

DECISION ON TRANSMISSION AND BULK SUPPLY TARIFFS

Effective from 1st July 2023

DECISION ON BULK SUPPLY TARIFFS- July- December 2023

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 the Act, the Commission, has approved a cost-reflective Methodology for Tariffs (“the Methodology”) and subsequently issued the Methodology to the Transmission Licensee (TL) and to each Distribution Licensee (DLs). The Methodology has been revised in 2021 and the Methodology is available as a separate document.

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, by issuing the Decision on Revenue Caps and Bulk Supply 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 July to December 2023, and hereby approved and requested the transmission licensee to implement the bulk supply tariffs effective from 1st of July 2023.

List of Acronyms

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
O & 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 ALLOWED REVENUE

Approved Distribution Variable Revenue Cap and Approved Retail Services Price Cap of each distribution licensee calculated as per the *DECISION ON TRANSMISSION AND BULK SUPPLY TARIFFS Jan 1, 2023* and CEB tariff submission dated May 15, 2023 are shown in Table 1 below.

Table 1: Approved Distribution Variable Revenue Cap and Approved Retail Services Price Cap for the year 2023

	Unit	DL1	DL2	DL3	DL4	DL5
Approved Distribution Variable Revenue Cap (Jan-June)	LKR million	8,127.88	5,430.22	4,434.55	4,040.84	5,689.84
Approved Distribution Variable Revenue Cap (July-Dec)	LKR million	8,136.80	5,436.18	4,439.42	4,045.27	5,784.15
Approved Distribution Variable Revenue Cap (Jan-Dec)	LKR million	16,264.68	10,866.40	8,873.97	8,086.11	11,474.0
Approved Retail Services price cap	LKR/customer	3,305.19	4,136.93	2,767.04	2,579.90	3,587.64

Note – Adjustment to CEB Distribution Variable Revenue Cap for period July-Dec was done based on the CEB tariff submission dated May 15, 2023. LKR million 555 (Material cost) was added to CEB Distribution and LKR million 896 (common cost Apportionment) was removed from CEB Distribution.

The Transmission and BSOB Revenue Caps mentioned in the *DECISION ON TRANSMISSION AND BULK SUPPLY TARIFFS Jan 1, 2023* are shown in the Table 2 below.

Table 2: Transmission and BSOB Revenue Cap for the year 2023

Approved Revenue Cap	Unit	TL
Transmission Revenue Cap	LKR million	20,279.9
BSOB Revenue Cap	LKR million	5,316.1
Total allowed revenue	LKR million	25,596.0

2 APPROVED LOSSES FOR THE PERIOD

The approved network losses for 2023 are shown in Table 3 below.

Table 3- Approved Network Loss For 2023

Licensee	DL 1	DL 2	DL 3	DL 4	DL 5	TL
Approved Network Loss	6.40%	8.60%	7.95%	7.09%	4.00%	3.42%

Note – Above given approved losses of DLs are corrected as per the original revenue models submitted by DLs and same will be applied to Jan-Dec 2023.

3 GENERATION COSTS

The approved generation dispatch for July- December 2023 is shown in Table 4 below.

Table 4- Dispatch Approved by the Commission for July- December 2023

Generation Unit		Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Total
Sapugaskanda Old 4 x 18 MW		GWh	20.43	24.17	21.00	10.92	12.61	13.68	102.81
Sapugaskanda Ext. 8 x 9 MW		GWh	38.17	38.16	32.11	16.54	19.55	26.95	171.48
Kelanitissa GT 4 x 17 MW (small GT)		GWh	1.95	0.08	0.00	-	0.01	-	2.05
Kelanitissa GT 1 x 115 MW (GT7)		GWh	6.98	4.98	-	-	-	-	11.96
Kelanitiss Combined Cycle 1	Naptha	GWh	27.49	20.54	4.28	0.71	7.45	2.43	62.89
	Diesel	GWh	-	-	-	-	-	-	-
Kelanitiss Combined Cycle 2		GWh	26.96	13.52	-	-	0.30	-	40.78
Coal – Puttlam		GWh	334.66	334.66	386.07	494.07	449.56	500.35	2,499.37
Barge		GWh	33.43	35.56	28.13	14.55	17.29	16.57	145.52
Hambantota 30MW		GWh	3.68	1.86	0.11	-	0.15	0.08	5.88
Mathugama 20MW		GWh	1.69	1.13	0.05	-	0.05	0.02	2.94
Chunnakam & Islands		GWh	0.20	0.20	0.20	0.20	0.20	0.20	1.20
New Chunnakam (Uthurujananee)		GWh	7.58	10.05	6.62	3.59	4.58	4.56	36.98
Kerawalapitiya - IPP (Westcoast)		GWh	104.76	106.96	81.35	23.04	35.43	41.40	392.93
Renewable Energy		GWh	188.50	243.71	249.85	233.42	192.20	203.16	1,310.83
CEB GL's Hydropower Generation		GWh	437.59	403.94	364.55	431.95	442.46	398.82	2,479.31
CEB GL's Windpower Generation (Mannar)		GWh	45.60	44.40	42.21	18.61	12.46	18.19	181.47
Solar Rooftop Generation		GWh	57.61	56.69	58.79	55.42	48.35	49.42	326.29
Total Generation		GWh	1,337.27	1,340.61	1,275.34	1,303.02	1,242.63	1,275.83	7,774.69

