

Power Supply Procurement Plan [2025-2034]

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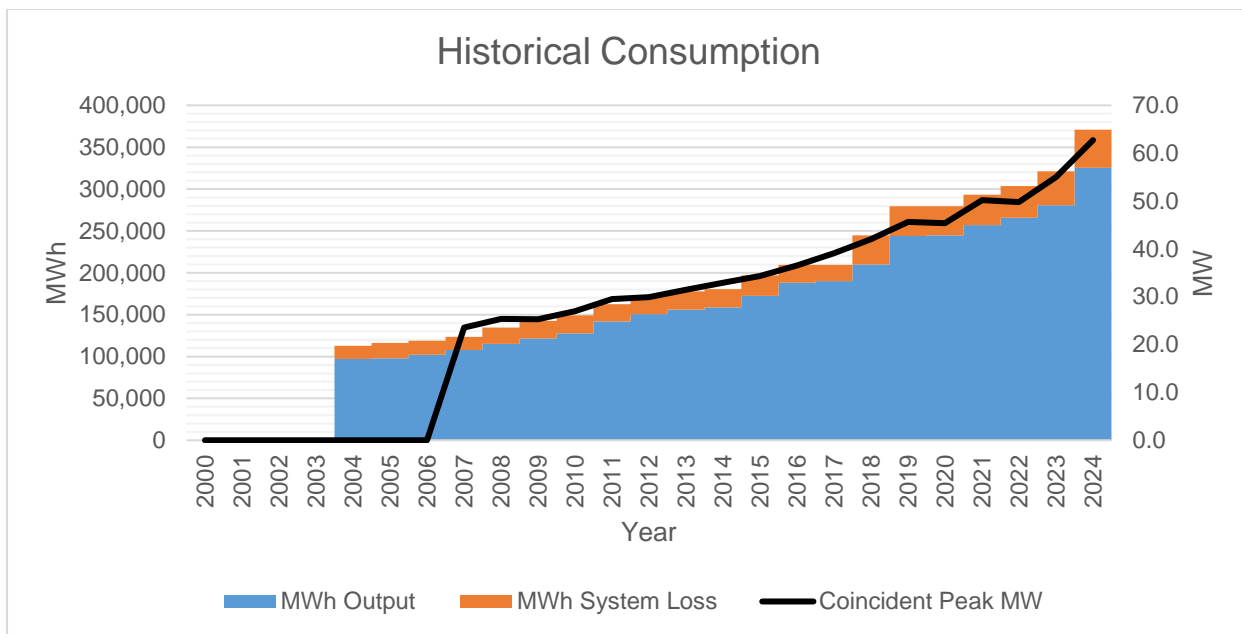
**Zamboanga del Norte Electric Cooperative, Inc.
(ZANECO)**

Historical Consumption Data

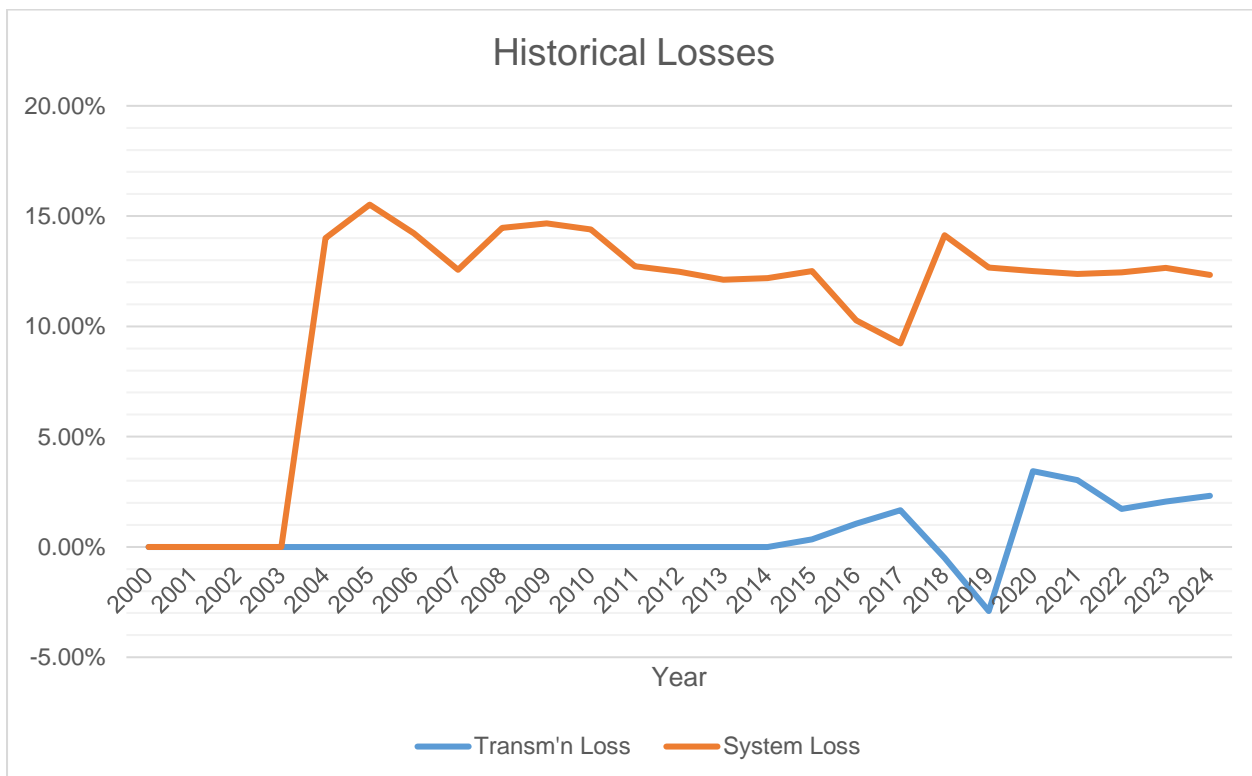
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	0.00	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
2001	0.00	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
2002	0.00	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
2003	0.00	0	0	0	0	0	0.00%	0.00%	0.00%	0.00%
2004	0.00	112,836	0	112,836	97,038	15,798	0.00%	0.00%	0.00%	14.00%
2005	0.00	116,085	0	116,085	98,069	18,017	0.00%	0.00%	0.00%	15.52%
2006	0.00	118,865	0	118,865	101,964	16,902	0.00%	0.00%	0.00%	14.22%
2007	23.56	123,531	0	123,531	108,002	15,530	60%	0.00%	0.00%	12.57%
2008	25.37	134,709	0	134,709	115,229	19,480	61%	0.00%	0.00%	14.46%
2009	25.32	142,739	0	142,739	121,799	20,939	64%	0.00%	0.00%	14.67%
2010	26.95	149,257	0	149,257	127,767	21,490	63%	0.00%	0.00%	14.40%
2011	29.48	162,615	0	162,615	141,919	20,696	63%	0.00%	0.00%	12.73%
2012	29.91	171,982	0	171,982	150,530	21,451	66%	0.00%	0.00%	12.47%
2013	31.42	177,718	0	177,718	156,188	21,530	65%	0.00%	0.00%	12.11%
2014	32.96	180,520	0	180,520	158,508	22,012	63%	0.00%	0.00%	12.19%
2015	34.35	197,788	0	197,116	172,466	24,649	66%	0.00%	0.34%	12.51%
2016	36.53	211,844	0	209,620	188,073	21,547	66%	0.00%	1.05%	10.28%
2017	39.08	213,008	0	209,458	190,119	19,339	61%	0.00%	1.67%	9.23%
2018	42.00	243,414	0	244,611	210,028	34,582	66%	0.00%	-0.49%	14.14%
2019	45.63	271,620	0	279,511	244,090	35,421	70%	0.00%	-2.91%	12.67%
2020	45.37	289,638	0	279,684	244,708	34,976	70%	0.00%	3.44%	12.51%
2021	50.17	302,286	0	293,139	256,839	36,301	67%	0.00%	3.03%	12.38%
2022	49.80	308,953	0	303,639	265,832	37,807	70%	0.00%	1.72%	12.45%
2023	54.99	327,990	65,871	321,217	280,562	40,655	67%	0.00%	2.06%	12.66%
2024	62.72	379,863	123,751	371,052	325,286	45,766	68%	0.00%	2.32%	12.33%

Peak demand increased from 54.99 MW in 2023 to 62.72 MW in 2024. The abnormal fluctuations in peak demand observed between 2020, 2021, and 2022 were attributed to the economic impact of the COVID-19 pandemic. In May 2024, peak demand reached 62.72 MW.

The MWh offtake rose from 327,990 MWh in 2023 to 379,863 MWh in 2024. During the same period, the load factor ranged from 67% to 68%.



MWh Output increased from the year 2023 at 280,562 MWh to 325,286 MWh in the year 2024, while MWh System Loss increased from 40,655 MWh to 45,766 MWh consecutively.

