

Power Supply Procurement Plan

2024

1971

CAPIZ ELECTRIC COOPERATIVE, INC.
(CAPELCO)

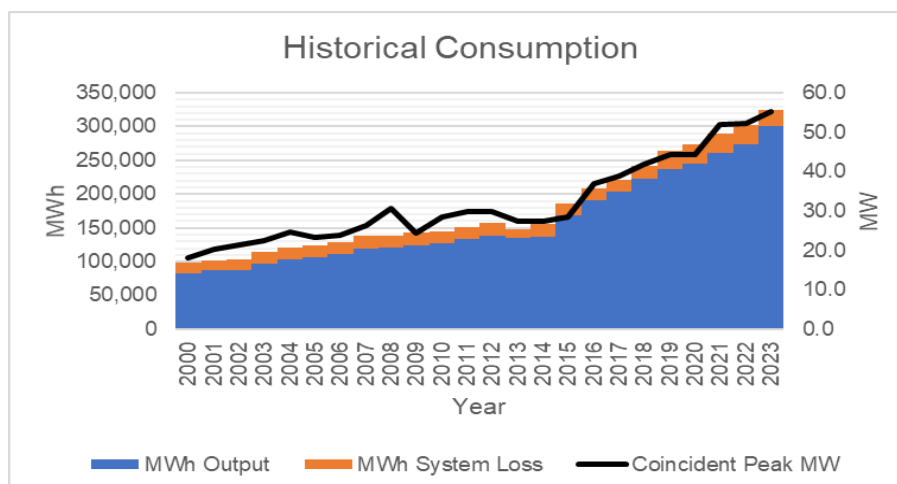
BURGOS ST., ROXAS CITY, CAPIZ



Historical Consumption Data

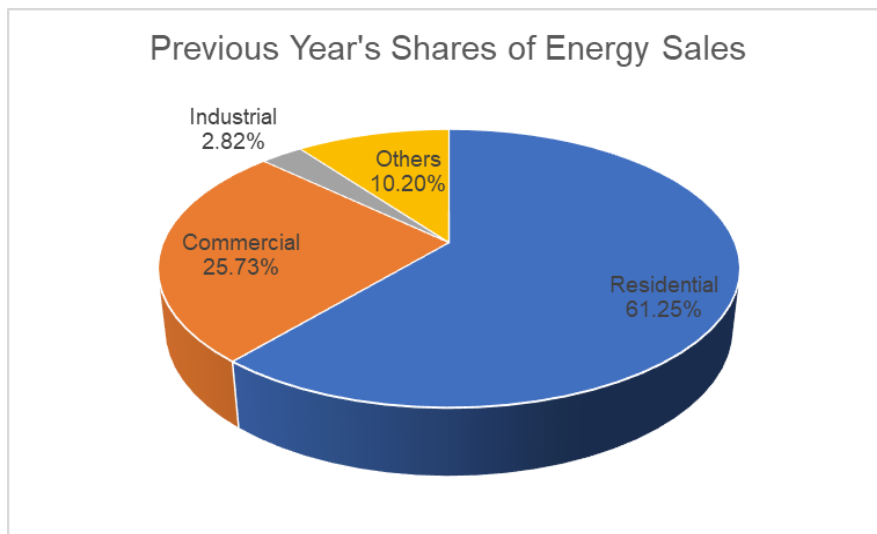
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	System Loss
2000	18.05	98,519	0	98,519	83,294	15,225	62%	15.45%
2001	20.41	102,251	0	102,251	87,358	14,893	57%	14.57%
2002	21.52	102,931	0	102,931	87,903	15,028	55%	14.60%
2003	22.38	113,741	0	113,741	96,209	17,532	58%	15.41%
2004	24.75	120,967	0	120,967	103,372	17,595	56%	14.55%
2005	23.34	124,664	0	124,664	106,851	17,813	61%	14.29%
2006	23.92	129,484	0	129,484	110,827	18,658	62%	14.41%
2007	26.39	138,407	0	138,407	118,473	19,934	60%	14.40%
2008	30.56	138,030	0	138,030	120,747	17,283	52%	12.52%
2009	24.44	142,638	0	142,638	123,466	19,171	67%	13.44%
2010	28.38	144,933	0	144,933	126,614	18,319	58%	12.64%
2011	29.73	151,271	0	151,271	133,290	17,981	58%	11.89%
2012	29.81	157,271	0	157,271	138,222	19,049	60%	12.11%
2013	27.44	147,902	0	147,902	134,711	13,191	62%	8.92%
2014	27.45	155,746	4,979	155,746	136,655	19,090	65%	12.26%
2015	28.62	186,166	8,615	186,166	168,054	18,112	74%	9.73%
2016	37.02	208,875	8,850	208,875	191,167	17,708	64%	8.48%
2017	38.98	221,764	45,412	221,764	203,459	18,305	65%	8.25%
2018	41.77	241,581	39,121	241,581	222,138	19,443	66%	8.05%
2019	44.41	264,673	69,667	264,673	237,535	27,138	68%	10.25%
2020	44.41	279,757	79,893	274,177	244,952	29,225	70%	10.66%
2021	51.85	296,514	90,990	289,899	260,850	29,475	64%	10.17%
2022	52.25	309,214	96,773	302,049	274,255	28,198	66%	9.34%
2023	55.34	325,714	117,526	319,231	300,824	24,339	66%	7.62%

