



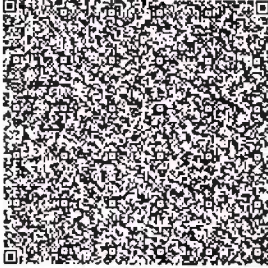
सत्यमेव जयते

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**This e-stamp form an integral part of Tripartite Memorandum of Understanding dated 15<sup>th</sup> March, 2017, executed amongst Ministry of Power, Government of India, Government of Kerala and Kerala State Electricity Board Ltd. (KSEBL).**

#### Statutory Alert:

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# **TRIPARTITE MEMORANDUM OF UNDERSTANDING AMONGST**

**Ministry of Power, Government of India  
AND  
Government of Kerala  
AND  
Kerala State Electricity Board Ltd (KSEBL)**

In order to achieve higher operational efficiency of Kerala state Electricity Board Ltd (KSEBL)

This **TRIPARTITE MEMORANDUM OF UNDERSTANDING** (hereinafter referred to as the "**Tripartite MoU**") is made this 2<sup>nd</sup> day of March, 2017, which shall be the Effective Date of this MoU.

## **BY AND AMONGST**

Ministry of Power, Government of India, having its Office at Rafi Marg, Sansad Marg Area, New Delhi – 110 001, 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 Kerala, which expression shall unless it be repugnant to the subject or context thereof, include its successors and assigns, of the **SECOND PART**;

## **AND**

Kerala State Electricity Board Ltd, hereinafter also referred to as KSEBL, which expression shall unless repugnant to the context or meaning includes its successors and assigns, of the **THIRD PART**.

The **Government of India**, the **Government of Kerala** and KSEBL are hereinafter also referred to collectively as the "**Parties**" and individually as the "**Party**".

## **Preamble:**

The **Government of India**, **Government of Kerala** and the **KSEBL** have entered into this Tripartite MoU in order to further improve the operational efficiency of the KSEBL to enable sustainable operations of KSEBL.

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 KSEBL;
- 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 coals grade slippages through reassessment of each mine;
- f) Directing Coal India to supply 100% washed coal for G10 grade and above by 1<sup>st</sup> October, 2018; if so required by the State of Kerala;
- g) Ensuring supply of 100% crushed coal from Coal India by 1<sup>st</sup> April 2016; if so required by the State of Kerala;
- 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 will help in getting cheaper power and revive stressed assets.

1.2 The Government of Kerala to take the following measures;

- a) Replacement of street lights with LEDs in all municipal towns through City Municipal Corporations/Town Municipalities;
- b) Improving efficiency of State Generating Units;
- c) The outstanding dues from the State Government Departments to KSEBL for supply of electricity shall be paid by 31<sup>st</sup> March, 2019;
- d) **Henceforth, Banks/FIs shall not advance short term debt to KSEBL for financing losses**
- e) Government of Kerala shall endeavor to ensure that periodical tariff hikes as reflected in Annexure-B are undertaken;
- f) Government of Kerala shall endeavor to ensure that all operational targets as enumerated in Section 1.3 are achieved;
- g) Review of KSEBL's performance shall be done on monthly basis at State Government level in the presence of State finance representative.

1.3 KSEBL to take the following measures:

- a) KSEBL shall endeavor to reduce AT&C losses of its electricity distribution business from 11.91% in FY 2014-15 to 11.00% by FY 2018-19 as per the following trajectory:

YEAR	FY 15-16	FY 16-17	FY 17-18	FY 18-19
AT&C losses of Discom	11.57%	11.45%	11.23%	11.00%

The Division wise targets have been finalized as indicated in Annexure - A. KSEBL shall also endeavor to reduce the losses in the Transmission system from 4.45% in FY 2015-16 to 4.40% by FY 2018-19 as per the following trajectory:

YEAR	FY 15-16	FY 16-17	FY 17-18	FY 18-19
Transmission losses	4.45%	4.52%	4.46%	4.40%

However, if the target in a particular year is not met, then the DISCOMs shall strive to achieve the targets in the subsequent years so as to achieve the desired target of transmission and AT&C losses by FY 2018-19.

