

Date: February 12, 2023

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Your ref:

My ref: DGM(CS&RA)/TRF/TRF2023

Director General,
Public Utilities Commission of Sri Lanka,
6th Floor, BOC Merchant Tower,
No.28, St, Michael's Road,
Colombo 3.

Dear Sir,

Proposed Tariff Revision 2023

This refers to your letter no. PUC/E/Tariff /01 dated 2022-02-10 which was handed over to us around 1800 hrs. on the above subject and the discussion held at the PUCSL on 2023-02-10 regarding the above.

Accordingly, CEB has examined the above letter and considered the meeting discussion points and wish to state our observations as given below.

1.0 General

We categorically deny the inferences made in the above letter in respect of not establishing reasonableness, shortcomings in data submissions, inaccurate information and unrealistic assumptions and unsatisfactory response to Commission Queries. It is not appropriate to put forward such inferences in general terms without specifying the exact fact/figure/data or assumption.

The tariff proposal submitted by the CEB dated 05th January 2023 is based on current prices of the sources of Generation given by the respective authorities. In CEB tariff proposal the distribution and transmission costs has been reduced by a significant amount than the allowed revenue proposed in the tariff Methodology. Through the BST submissions CEB has given all the required data for the review of the PUCSL and CEB has completed replying all clarifications by 2023-01-18. It appears that the BST decision documents are not given for 2023 1H and 2023 2H even though CEB submitted the same to PUCSL on 2023-01-10 and 2023-01-16.

I would like to inform once again that, CEB has analysed 20 different scenarios to approach the best estimate of expenditure and revenue based on many factors such as existing tariff, availability of fuel coal/oil/Naptha stocks, hydro inflow variations, scheduled plant outages, transmission constraints, envisioned GDP drop resulting reduction of energy demand, possible renewable power generation variations, demand management schemes, planned maintenance requirements, allowed revenue forecast for transmission and distribution, various policy instructions of Government etc.

OFFICE OF THE GENERAL MANAGER

Accordingly, generation dispatch schedules have been prepared using Stochastic Dual Dynamic Programming (SDDP) dispatch simulation software and transmission network constraints have been identified using Power System Simulation for Engineering (PSSE) simulation software. SDDP model calculated the least-cost stochastic operating policy of a hydrothermal system, taking into account operational details of hydro plants like water balance, irrigation requirements, limits on storage and turbine outflow, spillage, filtration etc. Further, thermal plants have been modelled while considering generation constraints, fuel consumption constraints, bi-fuel plants etc. PSSE was used for studies of power system transmission network and generation performance in both steady-state and dynamic conditions. All identified generation and transmission constraints have been modelled both in SDDP and PSSE and the extracted results were analysed. Financial evaluation has been carried out to identify the most appropriate scenario for 2023.

The Tariff proposal submitted dated 2023-01-05 was based on the above rigorous calculation process and CEB hereby reconfirm the above submission as the sole request forwarded for consideration of the Tariff Revision 2023. Further, CEB is of great concern for creating ambiguities for the general public who are our customers by considering different proposals than the proposal considered for public consultation which was completed on 2023-02-08.

2.0 Demand Forecast

The gross generation demand for the year 2023 was estimated by taking into account the gross generation demand of the year 2022 (including unserved energy) and reducing it by 4% due to GDP contraction which is estimated as 4%. The average gross generation estimated for the year 2023 is approximately 45 GWh per day. Last few days, the average gross generation demand in the country was in the range of 46 to 47 GWh and it is in line with the estimated average demand of the year 2023. The gross generation demand will further increase in coming months due to dry weather prevail in the country. It is essential to take into account the auxiliary power consumption of the CEB owned power plants in calculating the gross demand which is approximately 2.0 GWh per day. It is not prudent to compare the energy demand of the January 2023 against January 2022 as the eco systems of which electricity demand drives for January 2022 and January 2023 are quite different. Also, it is not appropriate to compare gross generation data against net generation data. It is prudent to obtain the actual gross generation demand for the year 2022 and adjust it to suit for economic contraction in determining gross generation demand for the year 2023. We do not see a direct correlation between tariff increase and the energy demand when look at the actual gross generation figures of August, September and October of the year 2022. We also note the electricity demand varies significantly due to average temperature prevails in the country and the demand reduction noted in the months of November, December and January could be attributed to the same. Therefore, CEB does not agree with the gross generation demand of 15,050 GWh.

