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AGUSAN DEL NORTE ELECTRIC COOPERATIVE, INC.

PSPP POWER SUPPLY PROCUREMENT PLAN

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Historical Consumption Data

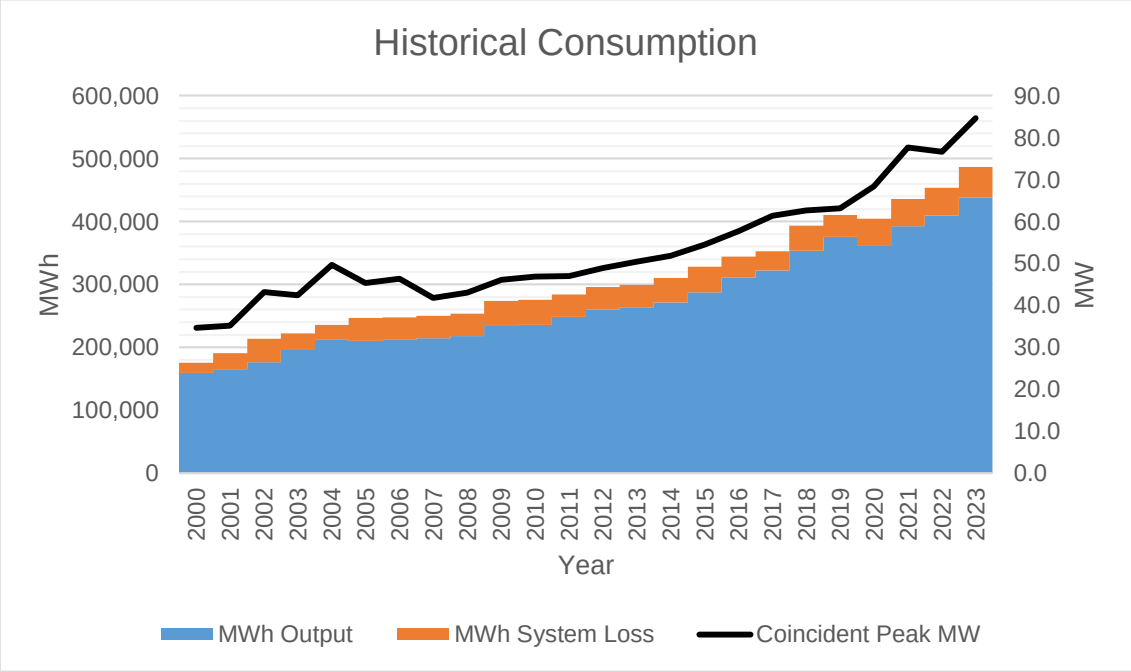
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	34.66	175,214	0	175,214	159,658	15,556	58%	0.00%	0.00%	8.88%
2001	35.14	190,802	0	190,802	165,751	25,051	62%	0.00%	0.00%	13.13%
2002	43.13	213,875	0	213,875	176,680	37,195	57%	0.00%	0.00%	17.39%
2003	42.38	222,018	0	222,018	195,549	26,468	60%	0.00%	0.00%	11.92%
2004	49.71	235,598	0	235,598	212,246	23,353	54%	0.00%	0.00%	9.91%
2005	45.33	246,512	0	246,512	210,000	36,512	62%	0.00%	0.00%	14.81%
2006	46.41	247,636	0	247,636	211,882	35,754	61%	0.00%	0.00%	14.44%
2007	41.79	250,492	0	250,492	214,540	35,952	68%	0.00%	0.00%	14.35%
2008	43.12	253,768	0	253,768	217,878	35,890	67%	0.00%	0.00%	14.14%
2009	46.11	273,824	0	273,824	233,799	40,025	68%	0.00%	0.00%	14.62%
2010	46.93	275,420	0	275,420	235,669	39,750	67%	0.00%	0.00%	14.43%
2011	47.06	284,353	0	284,353	248,902	35,451	69%	0.00%	0.00%	12.47%
2012	48.89	295,621	0	295,621	260,707	34,913	69%	0.00%	0.00%	11.81%
2013	50.48	299,286	0	299,286	263,809	35,476	68%	0.00%	0.00%	11.85%
2014	51.83	311,420	0	310,318	271,004	39,315	68%	0.00%	0.35%	12.67%
2015	54.50	332,398	0	327,941	287,796	40,145	69%	0.00%	1.34%	12.24%
2016	57.75	350,201	0	344,511	311,355	33,156	68%	0.00%	1.62%	9.62%
2017	61.44	359,490	0	353,002	322,616	30,386	66%	0.00%	1.80%	8.61%
2018	62.61	398,387	0	393,165	353,566	39,599	72%	0.00%	1.31%	10.07%
2019	63.15	418,284	0	410,567	375,915	34,652	74%	0.00%	1.84%	8.44%
2020	68.41	412,327	0	404,509	361,550	42,959	67%	0.00%	1.90%	10.62%
2021	77.67	442,636	0	435,704	392,756	42,948	64%	0.00%	1.57%	9.86%
2022	76.71	461,794	0	453,369	409,242	44,128	67%	0.00%	1.82%	9.73%
2023	84.72	487,080	-13,156	486,336	438,435	47,901	66%	0.00%	0.15%	9.85%

Year 2023, aside from returning to normal phase after the COVID-19 pandemic is as well dubbed as the “Economic-Revenge Spending” which directly impact electricity demand & consumption. As a result, as shown in the table:

- Peak Demand increased from 76.71 MW in 2022 to 84.72 MW in 2023 at a rate of 10.44% due to the increase consumption of the public buildings, large load, and commercial consumers.

- MWh Offtake increased by 5.48% from 461,794 MWh in 2022 to 487,080 MWh in 2023. The increase of consumption is predominantly brought about by public buildings, large load, and commercial. The industrial and residential consumers remain at their load requirements.

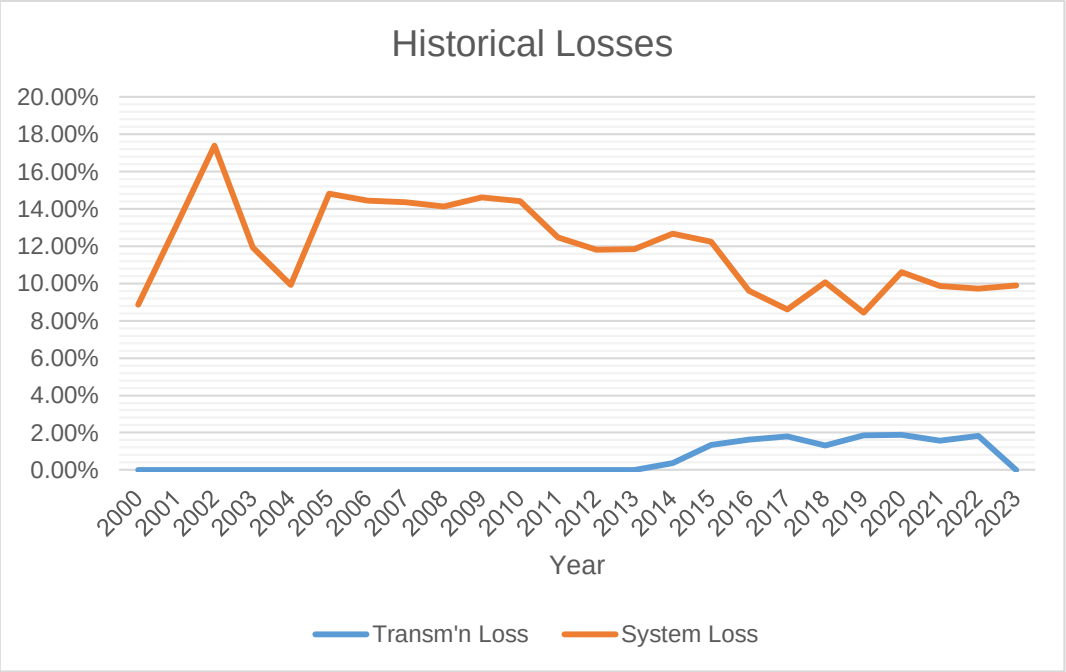
However, within the immediate 2-year comparative period, Load Factor slightly reduced from 67% to 66% due to shifting of load of some Industrial Consumers from day to the evening.



In terms of consumption, a parallel rapid change is as well observed. The MWh Output exponentially increased from year 2022 to year 2023 at a rate of 7.13%. Below shows the comparison of the MWH Sales per customer type.

Customer Type	MWH Sales		% Increase/ (Decrease)
	2022	2023	
Residential	202,830	219,307	8.12%
Commercial	65,061	73,683	13.25%
Industrial	110,664	111,158	0.45%
Public Building	26,917	30,412	12.98%
Street Light	3,076	3,122	1.48%
Own-Use	693	753	8.72%

The drastic increase in the consumption of Public Building at about 12.98% is directly brough by the renovation and expansion done by most of the LGUs right after the pandemic aside from the reasons as mentioned above.



It can be seen in the above table that data for Transmission Line Loss has been filled-up only starting year 2014. It was when Interim Mindanao Electricity Market (IMEM) was established, and monthly reconciliation of MWh purchased from Power Suppliers against National Grid Corporation of the Philippines (NGCP) metered MWH was done in Mindanao. As a result, energy data for transmission line loss became available, and right then it was measured and monitored separately.

However, as could be noticed as well, Transmission Loss started to be accounted at 0.00% starting year 2023. This is due to the commercialization of Wholesale Electricity Spot Market (WESM) in the region of Mindanao last January 26, 2024. Wherein, transmission loss is computed as either part of the line loss or line rental which either form part of the Generation Charge of the contracted Power Suppliers or WESM Bill depending on who would shoulder the line loss or line rental.

Historically, for years 2015 to 2022, Transmission Loss ranged from 0.35% to 1.90%. While System Loss ranged from 8.44% to 17.39%. Transmission Loss peaked at 1.90% on year 2020 and System Loss peaked at 17.39% on year 2002.

