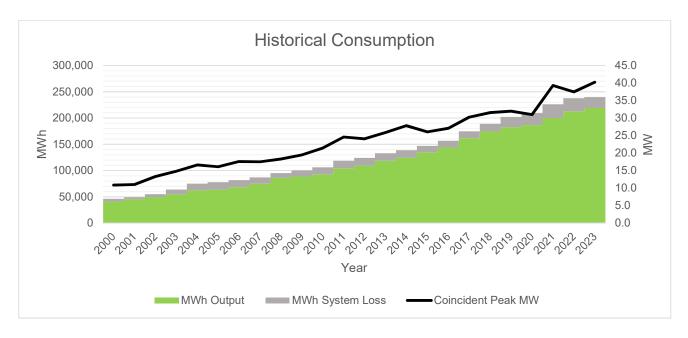
# Power Supply Procurement Plan 2024

**Bukidnon II Electric Cooperative, Inc.** 

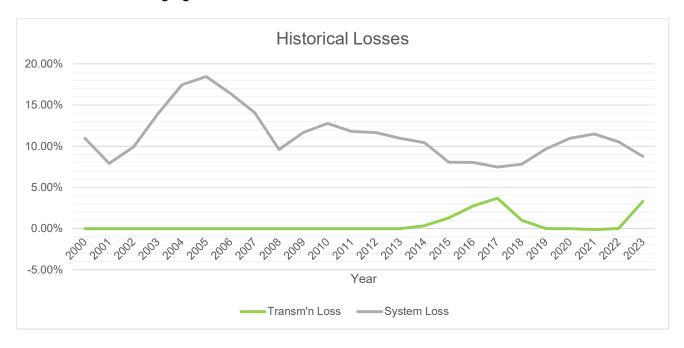
## **Historical Consumption Data**

	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	202,045	182,536	19,508	72%	0.00%	0.00%	9.66%
2020	30.99	209,652	0	209,652	186,654	22,998	77%	0.00%	0.00%	10.97%
2021	39.29	225,791	0	226,077	200,114	25,962	66%	0.00%	-0.13%	11.48%
2022	37.45	237,775	0	237,723	212,698	25,024	72%	0.00%	0.02%	10.53%
2023	40.21	248,205	19,597	239,993	218,973	21,020	68%	0.00%	3.31%	8.76%

BUSECO's peak demand increased from 10.87MW in the year 2000 to 40.21MW in the year 2023. The increase is considerably significant from year 2020 when the COVID-19 Pandemic hit the Philippines. This is an indication that the industries, which is the majority of BUSECO's consumers, along with the rest of the consumers are now easing back to normal day to day operations.

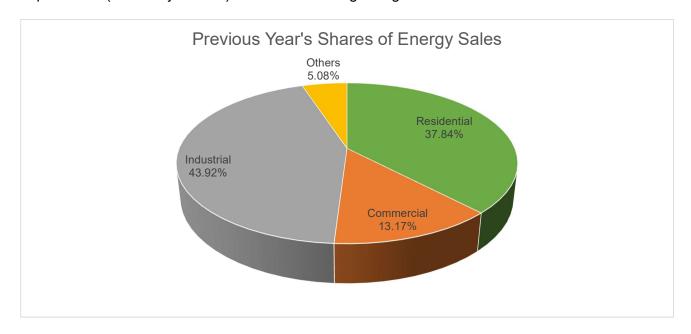


For the energy output, BUSECO has recorded a continuous increase for the last 24 years at an average rate of 7.61% which is at 218,973 MWh in the year 2023. The Coincident Peak Demand increased at an average growth rate of 6.14%.

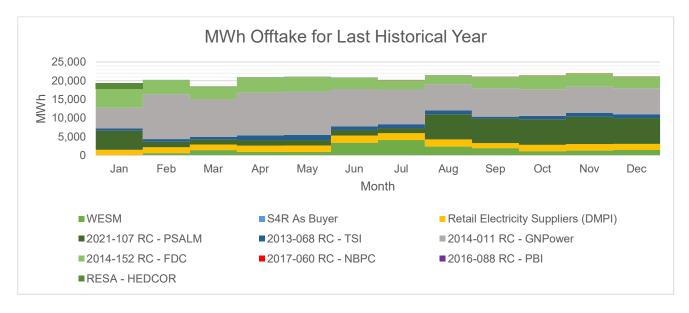


Historically, Transmission Loss ranged from -0.13% to 3.68% while System Loss ranged from 7.47% to 18.46%. Transmission Loss peaked at 3.68% on year 2017 due to increase in IPP BCQ nominations and frequent system constrains due to supply problem were experienced of which resulted to the increase in transmission 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. BUSECO is already implementing measures to minimize the systems loss like synchronized barangay line clearing, deployment of regular line clearers for the major distribution line sections as well as other network CAPEX projects that will reduce system loss. However, pending resolution of several CAPEX Applications with ERC, implementation of projects to address systems loss problem along with other network problems have been limited. Hence, effects on the recorded systems loss are also minimal. Further, it can be noted that transmission loss suddenly increased in the previous year at 3.31%. The reason causing this sudden increase is yet to be determined since ideally, transmission loss is already incorporated in the WESM quantity.

For the historical Transmission Losses under zero 0% or negative values, this was due to the unbilled energy of PSALM of which was adjusted accordingly by the latter and collected through a separate bill (Debit Adjustment) for the succeeding billing months.



Industrial customers account for the bulk of energy sales at 43.92% despite of the low number of connections. In contrast, Residential customers accounted for only 37.84% of energy sales despite having the highest number of customer connections.



