Power Supply Procurement Plan 2024

Cagayan I 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	16.19	86,943	0	86,943	73,366	13,577	61%	0.00%	0.00%	15.62%
2001	17.14	92,031	0	92,031	79,050	12,982	61%	0.00%	0.00%	14.11%
2002	19.12	102,629	0	102,629	88,147	14,482	61%	0.00%	0.00%	14.11%
2003	20.01	107,445	0	107,445	94,240	13,205	61%	0.00%	0.00%	12.29%
2004	21.30	114,354	0	114,354	101,644	12,710	61%	0.00%	0.00%	11.11%
2005	22.52	120,901	0	120,901	105,802	15,099	61%	0.00%	0.00%	12.49%
2006	22.58	121,206	0	121,206	106,651	14,555	61%	0.00%	0.00%	12.01%
2007	24.85	126,642	0	126,642	111,299	15,343	58%	0.00%	0.00%	12.12%
2008	27.36	131,124	0	131,124	116,961	14,162	55%	0.00%	0.00%	10.80%
2009	30.28	138,287	0	138,287	123,345	14,941	52%	0.00%	0.00%	10.80%
2010	30.48	154,188	0	154,188	137,822	16,366	58%	0.00%	0.00%	10.61%
2011	32.66	163,184	0	163,184	146,165	17,019	57%	0.00%	0.00%	10.43%
2012	34.44	183,780	29,380	181,829	161,855	19,974	60%	0.00%	1.06%	10.99%
2013	37.22	195,419	116,246	193,149	172,308	20,841	59%	0.00%	1.16%	10.79%
2014	40.84	205,896	89,415	203,074	177,617	25,458	57%	0.00%	1.37%	12.54%
2015	45.35	227,724	92,225	224,014	198,557	25,458	56%	0.00%	1.63%	11.36%
2016	49.61	237,065	69,079	233,423	207,966	25,458	54%	0.00%	1.54%	10.91%
2017	52.13	252,019	-3,719	248,112	221,993	26,118	54%	0.00%	1.55%	10.53%
2018	57.96	281,310	23,085	277,467	251,002	26,464	55%	0.00%	1.37%	9.54%
2019	63.98	312,934	37,804	308,132	278,562	29,570	55%	0.00%	1.53%	9.60%
2020	64.32	311,575	24,015	306,449	275,478	30,972	54%	0.00%	1.65%	10.11%
2021	68.75	334,621	19,808	327,962	293,606	34,356	54%	0.00%	1.99%	10.48%
2022	71.47	349,569	32,984	342,241	309,180	33,061	55%	0.00%	2.10%	9.66%
2023	77.54	392,290	61,662	384,651	349,002	35,650	57%	0.00%	1.95%	9.27%

Peak Demand increased from 71.47 MW in 2022 to 77.54 MW in 2023 at a rate of 7.82% due to fast growing electricity demand. MWh Offtake increased from 349,569 MWh in 2022 to 392,290 MWh in 2023 at a rate of 10.89% due to growing demand. Within the same period, Load Factor ranged from 55% to 57%.



MWh Output increased from year 2022 to year 2023 at a rate of 11.41%, while MWh System Loss increased at a rate of 7.24% within the same period.



Historically, Transmission Loss ranged from 1.06% to 2.10% while System Loss ranged from 9.27% to 15.62%. Transmission Loss peaked at 2.10% on year 2022 because of increase of load. System Loss peaked at 12.54% on year 2014 because of long stretch of distribution lines and overloading of substations.



Residential customers account for the bulk of energy sales at 50.34% due to the high number of connections. In contrast, Industrial customers accounted for only 0.34% of energy sales due to the low number of connections.



For 2023, the total Offtake for the last historical year is higher than the quantity stipulated in the PSA. The PSA with GN Power Mariveles Coal Plant Ltd. accounts for the bulk of MWh Offtake.



WESM Offtake decreased from 116,246 MWh in 2013 to 61,662 MWh in 2023 at a rate of 88.52% due to power supply contracted from GN Power Mariveles Coal Plant Ltd., Anda Power Corporation and PSALM COE. The share of WESM in the total Offtake ranged from 5.36% to 9.59%. The net WESM transaction is negative from March to April 2017 and October to December 2017 because of the effect of Super Typhoon Lawin that devastated our area coverage that makes our load to drop and the interim of additional power supply contracted from Anda Power Corporation.

Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 16.19 MW and the maximum load is 77.54 MW for the last historical year.



Peak MW occurred on the month of June due to summer season, opening of school year, and usage of water pumps for irrigation. Peak daily MWh occurred on 14:00 hour due to full usage of cooling appliances on residential, commercial and public buildings. As shown in the Load Curves, the available supply is lower than the Peak Demand.



The Non-coincident Peak Demand is 84.05 MW, which is around 26.91% of the total substation capacity of 115 MVA at a power factor of 97%. The load factor or the ratio between the Average Load of 43.81 MW and the Non-coincident Peak Demand is 52.12% of. A safe estimate of the true minimum load is the fifth percentile load of 22.62 MW which is 26.91% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Solana Substation	18.75	11.189
Piat Substation	12.5	7.990
Alcala Substation	12.5	14.903
Carig Substation	12.5	8.896
Caritan Substation	18.75	11.735
CaritanSubstation	25	14.273
Tuguegarao NGCP Substation	15	15.060

The substations loaded at above 70% are the Alcala Substation, Carig Substation and Tuguegarao NGCP Substation. This loading problem will be solved by putting up additional substation/s.

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	52	48.500	0.000	0.000	4	101%	101%	0.58
	Feb	58	48.500	0.000	0.000	4	91%	91%	-5.07
	Mar	66	48.500	0.000	0.000	5	79%	79%	-12.59
	Apr	70	48.500	0.000	0.000	5	75%	75%	-16.48
	May	79	48.500	0.000	0.000	5	65%	65%	-25.77
	Jun	80	48.500	0.000	0.000	5	65%	65%	-26.66
	Jul	78	48.500	0.000	0.000	5	66%	66%	-24.82
	Aug	79	48.500	0.000	0.000	5	65%	65%	-26.05
	Sep	70	48.500	0.000	0.000	5	76%	76%	-15.67
	Oct	69	48.500	0.000	0.000	6	76%	76%	-14.99
	Nov	67	48.500	0.000	0.000	5	79%	79%	-13.26
	Dec	61	48.500	0.000	0.000	5	87%	87%	-7.46
2025	Jan	54	48.500	0.000	0.000	4	96%	96%	-1.89
	Feb	61	48.500	0.000	0.000	4	86%	86%	-7.84
	Mar	69	48.500	0.000	0.000	5	75%	75%	-15.75
	Apr	74	48.500	0.000	0.000	5	71%	71%	-19.84
	May	83	48.500	0.000	0.000	5	62%	62%	-29.59
	Jun	84	48.500	0.000	0.000	5	61%	61%	-30.53
	Jul	82	48.500	0.000	10.000	5	63%	76%	-18.60
	Aug	83	48.500	0.000	10.000	5	62%	75%	-19.88
	Sep	73	48.500	0.000	10.000	6	72%	87%	-8.99
	Oct	72	48.500	0.000	10.000	6	73%	88%	-8.28
	Nov	71	40.500	0.000	10.000	6	62%	78%	-14.46
	Dec	64	40.500	0.000	10.000	5	69%	86%	-8.36
2026	Jan	57	40.500	0.000	10.000	4	76%	95%	-2.52
	Feb	64	40.500	0.000	10.000	4	68%	85%	-8.76
	Mar	73	40.500	0.000	10.000	5	60%	75%	-17.09
	Apr	77	40.500	0.000	10.000	5	56%	70%	-21.39