The peaking of the System Loss in 2002 was also being attributed by the change of computation. Because starting the said year, the System Loss of the cooperative has been computed in accordance with the following segregation:

- Technical Loss;
- Non-technical Loss; and
- Administrative Loss (Own use)

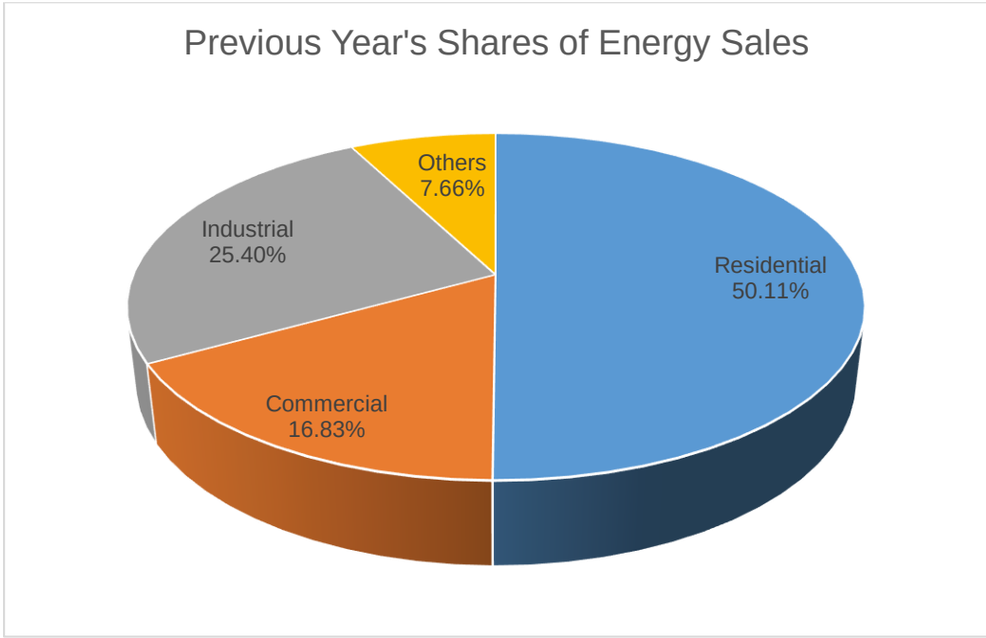
The said segregation was following the Energy Regulatory Commission's (ERC's) guidelines on Unbundling of Rate per Uniform Filing Requirements (UFR) that is in accordance with the provision of Republic Act No. 9136 (EPIRA) and its Implementing Rules and Regulations (IRR).

It is also good to note that starting January 2010, the Administrative Loss or the Cooperative's Own Use has been excluded in the system loss component. The Administrative loss has been recorded as part of electricity sale and has then been recognized as cooperative's operating expense. Such has been done in compliance with the provisional approval of the ERC to ANECO in the cooperative's proposed Revised Rate Schedule under Rules for Setting Electric Cooperatives' Wheeling Rates (RSEC-WR), docketed as ERC Case No. 2009-090 RC. Wherein, the ERC on its decision of the case, last November 22, 2021, confirmed and authorized the cooperative to continue implementing the Revised Rate Schedule until a new rate is determined by the Commission.

On top of that, computation of system loss was further amended in year 2018 when the Commission has issued ERC Resolution No. 10, Series of 2018, entitled “A Resolution Clarifying the System Loss Calculation and Providing the Effectivity of the Rules for Setting the Distribution System Loss Cap.” Wherein, distribution system loss was further segregated to Sub-transmission, Substation, and feeder. Then, the feeder loss is being cap per schedule provided below.

YEAR	PRIVATE DU	ELECTRIC COOPERATIVES CLUSTER		
		1	2	3
2018	6.50%	12.00%	12.00%	12.00%
2019	6.25%	12.00%	11.00%	11.00%
2020 Onwards	6.00%	12.00%	10.25%	10.00%

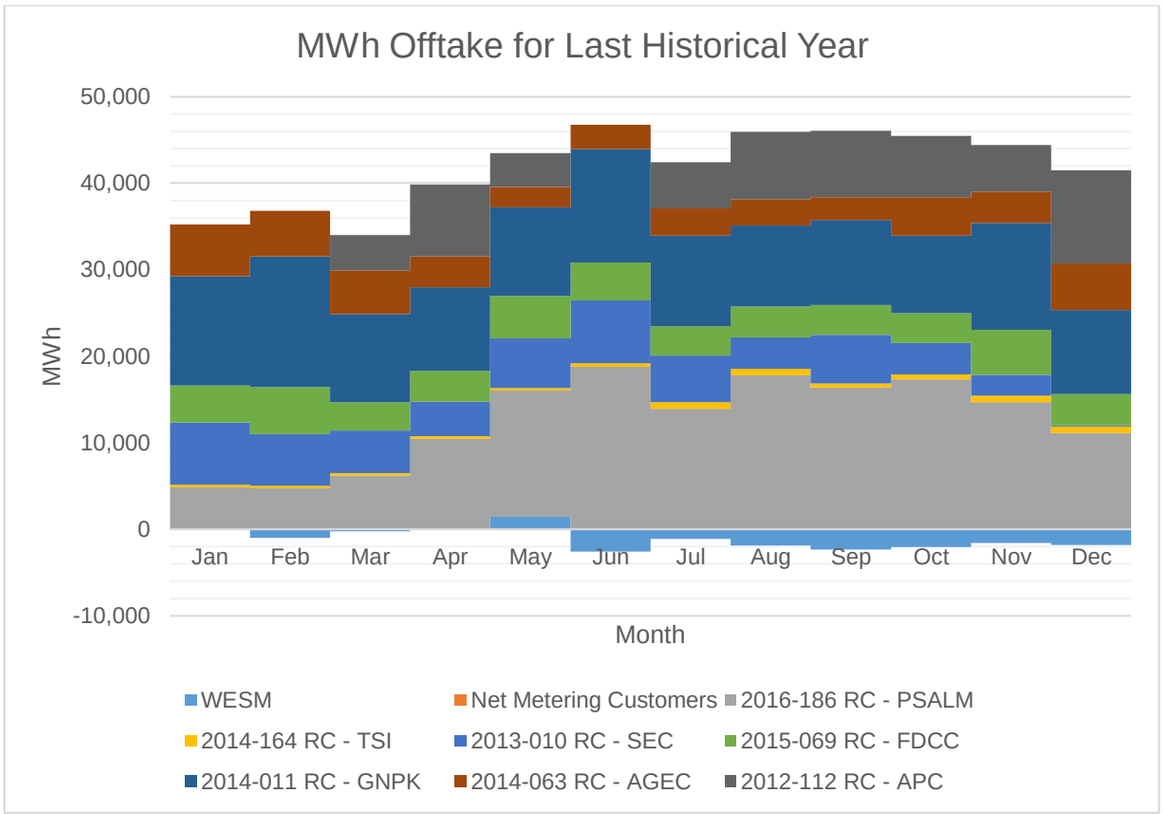
As for ANECO, the cooperative is under cluster 2, in which its feeder loss since the implementation of above segregation is consistently below the cap. Even if to include the Sub-transmission and Substation losses, the total system loss is at single digit starting 2019 except for year 2020. The sudden rise of system loss in year 2020 is attributed to the effect of the health protocols implemented during COVID-19 pandemic. In which, most of the consumption of the higher to low voltage customers reduced materially and swinged to the residential customers wherein the latter’s connection point is at the load end of the distribution system.



Residential customers account for the bulk of energy sales at 50.11% on the average due to being the highest in number of connections. In contrast, sector accounted as Others, composed of Low & Higher Voltage Public Building & Street Light customers accounted for only 7.66% of energy sales due to relatively low energy consumption aside from having low number of connections. As for Industrial Customers, though accounted as the lowest in terms of number of customers, it is second highest in terms of consumption due to being highly intensive in the utilization of electricity.

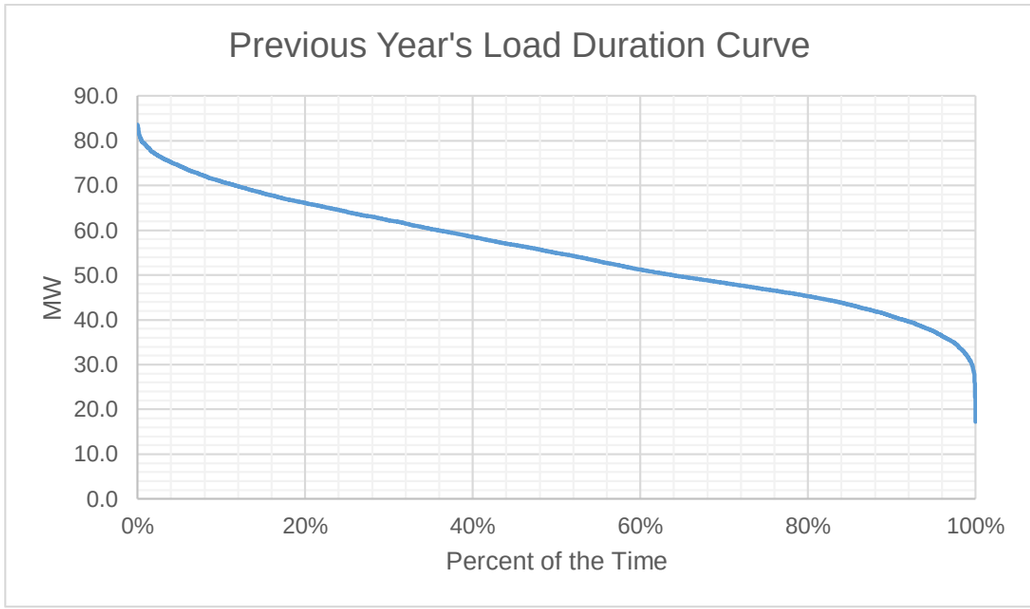
List of Power Suppliers as of December 2023

GENERATION COMPANIES	ERC CASE NUMBER	LOCATION	FUEL TYPE	STATUS OF ERC APP'N	CONTRACT		MINIMUM	
					CAP. (MW)	PERIOD (YRS)	MWh/yr	MW
1. National Power Corp. Power Sector Assets and Liabilities Management Corporation (NPC – PSALM)	2016-186RC	Mindanao	Mix of Hydro, Geothermal & Coal	Approved	36	4 (until Dec 2025)	170,030	19.75
2. Sarangani Energy Corporation (SEC)	2013-010RC	Maasim, Sarangani Province	Coal	Approved	10	25 (until 2041)	35,040	4.00
3. Therma South, Inc. (TSI)	2014-164RC	Davao City	Coal	Approved	1	25 (until 2040)	4,380	0.50
4. FDCUI - MISAMIS POWER COR.	2015-069RC	Villanueva, Mis. Oriental	Coal	Approved	12	25 (until 2041)	42,048	4.80
5. GN Power Kauswagan Ltd. Co. (GNPK)	2014-011RC	Kauswagan, Lanao Del Norte	Coal	Provisional Authority	24.96	25 (until 2042)	109,325	12.48
6. Asiga Green Energy Corporation (AGEC)	2014-063 RC	Santiago, Agusan Del Norte	Hydro	Approved	8	25 (until 2044)	35,040	4.00
7. Agusan Power Corporation	2012-112RC	Jabonga, Agusan Del Norte	Hydro	Provisional Authority	24.9	25 (Dec 2048)	87,250	9.96
8. ANECO Modular Generator Sets	2019-072RC	Aneco Warehouse, Brgy. Bit-Os, Butuan City	Diesel	For Approval	10	N/A	0.00	0.00
TOTAL					**126.86**		**483,113.00**	**55.49**

