## DECISION ON TRANSMISSION AND BULK SUPPLY TARIFFS

Effective from 1<sup>st</sup> October 2016

#### DECISION ON BULK SUPPLY TARIFFS- Oct 2016 – Mar 2017

In exercising the powers and functions vested with the Public Utilities Commission of Sri Lanka (Commission) under section 3 (d) of the Sri Lanka Electricity Act, No. 20 of 2009 (SLEA) to regulate tariffs and other charges levied by licensees and other electricity undertakings, in order to ensure that the most economical and efficient service possible is provided to consumers, and in accordance with section 30 (2) (a) of SLEA, the Commission has approved a Tariff Methodology.

In accordance with the methodology, the tariffs levied by the transmission licensee for the transmission and bulk sale of electricity (the transmission and bulk sale tariffs) and tariffs levied by the distribution licensee for the distribution and supply of electricity were approved by the Commission and requested licensees to implement with effect from 20<sup>th</sup> of June 2013, issuing the decision document on electricity tariffs. The transmission and bulk sale tariffs was a forecasted tariffs issued to determine the end use customer tariffs. The forecasted transmission and bulk sale tariffs are calculated and filed once every six months by the transmission license following the procedure defined in the methodology.

The Commission reviewed the transmission and bulk supply tariffs filed by the transmission licensee for the period from October 2016 to March 2017, and hereby approved and requested the transmission licensee to implement the bulk supply tariffs effective from 1<sup>st</sup> of October 2016.

BSOB	Bulk Supply and Operations Business
BST	Bulk Supply Tariffs
CAPEX	Capital Expenditure
CEB	Ceylon Electricity Board
DL	Distribution Licensee: Ceylon Electricity Board and Lanka Electricity Company (Pvt) Ltd
DL1	Distribution and Supply Licensee for CEB Distribution Region 1 holding license number EL/D/09-003
DL2	Distribution and Supply Licensee for CEB Distribution Region 2 holding license number EL/D/09-004
DL3	Distribution and Supply Licensee for CEB Distribution Region 3 holding license number EL/D/09-005
DL4	Distribution and Supply Licensee for CEB Distribution Region 4 holding license number EL/D/09-006
DL5	Distribution and Supply Licensee LECO holding license number EL/D/09-052
FSA	Fuel Supply Agreement
CEB GL	CEB Generation Licensee holding License number
GWh	Gigawatt hour
kVA	kilovolt ampere
kW	kilowatt
kWh	kilowatt hour
LECO	Lanka Electricity Company (Pvt) Ltd.
LKR	Sri Lanka Rupee
LV	Low Voltage
MV	Medium Voltage
MWh	Megawatt hour
NCRE	Non-Conventional Renewable Energy
0 & M	Operations & Maintenance
OPEX	Operating Expenditure
PPA	Power Purchase Agreement
Single Buyer	A function of the BSOB
SPPs	Small Power Producers
T&D	Transmission and Distribution
TL	Transmission and Bulk Supply Licensee holding License number EL/T/09-002
TOU	Time of Use
WIP	Work-in-Progress

## **1** Sales Forecast

Approved sales forecasts for each Distribution Licensee (DL) for year 2017 are shown in Table 1. Customer numbers forecast for year 2017 are shown in Table 2.

