Power Supply Procurement Plan 2021

Bukidnon Second Electric Cooperative, Inc.

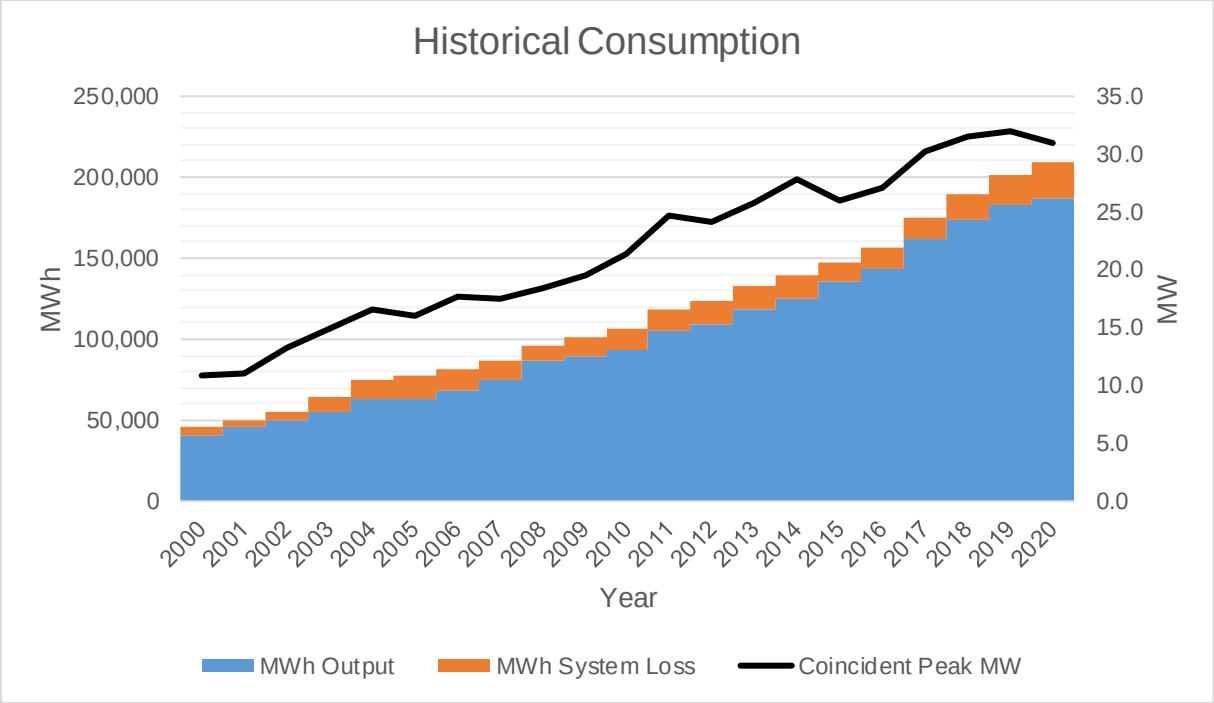
(BUSECO)

Historical Consumption Data

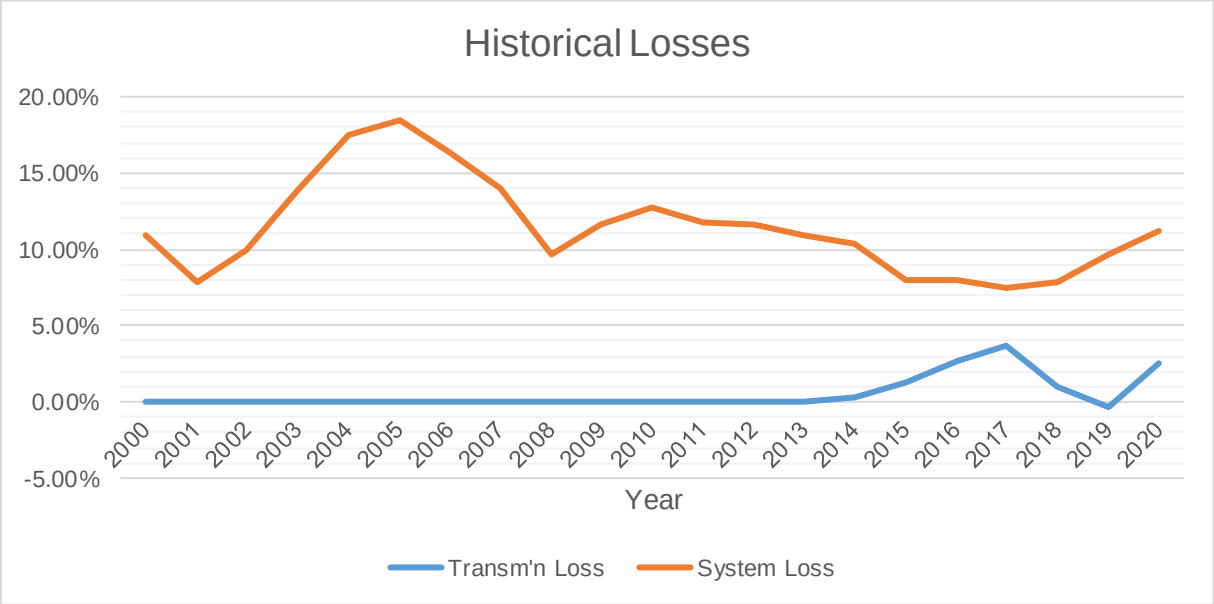
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	10.87	46,197	0	46,197	41,044	5,070	49%	-0.18%	0.00%	10.98%
2001	11.03	49,392	0	49,392	45,394	3,908	51%	-0.18%	0.00%	7.91%
2002	13.29	55,612	0	55,612	49,738	5,508	48%	-0.66%	0.00%	9.90%
2003	14.83	65,504	0	65,504	54,784	9,116	50%	-2.45%	0.00%	13.92%
2004	16.62	72,455	0	72,455	62,499	12,652	50%	3.72%	0.00%	17.46%
2005	16.11	78,633	0	78,633	63,537	14,519	56%	-0.73%	0.00%	18.46%
2006	17.60	82,233	0	82,233	68,527	13,492	53%	-0.26%	0.00%	16.41%
2007	17.52	87,639	0	87,639	74,942	12,328	57%	-0.42%	0.00%	14.07%
2008	18.34	95,387	0	95,387	86,187	9,155	59%	-0.05%	0.00%	9.60%
2009	19.47	101,225	0	101,225	88,892	11,813	59%	-0.51%	0.00%	11.67%
2010	21.45	106,524	0	106,524	92,756	13,592	57%	-0.17%	0.00%	12.76%
2011	24.61	118,563	0	118,563	104,575	13,988	55%	0.00%	0.00%	11.80%
2012	24.10	124,198	0	124,198	109,772	14,462	59%	0.03%	0.00%	11.64%
2013	25.86	133,098	0	133,098	118,506	14,593	59%	0.00%	0.00%	10.96%
2014	27.83	139,323	0	138,850	124,366	14,483	57%	0.00%	0.34%	10.43%
2015	26.05	148,815	0	146,860	135,034	11,826	64%	0.00%	1.31%	8.05%
2016	27.08	161,012	0	156,622	144,026	12,595	66%	0.00%	2.73%	8.04%
2017	30.24	181,308	0	174,634	161,594	13,040	66%	0.00%	3.68%	7.47%
2018	31.55	191,052	0	189,097	174,331	14,765	68%	0.00%	1.02%	7.81%
2019	31.98	202,045	0	202,743	182,536	19,508	72%	-0.34%	-0.35%	9.62%
2020	30.99	209,652	0	204,264	186,654	22,998	75%	2.64%	2.57%	11.26%

BUSECO demand requirement increased from 10.87 MW in 2000 to 31.98 MW in 2019 but slightly dropped at 30.99 MW. This reduction is mainly attributable to the effects of the COVID-19 pandemic whereby many of the commercial and industrial consumers are greatly affected, thus resulted to temporary closure for some.

Also, MWh Offtake increased from 46,197 MWh in 2000 to 209,652 MWh in 2020 at an average rate of 7.91%. Within the same period, Load Factor ranged from 49% to 75%.

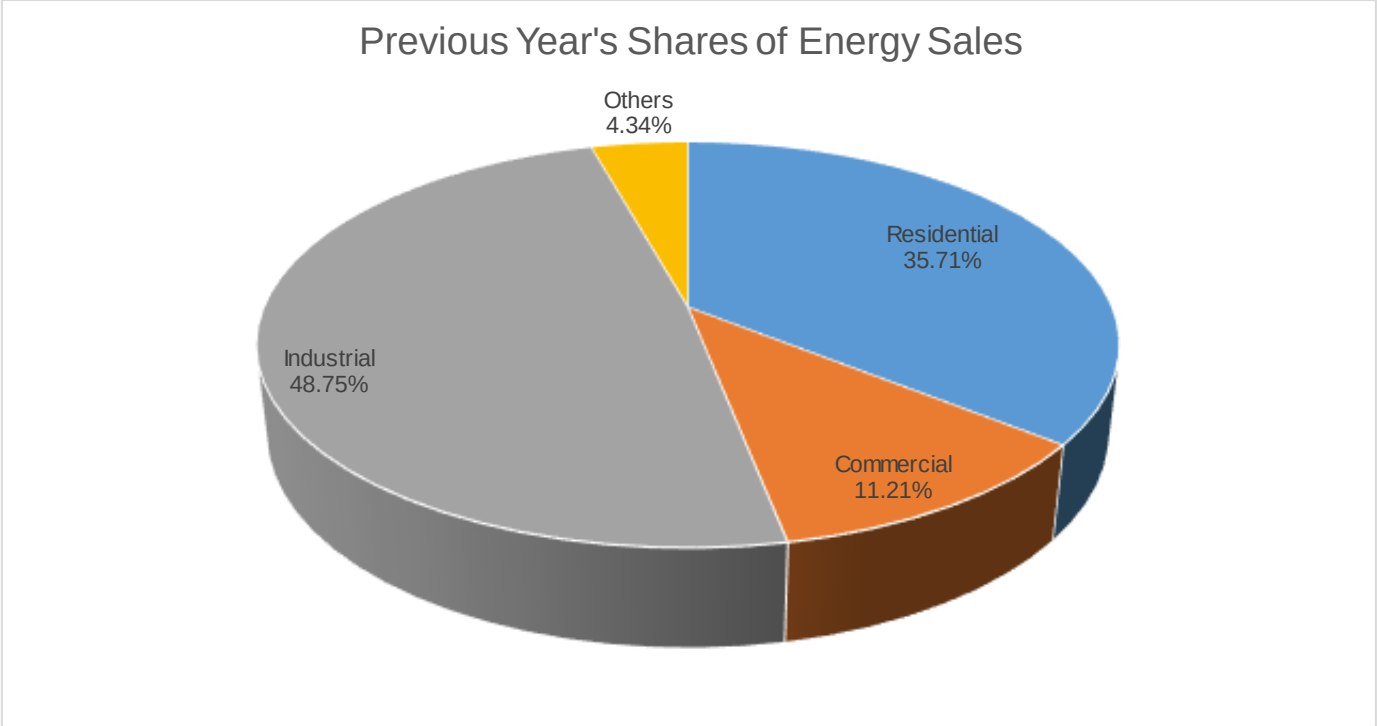


MWh Output increased from year 2000 to year 2020 at an average rate of 7.24%, while MWh System Loss slightly increased at a rate of 0.28% within the same period.

