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: GOVERNMENT OF MIZORAM

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: Article 5 General Agreement

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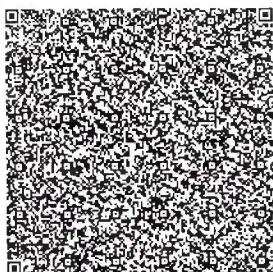
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This e-stamp forms an integral part of the Bipartite memorandum of Understanding dated 31st March, 2017 executed amongst Ministry of Power, Government of India and Government of Mizoram at New Delhi

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BIPARTITE MEMORANDUM OF UNDERSTANDING

AMONGST

Ministry of Power, Government of India

AND

Government of Mizoram

**For achieving improvement in operational efficiencies in
Distribution of Power**

This **BIPARTITE MEMORANDUM OF UNDERSTANDING** (hereinafter referred to as the "Bipartite MOU" is made this 31st day of March 2017.

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

The Government of India and the Government of Mizoram 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

Preamble:

The Power department of Mizoram has outstanding liabilities of Rs.NIL crore at the end of September, 2015. The ACS and ARR gap stands at Rs. NIL per unit and the AT&C losses stands at 36.74% as on 2014-15.

The Government of India and the Government of Mizoram have entered into a bipartite MOU in order to improve the operational parameters.

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:

- a) Facilitating through Ministry of Coal, increase in supply of domestic coal to Government of Mizoram
- b) Ensuring rationalization of coal linkages.

- c) Liberally allowing coal swaps from inefficient plants to efficient plants and from plant situated away from mines to pithead plants;
- d) Rationalizing coal prices based on Gross Calorific Value (GCV);
- e) Ensuring correction of coal grade slippages through re-assessment of each mine;
- f) Directing Coal India to supply 100% washed coal for G10 Grade and above by 1st October 2018.
- g) Ensuring supply of 100% crushed coal from Coal India by 1st April 2016.
- h) Faster completion of ISTN lines:
- i) Allocating linkages to State at notified price based on which the State will go for tariff based bidding. This help in getting cheaper power and revive stressed assets;

1.2 The Govt. of Mizoram to take the following measures:

- a) All outstanding dues from the State Government departments for supply of electricity shall be paid by 31.03.17.
- b) Replacement of street lights with LEDs in all municipal towns through Nagar Nigam / Municipal Corporations.
- c) Improving the efficiency of State Generating Units.
- d) The Government of Mizoram shall endeavour to ensure that tariff hikes as reflected in Annexure-B are undertaken.
- e) The Government of Mizoram shall endeavour to ensure that all operational targets as enumerated in Section 1.3 are achieved.
- f) The Government of Mizoram will endeavour to reduce the transmission losses from 3% in 2014-15 to 2.5% by 2017-18.
- g) Government of Mizoram shall endeavour to reduce AT&C losses from 36.74% in FY 2014-15 to 15.00% in FY 2019-20 as per the following trajectory:

Year	2015-16	2016-17	2017-18	2018-19	2019-20
AT&C Loss	32.17%	27.38%	23.76%	20.30%	15.00%

As per UDAY scheme, States are required to bring down AT&C losses to 15% by 31st March, 2019. In view of late joining the scheme & high AT&C losses currently, Government of Mizoram proposes to bring down the AT&C losses to 15% by 2019-20. However, the Government of Mizoram shall strive to reduce AT&C losses to 15% by 2018-19.

If the target in a particular year is not met, then the Government of Mizoram shall achieve the targets in the subsequent years so as to achieve the desired target of 15.00% AT&C losses by FY 2019-20 positively. The Division wise targets have been finalized as indicated in **Annexure- A**.

- h) Government of Mizoram shall increase hours of power supply in areas showing reduction in AT&C losses.
- i) Government of Mizoram 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**.
- j) Government of Mizoram shall submit the detailed action plan by March 2018 to achieve the projected trajectory for AT&C loss and ACS-ARR gap.
- k) Government of Mizoram shall achieve operational milestones as specified in DDUGJY & IPDS:
- l) Government of Mizoram shall take the following measures for Loss Reduction;
 - i) Undertaking name and shame campaign to control power theft from time to time.
 - ii) Preparing loss reduction targets at sub-divisions / divisions / 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.
 - iii) Implementing performance monitoring and management system MIS for tracking the meter replacement, loss reduction and day to day progress for reporting to top management.
 - iv) Achieving 100% Distribution Transformer (DT) Metering by 31.03.2019.