	Fore	Forecast sales to end-use customers (GWh)				Forecast monthly maximum demand (MVA)						
Customer category	DL1	DL2	DL3	DL4	DL5	Total	DL1	DL2	DL3	DL4	DL5	Total
LV RETAIL												
Households	1,231	1,231	832	730	592	4,617	-	-	-	-	-	-
Religious	28	20	11	11	11	80	-	-	-	-	-	-
General Purpose	546	372	226	221	295	1,660	-	-	-	-	-	-
Industrial	116	85	59	42	29	332	-	-	-	-	-	-
Hotel	1	1	1	0	0	3	-	-	-	-	-	-
Government	4	0	5	4	3	16	-	-	-	-	-	-
Street Lighting allowance	54	37	13	19	35	157	-	-	-	-	-	-
Total LV	1,980	1,746	1,146	1,027	964	6,864	-	-	-	-	-	-
LV BULK												
General Purpose 2	545	151	105	92	194	1,086	203	47	43	36	796	1,124
Industrial 2	334	793	578	365	209	2,280	132	210	165	135	145	787
Hotel 2	42	112	6	57	63	280	1	13	2	14	393	423
Government 2	40	48	17	27	20	152	19	11	5	8	349	392
Total LV bulk	961	1,104	705	541	486	3,797	355	281	215	192	1,683	2,726
MV Bulk	•						•	•	•			
General Purpose 3	217	109	34	10	1	371	51	20	20	4	3	97
Industrial 3	386	894	342	136	53	1,811	103	201	68	36	4	412
Hotel 3	70	58	0	18	2	148	12	0	0	1	164	178
Government 3	2	0	1	0	0	3	0	0	2	0	0	2
Total MV	675	1,061	377	164	56	2,334	167	221	89	41	171	689
Total sales	3,616	3,911	2,227	1,733	1,507	12,994	522	503	305	233	1,853	3,415

#### Table 1: Sales forecasts filed by the Distribution Licensees for year 2017

#### Table 2: Customer number forecast for year 2017

	Customer number											
Customer category	DL1	DL1 DL2 DL3 DL4 DL5										
LV RETAIL												
Households	1,490,824	1,766,010	1,120,503	911,128	457,019	5,745,484						
Religious	13,003	11,983	6,813	5,366	2,623	39,788						
General Purpose	199,373	226,699	113,055	95,357	78,076	712,559						
Industrial	29,234	13,220	8,269	5,526	2,521	58,770						
Hotel	88	101	41	29	0	259						
Government	1,900	0	2,686	1,629	680	6,895						
Street Lighting	-	-	-	-	-	-						
Total LV	1,734,422	2,018,013	1,251,367	1,019,035	540,919	6,563,756						

LV BULK						
General Purpose 2	2,348	1,034	577	487	1,112	5,559
Industrial 2	1,255	1,628	1,097	832	517	5,329
Hotel 2	73	107	14	126	80	400
Government 2	131	125	65	56	99	476
Total LV bulk	3,807	2,894	1,753	1,501	1,808	11,763
MV Bulk						
General Purpose 3	75	30	30	9	4	148
Industrial 3	50	127	41	19	16	253
Hotel 3	7	1	0	5	1	14
Government 3	1	0	1	0	0	2
Total MV	134	158	72	33	21	418
Total for each DL	1,738,363	2,021,065	1,253,191	1,020,569	542,748	6,575,936

## **2 ALLOWED REVENUE**

#### 2.1 Allowed revenue for 2017

Transmission allowed revenue and distribution allowed revenues were adjusted as per sections 2.3.2.9 and 3.1.2.8 of the approved *Tariff Methodology* respectively. Approved allowed revenues for 2016 (according to *Decision on Revenue Caps and Bulk Supply Tariffs, 2016-2020*) were adjusted with the OPEX Clawback of 2016 and then used to arrive at the allowed revenues for year 2017. The below mentioned sales forecasts (Table 03) and relevant indices (Table 04) are used for the calculation.

Forecast - Number of Consumers											
Year	DL1	DL2	DL3	DL4	DL5						
2016	1,671,000	1,986,551	1,203,348	988,088	538,998						
2017	1,738,364	2,021,065	1,253,191	1,020,569	553,075						
Forecast - Energ	gy (GWh)										
2016	3,258	3,728	2,061	1,606	1,332						
2017	3,616	3,875	2,227	1,733	1,507						

Table 3 – Sales forecast used for the revenue control formula

#### Table 4 – Indices used for the revenue control formula

Relevant Indices									
Year	LKR/USD	ССРІ	PPIUS(capital equipment)						
Jun-15	133.70	181.60	168.60						
Jun-16	145.25	192.50	169.40						
Percentage change	8.64%	6.00%	0.47%						