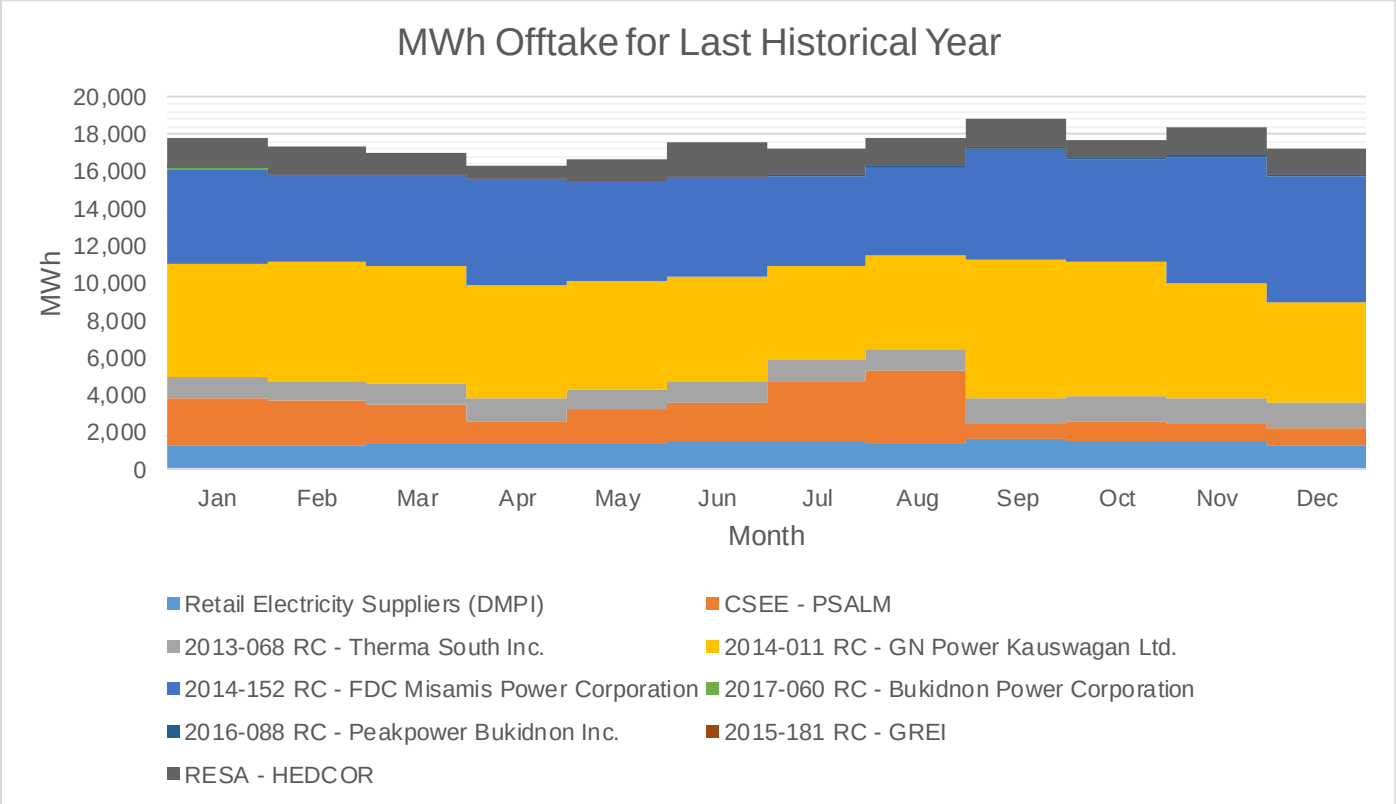


Historically, Transmission Loss ranged from -0.35% to 3.68% while System Loss ranged from 7.47% to 18.46%. Transmission Loss peaked at 3.68% on year 2017 because of IMEM transmission loss computation thru its system loss guide wherein during this year, increase in IPP nominations and system constrains due to supply problem were experienced of which resulted to the increase in transmission loss computation. While, System Loss peaked at 18.46 % on year 2005 due to over extended length of line problem, line vegetation and undersize conductor wires but gradually decreased in the long-run due to the implementation of CAPEX projects that will reduce system loss.

MWH sub-transmission and substation technical system loss data for historical years 2000 up to June 2016 cannot be reported separately since segregation software and the necessary data for the said process were only made available and completed starting July 2016. Also, non-technical system loss data reporting only commenced in the year 2012 up to present, thus, no historical data is available for reporting for the years earlier than the said timeline.



Through recent years, Industrial customers account for the bulk of energy sales at 48.75% despite of the low number of connections. In contrast, Residential customers accounted for only 35.71% of energy sales despite of the high number of connections.

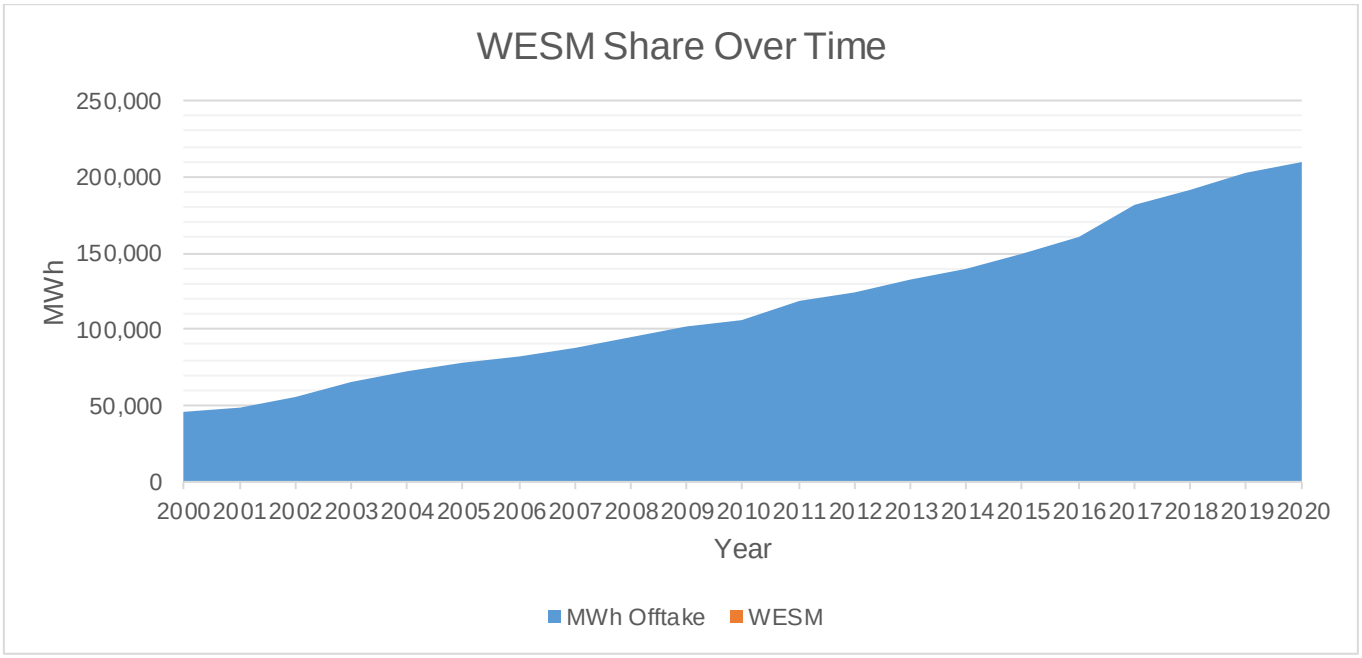


For 2020, it can be noted that BUSECO has been sourcing power from various suppliers, namely: PSALM (CSEE), Therma South Inc. (2013-068 RC), GN Power Kauswagan Ltd. (2014-011 RC), FDC Misamis Power Corporation (2014-152 RC), Bukidnon Power Corporation (2017-060 RC), HEDCOR (RESA), Peakpower Bukidnon Inc. (2016-088 RC) and GerPhil Renewable Energy Inc. (2015-181 RC). The PSA with ERC Case no. 2014-011 RC (GNPK) accounts for the bulk of MWh Offtake reaching about 72,806 MWh for the year 2020.

The CSEE with PSALM for the years 2021 to 2023 is currently ongoing the application process and is yet to be docketed with the Energy Regulatory Commission (ERC).

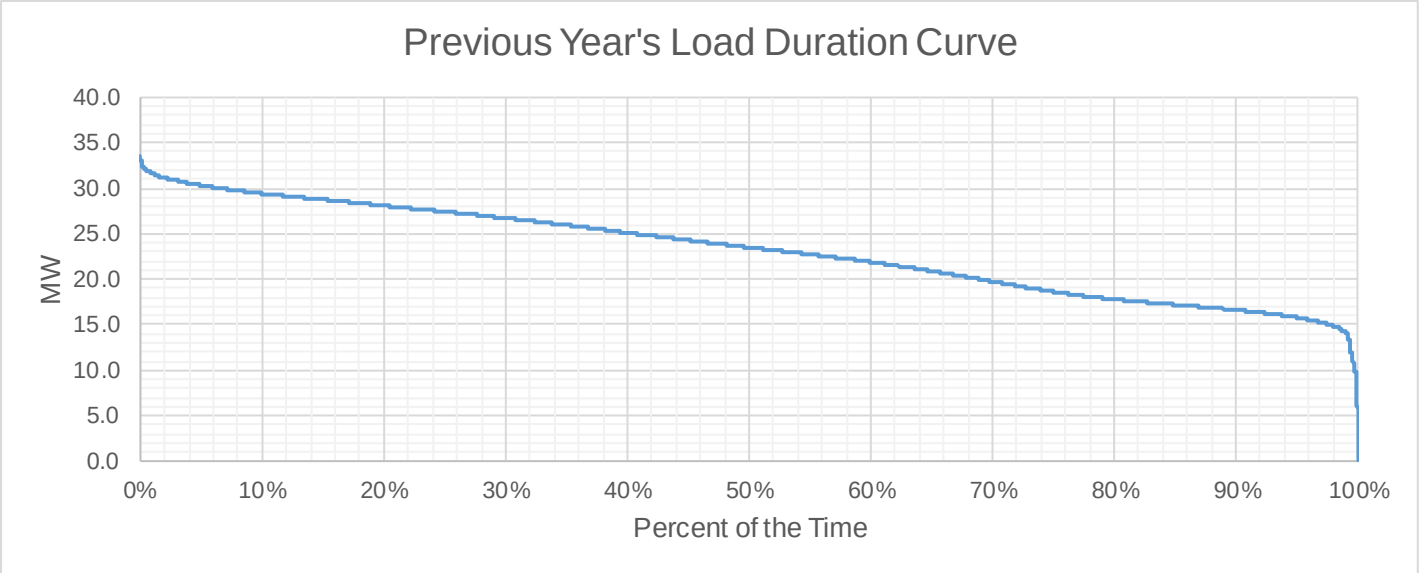
However, the Power Supply Agreements with PBI (2016-088 RC) and GREI (2015-181 RC) are affected by the Supreme Courts' decision dated 3 May 2019 on the PSA applications with ERC that did not undergo CSP on or after 30 June 2015. Since the issuance of the said SC decision, BUSECO has been in constant communication with the ERC for its ruling on the matter. Pending advice from the ERC whether or not these PSAs can be issued with Certificate of Exemption, BUSECO included the subject PSAs for Competitive Selection Process (CSP).