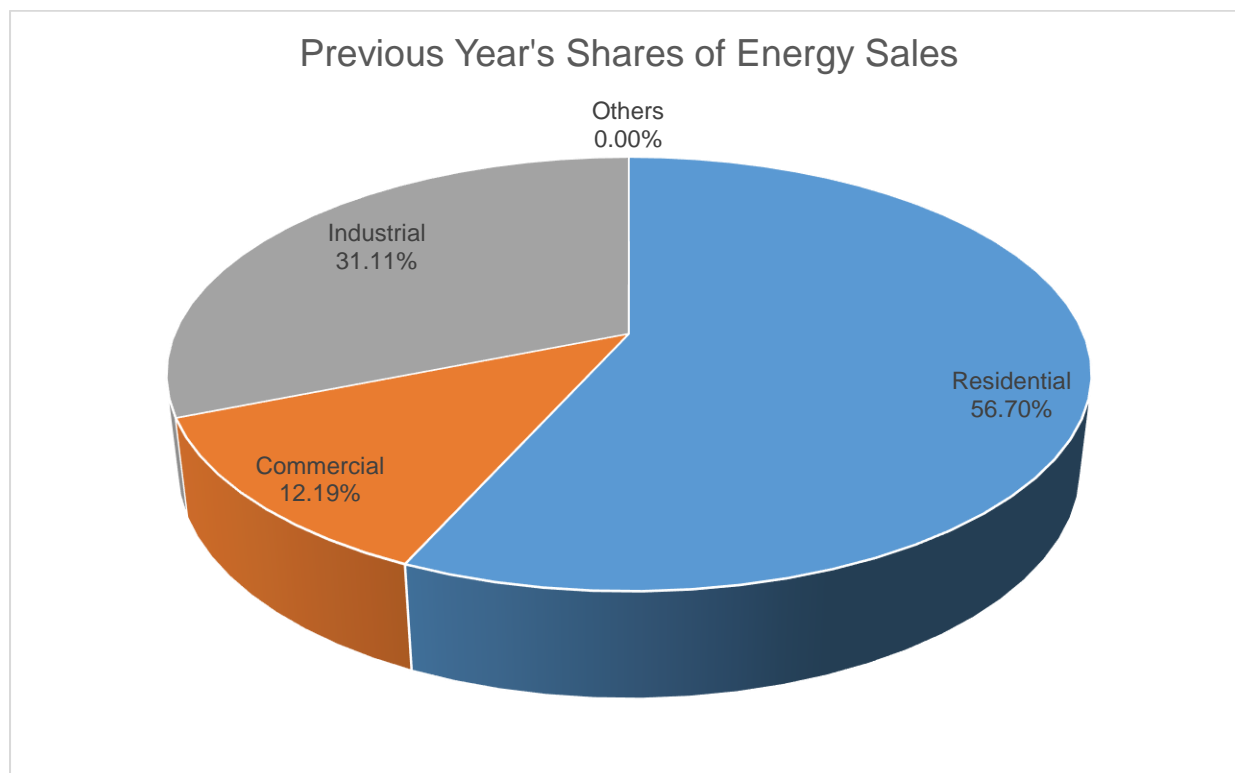


System loss has generally ranged from 9.23% to 15.52%, with the highest recorded system loss of 15.52% occurring in 2005. If the proposed Capital Expenditure Network Projects are approved and implemented, they are expected to reduce system loss to a single-digit percentage, which is the goal of every cooperative.

Historically, there is limited data available for transmission loss, as its calculation only began in 2015 with inconsistent and erratic results. According to the DOE-EPIMB DDP Form 2021-01-001 Template, the Transmission loss + system input (energy purchased) = Offtake MWh, then system loss (sub-transmission loss + substation loss + feeder loss+ non-technical loss) + system output (energy sales) = system input.

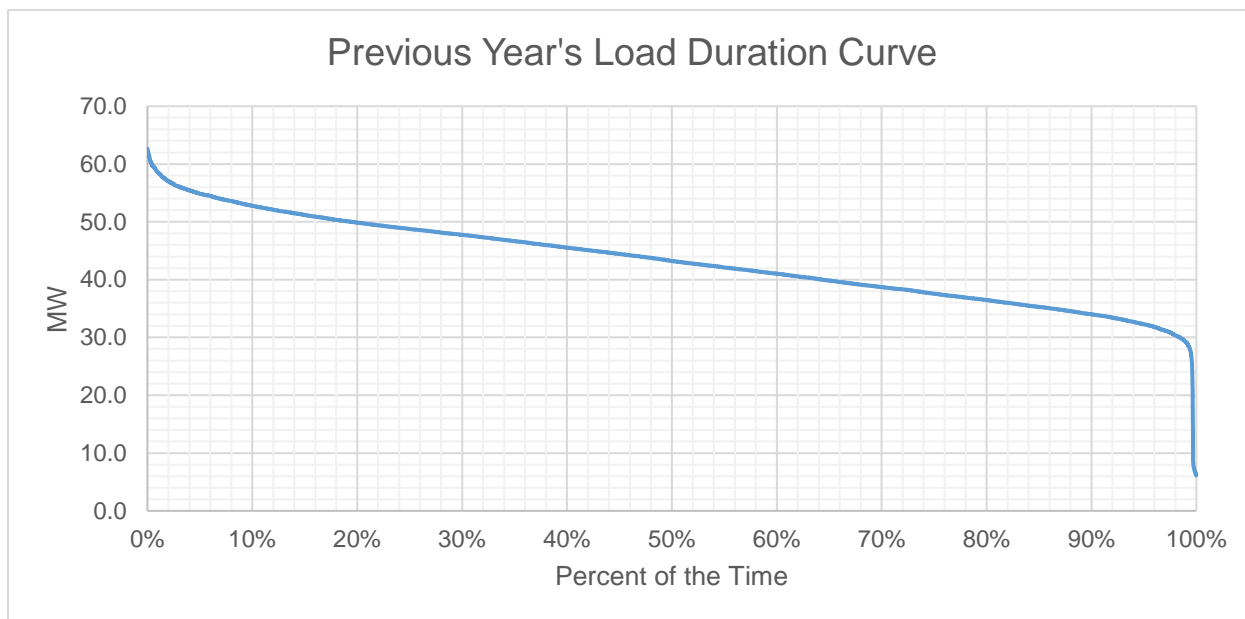
The System Loss Cap from the Energy Regulatory Commission (ERC) under Resolution No.11 Series of 2011, Resolution No.10 2c Series of 2018, and Resolution No. 20, Series of 2017 entitled “Rules for Setting the Distribution System Loss Cap and Establishing Performance Incentive Scheme for Distribution Efficiency” in which the $DSL = SUBTRANSMISSION\ LOSS + SUBSTATION\ LOSS + FEEDER\ LOSS$. With this new scheme, the measurement of the Distribution Utilities will start from the feeder Losses up to the Kilowatt-hour meter of end-users.

System loss was calculated through a Load Flow Study conducted in January 2025 by the Technical Data Processors (TDP) using Synergee software. Ideally, there should be no negative results for either technical loss or non-technical loss. However, for the sake of balancing the system, negative results were reflected.



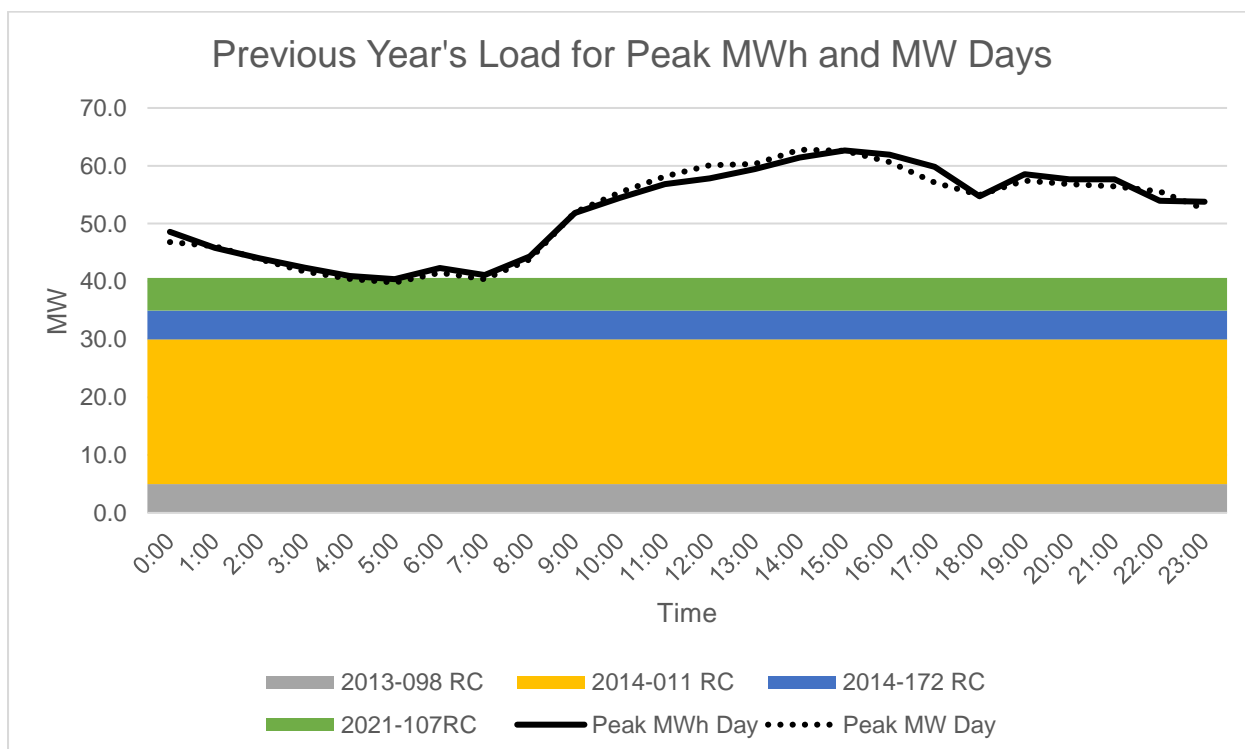
Residential customers account for the bulk of energy sales at 56.70% despite the low number of connections. In contrast, Commercial or low voltage customers accounted for only 12.19% of energy sales and 31.11% for Higher voltage or industrial customers.