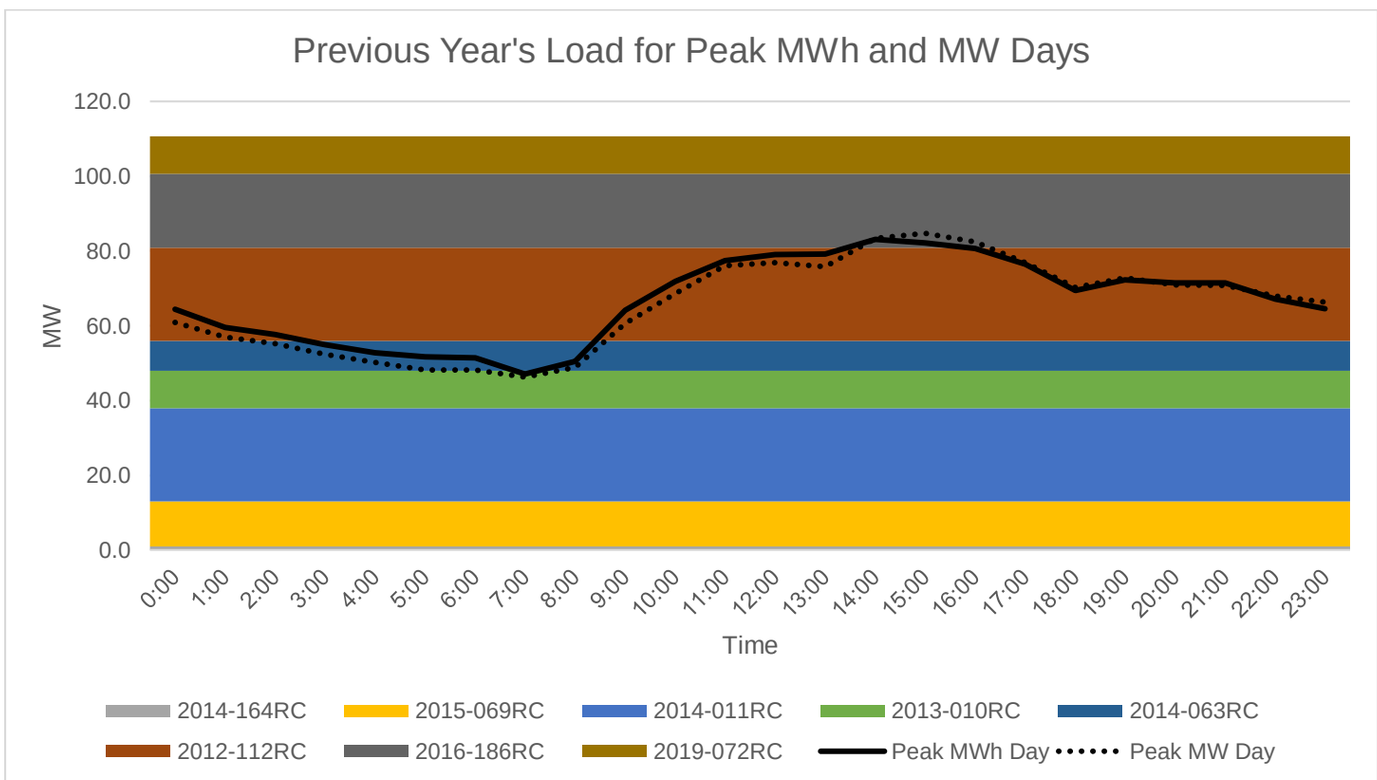


For 2023, the total Offtake quantity for the last historical year is within the range stipulated in the Power Supply Agreements (PSA). The PSA with ERC Case Number 2016-186 RC under RC-PSALM accounts for the bulk of MWh Offtake followed by the PSA with ERC Case Number 2014-011 RC under GNPK.

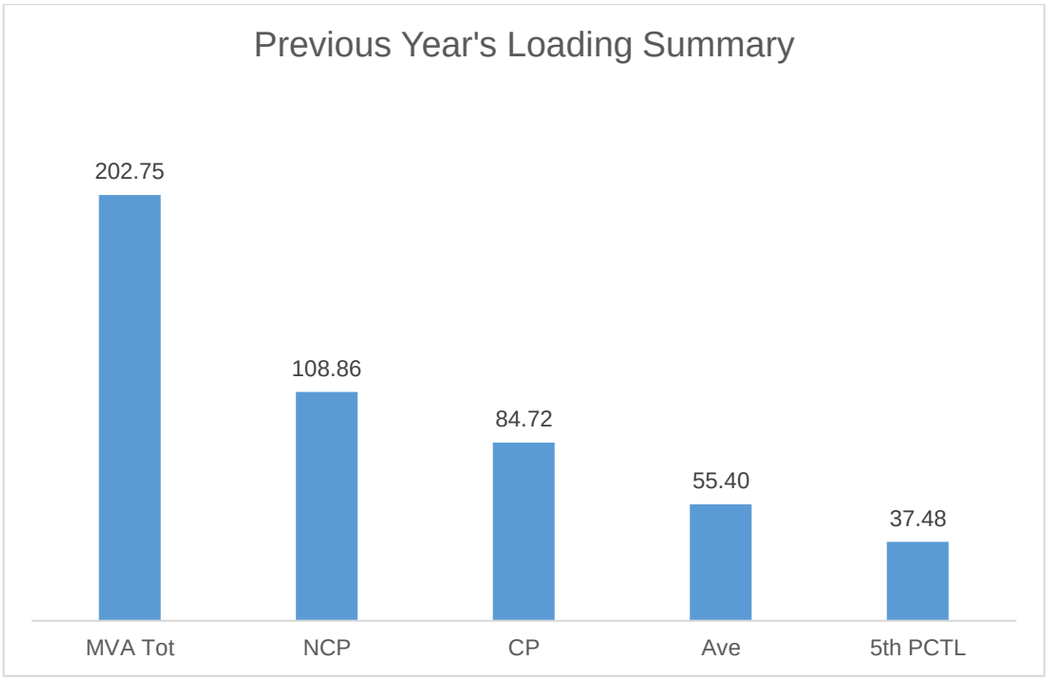
Previous Year's Load Profile



As depicted on the Load Duration Curve, the based load is approximately 30 MW and the maximum load is approximately 84.72 MW for the last historical year. Based on the Load Duration Curve above, Peaking Load occurs at around 12% of the time, Intermediate Load occurs at around 88% of the time and Base Load occurs at 100% of the time.



Peak demand (MW) occurred on three (3) PM due to the change of demand of commercial, public buildings, industrial and large load consumers brought about by major utilization of air-conditioning units. As shown in the Load Curves, the available supply is higher than the Peak Demand. Specifically, the Peak Demand of 84.72 MW on the previous year occurred on May 12, 2023 (Friday) at 3 o' clock in the afternoon.



The Non-Coincident Peak Demand is 108.86 MW, which is around 53.69% of the total substation capacity of 202.75 MVA at a power factor of 93.58%. The load factor or the ratio between the Average Load of 55.40 MW and the Non-Coincident Peak Demand is 50.89%. A safe estimate of the true minimum load is the fifth percentile load of 37.48 MW which is 34.43% of the Non-Coincident Peak Demand.

No.	Metering Point per WESM Registration	Location	Substation MVA	Substation Peak MW
1	M1 – Butuan (Lumbocan Totalizer)	Butuan City, Agusan del Norte	47.5	35.044
2	M5 – Nasipit	Municipality of Nasipit, Agusan del Norte	6.25	4.661
3	M8 – Manapa S/S	Municipality of Buenavista, Agusan del Norte	6.25	4.463
4	M10 – Butuan (Santiago) Totalizer	Butuan City, Agusan del Norte	81.75	24.608
5	M11 – Dumayokdok	Butuan City, Agusan del Norte	15	10.849
6	AGEC	Municipality of Santiago, Agusan del Norte	10	8.174
7	APC	Municipality of Jabonga, Agusan del Norte	36	21.064
TOTAL			**202.75**	**108.863**

The Substations connected within the enumerated metering points are the following:

- M1: Ambago, Libertad and Bayanihan Substations
- M5: Kinabjangan Substation
- M8: Manapa Substation
- M10: Ampayon, Soriano, Cabadbaran, and Santiago Substations as well as privately owned EMCO and PSPI Substations
- M11: Villakananga Substation and Privately owned Gaisano Substation
- AGEC: ASIGA Green Energy Corporation
- APC: Agusan Power Corporation