- b) KSEBL shall eliminate the gap between Average Cost of Supply and Aggregate Revenue Realization by FY 2018-19. Detailed computations of year-wise average cost of supply and aggregate revenue realization gap along with financial projections are attached as Annexure-B to this MoU.
- c) The detailed action plan for reduction of AT&C loss over next 3 years is attached to this MoU as Annexure-C.
- d) The DISCOMs shall achieve operational milestones as specified in DDUGJY and IPDS.
- e) The DISCOMs 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 Division/Circle/ Zonal levels and making concerned officers responsible for achieving the loss reduction targets; the loss reduction targets at the circle level targets have been finalized as indicated in Annexure-A. The Discom shall increase the hours of power supply in areas showing reduction in AT&C losses.
  - (iii) Implementing performance monitoring and management information system for tracking meter replacement, loss reduction and day to day progress for reporting to top management.
  - (iv) KSEBL proposes to achieve 100% Distribution Transformer (DT) metering in urban areas and rural areas by 30<sup>th</sup> March 2018.
  - (v) KSEBL has already achieved 100% Feeder metering, and shall endeavor to have AMR for all the feeders by 30<sup>th</sup> June 2017.
  - (vi) Undertaking energy audit upto 11kV level in rural areas is under progress and will be completed by March 2018;
  - (vii) Feeder Improvement Program for network strengthening and optimization is under progress under various schemes of State and Central Government. However, overall targets will be achieved by March 2018
  - (viii) However, the DISCOM shall not be attempting physical feeder segregation as agricultural consumption is nominal, and as it is already metered.
  - (ix) Installation of Smart Meters for all consumers consuming above 500 units/month by 31<sup>st</sup> December 2017 and consumers consuming above 200units/month by 31<sup>st</sup> December 2019.



- (x) Providing electricity access to all unconnected households by 2017, two years ahead of the trajectory finalized in the 24x7 Power for All documents to provide the same by FY 2019;
  - (xi) Implementing ERP systems for better and effective inventory management, personnel management, accounts management etc. to reduce costs and increase efficiencies by March 2018.
- f) The DISCOMs shall undertake the following measures for Demand Side Management and Energy Efficiency:
- (i) 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;
  - (iii) Replacing at least 10% of agriculture pump sets with energy efficient pumps by March 2019.
  - (iv) Implementing PAT scheme of BEE for improving energy efficiency in industries.
- g) KSEBL shall undertake the following tariff measures;
- (i) Quarterly tariff revision, particularly to offset fuel price increase;
  - (ii) Timely filing of Tariff Petition before the KSERC so that Tariff Order may be issued for the year as early as possible;
  - (iii) Timely preparation of annual accounts of KSEBL, which shall also enable timely filing of the Tariff Petition.
- h) KSEBL shall undertake the following measures to increase employee engagement;
- (i) Initiating capacity building of employees to enhance technical, management 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 meter/billing/collection efficiency. The performance of officer in-charge shall be linked to KPIs achieved and will attract incentive/penalty.
- i) The DISCOMs shall implement the following Customer 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 relating 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.
- j) The DISCOMs shall procure power through the transparent process of competitive bidding;
- k) Every DISCOM shall identify the key personnel for implementing the scheme (UDAY).

- l) DISCOMs shall devise the mechanism to motivate and encourage the staff.
- m) CMD/MD of DISCOMs shall monitor the performance of DISCOMs on monthly basis.
- n) Monthly monitoring targets shall be provided on or before 30<sup>th</sup> September, 2017.
- o) It is hereby agreed that the Memorandum of Understanding can be placed in public domain by any of the parties.

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 on the day, month & year first herein above written.

#### SIGNED AND DELIVERED BY

(on behalf of Ministry of Power, Govt. of India)  
Signature

डा. अरुण कुमार वर्मा  
DR. ARUN KUMAR VERMA  
संयुक्त सचिव / Joint Secretary  
विद्युत मंत्रालय / Ministry of Power  
भारत सरकार / Government of India  
नई दिल्ली-110001 / New Delhi-110001