## 2.1.1 Operational expenditure claw back for 2016

	Unit	DL1	DL2	DL3	DL4	DL5
Distribution OPEX Claw back	LKR Million	1,286.1	1,274.8	962.9	0.0	0.0
Retail Services OPEX Claw back	LKR/customer	76.62	0.00	55.66	75.18	0.0

#### Table 5 – Distribution and Retail Services OPEX Claw back

#### Table 6 – Transmission and BSOB OPEX Claw back

	Unit	TL
Transmission OPEX Claw back	LKR Million	3,390.8
BSOB OPEX Claw back	LKR Million	0.0
BSOB finance cost Claw back	LKR Million	1,716.2

## 2.1.2 Capital expenditure claw back for 2015

Table 7 – Ca	pital expe	enditure claw	back for 2015

capex claw back - 2015	Unit	DL1	DL2	DL3	DL4	DL5	TL
Depreciation	LKR Million	0.0	0.0	0.0	0.0	0.0	0.0
ROA (2%)	LKR Million	0.0	20.3	5.4	16.3	0.3	0.0

#### 2.1.3 Allowed revenue

Tuble o Approved Distribu			F			
	Unit	DL1	DL2	DL3	DL4	DL5
Revenue cap- 2016	LKR Million	10,214.5	13,185.4	7,580.9	6,211.5	3,347.7
OPEX Claw back - 2016	LKR Million	1,286.1	1,274.8	962.9	0.0	0.0
Revised Revenue cap - 2016	LKR Million	8,928.4	11,910.6	6,618.0	6,211.5	3,347.7
Revenue cap- 2017	LKR Million	10,152.5	13,065.8	7,445.5	6,960.4	3,817.0
CAPEX Claw back- 2015	LKR Million	0.0	20.3	5.4	16.3	0.3
Distribution Revenue cap approved for 2017	LKR Million	10,152.5	13,045.5	7,440.1	6,944.1	3,816.7

#### Table 8 – Approved Distribution Variable Revenue Cap

#### Table 9 – Approved Retail Services Price Cap

	Unit	DL1	DL2	DL3	DL4	DL5
Retail Services Price Cap - 2016	LKR/customer	548.49	436.94	595.47	634.68	896.92
Retail Services OPEX Claw back - 2016	LKR/customer	76.62	0.00	55.66	75.18	0.00
Revised Retail Services Price Cap - 2016	LKR/customer	471.87	436.94	539.81	559.50	896.92
Approved Retail Services Price Cap for 2017	LKR/customer	500.19	463.17	572.21	593.08	950.75

Table 10 – Approved Transmission Revenue Cap

	Unit	TL
Revenue cap- 2016	LKR Million	11,942.7
OPEX Claw back - 2016	LKR Million	3,390.8
Revised Revenue cap - 2016	LKR Million	8,551.9
Revenue cap- 2017	LKR Million	9,200.0
CAPEX Claw back- 2015	LKR Million	0.0
Revenue cap approved for 2017	LKR Million	9,200.0

#### Table 11 – Approved BSOB Revenue Cap

	Unit	BSOB
Revenue cap- 2016	LKR Million	1,225.4
BSOB finance cost Claw back	LKR Million	1,716.2
Revised Revenue cap per month – for Oct, Nov and Dec 2016	LKR Million	-12.3
Revenue cap approved for 2017	LKR Million	-74.0

## **3 APPROVED LOSSES FOR THE PERIOD**

The network loss targets are shown in Table 12 below.

Table 12- Approved	Network Loss	for 2016 and 2017

Licensee	DL 1	DL 2	DL 3	DL 4	DL 5	TL
Loss target for 2016	8.20%	10.00%	8.20%	8.60%	5.00%	3.26%
Loss target for 2017	7.41%	8.57%	7.64%	7.92%	4.81%	2.41%

## **4 GENERATION COSTS**

The approved generation dispatch for Oct 2016 – Mar 2017 is shown in Table 13 below.

