performance Indicators (KPIs) for each officer in-charge on areas of AT&C loss reduction and improvement in meter/billing/ collection efficiency. The performance of officer in-charge shall be linked to KPIs achieved and will attract incentive/ penalty;
- k) The MAHADISCOM shall implement the following Customer Service Strategy:
  - (i) Set up Centralized Customer Call Center for timely resolution of complaints related to no current and other technical complaints, harassment by official, reporting of theft and safety related complaints;
  - (ii) Introduce more avenues to consumers for bill payment, which could be in terms of e-payment through net banking, credit/ debit card, kiosks at banks and post offices, village panchayats, mobile collection vans, etc;
- l) MAHADISCOM shall procure power through the transparent process of competitive bidding.
- m) MAHADISCOM shall identify the key personnel for implementing the scheme (UDAY)
- n) MAHADISCOM shall devise the mechanism to motivate and encourage the staff.
- o) CMD / MD of MAHADISCOM shall monitor the performance of MAHADISCOM on monthly basis.
- p) It is hereby agreed that this signed MoU can be put in the public domain by any of the signatory.

Detailed action plan for implementation of the targeted activities is attached as Annexure C of the MOU.



IN WITNESS whereof the Parties hereto have executed these presents the day, month and year first herein above written.

<p><b>SIGNED AND DELIVERED BY</b></p> <p>(on behalf of <b>MOP, Govt. of India</b>)</p> <p>Signature ..... </p> <p><b>डा. अरुण कुमार वर्मा</b> <b>DR. ARUN KUMAR VERMA</b> संयुक्त सचिव / Joint Secretary विद्युत मंत्रालय / Ministry of Power भारत सरकार / Government of India New Delhi-110001</p> <p><b>Name &amp; Designation: Dr. A.K. Verma</b></p> <p><b>Address: Joint Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-1</b></p>	<p>in the presence of .....</p> <p>Signature .....</p> <p>Name &amp; Designation .....</p> <p>Address.....</p>
<p><b>SIGNED AND DELIVERED BY</b></p> <p>(on behalf of Govt. of Maharashtra)</p> <p>Signature ..... </p> <p><b>Name &amp; Designation: Bipin Shrimali, Principal Secretary (Energy), Govt. of Maharashtra</b></p>	<p>in the presence of .....</p> <p>Signature .....</p> <p>Name &amp; Designation .....</p> <p>Address.....</p>
<p><b>SIGNED AND DELIVERED BY</b></p> <p>(on behalf <b>MAHADISCOM</b>)</p> <p>Signature ..... </p> <p><b>Name &amp; Designation: Sanjeev Kumar, CMD</b></p> <p><b>Address: Maharashtra State Electricity Distribution Company Ltd., Mumbai</b></p>	<p>in the presence of .....</p> <p>Signature .....</p> <p>Name &amp; Designation .....</p> <p>Address.....</p>



### Annexure A: Loss Reduction Targets at the Division Level (in %)

- A. **Maharashtra State Electricity Distribution Company Limited:** As per the scheme, the AT&C Loss is to be reduced to 14.39% in 2018-19, accordingly the AT&C Loss trajectory has been prepared which is as follows: -