In the presence of  
Signature

विशाल कापूर  
VISHAL KAPOOR  
DIRECTOR(DIST), MDP  
GOVT OF INDIA

#### SIGNED AND DELIVERED BY

(on behalf of Govt. of Kerala)  
Signature

PAUL ANTONY IAS  
Additional Chief Secretary  
Power Department

In the presence of  
Signature

Name & Designation

Address

#### SIGNED AND DELIVERED BY

(on behalf of Kerala State Electricity Board Ltd.)  
Signature

Name & Designation

Address

Dr. K. ELLANGOVAN, IAS  
CHAIRMAN & MANAGING DIRECTOR  
KERALA STATE ELECTRICITY BOARD LTD.  
THIRUVANANTHAPURAM

In the presence of  
Signature

Name & Designation

Address

**Division Level AT&C Loss Reduction Trajectory**

No.	Electrical Division	Actual	Projected AT&C Loss			
		2015-16	2016-17	2017-18	2018-19	
1	Thiruvananthapuram	12.43%	12.18%	11.90%	11.70%	
2	Attingal	11.08%	10.86%	10.70%	10.52%	
3	Kazhakuttam	13.01%	12.76%	9.67%	9.47%	
4	Neyyattinkara	9.36%	9.18%	7.33%	7.18%	
5	Nedumangad	9.70%	9.51%	8.62%	8.44%	
6	Kattakkada	12.38%	12.14%	11.70%	11.50%	
7	Kollam	15.48%	15.18%	14.90%	14.50%	
8	Karunagappally	11.24%	11.02%	6.69%	6.55%	
9	Chathanoor	9.59%	9.40%	9.20%	9.05%	
10	Punalur	10.75%	10.54%	10.18%	9.96%	
11	Kottarakkara	11.91%	11.68%	11.27%	11.08%	
12	Kundara	12.93%	12.67%	9.75%	9.55%	
13	Pathanamthitta	16.64%	16.32%	10.12%	9.92%	
14	Adoor	8.47%	8.31%	8.15%	8.07%	
15	Thiruvalla	8.98%	8.80%	8.59%	8.27%	
16	Pallom	12.73%	12.48%	12.28%	12.14%	
17	Vaikkom	10.58%	10.37%	8.20%	8.03%	
18	Changanachery	9.60%	9.41%	9.39%	9.23%	
19	Pala	12.56%	12.31%	12.15%	12.05%	
20	Ponkunnam	14.69%	14.40%	11.92%	11.68%	
21	Cherthala	13.16%	12.90%	10.14%	9.94%	
22	Alappuzha	12.95%	12.70%	12.39%	12.05%	
23	Harippad	11.05%	10.84%	9.20%	9.01%	
24	Chengannur	18.30%	17.94%	17.59%	17.15%	
25	Mavelikkara	12.37%	12.13%	11.24%	11.00%	
26	Thrippunithura	9.36%	9.18%	8.29%	8.12%	
27	Ernakulam	12.82%	12.56%	12.12%	11.91%	
28	Mattanchery	7.63%	7.48%	6.59%	6.45%	
29	Moovattupuzha	11.52%	11.29%	6.27%	6.14%	
30	Aluva	16.02%	15.71%	15.20%	15.04%	
31	Perumbavoor	12.52%	12.27%	10.12%	9.91%	
32	Angamaly	16.18%	15.86%	15.19%	14.14%	
33	N.Parur	12.66%	12.41%	12.17%	12.09%	
34	Kattappana	13.48%	13.21%	11.28%	11.05%	
35	Thodupuzha	10.70%	10.49%	8.68%	8.51%	
36	Adimaly	17.45%	17.10%	16.93%	16.78%	
37	Peerumade	13.25%	12.99%	15.68%	15.36%	
38	Thrissur East	14.01%	13.73%	13.06%	12.48%	
39	Kunnamkulam	11.23%	11.01%	9.27%	9.08%	
40	Thrissur West	13.63%	13.36%	13.04%	12.79%	
41	Wadakkanchery	13.05%	12.80%	11.85%	11.61%	
42	Chalakkudy	9.73%	9.54%	8.24%	8.08%	
43	Irinjalakkuda	12.54%	12.30%	12.10%	11.79%	
44	Kodungallur	13.89%	13.62%	12.91%	12.64%	
45	Palakkad	9.18%	9.00%	8.39%	8.22%	