Diaut) Mauth	Cada		Month of	the year 2	2016	Month of	the year 2	2017	
<b>Plant\Month</b>	Code	Unit	Oct	Nov	Dec	Jan	Feb	Mar	Total
<u>Independent Power</u> Producers (IPPs)									
ASIA Power – 51 MW	DAPL	GWh	2.3	-	0.7	2.3	2.1	2.3	9.8
AES Kelanitissa – 165 MW	CAES	GWh	68.4	8.8	15.2	81.6	11.2	103.2	288.5
Kerawalapitiya – 270 MW	CCKW	GWh	15.1	14.1	13.4	15.1	13.6	44.5	115.8
ACE - Embilipitiya -99WW	DEMB	GWh	22.6	9.0	27.9	38.2	25.5	43.9	167.0
TOTAL IPP		GWh	108.4	32.0	57.3	137.2	52.3	194.0	581.1
<u>CEB GL's Thermal</u> <u>Generation</u>									
Sapu Old 4 x 18 MW	DSP1	GWh	32.2	30.3	31.6	33.9	30.6	33.9	192.6
Sapu Ext. 8 x 9 MW	DSP2	GWh	38.2	35.8	38.2	38.2	34.5	38.2	222.9
KPS GT 1 x 115 MW	GT07	GWh	2.4	-	-	5.2	4.1	4.6	16.2

#### Table 13- Dispatch Approved By the Commission for Oct 2016 – Mar 2017

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KPS GT 5 x 17 MW	GT16	GWh	-	-	-	1.3	1.2	1.2	3.8
KPS Combined – 165 MW	CCKP	GWh	97.1	80.3	66.7	98.5	77.6	103.1	523.3
Coal – Puttlam 300 MW	CPUT	GWh	334.7	406.5	502.0	502.0	453.4	502.0	2,700.5
Total CEB GL's Thermal Generation		GWh	504.5	552.8	638.4	679.1	601.5	683.0	3,659.3
Renewable energy	NCRE	GWh	144.5	131.7	121.0	90.7	66.6	77.1	631.5
Chunnakam	DCHU	GWh	0.2	0.2	0.2	0.2	0.2	0.2	1.2
New Chunnakam	DNCHU	GWh	8.5	2.5	7.7	11.1	12.1	13.2	55.1
Northern Power	DNOR	GWh	-	-	-	-	-	-	-
Total Northern generation		GWh	8.7	2.7	7.9	11.3	12.3	13.4	56.3
CEB GL's Hydropower Generation		GWh	445.4	433.1	353.2	305.4	403.7	340.3	2,281.1
Total Generation		GWh	1,211.5	1,152.2	1,177.8	1,223.6	1,136.4	1,307.7	7,209.2

Forecast system coincident peak generation demand and the approved monthly capacity costs of each generation plant/ hydro scheme are shown in Table 14 and Table 15 below.

Item\Month	Unit	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
System Coincidental Peak demand	MW	2,148.9	2,123.8	2,128.5	2,281.7	2,385.5	2,478.5

#### Table 15- Approved Capacity payments to GL by TL for Oct 2016 – Mar 2017

Plant\Month	Unit	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
Mahaweli	LKR Million	748.3	748.3	748.3	706.2	706.2	706.2
Laxapana	LKR Million	394.8	394.8	394.8	386.6	386.6	386.6
Other Hydro	LKR Million	283.8	283.8	283.8	307.2	307.2	307.2
GTSM	LKR Million	78.3	78.3	78.3	69.0	69.0	69.0
DSP	LKR Million	134.8	134.8	134.8	132.5	132.5	132.5
DSPX	LKR Million	151.6	151.6	151.6	149.0	149.0	149.0
DAPL	LKR Million	163.8	163.8	163.8	163.8	163.8	163.8
ССКР	LKR Million	225.7	225.7	225.7	213.4	213.4	213.4
CAES	LKR Million	46.9	45.4	46.9	47.0	42.5	47.0
DEMB <sup>1</sup>	LKR Million	-	-	-	-	-	-
BARGE <sup>1</sup>	LKR Million	-	-	-	-	-	-
ССКШ	LKR Million	734.3	710.6	734.3	734.3	663.3	734.3
CPUT	LKR Million	1,733.9	1,733.9	1,733.9	1,994.5	1,994.5	1,994.5
RENW	LKR Million	-	-	-	-	-	-
GT7	LKR Million	100.6	105.9	105.9	93.4	93.4	93.4
DCHU	LKR Million	10.9	10.9	10.9	11.4	11.4	11.4
DNOR <sup>2</sup>	LKR Million	75.1	72.7	75.1	75.1	67.9	75.1
DNCHU	LKR Million	66.0	66.0	66.0	64.7	64.7	64.7
TOTAL	LKR Million	4,948.8	4,926.6	4,954.2	5,148.2	5,065.4	5,148.2