- v) Achieving 100% feeder metering by 31 March 2019.
 - vi) Undertaking energy audit up-to 11 KV level in rural areas by 31.12.2017.
 - vii) Undertaking Feeder Improvement Program for network strengthening and optimization, to be completed by March 2018;
 - viii) Undertaking Physical Feeder Segregation: Segregation is not required, since Agriculture load is low in Mizoram.
 - ix) Installation of Smart Meters for all consumers other than agricultural consumers consuming above 500 units / month by 31st December 2018 and consumers consuming above 200 units/ month by 31st December 2019.
 - x) Providing electricity access to 22007 unconnected households as per trajectory finalized in the 24x7 power for all document by FY19.
 - xi) Implementing ERP system for better and effective inventory management, personnel management, accounts management etc. to reduce costs and increase efficiencies by March 2019.
- m) Government of Mizoram shall undertake the following measures for Demand Side Management and Energy Efficiency:
- a) Providing LED for domestic and other category consumers under DELP program through EESL:
 - ii) Undertaking consumer awareness programs for optimum utilization of resources and to foster long term behavioural changes:
 - i) Replacing at least 10% of existing agriculture pumps with energy efficient pumps by March 2019.
 - ii) Implementing PAT scheme of BEE for improving energy efficiency in Industries.
- n) Government of Mizoram shall undertake the following tariff measures:
- i) Quarterly tariff revision particularly to offset fuel price increase;

- ii) Timely filing of Tariff Petition before the JERC (M&M) so that Tariff Order may be issued for the year as early as possible.
- iii) Timely preparation of annual accounts of the Power Department which shall also enable timely filing of the Tariff Petition.
- o) Government of Mizoram shall undertake the following measures to increase employee engagement:
 - i) Initiating capacity building of employees to enhance technical, managerial and professional capabilities at induction level and in subsequent refresher trainings;
 - ii) Devising Key Performance Indicators (KPIs) for each officer in-charge on areas of AT&C loss reduction and improvement in metering / billing / collection efficiency. The performance of officer in-charge shall be linked to KPIs achieved and will attract incentive / penalty.
- p) Government of Mizoram shall implement the following Consumer Service Strategy:
 - i) Setting up of Centralized Customer Call Centre for timely resolution of complaints related to no current and other technical complaints, harassment by official, reporting of theft and safety related complaints;
 - ii) Introducing 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.
- q) Government of Mizoram shall procure power through the transparent process of competitive bidding.
- r) Government of Mizoram shall identify the key personnel for implementing the scheme (UDAY)
- s) Government of Mizoram shall devise the mechanism to motivate and encourage the staff.
- t) Review of performance of State Power department shall be done on a monthly basis at State Government level in the presence of State finance representative.
- u) Monthly monitoring formats along with the targets shall be provided by March 2017).

Details action plan for implementation of the targeted activities is attached as **Annexure-C** of the MOU.

The Parties agree for making this MoU available in the public domain.

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

<p>SIGNED AND DELIVERED BY (on behalf of MOP, Govt. of India)</p> <p>Signature </p> <p>Dr. ARUN KUMAR VERMA संयुक्त सचिव / Joint Secretary विद्युत नियंत्रण / Ministry of Power मानव संसाधन / Government of India परिवहन विभाग / Ministry of Power नई दिल्ली - 110001 / New Delhi - 110001</p> <p>Name and Designation: Dr. A. K. Verma Joint Secretary (Distribution) Address: Ministry of Power, Sharm Shakti, Rafi Marg, Sansad Marg, Sansad Marg, New Delhi-110001</p>	<p>In the presence of </p> <p>Signature</p> <p>Name & Designation VISHAL KAPOOR DIRECTOR (DISTRIBUTION)</p> <p>Address Ministry of Power, G.O.I., New Delhi</p>
<p>SIGNED AND DELIVERED BY (on behalf of Govt. of Mizoram)</p> <p>Signature </p> <p>Office of Special Duty Government of Mizoram</p> <p>Name and Designation: Mr. Umakant, Officer on Special Duty Address: Mizoram House, Pt. Uma Shankar Dixit Marg, Chanakyapuri, New Delhi- 110021</p>	<p>In the presence of </p> <p>Signature </p> <p>Name & Designation SUBRATA ACHARYA D.A.M. (P.G.A.) REC. D.A. New Delhi</p> <p>Address</p>