The substation loaded at above 70% are Ambago, Libertad, Villakananga, Manapa, and Kinabjangan as of to date. Just if in case there will be Substation/s that would reach the above 70% or at critical loading capacity, the loading problem will be solved by transferring load to adjacent substation. This will be aided as well with one of the Capital Expenditure Projects of years 2020-2022. That is, the uprating of the substation transformer capacity of Villakananga Substation from 10 MVA to 20 MVA then relocation of its existing 10 MVA substation transformer to Manapa substation. Uprating the latter from 5 MVA to 10 MVA. Further, CAPEX 2023-2025, includes uprating of Ambago substation from 10 MVA to 20 MVA and relocation of its existing 10 MVA substation transformer to Kinabjangan substation. Uprating the latter from 5 MVA to 10 MVA.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	76.82	50.74	49.86		66%	131%	23.78
	Feb	76.76	50.04	49.86		65%	130%	23.14
	Mar	79.08	57.00	49.86		72%	135%	27.78
	Apr	82.74	66.03	49.86		80%	140%	33.15
	May	87.16	72.73	49.86		83%	141%	35.43
	Jun	86.34	79.34	49.86		92%	150%	42.86
	Jul	84.43	71.99	49.86		85%	144%	37.42
	Aug	84.84	76.95	49.86		91%	149%	41.96
	Sep	84.09	79.49	49.86		95%	154%	45.26
	Oct	85.34	76.40	49.86		90%	148%	40.92
	Nov	85.44	72.47	49.86		85%	143%	36.89
	Dec	81.87	67.33	49.86		82%	143%	35.32
2025	Jan	80.44	54.30	49.86		67%	129%	23.71
	Feb	80.35	53.48	49.86		67%	129%	22.99
	Mar	82.44	60.49	49.86		73%	134%	27.90
	Apr	86.35	69.76	49.86		81%	139%	33.27
	May	90.86	76.84	49.86		85%	139%	35.84
	Jun	89.99	83.86	49.86		93%	149%	43.73
	Jul	88.03	75.92	49.86		86%	143%	37.74
	Aug	88.29	80.85	49.86		92%	148%	42.42
	Sep	87.56	83.75	49.86		96%	153%	46.04
	Oct	88.84	80.71	49.86		91%	147%	41.73
	Nov	89.02	77.02	49.86		87%	143%	37.87
	Dec	85.05	71.53	49.86		84%	143%	36.34
2026	Jan	84.10	31.00	59.86		37%	108%	6.76
	Feb	84.01	31.00	59.86		37%	108%	6.85
	Mar	85.89	31.00	59.86		36%	106%	4.97
	Apr	90.06	31.00	59.86		34%	101%	0.80
	May	94.66	31.00	59.86	4.10	34%	100%	0.30
	Jun	93.75	31.00	59.86	3.50	34%	101%	0.61
	Jul	91.75	31.00	59.86	1.50	34%	101%	0.61
	Aug	91.87	31.00	59.86	1.50	34%	101%	0.49
	Sep	91.13	31.00	59.86	1.50	35%	101%	1.23
	Oct	92.43	31.00	59.86	1.87	34%	100%	0.30
	Nov	92.71	31.00	59.86	2.15	34%	100%	0.30
	Dec	88.33	31.00	59.86		35%	103%	2.53
2027	Jan	87.81	31.00	59.86		35%	103%	3.05
	Feb	87.73	31.00	59.86		35%	104%	3.13
	Mar	89.43	31.00	59.86		35%	102%	1.43
	Apr	93.86	31.00	59.86	3.30	34%	100%	0.30
	May	98.58	31.00	59.86	8.02	34%	100%	0.30
	Jun	97.62	31.00	59.86	7.06	34%	100%	0.30
	Jul	95.58	31.00	59.86	5.02	34%	100%	0.30
	Aug	95.58	31.00	59.86	5.02	34%	100%	0.30
	Sep	94.81	31.00	59.86	4.25	34%	100%	0.30
	Oct	96.12	31.00	59.86	5.56	34%	100%	0.30
	Nov	96.52	31.00	59.86	5.96	34%	100%	0.30
	Dec	91.70	31.00	59.86	1.14	34%	100%	0.30
2028	Jan	91.56	31.00	59.86	1.00	34%	100%	0.30
	Feb	91.51	31.00	59.86	0.95	34%	100%	0.30

	Mar	93.05	31.00	59.86	2.49	34%	100%	0.30
	Apr	97.76	31.00	59.86	7.20	34%	100%	0.30
	May	102.60	31.00	59.86	12.04	34%	100%	0.30
	Jun	101.61	31.00	59.86	11.05	34%	100%	0.30
	Jul	99.51	31.00	59.86	8.95	34%	100%	0.30
	Aug	99.42	31.00	59.86	8.86	34%	100%	0.30
	Sep	98.58	31.00	59.86	8.02	34%	100%	0.30
	Oct	99.90	31.00	59.86	9.34	34%	100%	0.30
	Nov	100.44	31.00	59.86	9.88	34%	100%	0.30
	Dec	95.16	31.00	59.86	4.60	34%	100%	0.30
2029	Jan	95.35	31.00	59.86	4.79	34%	100%	0.30
	Feb	95.36	31.00	59.86	4.80	34%	100%	0.30
	Mar	96.76	31.00	59.86	6.20	34%	100%	0.30
	Apr	101.75	31.00	59.86	11.19	34%	100%	0.30
	May	106.74	31.00	59.86	16.18	34%	100%	0.30
	Jun	105.70	31.00	59.86	15.14	34%	100%	0.30
	Jul	103.56	31.00	59.86	13.00	34%	100%	0.30
	Aug	103.39	31.00	59.86	12.83	34%	100%	0.30
	Sep	102.46	31.00	59.86	11.90	34%	100%	0.30
	Oct	103.78	31.00	59.86	13.22	34%	100%	0.30
	Nov	104.48	31.00	59.86	13.92	34%	100%	0.30
	Dec	98.72	31.00	59.86	8.16	34%	100%	0.30
2030	Jan	99.18	31.00	59.86	8.62	34%	100%	0.30
	Feb	99.27	31.00	59.86	8.71	34%	100%	0.30
	Mar	100.56	31.00	59.86	10.00	34%	100%	0.30
	Apr	105.84	31.00	59.86	15.28	34%	100%	0.30
	May	110.99	31.00	59.86	20.43	34%	100%	0.30
	Jun	109.91	31.00	59.86	19.35	34%	100%	0.30
	Jul	107.72	31.00	59.86	17.16	34%	100%	0.30
	Aug	107.48	31.00	59.86	16.92	34%	100%	0.30
	Sep	106.45	31.00	59.86	15.89	34%	100%	0.30
	Oct	107.76	31.00	59.86	17.20	34%	100%	0.30
	Nov	108.63	31.00	59.86	18.07	34%	100%	0.30
	Dec	102.37	31.00	59.86	11.81	34%	100%	0.30
2031	Jan	103.06	31.00	59.86	12.50	34%	100%	0.30
	Feb	103.24	31.00	59.86	12.68	34%	100%	0.30
	Mar	104.44	31.00	59.86	13.88	34%	100%	0.30
	Apr	110.03	31.00	59.86	19.47	34%	100%	0.30
	May	115.35	31.00	59.86	24.79	34%	100%	0.30
	Jun	114.23	31.00	59.86	23.67	34%	100%	0.30
	Jul	111.99	31.00	59.86	21.43	34%	100%	0.30
	Aug	111.71	31.00	59.86	21.15	34%	100%	0.30
	Sep	110.53	31.00	59.86	19.97	34%	100%	0.30
	Oct	111.83	31.00	59.86	21.27	34%	100%	0.30
	Nov	112.90	31.00	59.86	22.34	34%	100%	0.30
	Dec	106.11	31.00	59.86	15.55	34%	100%	0.30
2032	Jan	106.98	31.00	59.86	16.42	34%	100%	0.30
	Feb	107.27	31.00	59.86	16.71	34%	100%	0.30
	Mar	108.42	31.00	59.86	17.86	34%	100%	0.30
	Apr	114.31	31.00	59.86	23.75	34%	100%	0.30
	May	119.83	31.00	59.86	29.27	34%	100%	0.30
	Jun	118.65	31.00	59.86	28.09	34%	100%	0.30
	Jul	116.36	31.00	59.86	25.80	34%	100%	0.30
	Aug	116.07	31.00	59.86	25.51	34%	100%	0.30
	Sep	114.72	31.00	59.86	24.16	34%	100%	0.30

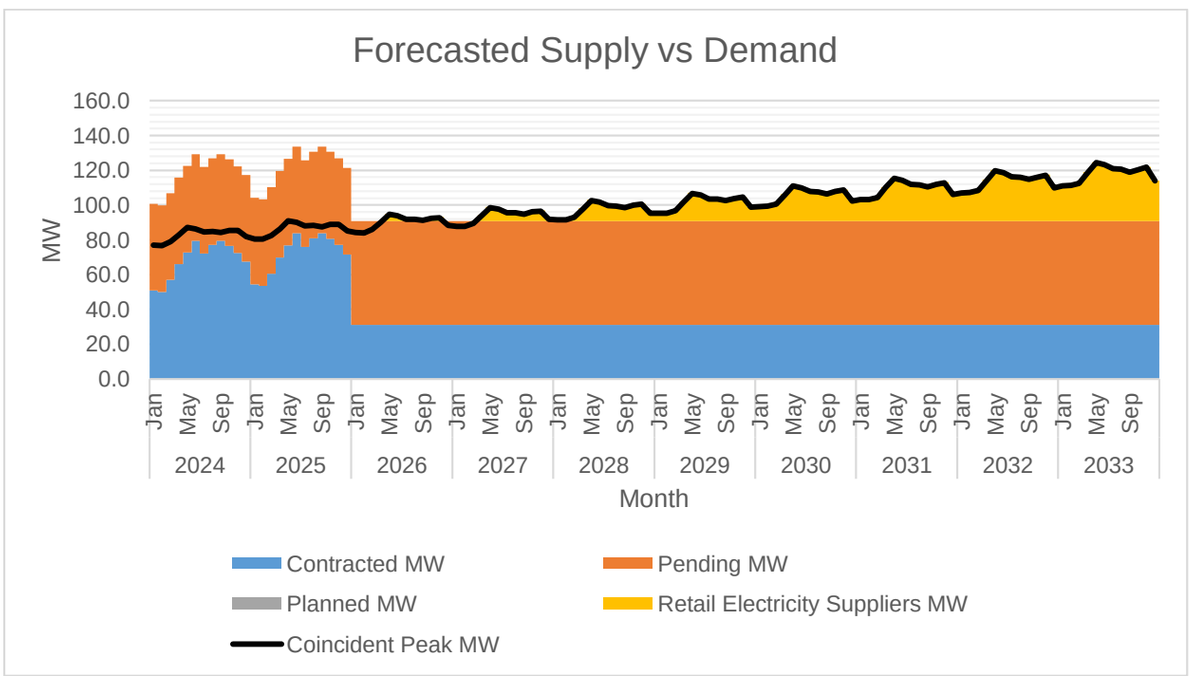
	Oct	115.99	31.00	59.86	25.43	34%	100%	0.30
	Nov	117.28	31.00	59.86	26.72	34%	100%	0.30
	Dec	109.95	31.00	59.86	19.39	34%	100%	0.30
2033	Jan	110.95	31.00	59.86	20.39	34%	100%	0.30
	Feb	111.37	31.00	59.86	20.81	34%	100%	0.30
	Mar	112.47	31.00	59.86	21.91	34%	100%	0.30
	Apr	118.68	31.00	59.86	28.12	34%	100%	0.30
	May	124.41	31.00	59.86	33.85	34%	100%	0.30
	Jun	123.19	31.00	59.86	32.63	34%	100%	0.30
	Jul	120.85	31.00	59.86	30.29	34%	100%	0.30
	Aug	120.55	31.00	59.86	29.99	34%	100%	0.30
	Sep	119.01	31.00	59.86	28.45	34%	100%	0.30
	Oct	120.25	31.00	59.86	29.69	34%	100%	0.30
	Nov	121.78	31.00	59.86	31.22	34%	100%	0.30
	Dec	113.89	31.00	59.86	23.33	34%	100%	0.30

The monthly Peak Demand was forecasted using Quadratic with Horizon. The highest peak demand for year 2024 was assumed to occur on the month of May, the peak of summer in the franchise, the same with year 2023. Monthly Peak Demand is at its lowest on the month of February due to weather condition, as this month falls to rainy season. In general, Peak Demand is expected to grow at an average rate of 3.92% for the ten-year forecast period.