Moreover, since the issuance of the Supreme Court's ruling and while the resolution from the ERC is pending, BUSECO and PBI have agreed to still allow the latter to supply energy to the distribution system especially during conditions when the grid is not available. It can be noted that prior to the issuance of the SC's ruling, the PSA with PBI has already secured a provisional authority from the Energy Regulatory Commission (ERC). The power plant of the PBI is embedded to the distribution system of BUSECO specifically in its Lunocan Substation. While the GREI has ceased supplying energy to the distribution system of BUSECO since February 2021 which is also the end term of the effectivity of the PSA.

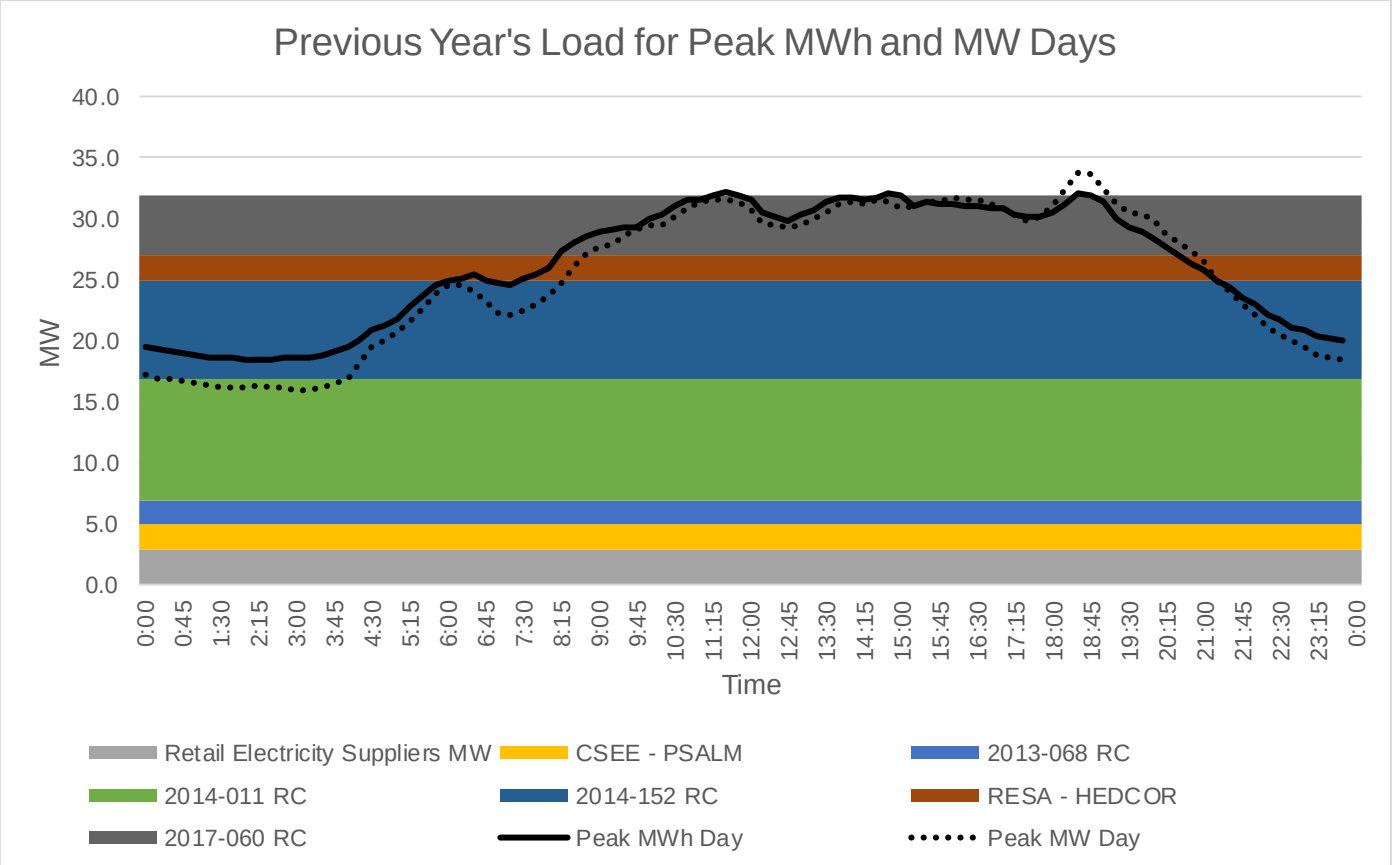


WESM Offtake is at 0 kWh considering that WESM registration is still on-going. As of the present, BUSECO is still on the process of completing its registration requirements particularly in posting its prudential requirement and the submission of the test results of the Potential Transformers and Current Transformers for its metering 3 which is yet to be released by the NGCP.

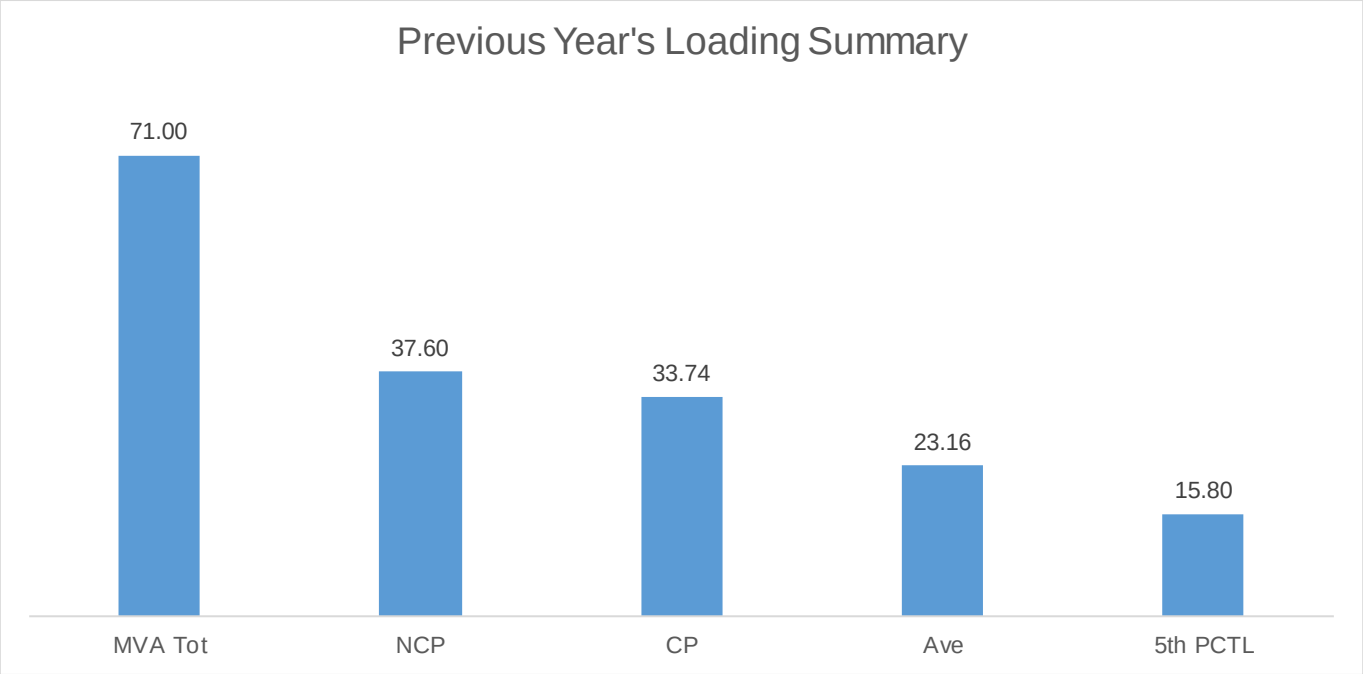
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load of BUSECO is at 0.304 MW and the maximum load is at 33.74 MW for the last historical year.



As shown in the Load Curves, the available supply is sufficient enough to cover the demand requirement of BUSECO.



The Non-Coincident Peak Demand is 37.6 MW, which is around 52.42% of the total substation capacity of 70 MVA. The load factor or the ratio between the Average Load of 23.16 MW and the Non-Coincident Peak Demand is 61.60% of 37.60 MW. A safe estimate of the true minimum load is the fifth percentile load of 15.80 MW which is 42.02% of the Non-Coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Metering 1 Lunocan Substation	25	13.125
Metering 2	1	0.773
Metering 3 Aglayan Substation	20	7.332
Metering 4 San Vicente Substation	10	4.599
Metering 5 Casisang Substation	10	8.454
Metering 6 Damilag Substation	5	3.315