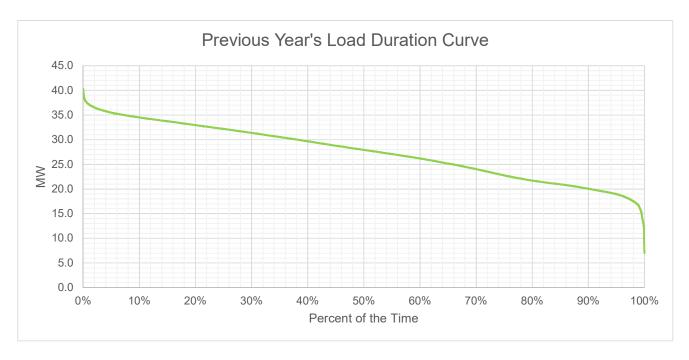
For the past year 2023, WESM, since it's commercial operations in Mindanao began, has been added to the list of BUSECO's power suppliers, namely: PSALM-CSEE (2021-107 RC), Therma South Inc. (2013-068 RC), GNPower Kauswagan Ltd. (2014-011 RC), FDC Misamis Power Corporation (2014-152 RC), North Bukidnon Power Corporation (2017-060 RC), HEDCOR (RESA), and Peakpower Bukidnon Inc. (2016-088 RC). The PSA with ERC Case no. 2014-011 RC (GNPK) accounts for the bulk of MWh Offtake reaching about 105,851MWh for the year 2023.

However, the Power Supply Agreements with PBI (2016-088 RC), after having been issued a decision from the Supreme Court's last 3 May 2019 as well as the Energy Regulatory Commission last 6 September 2023, has been terminated. BUSECO ceased from withdrawing power from PBI immediately after receiving the copy of the said decision.

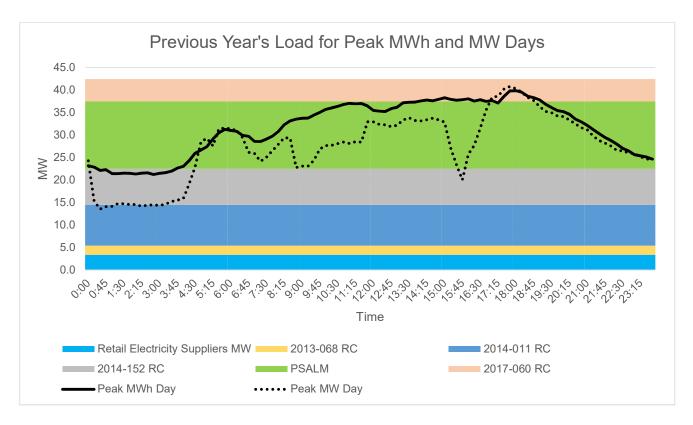


Since the commercial operations of the WESM in Mindanao last 26 January 2023, BUSECO was able to draw quantities amounting to 19,597MWh. This has impacted BUSECO positively on terms of the power rates being passed on the consumers considering a much cheaper prices being offered in the market. Luckily for BUSECO, the increase in its energy requirements gave room for BUSECO to benefit with the competitive market prices despite having bilateral contracts with several IPPs. BUSECO is now strategizing on how to be able to maximize the market for the benefit of its member-consumer-owners.

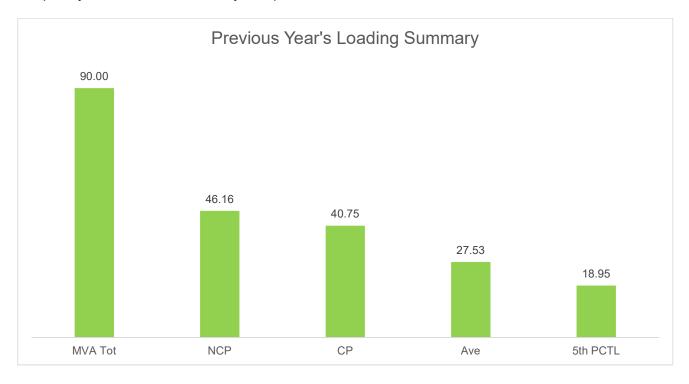
#### **Previous Year's Load Profile**



Based on the Load Duration Curve, the minimum load is at 7.015MW and the maximum load is at 40.75MW for the last historical year 2023. However, it can be noted that there was a temporary load transfer conducted in the month of November 2023 due to major line maintenance schedule. With this, BUSECO did not consider the metered data during the affected days due to the nature of its irregularity. Hence, although the meter data reflects that the peak demand for the year 2023 is at 40.75MW, BUSECO only reported 40.21MW as its Coincident Peak Demand.



Peak Demand occurred on November 23, 2023 with the highest recorded demand at 40.75MW. However, the true reflective peak demand happened in November 9, 2023 at 40.21MW when the temporary load transfer was not yet implemented.



The Non-Coincident Peak Demand is at 46.167MW, which is around 51.29% of the total substation capacity of 90 MVA. The load factor or the ratio between the Average Load of 27.53MW and the Non-Coincident Peak Demand is 59.64%. A safe estimate of the true minimum load is the fifth percentile load of 18.95MW which is 41.04% of the Non-Coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Metering 1 Lunocan Substation	25	16.425
Metering 2	1	1.059
Metering 3 Aglayan Substation	20	10.349
Metering 4 San Vicente Substation	10	5.709
Metering 5 Casisang Substation	20	8.728
Metering 6 Damilag Substation	15	3.893

All substations are loaded within the safe limits below 70% as of December 2023. The additional capacities for Damilag Substation at 10MW and Casisang Substation being uprated into 20MW from 10MW provided relief in the loading concerns of the power transformers.

Moreso, BUSECO plans to install a new substation at Laturan Substation as part of its CAPEX Projects filed under ERC Case no. 2016-080 RC. This project will aide Lunocan Substation with its existing capacity. Part of the load from Lunocan Substation will be transferred to Laturan Substation hence, allowing more capacity to be catered all while ensuring excellent power quality delivered to its connected consumers.