Assuming that the number of Own Use Customers will either remain the same or increase minimally, and their energy consumption will be directly proportional, we have used the 2023 own use energy monthly data for the years 2024-2033. Any discrepancies between this projection and the actual data are anticipated to be minor, having a negligible impact on the Total Energy Sales.

All ANECO's contract with Power Suppliers have been evaluated by the ERC. Mostly are approved. The cooperative's application of its owned Modular Generating Set, under ERC Case No. 2019-072 RC, is still pending before the Commission. Furthermore, the contract of ANECO with GNPK under ERC Case No. 2014-011 RC is still under Provisional Authority. And APC, under ERC Case No. 2012-112 RC, is still under the extended Provisional Authority.

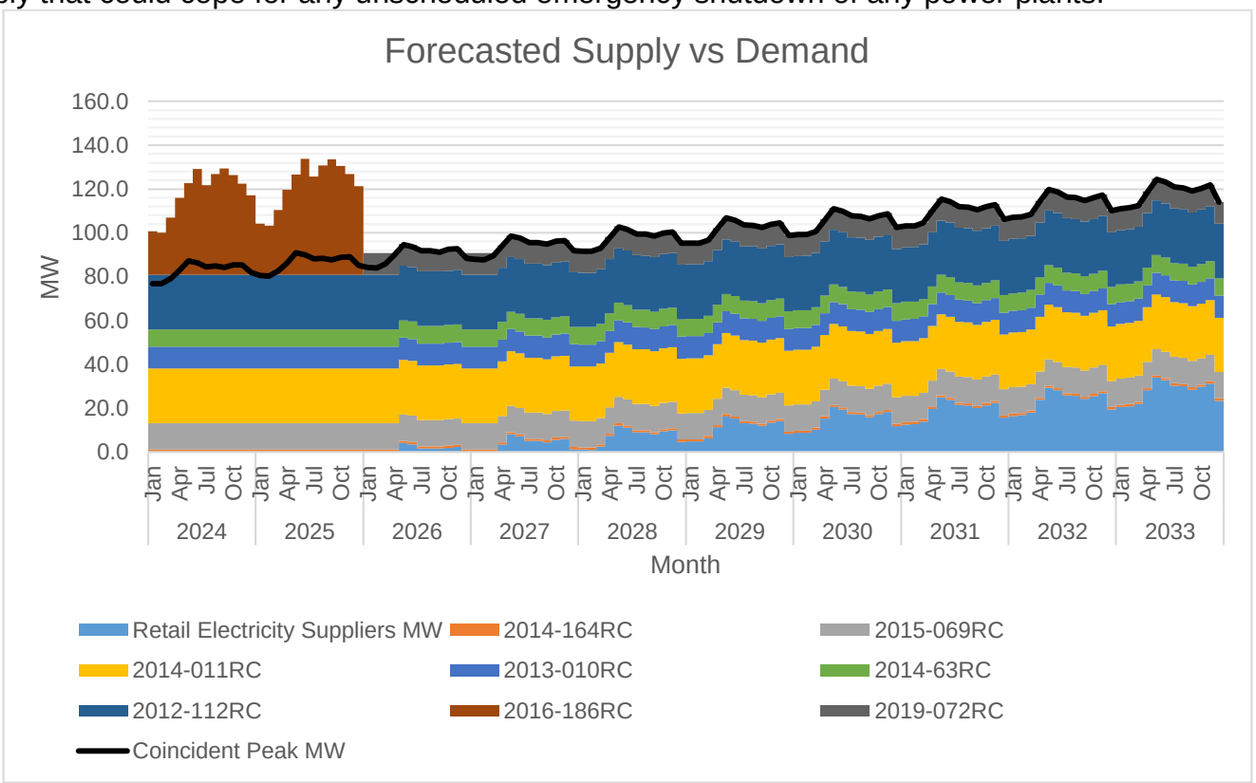
As of December 2023, all ANECO's Generating Power Suppliers are already in commercial operation.



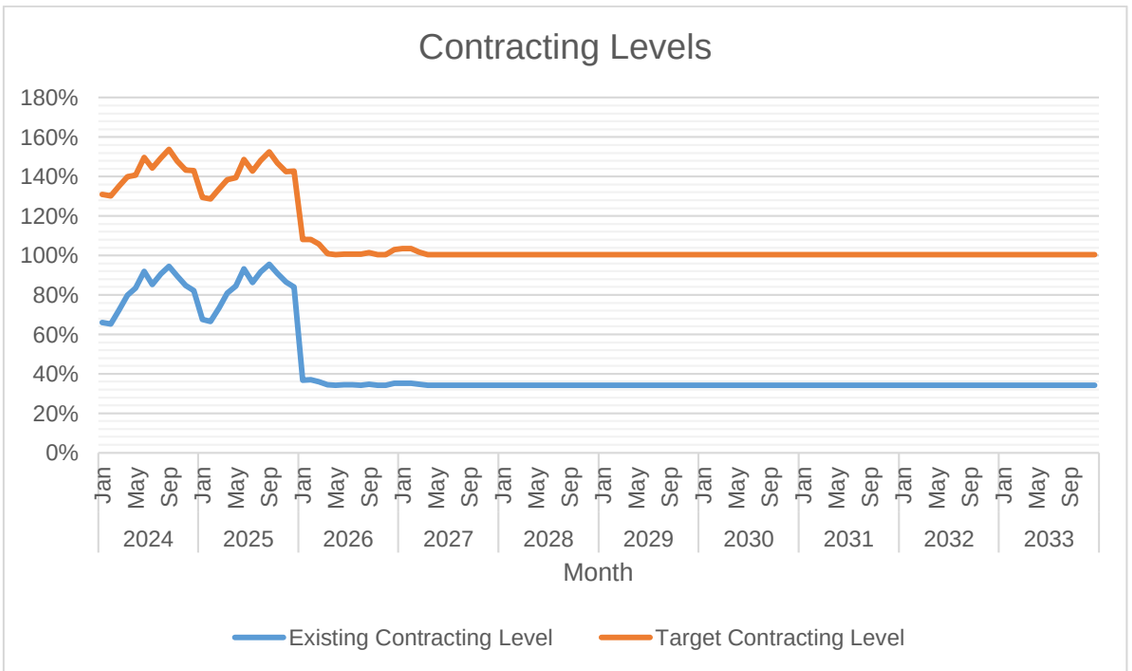
Note: RES Suppliers MW represents WESM wherein the Forecasted MWh Offtake are not covered by existing PSA.

For years 2024 to early part of 2026, the available supply is generally above the Peak Demand. This is because, as mandated by EPIRA, ANECO need to ensure the reliability and security of the supply of

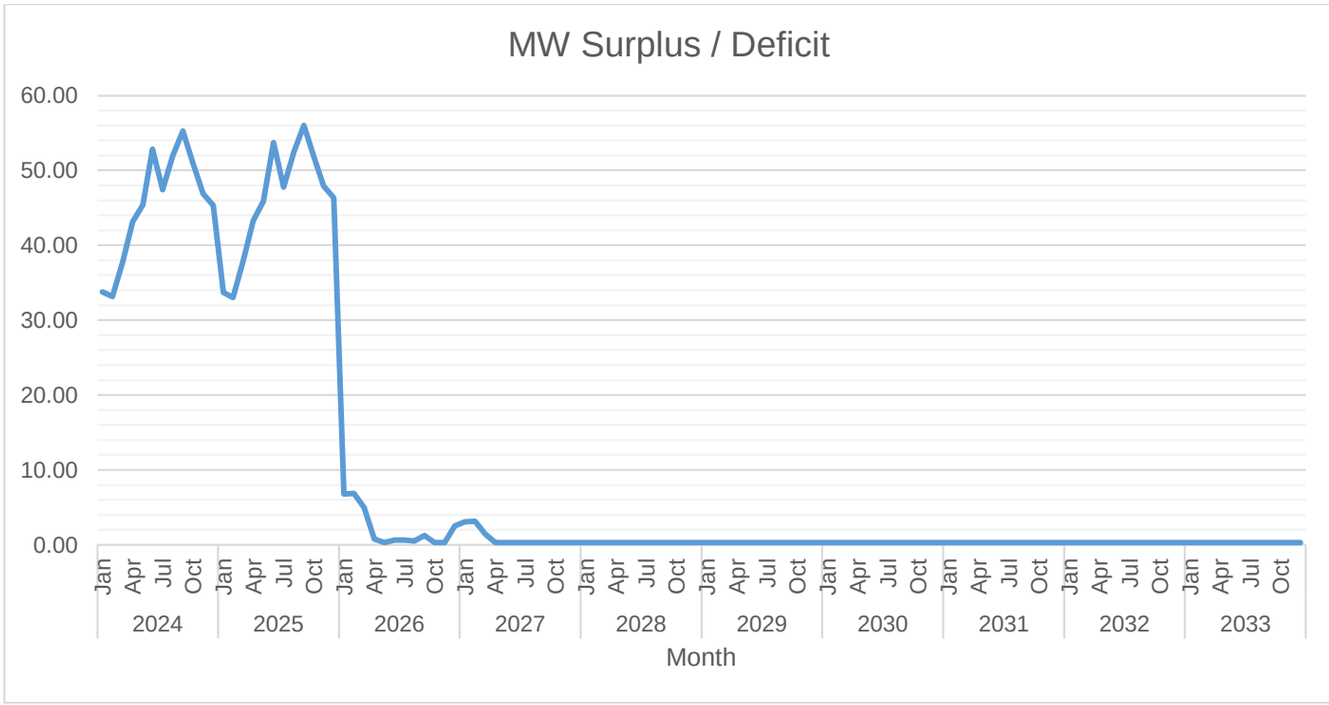
electric power. Like for instance, the cooperative should have enough and readily available power supply that could cope for any unscheduled emergency shutdown of any power plants.