Previous Year's Load Profile

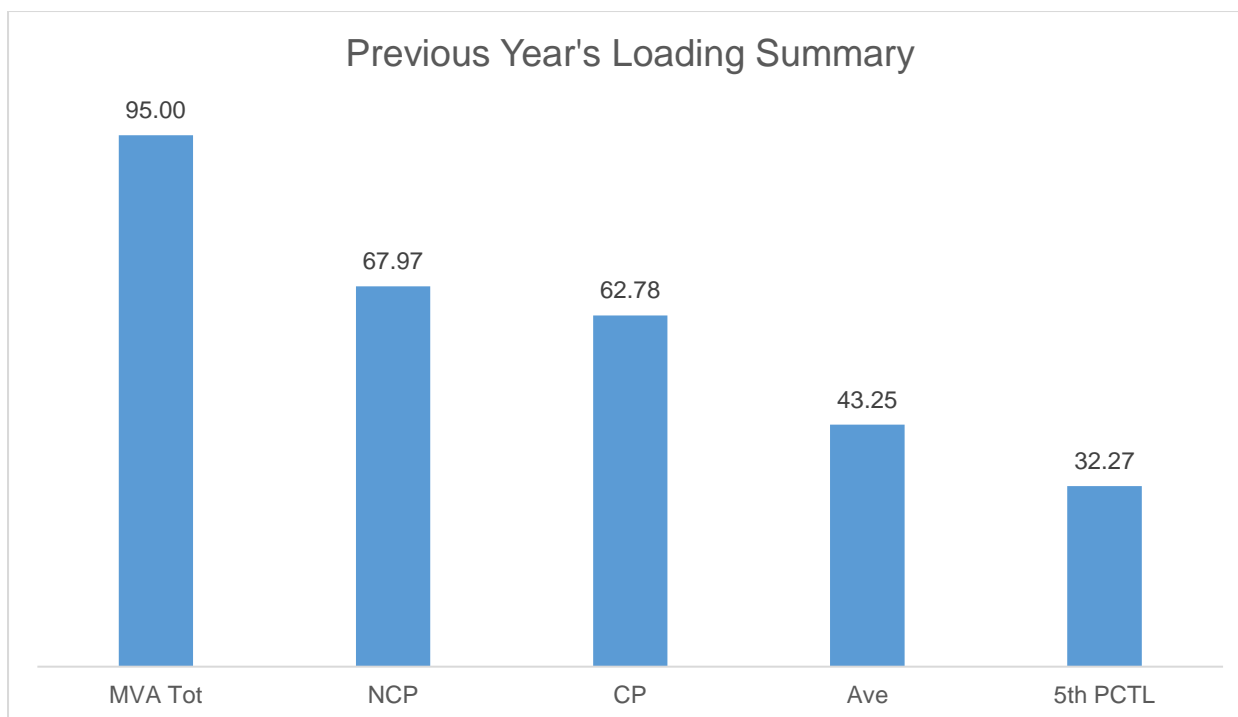


Based on the Load Duration Curve, the minimum load is 6.121 MW and the maximum load is 62.72 MW for the last historical year.

For the load profile of 2024, you will notice that the M3 substation is zero because the substation was on standby. It was removed from the grid last December 13, 2020, for refurbishment. This substation is planned to be repurposed as a mobile power transformer.



Peak demand of 62.72 MW occurred on May 20, 2024, at 2:00 PM, driven by increased consumer consumption due to a reduction in ZANECO's power rates during this period. The peak daily MWh also occurred in May 2024, attributed to the extended dry and warm season in the country, which lasted until that month. As indicated in the load curves, the available supply during this period was lower than the peak demand.



The Non-Coincident Peak Demand is 67.97 MW, which is around 72% of the total substation capacity of 95 MVA at a power factor of 99.36%. The load factor or the ratio between the Average Load of 43.25 MW and the Coincident Peak Demand is 62.78 MW. A safe estimate of the true minimum load is the fifth percentile load of 32.27 MW which is 47% of the Non-Coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
M1-POLO	20	16.681
M2-SALUG	5	5.327
M3-PIAO (Standby)	5	0.000
M4-OBAY	20	21.756
M5-LILOY	5	4.704
M6-IRASAN	20	10.954
M7-SINDANGAN	10	5.964
M8-PETRA CEMENT	10	2.587

The substations loaded above 70% are M2- Salug, M4-Polanco, and M5-Liloy substations. The M2-Salug reached 85% in August 2024 with 100% Power Factor, M4-Polanco reached 87% in May 2024 with 98.67% Power Factor, and M5-Liloy reached 94% in October 2024 at 99.97% Power Factor.

The loading problems of certain substations will be addressed following the energization of the 2x5 MVA Labason substation this year. Furthermore, the management has planned the implementation of the 5 MVA Piñan substation, which is expected to be completed by the end of 2026. The overloaded capacity issue at the M4-Polanco substation will be resolved through the proposed construction of a new 20 MVA substation in Dipolog City. The pre-filing of ZANECO's Multi-Year Capital Expenditure (Capex) Plan for 2025–2027 is currently ongoing.

The M3-Piao (Roxas) substation was taken off-grid on December 13, 2020, for the replacement of its dilapidated wooden substation gantry structure with steel structures, as well as for an upgrade to include a substation automation system and SCADA readiness through the purchase of modern equipment. However, the substation is now planned to be repurposed as a mobile power transformer.

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
2025	Jan	56.98	10.63	30.00	0.000		19%	71%	-16.36
	Feb	55.03	10.24	35.00	0.000		19%	82%	-9.78
	Mar	59.38	10.28	35.00	10.000		17%	93%	-4.10
	Apr	61.67	11.79	35.00	10.000		19%	92%	-4.88
	May	63.40	13.01	35.00	10.000		21%	92%	-5.39
	Jun	61.73	13.60	35.00	10.000		22%	95%	-3.13
	Jul	57.16	12.04	35.00	10.000		21%	100%	-0.12
	Aug	60.35	13.17	35.00	10.000		22%	96%	-2.19
	Sep	58.32	12.10	35.00	10.000		21%	98%	-1.22
	Oct	59.19	13.36	35.00	10.000		23%	99%	-0.84
	Nov	61.14	13.73	35.00	10.000		22%	96%	-2.41
	Dec	61.36	14.64	35.00	10.000		24%	97%	-1.72
2026	Jan	58.59	5.00	35.00	17.351		9%	98%	-1.24
	Feb	56.35	5.00	35.00	15.215		9%	98%	-1.14
	Mar	60.97	5.00	35.00	19.876		8%	98%	-1.10
	Apr	66.34	5.00	35.00	25.125		8%	98%	-1.22
	May	68.18	5.00	35.00	26.978		7%	98%	-1.20
	Jun	66.35	5.00	35.00	25.126		8%	98%	-1.22
	Jul	61.42	5.00	35.00	20.138		8%	98%	-1.28
	Aug	64.82	5.00	35.00	23.576		8%	98%	-1.24
	Sep	62.60	5.00	35.00	21.301		8%	98%	-1.30
	Oct	63.52	5.00	35.00	22.263		8%	98%	-1.25
	Nov	65.58	5.00	35.00	24.489		8%	98%	-1.09
	Dec	65.79	5.00	35.00	24.700		8%	98%	-1.09
2027	Jan	62.80	5.00	35.00	20.000		8%	96%	-2.80
	Feb	60.38	5.00	35.00	20.000		8%	99%	-0.38
	Mar	65.30	5.00	35.00	20.000		8%	92%	-5.30
	Apr	73.97	5.00	35.00	20.000		7%	81%	-13.97
	May	75.93	5.00	35.00	20.000		7%	79%	-15.93