## **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
2024	Jan	41.19	24.10	15.00	0.000	2.09	62%	100%	0.00
	Feb	40.98	23.64	15.00	0.000	2.34	61%	100%	0.00
	Mar	41.97	24.91	15.00	0.000	2.06	62%	100%	0.00
	Apr	43.15	25.68	15.00	0.000	2.47	63%	100%	0.00
	May	43.71	26.24	15.00	0.000	2.47	64%	100%	0.00
	Jun	41.90	24.12	15.00	0.000	2.78	62%	100%	0.00
	Jul	44.02	26.43	15.00	0.000	2.60	64%	100%	0.00
	Aug	42.81	25.20	15.00	0.000	2.61	63%	100%	0.00
	Sep	42.40	25.41	15.00	0.000	1.99	63%	100%	0.00
	Oct	44.31	26.95	15.00	0.000	2.36	64%	100%	0.00
	Nov	45.74	28.18	15.00	0.000	2.56	65%	100%	0.00
	Dec	45.33	28.10	15.00	0.000	2.22	65%	100%	0.00
2025	Jan	42.92	25.74	15.00	0.000	2.18	63%	100%	0.00
	Feb	42.70	25.18	15.00	0.000	2.52	63%	100%	0.00
	Mar	43.73	26.58	15.00	0.000	2.14	64%	100%	0.00
	Apr	44.96	27.39	15.00	0.000	2.57	65%	100%	0.00
	May	45.54	27.97	15.00	0.000	2.57	65%	100%	0.00
	Jun	43.66	25.77	15.00	0.000	2.89	63%	100%	0.00
	Jul	45.87	28.17	15.00	0.000	2.70	65%	100%	0.00
	Aug	44.61	26.89	15.00	0.000	2.72	64%	100%	0.00
	Sep	44.18	27.11	15.00	0.000	2.07	64%	100%	0.00
	Oct	46.17	28.71	15.00	0.000	2.46	66%	100%	0.00
	Nov	47.66	29.99	15.00	0.000	2.67	67%	100%	0.00
	Dec	47.23	29.91	15.00	0.000	2.31	67%	100%	0.00
2026	Jan	44.62	32.36	0.00	10.000	2.26	76%	100%	0.00
	Feb	44.39	31.77	0.00	10.000	2.62	76%	100%	0.00
	Mar	45.46	33.18	0.00	10.055	2.22	77%	100%	0.00
	Apr	46.74	33.18	0.00	10.891	2.67	75%	100%	0.00
	May	47.34	33.18	0.00	11.497	2.67	74%	100%	0.00
	Jun	45.39	32.39	0.00	10.000	3.00	76%	100%	0.00
	Jul	47.69	33.18	0.00	11.704	2.80	74%	100%	0.00
	Aug	46.38	33.18	0.00	10.376	2.82	76%	100%	0.00
	Sep	45.93	33.18	0.00	10.603	2.15	76%	100%	0.00
	Oct	48.00	33.18	0.00	12.269	2.55	73%	100%	0.00
	Nov	49.55	33.18	0.00	13.602	2.77	71%	100%	0.00
	Dec	49.10	33.18	0.00	13.515	2.40	71%	100%	0.00
2027	Jan	46.29	29.55	0.00	14.400	2.34	67%	100%	0.00
	Feb	46.05	28.94	0.00	14.400	2.71	67%	100%	0.00
	Mar	47.16	30.45	0.00	14.400	2.30	68%	100%	0.00
	Apr	48.49	31.32	0.00	14.400	2.76	69%	100%	0.00