Of the available supply, the largest is 24.96 MW from 2014-011RC, GNPK. This is followed by 24.9 MW from 2012-112RC, APC.



Currently, there is under-contracting at 91%. The highest target contracting level is 154% which is expected to occur in September 2024. The lowest target contracting level is 100% which is expected to occur in May 2026.



As depicted above, especially in the early part of year 2026 and onwards, a sudden reduction of contracted capacity is observed due to the end of the cooperative's contract with NPC-PSALM while the demand is constantly increasing. Thus, foreseen to might result to a serious power supply deficiency.

However, ANECO in its power supply planning seen the conduct of Competitive Selection Process (CSP) to be too soon if to affect such now. Because the foreseen deficiency might not drastically happen or be addressed due to the following:

1. Government renewal or extension of the Corporate Life of NPC-PSALM
2. Declaration of RCOA in Mindanao
   - Highest probability of 100% shifting of existing Contestable Customers (CCs) to Retail Electricity Supplier (RES). Wherein ANECO CCs for year 2023 accounted to 14% of the cooperative's NCP;
   - ANECO's largeload customers to avail of the GEOP;
3. Increase in household level availing of the Net-Metering Program
4. Seen probability of Largeload customers, to include LGUs, to avail of Self-Generating RE Facilities; and
5. ANECO's partnership with LGU in developing local sources of Generating Power Plants harnessing indigenous RE resources within the contracting level exempted from CSP.

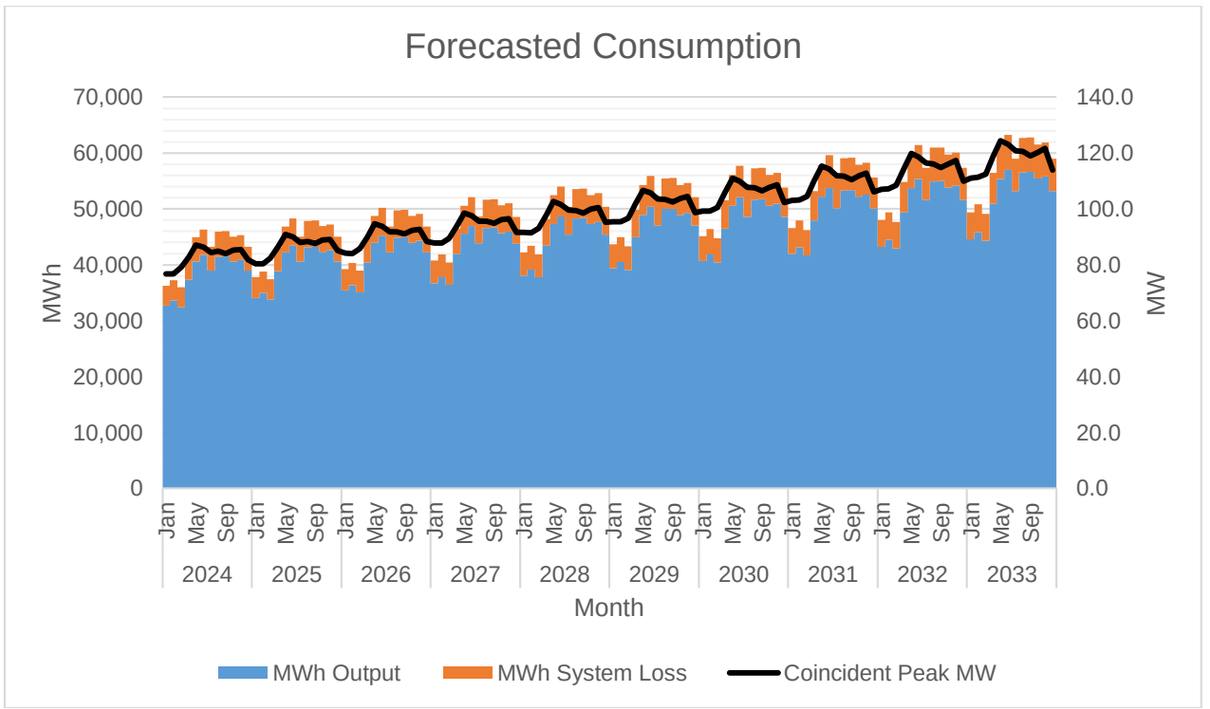
Other than that, the seen deficiency would only occur during peaking hours with the duration of 2-3 hours only. And this could immediately be cope through procurement of supply in the electricity market as Wholesale Electricity Spot Market (WESM) already commercialized in the Mindanao Region last January 26, 2023.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	36,282	32,710	3,572	0.00%	9.84%
	Feb	37,282	33,611	3,670	0.00%	9.84%
	Mar	35,971	32,430	3,541	0.00%	9.84%
	Apr	41,380	37,306	4,074	0.00%	9.84%
	May	44,986	40,558	4,429	0.00%	9.84%
	Jun	46,350	41,787	4,563	0.00%	9.84%
	Jul	43,248	38,990	4,258	0.00%	9.84%
	Aug	45,964	41,439	4,525	0.00%	9.84%
	Sep	46,018	41,488	4,530	0.00%	9.84%
	Oct	45,046	40,612	4,435	0.00%	9.84%
	Nov	45,327	40,865	4,462	0.00%	9.84%
	Dec	43,213	38,959	4,254	0.00%	9.84%

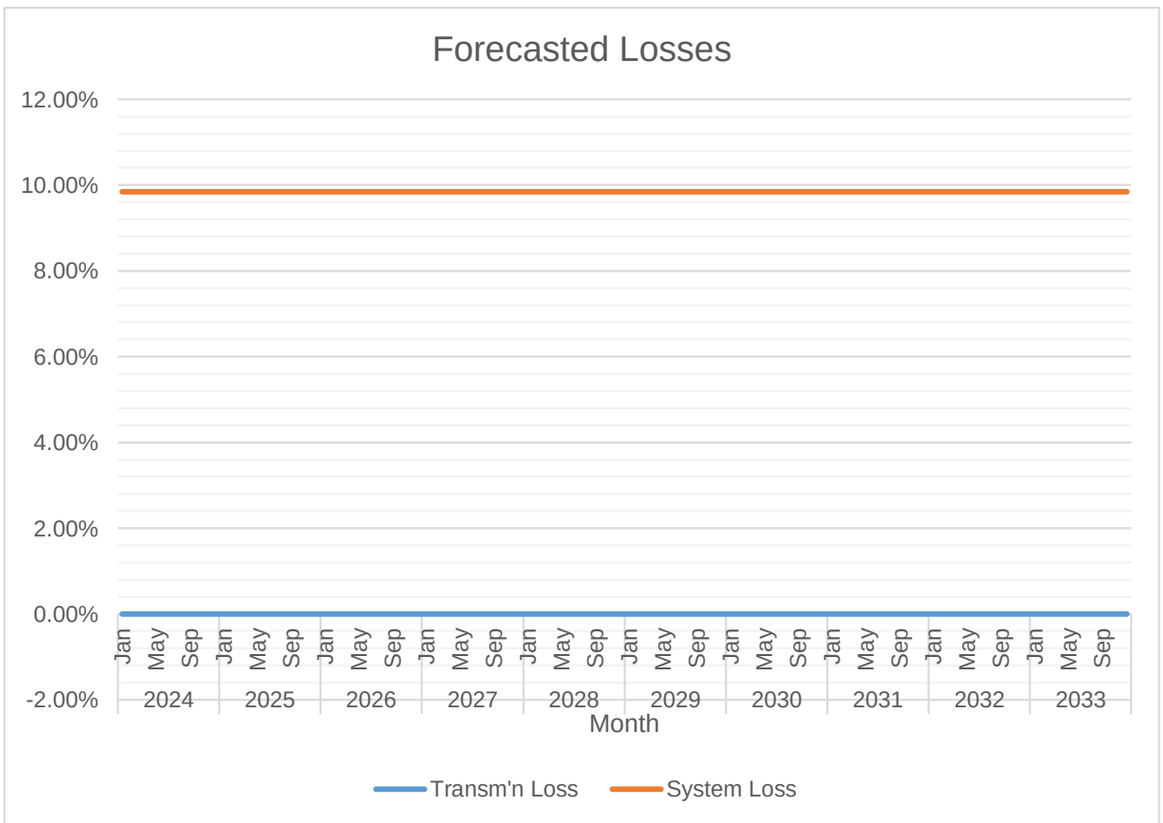
2025	Jan	37,784	34,064	3,720	0.00%	9.84%
	Feb	38,826	35,003	3,822	0.00%	9.84%
	Mar	37,467	33,778	3,689	0.00%	9.84%
	Apr	43,103	38,859	4,243	0.00%	9.84%
	May	46,867	42,253	4,614	0.00%	9.84%
	Jun	48,285	43,531	4,754	0.00%	9.84%
	Jul	45,054	40,619	4,436	0.00%	9.84%
	Aug	47,886	43,172	4,714	0.00%	9.84%
	Sep	47,945	43,225	4,720	0.00%	9.84%
	Oct	46,929	42,309	4,620	0.00%	9.84%
	Nov	47,223	42,574	4,649	0.00%	9.84%
	Dec	45,021	40,589	4,432	0.00%	9.84%
2026	Jan	39,276	35,409	3,867	0.00%	9.84%
	Feb	40,361	36,388	3,974	0.00%	9.84%
	Mar	38,954	35,119	3,835	0.00%	9.84%
	Apr	44,814	40,402	4,412	0.00%	9.84%
	May	48,733	43,936	4,798	0.00%	9.84%
	Jun	50,206	45,264	4,943	0.00%	9.84%
	Jul	46,848	42,236	4,612	0.00%	9.84%
	Aug	49,795	44,893	4,902	0.00%	9.84%
	Sep	49,857	44,949	4,908	0.00%	9.84%
	Oct	48,798	43,994	4,804	0.00%	9.84%
	Nov	49,105	44,271	4,834	0.00%	9.84%
	Dec	46,817	42,208	4,609	0.00%	9.84%
2027	Jan	40,757	36,744	4,012	0.00%	9.84%
	Feb	41,888	37,764	4,124	0.00%	9.84%
	Mar	40,432	36,452	3,980	0.00%	9.84%
	Apr	46,513	41,934	4,579	0.00%	9.84%
	May	50,586	45,606	4,980	0.00%	9.84%
	Jun	52,114	46,983	5,130	0.00%	9.84%
	Jul	48,628	43,841	4,787	0.00%	9.84%
	Aug	51,690	46,601	5,089	0.00%	9.84%
	Sep	51,755	46,660	5,095	0.00%	9.84%
	Oct	50,654	45,667	4,987	0.00%	9.84%
	Nov	50,973	45,955	5,018	0.00%	9.84%
	Dec	48,600	43,815	4,785	0.00%	9.84%
2028	Jan	42,227	38,070	4,157	0.00%	9.84%
	Feb	43,405	39,131	4,273	0.00%	9.84%
	Mar	41,902	37,776	4,125	0.00%	9.84%
	Apr	48,200	43,455	4,745	0.00%	9.84%
	May	52,425	47,264	5,161	0.00%	9.84%
	Jun	54,007	48,690	5,317	0.00%	9.84%
	Jul	50,395	45,434	4,961	0.00%	9.84%
	Aug	53,569	48,295	5,274	0.00%	9.84%
	Sep	53,639	48,358	5,281	0.00%	9.84%
	Oct	52,496	47,328	5,168	0.00%	9.84%
	Nov	52,827	47,626	5,201	0.00%	9.84%
	Dec	50,370	45,411	4,959	0.00%	9.84%
2029	Jan	43,686	39,385	4,301	0.00%	9.84%
	Feb	44,912	40,490	4,421	0.00%	9.84%
	Mar	43,362	39,093	4,269	0.00%	9.84%
	Apr	49,875	44,965	4,910	0.00%	9.84%
	May	54,250	48,909	5,341	0.00%	9.84%
	Jun	55,886	50,384	5,502	0.00%	9.84%
	Jul	52,149	47,015	5,134	0.00%	9.84%

