



Your ref:

My ref: AGM(CS)/DGM(CSR A)/GEN/4

Date: September 6, 2019

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

Least Cost Long-Term Generation Expansion Plan (LCLTGEP) 2020-2039

This refers to PUCSL letter No. PUC/L1/AP19/01/14 dated 2019-08-28.

Accordingly, Transmission Licensee herewith submit the additional information requested.

- a) Soft versions of daily demand curves are provided in the enclosed CD.
- b) Soft versions of daily ORE generation profiles are provided in the enclosed CD.
- c) Annual Generation from ORE, separately for each technology is presented in Annex I.
- d) Annual Generation from rooftop solar is included in the total solar generation figure presented in Annex I.
- e) Basis of estimation of curtailment of ORE was discussed in detail at the presentation of CEB held on 2019-09-03 at the PUCSL.

In addition to the above information, WASP software input data files of the other scenarios (Reference Case, Base Case Equivalent to LTGEP 2018-2037, Energy Mix with Nuclear Power Development and India-Sri Lanka HVDC Interconnection Scenario) in Draft LCLTGEP 2020-2039 are provided in the enclosed CD.

I would be grateful if you could make necessary arrangements to obtain the commission's approval for the draft Least Cost Long-Term Generation Expansion Plan (LCLTGEP) 2020-2039 early.

Eng. D D K Karunaratne Actg. General Manager

Annex I

ORE Projection 2020-2039

	OKE 110jettion 2020-2039												
	Year	Mini-hydro		Wind		Biomass		Solar		ORE	ORE	ORE Energy	Base
		MW	GWh	MW	GWh	MW	GWh	MW	GWh		Energy (GWh)	Share from Total Generation (%)	Demand Forecast (GWh)
	2020	419	1373	368	1106	49	340	410	584	1245	3403	18.4%	18,542
	2021	439	1438	488	1488	54	375	470	669	1450	3970	19.9%	19,910
•	2022	459	1504	558	1708	59	410	530	754	1605	4376	20.9%	20,959
	2023	479	1569	598	1824	64	445	590	839	1730	4677	21.2%	22,065
	2024	499	1635	598	1824	69	480	650	924	1815	4863	20.9%	23,230
	2025	519	1700	638	1940	74	515	730	1037	1960	5193	21.2%	24,458
	2026	529	1733	673	2036	79	550	820	1164	2100	5483	21.3%	25,696
	2027	539	1766	723	2176	84	585	910	1292	2255	5819	21.6%	26,918
	2028	549	1799	763	2292	89	620	1010	1434	2410	6144	21.8%	28,195
	029	559	1831	803	2408	94	655	1110	1575	2565	6469	21.9%	29,522
	2030	569	1864	823	2467	99	690	1210	1717	2700	6738	21.8%	30,890
	2031	579	1897	883	2633	104	725	1310	1858	2875	7114	22.0%	32,325
	2032	589	1930	933	2783	109	760	1420	2014	3050	7487	22.2%	33,778
	2033	599	1962	968	2874	114	795	1530	2169	3210	7801	22.1%	35,267
	2034	609	1995	1038	3079	119	830	1650	2339	3415	8244	22.4%	36,806
	2035	619	2028	1083	3210	124	865	1770	2509	3595	8613	22.4%	38,390
	2036	629	2061	1133	3360	129	901	1880	2664	3770	8985	22.4%	40,028
	2037	639	2094	1183	3509	134	936	1990	2819	3945	9357	22.4%	41,716
	2038	649	2126	1253	3714	139	971	2100	2975	4140	9786	22.5%	43,448
	2039	654	2143	1323	3920	144	1006	2210	3130	4330	10198	22.6%	45,215