	May	87	40.500	0.000	10.000	5	49%	61%	-31.62
	Jun	89	40.500	0.000	10.000	5	49%	61%	-32.61
	Jul	86	40.500	0.000	10.000	5	50%	62%	-30.58
	Aug	88	40.500	0.000	10.000	5	49%	61%	-31.93
	Sep	77	40.500	0.000	10.000	6	57%	71%	-20.50
	Oct	76	40.500	0.000	10.000	6	58%	72%	-19.76
	Nov	74	40.500	0.000	10.000	6	59%	74%	-17.85
	Dec	67	40.500	0.000	10.000	5	65%	82%	-11.43
2027	Jan	60	40.500	0.000	10.000	4	73%	91%	-5.27
	Feb	67	40.500	0.000	10.000	4	65%	81%	-11.84
	Mar	77	28.000	0.000	25.000	5	39%	75%	-18.11
	Apr	81	28.000	0.000	25.000	6	37%	70%	-22.63
	May	92	28.000	0.000	25.000	5	32%	61%	-33.37
	Jun	93	28.000	0.000	25.000	6	32%	61%	-34.41
	Jul	91	28.000	0.000	25.000	5	33%	62%	-32.27
	Aug	92	28.000	0.000	25.000	5	32%	61%	-33.68
	Sep	81	28.000	0.000	25.000	6	37%	71%	-21.69
	Oct	80	28.000	0.000	25.000	6	38%	72%	-20.92
	Nov	78	28.000	0.000	25.000	6	39%	74%	-18.92
	Dec	71	28.000	0.000	25.000	5	43%	81%	-12.17
2028	Jan	63	28.000	0.000	25.000	4	48%	90%	-5.67
	Feb	70	28.000	0.000	25.000	5	43%	81%	-12.56
	Mar	80	28.000	0.000	25.000	6	37%	71%	-21.80
	Apr	85	28.000	0.000	25.000	6	35%	67%	-26.55
	May	96	28.000	0.000	25.000	6	31%	58%	-37.82
	Jun	98	28.000	0.000	25.000	6	30%	58%	-38.91
	Jul	95	28.000	0.000	25.000	6	31%	59%	-36.66
	Aug	97	28.000	0.000	25.000	5	31%	58%	-38.14
	Sep	85	28.000	0.000	25.000	6	36%	67%	-25.58
	Oct	84	28.000	0.000	25.000	6	36%	68%	-24.77
	Nov	82	28.000	0.000	25.000	6	37%	70%	-22.66
	Dec	74	28.000	0.000	25.000	5	41%	77%	-15.56
2029	Jan	66	28.000	0.000	25.000	5	45%	86%	-8.68

	Feb	74	28.000	0.000	25.000	5	41%	77%	-15.92
	Mar	84	0.000	0.000	50.000	6	0%	64%	-28.63
	Apr	89	0.000	0.000	50.000	6	0%	60%	-33.62
	May	101	0.000	0.000	50.000	6	0%	52%	-45.44
	Jun	102	0.000	0.000	50.000	6	0%	52%	-46.60
	Jul	100	0.000	0.000	50.000	6	0%	53%	-44.24
	Aug	101	0.000	0.000	50.000	6	0%	52%	-45.79
	Sep	89	0.000	0.000	50.000	6	0%	61%	-32.61
	Oct	88	0.000	0.000	50.000	6	0%	61%	-31.77
	Nov	86	0.000	0.000	50.000	6	0%	63%	-29.56
	Dec	78	0.000	0.000	50.000	6	0%	69%	-22.09
2030	Jan	69	0.000	0.000	50.000	5	0%	77%	-14.81
	Feb	77	0.000	0.000	50.000	5	0%	69%	-22.41
	Mar	88	0.000	0.000	50.000	6	0%	61%	-32.63
	Apr	94	0.000	0.000	65.000	6	0%	74%	-22.87
	May	106	0.000	0.000	65.000	6	0%	65%	-35.27
	Jun	107	0.000	0.000	65.000	6	0%	64%	-36.48
	Jul	105	0.000	0.000	65.000	6	0%	66%	-34.00
	Aug	106	0.000	0.000	65.000	6	0%	65%	-35.62
	Sep	93	0.000	0.000	65.000	6	0%	75%	-21.81
	Oct	92	0.000	0.000	65.000	6	0%	76%	-20.93
	Nov	90	0.000	0.000	65.000	6	0%	78%	-18.60
	Dec	82	0.000	0.000	65.000	6	0%	86%	-10.76
2031	Jan	73	0.000	0.000	65.000	5	0%	95%	-3.12
	Feb	81	0.000	0.000	65.000	5	0%	85%	-11.09
	Mar	93	0.000	0.000	65.000	6	0%	75%	-21.83
	Apr	99	0.000	0.000	65.000	6	0%	70%	-27.34
	May	111	0.000	0.000	65.000	6	0%	62%	-40.34
	Jun	113	0.000	0.000	65.000	6	0%	61%	-41.61
	Jul	110	0.000	0.000	65.000	6	0%	62%	-39.01
	Aug	112	0.000	0.000	65.000	6	0%	61%	-40.71
	Sep	98	0.000	0.000	65.000	6	0%	71%	-26.23
	Oct	97	0.000	0.000	65.000	7	0%	72%	-25.31