The Table shows the progression of Coincident Peak MW in an increasing manner due to the increase in demand except between the years 2013 and 2014 when CAPELCO was devastated by Typhoon Yolanda and in the year 2020 abnormality of operation is caused and affected by the pandemic COVID-19. Steady increase of load factor at an average of 64% was also observed.

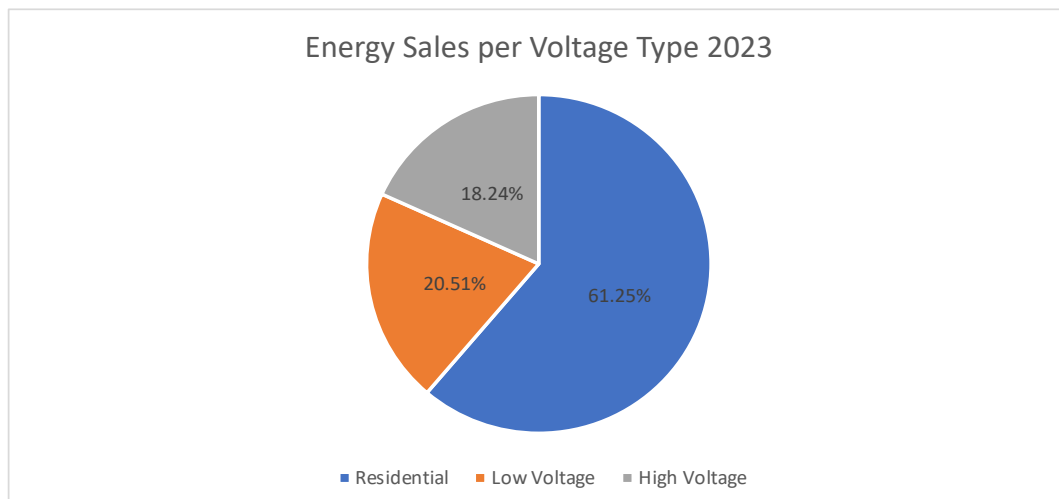


As expected of a growing economy, MWh Output increased steadily. However, there is a sharp upturn in 2014 after Typhoon Yolanda in 2013 and the abnormality during the pandemic COVID-19 in the year 2020. This is because 95% of CAPELCO's distribution facilities which are already damaged and dilapidated were replaced and rehabilitated. With the improved system reliability of the said facilities, CAPELCO was more able to support the growth of the local economy.

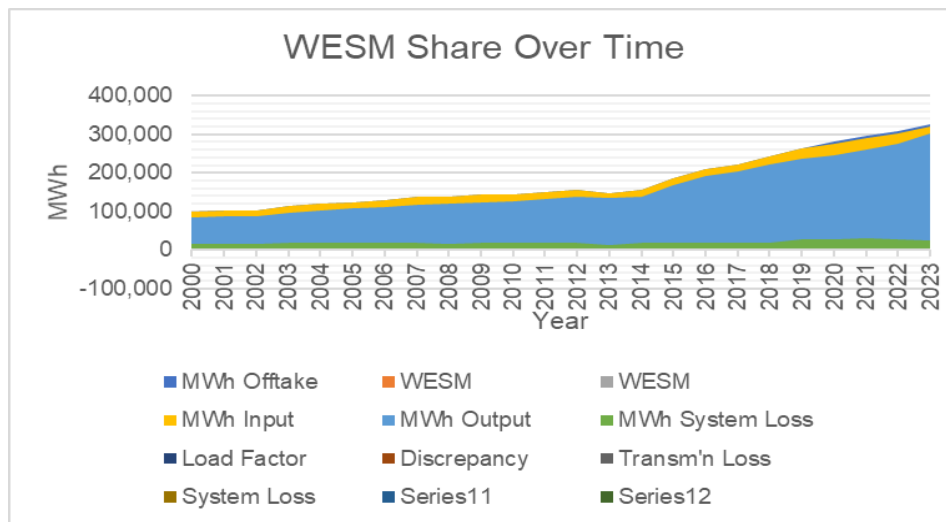
System Loss in absolute terms is quite erratic in progression specifically that again, CAPELCO was hit by Typhoon Ursula on December 24, 2019, and the spike of pandemic COVID-19 on year 2020 until now that affected our operations and subsequently resulted to a higher system loss in the year 2019-2021. However, System Loss in percentage is steadily decreasing.