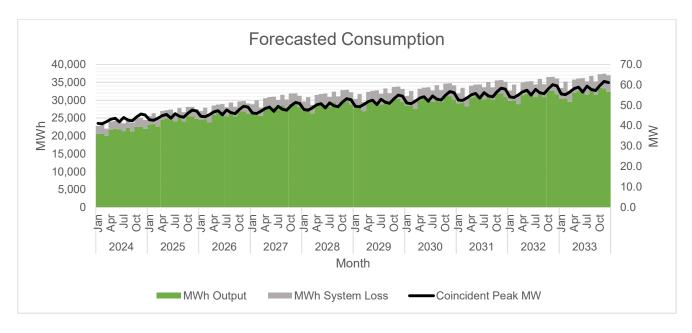
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	May	49.11	31.95	0.00	14.400	2.76	69%	100%	0.00
	Jun	47.08	29.58	0.00	14.400	3.11	67%	100%	0.00
	Jul	49.47	32.17	0.00	14.400	2.91	69%	100%	0.00
	Aug	48.11	30.79	0.00	14.400	2.92	68%	100%	0.00
	Sep	47.65	31.02	0.00	14.400	2.23	68%	100%	0.00
	Oct	49.80	32.75	0.00	14.400	2.64	69%	100%	0.00
	Nov	51.40	33.18	0.00	15.355	2.87	68%	100%	0.00
	Dec	50.93	33.18	0.00	15.264	2.49	68%	100%	0.00
2028	Jan	47.92	29.10	0.00	16.400	2.42	64%	100%	0.00
	Feb	47.68	28.57	0.00	16.400	2.71	64%	100%	0.00
	Mar	48.82	30.04	0.00	16.400	2.38	65%	100%	0.00
	Apr	50.20	30.94	0.00	16.400	2.86	65%	100%	0.00
	May	50.85	31.59	0.00	16.400	2.86	66%	100%	0.00
	Jun	48.75	29.13	0.00	16.400	3.21	64%	100%	0.00
	Jul	51.22	31.81	0.00	16.400	3.01	66%	100%	0.00
	Aug	49.81	30.39	0.00	16.400	3.02	65%	100%	0.00
	Sep	49.33	30.63	0.00	16.400	2.30	65%	100%	0.00
	Oct	51.55	32.42	0.00	16.400	2.73	66%	100%	0.00
	Nov	53.22	33.18	0.00	17.070	2.97	66%	100%	0.00
	Dec	52.73	33.18	0.00	16.977	2.57	66%	100%	0.00
2029	Jan	49.52	30.62	0.00	16.400	2.50	65%	100%	0.00
	Feb	49.26	29.97	0.00	16.400	2.89	65%	100%	0.00
	Mar	50.45	31.59	0.00	16.400	2.46	66%	100%	0.00
	Apr	51.87	32.52	0.00	16.400	2.95	66%	100%	0.00
	May	52.54	33.18	0.00	16.412	2.95	67%	100%	0.00
	Jun	50.37	30.65	0.00	16.400	3.32	65%	100%	0.00
	Jul	52.92	33.18	0.00	16.642	3.10	67%	100%	0.00
	Aug	51.47	31.95	0.00	16.400	3.12	66%	100%	0.00
	Sep	50.98	32.20	0.00	16.400	2.38	66%	100%	0.00
	Oct	53.27	33.18	0.00	17.268	2.82	66%	100%	0.00
	Nov	54.99	33.18	0.00	18.748	3.06	64%	100%	0.00
	Dec	54.49	33.18	0.00	18.650	2.66	64%	100%	0.00
2030	Jan	51.08	27.10	0.00	21.400	2.58	56%	100%	0.00
	Feb	50.82	26.43	0.00	21.400	2.98	55%	100%	0.00
	Mar	52.04	28.10	0.00	21.400	2.54	57%	100%	0.00
	Apr	53.51	29.06	0.00	21.400	3.04	58%	100%	0.00
	May	54.20	29.76	0.00	21.400	3.04	58%	100%	0.00
	Jun	51.96	27.14	0.00	21.400	3.42	56%	100%	0.00
	Jul	54.59	29.99	0.00	21.400	3.20	58%	100%	0.00
	Aug	53.09	28.47	0.00	21.400	3.22	57%	100%	0.00
	Sep	52.58	28.73	0.00	21.400	2.45	57%	100%	0.00
	Oct	54.95	30.64	0.00	21.400	2.91	59%	100%	0.00
	Nov	56.72	32.17	0.00	21.400	3.16	60%	100%	0.00
	Dec	56.21	32.07	0.00	21.400	2.74	60%	100%	0.00
2031	Jan	52.60	28.55	0.00	21.400	2.65	57%	100%	0.00
	Feb	52.33	27.86	0.00	21.400	3.07	57%	100%	0.00
	Mar	53.59	29.58	0.00	21.400	2.61	58%	100%	0.00

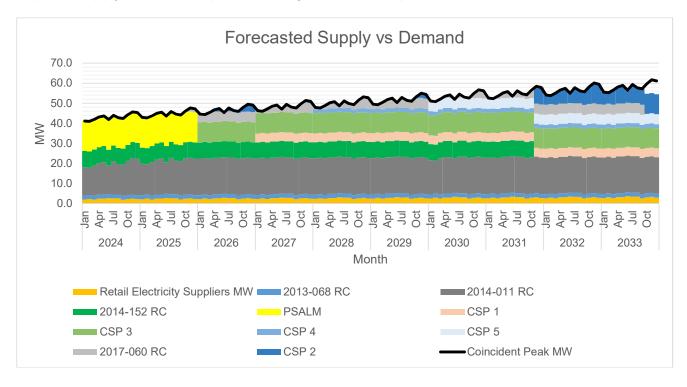
BUSECO PSPP 2024/08/22

	Apr	55.10	30.57	0.00	21.400	3.13	59%	100%	0.00
	May	55.82	31.28	0.00	21.400	3.13	59%	100%	0.00
	Jun	53.51	28.59	0.00	21.400	3.52	57%	100%	0.00
	Jul	56.22	31.53	0.00	21.400	3.29	60%	100%	0.00
	Aug	54.68	29.96	0.00	21.400	3.31	58%	100%	0.00
	Sep	54.15	30.23	0.00	21.400	2.52	59%	100%	0.00
	Oct	56.59	32.19	0.00	21.400	3.00	60%	100%	0.00
	Nov	58.42	25.18	0.00	29.985	3.25	46%	100%	0.00
	Dec	57.88	25.18	0.00	29.882	2.82	46%	100%	0.00
2032	Jan	54.09	25.18	0.00	26.183	2.73	49%	100%	0.00
	Feb	53.81	25.18	0.00	25.584	3.05	50%	100%	0.00
	Mar	55.11	25.18	0.00	27.245	2.68	48%	100%	0.00
	Apr	56.66	25.18	0.00	28.261	3.22	47%	100%	0.00
	May	57.40	25.18	0.00	28.996	3.22	46%	100%	0.00
	Jun	55.02	25.18	0.00	26.221	3.62	49%	100%	0.00
	Jul	57.81	25.18	0.00	29.248	3.39	46%	100%	0.00
	Aug	56.22	25.18	0.00	27.638	3.41	48%	100%	0.00
	Sep	55.68	25.18	0.00	27.909	2.60	47%	100%	0.00
	Oct	58.19	25.18	0.00	29.931	3.08	46%	100%	0.00
	Nov	60.07	25.18	0.00	31.400	3.34	44%	100%	-0.15
	Dec	59.52	25.18	0.00	31.400	2.90	44%	100%	-0.04
2033	Jan	55.55	25.18	0.00	27.565	2.80	48%	100%	0.00
	Feb	55.26	25.18	0.00	26.838	3.24	48%	100%	0.00
	Mar	56.59	25.18	0.00	28.655	2.76	47%	100%	0.00
	Apr	58.19	25.18	0.00	29.698	3.31	46%	100%	0.00
	May	58.94	25.18	0.00	30.453	3.31	45%	100%	0.00
	Jun	56.50	25.18	0.00	27.603	3.72	48%	100%	0.00
	Jul	59.37	25.18	0.00	30.711	3.48	45%	100%	0.00
	Aug	57.73	25.18	0.00	29.058	3.50	46%	100%	0.00
	Sep	57.18	25.18	0.00	29.337	2.66	46%	100%	0.00
	Oct	59.76	20.18	0.00	31.400	3.16	36%	91%	-5.01
	Nov	61.68	20.18	0.00	31.400	3.43	35%	89%	-6.67
	Dec	61.12	20.18	0.00	31.400	2.98	35%	89%	-6.56