	Nov	94	0.000	0.000	65.000	6	0%	74%	-22.87
	Dec	86	0.000	0.000	65.000	6	0%	82%	-14.63
2032	Jan	76	0.000	0.000	65.000	5	0%	91%	-6.58
	Feb	85	0.000	0.000	65.000	5	0%	81%	-14.95
	Mar	97	0.000	0.000	65.000	6	0%	71%	-26.25
	Apr	103	0.000	0.000	65.000	6	0%	67%	-32.02
	May	117	0.000	0.000	65.000	6	0%	59%	-45.65
	Jun	118	0.000	0.000	65.000	6	0%	58%	-46.99
	Jul	115	0.000	0.000	65.000	6	0%	59%	-44.26
	Aug	117	0.000	0.000	65.000	6	0%	59%	-46.03
	Sep	102	0.000	0.000	65.000	7	0%	68%	-30.87
	Oct	102	0.000	0.000	65.000	7	0%	68%	-29.92
	Nov	99	0.000	0.000	65.000	7	0%	70%	-27.35
	Dec	90	0.000	0.000	65.000	6	0%	78%	-18.69
2033	Jan	80	0.000	0.000	65.000	5	0%	86%	-10.18
	Feb	89	0.000	0.000	65.000	5	0%	77%	-18.96
	Mar	102	0.000	0.000	65.000	6	0%	68%	-30.84
	Apr	108	0.000	0.000	65.000	6	0%	64%	-36.90
	May	122	0.000	0.000	65.000	6	0%	56%	-51.18
	Jun	124	0.000	0.000	65.000	6	0%	55%	-52.59
	Jul	121	0.000	0.000	65.000	6	0%	57%	-49.72
	Aug	123	0.000	0.000	65.000	6	0%	56%	-51.58
	Sep	107	0.000	0.000	65.000	7	0%	65%	-35.70
	Oct	107	0.000	0.000	65.000	7	0%	65%	-34.71
	Nov	104	0.000	0.000	65.000	7	0%	67%	-32.02
	Dec	94	0.000	0.000	65.000	6	0%	74%	-22.91

The Peak Demand was forecasted using Cubic & Logarithmic Trending with Horizon (a + logt^3) and was assumed to occur on the month of June due to summer season and usage of water pumps for irrigation. Monthly Peak Demand is at its lowest on the month of February due to minimal usage of cooling appliances during cold weather condition. In general, Peak Demand is expected to grow at a rate of 7.82% annually.



The available supply is generally below the Peak Demand. This is because majority of the contracted MW demand was base load.



Of the available supply, the largest is 28MW from GN Power Mariveles Coal Plant Ltd. contracted power supply with ERC Case 2007-0121 then by 12.5 MW from Anda Power Corporation contracted power supply with ERC Case 2015-182. This is followed by 8 MW from PSALM COE. Considering the increasing demand and compliance to Renewable Portfolio Standard (RPS) requirement, it was planned to put up 10MW Embedded Generator in 2025, 15MW Baseload with RPS requirement in 2027, 25MW Baseload in 2029, 5MW Peaking in 2030 and another 10 MW Baseload in 2030.



The first wave of supply procurement will be for CAGELCO I CSP1 EMBEDDED planned to be available by the month of June 2025. This will be followed by 15MW CAGELCO I CSP2 WITH RPS REQUIREMENT planned to be available by the month of April 2027. Followed by 25MW CAGELCO I CSP3 BASELOAD planned to be available by the month of March 2029. Followed by 25MW CAGELCO I CSP5 BASELOAD planned to be available by the month of March 2029. Followed by 5MW CAGELCO I CSP4 PEAKING and 10MW CAGELCO I CSP5 BASELOAD planned to be available by the month of March 2029.