The substations loaded at above 70% is the Metering 5 or Casisang Substation. This loading problem will be solved by putting up additional power transformer to cater the increasing load of Casisang Substation. BUSECO, in its CAPEX Application docketed under ERC Case no. 2016-080 RC, already included a proposed construction of the Kalasungay Substation as capital expenditure project meant to address this concern. This project will allow the existing load catered by the Casisang Substation to be transferred to the proposed substation, thus addressing its overloading concern. However, pending the ERC's decision for the said CAPEX application, BUSECO is continuously serving the demands connected to the Casisang Substation but closely monitoring the substation's loading to avoid any untoward incidents.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2021	Jan	34.87	29.00	0.00	10.220	2.93	91%	123%	7.28
	Feb	35.31	34.00	0.00	10.220	2.50	104%	135%	11.41
	Mar	35.71	34.00	0.00	10.000	3.05	104%	135%	11.34
	Apr	36.40	34.00	0.00	10.000	3.34	103%	133%	10.94
	May	36.79	34.00	0.00	10.000	3.23	101%	131%	10.43
	Jun	37.58	34.00	0.00	10.000	3.54	100%	129%	9.96
	Jul	35.51	34.00	0.00	10.000	3.50	106%	137%	11.98
	Aug	36.04	34.00	0.00	10.000	2.91	103%	133%	10.87
	Sep	37.51	34.00	0.00	10.000	3.17	99%	128%	9.67
	Oct	37.85	34.00	0.00	10.000	3.11	98%	127%	9.26
	Nov	37.62	34.00	0.00	10.000	2.58	97%	126%	8.96
	Dec	38.73	34.00	0.00	10.000	2.68	94%	122%	7.96
2022	Jan	39.71	37.18	2.00	10.000	3.10	102%	134%	12.57
	Feb	40.17	37.18	2.00	10.000	2.65	99%	131%	11.66
	Mar	40.59	37.18	2.00	10.000	3.22	99%	132%	11.81
	Apr	41.31	37.18	2.00	10.000	3.54	98%	130%	11.40
	May	41.73	37.18	2.00	10.000	3.41	97%	128%	10.86
	Jun	42.55	37.18	2.00	10.000	3.74	96%	127%	10.37
	Jul	42.43	37.18	2.00	10.000	3.70	96%	127%	10.45
	Aug	42.98	37.18	2.00	10.000	3.08	93%	123%	9.29
	Sep	44.52	37.18	2.00	10.000	3.36	90%	119%	8.02
	Oct	44.87	37.18	2.00	10.000	3.29	89%	118%	7.59
	Nov	44.63	37.18	2.00	10.000	2.73	89%	117%	7.28
	Dec	45.79	37.18	2.00	10.000	2.84	87%	114%	6.22
2023	Jan	45.08	35.18	2.00	20.000	3.27	84%	137%	15.37
	Feb	45.55	35.18	2.00	20.000	2.79	82%	134%	14.42
	Mar	46.00	35.18	2.00	20.000	3.40	83%	134%	14.58

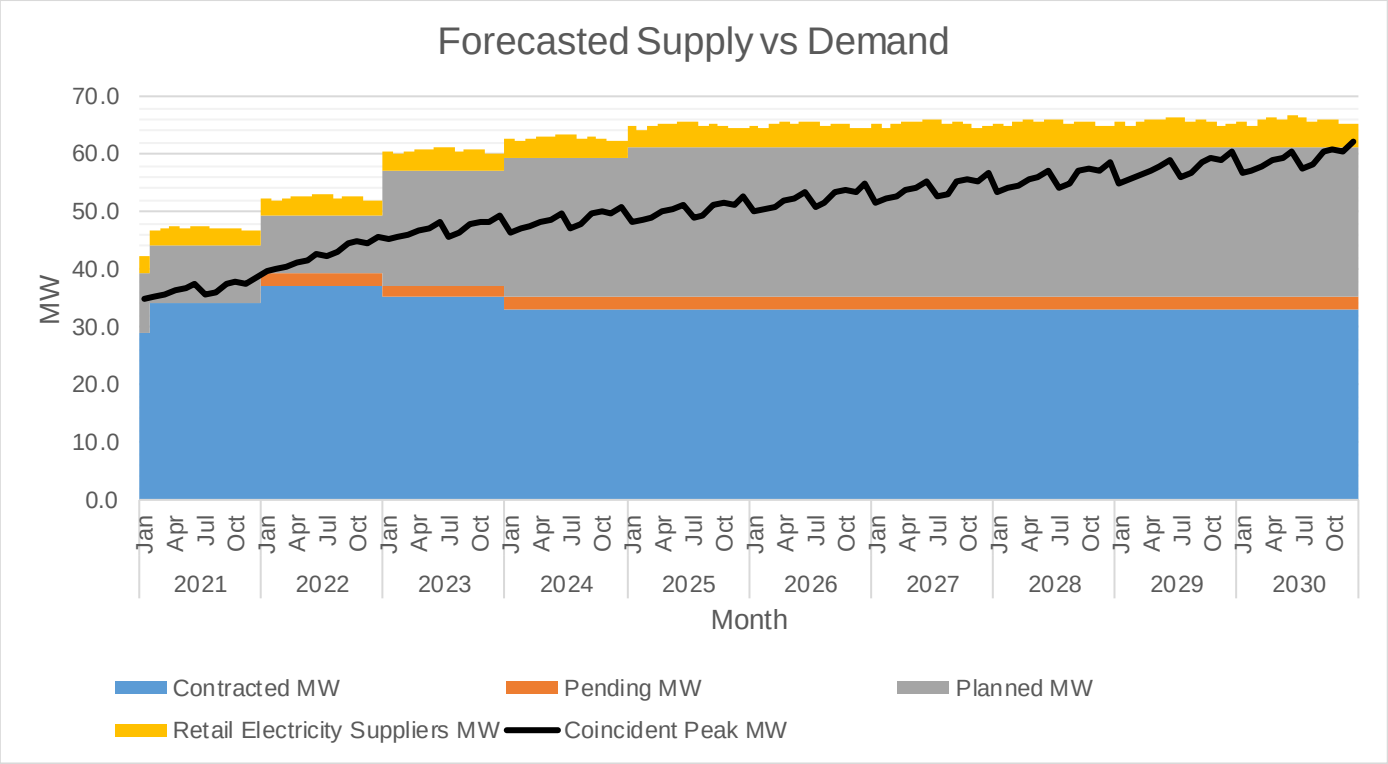
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Apr	46.76	35.18	2.00	20.000	3.73	82%	133%	14.15
	May	47.19	35.18	2.00	20.000	3.60	81%	131%	13.58
	Jun	48.06	35.18	2.00	20.000	3.94	80%	130%	13.06
	Jul	45.79	35.18	2.00	20.000	3.90	84%	136%	15.29
	Aug	46.36	35.18	2.00	20.000	3.25	82%	133%	14.07
	Sep	47.98	35.18	2.00	20.000	3.54	79%	129%	12.74
	Oct	48.35	35.18	2.00	20.000	3.46	78%	127%	12.29
	Nov	48.09	35.18	2.00	20.000	2.88	78%	126%	11.97
	Dec	49.31	35.18	2.00	20.000	2.99	76%	123%	10.86
2024	Jan	46.50	33.18	2.00	24.000	3.44	77%	137%	16.12
	Feb	47.00	33.18	2.00	24.000	2.93	75%	134%	15.11
	Mar	47.47	33.18	2.00	24.000	3.57	76%	135%	15.28
	Apr	48.27	33.18	2.00	24.000	3.92	75%	133%	14.83
	May	48.72	33.18	2.00	24.000	3.78	74%	132%	14.24
	Jun	49.63	33.18	2.00	24.000	4.15	73%	130%	13.70
	Jul	47.26	33.18	2.00	24.000	4.10	77%	137%	16.03
	Aug	47.85	33.18	2.00	24.000	3.42	75%	133%	14.75
	Sep	49.54	33.18	2.00	24.000	3.72	72%	129%	13.37
	Oct	49.93	33.18	2.00	24.000	3.64	72%	128%	12.89
	Nov	49.65	33.18	2.00	24.000	3.03	71%	127%	12.55
	Dec	50.93	33.18	2.00	24.000	3.15	69%	124%	11.40
2025	Jan	48.05	33.18	2.00	26.000	3.61	75%	138%	16.73
	Feb	48.57	33.18	2.00	26.000	3.08	73%	134%	15.69
	Mar	49.07	33.18	2.00	26.000	3.75	73%	135%	15.86
	Apr	49.90	33.18	2.00	26.000	4.11	72%	134%	15.39
	May	50.37	33.18	2.00	26.000	3.97	72%	132%	14.78
	Jun	51.32	33.18	2.00	26.000	4.35	71%	130%	14.21
	Jul	48.84	33.18	2.00	26.000	4.31	74%	137%	16.64
	Aug	49.46	33.18	2.00	26.000	3.58	72%	133%	15.31
	Sep	51.22	33.18	2.00	26.000	3.91	70%	129%	13.86

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Oct	51.63	33.18	2.00	26.000	3.82	69%	128%	13.37
	Nov	51.34	33.18	2.00	26.000	3.18	69%	127%	13.02
	Dec	52.67	33.18	2.00	26.000	3.30	67%	124%	11.81
2026	Jan	49.91	33.18	2.00	26.000	3.78	72%	133%	15.05
	Feb	50.44	33.18	2.00	26.000	3.22	70%	130%	13.96
	Mar	50.96	33.18	2.00	26.000	3.92	71%	130%	14.14
	Apr	51.83	33.18	2.00	26.000	4.31	70%	129%	13.66
	May	52.32	33.18	2.00	26.000	4.16	69%	127%	13.02
	Jun	53.31	33.18	2.00	26.000	4.56	68%	125%	12.43
	Jul	50.73	33.18	2.00	26.000	4.51	72%	132%	14.96
	Aug	51.37	33.18	2.00	26.000	3.75	70%	128%	13.57
	Sep	53.21	33.18	2.00	26.000	4.09	68%	125%	12.06
	Oct	53.63	33.18	2.00	26.000	4.00	67%	123%	11.55
	Nov	53.32	33.18	2.00	26.000	3.33	66%	122%	11.18
	Dec	54.71	33.18	2.00	26.000	3.46	65%	119%	9.92
2027	Jan	51.65	33.18	2.00	26.000	3.95	70%	128%	13.47
	Feb	52.20	33.18	2.00	26.000	3.37	68%	125%	12.34
	Mar	52.75	33.18	2.00	26.000	4.10	68%	126%	12.53
	Apr	53.65	33.18	2.00	26.000	4.50	67%	124%	12.02
	May	54.16	33.18	2.00	26.000	4.34	67%	123%	11.36
	Jun	55.19	33.18	2.00	26.000	4.76	66%	121%	10.75
	Jul	52.51	33.18	2.00	26.000	4.71	69%	128%	13.37
	Aug	53.17	33.18	2.00	26.000	3.92	67%	124%	11.93
	Sep	55.08	33.18	2.00	26.000	4.27	65%	120%	10.37
	Oct	55.52	33.18	2.00	26.000	4.18	65%	119%	9.84
	Nov	55.20	33.18	2.00	26.000	3.47	64%	118%	9.45
	Dec	56.65	33.18	2.00	26.000	3.61	63%	115%	8.15
2028	Jan	53.38	33.18	2.00	26.000	4.11	67%	124%	11.91
	Feb	53.95	33.18	2.00	26.000	3.51	66%	121%	10.74
	Mar	54.52	33.18	2.00	26.000	4.28	66%	122%	10.94