Depreciation Provision Excluded from CEB GL	LKR Million	1,159.8	1,159.8	1,159.8	1,159.8	1,159.8	1,159.8
Return of Equity allowed for CEB GL	LKR Million	232.0	232.0	232.0	232.0	232.0	232.0

<sup>1</sup> Capacity costs of Barge and Embilipitiya were removed

<sup>2</sup> Though Northern Power Pvt Ltd power plant is not operating as per a court order, capacity cost was allowed.

	Unit	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
Generation Capacity cost	LKR /MW	1,871,166.96	1,882,793.52	1,891,665.94	1,849,715.44	1,734,436.63	1,702,834.85

Forecast monthly generation from each generation plant along with approved average cost LKR/kWh is shown in Table 16 below.

<b>Plant\Month</b>	Unit	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
	GWh	445.4	433.1	353.2	305.4	403.7	340.3
Mahaweli	LKR /kWh	-	-	-	-	-	-
1	GWh	-	-	-	-	-	-
Laxapana	LKR /kWh	-	-	-	-	-	-
	GWh	-	-	-	-	-	-
Other Hydro	LKR /kWh	-	-	-	-	-	-
CTCM	GWh	0.0	0.0	0.0	1.3	1.2	1.2
GTSM	LKR /kWh	0.0	0.0	0.0	72.1	72.7	72.4
	GWh	32.2	30.3	31.6	33.9	30.6	33.9
DSP	LKR /kWh	21.0	21.1	21.0	21.1	21.3	21.1
DCDV	GWh	38.2	35.8	38.2	38.2	34.5	38.2
DSPX	LKR /kWh	19.2	19.4	19.3	19.3	19.6	19.5
	GWh	2.3	0.0	0.7	2.3	2.1	2.3
DAPL	LKR /kWh	27.3	0.0	32.4	23.9	24.2	27.3
CCKB	GWh	97.1	80.3	66.7	98.5	77.6	103.1
ССКР	LKR /kWh	26.6	26.5	26.3	26.6	26.2	26.5
CAEC	GWh	68.4	8.8	15.2	81.6	11.2	103.2
CAES	LKR /kWh	21.5	22.9	22.7	21.3	22.7	21.3
DEMB <sup>3</sup>	GWh	22.6	9.0	27.9	38.2	25.5	43.9
DEMB	LKR /kWh	13.8	11.4	10.4	12.2	11.1	12.8
BARGE <sup>4</sup>	GWh	0.0	0.0	0.0	0.0	0.0	0.0
DARGE	LKR /kWh	0.0	0.0	0.0	0.0	0.0	0.0
CCKW	GWh	15.1	14.1	13.4	15.1	13.6	44.5
CCKW	LKR /kWh	25.4	26.1	26.5	25.4	26.4	23.5
CDUT	GWh	334.7	406.5	502.0	502.0	453.4	502.0
CPUT	LKR /kWh	6.2	6.1	6.0	5.6	5.6	5.6
	GWh	144.5	131.7	121.0	90.7	66.6	77.1
RENW	LKR /kWh	21.7	21.2	20.9	22.8	24.4	24.5