Currently, there is under-contracting by 16.06%. The highest target contracting level is 99% which is expected to occur on January 2024. The lowest target contracting level is 33% which is expected to occur on May 2029.



Currently, there is under-contacting by -41.83 MW. The highest deficit is -1.90 MW which is expected to occur on the month of January. The lowest deficit is -61.29 MW which is expected to occur on the month of July.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	24,026	21,602	2,192	0.97%	9.21%
	Feb	25,889	23,629	1,925	1.30%	7.53%
	Mar	26,238	21,104	4,260	3.33%	16.80%
	Apr	36,369	30,984	4,322	2.92%	12.24%
	May	39,805	34,547	4,653	1.52%	11.87%
	Jun	41,690	36,454	4,490	1.79%	10.97%
	Jul	39,316	35,423	2,756	2.89%	7.22%
	Aug	40,803	34,934	5,349	1.27%	13.28%
	Sep	36,869	33,284	3,059	1.43%	8.42%
	Oct	37,766	34,737	2,495	1.41%	6.70%
	Nov	33,242	31,513	1,289	1.32%	3.93%
	Dec	30,312	28,106	2,179	0.09%	7.20%
2025	Jan	25,764	23,174	2,348	0.94%	9.20%
	Feb	27,740	25,349	2,061	1.19%	7.52%
	Mar	28,261	22,641	4,566	3.73%	16.78%
	Apr	39,324	33,241	4,630	3.70%	12.23%
	May	42,535	37,062	4,983	1.15%	11.85%
	Jun	44,559	39,108	4,809	1.44%	10.95%
	Jul	42,072	38,003	2,949	2.66%	7.20%
	Aug	43,602	37,478	5,730	0.90%	13.26%
	Sep	39,585	35,707	3,274	1.52%	8.40%
	Oct	40,472	37,266	2,670	1.32%	6.69%
	Nov	35,678	33,806	1,377	1.39%	3.91%
	Dec	32,849	30,152	2,332	1.11%	7.18%
2026	Jan	27,631	24,912	2,500	0.79%	9.12%
	Feb	30,003	27,250	2,189	1.88%	7.44%
	Mar	29,321	24,340	4,882	0.34%	16.71%
	Apr	41,384	35,736	4,940	1.71%	12.14%
	May	45,960	39,844	5,316	1.74%	11.77%

	Jun	47,646	42,043	5,127	1.00%	10.87%
	Jul	44,885	40,855	3,130	2.01%	7.12%
	Aug	47,333	40,291	6,118	1.95%	13.18%
	Sep	42,612	38,387	3,482	1.74%	8.32%
	Oct	43,706	40,063	2,832	1.86%	6.60%
	Nov	38,521	36,343	1,447	1.90%	3.83%
	Dec	35,342	32,415	2,476	1.28%	7.10%
2027	Jan	29,751	26,838	2,692	0.74%	9.12%
	Feb	32,287	29,357	2,357	1.77%	7.43%
	Mar	31,580	26,222	5,258	0.32%	16.70%
	Apr	44,546	38,499	5,319	1.63%	12.14%
	May	49,782	42,925	5,724	2.28%	11.77%
	Jun	51,727	45,294	5,521	1.76%	10.86%
	Jul	47,832	44,015	3,370	0.94%	7.11%
	Aug	50,947	43,407	6,588	1.87%	13.18%
	Sep	45,857	41,355	3,749	1.64%	8.31%
	Oct	47,040	43,160	3,049	1.77%	6.60%
	Nov	41,450	39.153	1.557	1.79%	3.82%
	Dec	38,043	34,921	2,666	1.20%	7.09%
2028	Jan	32,084	28,972	2,908	0.64%	9.12%
	Feb	35,101	31,691	2,545	2.46%	7.43%
	Mar	34.067	28.307	5.677	0.25%	16.70%
	Apr	48,030	41,560	5,743	1.51%	12.14%
	Mav	52.859	46.338	6.180	0.64%	11.77%
	Jun	55,378	48,895	5,961	0.94%	10.87%
	Jul	52.128	47.514	3.639	1.87%	7.11%
	Aug	54,927	46,858	7,113	1.74%	13.18%
	Sep	49,429	44,643	4,048	1.49%	8.31%
	Oct	50,713	46,592	3,292	1.63%	6.60%
	Nov	44,672	42,265	1,682	1.62%	3.83%
	Dec	41,018	37,697	2,880	1.08%	7.10%
2029	Jan	34,703	31,339	3,145	0.63%	9.12%
	Feb	37,822	34,281	2,753	2.08%	7.43%
	Mar	36,859	30,620	6,141	0.27%	16.70%
	Apr	51,932	44,956	6,213	1.47%	12.14%
	May	57,203	50,125	6,685	0.69%	11.77%
	Jun	59,920	52,891	6,448	0.97%	10.87%
	Jul	56,380	51,397	3,936	1.86%	7.11%
	Aug	59,382	50,687	7,694	1.69%	13.18%
	Sep	53,438	48,291	4,379	1.44%	8.31%
	Oct	54,828	50,399	3,562	1.58%	6.60%
	Nov	48,292	45,719	1,820	1.56%	3.83%
	Dec	44,355	40,777	3,115	1.04%	7.10%
2030	Jan	37,553	33,957	3,408	0.50%	9.12%
	Feb	40,861	37,145	2,983	1.79%	7.43%
	Mar	39,923	33,178	6,653	0.23%	16.70%
	Apr	56,188	48,713	6,731	1.33%	12.14%
	May	62,508	54,313	7,243	1.52%	11.77%
	Jun	64,943	57,310	6,986	1.00%	10.87%