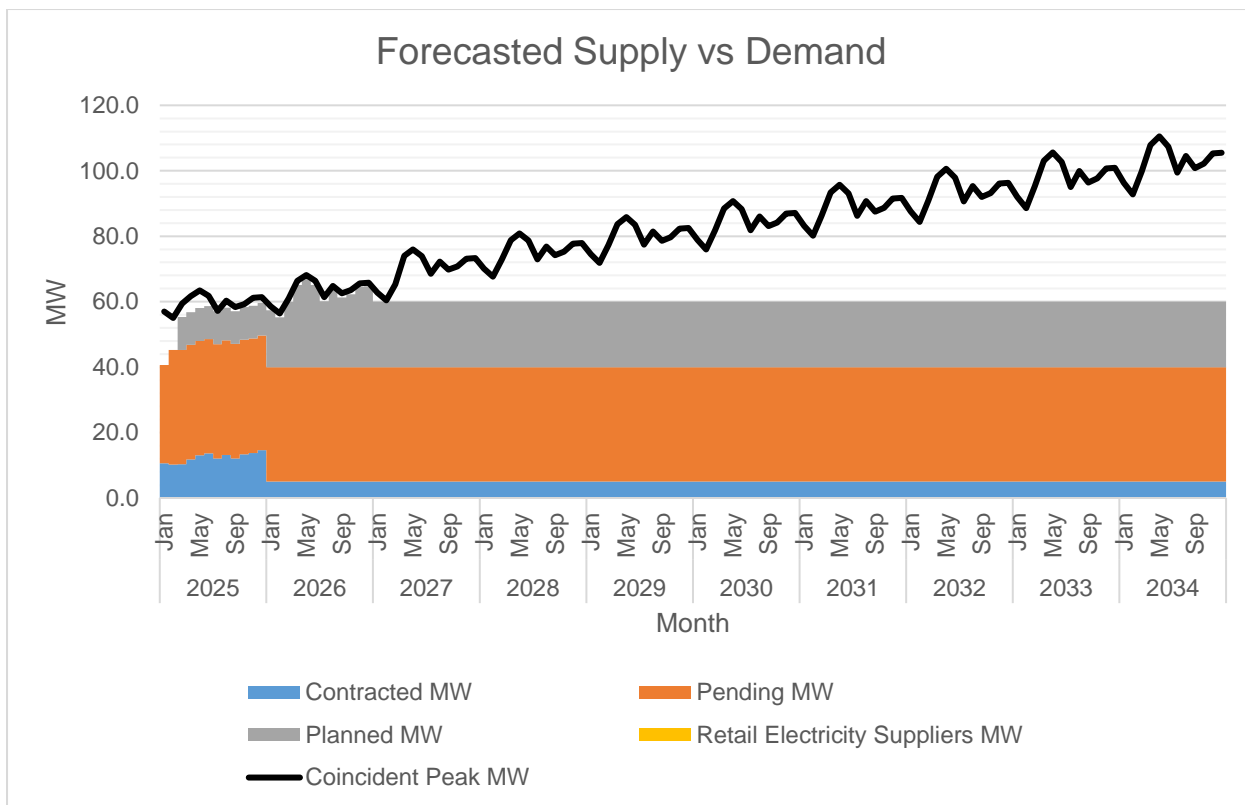
	Jun	73.92	5.00	35.00	20.000		7%	81%	-13.92
	Jul	68.56	5.00	35.00	20.000		7%	88%	-8.56
	Aug	72.21	5.00	35.00	20.000		7%	83%	-12.21
	Sep	69.75	5.00	35.00	20.000		7%	86%	-9.75
	Oct	70.75	5.00	35.00	20.000		7%	85%	-10.75
	Nov	73.10	5.00	35.00	20.000		7%	82%	-13.10
	Dec	73.30	5.00	35.00	20.000		7%	82%	-13.30
2028	Jan	70.10	5.00	35.00	20.000		7%	86%	-10.10
	Feb	67.61	5.00	35.00	20.000		7%	89%	-7.61
	Mar	72.88	5.00	35.00	20.000		7%	82%	-12.88
	Apr	78.81	5.00	35.00	20.000		6%	76%	-18.81
	May	80.87	5.00	35.00	20.000		6%	74%	-20.87
	Jun	78.70	5.00	35.00	20.000		6%	76%	-18.70
	Jul	72.97	5.00	35.00	20.000		7%	82%	-12.97
	Aug	76.83	5.00	35.00	20.000		7%	78%	-16.83
	Sep	74.19	5.00	35.00	20.000		7%	81%	-14.19
	Oct	75.23	5.00	35.00	20.000		7%	80%	-15.23
	Nov	77.71	5.00	35.00	20.000		6%	77%	-17.71
	Dec	77.90	5.00	35.00	20.000		6%	77%	-17.90
2029	Jan	74.47	5.00	35.00	20.000		7%	81%	-14.47
	Feb	71.81	5.00	35.00	20.000		7%	84%	-11.81
	Mar	77.38	5.00	35.00	20.000		6%	78%	-17.38
	Apr	83.65	5.00	35.00	20.000		6%	72%	-23.65
	May	85.81	5.00	35.00	20.000		6%	70%	-25.81
	Jun	83.48	5.00	35.00	20.000		6%	72%	-23.48
	Jul	77.39	5.00	35.00	20.000		6%	78%	-17.39
	Aug	81.45	5.00	35.00	20.000		6%	74%	-21.45
	Sep	78.63	5.00	35.00	20.000		6%	76%	-18.63
	Oct	79.72	5.00	35.00	20.000		6%	75%	-19.72
	Nov	82.32	5.00	35.00	20.000		6%	73%	-22.32
	Dec	82.49	5.00	35.00	20.000		6%	73%	-22.49
2030	Jan	78.85	5.00	35.00	20.000		6%	76%	-18.85
	Feb	76.00	5.00	35.00	20.000		7%	79%	-16.00
	Mar	81.88	5.00	35.00	20.000		6%	73%	-21.88
	Apr	88.49	5.00	35.00	20.000		6%	68%	-28.49

	May	90.75	5.00	35.00	20.000		6%	66%	-30.75
	Jun	88.27	5.00	35.00	20.000		6%	68%	-28.27
	Jul	81.80	5.00	35.00	20.000		6%	73%	-21.80
	Aug	86.08	5.00	35.00	20.000		6%	70%	-26.08
	Sep	83.08	5.00	35.00	20.000		6%	72%	-23.08
	Oct	84.20	5.00	35.00	20.000		6%	71%	-24.20
	Nov	86.92	5.00	35.00	20.000		6%	69%	-26.92
	Dec	87.09	5.00	35.00	20.000		6%	69%	-27.09
2031	Jan	83.22	5.00	35.00	20.000		6%	72%	-23.22
	Feb	80.20	5.00	35.00	20.000		6%	75%	-20.20
	Mar	86.38	5.00	35.00	20.000		6%	69%	-26.38
	Apr	93.33	5.00	35.00	20.000		5%	64%	-33.33
	May	95.69	5.00	35.00	20.000		5%	63%	-35.69
	Jun	93.05	5.00	35.00	20.000		5%	64%	-33.05
	Jul	86.21	5.00	35.00	20.000		6%	70%	-26.21
	Aug	90.70	5.00	35.00	20.000		6%	66%	-30.70
	Sep	87.52	5.00	35.00	20.000		6%	69%	-27.52
	Oct	88.68	5.00	35.00	20.000		6%	68%	-28.68
	Nov	91.53	5.00	35.00	20.000		5%	66%	-31.53
	Dec	91.68	5.00	35.00	20.000		5%	65%	-31.68
2032	Jan	87.59	5.00	35.00	20.000		6%	69%	-27.59
	Feb	84.39	5.00	35.00	20.000		6%	71%	-24.39
	Mar	90.87	5.00	35.00	20.000		6%	66%	-30.87
	Apr	98.17	5.00	35.00	20.000		5%	61%	-38.17
	May	100.63	5.00	35.00	20.000		5%	60%	-40.63
	Jun	97.84	5.00	35.00	20.000		5%	61%	-37.84
	Jul	90.63	5.00	35.00	20.000		6%	66%	-30.63
	Aug	95.32	5.00	35.00	20.000		5%	63%	-35.32
	Sep	91.96	5.00	35.00	20.000		5%	65%	-31.96
	Oct	93.17	5.00	35.00	20.000		5%	64%	-33.17
	Nov	96.14	5.00	35.00	20.000		5%	62%	-36.14
	Dec	96.28	5.00	35.00	20.000		5%	62%	-36.28
2033	Jan	91.96	5.00	35.00	20.000		5%	65%	-31.96
	Feb	88.59	5.00	35.00	20.000		6%	68%	-28.59
	Mar	95.37	5.00	35.00	20.000		5%	63%	-35.37

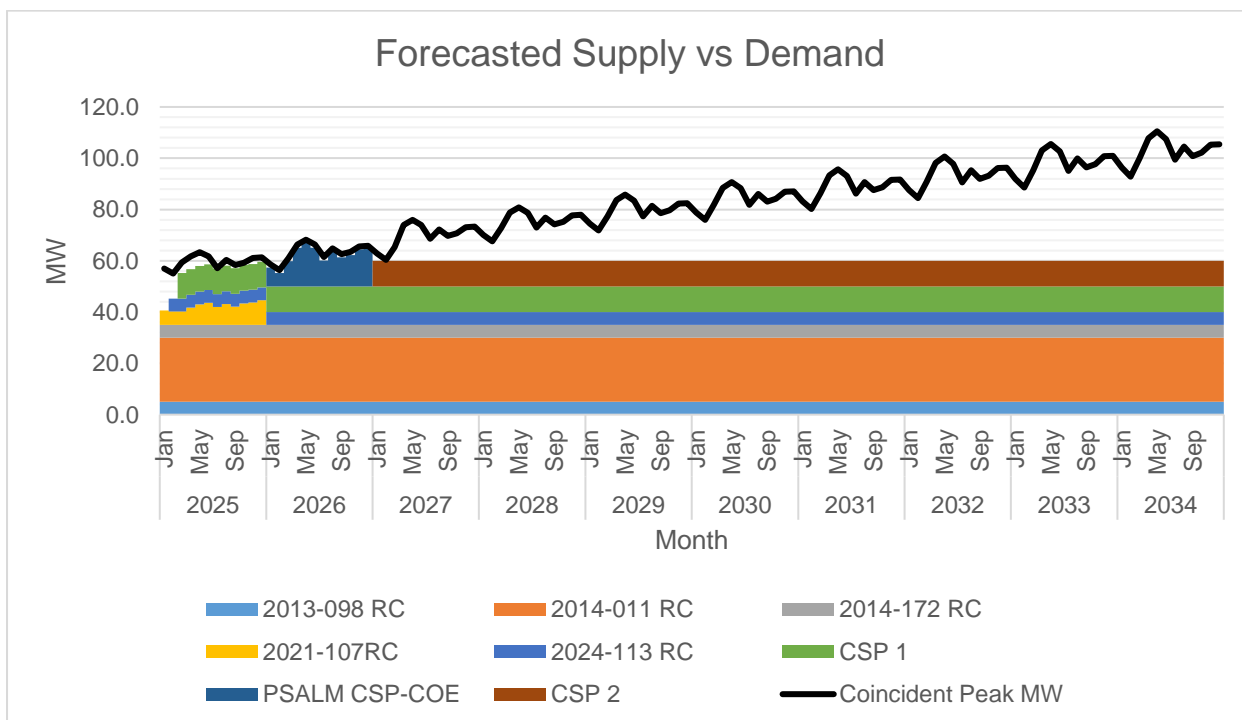
	Apr	103.01	5.00	35.00	20.000		5%	58%	-43.01
	May	105.57	5.00	35.00	20.000		5%	57%	-45.57
	Jun	102.62	5.00	35.00	20.000		5%	58%	-42.62
	Jul	95.04	5.00	35.00	20.000		5%	63%	-35.04
	Aug	99.95	5.00	35.00	20.000		5%	60%	-39.95
	Sep	96.40	5.00	35.00	20.000		5%	62%	-36.40
	Oct	97.65	5.00	35.00	20.000		5%	61%	-37.65
	Nov	100.75	5.00	35.00	20.000		5%	60%	-40.75
	Dec	100.88	5.00	35.00	20.000		5%	59%	-40.88
2034	Jan	96.33	5.00	35.00	20.000		5%	62%	-36.33
	Feb	92.78	5.00	35.00	20.000		5%	65%	-32.78
	Mar	99.87	5.00	35.00	20.000		5%	60%	-39.87
	Apr	107.85	5.00	35.00	20.000		5%	56%	-47.85
	May	110.51	5.00	35.00	20.000		5%	54%	-50.51
	Jun	107.41	5.00	35.00	20.000		5%	56%	-47.41
	Jul	99.45	5.00	35.00	20.000		5%	60%	-39.45
	Aug	104.57	5.00	35.00	20.000		5%	57%	-44.57
	Sep	100.85	5.00	35.00	20.000		5%	59%	-40.85
	Oct	102.13	5.00	35.00	20.000		5%	59%	-42.13
	Nov	105.35	5.00	35.00	20.000		5%	57%	-45.35
	Dec	105.47	5.00	35.00	20.000		5%	57%	-45.47

The Peak Demand was forecasted using Short Term Load Forecasting using Seasonal Effects and was assumed to occur in the month of May based on seven (7) years of historical loads. Monthly Peak Demand is at its lowest in the month of February based on the actual metering data of NGCP. In general, Peak Demand is expected to grow at an annual average growth rate of 5.03%.