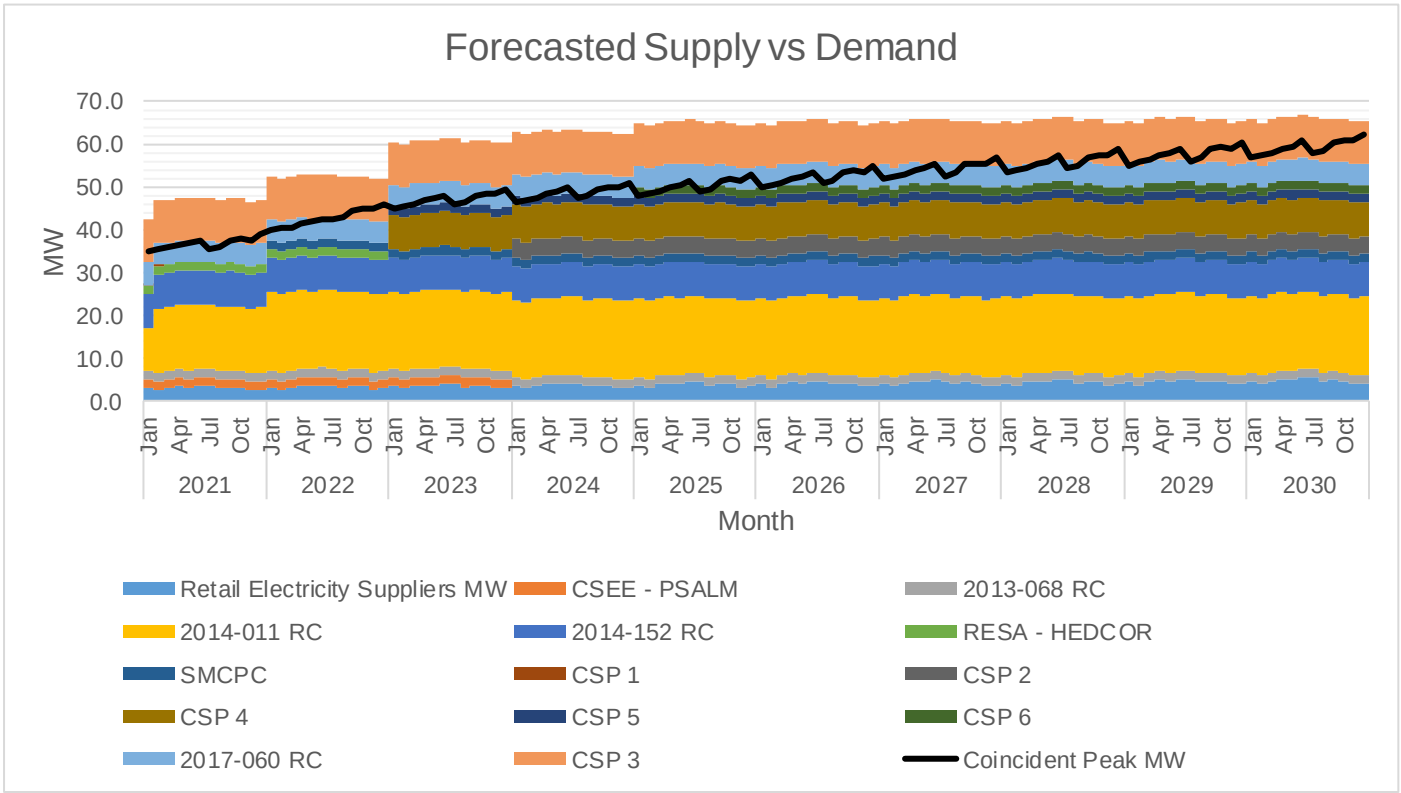
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Apr	55.46	33.18	2.00	26.000	4.69	65%	121%	10.41
	May	55.98	33.18	2.00	26.000	4.53	64%	119%	9.72
	Jun	57.06	33.18	2.00	26.000	4.96	64%	117%	9.08
	Jul	54.28	33.18	2.00	26.000	4.91	67%	124%	11.81
	Aug	54.95	33.18	2.00	26.000	4.09	65%	120%	10.31
	Sep	56.94	33.18	2.00	26.000	4.46	63%	117%	8.69
	Oct	57.40	33.18	2.00	26.000	4.36	63%	115%	8.14
	Nov	57.06	33.18	2.00	26.000	3.62	62%	114%	7.74
	Dec	58.56	33.18	2.00	26.000	3.77	61%	112%	6.39
2029	Jan	55.00	33.18	2.00	26.000	4.28	65%	121%	10.46
	Feb	55.59	33.18	2.00	26.000	3.65	64%	118%	9.25
	Mar	56.18	33.18	2.00	26.000	4.45	64%	118%	9.45
	Apr	57.16	33.18	2.00	26.000	4.88	63%	117%	8.90
	May	57.70	33.18	2.00	26.000	4.71	63%	115%	8.19
	Jun	58.82	33.18	2.00	26.000	5.17	62%	114%	7.53
	Jul	55.94	33.18	2.00	26.000	5.11	65%	120%	10.35
	Aug	56.63	33.18	2.00	26.000	4.26	63%	117%	8.81
	Sep	58.69	33.18	2.00	26.000	4.64	61%	113%	7.13
	Oct	59.16	33.18	2.00	26.000	4.54	61%	112%	6.56
	Nov	58.81	33.18	2.00	26.000	3.77	60%	111%	6.14
	Dec	60.36	33.18	2.00	26.000	3.92	59%	108%	4.74
2030	Jan	56.61	33.18	2.00	26.000	4.45	64%	117%	9.03
	Feb	57.21	33.18	2.00	26.000	3.80	62%	115%	7.77
	Mar	57.83	33.18	2.00	26.000	4.63	62%	115%	7.98
	Apr	58.84	33.18	2.00	26.000	5.08	62%	114%	7.42
	May	59.40	33.18	2.00	26.000	4.90	61%	112%	6.68
	Jun	60.55	33.18	2.00	26.000	5.37	60%	111%	6.00
	Jul	57.58	33.18	2.00	26.000	5.31	63%	117%	8.92
	Aug	58.29	33.18	2.00	26.000	4.42	62%	114%	7.32
	Sep	60.42	33.18	2.00	26.000	4.82	60%	110%	5.58

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Oct	60.91	33.18	2.00	26.000	4.72	59%	109%	4.99
	Nov	60.54	33.18	2.00	26.000	3.92	59%	108%	4.56
	Dec	62.14	33.18	2.00	26.000	4.08	57%	105%	3.11

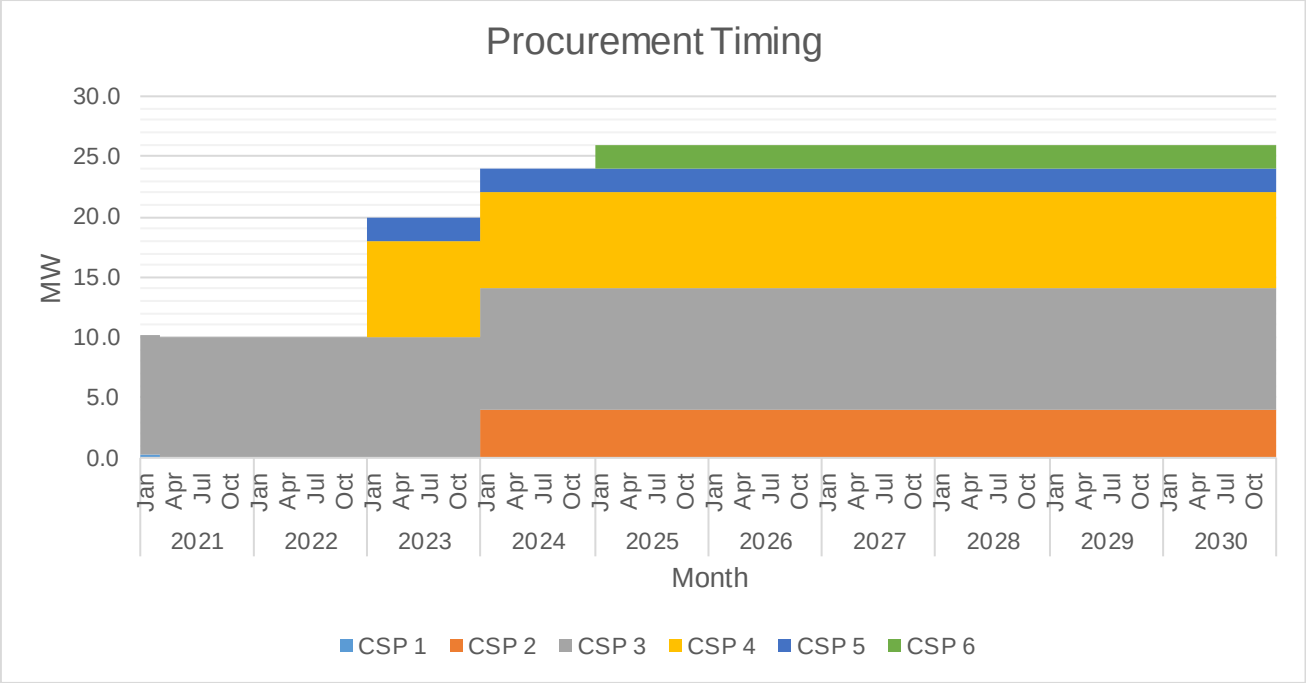
The Peak Demand was forecasted using ERC forecasting template model a + blogt + clogt^3 + dt^-1 number 122 and was assumed to occur on the month of December due to seasonal requirement. Monthly Peak Demand is at its lowest on the month of January due to December and January new year holidays. In general, Peak Demand is expected to grow at a rate of 5.91% annually based on ERC forecasting template average forecasted growth rate computation.



The available contracted supply is generally below the Peak Demand. This is because two (2) of its existing power suppliers namely: GREI with 220kW capacity and PBI with 10MW capacity has been affected by the issued decision of the Supreme Court relative to the conduct of the Competitive Selection Process along with several other planned supply. However, BUSECO is still waiting for the ERC's final resolution on the said issuance and the CSP for the pending and planned supply will then follow.