In the circumstance, it is of our best estimation that the generation for the year 2023 would be around 16,520 GWh in 2023. Similarly, the estimated sales would be 14,920 GWh. It is also to be noted that electricity has no considerable elasticity since the commodity has no close substitutes and the reduction of demand after a tariff revision could be a temporary effect.

However, on PUCSL's request made at the meeting on 2023-02-10, we are attaching the dispatch done for the demand forecast for Generation 15,725 GWh (15,050 + 675) please. The associated tariff increase as per our expenditure and revenue estimation is given below.

	CEB Tariff	Revised Demand on			
	proposal 2023	request of PUCSL			
Expenditure (Rs. Mn.)	722,402	668,913			
Income excl. other incomes (Rs. Mn.)	434,756	413,814			
Surplus (Rs. Mn.)	(287,646)	(255,099)			
Surplus as a % of Rev.	-66.20%	-61.65%			

3.0 Fuel Prices

Tariff preparation was done considering all fuel prices applicable at the delivery point of CEB based on actual invoices or tender prices received from fuel suppliers. Hence, CEB is not in a position to calculate any tariff proposal other than below prices used for Tariff Calculation.

- Coal 104 Rs./kg
- Diesel 405 Rs./l
- Furnace Oil 270 Rs./l
- Heavy Fuel 270 Rs./l
- Naphtha 220 Rs./l

Any future price changes can be accommodated in the next Tariff revision from July - December 2023. Further it is to be noted that Chairman, CPC at the said meeting at PUCSL on 2023-02-10 has strongly mentioned that they cannot reduce prices further at this juncture. In the circumstance, there is no assurance or indication that the fuel prices are significantly reduced by CPC even though the Commission assumed very low prices for the tariff revision. This same mistake has been done during the last tariff revision process by the Commission assuming low fuel prices for expenditure estimation making CEB to record Rs. 151 billion deficit in 2022. However, the commission could not achieve the assumed fuel prices and hence it is not prudent in formulating generation costs based on arbitrary fuel prices since the fuel suppliers for CEB do not provide fuel at such low costs.

4. Allocation of Costs among Tariff Categories

CEB is in agreement to the same and the proposal has been prepared considering Block tariff considering the concept that all citizens have right to enjoy low cost of electricity generated through indigenous resources.

5. Settlement of due payments to NCRE suppliers

Settlement of due payments to NCRE can be done based on a viable payment plan over a period of time based on the receipt of approval for a 66.2% tariff revision requested by CEB. Please note that the estimated cost for the year 2023 by the CEB covers only the operational cost of the year 2023 and does not cover the past debt accumulated in CEB.

6. Hotels to be included in the Industrial Category

As per the discussion held at the PUCSL on 2023-02-10 regarding tariff revision 2023, PUCSL indicated the concern of giving the Industrial Tariff to Hotels. We have very strong reservations for doing so since all hotels contributes very severely to the peak demand increase making CEB to operate most expensive thermal power plants. Unlike industries, hotels have less chances to shift loads.

7. Social Security Levy of LECO

At present LECO is not collecting the SSCL from their own customers. The invoiced amount to LECO for SSCL has to be charged from their Allowed revenue during UNT Adjustments. If not, this has to be included in the Tariff revision as well. The estimated amount of SSCL of LECO is Rs. 1.0 billion per annum.

8. Deficit up to Feb 15th 2023

Pl. note the Loss already made by CEB from Jan – Mid February 2023 is Rs. 37 billion.