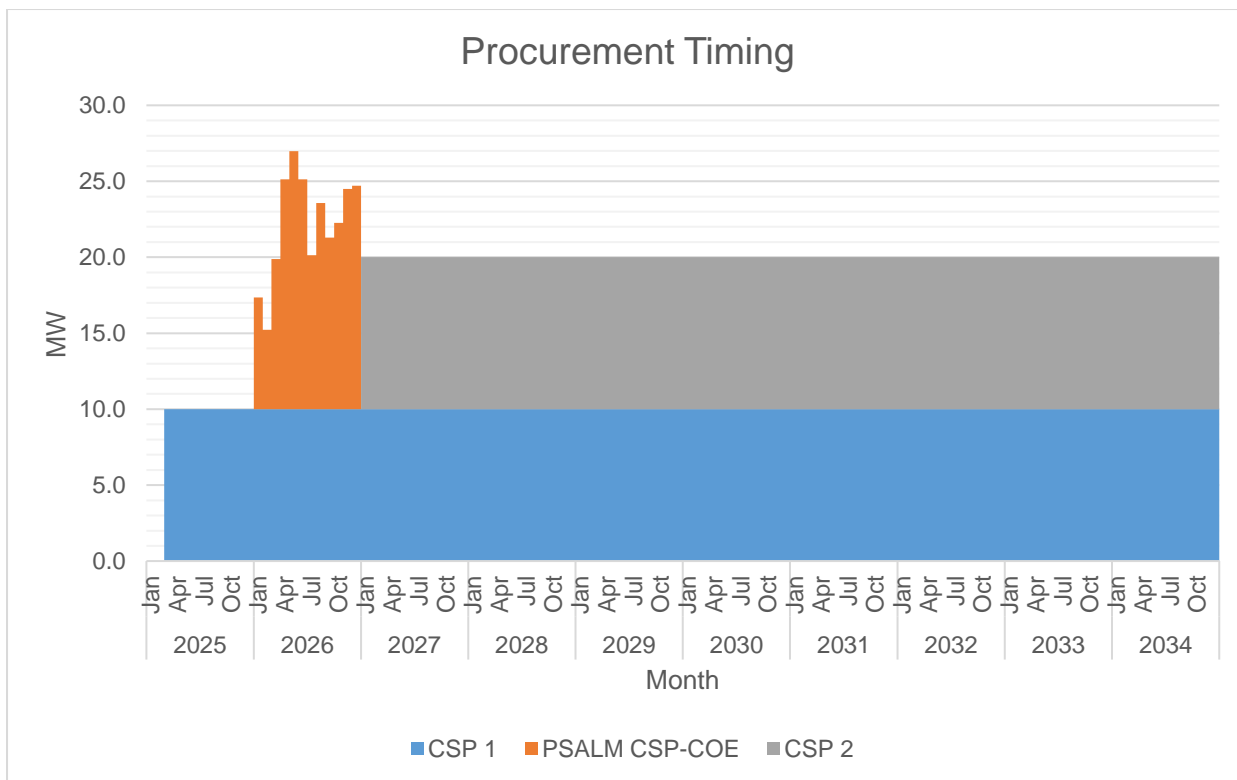
With the commencement of WESM Mindanao last January 26, 2023 pursuant to DOE Circular No. 2022-12-0039, ZANECO sourced additional supply from the market in order to eliminate supply deficiency in the franchise area for years 2023 and 2024. As of to date, the market price is cheaper and for the mean time ZANECO takes the opportunity of buying power in the market, however, the cooperative will be including another supply procurement in the succeeding PSPP submissions. At present, there is an on-going CSP for the supply of Renewable Energy of 10MW, which already secured a Notice to Proceed for PSA signing from NEA, and a CSP-exempted 5MW, which already conducted a public hearing with ERC last December 3 and 10, 2024. Both of the supply will have a commercial operation date on year 2025 subject to ERC's approval. For additional supply, ZANECO plans to renew the CSEE with PSALM for the period December 26, 2025 to December 25, 2026 since the Mindanao plants of PSALM is still due for bidding. Another, ZANECO scheduled a CSP for a 10MW renewable energy supply which will commence in January 2027 in order to alleviate the projected supply deficiency.



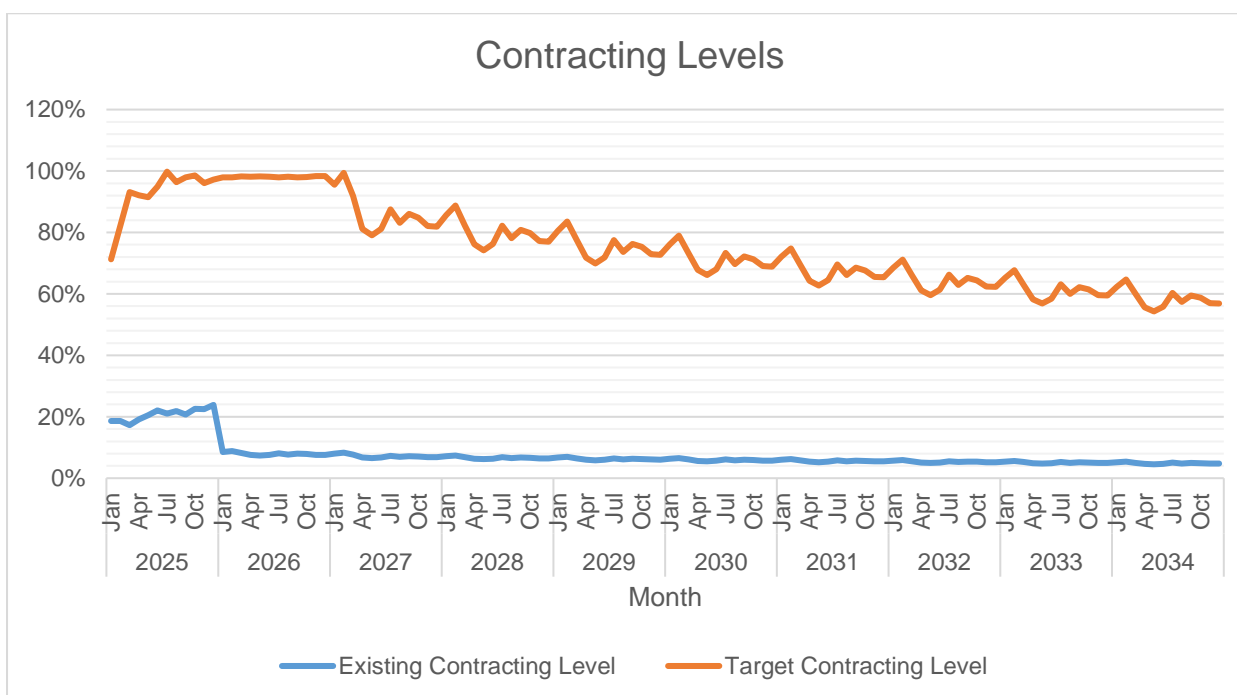
The available supply is generally below the Peak Demand. This is because PSALM shall only supply until year 2025 and the reduction of the supply contract of GNPK from 35MW to 25MW based on the ERC Order dated February 23, 2023 under ERC Case No. 2014-011RC which Commission only acknowledges the original contracted capacity. While, for the succeeding years, ZANECO has planned its procurement of additional power supply requirements for the captive customers. The conduct of another round of CSP is scheduled for a 10MW renewable energy source which supply will commence in January 2027.