The Peak Demand was forecasted to occur on the month of November which may be due to the preparation of the manufacturing plants and other industrial plants within the franchise for the upcoming holidays. It can be noted that the consumer profile of BUSECO is comprised of majority from industrial. Monthly Peak Demand is at its lowest on the month of February which may have been affected by the number of calendar days therein. In general, Peak Demand is expected to grow at a rate of 4.98% annually.

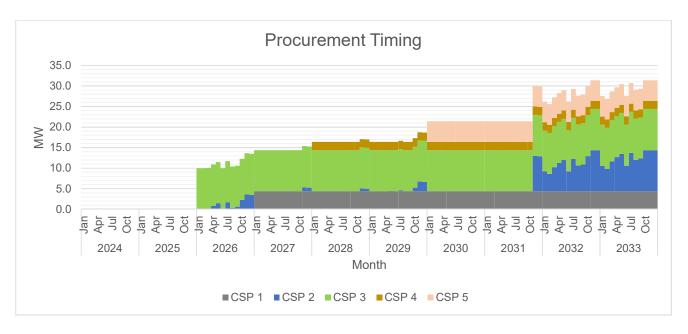


The forecasted contracted power supply of BUSECO is expected to be sufficient to meet the forecasted demand not until the 4<sup>th</sup> quarter of 2033. BUSECO already planned for the procurement of power supply to make this possible, subject to the Competitive Selection Process.



BUSECO was able to secure an extension for a 15MW capacity from the PSALM to cover from January 2024 until December 2025. This provided a relief for BUSECO in alleviating the high electricity rates for its consumers considering that PSALM so far is the cheapest power supplier in the country.

ERC's directive for a take-and-pay scheme relative to the PSA between BUSECO and GNPK enclosed in the ERC Order No. 2014-011-C RC promulgated on February 23, 3023, will allow flexibility on the part of BUSECO to accommodate a comparatively cheaper supply of electricity especially from a renewable energy source to be able to comply its RPS requirements.



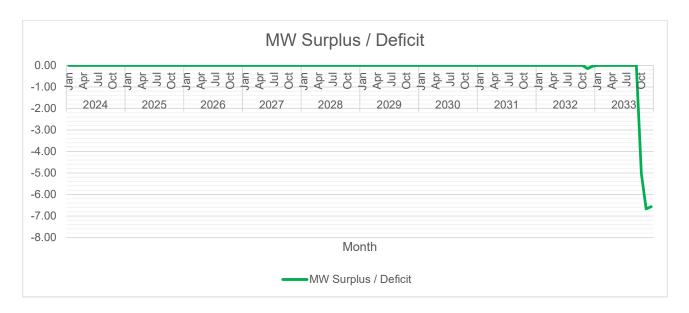
Moreover, BUSECO is planning to conduct five CSP within the next ten years to secure power supply for its consumers at a reasonable price. Although WESM in Mindanao is already in commercial operations since February 2023, BUSECO intends to secure power supply agreements so as not to be prone to the vulnerability of the market prices.

The planned CSP will also include a contract that was affected by the Supreme Court's ruling on the conduct of the CSP especially that which has a Built-Operate-Transfer Agreement. BUSECO is already reviewing the related issuances from the Department of Energy (DOE), Energy Regulatory Commission (ERC) and the National Electrification Administration (NEA) in preparation for the conduct of the said CSP.

Moreover, there are several CSPs that are planned for RPS compliance on top of the demand requirements which are most likely be from Hydro electric power plants. Considering that BUSECO's location is rich with hydro resources, there are several intents of putting up hydro electric power plants nearby. These power plants are expected to provide for the baseload requirements of BUSECO.



The lowest target contracting level is 89% which is expected to occur starting November 2033.



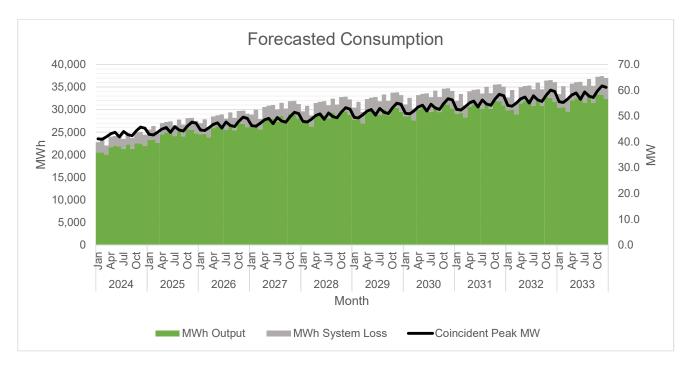
It can be noted that from 2024 to October 2033, there is no MW surplus nor deficit recorded. This is due to the fact that two of the Power Suppliers, one contracted and one which is for CSP, are peaking suppliers which means BUSECO has the flexibility as to the quantity to be drawn. The highest deficit is -6.67MW which is expected to occur on the month of November 2033.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	22,803	20,590	2,213	0.00%	9.71%
	Feb	23,393	20,569	2,824	0.00%	12.07%
	Mar	22,050	20,028	2,022	0.00%	9.17%
	Apr	24,022	21,725	2,297	0.00%	9.56%
	May	24,178	22,000	2,177	0.00%	9.01%
	Jun	24,398	21,830	2,568	0.00%	10.52%
	Jul	23,554	21,356	2,199	0.00%	9.33%
	Aug	24,720	22,278	2,443	0.00%	9.88%
	Sep	23,737	21,300	2,438	0.00%	10.27%
	Oct	24,966	22,576	2,390	0.00%	9.57%
	Nov	25,052	22,536	2,515	0.00%	10.04%
	Dec	24,465	21,986	2,479	0.00%	10.13%
2025	Jan	25,590	23,291	2,299	0.00%	8.98%
	Feb	26,377	23,350	3,027	0.00%	11.48%
	Mar	24,739	22,625	2,115	0.00%	8.55%
	Apr	26,998	24,547	2,451	0.00%	9.08%
	May	27,223	24,895	2,328	0.00%	8.55%
	Jun	27,408	24,695	2,713	0.00%	9.90%
	Jul	26,513	24,142	2,371	0.00%	8.94%
	Aug	27,819	25,220	2,598	0.00%	9.34%
	Sep	26,698	24,114	2,584	0.00%	9.68%
	Oct	28,120	25,563	2,557	0.00%	9.09%
	Nov	28,180	25,488	2,692	0.00%	9.55%
	Dec	27,506	24,791	2,714	0.00%	9.87%
2026	Jan	26,957	24,573	2,384	0.00%	8.84%
	Feb	27,881	24,651	3,230	0.00%	11.59%