Sr. No	Division	FY 15 (Actual)			FY 16	FY 17	FY 18	FY 19
		Dist. Losses	Collection Efficiency	AT&C	AT&C	AT&C	AT&C	AT&C
1	Akola (R)	23.50	88.14	32.57	29.69	28.73	26.63	23.29
2	Akola (U)	28.79	99.83	28.91	25.79	24.29	23.29	22.29
3	Buldhana	16.43	73.68	38.42	33.65	31.30	26.64	22.63
4	Khamgaon	12.76	84.49	26.29	23.24	21.79	19.06	16.23
5	Malkapur	12.83	89.29	22.16	19.96	19.56	18.15	15.32
6	Washim	22.15	75.13	41.50	37.20	34.57	30.13	26.13
7	Achalpur	14.83	81.82	30.31	27.33	25.49	22.83	18.77
8	Amravati (R)	10.90	92.96	17.18	15.82	15.40	13.96	12.65
9	Amravati (U)	20.77	98.42	22.02	20.14	19.77	18.47	18.07
10	Morshi	9.27	91.62	16.87	15.96	15.69	14.33	11.61
11	Pandharkawada	9.42	82.19	25.55	22.83	21.47	18.75	14.68
12	Pusad	13.08	67.72	41.14	36.43	33.69	28.36	23.80
13	Yeotmal	13.10	87.56	23.92	21.73	20.28	18.88	16.06
14	Aurangabad U - I	16.43	99.03	17.24	16.07	15.69	14.88	14.68
15	Aurangabad U - II	24.50	99.03	25.23	23.36	22.48	21.20	20.20
16	Aurangabad [R]	13.53	86.53	25.17	23.00	21.56	20.16	17.36
17	Kannad	18.00	62.15	49.04	44.43	41.74	35.54	30.20
18	Jalana - I	10.40	90.34	19.05	17.70	17.43	16.08	13.37
19	Jalana - II	34.08	54.34	64.18	58.21	55.17	49.09	41.28
20	Baramati	17.37	87.21	27.94	25.62	24.09	22.38	19.47
21	Daund	11.48	92.73	17.91	16.56	16.15	14.72	13.41
22	Saswad	11.26	88.95	21.07	18.84	18.43	17.00	14.12
23	Karad	15.06	97.15	17.49	16.33	16.10	15.14	13.87
24	Phaltan	8.81	94.20	14.10	13.19	13.10	12.19	11.05
25	Satara	12.93	96.31	16.15	15.23	14.99	14.02	12.72
26	Vaduj	18.34	73.15	40.26	35.59	33.29	28.73	24.62
27	Wai	14.92	98.08	16.55	15.63	15.40	14.44	13.97
28	Akluj	17.74	60.17	50.51	45.91	43.21	37.00	31.65
29	Barshi	15.41	67.88	42.58	37.80	35.13	29.92	25.46
30	Pandharpur	16.81	67.89	43.52	38.81	36.06	30.60	26.01
31	Solapur (R)	13.10	82.35	28.43	25.40	23.96	21.24	17.11
32	Solapur (U)	14.86	100.00	14.86	14.36	14.21	14.11	13.91
33	Bhiwandi Circle(Bhiwandi-I +II)	21.64	89.89	29.56	26.62	25.64	23.96	21.14
34	Bhandup	6.66	99.65	6.99	6.66	6.66	6.66	6.66
35	Mulund	7.49	97.72	9.61	9.14	9.05	8.13	7.49
36	Thane I	8.85	99.65	9.16	8.85	8.85	8.85	8.85