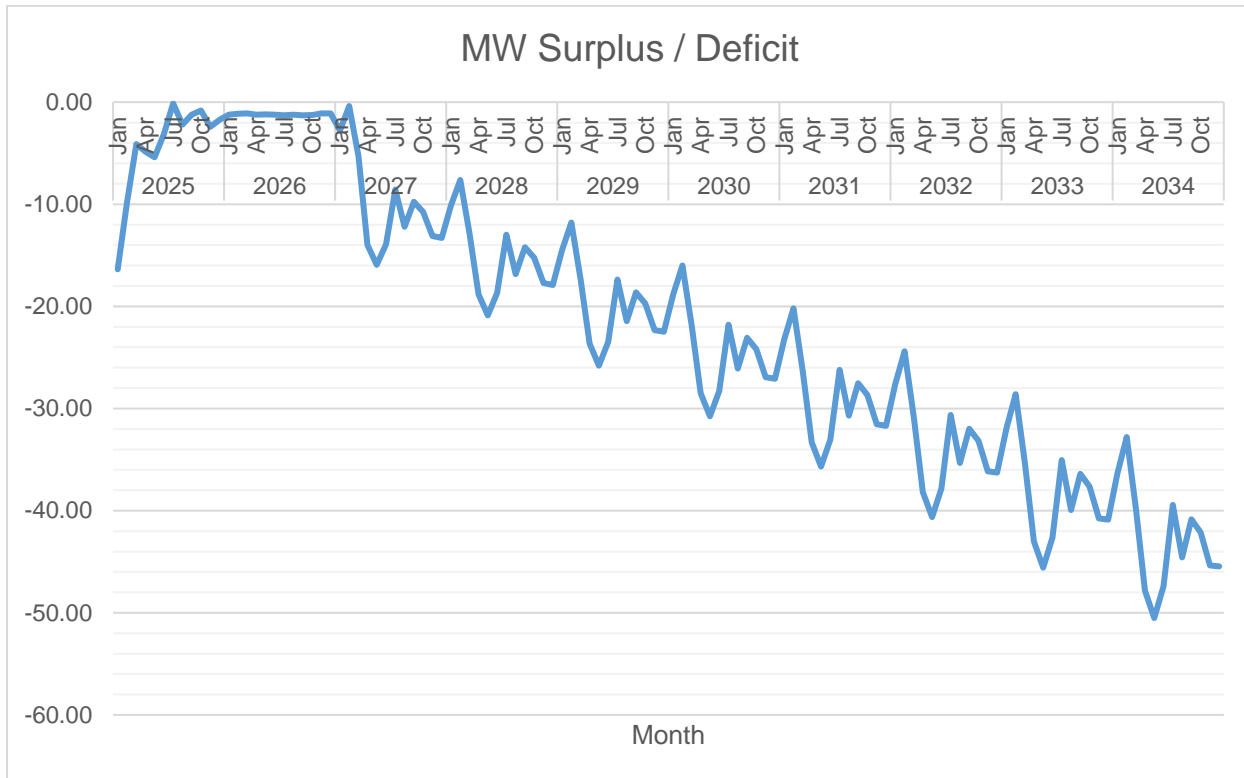
Of the available supply, the largest is 25 MW PSA from GN Power Kauswagan Ltd. Co. This is followed by 10 MW mid-merit supply from the planned first and second CSP of ZANECO.



The first wave of supply procurement will be for 10 MW mid-merit supply planned to be available by the year 2025. This planned CSP was already approved based on the 2021-2030 PSPP of ZANECO. To date, ZANECO has already received the Notice to Proceed Signing of PSA from NEA dated 25 April 2024. This will be followed by the procurement of mid-merit supply from PSALM through a CSP exemption under Section 2.3.4 of the DOE Department Circular No. DC2023-06-0021, which is the supply to Distribution Utilities (DU) from any generating plant embedded in its franchise area utilizing renewable energy resources, wherein the contracted capacity of the embedded generation plant/s shall not exceed 10MW per DU. The third wave of supply procurement is another 10MW mid-merit supply planned to commence supply in the year 2027.



Currently, the contracting level is 19% however, ERC has already granted provisional authority from other power supply agreements which allows them to deliver supply to ZANECO. The highest target contracting level is 100% which is expected to occur in July 2025.



Currently, there is under-contracting by 16.36MW which is highest deficit and is expected to occur on the month of January 2025. The lowest deficit is 50.51 MW which is expected to occur on the month of May 2034.

As per submitted Renewable Portfolio Standard (RPS) compliance, ZANECO has an RE certificate shortfall starting in the year 2023. With this factor, the procurement of two (2) 10MW and a 5MW mid-merit supply would alleviate the supply deficiency in the future, and help with the compliance to the Renewable Portfolio Standards (RPS Rules).

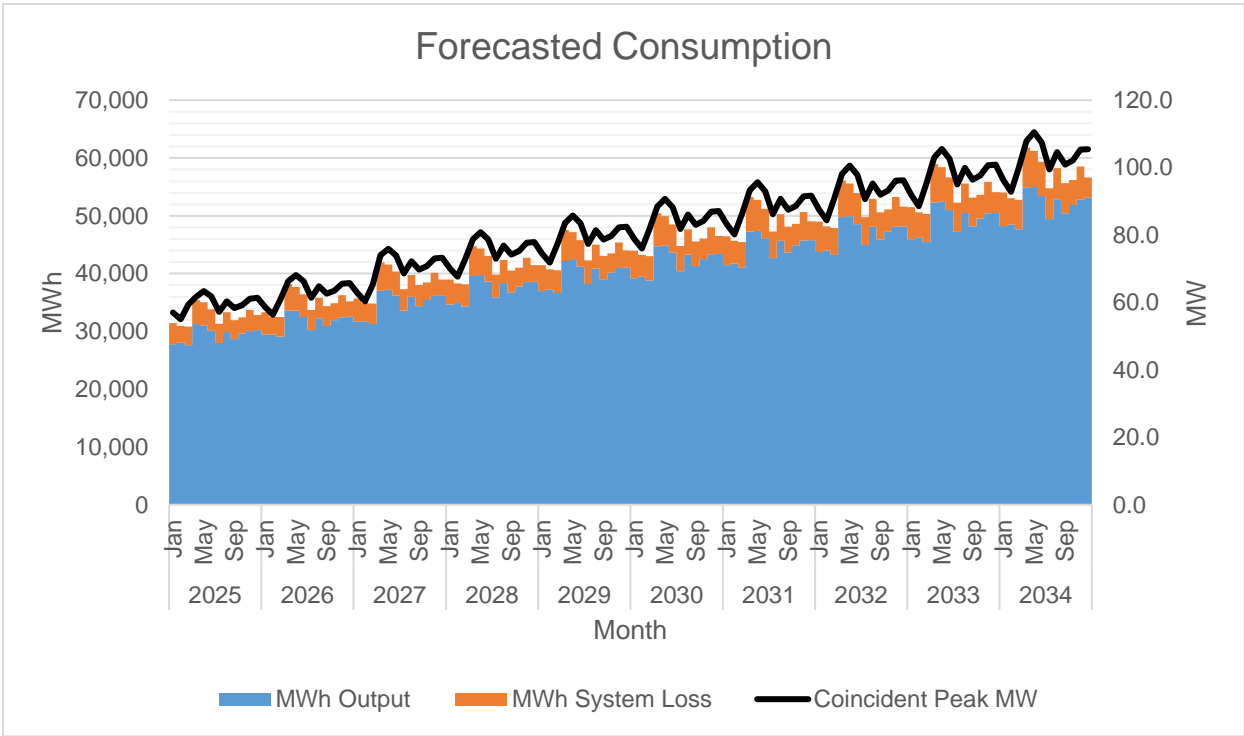
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2025	Jan	32,153	27,787	3,645	2.24%	11.60%
	Feb	31,582	28,046	2,909	1.98%	9.40%
	Mar	31,409	27,608	3,210	1.88%	10.42%
	Apr	36,380	31,261	4,178	2.59%	11.79%
	May	35,952	31,054	3,953	2.63%	11.29%
	Jun	34,712	30,081	3,761	2.51%	11.11%
	Jul	31,922	27,998	3,331	1.86%	10.63%
	Aug	34,117	29,874	3,426	2.39%	10.29%
	Sep	32,493	28,652	3,279	1.73%	10.27%
	Oct	33,120	29,607	2,806	2.14%	8.66%
	Nov	34,540	30,047	3,666	2.40%	10.87%
	Dec	33,696	30,202	2,591	2.68%	7.90%
2026	Jan	34,060	29,474	3,822	2.25%	11.48%
	Feb	33,152	29,462	3,032	1.98%	9.33%
	Mar	33,093	29,119	3,369	1.83%	10.37%
	Apr	39,160	33,576	4,591	2.54%	12.03%
	May	38,693	33,566	4,137	2.56%	10.97%
	Jun	37,353	32,511	3,935	2.43%	10.80%
	Jul	34,321	30,231	3,501	1.72%	10.38%

	Aug	36,682	32,260	3,573	2.32%	9.97%
	Sep	34,911	30,914	3,443	1.58%	10.02%
	Oct	35,566	31,928	2,913	2.04%	8.36%
	Nov	37,090	32,404	3,824	2.32%	10.56%
	Dec	36,165	32,552	2,643	2.68%	7.51%
2027	Jan	36,502	31,675	4,023	2.20%	11.27%
	Feb	35,531	31,668	3,178	1.93%	9.12%
	Mar	35,443	31,277	3,548	1.74%	10.19%
	Apr	42,923	37,050	4,833	2.42%	11.54%
	May	42,573	37,195	4,348	2.42%	10.47%
	Jun	41,293	36,219	4,135	2.28%	10.25%
	Jul	37,874	33,595	3,690	1.56%	9.90%
	Aug	40,609	35,985	3,745	2.17%	9.43%
	Sep	38,568	34,394	3,626	1.42%	9.54%
	Oct	39,216	35,431	3,044	1.89%	7.91%
	Nov	41,032	36,130	4,008	2.18%	9.99%
	Dec	39,985	36,231	2,727	2.57%	7.00%
2028	Jan	39,775	34,649	4,291	2.10%	11.02%
	Feb	39,020	34,923	3,388	1.82%	8.84%
	Mar	38,757	34,340	3,782	1.64%	9.92%
	Apr	45,803	39,574	5,151	2.35%	11.52%
	May	45,413	39,716	4,632	2.34%	10.45%
	Jun	44,033	38,660	4,403	2.20%	10.23%
	Jul	40,373	35,845	3,929	1.49%	9.88%
	Aug	43,274	38,382	3,984	2.10%	9.40%
	Sep	41,085	36,672	3,859	1.35%	9.52%
	Oct	41,762	37,765	3,235	1.82%	7.89%
	Nov	43,681	38,498	4,261	2.11%	9.97%
	Dec	42,553	38,590	2,893	2.51%	6.97%
2029	Jan	42,316	36,966	4,477	2.06%	10.80%
	Feb	41,499	37,245	3,519	1.77%	8.63%
	Mar	41,207	36,614	3,949	1.56%	9.74%
	Apr	48,683	42,185	5,375	2.31%	11.30%
	May	48,253	42,325	4,827	2.28%	10.24%
	Jun	46,773	41,185	4,588	2.14%	10.02%
	Jul	42,872	38,172	4,107	1.38%	9.71%
	Aug	45,938	40,863	4,142	2.03%	9.20%
	Sep	43,602	39,029	4,031	1.24%	9.36%
	Oct	44,307	40,182	3,352	1.75%	7.70%
	Nov	46,330	40,950	4,430	2.05%	9.76%
	Dec	45,121	41,034	2,959	2.50%	6.73%
2030	Jan	44,857	39,208	4,748	2.01%	10.80%
	Feb	43,978	39,491	3,731	1.72%	8.63%
	Mar	43,657	38,812	4,186	1.51%	9.73%
	Apr	51,562	44,709	5,697	2.24%	11.30%
	May	51,093	44,848	5,115	2.21%	10.24%
	Jun	49,512	43,627	4,859	2.07%	10.02%
	Jul	45,371	40,422	4,349	1.32%	9.71%
	Aug	48,603	43,261	4,384	1.97%	9.20%
	Sep	46,119	41,306	4,266	1.19%	9.36%
	Oct	46,853	42,516	3,547	1.69%	7.70%