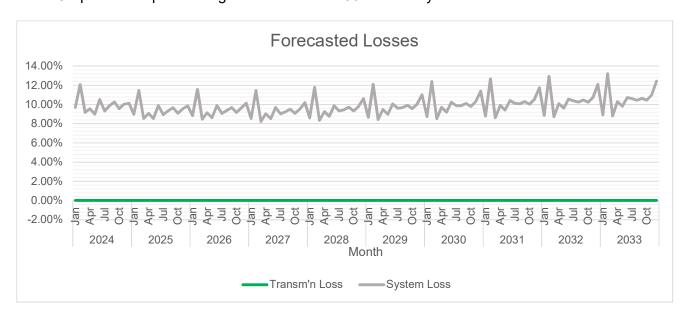
	Mar	26,071	23,864	2,207	0.00%	8.47%
	Apr	28,498	25,893	2,605	0.00%	9.14%
	May	28,746	26,266	2,480	0.00%	8.63%
	Jun	28,913	26,054	2,859	0.00%	9.89%
	Jul	28,011	25,468	2,543	0.00%	9.08%
	Aug	29,366	26,612	2,754	0.00%	9.38%
	Sep	28,176	25,445	2,731	0.00%	9.69%
	Oct	29,699	26,974	2,725	0.00%	9.18%
	Nov	29,759	26,890	2,869	0.00%	9.64%
	Dec	29,090	26,141	2,950	0.00%	10.14%
2027	Jan	28,869	26,400	2,469	0.00%	8.55%
	Feb	29,954	26,521	3,433	0.00%	11.46%
	Mar	27,925	25,624	2,300	0.00%	8.24%
	Apr	30,564	27,806	2,759	0.00%	9.03%
	May	30,853	28,223	2,631	0.00%	8.53%
	Jun	30,996	27,992	3,004	0.00%	9.69%
	Jul	30,070	27,355	2,715	0.00%	9.03%
	Aug	31,510	28,600	2,910	0.00%	9.23%
	Sep	30,224	27,346	2,877	0.00%	9.52%
	Oct	31,884	28,991	2,893	0.00%	9.07%
	Nov	31,933	28,887	3,046	0.00%	9.54%
	Dec	31,234	28,048	3,185	0.00%	10.20%
2028	Jan	29,654	27,099	2,554	0.00%	8.61%
	Feb	30,851	27,215	3,636	0.00%	11.79%
	Mar	28,699	26,306	2,393	0.00%	8.34%
	Apr	31,457	28,545	2,912	0.00%	9.26%
	May	31,751	28,969	2,782	0.00%	8.76%
	Jun	31,882	28,733	3,149	0.00%	9.88%
	Jul	30,968	28,081	2,887	0.00%	9.32%
	Aug	32,421	29,355	3,066	0.00%	9.46%
	Sep	31,092	28,068	3,024	0.00%	9.73%
	Oct	32,817	29,756	3,061	0.00%	9.33%
	Nov	32,875	29,652	3,223	0.00%	9.80%
	Dec	32,219	28,799	3,421	0.00%	10.62%
2029	Jan	30,425	27,785	2,639	0.00%	8.68%
	Feb	31,736	27,897	3,839	0.00%	12.10%
	Mar	29,460	26,975	2,485	0.00%	8.44%
	Apr	32,336	29,270	3,066	0.00%	9.48%
	May	32,635	29,702	2,933	0.00%	8.99%
	Jun	32,755	29,460	3,295	0.00%	10.06%
	Jul	31,852	28,793	3,059	0.00%	9.60%
	Aug	33,318	30,096	3,221	0.00%	9.67%
	Sep	31,947	28,777	3,170	0.00%	9.92%
	Oct	33,736	30,507	3,228	0.00%	9.57%
	Nov	33,803	30,403	3,399	0.00%	10.06%
	Dec	33,191	29,535	3,656	0.00%	11.02%
2030	Jan	31,183	28,459	2,725	0.00%	8.74%
	Feb	32,608	28,566	4,042	0.00%	12.40%
	Mar	30,209	27,631	2,578	0.00%	8.53%
	Apr	33,201	29,981	3,220	0.00%	9.70%
			•	•	•	•