Forecast system coincident peak generation demand and the approved monthly capacity costs of each generation plant/ hydro scheme are shown in Table 5 and Table 6 respectively.

Table 5- Forecast system coincident peak demand for July- December 2023

Item\Month	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
System Coincidental Peak demand	MW	2314	2209	2134	2154	2186	2160

Table 6- Approved Capacity payments to GL by TL for July- December 2023

Generation Plant\Scheme	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Mahaweli	Mn. LKR	745.68	745.68	745.68	745.68	745.68	745.68
Laxapana	Mn. LKR	325.46	325.46	325.46	325.46	325.46	325.46
Samanala	Mn. LKR	281.01	281.01	281.01	281.01	281.01	281.01
Mannar Wind	Mn. LKR	183.89	183.89	183.89	183.89	183.89	183.89
Sapugaskanda Old 4 x 18 MW	Mn. LKR	134.95	134.95	134.95	134.95	134.95	134.95
Sapugaskanda Ext. 8 x 9 MW	Mn. LKR	138.80	138.80	138.80	138.80	138.80	138.80
Kelanitissa GT 4 x 17 MW (small GT)	Mn. LKR	126.82	126.82	126.82	138.14	126.82	138.14
Kelanitissa GT 1 x 115 MW (GT7)	Mn. LKR	214.48	214.48	233.62	233.62	233.62	233.62
Kelanitiss Combined Cycle 1	Mn. LKR	165.34	165.34	165.34	165.34	165.34	165.34
Kelanitiss Combined Cycle 2	Mn. LKR	80.76	80.76	95.48	95.48	80.76	95.48
Coal – Puttlam	Mn. LKR	2,048.10	2,048.10	2,048.10	2,048.10	2,048.10	2,048.10
New Chunnakam (Uthurujananee)	Mn. LKR	41.24	41.24	41.24	41.24	41.24	41.24
Island Gen	Mn. LKR	7.96	7.96	7.96	7.96	7.96	7.96
BARGE	Mn. LKR	72.74	72.74	72.74	72.74	72.74	72.74
30MW Hambantota	Mn. LKR	22.53	22.53	22.53	28.01	22.53	22.53
20MW Mathugama	Mn. LKR	15.02	15.02	15.02	18.68	15.02	15.02
Kerawalapitiya - IPP (Westcoast)	Mn. LKR	1,184.25	1,184.25	1,146.05	1,184.25	1,146.05	1,184.25
Renewable	Mn. LKR	-	-	-	-	-	-
TOTAL	Mn. LKR	5,789.02	5,789.02	5,784.69	5,843.35	5,769.97	5,834.21

	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Generation Capacity cost	LKR/MW	2,502,135.30	2,620,458.45	2,710,504.14	2,712,570.26	2,639,381.23	2,700,553.27

Forecast monthly generation from each generation plant along with approved average cost LKR/kWh is shown in Table 7 below.