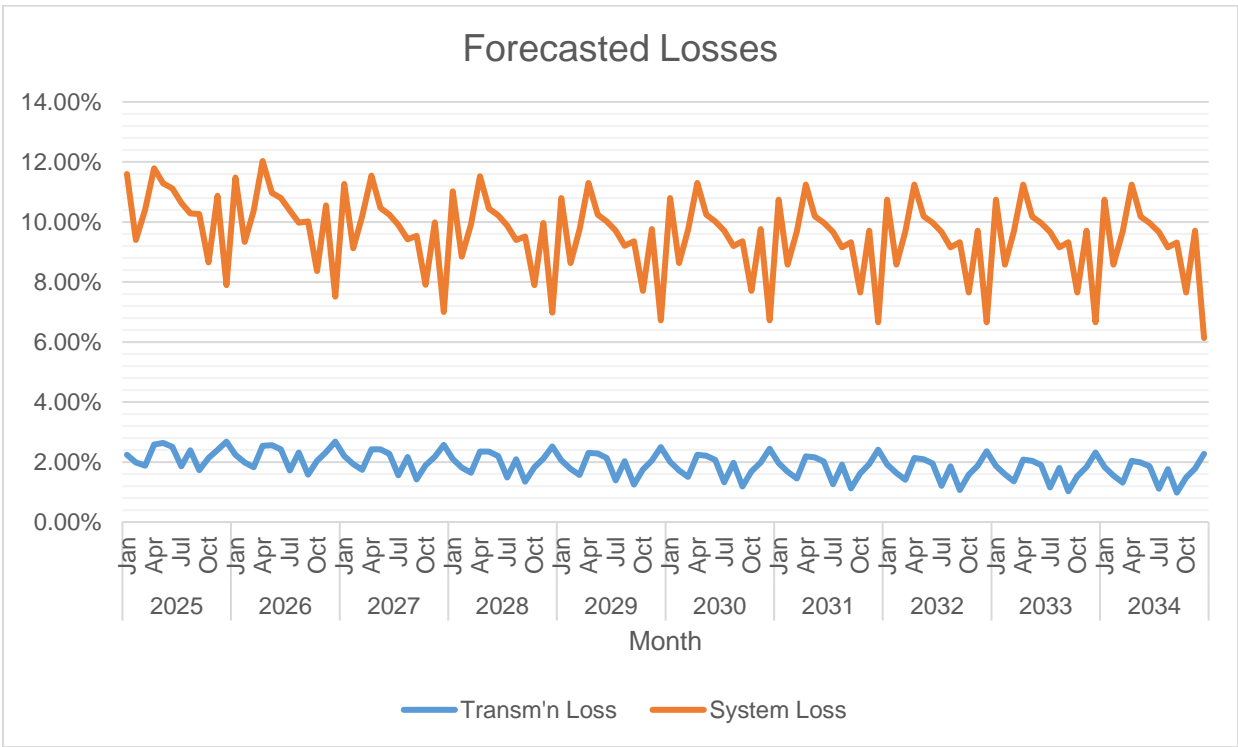
	Nov	48,979	43,318	4,686	1.99%	9.76%
	Dec	47,689	43,393	3,129	2.45%	6.72%
2031	Jan	47,397	41,473	4,993	1.96%	10.75%
	Feb	46,457	41,761	3,919	1.67%	8.58%
	Mar	46,106	41,034	4,402	1.45%	9.69%
	Apr	54,442	47,261	5,989	2.19%	11.25%
	May	53,934	47,397	5,375	2.15%	10.18%
	Jun	52,252	46,095	5,105	2.01%	9.97%
	Jul	47,870	42,696	4,571	1.26%	9.67%
	Aug	51,268	45,685	4,602	1.91%	9.15%
	Sep	48,636	43,608	4,482	1.12%	9.32%
	Oct	49,399	44,876	3,718	1.63%	7.65%
	Nov	51,628	45,713	4,917	1.93%	9.71%
	Dec	50,256	45,779	3,268	2.41%	6.66%
2032	Jan	49,938	43,717	5,263	1.92%	10.75%
	Feb	48,937	44,010	4,130	1.63%	8.58%
	Mar	48,556	43,236	4,638	1.40%	9.69%
	Apr	57,321	49,789	6,309	2.13%	11.25%
	May	56,774	49,924	5,661	2.09%	10.18%
	Jun	54,992	48,541	5,376	1.96%	9.97%
	Jul	50,369	44,949	4,812	1.21%	9.67%
	Aug	53,933	48,087	4,843	1.86%	9.15%
	Sep	51,154	45,889	4,716	1.07%	9.32%
	Oct	51,944	47,214	3,912	1.58%	7.65%
	Nov	54,277	48,085	5,171	1.88%	9.71%
	Dec	52,824	48,142	3,436	2.36%	6.66%
2033	Jan	52,479	45,962	5,533	1.87%	10.75%
	Feb	51,416	46,259	4,341	1.59%	8.58%
	Mar	51,005	45,438	4,874	1.36%	9.69%
	Apr	60,201	52,318	6,629	2.08%	11.25%
	May	59,614	52,451	5,947	2.04%	10.18%
	Jun	57,731	50,987	5,646	1.90%	9.97%
	Jul	52,868	47,203	5,053	1.16%	9.67%
	Aug	56,598	50,489	5,085	1.81%	9.15%
	Sep	53,671	48,170	4,951	1.02%	9.32%
	Oct	54,490	49,552	4,105	1.53%	7.65%
	Nov	56,926	50,457	5,426	1.83%	9.71%
	Dec	55,392	50,505	3,604	2.31%	6.66%
2034	Jan	55,019	48,208	5,803	1.83%	10.74%
	Feb	53,895	48,509	4,551	1.55%	8.58%
	Mar	53,455	47,641	5,110	1.32%	9.69%
	Apr	63,081	54,848	6,950	2.03%	11.25%
	May	62,454	54,979	6,233	1.99%	10.18%
	Jun	60,471	53,434	5,917	1.85%	9.97%
	Jul	55,367	49,457	5,295	1.11%	9.67%
	Aug	59,262	52,892	5,326	1.76%	9.15%
	Sep	56,188	50,452	5,185	0.98%	9.32%
	Oct	57,035	51,892	4,299	1.48%	7.65%
	Nov	59,575	52,831	5,681	1.79%	9.71%
	Dec	57,959	53,170	3,473	2.27%	6.13%

MWh Offtake was forecasted using Short Term Load Forecasting using Seasonal Effects.

System Loss was calculated through a Load Flow Study conducted in January 2025 by the Technical Data Processors (TDP) using Synergee software. Based on the same study, the Distribution System can adequately convey electricity to customers.



MWh Output was expected to grow at an average growth rate of 6.28 annually.



Transmission loss is projected to range from 2.31% to 1.66%, while system loss is expected to decrease from 10.18% to 9.36% by 2034. System loss is anticipated to reach a single-digit level once all Multiyear Capital Expenditure (CapEx) projects for 2019–2021, 2022–2024, and 2025–2027, which have been applied for and pre-filed with the Energy Regulatory Commission, are

approved and implemented. This is particularly dependent on the construction of new substations, as well as the rehabilitation and conductor upgrading of primary lines.

Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2013-098 RC	Base	Therma South, Inc.	2.00	17,520	9/18/2015	9/17/2040
2024-019 RC	Intermediate	Power Sector Assets and Liabilities Management Corporation	5.24	51,789	12/26/2023	12/25/2025

The **PSA with Therma South, Inc. filed with ERC under Case No. 2013-098 RC** was through submission of proposal and was subsequently evaluated prior execution of PSA. It was selected to provide for baseload requirements due to the experienced region-wide power supply deficiency problem in Mindanao. Historically, the utilization of the PSA is 84%. Outages of the plant and reduced nomination led to unserved energy of around 7,147MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 7.14 P/kWh to 7.63 P/KWh in the same period.

The **PSA with Power Sector Assets and Liabilities Management Corporation** filed with ERC was procured under the existing provisions of RA 9136. ZANECO has renewed the CSEE for years 2024-2025. It was selected to provide for intermediate requirements due to the expiration of the existing Contracts for the Supply of Electric Energy (CSEE). Historically, the utilization of the PSA is 85%. Outages of the plant and reduced supply allocations led to unserved energy in the past year of 14,933MWh. The actual billed overall monthly charge under the PSA ranged from 2.59 P/kWh to 2.95 P/KWh in the same period.