	May	33,505	30,421	3,084	0.00%	9.21%
	Jun	33,614	30,174	3,440	0.00%	10.24%
	Jul	32,723	29,492	3,231	0.00%	9.87%
	Aug	34,201	30,824	3,377	0.00%	9.87%
	Sep	32,789	29,472	3,317	0.00%	10.12%
	Oct	34,641	31,244	3,396	0.00%	9.80%
	Nov	34,716	31,140	3,576	0.00%	10.30%
	Dec	34,149	30,257	3,892	0.00%	11.40%
2031	Jan	31,929	29,119	2,810	0.00%	8.80%
	Feb	33,467	29,222	4,245	0.00%	12.68%
	Mar	30,946	28,275	2,671	0.00%	8.63%
	Apr	34,053	30,680	3,374	0.00%	9.91%
	May	34,362	31,126	3,235	0.00%	9.42%
	Jun	34,460	30,874	3,586	0.00%	10.41%
	Jul	33,581	30,178	3,403	0.00%	10.13%
	Aug	35,071	31,538	3,533	0.00%	10.07%
	Sep	33,619	30,155	3,464	0.00%	10.30%
	Oct	35,532	31,968	3,564	0.00%	10.03%
	Nov	35,617	31,864	3,753	0.00%	10.54%
	Dec	35,093	30,966	4,127	0.00%	11.76%
2032	Jan	32,697	29,802	2,895	0.00%	8.85%
	Feb	34,348	29,900	4,448	0.00%	12.95%
	Mar	31,704	28,940	2,764	0.00%	8.72%
	Apr	34,928	31,401	3,527	0.00%	10.10%
	May	35,241	31,855	3,387	0.00%	9.61%
	Jun	35,329	31,597	3,731	0.00%	10.56%
	Jul	34,461	30,886	3,575	0.00%	10.37%
	Aug	35,964	32,275	3,689	0.00%	10.26%
	Sep	34,471	30,860	3,610	0.00%	10.47%
	Oct	36,447	32,715	3,732	0.00%	10.24%
	Nov	36,540	32,611	3,930	0.00%	10.75%
	Dec	36,061	31,699	4,362	0.00%	12.10%
2033	Jan	33,419	30,439	2,980	0.00%	8.92%
	Feb	35,184	30,533	4,651	0.00%	13.22%
	Mar	32,418	29,561	2,856	0.00%	8.81%
	Apr	35,756	32,075	3,681	0.00%	10.30%
	May	36,073	32,536	3,538	0.00%	9.81%
	Jun	36,150	32,273	3,877	0.00%	10.72%
	Jul	35,295	31,548	3,747	0.00%	10.62%
	Aug	36,808	32,964	3,844	0.00%	10.44%
	Sep	35,276	31,519	3,757	0.00%	10.65%
		1	00 440	3,900	0.00%	10.45%
	Oct	37,312	33,413	3,900	0.0076	10.4370
	Oct Nov	37,312 37,415	33,413	4,107	0.00%	10.98%

Forecasted MWh Offtake has an average growth rate of 4.58%. The load factor for peaking power supply is at 0% while for base load power supply is between 40% - 75% depending on the plant technology.



MWh Output was expected to grow at a rate of 4.50% annually.



Transmission Loss (TL) is expected to be at zero 0%. This is due to the effect of the commercial operations of WESM in Mindanao starting January 26, 2023 which is expected to account for the remaining energy that is not accounted by the bilateral contracted quantities. WES exposure is computed by computing the difference between the Gross Energy Settlement Quantity (GESQ) and the Bilateral Contract Quantity (BCQ).

Further, BUSECO's System Loss is expected to range from 8.44% to 13.22% for the forecasted years. 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. BUSECO has also lined up projects to address the systems loss issue within the next ten years.

## **Power Supply**

Case No.	Туре	GenCo	Minimum MW	Maximum MW	Minimum MWh/yr	Maximum MWh/yr	PSA Start	PSA End
2013-068 RC	Base	Therma South, Inc.	0.80	2.00	7,008	17,520	6/26/2015	6/25/2040
2014-011 RC	Base	GN Power Kauswagan Ltd.	9.09	18.18	79,628	159,256.80	7/26/2019	7/25/2039
2014-152 RC	Base	FDC Misamis Power Corporation	3.20	8.00	28,032	70,080	10/14/2016	10/13/2031
2017-060 RC	Peaking	North Bukidnon Power Corporation	0.00	5.00	480	43,800	9/26/2018	9/25/2033

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 with a maximum contracted capacity of 2 MW equivalent to 17,520 MWh. 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 with a maximum contracted capacity of 18.18 MW equivalent to 159,256.80 MWh. 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. However, last September 6, 2023, the ERC issued a decision prescribing a take-and-pay scheme of the capacity under the contract. This will allow flexibility on the quantity of capacity to be withdrawn from GNPK and further allowing a cheaper supply especially since the WESM is already in place.

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 with a maximum contracted capacity of 8 MW equivalent to 70,080 MWh. 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.

The PSA with **North Bukidnon Power Corporation** filed under ERC Case No. 2017-060 RC has a maximum contracted capacity of 5MW that is embedded in the distribution system of BUSECO. The contract was affected by the Supreme Court's ruling on the Alyansa para sa Bagong Pilipinas Inc. and was mandated by the ERC for termination effective September 6, 2023. Although a motion for reconsideration was filed jointly by PBI and BUSECO, the decision was implemented by BUSECO immediately after the receipt of the order from the ERC.

Case No.	Туре	GenCo	Minimum MW	Maximum MW	Minimum MWh/yr	Maximum MWh/yr	PSA Start	PSA End
Pending	Base	Power Sector Assets and Liabilities Management Corporation	10.80	15.00	94,608	131,400	12/26/2023	12/25/2025

BUSECO was able to secure an extension of its CSEE with PSALM for a capacity of 15MW to cover January 2024 up to December 2025. Although a Letter of Agreement was already signed by both parties, its filing before the ERC is still pending awaiting for some other documents to be completed.