Table 7- Approved Energy Payments to GL by TL for July - December 2023

Generation Plant\Scheme	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Mahaweli/Laxapana/Samanala	GWh	437.59	403.94	364.55	431.95	442.46	398.82
	SLR/kWh	-	-	-	-	-	-
Mannanr wind	GWh	45.60	44.40	42.21	18.61	12.46	18.19
	SLR/kWh	-	-	-	-	-	-
Sapugaskanda Old 4 x 18 MW	GWh	20.43	24.17	21.00	10.92	12.61	13.68
	SLR/kWh	50.34	49.86	50.26	53.08	52.29	51.89
Sapugaskanda Ext. 8 x 9 MW	GWh	38.17	38.16	32.11	16.54	19.55	26.95
	SLR/kWh	45.11	45.11	45.36	46.85	46.38	45.66
Kelanitissa GT 4 x 17 MW (small GT)	GWh	1.95	0.08	0.00	-	0.01	-
	SLR/kWh	155.08	293.36	3,314.32	-	1,321.37	-
Kelanitissa GT 1 x 115 MW (GT7)	GWh	6.98	4.98	-	-	-	-
	SLR/kWh	114.08	113.26	-	-	-	-
Kelanitissa Combined Cycle 1	GWh	27.49	20.54	4.28	0.71	7.45	2.43
	SLR/kWh	67.85	69.02	82.11	171.24	71.89	87.36
Kelanitissa Combined Cycle 2	GWh	26.96	13.52	-	-	0.30	-
	SLR/kWh	70.55	72.63	-	-	187.87	-
Coal – Puttlam	GWh	334.66	334.66	386.07	494.07	449.56	500.35
	SLR/kWh	39.15	39.28	38.35	28.68	28.73	28.67
New Chunnakam (Uthurujananee)	GWh	7.58	10.05	6.62	3.59	4.58	4.56
	SLR/kWh	45.05	44.67	45.28	46.79	46.08	46.09
Island Gen	GWh	0.20	0.20	0.20	0.20	0.20	0.20
	SLR/kWh	106.65	106.65	106.65	106.65	106.65	106.65
BARGE	GWh	33.43	35.56	28.13	14.55	17.29	16.57
	SLR/kWh	46.77	46.61	47.28	50.28	49.29	49.52
30MW Hambantota	GWh	3.68	1.86	0.11	-	0.15	0.08
	SLR/kWh	83.04	84.69	139.65	-	122.77	155.37
20MW Mathugama	GWh	1.69	1.13	0.05	-	0.05	0.02
	SLR/kWh	82.54	83.71	154.24	-	154.24	308.27
Kerawalapitiya - IPP (Westcoast)	GWh	104.76	106.96	81.35	23.04	35.43	41.40
	SLR/kWh	52.33	52.36	53.01	58.70	56.03	55.40
Renewable	GWh	188.50	243.71	249.85	233.42	192.20	203.16
	SLR/kWh	18.52	18.26	18.28	18.28	18.63	18.95
Solar Rooftop Generation	GWh	57.61	56.69	58.79	55.42	48.35	49.42
	SLR/kWh	23.89	23.89	23.89	23.89	23.89	23.89

TOTAL generated energy	GWh	1337.27	1340.61	1275.34	1303.02	1242.63	1275.83
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Monthly Energy Cost	LKR Million	33,441	32,844	29,640	23,510	22,919	24,895
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Total Energy cost for sixmonths	LKR Million	167,249.79
Total energy dispatch for sixmonths	GWh	7774.69
Six-month average energy cost	LKR/kWh	21.51
Six-month average loss adjusted energy cost	LKR/kWh	22.27

Note –

The Commission has allowed the energy and capacity costs of power plants without generation licenses for July-Dec 2023. CEB shall obtain electricity generation licenses for all generation plants by December 2023, failing which the Commission will not allow the said costs in future tariff revisions.

4 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 8 below.

Table 8- 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

The energy dispatches and costs in each interval are provided in table below. The Commission has assessed the energy dispatches in each interval using historic information on the load profile on typical weekdays, weekends, and holidays.

Table 9- Monthly Energy Dispatches and Costs in the TOU Regime for July- December 2023

Average Generation Energy cost							
	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Generation energy cost	LKR /kWh	25.01	24.50	23.24	18.04	18.44	19.51

Month 1 - Block tariffs				
Block	Energy generated (GWh)	Block Factor	Adjusted Factor	Charge
		(#)	(#)	(LKR/kWh)
B1 (Day)	776	1	1.03	25.78
B2 (Peak)	263	1.3	1.34	33.52
B3 (Off peak)	298	0.6	0.62	15.47

Month 2 - Block tariffs				
Block	Energy generated (GWh)	Block Factor	Adjusted Factor	Charge
		(#)	(#)	(LKR/kWh)
B1 (Day)	778	1	1.03	25.26
B2 (Peak)	264	1.3	1.34	32.84
B3 (Off peak)	299	0.6	0.62	15.16

Month 3 - Block tariffs				
Block	Energy generated (GWh)	Block Factor	Adjusted Factor	Charge
		(#)	(#)	(LKR/kWh)
B1 (Day)	740	1.00	1.03	23.96
B2 (Peak)	251	1.30	1.34	31.15
B3 (Off peak)	284	0.60	0.62	14.38

Month 4 - Block tariffs				
Block	Energy generated (GWh)	Block Factor	Adjusted Factor	Charge
		(#)	(#)	(LKR/kWh)
B1 (Day)	755.75	1	1.03	18.60
B2 (Peak)	256.69	1.3	1.34	24.18
B3 (Off peak)	290.57	0.6	0.62	11.16

Month 5- Block tariffs				
Block	Energy generated (GWh)	Block Factor	Adjusted Factor	Charge
		(#)	(#)	(LKR/kWh)
B1 (Day)	721	1	1.03	19.02
B2 (Peak)	245	1.3	1.34	24.72
B3 (Off peak)	277	0.6	0.62	11.41

Month 6 - Block tariffs				
Block	Energy generated (GWh)	Block Factor	Adjusted Factor	Charge
		(#)	(#)	(LKR/kWh)
B1 (Day)	740	1	1.03	20.12
B2 (Peak)	251	1.3	1.34	26.15
B3 (Off peak)	285	0.6	0.62	12.07

5 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 below and provides the six-month average.