	Jul	60,947	55,691	4,264	1.63%	7.11%
	Aug	64,190	54,922	8,336	1.45%	13.18%
	Sep	57,887	52,326	4,744	1.41%	8.31%
	Oct	59,359	54,610	3,858	1.50%	6.60%
	Nov	52,312	49,539	1,971	1.53%	3.83%
	Dec	48,088	44,184	3,375	1.10%	7.10%
2031	Jan	40,930	36,834	3,697	0.98%	9.12%
	Feb	43,996	40,291	3,236	1.07%	7.43%
	Mar	43,425	35,988	7,217	0.51%	16.70%
	Apr	61,104	52,838	7,302	1.58%	12.14%
	May	67,410	58,913	7,857	0.95%	11.77%
	Jun	70,610	62,164	7,578	1.23%	10.87%
	Jul	66,137	60,408	4,626	1.67%	7.11%
	Aug	68,824	59,574	9,043	0.30%	13.18%
	Sep	62,952	56,758	5,146	1.66%	8.31%
	Oct	64,569	59,235	4,186	1.78%	6.60%
	Nov	56,901	53,735	2,138	1.81%	3.83%
	Dec	52,267	47,926	3,661	1.30%	7.10%
2032	Jan	44,425	39,990	4,013	0.95%	9.12%
	Feb	47,556	43,744	3,513	0.63%	7.43%
	Mar	47,151	39,072	7,836	0.52%	16.70%
	Apr	66,303	57,366	7,928	1.52%	12.14%
	May	73,197	63,961	8,531	0.96%	11.77%
	Jun	76,658	67,491	8,228	1.23%	10.87%
	Jul	71,690	65,584	5,023	1.51%	7.11%
	Aug	75,562	64,679	9,819	1.41%	13.18%
	Sep	68,297	61,622	5,588	1.59%	8.31%
	Oct	69,053	64,311	4,545	0.29%	6.60%
	Nov	61,727	58,340	2,322	1.73%	3.83%
	Dec	56,716	52,033	3,975	1.25%	7.10%
2033	Jan	47,964	43,452	4,358	0.32%	9.11%
	Feb	52,186	47,531	3,814	1.61%	7.43%
	Mar	51,878	42,454	8,511	1.76%	16.70%
	Apr	71,566	62,331	8,611	0.87%	12.14%
	May	80,086	69,498	9,266	1.65%	11.76%
	Jun	83,097	73,333	8,936	1.00%	10.86%
	Jul	77,850	71,261	5,454	1.46%	7.11%
	Aug	81,842	70,277	10,665	1.10%	13.18%
	Sep	73,711	66,956	6,068	0.93%	8.31%
	Oct	75,674	69,879	4,934	1.14%	6.59%
	Nov	66,603	63,390	2,519	1.04%	3.82%
	Dec	61,254	56,538	4,315	0.65%	7.09%

MWh Offtake was forecasted using Cubic & Logarithmic Trending (a + logt + logt^3). The assumed load factor is 57%.