9. Cost of Street Lamps

Pl. note that the provision of street lamps will add approximately Rs. 5 billion per annum since Treasury does not reimburse the cost of street lamps.

Please be good enough to give due concerns for the above facts in finalising the tariff for end user customers of CEB and LECO in view of supplying an uninterrupted power supply at minimum cost according to the Government Policy.

Yours faithfully

CEYLON ELECTRICITY BOARD

Eng. (Mrs.) KVSM Kudaligama

Deputy General Manager

Corporate Strategy and Regulatory Relations

Signed Eng. Rohan Seneviratne

General Manager

Ceylon Electricity Board

Eng. KVSM Kudaligama DGM (CS&RA)

Copy:

1. Secretary, MOPE - fi pl.

2. Chairman, PUCSL - fi & na pl.

3. Chairman, CPC - fi pl.

4. Chairman, CEB - fi pl.

5. Dir. General, Dept. of Public Enterprise - fi pl.

6. AGM(CS) - fi pl.

7. FM - fi pl.

ANNEXTURE-1

	Jan Feb	Mar	Apr	May	ĺ	un J	ul <i>i</i>	Aug	Sep C	Oct	Nov	Dec T	otal
Total Generation	1298.2	1198.7	1390.6	1281.1	1308.1	1286.3	1382.1	1383.3	1293.8	1331.2	1265.4	1305.8	15725
Total Generation/day	41.9	42.8	44.9	42.7	42.2	42.9	44.6	44.6	43.1	42.9	42.2	42.1	
Generation Red. due to SPP	174.9	165.5	211.4	169.1	269.0	339.6	291.7	344.8	350.9	307.5	253.0	270.8	3148.2
Self Generation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
No. of days	31.0	28.0	31.0	30.0	31.0	30.0	31.0	31.0	30.0	31.0	30.0	31.0	
Generation (Centrally dispatch)	1123.3	1033.2	1179.1	1112.0	1039.1	946.7	1090.4	1038.5	943.0	1023.8	1012.4	1035.1	12576.4
Reqd. Generation/day(Centraly)	36.2	36.9	38.0	37.1	33.5	31.6	35.2	33.5	31.4	33.0	33.7	33.4	
IPP/CEB emergency													
Southern 100MW	17.5	27.1	23.9	27.2	26.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	
WCPP	138.3	119.0	130.3	130.9	124.1	44.6	126.0	114.6	102.8	100.2	42.4	54.4	
Sojitz	6.7	6.5	14.6	12.4	2.8	0.3	18.4	9.0	7.1	11.9	8.2	18.5	
Kolonnawa-CEB	0.0	0.0	0.0	0.0	1.0	0.0	0.2	0.2	0.1	0.1	0.1	0.1	
Matugama-CEB	0.0	0.0	0.0	0.0	1.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	
Thulhiriya-CEB	0.0	0.0	0.0	0.0	0.5	0.0	0.2	0.2	0.1	0.1	0.1	0.1	
TOTAL IPP	162.5	152.6	168.8	170.5	155.4	51.6	144.9	124.2	110.1	112.2	50.9	73.2	1477.0
CEB Thermal Generation													
LAKVIJAYA1	177.2	160.0	177.2	87.5	0.0	87.5	142.8	177.2	138.2	177.2	169.3	159.5	
LAKVIJAYA2	177.2	160.0	177.2	171.5	172.0	87.5	0.0	177.2	138.2	177.2	167.2	175.5	
LAKVIJAYA3	177.2	160.0	177.2	171.5	172.0	171.1	177.2	0.0	0.0	0.0	0.0	0.0	4640.4
SAPU B	38.2	34.5	38.2	33.7	34.8	30.3	38.2	35.8	36.9	34.7	30.2	36.1	
SAPU A	27.8	24.9	30.4	26.6	27.4	16.6	27.4	26.4	24.8	23.1	15.9	16.6	
BARGE	35.9	32.7	36.2	31.9	31.1	26.9	32.6	33.0	32.5	30.9	24.3	24.8	
Uthuru Jannanee	10.3	9.4	10.4	9.2	8.4	5.7	8.5	9.5	8.5	8.3	5.7	6.7	
KCCP_Naptha	66.5	67.2	67.5	66.0	66.5	67.1	66.2	67.5	66.7	51.6	66.3	65.4	
KCCP_Diesel	0.0	0.6	2.6	7.5	2.6	0.0	4.2	0.0	0.0	0.0	1.3	3.6	
GT7	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.1	0.6	
SMALL_GT Total CEB Thermal Generation	0.0 710.2	0.0 649.4	0.0 716.8	0.0 605.3	0.0 514.9	0.0 492.7	0.0 497.6	0.0 526.7	0.0 445.9	0.0 502.9	0.0 480.4	0.0 488.8	6631.5
Total CEB Thermal Generation	710.2	649.4	/16.8	605.3	514.9	492.7	497.6	526.7	445.9	502.9	480.4	488.8	6631.5
Prospective Gen. / Energy shortfall													
Total Thermal Generation	872.7	801.9	885.7	775.9	670.2	544.3	642.5	650.9	556.0	615.1	531.3	562.0	8108.5
Hydro Gen Regd.	250.6	231.2	293.5	336.2	368.8	402.4	447.9	387.6	387.0	408.6	481.1	473.0	4467.9
Deficit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Power cut saving	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Actual hydro reqd.	250.6	231.2	293.5	336.2	368.8	402.4	447.9	387.6	387.0	408.6	481.1	473.0	4467.9
Inflow	189.9	126.4	148.3	277.0	398.7	498.5	468.7	430.3	415.5	482.2	510.7	502.7	4448.8
Drawdown from reservoirs	-60.7	-104.8	-145.2	-59.1	29.9	96.1	20.8	42.7	28.5	73.5	29.6	29.6	
STARTING STORAGE	850.0	789.3	684.5	539.3	480.1	510.0	606.1	626.9	669.6	698.1	771.7	801.3	
Month End Storage	789.3	684.5	539.3	480.1	510.0	606.1	626.9	669.6	698.1	771.7	801.3	830.9	
% Storage	0.7	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	
NCRE Breakdown													