#### Table 16- Approved Energy Payments to GL by TL for Oct 2016 – Mar 2017

CT7	GWh	2.4	0.0	0.0	5.2	4.1	4.6
GT7	LKR /kWh	44.0	0.0	0.0	43.6	44.2	44.0
ОСНИ	GWh	0.2	0.2	0.2	0.2	0.2	0.2
	LKR /kWh	32.1	32.1	32.1	32.1	32.1	32.1
DNOR	GWh	0.0	0.0	0.0	0.0	0.0	0.0
DNOR	LKR /kWh	0.0	0.0	0.0	0.0	0.0	0.0
DNCHU	GWh	8.5	2.5	7.7	11.1	12.1	13.2
	LKR /kWh	21.6	28.3	21.8	21.5	21.2	21.0

<sup>3</sup> Energy cost of Embilipitiya was calculated by taking the weighted average energy cost of all thermal power plants

<sup>4</sup> Energy generation of Barge was removed and added to Hydro

TOTAL generated energy	GWh	1,211.5	1,152.2	1,177.8	1,223.6	1,136.4	1,307.7
Monthly energy cost	LKR Million	11,723.3	9,470.7	9,868.2	12,151.7	9,016.8	13,318.5
Total Energy cost for six-months	LKR Million	65,549.1					
Total energy dispatch for six-months	GWh	7,209.2					
Six-month average energy cost	LKR/kWh	9.37					

#### 5 **ENERGY COSTS IN EACH INTERVAL FOR TOU PRICING**

Using the approved Methodology, the Commission has determined that the peak adjustment factors to be as given in Table 17 below.

Table 17- Approved Peak Adjustment Factors							
Time interval for TOU pricing	Factor	Value					
0530-1830	k1	1					
1830-2230	k2	1.3					
2230-0530	k3	0.6					

#### - - - - - d Dools Adjusters nt En et.

The energy dispatches and costs in each interval are provided in Table 18 below. The Commission has assessed the energy dispatches in each interval using historic information on the load profile on typical weekdays, week-ends and holidays.

#### Table 18- Monthly Energy Dispatches and Costs in the TOU Regime for Oct 2016 - Mar 2017

	Unit	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
Generation Energy cost	LKR/kWh	9.68	8.22	8.38	9.93	7.93	10.18

Month 1 - Block tariffs								
Block	Energy generated (GWh)	Block Factor (#)	Adjusted Factor (#)	Charge (LKR/kWh)				
B1 (Day)	688.1	1.0	1.01	9.81				
B2 (Peak)	275.0	1.3	1.32	12.76				
B3 (Off peak)	248.4	0.6	0.61	5.89				

Month 2 - Block tariffs								
Block	Adjusted Factor (#)	Charge (LKR/kWh)						
B1 (Day)	654.4	1.0	1.01	8.34				
B2 (Peak)	261.5	1.3	1.32	10.84				
B3 (Off peak)	236.2	0.6	0.61	5.00				

Month 3 - Block tariffs								
Block Energy generated (GWh) Block Factor Adjusted Factor Charg (#) (#) (LKR/kV								
B1 (Day)	669.0	1.0	1.01	8.50				
B2 (Peak)	267.4	1.3	1.32	11.05				
B3 (Off peak)	241.4	0.6	0.61	5.10				

Month 4 - Block tariffs								
Block         Energy generated (GWh)         Block Factor (#)         Adjusted Factor (#)         Charge (LKR/kW)								
B1 (Day)	695.0	1.0	1.01	10.07				
B2 (Peak)	277.8	1.3	1.32	13.09				
B3 (Off peak)	250.8	0.6	0.61	6.04				

Month 5- Block tariffs								
Block Energy generated (GWh) Block Factor Adjusted Factor Cha (#) (#) (LKR)								
B1 (Day)	645.5	1.0	1.01	8.05				
B2 (Peak)	258.0	1.3	1.32	10.46				
B3 (Off peak)	233.0	0.6	0.61	4.83				

Month 6 - Block tariffs								
Block         Energy generated (GWh)         Block Factor (#)         Adjusted Factor (#)         Ch								
B1 (Day)	742.8	1.0	1.01	10.33				
B2 (Peak)	296.9	1.3	1.32	13.43				
B3 (Off peak)	268.1	0.6	0.61	6.20				

# 6 COMBINED COSTS OF SINGLE BUYER, AND TRANSMISSION AND BSOB

The allowed capacity costs of generation and energy costs of generation have been combined with the allowed transmission and BSOB costs to calculate the Bulk Supply Tariffs (BST) for sales by the TL to DLs. The approved average BST in each month in each TOU interval is given in Table 19 below and Table 20 provides the six-month average.