System Loss was calculated based on the difference between preceding year historical data and estimated reduction on non-technical loss and technical loss. Technical loss was calculated through a Load Flow Study conducted on system by using SynerGEE Engineering Software. Based on the same study, the Distribution System can adequately convey electricity to customers.



MWh Output was expected to grow at a rate of 2.88 annually.



Transmission Loss is expected to range from 1.06% to 2.10% while System Loss is expected to range from 9.27% to 15.62%.

Power Supply

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2007-0121	Base	GN Power Mariveles Coal Plant Ltd.	14.00	78,792	2/26/2014	2/25/2029
2015-182	Base	Anda Power Corporation	2.50	14,070	3/10/2017	3/9/2027
PSALM - COE	Peaking	Power Sector Assets and Liabilities Management Corporation	8.00	12,240	9/1/2023	10/1/2024

The PSA with GN Power Mariveles Coal Plant Ltd. filed with ERC under Case No. 2007-0121 was procured through Bidding. It was selected to provide for base requirements due to expiration of bilateral contract with the previous Power Supplier. Historically, the utilization of the PSA is 62%. Outages of the plant led to unserved energy of around 92,350 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 4.0182 P/kWh to 7.8399 P/KWh in the same period.

The PSA with Anda Power Corporation filed with ERC under Case No. 2015-0182 was procured through Bidding. It was selected to provide for base requirements due to need of additional base load contract. Historically, the utilization of the PSA is 92%. Outages of the plant led to unserved energy of around 8,792 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 5.6460 P/kWh to 6.6943 P/KWh in the same period.

The PSALM COE is exempted from Competitive Selection Process (CSP). It was selected to provide for peaking requirements due to need of additional peak load contract.

	CAGELCO1 CSP1 EMBEDDED	CAGELCO1 CSP2 WITH RPS REQUIREMENT	CAGELCO1 CSP3 BASELOAD	CAGELCO1 CSP4 PEAKING	CAGELCO1 CSP5 BASELOAD
Туре	Peaking	Base	Base	Peaking	Base
Minimum MW	10.00	15.00	25.00	5.00	10.00
Minimum MWh/yr	14,016	110,160	213,200	7,008	87,600
PSA Start	6/1/2025	4/1/2027	3/10/2029	4/1/2030	4/1/2030
PSA End	5/30/2042	3/30/2042	3/9/2044	3/30/2045	3/30/2045
Publication	6/1/2024	2/1/2025	3/1/2026	3/1/2028	3/1/2028
Pre-bid	6/22/2024	2/22/2025	3/22/2026	3/22/2028	3/22/2028
Opening	8/21/2024	4/23/2025	5/21/2026	5/21/2028	5/21/2028
Awarding	9/20/2024	5/23/2025	6/20/2026	6/20/2028	6/20/2028
PSA Signing	10/20/2024	6/22/2025	7/20/2026	7/20/2028	7/20/2028
Joint Filing	10/29/2024	7/1/2025	7/29/2026	7/29/2028	7/29/2028



For the procurement of 15MW of supply which is planned to be available on April 1, 2027, the first publication or launch of CSP will be on February 1, 2025. Joint filing is planned on July 1, 2025, or 150 days later, in accordance with DOE's 2018 CSP Policy.

For the procurement of 25 MW of supply which is planned to be available on March 10, 2029, the first publication or launch of CSP will be on March 1, 2026. Joint filing is planned on July 29, 2026, or 150 days later, in accordance with DOE's 2018 CSP Policy.

For the procurement of 5 MW Peaking & 10 MW BASELOAD of supply which is planned to be available on April 1, 2030, the first publication or launch of CSP will be on March 1, 2028. Joint filing is planned on July 29, 2028, or 150 days later, in accordance with DOE's 2018 CSP Policy.



Captive Customer Connections

The number of residential connections is expected to grow at a rate of 3.45% annually. Said customer class is expected to account for 50.34% of the total consumption.