Sr. No	Division	FY 15 (Actual)			FY 16	FY 17	FY 18	FY 19
		Dist. Losses	Collection Efficiency	AT&C	AT&C	AT&C	AT&C	AT&C
37	Thane II	17.08	99.63	17.39	16.33	16.03	15.53	15.13
38	Thane III	48.40	81.24	58.08	52.32	48.60	43.24	35.69
39	Wagle Estate	11.40	99.33	11.99	11.05	10.81	10.65	10.45
40	Nerul	7.93	100.00	7.93	7.93	7.93	7.93	7.93
41	Panvel	9.71	97.40	12.05	11.60	11.51	10.61	9.71
42	Washi	5.51	100.00	5.51	5.51	5.51	5.51	5.51
43	Ballarshah	12.96	97.99	14.71	13.78	13.55	12.57	12.01
44	Chandrapur	6.20	100.00	6.20	6.20	6.20	6.20	6.20
45	Warora	9.48	97.28	11.95	11.49	11.40	10.50	9.48
46	Allapalli	21.70	90.94	28.80	26.63	25.66	23.98	21.16
47	Bramhapuri	15.37	93.84	20.58	19.02	18.62	17.67	16.41
48	Gadchiroli	21.65	93.40	26.82	24.62	23.62	21.93	20.53
49	Bhandara	11.87	98.12	13.53	12.59	12.36	11.37	10.92
50	Sakoli	18.45	88.46	27.86	25.55	25.03	23.33	20.46
51	Deori	21.95	94.80	26.01	23.79	22.94	21.65	20.25
52	Gondia	22.89	97.31	24.97	23.11	22.25	20.47	19.19
53	Dhule (R)	15.52	75.98	35.81	31.83	29.57	25.22	21.19
54	Dhule (U)	18.53	96.92	21.04	19.90	19.52	18.21	16.77
55	Dondaicha	15.83	87.58	26.28	23.93	22.38	21.01	18.26
56	Bhusaval UCR	15.24	89.26	24.35	21.97	21.57	20.20	17.43
57	Chalisgaon	18.42	89.04	27.36	25.04	24.52	22.82	19.94
58	Dharangaon	12.54	83.09	27.33	24.27	22.82	20.09	17.25
59	Jalgaon (U)	27.33	98.08	28.72	25.40	24.54	22.78	21.53
60	Pachora	14.99	81.44	30.76	27.79	25.95	23.29	19.24
61	Savada .	23.14	92.22	29.12	26.95	25.96	23.83	22.44
62	Nandurbar	30.12	84.14	41.20	35.18	32.74	29.54	26.29
63	Shahada	39.30	79.37	51.82	45.23	42.20	37.52	32.02
64	Dombivali	8.36	99.64	8.69	8.36	8.36	8.36	8.36
65	Kalyan (E)	14.27	99.55	14.66	13.77	13.62	13.52	13.32
66	Kalyan (W)	9.33	99.69	9.61	9.33	9.33	9.33	9.33
67	Kalyan (R)	13.44	99.32	14.03	13.10	12.86	12.69	12.49
68	Ulhasnagar (I)	14.20	99.93	14.26	13.70	13.55	13.45	13.25
69	Ulhasnagar II	10.71	100.00	10.71	10.21	10.06	9.96	9.96
70	Alibag	2.15	99.91	2.24	2.15	2.15	2.15	2.15
71	Goregaon	8.77	97.13	11.39	10.93	10.84	9.93	8.79
72	Panvel (R)	5.77	99.51	6.23	5.77	5.77	5.77	5.77
73	Roha	4.25	98.22	5.95	5.47	5.38	4.42	4.25
74	Palghar	9.55	99.01	10.45	10.00	9.91	9.55	9.55
75	Vasai	13.44	99.26	14.08	13.15	12.91	12.69	12.49
76	Virar	24.56	100.00	24.56	23.06	22.26	21.26	20.26
77	Chiplun	17.24	96.50	20.14	18.99	18.62	17.29	15.84
78	Khed	11.49	96.28	14.78	13.85	13.62	12.63	11.31
79	Ratnagiri	14.14	96.52	17.13	16.21	15.98	15.02	13.74
80	Kankawali	20.67	98.57	21.81	19.92	19.54	18.37	17.97