Table 19- Combined Tra	ansfer Price from	TL to DLs for Oct	2016 – Mar 2017

Capacity Charge									
	Unit	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17		
Generation capacity	LKR /MW	1,871,166.96	1,882,793.52	1,891,665.94	1,849,715.44	1,734,436.63	1,702,834.85		
Transmission	LKR /MW	463,126.31	468,595.21	467,574.22	336,011.93	321,380.65	309,330.19		

BST (C)6-Month Weighted average	LKR/MW	2,539,621.55					
BST (C)	LKR /MW	2,697,630.56	2,719,016.55	2,726,066.99	2,500,042.98	2,356,446.35	2,301,521.74
Bulk Supply and Operation Business	LKR /MW	363,337.29	367,627.82	366,826.82	314,315.61	300,629.07	289,356.71

Energy Charge							
Month	Unit	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17

#### Interval 1 (day)

Transmission Loss Factor B1	%	3.08%	3.08%	3.08%	3.08%	3.08%	3.08%
Generation energy Cost B1	LKR /kWh	9.81	8.34	8.50	10.07	8.05	10.33
BST (E1)	LKR/kWh	10.12	8.59	8.76	10.38	8.29	10.65

#### Interval 2 (peak)

Factor B2 Generation energy	% LKR /kWh	3.93%	3.93%	3.93%	3.93%	3.93% 10.46	3.93%
Cost B2 BST (E2)	LKR/kWh	13.26	<b>11.26</b>	11.48	13.61	<b>10.40</b>	13.95

#### Interval 3 (off peak)

Transmission Loss Factor B3	%	2.18%	2.18%	2.18%	2.18%	2.18%	2.18%
Generation energy Cost B3	LKR /kWh	5.89	5.00	5.10	6.04	4.83	6.20
BST (E3)	LKR/kWh	6.02	5.11	5.21	6.17	4.93	6.33

#### Table 20- Approved Six-month Average Bulk Supply Tariffs for Oct 2016 – Mar 2017

	Unit	BST (E)
BST day (E1) 6-Month weighted average	LKR/kWh	9.50
BST peak (E2) 6-Month weighted average	LKR/kWh	12.46
BST off-peak (E3) 6-Month weighted average	LKR/kWh	5.65

BST = Bulk Supply Tariff, means the average transfer price from Transmission to Distribution Licensees

E1, E2, E3 refer to the energy delivered in the three time intervals in the time-of-use tariffs regime. ie 0530-1830, 1830-2230 and 2230-0530, respectively.

## 7 APPROVED BST FROM TL TO EACH DL

Owing to the requirement to maintain a Uniform National Tariff (UNT) and owing to the varying customer mix among Distribution Licensees, the BST to each DL was adjusted, to enable each Distribution Licensee to recover their full allowed revenues. The summary calculation and the approved BSTs are shown in Table 21 and Table 22.

The Transmission Licensee is hereby directed to invoice each Distribution Licensee at the rates shown in Table 21 and Table 22 as (i) Approved BST for payment on Coincident Maximum, and (ii) Approved BST for energy in each TOU interval.