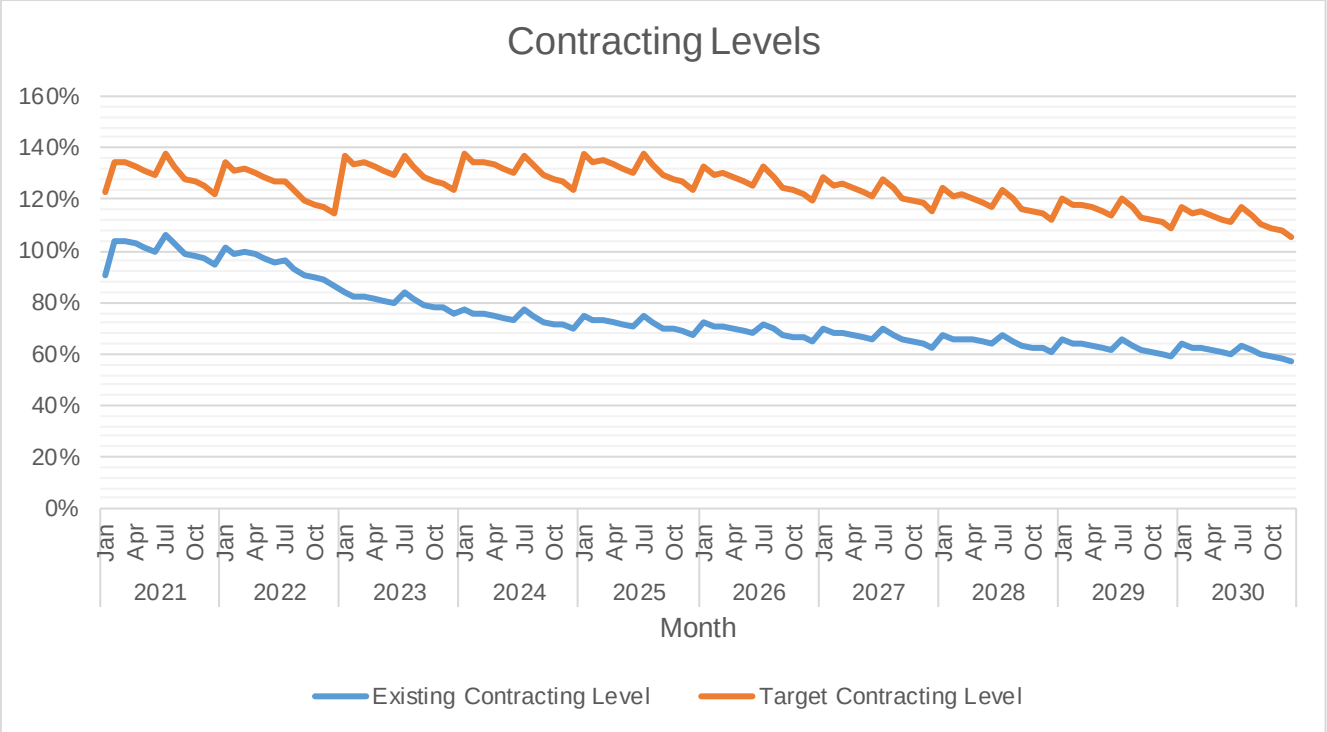
Of all the available supply, the largest is 18.18 MW from 2014-011 RC (GNPK). This is followed by 8 MW from 2014-152 RC (FDC Coal).



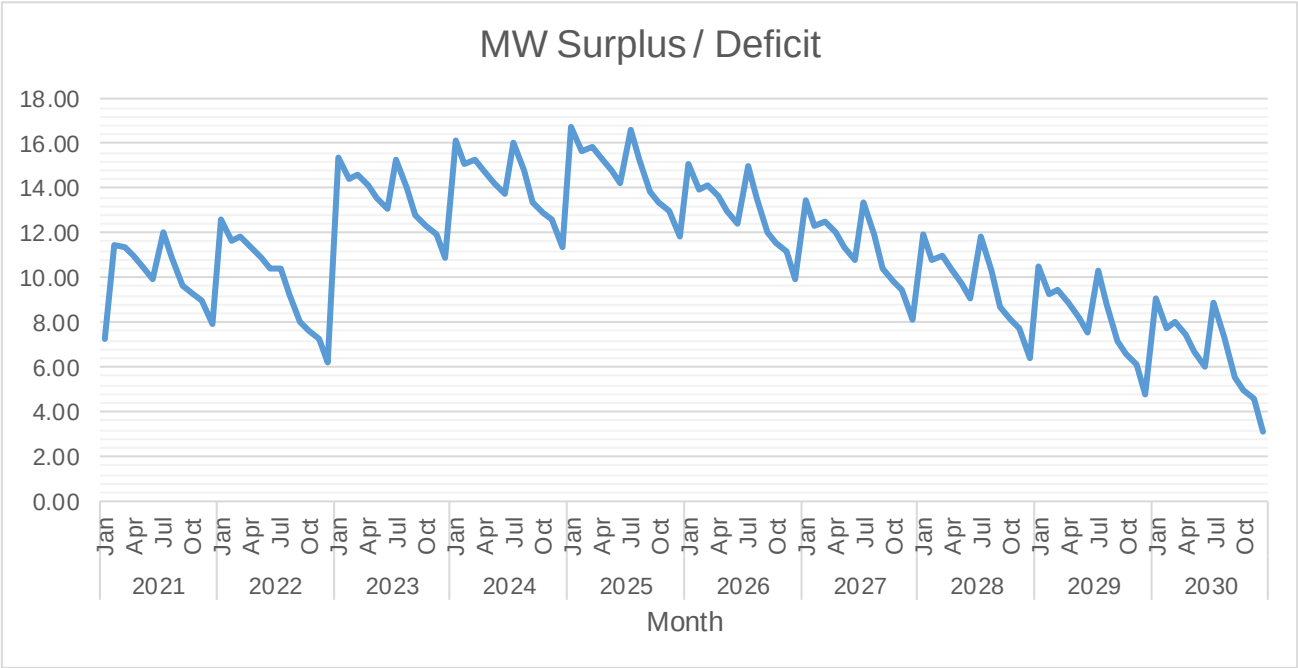
Following the provisions of the DC2018-02-0003, BUSECO has already submitted to the National Electrification Administration (NEA) its draft Terms-of-Reference for the planned CSP for the 8MW requirement under CSP 4. Pending issuance of the Notice to Proceed by the NEA with due endorsement by the Department of Energy (DOE), BUSECO cannot post any invitation to bid for the matter.

Further, BUSECO is currently preparing for another Terms-of-Reference for the planned CSP 5 for the 2MW requirement. It will undergo prior approval from both the NEA and the DOE prior to posting of invitation to bid as part of the process.

Moreover, for power requirement under CSP 1 (GREI), CSP 2 (UMHEPCOR), CSP 3 (PBI) and CSP 6 (Sunasia), BUSECO is still waiting for the final resolution from the Energy Regulatory Commission (ERC) on whether or not to conduct the Competitive Selection Process after the Supreme Court issued a ruling on the matter. A motion for reconsideration was already filed before the ERC for the affected Power Supply Agreements and pending resolution, BUSECO cannot set definite schedules for the conduct of the CSP.



The highest target contracting level is 138% which is expected to occur in January 2025. The lowest target contracting level is 105% which is expected to occur on December 2030.



The highest surplus is 16.73 MW which is expected to occur on the month of January 2025. The lowest surplus is 3.11 MW which is expected to occur on the month of December 2030.