	Aug	55,434	49,977	5,457	0.00%	9.84%
	Sep	55,507	50,043	5,465	0.00%	9.84%
	Oct	54,323	48,975	5,348	0.00%	9.84%
	Nov	54,666	49,285	5,382	0.00%	9.84%
	Dec	52,127	46,995	5,132	0.00%	9.84%
2030	Jan	45,134	40,690	4,443	0.00%	9.84%
	Feb	46,409	41,840	4,569	0.00%	9.84%
	Mar	44,812	40,401	4,412	0.00%	9.84%
	Apr	51,538	46,464	5,074	0.00%	9.84%
	May	56,060	50,541	5,519	0.00%	9.84%
	Jun	57,750	52,064	5,685	0.00%	9.84%
	Jul	53,889	48,583	5,305	0.00%	9.84%
	Aug	57,284	51,645	5,640	0.00%	9.84%
	Sep	57,361	51,714	5,647	0.00%	9.84%
	Oct	56,137	50,610	5,527	0.00%	9.84%
	Nov	56,491	50,930	5,561	0.00%	9.84%
	Dec	53,870	48,567	5,303	0.00%	9.84%
2031	Jan	46,571	41,986	4,585	0.00%	9.84%
	Feb	47,897	43,182	4,715	0.00%	9.84%
	Mar	46,253	41,700	4,554	0.00%	9.84%
	Apr	53,188	47,951	5,236	0.00%	9.84%
	May	57,857	52,161	5,696	0.00%	9.84%
	Jun	59,600	53,732	5,867	0.00%	9.84%
	Jul	55,615	50,140	5,475	0.00%	9.84%
	Aug	59,120	53,300	5,820	0.00%	9.84%
	Sep	59,200	53,372	5,828	0.00%	9.84%
	Oct	57,936	52,233	5,704	0.00%	9.84%
	Nov	58,302	52,562	5,740	0.00%	9.84%
	Dec	55,601	50,127	5,474	0.00%	9.84%
2032	Jan	47,997	43,272	4,725	0.00%	9.84%
	Feb	49,375	44,514	4,861	0.00%	9.84%
	Mar	47,685	42,990	4,694	0.00%	9.84%
	Apr	54,825	49,428	5,397	0.00%	9.84%
	May	59,639	53,768	5,871	0.00%	9.84%
	Jun	61,435	55,387	6,048	0.00%	9.84%
	Jul	57,329	51,685	5,644	0.00%	9.84%
	Aug	60,941	54,941	6,000	0.00%	9.84%
	Sep	61,025	55,017	6,008	0.00%	9.84%
	Oct	59,722	53,843	5,880	0.00%	9.84%
	Nov	60,099	54,182	5,917	0.00%	9.84%
	Dec	57,318	51,676	5,643	0.00%	9.84%
2033	Jan	49,412	44,548	4,865	0.00%	9.84%
	Feb	50,843	45,837	5,005	0.00%	9.84%
	Mar	49,107	44,272	4,834	0.00%	9.84%
	Apr	56,451	50,894	5,558	0.00%	9.84%
	May	61,408	55,362	6,046	0.00%	9.84%
	Jun	63,257	57,029	6,228	0.00%	9.84%
	Jul	59,029	53,217	5,811	0.00%	9.84%
	Aug	62,748	56,570	6,177	0.00%	9.84%
	Sep	62,835	56,649	6,186	0.00%	9.84%
	Oct	61,494	55,440	6,054	0.00%	9.84%
	Nov	61,881	55,789	6,092	0.00%	9.84%
	Dec	59,023	53,212	5,811	0.00%	9.84%

System Loss was calculated using the e-ICPM Model as provided by the DOE and the NEA. Based on the same study, the Distribution System can adequately convey electricity to customers.



MWh Output is expected to grow at an average rate of 4.7% for the ten-year forecast period.



Transmission Loss, in terms of energy is at 0%, as this will be billed as either part of line loss or line rental of Contracted Power Suppliers or WESM depending on who would shoulder the line rental. While System Loss is expected to be 9.84%.

Power Supply

Contracted Power Supply

Case No.	Type	Power Supplier	Minimum MW	Minimum MWh/yr	Maximum MW	Maximum MWh/yr	PSA Start	PSA End
2014-164RC	Base	Therma South, Inc.	0.40	3,504	1.00	8,760	12/26/2015	12/25/2040
2013-010RC	Intermediate	Sarangani Energy Corporation	4.00	35,040	10.00	87,600	4/29/2016	4/28/2041
2016-186RC	Peaking	Power Sector Assets and Liabilities Management Corporation	19.04	170,030	36.00	315,360	12/26/2020	12/25/2025
2015-069RC	Base	FDC Misamis Power Corporation	4.80	42,048	12.00	105,120	10/14/2016	10/25/2041
2014-63RC	Intermediate	ASIGA Green Energy Corporation	3.20	28,032	8.00	70,080	5/17/2019	5/25/2044

Pending Power Supply

Case No.	Type	Power Supplier	Minimum MW	Minimum MWh/yr	Maximum MW	Maximum MWh/yr	PSA Start	PSA End
2014-011RC	Base	GN Power Kauswagan Ltd.	12.48	109,325	24.96	218,649	12/25/2017	12/25/2042
2012-112RC	Intermediate	Agusan Power Corporation	9.96	87,250	24.90	218,124	2/26/2023	12/25/2048
2019-072RC	Peaking	DU-owned	0.00	0	10.00	87,600	12/26/2021	12/25/2046

1. PSALM

Sometime on year 2020, ANECO write to PSALM the cooperative's interest to extend the Contract for the supply of Electric Energy (CSEE) covering years 2021 to 2025 wherein the latter promptly issued Certificate of Available capacity to supply.

Anent to that, on November 26, 2020, ANECO applied for Certificate of Exemption from the Conduct of Competitive Selection Process (CSP) before the DOE in accordance with the latter's Circular Number DC2018-02-003, entitled "Adopting and Prescribing the Policy for the Competitive Selection Process (CSP) in the Procurement by the Distribution Utilities of Power Supply Agreement (PSA) for the Captive Market".

On January 20, 2021, the DOE issued the Certificate to ANECO, bearing the number COE-CSP-2020-12-004, exempting the cooperative from conducting CSP for the renewal of its CSEE with PSALM for the period 26 December 2020 to 25 December 2025.

On February 2021, ANECO and PSALM signed the renewed CSEE which would be applied by the former to the ERC.

The renewal of contract with PSALM was done to provide part of the intermediate and peaking load power requirements of the cooperative. Outages of the plant led to unserved energy of around 4,380 MWh in the past year.

The actual billed overall monthly charge under the said CSEE was based on the ERC-Approved PSALM's Time of Use (TOU) generation rates, plus adjustments in the tariff such as, but not limited to Deferred Accounting Adjustment (DAAs) and the Incremental Currency Exchange Rate Adjustments (ICERA), the RA 9136 Mandatory Rate Reduction Adjustments which is averaging to 3.00 Php/kWh.

Historically, the utilization of the CSEE is mostly at 100%. However, for the recent three-year period, the CSEE was not fully observed considering that utilization would only depend on the actual allocation provided by PSALM based on their actual plant output.

The monthly average Generation Rate (Php/kWh) for the year 2023 is shown in the table below.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
AVE. TOU RATE	3.0322	3.0254	3.0480	3.0758	3.0397	3.0134	2.8387	2.8013	2.7944	2.8139	2.8402	2.9266

2. SEC

The Power Supply Agreement (PSA) with SEC, under ERC Case No. 2013-010 RC, that was secured through Bilateral Contract was already approved by the ERC in its decision rendered last March 17, 2014. The contract was entered into to provide part of the 24-hour base and intermediate load power requirements of the cooperative. Historically, the utilization of the PSA is 63%. Outages of the plant led to unserved energy of around 4800 MWh in the past year The table below show the applicable rate upon Commercial Operation as approved by the ERC.