Description	Units	DL1: CEB	DL2: CEB	DL3: CEB	DL4: CEB	DL5: LECO	Total
		Region 1	Region 2	Region 3	Region 4		
Sales to end-use customers – 2016 (Jan-Dec)	GWh	3,258	3,728	2,061	1,606	1,332	11,985
Revenue based on approved customer tariffs – 2016 (Jan- Dec)	LKR Million	59,121	62,279	30,770	25,471	25,590	203,232
Coincident peak demand for purchases from Transmission	MW	523	572	385	276	218	-
Approved BST for payment on Coincident Maximum Demand	LKR/MW/ month	2,539,622	2,539,622	2,539,622	2,539,622	2,539,622	-
Amount payable to Transmission on account of Demand (Oct-Dec 2016)	LKR Million	3,986	4,357	2,931	2,101	1,662	15,038
Allowed losses (2016)		8.20%	10.00%	8.20%	8.60%	5.00%	-
Revenue to be recovered by Transmission through energy charges (Oct-Dec 2016)	LKR Million	8,077	7,765	2,718	2,582	3,807	24,950
Energy sold from Transmission at MV (Oct- Dec 2016)	GWh	934	1,089	589	460	377	3,448
Approved BST for energy in ea	ich TOU interva	 					
Peak (1830-2230)	LKR/kWh	11.49	9.48	6.14	7.47	13.44	-
Off Peak (2230-0530)	LKR/kWh	5.21	4.30	2.78	3.39	6.10	-
Day (0530-1830)	LKR/kWh	8.76	7.23	4.68	5.70	10.25	-

Table 21- Approved BST from Transmission to each Distribution Licensee for the period fromOctober to December 2016

Table 22- Approved BST from Transmission to each Distribution Licensee for the period from
January to March 2017

January to March 2017 Description	Units	DL1: CEB Region 1	DL2: CEB Region 2	DL3: CEB Region 3	DL4: CEB Region 4	DL5: LECO	Total
Sales to end-use customers – 2017 (Jan-Dec)	GWh	3,616	3,911	2,227	1,733	1,507	12,994
Revenue based on approved customer tariffs - 2017 (Jan- Dec)	LKR Million	68,516	65,317	33,922	27,499	29,020	224,274
Coincident peak demand for purchases from Transmission	MW	598	654	440	315	250	-
Approved BST for payment on Coincident Maximum Demand	LKR/MW/ month	2,539,622	2,539,622	2,539,622	2,539,622	2,539,622	-
Amount payable to Transmission on account of Demand (Jan- Mar 2017)	LKR Million	4,559	4,985	3,353	2,403	1,902	17,202
Allowed losses (2017)		7.41%	8.57%	7.64%	7.92%	4.81%	-
Revenue to be recovered by Transmission through energy charges (Jan- Mar 2017)	LKR Million	9,579	7,639	2,983	2,502	4,169	26,871
Energy sold from Transmission at MV (Jan- Mar 2017)	GWh	952	1,041	585	456	394	3,427
Approved BST for energy in ea	ch TOU interval	I		I			I
Peak (1830-2230)	LKR/kWh	13.37	9.75	6.78	7.30	14.08	-
Off Peak (2230-0530)	LKR/kWh	6.07	4.43	3.07	3.31	6.39	-
Day (0530-1830)	LKR/kWh	10.20	7.44	5.17	5.57	10.74	-

Note – Two Approved Bulk Supply Tariffs are issued with respect to last quarter of 2016 and the first quarter of 2017.

## 8 Generation Costs summary of year 2016

The depreciation costs filed under each generator owned by CEB was removed and 20% of that cost was allowed as a Return on Equity, since the total debt and part of the equity for building of these plants were aided by the Government

# 8.1 Forecast Total Cost and Revenue for Oct 2016 – Mar 2017 and for the year 2017

	Units	Oct 2016-Mar 2017	2017
Generation - Energy Cost	LKR Million	65,549	137,949
Generation - Capacity Cost	LKR Million	24,624	50,312
Distribution Revenue Cap	LKR Million	16,961	41,399
Transmission and BSOB Revenue Cap	LKR Million	467	9,126
Term Loan	LKR Million	4,549	8,680
Retail Cost	LKR Million	1,547	3,654
Total Cost	LKR Million	113,697	251,120
Sales excluding streetlights	GWh	6,170	12,838
Average Cost of a unit sold	LKR /kWh	18.43	19.56
Total Revenue	LKR Million	106,734	223,706
Average Revenue	LKR /kWh	17.30	17.43
Surplus/ (deficit)	LKR /kWh	-1.13	-2.14
Surplus/ (deficit)	%	-7%	-12%

#### Table 23: Forecast Total Cost and Revenue