Division wise Loss Trajectory

Name of Division	AT&C Losses				
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Revenue Division, Aizawl	30.46%	26.60%	22.73%	18.87%	15.00%
Distribution Division, Aizawl	44.36%	34.52%	30.68%	25.34%	15.00%
Power Maint. Division-I	38.02%	32.26%	26.51%	20.75%	15.00%
Power Maint. Division-II	48.20%	35.90%	32.70%	26.30%	15.00%
Saiha Power Division	27.11%	24.08%	21.05%	18.03%	15.00%
Lawngtai Power Division	23.07%	21.05%	19.03%	17.02%	15.00%
Kolasib Power Division	31.60%	27.45%	23.30%	19.15%	15.00%
Mamit Power Division	32.24%	27.93%	23.62%	20.31%	15.00%
Khawzawl Power Division	20.22%	18.92%	17.81%	17.31%	15.00%
Champhai Power Division	32.47%	28.10%	23.74%	20.37%	15.00%
Serchhip Power Division	26.42%	23.57%	20.71%	18.56%	15.00%
Construction Power Division	23.10%	21.08%	19.05%	17.43%	15.00%
Maicham Power Division	41.00%	34.50%	28.00%	24.50%	15.00%
	32.17%	27.38%	23.76%	20.30%	15.00%

Financial Projections

Key Assumptions:

Tariff Hike:

	FY16 *	FY17	FY18	FY19	FY20
	2.0	4.0	5.0	5.0	5.0
<i>ual as per TO dated 27.2.15</i>					

AT&C Loss Trajectory:

	FY 16*	FY 17	FY 18	FY 19	FY 20
	32.17%	27.38%	24.76%	20.30%	15.00%
<i>ual as per TO dated 27.2.15</i>					

Billing Efficiency:

	FY 16*	FY 17	FY 18	FY 19	FY 20
	69.51%	76.65%	78.52%	82.95%	87.75%
<i>ual as per TO dated 27.2.15</i>					

Collection Efficiency:

	FY 16*	FY 17	FY 18	FY 19	FY 20
	97.58%	94.74%	95.81%	96.09%	96.86%
<i>ual as per TO dated 27.2.15</i>					

20. All - Migration Bipartite MOU

Income Statement- Summary

	FY16	FY17	FY18	FY 19	FY 20
Amount in Rs. Crore					
Total Income	171.76	182.58	208.73	223.88	249.90
Total Costs	330.82	348.11	365.80	384.78	405.21
Net Income (Without Subsidy)	-159.06	-165.53	-157.07	-160.90	-155.31
Committed State Govt. Subsidy	159.06	165.53	157.07	160.90	155.31
Net Income (With Subsidy)	0	0	0	0	0

Income Statement- Detailed

Amount in Rs. Crore	FY16*	FY17	FY18	FY19	FY20
INCOME					
Revenue from Sale of Power	156.91	180	206	221	247
Other receipts	2.51	2.58	2.73	2.88	2.9
Other Income (Including Revenue from trading)	12.34	0	0	0	0
TOTAL INCOME	171.76	182.58	208.73	223.88	249.9
COSTS					
Power Purchase Costs	210	216.3	222.79	229.47	236.36
R & M Costs	20.99	22.04	23.14	24.3	25.51
Employees Costs	91.05	100.15	110.17	121.18	133.3
Administration & General Costs	1.46	1.53	1.61	1.69	1.77
Depreciation	0.96	1.94	2.07	2.17	2.28
Interest & Finance Costs	3.16	2.68	2.26	1.92	1.63



Other debits	3.20	3.47	3.76	4.04	4.35
Sub-total costs	330.82	348.11	365.8	384.78	405.21
Less: Incidental expenses					
TOTAL COSTS	330.82	348.11	365.8	384.78	405.21
Net Income	-159.06	-165.53	-157.07	-160.9	-155.31
Electricity Duty Retention/ Stamp Duty	-	-	-	-	-
Committed State Govt. Subsidy to Power Department	159.06	165.53	157.07	160.9	155.31
Cash subsidy	-	-	-	-	-
Others (Compounding charges)	-	-	-	-	-
Total subsidy available	0	0	0	0	0
NET INCOME with Subsidy	0	0	0	0	0

ACS- ARR Gap	Amount in Rs. Crore	FY16*	FY17	FY18	FY19	FY20
Cost Components						
Power Purchase Costs	2.23	2.40	2.50	2.61	2.61	2.84
R & M Costs	0.22	0.25	0.26	0.28	0.28	0.31
Employee Costs	0.97	1.11	1.23	1.38	1.38	1.60
Administration & General Costs	0.02	0.02	0.02	0.02	0.02	0.02
Depreciation	0.01	0.02	0.02	0.02	0.02	0.03
Interest & Finance Costs	0.03	0.03	0.03	0.03	0.03	0.02
Other Debits	0.03	0.04	0.04	0.04	0.05	0.05
ACS	3.52	3.87	4.10	4.38	4.38	4.87
ARR	3.52	3.87	4.10	4.38	4.38	4.87
Gap	0	0	0	0	0	0