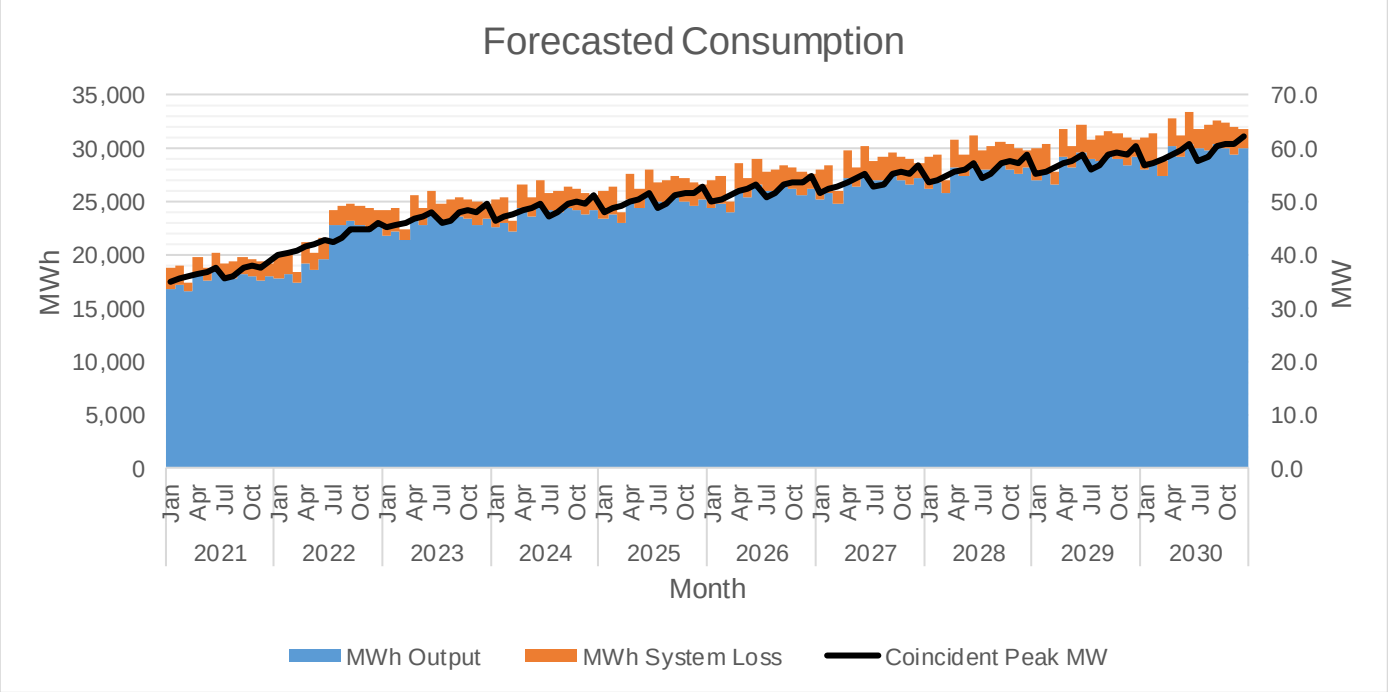
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	19,165	16,734	1,977	2.37%	10.56%
	Feb	19,387	17,080	1,841	2.41%	9.73%
	Mar	17,483	16,471	849	0.93%	4.90%
	Apr	20,160	18,078	1,731	1.74%	8.74%
	May	19,253	17,501	1,341	2.14%	7.12%
	Jun	20,860	18,278	1,821	3.65%	9.06%
	Jul	19,583	17,931	1,276	1.92%	6.64%
	Aug	19,693	17,839	1,573	1.42%	8.11%
	Sep	20,397	18,168	1,494	3.61%	7.60%
	Oct	20,274	17,963	1,536	3.82%	7.88%
	Nov	19,462	17,612	1,670	0.93%	8.66%
	Dec	19,687	18,012	1,105	2.89%	5.78%
2022	Jan	20,494	17,679	2,277	2.63%	11.41%
	Feb	20,754	18,082	2,118	2.67%	10.48%
	Mar	18,533	17,372	963	1.07%	5.25%
	Apr	21,655	19,248	1,989	1.93%	9.36%
	May	20,598	18,575	1,534	2.37%	7.63%
	Jun	22,471	19,481	2,093	4.00%	9.70%
	Jul	24,695	22,789	1,458	1.81%	6.01%
	Aug	24,824	22,682	1,805	1.36%	7.37%
	Sep	25,645	23,065	1,712	3.39%	6.91%
	Oct	25,501	22,826	1,761	3.58%	7.16%
	Nov	24,554	22,416	1,918	0.90%	7.88%
	Dec	24,816	22,884	1,259	2.72%	5.21%
2023	Jan	24,775	21,665	2,501	2.46%	10.35%
	Feb	25,063	22,112	2,324	2.50%	9.51%
	Mar	22,601	21,324	1,046	1.02%	4.67%
	Apr	26,062	23,405	2,180	1.83%	8.52%
	May	24,890	22,658	1,677	2.23%	6.89%
	Jun	26,967	23,663	2,295	3.74%	8.84%
	Jul	25,316	23,214	1,592	2.01%	6.42%
	Aug	25,459	23,096	1,976	1.52%	7.88%
	Sep	26,369	23,521	1,872	3.70%	7.37%
	Oct	26,209	23,256	1,927	3.91%	7.65%
	Nov	25,160	22,801	2,102	1.02%	8.44%
	Dec	25,451	23,319	1,371	2.99%	5.55%
2024	Jan	25,734	22,501	2,582	2.53%	10.29%
	Feb	26,033	22,966	2,398	2.57%	9.45%
	Mar	23,475	22,148	1,072	1.09%	4.62%
	Apr	27,070	24,309	2,247	1.90%	8.46%
	May	25,853	23,533	1,726	2.30%	6.83%
	Jun	28,010	24,577	2,367	3.81%	8.78%
	Jul	26,295	24,111	1,637	2.08%	6.36%
	Aug	26,444	23,988	2,037	1.59%	7.83%
	Sep	27,389	24,429	1,928	3.77%	7.32%
	Oct	27,223	24,154	1,986	3.98%	7.60%
	Nov	26,134	23,682	2,167	1.09%	8.38%
	Dec	26,435	24,220	1,408	3.05%	5.49%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2025	Jan	26,659	23,309	2,660	2.59%	10.24%
	Feb	26,969	23,790	2,469	2.63%	9.40%
	Mar	24,320	22,943	1,097	1.15%	4.56%
	Apr	28,044	25,181	2,313	1.96%	8.41%
	May	26,783	24,378	1,773	2.36%	6.78%
	Jun	29,018	25,459	2,436	3.87%	8.73%
	Jul	27,241	24,976	1,681	2.14%	6.31%
	Aug	27,395	24,848	2,095	1.65%	7.77%
	Sep	28,374	25,306	1,983	3.83%	7.27%
	Oct	28,202	25,021	2,042	4.04%	7.55%
	Nov	27,073	24,531	2,230	1.15%	8.33%
	Dec	27,386	25,089	1,444	3.12%	5.44%
2026	Jan	27,765	24,275	2,756	2.64%	10.19%
	Feb	28,087	24,776	2,557	2.69%	9.35%
	Mar	25,328	23,894	1,129	1.21%	4.51%
	Apr	29,207	26,225	2,393	2.02%	8.36%
	May	27,894	25,388	1,832	2.41%	6.73%
	Jun	30,221	26,514	2,521	3.92%	8.68%
	Jul	28,371	26,011	1,736	2.20%	6.26%
	Aug	28,531	25,878	2,166	1.70%	7.72%
	Sep	29,551	26,355	2,049	3.88%	7.21%
	Oct	29,372	26,058	2,111	4.09%	7.50%
	Nov	28,196	25,548	2,308	1.21%	8.28%
	Dec	28,522	26,129	1,489	3.17%	5.39%
2027	Jan	28,822	25,199	2,847	2.69%	10.15%
	Feb	29,157	25,719	2,640	2.74%	9.31%
	Mar	26,293	24,803	1,159	1.26%	4.46%
	Apr	30,319	27,223	2,470	2.07%	8.32%
	May	28,956	26,354	1,888	2.46%	6.69%
	Jun	31,372	27,523	2,603	3.97%	8.64%
	Jul	29,451	27,001	1,788	2.25%	6.21%
	Aug	29,617	26,863	2,235	1.75%	7.68%
	Sep	30,676	27,358	2,113	3.93%	7.17%
	Oct	30,490	27,050	2,178	4.14%	7.45%
	Nov	29,270	26,521	2,381	1.26%	8.24%
	Dec	29,608	27,123	1,531	3.22%	5.34%
2028	Jan	29,892	26,133	2,939	2.74%	10.11%
	Feb	30,239	26,673	2,725	2.78%	9.27%
	Mar	27,268	25,723	1,190	1.30%	4.42%
	Apr	31,444	28,232	2,547	2.11%	8.28%
	May	30,031	27,332	1,945	2.51%	6.64%
	Jun	32,536	28,544	2,685	4.02%	8.60%
	Jul	30,544	28,002	1,841	2.29%	6.17%
	Aug	30,716	27,859	2,304	1.80%	7.64%
	Sep	31,815	28,372	2,177	3.98%	7.13%
	Oct	31,622	28,053	2,245	4.19%	7.41%
	Nov	30,356	27,504	2,456	1.30%	8.20%
	Dec	30,707	28,129	1,575	3.27%	5.30%

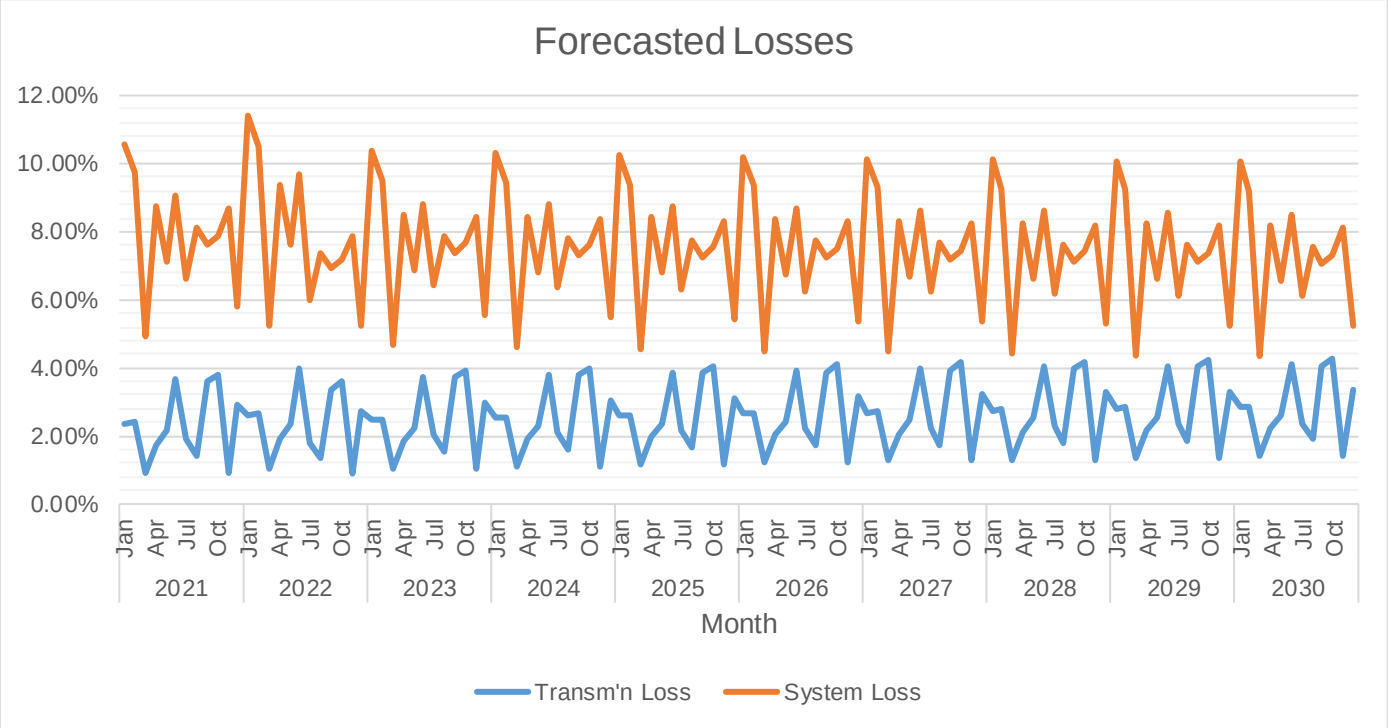
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2029	Jan	30,889	27,004	3,025	2.78%	10.07%
	Feb	31,248	27,562	2,803	2.83%	9.23%
	Mar	28,178	26,580	1,218	1.35%	4.38%
	Apr	32,493	29,173	2,619	2.16%	8.24%
	May	31,032	28,242	1,997	2.55%	6.61%
	Jun	33,621	29,495	2,761	4.06%	8.56%
	Jul	31,563	28,935	1,890	2.34%	6.13%
	Aug	31,741	28,788	2,368	1.84%	7.60%
	Sep	32,876	29,317	2,237	4.02%	7.09%
	Oct	32,677	28,987	2,307	4.23%	7.37%
	Nov	31,369	28,421	2,525	1.35%	8.16%
	Dec	31,731	29,066	1,615	3.31%	5.26%
2030	Jan	31,898	27,885	3,112	2.82%	10.04%
	Feb	32,269	28,461	2,883	2.87%	9.20%
	Mar	29,099	27,448	1,247	1.39%	4.35%
	Apr	33,555	30,125	2,692	2.20%	8.20%
	May	32,046	29,164	2,051	2.59%	6.57%
	Jun	34,720	30,458	2,839	4.10%	8.53%
	Jul	32,594	29,880	1,939	2.38%	6.09%
	Aug	32,778	29,727	2,433	1.89%	7.57%
	Sep	33,951	30,274	2,298	4.06%	7.05%
	Oct	33,745	29,934	2,370	4.27%	7.34%
	Nov	32,394	29,348	2,596	1.39%	8.13%
	Dec	32,768	30,015	1,655	3.35%	5.23%

The assumed load factor is at 0% for Peaking Supply and 40% - 75% for the base supply.

System Loss was calculated through a Load Flow Study conducted based on the forecasted results. Based on the same study, the Distribution System can adequately convey electricity to customers.



MWh Output was expected to grow at a rate of 4.47% annually based on ERC template on forecasted result AGR computed.



Transmission Loss is expected to range from 0.90% to 4.27% while System Loss is expected to range from 4.35% to 11.41%.

Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
CSEE - PSALM	Base	Power Sector Assets and Liabilities Management Corporation	2.00	70,080	12/26/2020	12/25/2023
2013-068 RC	Base	Therma South, Inc.	0.80	7,008	9/1/2015	9/1/2040
2014-011 RC	Base	GN Power Kauswagan Ltd.	9.09	119,443	4/1/2019	4/1/2039
2014-152 RC	Base	FDC Misamis Power Corporation	3.20	28,032	10/1/2016	10/1/2031
2017-060 RC	Peaking	Bukidnon Power Corporation	0.00	144	10/1/2018	10/1/2033
RESA - HEDCOR	Base	HEDCOR Bukidnon, Inc.	2.00	17,520	6/1/2018	6/1/2022

The PSA with Therma South Inc. filed with ERC under Case No. 2013-068 RC was procured through PSA. It was selected to provide BUSECO's base load requirement. Historically, the utilization of the PSA is 88 %. The actual billed overall monthly charge under the PSA ranged from 4.83 Php/kWh to 6.42 Php/KWh in the same period.

The PSA with GN Power Kauswagan Ltd. Co. filed with ERC under Case No. 2014-011 RC was procured through PSA. It was selected to provide BUSECO's base load requirement. Historically, the utilization of the PSA is 80% (at 5 MW capacity for the year 2019). The actual billed overall monthly charge under the PSA ranged from 4.06 Php/kWh to 5.28 Php/KWh in the same period.

The PSA with FDC Misamis Power Corp. filed with ERC under Case No. 2014-052 RC was procured through PSA. It was selected to provide BUSECO base load requirement. Historically, the utilization of the PSA is 100%. The actual billed overall monthly charge under the PSA ranged from 5.33 Php/kWh to 6.12 Php/KWh in the same period.

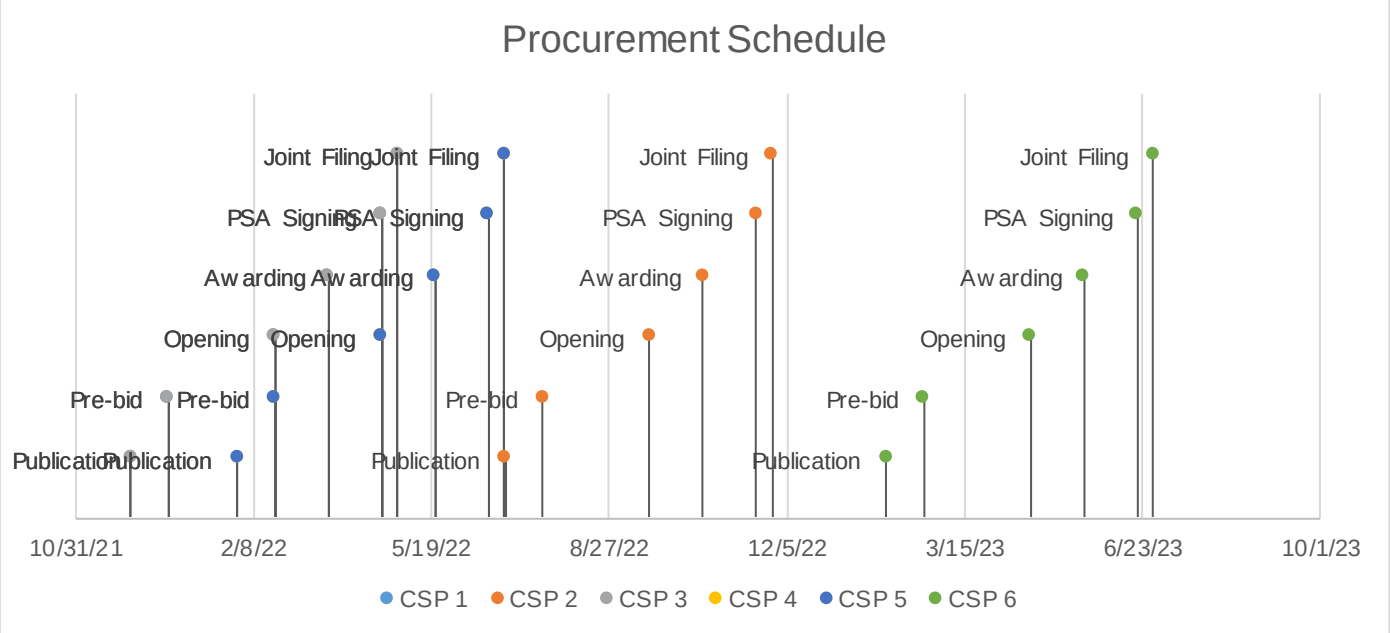
HEDCOR which is under RESA, pursuant to Republic Act No. 9513, was selected to provide BUSECO's base load requirement. Historically, the utilization of the PSA is 47%. The actual billed overall monthly charge under the PSA ranged from 5.51 Php/kWh to 6.13 Php/KWh in the same period. The RESA will be terminated once the WESM in Mindanao commences.

The PSA with Power Sector Assets and Liabilities Management Corporation is currently on the process of filing the CSEE for years 2021-2023 with the ERC pursuant to the existing provisions of RA 9136.

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
SMCPC	Base	SMC Consolidated Power Corporation	0.80	7,008	1/1/2022	1/1/2037

The Power Supply Contract with the SMC Consolidated Power Corporation has already undergone the Competitive Selection Process (CSP) last October 25-26, 2016. With this, BUSECO and SMCPC will jointly file its application before the Energy Regulatory Commission (ERC) once the necessary documents are completed by both parties as discussed during the pre-filing conference that was conducted recently. Currently, SMCPC is not yet supplying any power from its facilities to BUSECO.

	CSP 1	CSP 2	CSP 3	CSP 4	CSP 5	CSP 6
Type	Base	Base	Peaking	Base	Base	Intermediate
Minimum MW	0.22	4.00	10.00	8.00	2.00	2.00
Minimum MWh/yr	771	15,768	144	31,536	7,884	2,044
PSA Start	7/1/2016	1/1/2024	4/1/2018	1/1/2023	1/1/2023	1/1/2025
PSA End	2/26/2021	1/1/2049	4/1/2033	1/1/2048	1/1/2043	1/2/2050
Publication	12/1/2021	6/30/2022	12/1/2021	1/30/2022	1/30/2022	1/30/2023
Pre-bid	12/22/2021	7/21/2022	12/22/2021	2/20/2022	2/20/2022	2/20/2023
Opening	2/20/2022	9/19/2022	2/20/2022	4/21/2022	4/21/2022	4/21/2023
Awarding	3/22/2022	10/19/2022	3/22/2022	5/21/2022	5/21/2022	5/21/2023
PSA Signing	4/21/2022	11/18/2022	4/21/2022	6/20/2022	6/20/2022	6/20/2023
Joint Filing	4/30/2022	11/27/2022	4/30/2022	6/29/2022	6/29/2022	6/29/2023

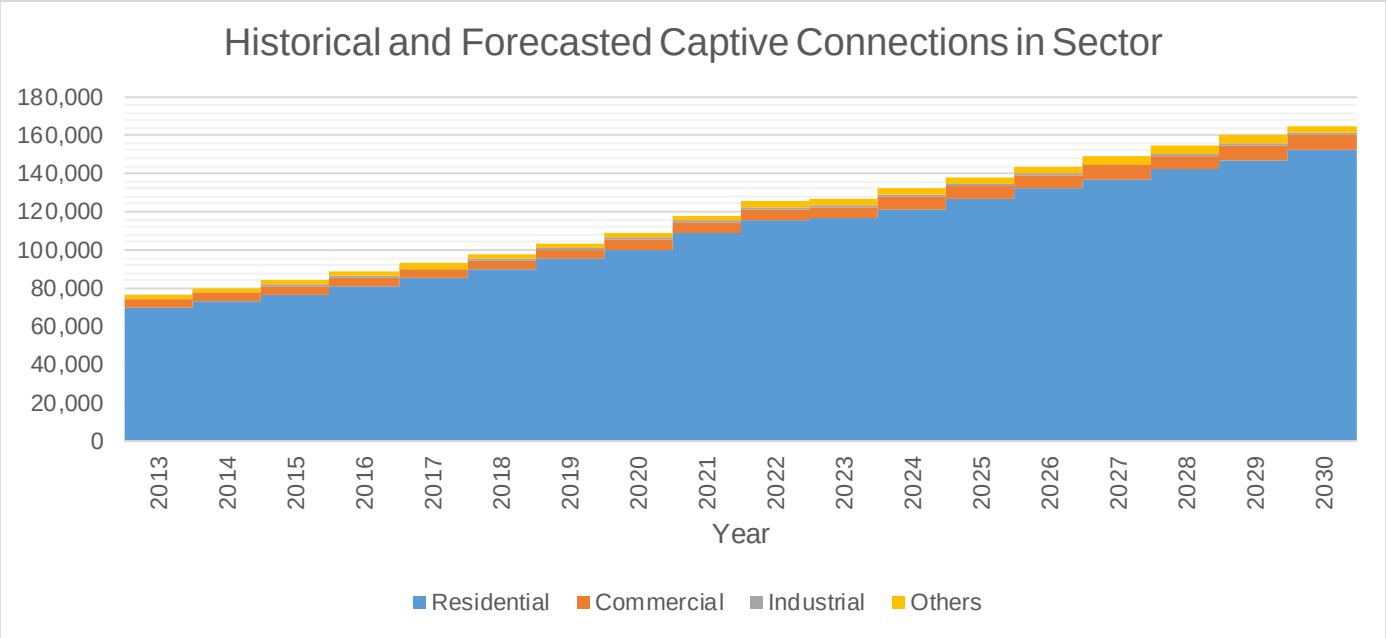


BUSECO is planning to conduct six Competitive Selection Processes (CSPs) for its power requirements. However, considering the different circumstances that each of these CSPs are in, the schedules shown above are considered indicative and may change as applicable. As per CSP rules, BUSECO will have to secure an approval from the National Electrification Administration (NEA) through a Notice to Proceed (NTP) with due endorsement from the Department of Energy (DOE) of the Terms of Reference (TOR) prior to the publication of the Invitation to Bid. Once the NTP is secured and publications are made, only then will the schedules for the conduct of the CSP will be finalized.

The planned CSP 4 for the 8MW requirement is still pending. Although the Terms of Reference for the said requirement has been submitted to both the NEA and the DOE and several revisions were already made. BUSECO is yet to finalize the Terms of Reference for submission to the NEA.

The 2MW power requirement under CSP 5 is still on the process of preparation of the TOR. While CSPs 1, 2, 3, and 6 are still pending, waiting for the ERC resolution on whether to pursue CSP or not as a result of the Supreme Court's ruling.

Captive Customer Connections



The number of total connections is expected to grow at a rate of 4.62% annually. In 2020, out of the 109,216 consumers, Residential customer class account for 92.06%, Commercial class at 4.81%, Industrial class at 0.53% and others at 2.60%. Since the WESM in Mindanao is yet to operate, thus implementing of the RCOA is still pending in the region, all the connected customers of BUSECO is accounted as captive and part of this data.