No.	Electrical Division	Actual	Projected AT&C Loss		
		2015-16	2016-17	2017-18	2018-19
46	Alathur	8.35%	8.18%	7.53%	7.38%
47	Chittur	9.35%	9.16%	10.06%	9.75%
48	Pattambi	17.04%	16.71%	14.70%	14.40%
49	Shornur	13.38%	13.11%	12.80%	12.54%
50	Mannarkkad	16.69%	16.36%	15.91%	15.52%
51	Tirur	10.90%	10.68%	10.09%	9.88%
52	Tirurangadi	12.31%	12.06%	9.89%	9.69%
53	Ponnani	14.90%	14.61%	14.28%	13.97%
54	Perinthalmanna	15.28%	14.98%	10.90%	10.67%
55	Manjeri	18.20%	17.84%	17.01%	16.66%
56	Kondotty	11.95%	11.71%	11.04%	10.91%
57	Wandoor	12.41%	12.17%	9.71%	9.51%
58	Nilambur	15.85%	15.54%	15.18%	14.84%
59	Balussery	13.65%	13.38%	8.11%	7.94%
60	Kozhikode	14.27%	13.99%	13.66%	13.06%
61	Feroke	13.81%	13.54%	13.18%	12.89%
62	Vadakara	14.38%	14.10%	14.02%	13.81%
63	Nadapuram	13.65%	13.38%	12.21%	11.96%
64	Kalpetta	11.30%	11.08%	10.91%	10.69%
65	Mananthavady	13.04%	12.79%	12.48%	12.22%
66	Kannur	11.56%	11.33%	11.09%	12.84%
67	Thalassery	10.55%	10.35%	9.58%	9.38%
68	Payyannur	13.73%	13.46%	13.74%	13.46%
69	Iritty	12.75%	12.49%	11.82%	11.58%
70	Kasargode	11.46%	11.23%	9.94%	9.74%
71	Kanhangad	12.38%	12.13%	13.47%	13.20%



**Proposed / Anticipated Tariff Revision**

Year	FY 15	FY 16	FY 17	FY 18	FY 19
Tariff increase (%)	6.70%	0.00	0.00	0.00	5.00%

**Income Statement - Summary**

Amount in Rs. Crore	FY 16	FY 17	FY 18	FY 19
Total Income	10863.68	12818.78	13525.16	15324.04
Total Costs	11560.44	12551.76	13427.67	15175.68
Net Income (without subsidy)	-696.76	267.02	97.49	148.36
Committed State Govt. Subsidy	383.47	384.00	0.00	0.00
Net Income (subsidy)	-313.29	651.02	97.49	148.36

**Operational Funding Requirement (OFR) - Summary**

Amount in Rs. Crore	FY 16	FY 17	FY 18	FY 19	Total
Operational Funding Requirement	-816.83	-12.98	-162.51	-45.64	-1037.97

### Income Statement - Detailed

Amount in Rs.Crore	FY 16	FY 17	FY 18	FY 19
<b>INCOME</b>				
Revenue from Sale of Power	10530.97	12452.80	13122.58	14881.20
Other receipts	332.71	365.98	402.58	442.84
Other Income (Including revenue from trading)	0.00	0.00	0.00	0.00
<b>TOTAL INCOME</b>	<b>10863.68</b>	<b>12818.78</b>	<b>13525.16</b>	<b>15324.04</b>
<b>COSTS</b>				
Power purchase & generation costs	6441.07	6943.20	7315.60	8513.20
R & M Costs	259.76	272.75	286.39	300.70
Employees Costs	3104.53	3501.00	3852.00	4237.00
Administration & General Costs	327.87	344.26	361.48	379.55
Depreciation	491.22	501.00	526.00	552.00
Interest & Finance Costs	851.41	936.55	1030.21	1133.23
Other debits	84.58	53.00	56.00	60.00
Sub-total costs	11560.44	12551.76	13427.67	15175.68
Less : Incidental	0	0	0	0
<b>TOTAL COSTS</b>	<b>11560.44</b>	<b>12551.76</b>	<b>13427.67</b>	<b>15175.68</b>
<b>Net Income (without subsidy)</b>	<b>-696.76</b>	<b>267.02</b>	<b>97.49</b>	<b>148.36</b>
Committed State Govt. Subsidy	383.47	384.00	0.00	0.00
<b>Net Income ( subsidy)</b>	<b>-313.29</b>	<b>651.02</b>	<b>97.49</b>	<b>148.36</b>