	CSP 1	CSP 2	CSP 3
Туре	Base	Peaking	Base
Minimum MW	2.20	0.00	5.00
Maximum MW	4.40	10	10.00
Minimum MWh/yr	19,272	144	43,800
Maximum MWh/yr	38,544	87,600	87,600
PSA Start	12/26/2026	9/26/2025	12/26/2025
PSA End	12/25/2051	9/25/2035	12/25/2045
Publication	1/26/2025	1/26/2025	1/26/2025
Pre-bid	2/16/2025	2/16/2025	2/16/2025
Opening	4/17/2025	4/17/2025	4/17/2025
Awarding	5/17/2025	5/17/2025	5/17/2025
PSA Signing	6/16/2025	6/16/2025	6/16/2025
Joint Filing	6/25/2025	6/25/2025	6/25/2025

	CSP 4	CSP 5
Туре	Base	Base
Minimum MW	1.00	2.00
Maximum MW	2.00	5.00
Minimum MWh/yr	8,760	17,520
Maximum MWh/yr	17,520	43,800
PSA Start	12/26/2027	12/26/2029
PSA End	12/25/2052	12/25/2039
Publication	12/26/2025	1/26/2025
Pre-bid	1/16/2026	2/16/2025
Opening	3/17/2026	4/17/2025
Awarding	4/16/2026	5/17/2025
PSA Signing	5/16/2026	6/16/2025
Joint Filing	5/25/2026	6/25/2025

BUSECO is planning to conduct five Competitive Selection Processes (CSPs) for its power requirements. These will include three contracts which were previously submitted for approval before the ERC but were affected by the Supreme Court's ruling on the conduct of CSP and another two which will be intended for RPS compliance.

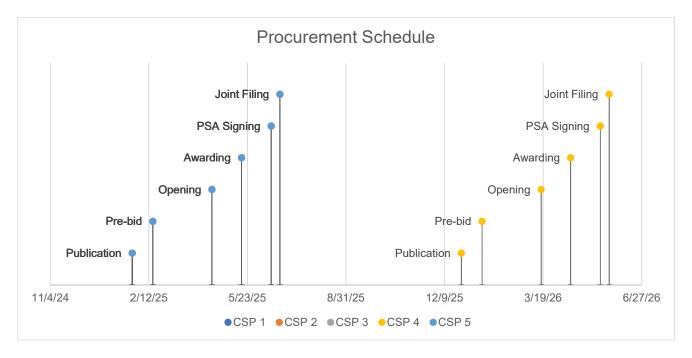
CSP 1 – The contract refers to a 4.4MW hydro power plant project that will be constructed by BUSECO in partnership with two other private entities. It was one of the contracts ruled by the Supreme Court's decision to undergo CSP. Hence, following such order, BUSECO scheduled a CSP which will commence on January 26, 2025 and aims to supply beginning December 26, 2026. It is expected to support for BUSECO's baseload requirement.

CSP 2 – The contract refers to a 10MW embedded diesel plant intended for peaking. It aims to continue the contract that was terminated per ERC order following the Supreme Court's decision for the contract to undergo CSP prior to delivery of power. BUSECO is already reviewing the issuances from the DOE, the ERC and the NEA that is applicable for such contract.

CSP 3 – The contract is an 10MW RE supply intended for RPS compliance starting December 26, 2025. BUSECO previously submitted a proposed Terms of Reference for the said contract, however, several revisions later, BUSECO decided to keep it on hold for further review and finalization especially because of the changes in its duration among others.

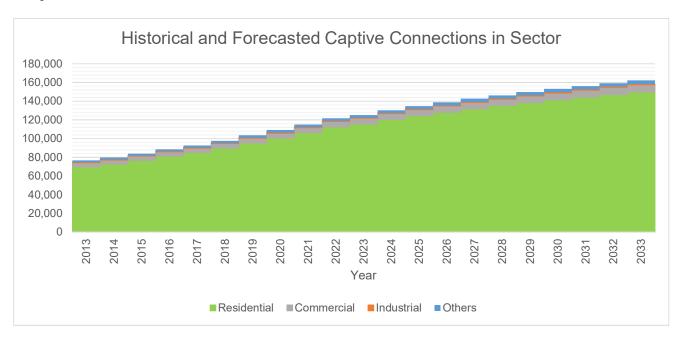
CSP 4 – The contract refers to a 2MW hydro power plant project that is in partnership with LGU-Impasug-ong. It was one of the contracts ruled by the Supreme Court's decision to undergo CSP. It is expected to start delivering power on December 26, 2027.

CSP 5 – The contract is a 5MW RE supply intended for RPS compliance. It is expected to provide power starting December 26, 2029 until December 25, 2039.



Shown above are the indicative timeline for each CSP to be conducted in the coming years. Schedules shown might change in consideration of the processes that needs to be undergone that BUSECO does not have any control with. Final Competitive Selection Process schedule will be posted per CSP guidelines.

## **Captive Customer Connections**



The number of total connections is expected to grow at a rate of 2.63% annually. In 2023, out of the 125,211 consumers, Residential customer class account for 92.33%, Commercial class at 4.79%, Industrial class at 0.50% and others at 2.38%. Since the WESM in Mindanao has just commenced, thus implementation of the RCOA is still pending in the region, all the connected customers of BUSECO is accounted as captive and part of this data except for a certain customer with a special arrangement, that is the Del Monte Philippines Inc. (DMPI). In DMPI's case, although the RCOA is still not yet implemented in the region, it has its own Contract for the Supply of Electric Energy (CSEE) with PSALM but it is physically connected to the infrastructure of BUSECO. With this setup, corresponding data like its demand and consumption is already reported under the switched customer even while its formal migration as a contestable customer happens. This is also the reason why there is a tad bit of difference in the 2022 historical data for the number of industrial consumers.