Sr. No	Division	FY 15 (Actual)			FY 16	FY 17	FY 18	FY 19
		Dist. Losses	Collection Efficiency	AT&C	AT&C	AT&C	AT&C	AT&C
81	Kudal	20.21	98.56	21.37	19.48	19.10	17.91	17.51
82	Gadhinglaj	17.40	97.06	19.83	18.69	18.31	16.98	15.53
83	Ichalkaranji	6.54	99.91	6.62	6.54	6.54	6.54	6.54
84	Jaisinghpur	13.71	98.80	14.74	13.82	13.58	12.96	12.76
85	Kolhapur (R-1)	14.38	95.54	18.19	17.29	17.06	16.10	14.82
86	Kolhapur (R-2)	8.50	97.28	10.99	10.53	10.44	9.53	8.50
87	Kolhapur (U)	5.19	99.98	5.21	5.19	5.19	5.19	5.19
88	Islampur	14.17	99.32	14.75	13.82	13.58	13.42	13.22
89	KawatheMahankal	29.30	73.76	47.85	41.95	38.89	34.26	29.93
90	Sangali (R)	17.46	87.74	27.57	25.25	23.73	22.01	19.10
91	Sangali (U)	5.87	98.94	6.87	6.40	6.30	5.87	5.87
92	Vita	19.87	94.09	24.60	23.09	22.72	21.43	20.02
93	Ambejogai	20.45	74.21	40.96	35.80	33.53	29.02	24.98
94	Beed	22.94	66.27	48.93	44.01	41.06	34.69	30.33
95	Latur	15.03	92.68	21.24	19.69	19.29	17.91	16.64
96	Nilanga	19.11	57.92	53.14	48.63	45.98	39.88	32.96
97	Udgir	35.53	86.69	44.11	38.38	35.54	33.09	28.53
98	Osmanabad	16.03	66.52	44.14	39.41	36.64	30.61	26.18
99	Tuljapur	16.39	66.31	44.56	39.84	37.09	30.75	26.32
100	Katol	10.35	95.52	14.37	13.44	13.35	12.45	11.32
101	Nagpur R-1	14.07	100.00	14.07	13.57	13.42	13.32	13.12
102	Nagpur R-2	8.63	98.69	9.82	9.37	9.28	8.63	8.63
103	Nagpur MIDC	3.66	99.84	3.81	3.66	3.66	3.66	3.66
104	Nagpur U (DF)	16.24	100.00	16.24	15.49	15.19	14.69	14.49
105	Congress Nagar	7.45	99.77	7.66	7.45	7.45	7.45	7.45
106	Arvi	9.33	95.36	13.54	13.09	12.99	12.09	10.95
107	Hinganghat	6.99	98.12	8.74	8.27	8.18	7.25	6.99
108	Wardha	7.38	95.65	11.41	10.95	10.85	9.93	8.77
109	Hingoli	21.71	65.67	48.59	43.61	40.63	34.59	30.19
110	Bhokar	15.09	62.30	47.10	42.35	39.67	33.59	28.27
111	Degloor	14.01	72.24	37.88	33.20	30.91	25.63	21.55
112	Nanded Urban	33.09	95.10	36.37	31.74	30.23	28.05	24.67
113	Nanded ( R )	18.70	61.99	49.60	45.03	42.36	36.21	30.91
114	Parbhani	21.93	69.78	45.52	40.50	37.49	32.24	27.85
115	Ahmednagar (R)	14.27	51.92	55.48	50.91	48.24	42.12	35.05
116	Ahmednagar (U)	13.05	92.35	19.71	18.37	17.97	16.56	15.27
117	Karjat ( R )	22.68	47.71	63.11	58.46	55.64	49.44	42.71
118	Sangamner	16.46	84.58	29.35	26.18	24.65	21.65	18.91
119	Shrirampur	23.32	85.62	34.34	31.50	29.61	26.32	22.97
120	Nashik 1	6.28	100.00	6.28	6.28	6.28	6.28	6.28
121	Nashik 2	12.23	98.78	13.30	12.37	12.13	11.48	11.28
122	Chandwad	12.54	84.63	25.98	22.92	21.47	18.73	15.89
123	Kalwan	16.55	81.12	32.31	29.17	27.23	24.25	20.24
124	Malegaon (U)	37.62	89.37	44.25	38.44	36.40	32.57	27.99