**Operational Funding Requirement - Detailed**

Particulars	FY 16	FY 17	FY 18	FY 19
Revenue (excluding Cash Support & ED Retention)	11247.15	13202.78	13525.16	15324.04
Expenditure	11560.44	12551.76	13427.67	15175.69
Book Loss (+) / Profit (-)	-313.29	651.02	97.49	148.35
Add : Depreciation	491.22	501.00	526.00	552.00
Cash Loss (+)/Profit(-)	177.93	1152.02	623.49	700.30
Add : Inc. in Current Assets (excluding cash support)	266.26	30.00	50.00	40.00
Less : Inc. in Current Liabilities (incl. Misc Exp)	520.60	420.00	250.00	200.00
Add : Dec in Current Liabilities (incl. Misc Exp)	0.00	0.00	0.00	0.00
<b>Gross Operational Funding Required</b>	<b>-76.41</b>	<b>762.02</b>	<b>423.49</b>	<b>540.36</b>

(Without Government Support)

Proportion allowed as per FRP Scheme	0.00	0.00	0.00	0.00
Allowed Funding (Without Government Support)				
Less : Support from State Govt.	0.00	0.00	0.00	0.00
Cash Support from State Govt.	0.00	0.00	0.00	0.00
Support on Reimbursement of Losses	0.00	0.00	0.00	
ED retention	740.42	775.00	586.00	586.00
Interest Subsidy on IBRD Loan	0.00	0.00	0.00	0.00
<b>Total Support from State Govt.</b>	<b>740.42</b>	<b>775.00</b>	<b>586.00</b>	<b>586.00</b>
<b>Gross Operational Funding Required</b>	<b>-816.83</b>	<b>-12.98</b>	<b>-162.51</b>	<b>-45.64</b>

(After Government Support)

**ACS - ARR Gap**

Amount in Rs. Crore	FY 16	FY 17	FY 18	FY 19
<b>Cost Components</b>				
Power Purchase & generation cost	6441.07	6943.20	7315.60	8513.20
Cost of Energy Lost	1931.64	1772.31	2095.24	2332.54
PP per unit sold	3.94	3.50	3.50	3.70
O & M and Estt Cost	3692.16	4118.01	4499.86	4917.26
Depreciation Cost	491.22	501.00	526.00	552.00
Interest Cost	851.41	936.55	1030.21	1133.23
Other Debits	84.58	53.00	56.00	60.00
ACS	11560.44	12551.76	13427.67	15175.68
ARR	11247.15	13202.78	13525.16	15324.04
GAP	-313.29	651.02	97.49	148.36
ACS per unit	5.91	5.04	5.53	5.71
ARR per unit	5.75	5.3	5.57	5.77

Note-The projections are by anticipating normal monsoon.Any variation in monsoon will have severe impact on the power generation in Kerala and consequent impact on the power purchase cost.



## Annexure-C

Detailed Action Plan for implementation of targeted activities

	Activity	Unit	Status / Pending at the end of FY 15-16	FY 16-17			FY 17-18		FY 18-19		Officer Responsible	Resources required in INR Cr.
				H 1	H 2		H 1	H 2	H 1	H 2		
1	AT & C loss reduction trajectory	%	11.57		11.45			11.23		11.00	Officers under Transmission & Distribution SBUs	523.85
	Collection efficiency	%	98.12		98.5			98.6		98.70		
	Billing efficiency	%	90.12		89.78			90.03		90.17		
2	11 kV Feeder meters functional	%	75	85	90	95	100	100	100	100	Officers under Transmission SBU	0.18
3	DTR Metering in Rural Areas	%	35	40	50	75	100	100	100	100	Officers under Distribution SBU	15
4	11 kV feeders audit in rural area	%	0	0	10	50	100	100			Officers under Distribution SBU	5
5	Feeder Improvement Program on Feeders	%	70	85	90	95	100	100	100	100	Officers under Distribution SBU	1332.15
6	Installation of Smart meters (other than Agricultural) consumption above 500 units/month	%	0	25	50	75	100	100	100	100	Officers under Distribution SBU	127.15
	Installation of Smart meters (other than Agricultural) consumption above 200 units/month	%	0	10	25	30	50	70	90		Officers under Distribution SBU	2065
7	Pending Domestic connections under 24X7 PFA (See note 1)	in lakhs	2.4	1.1	0	0	0	0	0		Officers under Distribution SBU	193
8	Implementation of ERP System		Will be implemented by March 2018									
9	Providing LED bulbs under DELP	Nos. in Lakhs	15	75	60	0	0		0		Officers under Distribution SBU	0