Detailed Action Plan for implementation of targeted activities

Annexure C

Clause no	Activity	Unit	Status/ pending at the end of FY 15	FY-16		FY-17		FY-18		FY-19		FY-20		Officer Responsible	Resources in INR	Remarks
				H 1	H 2	H 1	H 2	H 1	H 2	H 1	H 2	H 1	H 2			
1.3 (a)	AT&C loss reduction trajectory	%	36.74%	32.17%	27.38%	24.76%	20.30%	15.00%	SE (P) 0/o E-in-C	-	-	-	-	-	-	-
1.3 (e-iii)	11 KV Feeder metering functional (21,993)	%	74%	80%	85%	90%	100%	100%	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -
1.3 (e-iv)	DT Metering in Urban area (Distt. HQ)	%	80%	80%	85%	95%	100%	100%	- do -	- do -	- do -	- do -	- do -	- do -	- do -	- do -

Clause no	Activity	Unit	Status/ pending at the end of FY 15	FY-16		FY-17		FY-18		FY-19		FY-20		Officer Responsible	Resources in INR	Remarks
				H 1	H 2	H 1	H 2	H 1	H 2	H 1	H 2	H 1	H 2			
1.3 (e-v)	11 KV feeder audit in Rural area	%	74%	80%		90%		100%							- do -	
1.3 (e-vi)	Feeder Improvement Program on Feeders	%	40%		60%		70%		100%						- do -	
1.3 (e-vii)	Feeder separation (separation of Ag load on feeders)	%	40%		60%		70%		100%						- do -	
1.3 (e-viii)	Installation of Smart meters/ other than Ag. (Abv. 500 Units)	%	0%		0%		0%		50%		100%				- do -	
	Installation of Smart meters/ other than Ag.	%	0%		0%		0%		50%		100%				- do -	

Clause no	Activity	Unit	Status/ pending at the end of FY 15	FY-16		FY-17		FY-18		FY-19		FY-20		Officer Responsible	Resources in INR	Remarks
				H 1	H 2	H 1	H 2	H 1	H 2	H 1	H 2	H 1	H 2			
	(Below 500 Units)															
1.3 (e-ix)	Domestic connections (in lakhs) under 24X7 PFA	Nos (in Lacs)	22007	0%	0%										- do -	
1.3 (e-x)	Implementation of ERP System	-														
1.3 (f-i)	Providing LED bulbs under DELP	Lacs								154	152				- do -	

Monthly monitoring format for States participating in UDAY

Name of the State:

Status as on:

A Financial Parameters

1	Total outstanding debt of DISCOMs as on 30.09.2015 (Rs crore)
2	Amount of unpaid overdue interest and penal interest waived off by Banks / FIs (Rs Crore)
3	Eligible outstanding debt of DISCOMs as on 30.09.2015 (Rs crore)
4	50% of the outstanding debt to be taken over in 2015-16 (Rs Crore)
5	25% of the outstanding debt to be taken over in 2016-17 (Rs crore)
6	Bonds Issued by the State (Rs crore)
7	Bonds issue date
8	Rate of Interest on bonds (%)
9	Debt taken over by State transferred to DISCOMs in form of Grant (Rs crore)
10	Debt taken over by State transferred to DISCOMs in form of Loan (Rs crore)
11	Debt taken over by State transferred to DISCOMs in form of equity (Rs crore)
12	Operationalcrore) Funding Requirement (OFR) support provided to DISCOMs (Rs
13	Outstanding electricity dues from the State Government departments to DISCOMs (Rs Crore)
14	Outstanding (Date) electricity dues from the State Government departments paid on
15	Previous Year's DISCOM losses taken over by State (Rs crore)



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 un metered Feeders		
7	Number of Feeders metered in the current month		
8	Total number of un metered Distribution Transformers (DTs)		
9	Number of Distribution Transformers (DTs) metered in the current month		
10	Total Number of Smart Meters to be installed		
11	Number of Smart Meters installed in the current month		
12	Total number of LED Lamps to be replaced		

- 13 Number of LED Lamps replaced in the current month
- 14 Total number of Ag pumps to be replaced
- 15 Number of Ag pumps replaced in the 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 11 KV level started or not?
3	Key person for implementing UDAY identified or not?
4	No of awareness campaigns 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