Sr. No	Division	FY 15 (Actual)			FY 16	FY 17	FY 18	FY 19
		Dist. Losses	Collection Efficiency	AT&C	AT&C	AT&C	AT&C	AT&C
125	Manmad (R)	15.76	85.12	28.29	25.95	24.41	21.76	19.01
126	Nasik (R)	6.03	95.50	10.26	9.79	9.69	8.75	7.58
127	Satana	15.34	75.44	36.13	32.15	29.89	25.53	21.49
128	Bhosari	7.22	99.67	7.53	7.22	7.22	7.22	7.22
129	Kothrud	6.59	100.00	6.59	6.59	6.59	6.59	6.59
130	Pimpri	7.39	99.21	8.12	7.65	7.56	7.39	7.39
131	Shivaji Nagar	6.70	99.28	7.37	6.91	6.81	6.70	6.70
132	Manchar	18.82	90.48	26.55	25.05	24.53	22.83	19.96
133	Pune (Mulshi )	17.27	97.58	19.27	18.13	17.75	16.41	15.32
134	Rajguru Nagar	6.88	98.41	8.36	7.89	7.80	6.88	6.88
135	Band Garden	6.02	100.00	6.02	6.02	6.02	6.02	6.02
136	Nagar Road	8.99	99.71	9.25	8.99	8.99	8.99	8.99
137	Padmavati	13.47	99.91	13.55	12.97	12.82	12.72	12.52
138	Parvati	9.92	100.00	9.92	9.92	9.92	9.92	9.92
139	Rasta Peth	10.82	98.85	11.84	10.90	10.66	10.07	9.87
<b>Total Discom</b>		<b>14.17</b>	<b>94.71</b>	<b>18.71</b>	<b>17.31</b>	<b>16.74</b>	<b>15.61</b>	<b>14.39</b>



**Annexure B: Financial Projections of Maharashtra State Electricity Distribution Company Limited**

**Scenarios Highlights (Medium Term and Short Term Debt Take-over as Grant)**

- 1) 75% of O/S Medium Term and Short term Debt as on 30.09.2015 to be taken over in the form of Grant to DISCOM's.
- 2) Of the Loan taken, 100% will be converted as grant in 5 years
- 3) ROI of balance 25% loans: G-SEC + 100 basis points p.a assumed to be @9% p.a.

## Other Key Assumptions:

- Tariff Hike\*:**

FY 15**	FY16	FY17	FY18	FY19
~15%	-0.75%	2.59%	9.01%	8.92%

\* **Expected** Tariff hike to be recovered in next year

\*\* Actual during FY 2014-15

- AT&C Loss Trajectory:**

FY 16	FY17	FY18	FY19
17.31%	16.74%	15.61%	14.39%

- Billing Efficiency:**

FY 16	FY17	FY18	FY19
86.50%	86.75%	87.00%	87.25%

- Collection Efficiency:**

FY 16	FY17	FY18	FY19
95.59%	95.98%	97.02%	98.12%



### Income Statement- Summary

Particulars (Provisional)	Rs. Crs		
	FY 16 Projection	FY 17 Projection	FY 18 Projection
Total Income	57,557	63,283	72,692
Total Cost	60,572	65,922	71,944
<b>Net Income (Without subsidy)</b>	<b>(3,015)</b>	<b>(2,639)</b>	<b>748</b>
Committed State Govt Subsidy	-	-	-
<b>Net Income (With subsidy)</b>	<b>(3,015)</b>	<b>(2,639)</b>	<b>748</b>
			<b>6,109</b>

### Operational Funding Requirement (OFR) - Summary

Particulars	Rs. Crs		
	FY 16	FY 17	FY 18
Committed Subsidy	-	-	-
Power Purchase Liability	-	-	-
<b>OMR (includes power purchase liability as on 31.3.2015)</b>	<b>-</b>	<b>-</b>	<b>-</b>
			<b>0</b>