Table 10- Combined Transfer Price from TL to DLs for July- December 2023

Capacity Charge							
	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Generation capacity	LKR /MW	2,502,135.30	2,620,458.45	2,710,504.14	2,712,570.26	2,639,381.23	2,700,553.27
Transmission	LKR /MW	730,449.17	764,991.29	791,871.19	784,519.13	773,060.14	782,267.07
Bulk Supply and Operation Business	LKR /MW	1,617,918.01	1,694,427.53	1,753,965.51	1,737,680.97	1,712,299.74	1,732,692.74
BST (C)	LKR /MW	4,850,502.48	5,079,877.26	5,256,340.85	5,234,770.36	5,124,741.11	5,215,513.09
BST (C)6-Month Weighted average	LKR/MW	5,123,250.076					

Energy Charge

Month	Unit	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Interval 1 (day)							
Transmission Loss Factor B1	%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%
Generation energy Cost B1	LKR /kWh	25.78	25.26	23.96	18.60	19.02	20.12
BST (E1)	LKR/kWh	26.69	26.15	24.80	19.26	19.68	20.82

Interval 2 (peak)

Transmission Loss Factor B2	%	4.49%	4.49%	4.49%	4.49%	4.49%	4.49%
Generation energy Cost B2	LKR /kWh	33.52	32.84	31.15	24.18	24.72	26.15
BST (E2)	LKR/kWh	35.02	34.31	32.55	25.27	25.83	27.33

Interval 3 (off peak)

Transmission Loss Factor B3	%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
Generation energy Cost B3	LKR /kWh	15.47	15.16	14.38	11.16	11.41	12.07
BST (E3)	LKR/kWh	15.85	15.53	14.73	11.44	11.69	12.37

Table 11- Approved Six-month Average Bulk Supply Tariffs for July- December 2023

	Unit	BST (E)
BST day (E1) 6-Month weighted average	LKR/kWh	22.96
BST peak (E2) 6-Month weighted average	LKR/kWh	30.13
BST off-peak (E3) 6-Month weighted average	LKR/kWh	13.64

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. i.e. 0530-1830, 1830-2230 and 2230-0530, respectively.

6 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 as per section 5.2.1 of the tariff methodology, and the approved BSTs are shown in Table 12.

The Transmission Licensee is hereby directed to invoice each Distribution Licensee at the rates shown in Table 12 as (i) Approved BST for payment on Coincident Maximum, and (ii) Approved BST for energy in each TOU interval. In addition, adjustment of sales to DL5 by DL2, DL3 and DL4 shall be done as per section 11 of the Decision on Revenue Caps and Bulk Supply Tariffs 2021-2023.

Table 12- Approved BST from Transmission to each Distribution Licensee

Description	Units	DL1: CEB Region 1	DL2: CEB Region 2	DL3: CEB Region 3	DL4: CEB Region 4	DL5: LECO Region 5	Total
Sales to end-use customers (Jul-Dec)	GWh	1,954	2,155	1,169	1,023	716	7,016
Revenue based on approved customer tariffs (Jul-Dec)	LKR Million	83,917.74	88,789.35	48,316.28	42,080.30	34,555.88	297,659.55
Coincident peak demand for purchases from Transmission	MW	613	670	451	323	256	-
Approved BST for payment on Coincident Maximum Demand	LKR/MW/month	5,123,250.076	5,123,250.076	5,123,250.076	5,123,250.076	5,123,250.076	-
Amount payable to Transmission on account of Demand (July- Dec)	LKR Million	18,850.20	20,608.73	13,861.90	9,936.84	7,862.26	71,119.94
Allowed losses		6.40%	8.60%	7.95%	7.09%	4.00%	
Revenue to be recovered by Transmission through energy charges (July-Dec)	LKR Million	53,714.24	57,767.26	28,050.04	26,586.33	19,881.37	185,999.23
Energy sold from Transmission at MV level (July-Dec)	GWh	1,954	2,155	1,169	1,023	716	7,016
Approved BST for energy in each TOU interval							
Peak (1830-2230)	LKR/kWh	34.81	33.19	30.00	32.84	35.33	
Off Peak (2230-0530)	LKR/kWh	15.76	15.03	13.58	14.87	15.99	
Day (0530-1830)	LKR/kWh	26.53	25.30	22.86	25.03	26.92	