Based on the figure above, the biggest contribution of the total energy sales share is Residential customers with 61.25%, Commercial customers with 25.73%, Industrial customers with 2.82% and other customers with 10.20% which consist of Public Buildings, Street Lights and Water Systems.



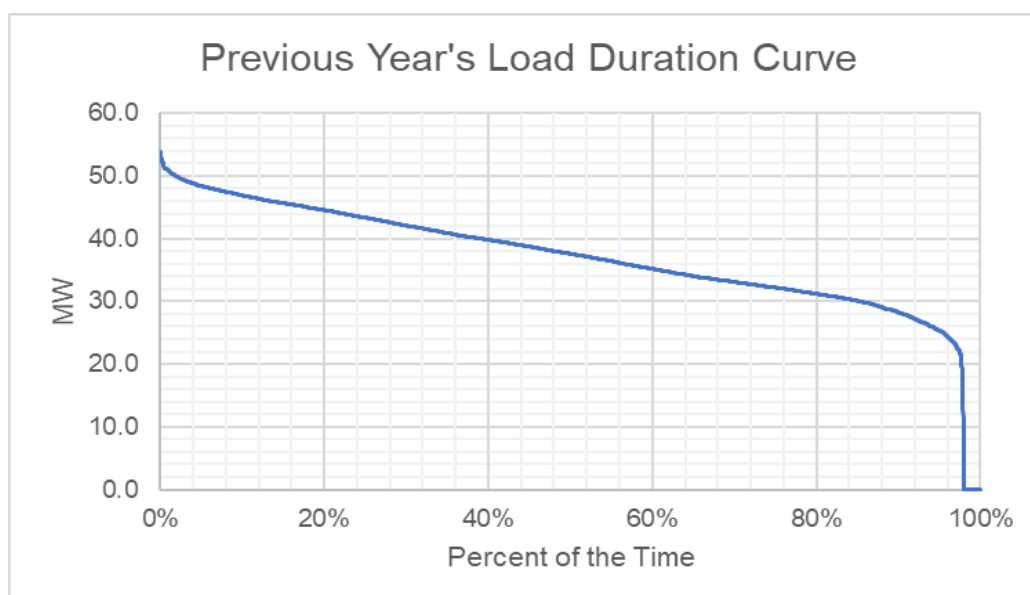
MWh Output per voltage type is comprised of Residential Customers that account 61.25% of the total energy sales followed by Low Voltage Customers at 20.51% and High Voltage Customers at 18.24% shares of the total energy sales.