## Income Statement- Detailed

Particulars	(Rs. Crores)			
	FY 15	FY 16	FY 17	FY 18
<b>Income</b>				
Revenue from Sale of Power	54,374	54,911	59,268	68,775
Other Receipts	2,930	2,457	3,000	3,129
Other Income (including revenue from trading)	189	189	1,015	788
<b>Total Income (A)</b>	<b>57,492</b>	<b>57,557</b>	<b>63,283</b>	<b>72,692</b>
<b>Cost</b>				
Power Purchase Cost including transmission charges	49,088	48,105	51,508	56,106
R&M Cost	903	1,021	1,124	1,236
Employees Costs	4,551	5,031	5,494	6,070
Administration and General Cost	703	673	771	887
Depreciation	1,680	2,333	2,724	3,202
Interest & Finance Costs	2,819	3,109	3,881	3,997
Other Debts incl. Prov. For doubtful debts and other provision	1,105	300	421	447
Prior Period Expenses and Exceptional item	(2,217)			
<b>Total Cost (B)</b>	<b>58,632</b>	<b>60,572</b>	<b>65,922</b>	<b>71,944</b>
<b>Net Income W/O Subsidy(A-B=C)</b>	<b>(1,140)</b>	<b>(3,015)</b>	<b>(2,639)</b>	<b>748</b>
<b>Committed State Govt. Subsidy/OFR</b>	-	-	-	-
<b>Electricity Duty Retention/Stamp Duty</b>	-	-	-	-
Interest Subsidy on IBRD Loan	-	-	-	-
Cash Subsidy	-	-	-	-
Others (Compounding Charges)	-	-	-	-
<b>Total Subsidy Available (D)</b>	-	-	-	-
<b>Net Income with Subsidy (C-D)</b>	<b>(1,140)</b>	<b>(3,015)</b>	<b>(2,639)</b>	<b>748</b>
<b>Net Income</b>	<b>6,109</b>	<b>6,109</b>	<b>6,109</b>	<b>6,109</b>

\* - Revenue includes the recovery of past losses and RoE



## Operational Funding Requirement- Detailed\*

Particulars	Rs. Crs			
	FY 16	FY 17	FY 18	FY 19
Revenue(excluding Cash Support & ED Retention)	57,557	63,283	72,692	84,029
Expenditure	62,014	66,316	72,252	79,017
<b>Book Loss(+)/Profit(-)</b>	<b>(4,457)</b>	<b>(3,032)</b>	<b>441</b>	<b>5,012</b>
Add: Depreciation	2,333	2,724	3,202	3,629
<b>Cash Loss(+)/Profit(-)</b>	<b>(2,124)</b>	<b>(309)</b>	<b>3,643</b>	<b>8,641</b>
Less: Decrease in Current Assets(Excl. Cash Support)				
Less: Increase in Current Liabilities (Incl. Misc Expenses)	(2,432)	1,034	649	566
Add: Increase in Current Assets(Excl. Cash Support)				
Add: Decrease in Current Liabilities (Incl. Misc Expenses)				
<b>Gross Operational Funding Required(OFR)</b>	<b>(4,556)</b>	<b>725</b>	<b>4,292</b>	<b>9,207</b>
<b>(Without Government Support)</b>				
Proportion allowed as per FRP Scheme				
<b>Allowed Funding(Without Government support)</b>	<b>(4,556)</b>	<b>725</b>	<b>4,292</b>	<b>9,207</b>
<b>Less: Support from State Government.</b>				
Support on Reimbursement of Losses				
ED retention				
Interest Subsidy on IBRD Loan				
<b>Total Support from State Govt.</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Gross Operational Funding Required(OFR)</b>	<b>(4,556)</b>	<b>725</b>	<b>4,292</b>	<b>9,207</b>
<b>(After Government Support)</b>				

\* - Above funding requirement considered after calculating the impact of UDAY

\$ - The change in working capital doesn't include the Working Capital loan and same is considered under outstanding debt.