Bio mass	8.5	7.7	8.5	8.3	8.5	8.3	8.5	8.5	8.3	8.5	8.3	8.5	100.4
Mini Hydro	42.0	33.9	75.0	60.9	91.6	133.0	96.8	147.3	167.8	172.4	152.5	157.7	1,330.8
Bulk Solar	24.2	25.4	28.6	25.6	26.6	25.8	27.6	27.2	27.3	24.4	19.0	18.5	300.1
Solar RT	63.1	62.1	66.8	58.0	55.5	51.7	57.6	56.7	58.8	55.4	48.4	49.4	683.5
IPP Wind	19.4	18.1	22.0	11.4	49.4	69.7	55.6	60.7	46.5	28.1	12.5	18.5	411.8
CEB Wind	17.7	18.3	10.6	5.0	37.4	51.2	45.6	44.4	42.2	18.6	12.5	18.2	321.6
Fuel Requirement (MT)													
HFO	27,289	27,260	29,344	27,261	27,056	18,101	22,177	21,727	21,357	20,160	15,870	17,598	275,201.2
LSFO	30,208	25,995	28,479	28,604	27,114	9,735	27,529	25,049	22,460	21,889	9,272	11,885	268,218.1
Naptha	11,238	11,360	11,415	11,154	11,240	11,346	11,188	11,415	11,278	8,713	11,207	11,050	132,602.6
Diesel	1,202	1,260	3,065	3,530	1,526	53	4,288	1,793	1,323	2,156	1,783	4,201	26,179.9
Coal	227,154	205,166	227,154	183,931	147,017	147,889	136,756	151,436	118,137	151,436	143,833	143,149	1,983,057.8