Rate Components	Approve Rate		
	Php/ kW		Php/ kWh
	Foreign Component (USD)	Local Component (Php)	
CRF			
Year 1	20.32/ Month	427.32/ Month	
Year 2	23.33/ Month	490.56/ Month	
Year 3	28.39/ Month	490.56 Month	

Year 4 & Onwards	28.69/ Month	603.37/ Month	
FOMF		333.23/ Month	
VOMF			0.3170/ kWh
Interconnection CRF	1.25/ Month	43.68/ Month	
Actual Fuel Cost			Pass-through Cost subject to Efficiency Cap of 0.70kg/kWh plus 0.5% degradation factor or the actual fuel consumed, whichever is lower

Note: The O&M Fee shall be subject to adjustment based on economic indices provided in the PSA

The monthly average Generation Rate (Php/kWh) for the year 2023 is shown in the table below.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Php/kW	2,492.55	2,458.61	2,455.88	2,457.74	2,452.06	2,449.42	2,441.31	2,446.30	2,451.32	2,469.86	2,473.59	2,411.77
Php/kWh	5.7887	5.3797	5.0459	4.2750	4.5457	4.5020	3.9791	3.7499	3.5712	3.4079	3.8519	3.5985

3. TSI

The Energy Supply Agreement (ESA) with TSI, under ERC Case No. 2014-164 RC, that was secured through Bilateral Contract was already approved by the ERC on its decision rendered August 24, 2015. The contract was entered into to provide part of the base load power requirements for twenty-four (24) hour period of operation. Historically, the utilization of the ESA is 67%. Outages of the plant led to unserved energy of around 360 MWh in the past year. The table below show the applicable rate upon Commercial Operation as approved by the ERC.

Rate Components	Approve Rate	
	Php/ kW	Php/ kWh
Capital Recovery Fee (CRF)	1,936.60/ Month	
Fixed O&M Fee (FOMF)	387.35/ Month	
Variable O&M Fee (VOMF)		0.2908/ kWh
Actual Fuel Cost		Pass-through Cost subject to Efficiency Cap of 0.70kg/kWh escalated at 1% degradation factor or the actual fuel consumed, whichever is lower

Note: The O&M Fee shall be subject to adjustment based on economic indices provided in the ESA

The monthly average Generation Rate (Php/kWh) for the year 2023 is shown in the table below.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Php/kW	2,499.48	2,552.24	2,551.09	2,555.12	2,554.83	2,353.85	2,553.10	2,518.81	1,655.36	2,105.23	2,566.10	2,567.07
Php/kWh	7.2206	6.6131	5.6752	5.3429	4.7443	4.7456	4.7329	4.5532	4.6665	3.6471	3.4829	3.7059

4. FDC – Coal

The Energy Power Purchase Agreement (EPPA) with FDC, under ERC Case No. 2015-069 RC, that was secured through Bilateral Contract has been resolved to approve by the ERC on its September 13, 2016 Regular Commission Meeting. The contract was entered into to provide part of the 24-hour baseload power requirements of the cooperative. Historically, the utilization of the PSA is 54%. Outages of the plant led to unserved energy of around 876 MWh in the past year. The table below show the applicable rate upon Commercial Operation as approved by the ERC.

Rate Components	Approve Rate	
	Php/ kW	Php/ kWh
Capital Recovery Fee (CRF)	1,924.48/ Month	
Fixed O&M Fee (FOMF)	366.16/ Month	
Variable O&M Fee (VOMF)		0.1907/ kWh
Actual Fuel Cost		Pass-through Cost subject to Efficiency Cap of 0.70kg/kWh escalated at 1.5% annual degradation factor or the actual fuel consumed, whichever is lower

Note: Above rate shall be subject to adjustment based on the formula in the EPPA subject to the modification as discussed in the ERC approval.

The monthly average Generation Rate (Php/kWh) for the year 2022 is shown in the table below.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Php/kW	2,401.66	2,401.66	2,400.85	2,401.26	2,401.26	2,402.47	2,403.27	2,408.91	2,412.17	2,412.97	2,412.57	2,411.77
Php/kWh	7.4494	6.5122	6.4555	7.0150	7.1976	6.1328	5.1287	4.3179	3.8420	4.1680	3.7844	3.3725

5. GNPK

The Power Purchase & Sale Agreement (PPSA) with GNPK, under ERC Case No. 2014-011 RC, that was secured through Competitive Bidding, conducted by ECs established AMRECO PSAG-CORP, has still Provisional Authority with the ERC. The bidding was done in order to provide part of the 24-hour base load power requirements of the cooperative. Historically, the utilization of the PSA is averaging from 60 to 75%. Outages of the plant led to unserved energy of around 5,990 MWh in the past year. The actual billed overall monthly charge under the PSA was based on the ERC provisionally approved base rate of 0.0976 $/ kWh.

The monthly average Generation Rate (Php/kWh) for the year 2022 is shown in the table below.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Php/kWh	10.8923	9.5300	9.9027	11.0267	9.1502	7.7372	8.1472	9.7214	8.7415	8.9990	7.2969	8.4560

6. AGEC

The Power Purchase Agreement (PPA) with AGEC, under ERC Case No. 2014-063 RC, that was secured through Bilateral Contract was already approved by the ERC on its decision rendered last June 22, 2015. The contract was entered into that the entire power supply coming from the embedded run-of-the-river power plant could provide part of the intermediate load power requirements of the cooperative. Historically, the utilization of the PPA is 68%, for the actual output of the plant solely rely on the water level of the Asiga river. Outages of the plant led to unserved energy of around 1,152 MWh in the past year.

AGEC billed ANECO based on its approved ERC rate. That is equivalent to the approved Feed-In-Tariff (FIT) for run-of-the-river hydro power plants amounting to Php 5.9000/kWh. And as provided in the ERC decision, only Php1.3928/kWh of the AGEC's O&M Fee is subject to the Consumer Price Index (CPI).

The monthly average Generation Rate (Php/kWh) for the year 2022 is shown in the table below.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Php/kWh	5.9000	5.9000	5.9000	5.9000	5.9000	5.9000	5.9000	5.9000	5.9000	5.9000	5.9000	5.9000

7. DU-Owned Modular GenSets

The DU owned 10MW Modular GenSets was procured through Competitive Selection Process (CSP) availing of the government's "Mindanao Modular Generator Sets Program" under Executive Order No. 137. The Modular GenSets are already operational and was already granted by the ERC of Certificate of Compliance (COC) valid for the period of 5 years from May 18, 2018 to May 17, 2023.

On September 17, 2019, ANECO filed an instant application for the approval of the Generation Rate for the use (acquisition and operation) of 5 units of 2MW Modular GenSets and the corresponding loan from the NEA under ERC Case No. 2019-072 RC.

ANECO as of to date is still waiting for ERC's approval of the application; though the Modular Gensets can be used anytime when needed, as provided under ERC Resolution No. 12, Series of 2014, using the rate of Mapalad Power Corporation or actual, whichever is lower, for recovery.

ERC Case No.	Type	Generating Company	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2012-112RC	Intermediate	Agusan Power Corporation	9.96	87,250	2/26/2023	12/25/2048

8. APC

The PPA with APC, under ERC Case No. 2012-112 RC, that was secured through Bilateral Contract is still under an extended Provisional Authority (PA) with the ERC per the latter's order dated December 2, 2013. The contract was entered into that the entire power supply coming from the embedded hydro power plant would provide part of the intermediate load power requirements of the cooperative. The utilization of the PPA is around 37% since they limit their power generation to prevent transmission overvoltage. ANECO, APC, and NGCP has come into an agreement to address this issue. Outages of the plant led to unserved energy of around 7,128 MWh. The table below shows the applicable rate upon Commercial Operation as provided in the issued PA of the ERC.

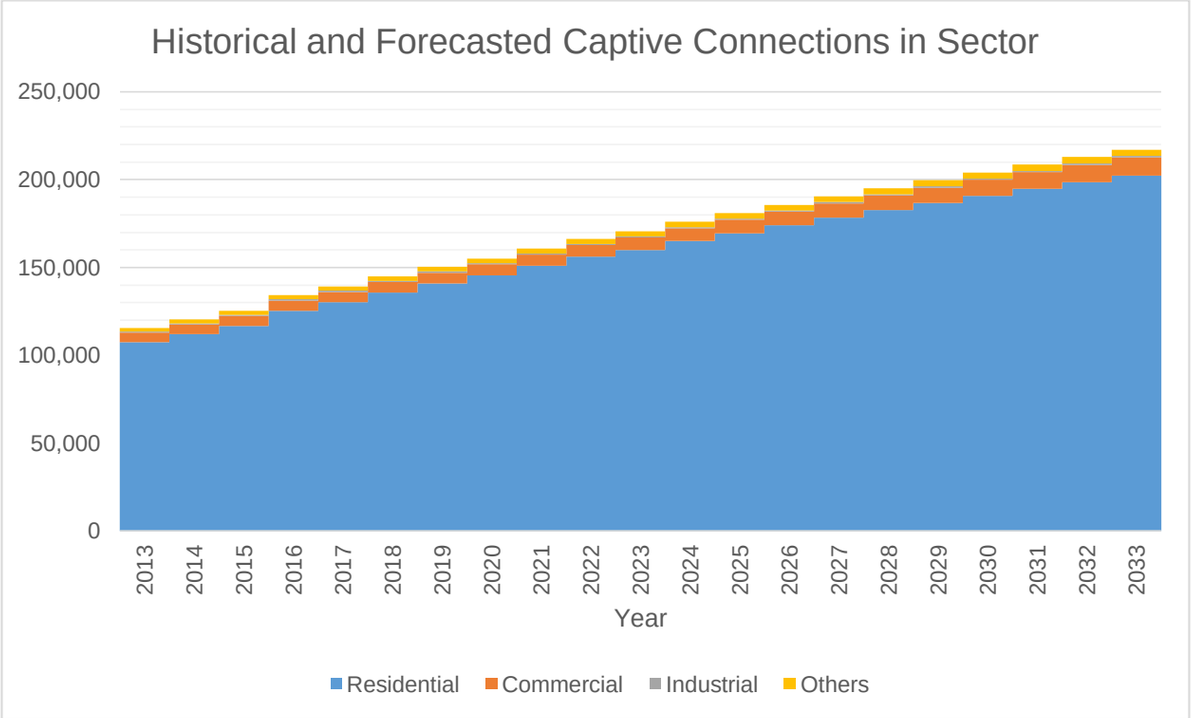
Rate Component	Php/ kWh
CRF	5.3314
O&M Fee	1.0185
TOTAL	**6.3499**

Note: Subject to changes in economic indices as provided in the PPA

The monthly Generation Rate (Php/kWh) for the year 2023 is shown in the table below.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Php/kWh		6.3499	6.3499	6.3499	6.3499	6.3499	6.3499	6.3499	6.3499	6.3499	6.3499	6.3499

Captive Customer Connections



The number of connections is expected to grow at the average rate of 2.44% annually.

Below is the number and average percentage breakdown of the Captive Customer Connection as of December 31, 2023:

Type	Number	Percentage
Residential	159,981	93.80%
Commercial	7,039	4.13%
Industrial	570	0.33%
Others	2,966	1.74%
Total	**170,556**	**100%**