## ACS- ARR Gap

Rs./kWh

Particulars	FY 15 Actual	FY 16 Projection	FY 17 Projection	FY 18 Projection	FY 19 Projection
<b>Cost Components</b>					
Power Purchase Cost incl. Transmission Charges	4.50	4.31	4.45	4.57	4.64
Cost of Energy Lost	0.93	0.91	0.87	0.87	0.87
PP per unit sold	5.43	5.23	5.32	5.44	5.52
O&M and Estt Cost	0.68	0.73	0.76	0.79	0.86
Depreciation Cost	0.19	0.25	0.28	0.31	0.33
Interest Cost	0.31	0.34	0.40	0.39	0.34
Other Debits (incl. RoE and other Income)	(0.30)	(0.08)	(0.29)	(0.25)	(0.17)
<b>ACS</b>	<b>6.31</b>	<b>6.47</b>	<b>6.48</b>	<b>6.69</b>	<b>6.88</b>
<b>ARR *</b>	<b>6.01</b>	<b>5.97</b>	<b>6.12</b>	<b>6.67</b>	<b>7.27</b>
<b>(Gap) / Surplus</b>	<b>(0.30)</b>	<b>(0.50)</b>	<b>(0.36)</b>	<b>(0.01)</b>	<b>0.39</b>

\* - Revenue includes the recovery of past losses and RoE

### Note:

The above calculation is based on MYT Petition submitted to MERC. There is no revenue gap presented in the statement and as per MYT Regulations, Tariff is decided for four years. Accordingly, the Revenue is deferred in 4 years and at the end of that DISCOM is revenue surplus.



### Annexure C: Detailed Action Plan for implementation of targeted activities

Clause No.	Activity	Sub-Activity	Units	Status / Pending at the end of FY 15	FY-16		FY-17		FY-18		FY-19		Officer Responsible	Resources in INR Cr.	
					H1	H2	H1	H2	H1	H2	H1	H2			
1.3(a)	AT&C Loss Reduction		%	18.71	17.31		16.74		15.61		14.39		Chief Engineer (Internal Reforms & Tariff Regulatory Cell)		
1.3(e-iii)	11 KV Feeder metering functional(219 93)		%	All the 11 KV feeders will be metered by December 2016.											
1.3(e-iv)	DT Metering in Urban area (Distt HQ)		%												
1.3(e-iv)	DT Metering in Urban area(Other Municipal Town)		%	86.58	90		95		100						
1.3(e-v)	11 KV Feeder audit in rural areas.		%	Except Single phasing & AG sep. feeders in Rural area, Energy audit of All 11 KV feeders is carried out											
1.3(e-vi)	Feeder Improvement Program on Feeders	New S-stn / Augmentation / Additional	No.	-	Nil	Nil	50	76	95	94	Nil	Nil	Chief Engineer (Infra)		
		HT Line	kM	-	Nil	Nil	3107	4660	5825	5825	Nil	Nil			
		LT Line	kM	-	Nil	Nil	995	1492	1866	1865	Nil	Nil			
		DTC	No	-	Nil	Nil	1567	2350	2937	2937	Nil	Nil			
1.3(e-vii)	Feeder separation (separation of Ag loan) on feeders		No	2371*	Nil	Nil	134	151	151	151	150	100	Chief Engineer (Infra)		