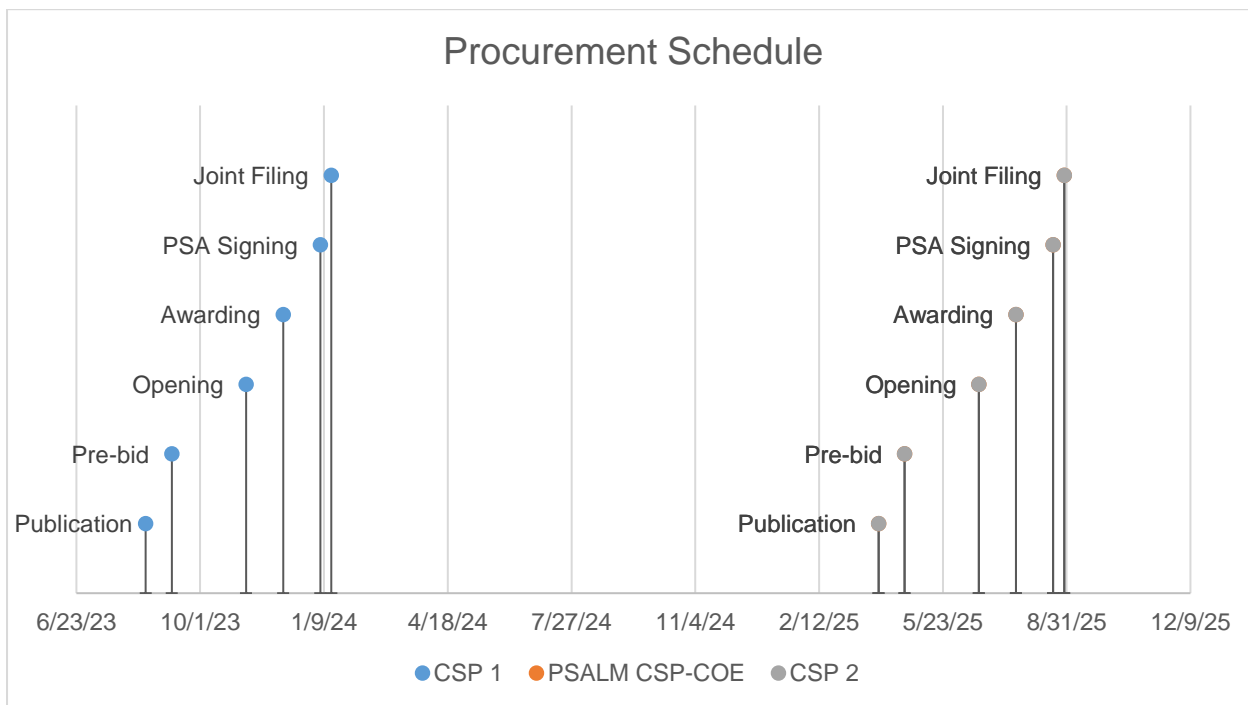
Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2014-011 RC	Base	GN Power Kauswagan Ltd.	12.50	109,500	8/26/2019	8/25/2039
2014-172 RC	Base	Sarangani Energy Corporation	2.00	17,520	10/10/2019	10/9/2044
2024-113 RC	Intermediate	Other	2.00	11,250	2/1/2025	1/31/2045

The **PSA with GN Power Kauswagan Ltd. Co. filed with ERC under Case No. 2014-011 RC** was procured through a competitive bidding. It was selected to provide for baseload requirements due to the insufficiency of existing supply in Mindanao and to address power shortfall in the future. Historically, the utilization of the PSA is 49%. Outages of the plant, and reduction of nomination led to unserved energy of around 112,249 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 6.80 P/kWh to 7.53 P/KWh in the same period. To date, the power supply contract with GNPK is still on a provisional authority as granted by the Energy Regulatory Commission.

The **PSA with Sarangani Energy Corporation filed with ERC under Case No. 2014-172 RC** was procured through submission of proposal and was subsequently evaluated prior execution of PSA. It was selected to provide for baseload requirements due to the risk of suffering power shortages caused by the steadily increasing demand of power in the franchise area. Historically, the utilization of the PSA is 65%. Outages of the plant, and reduction of nomination led to unserved energy of around 15,255 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 7.89 P/kWh to 10.07 P/KWh in the same period. To date, the power supply contract with SEC is still on a provisional authority as granted by the Energy Regulatory Commission.

The **PSA with Astronergy Development Dipolog Inc. filed with ERC under Case No. 2024-113 RC** was procured through submission of proposal and was subsequently evaluated prior execution of PSA. It was selected to provide for mid-merit requirements due to the risk of suffering power shortages caused by the steadily increasing demand of power in the franchise area and compliance to the Renewable Portfolio Standards (RPS) rules. There is no available historical data of this PSA since this is still pending for ERC provisional authority or final approval. To date, the power supply contract with Astronergy has already conducted the required virtual hearing per ERC Order last December 3 and 10, 2024.

	CSP 1	PSALM CSP-COE	CSP 2
Type	Intermediate	Intermediate	Intermediate
Minimum MW	10.00	5.22	10.00
Minimum MWh/yr	70,080	85,375	52,560
PSA Start	3/1/2025	12/26/2025	1/1/2027
PSA End	2/28/2050	12/25/2026	12/31/2046
Publication	8/18/2023	4/1/2025	4/1/2025
Pre-bid	9/8/2023	4/22/2025	4/22/2025
Opening	11/7/2023	6/21/2025	6/21/2025
Awarding	12/7/2023	7/21/2025	7/21/2025
PSA Signing	1/6/2024	8/20/2025	8/20/2025
Joint Filing	1/15/2024	8/29/2025	8/29/2025

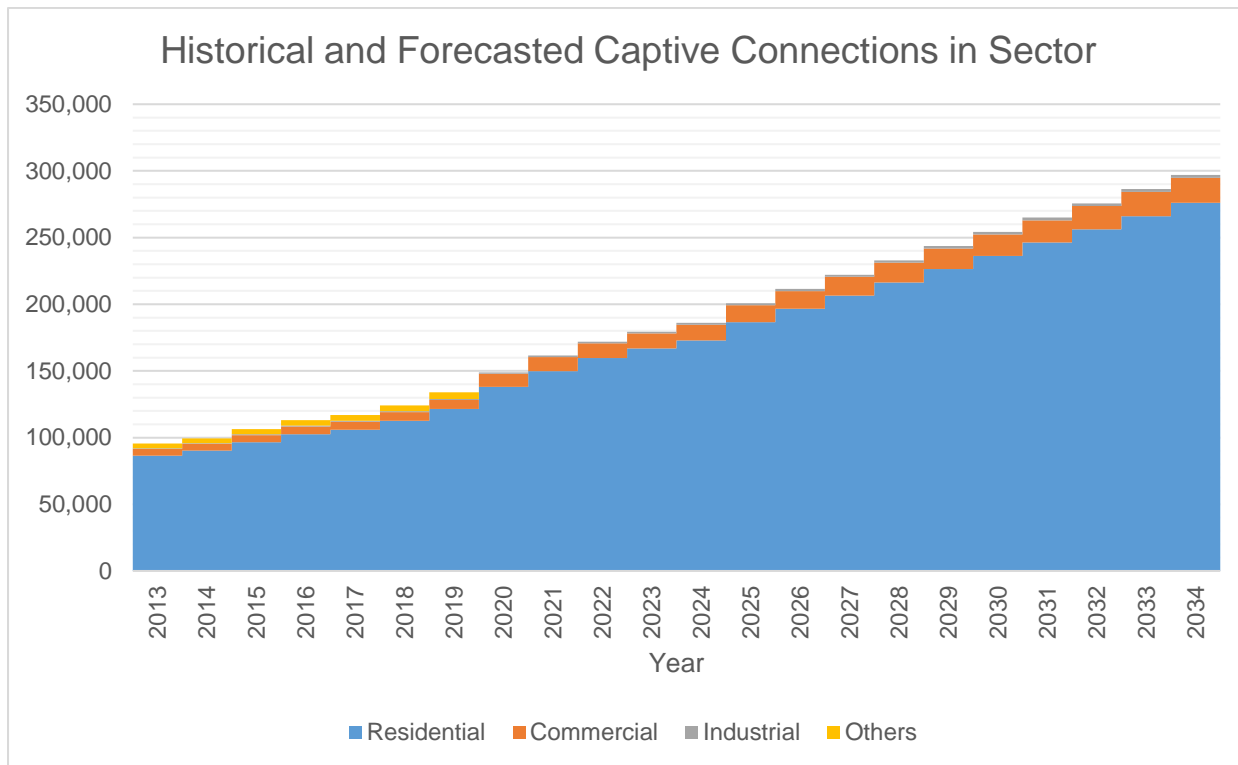


For the procurement of 10MW of supply which is planned to be available on year 2025, the publication for its negotiated procurement was on August 18, 2023. Joint filing is planned on January 15, 2024, or 150 days later, in accordance with DOE's 2018 CSP Policy. This procurement was already approved by DOE and was published in its portal last October 2021. To date, this PSA is due for signing since ZANECO has already received the Notice to Proceed Signing of PSA from NEA dated 25 April 2024.

For the procurement of an average 12.18MW mid-merit supply from PSALM which is planned to be available on the year 2026, a letter request shall be submitted to PSALM in mid-2025. This power supply procurement is exempted from the conduct of CSP under Section 2.3.2 of the DOE Department Circular No. DC2023-06-0021, which is the provision of power supply by the Power Sector Assets and Liabilities Management Corporation (PSALM) through bilateral contracts for the power produced from the undisposed generating assets and contracts with Independent Power Producers.

For the procurement of 10MW of mid-merit supply which is planned to be available on January 2027, the publication for its procurement is on April 01, 2025. Joint filing is planned on August 29, 2025, or 150 days later, in accordance with DOE's 2018 CSP Policy.

Captive Customer Connections



The total number of 186,106 connections in 2024, and 172,961 residential connections is expected to grow at a rate of 4.79% on average annually. The said customer class is expected to account for 93% of the total connections.

Per ERC Resolution 20 Series of 2009, Section 4, Article 6- Development of New Customer Classes 6.4, the new customer class shall be residential, low voltage and higher voltage from the existing customer type: Residential, Commercial, Industrial, Street lights and Public Buildings.