Clause No.	Activity	Sub-Activity	Units	Status / Pending at the end of FY 15	FY-16		FY-17		FY-18		FY-19		Officer Responsible	Resources in INR Cr.
					H1	H2	H1	H2	H1	H2	H1	H2		
1.3(e-viii)	Installation of Smart Meters / Other than Ag		%	The work of installation of smart Meters shall be taken considering the plan as submitted in MoU and after availability of funds and considering cost effectiveness of the implementation and targeted to be completed by 31 <sup>st</sup> December 2020.									Chief Engineer (IPDS)	
1.3(e-ix)	Domestic connections (in lakhs) under 24x7 PFA		Nos	1479991#	Nil	Nil	199756	299634	374542	374542	Nil	Nil	Chief Engineer (Infra)	
1.3(e-x)	Implementation of ERP System			Implemented										
1.3(f-i)	Providing LED bulbs under DELP		No. (in Cr)	Nil	Nil	1.5	1.5	0	0	0	0	0	Chief Engineer (Infra)	Nil
<p>§ - Network strengthening is a continuous process. However major network strengthening works are proposed in DDUGJY as above.</p> <p>* - In Maharashtra almost all feeders are separated. However 3104 nos. of feeders are virtually separated (single phasing programme). Out of this, 2012 feeders are considered for physical separation. Due to limited funds approved by Gol, 837 feeders are proposed for physical separation under DDUGJY Phase-I scheme in 2016-2018. 1175 feeders are proposed for physical separation under DDUGJY Phase-II (Additional DDUGJY). 1451 feeders are not considered for physical segregation as they are not financially viable or having RoW issues.</p> <p># - Out of balance 1479991 unelectrified Rural Household, creation of infrastructure for connecting 1248474 RHH is proposed DDUGJY Phase-I due to limited funds approved by Gol. Also, 1248474 proposed in DDUGJY-I in FY 2016-17 and FY 2017-18</p>														



## Monthly monitoring format for States participating in UDAY

Name of the State:

Status as on:

### A Financial Parameters:

1	Total outstanding Medium Term and Short Term debt of DISCOM as on 30.09.2015(Rscore)	
2	Amount of unpaid overdue interest and penal interest waived off by Banks and FI's(Rscores)	
3	Eligible Outstanding Medium Term and Short Term debt of DISCOMS as on 30.09.2015(Rscore)	
4	50% of the outstanding Medium Term and Short Term debt to be taken over in 2015-16(Rscore)	
5	25% of the outstanding Medium Term and Short Term debt to be taken over in 2016-17(Rscore)	
6	Bonds issued by State (Rscore)	
7	Bonds issue date	
8	Rate Of Interest on bonds (%)	
9	Medium Term and Short Term Debt taken over by State transferred to DISCOMs in form of Grant (Rscore)	
10	Medium Term and Short Term Debt taken over by State transferred to DISCOMs in form of Loan (Rscore)	
11	Medium Term and Short Term Debt taken over by State transferred to DISCOMs in form of Equity (Rscore)	
12	Operational Funding Requirement(OFR) support provided to DISCOMs (Rscore)	
13	Outstanding electricity dues from the State Government Dept to Discoms (RsCrore)	
14	Outstanding electricity dues from the State Government Dept paid on(date)	
15	Previous Years DISCOM Losses taken over by State (RsCrore)	

## Monthly monitoring format for States participating in UDAY

Name of the State:

Status as on:

### B. Operational Parameters:

1	AT&C Loss (%)	
	Target	
	Actual	
2	Billing Efficiency (%)	
	Target	
	Actual	
3	Collection Efficiency (%)	
	Target	
	Actual	
4	Gap ACS-ARR(RS per unit)	
	Target	
	Actual	
5	Distribution Loss (%)	
	Target	
	Actual	
6	Total number of unmetered feeders	
7	Number of Feeders metered in the current month.	
8	Total number of unmetered Distribution transformers(DTs)	
9	Number of Distribution Transformers metered in the current month.	
10	Total no of Smart meters to be installed	
11	Total no of Smart meters installed in current month	
12	Total no of LED Lamps to be replaced	
13	Number of LED Lamps replaced in current month.	
14	Total no of AG pumps to be replaced	
15	Number of Ag pumps replaced in current month	



## Monthly monitoring format for States participating in UDAY

Name of the State:

Status as on:

### C. Other Managerial / monitoring activities

1	Detailed action plan achieve the projected trajectory for AT&C loss and ACS-ARR gap submitted or not?	
2	Energy audit at 11Kv level started or not?	
3	Key person for implementing UDAY identified or not?	
4	No of awareness campaign done for energy efficiency and theft prevention	
5	Date of Review taken by CMS/MD of DISCOMs	
6	Date of Review taken at State Level	