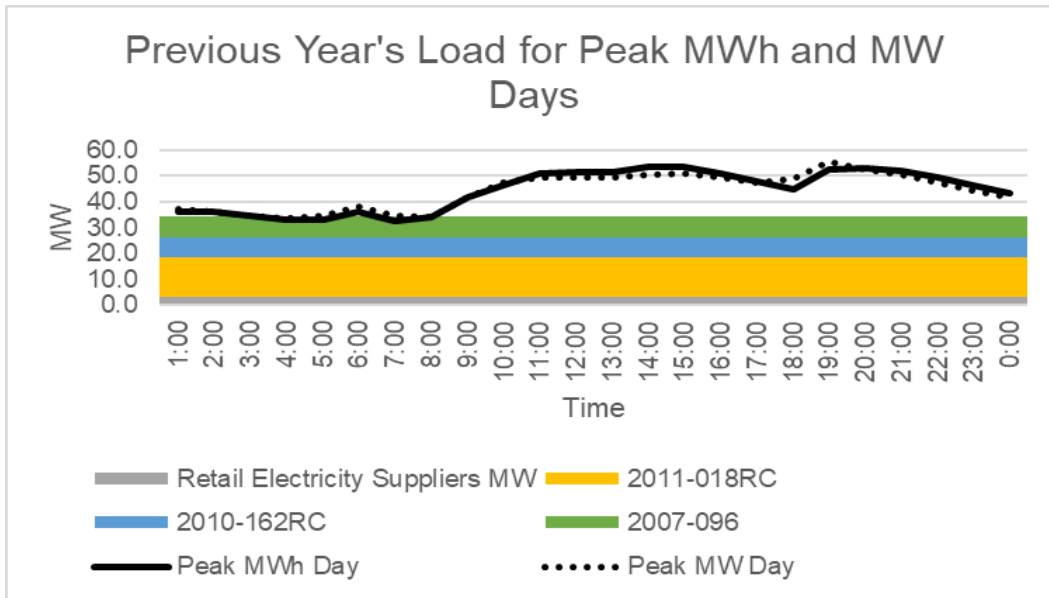
CAPELCO started WESM Energy offtake in 2010. However, due to the lack of data, we were only able to input figures for the year 2014. But, for the last three (3) years, the WESM Energy offtake increased due to the high demand of energy.

For the year 2023, the share of WESM from the MWh Input is equivalent to 36.81% of the total purchased energy and the remaining 63.19% are from CAPELCO Power Supply Agreement (PSA).

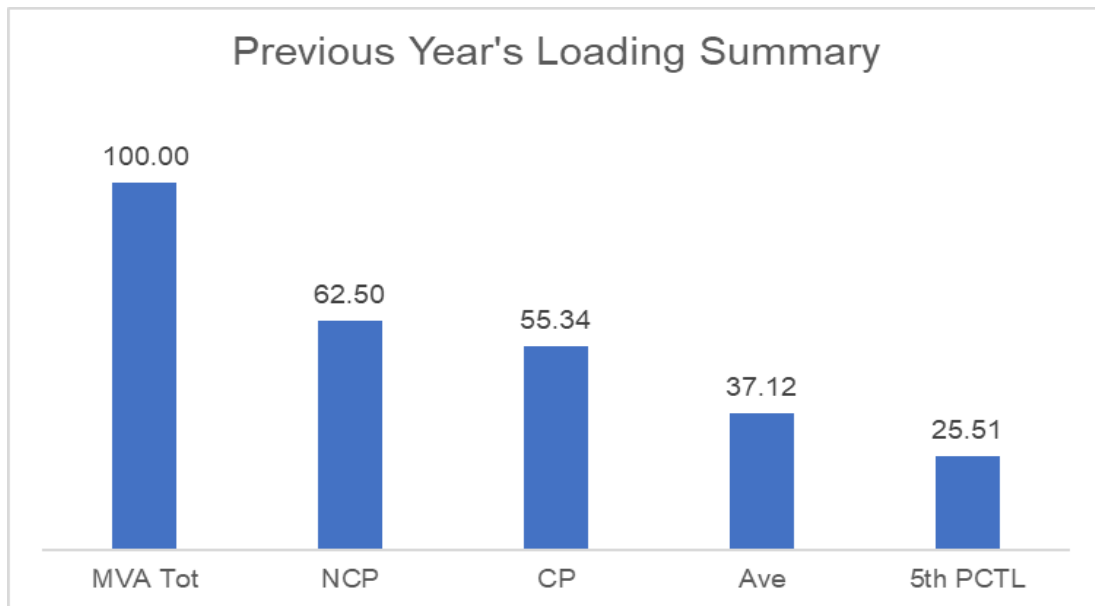
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 46.73 MW, and the maximum load is 55.34 MW (CP) for the last historical year 2023.



The Peak MW and MWh days occurred in May 2023 due to the increase of demand during summer. There is a substantial gap between the peak load and the available contracted supply. This can be attributed to the sudden increase in loads and effect by pandemic COVID-19 which was not expected.



The Non-coincident Peak Demand is 61.03 MW, which is around 55% of the total substation capacity of 110 MW at a power factor of 90%. The load factor or the ratio between the Average Load and the Non-coincident Peak Demand is 89%.

Metering Point	Substation MVA	Substation Peak MW
Panitan	20	11.973
Lawaan	50	30.015
Dao	10	8.894
Pres Roxas	10	4.814
Mambusao	10	6.805

The cooperative is proposing a new substation, currently included in the CAPEX 2024-2026 pre-filing, that will be built in Dumalag to serve portion of load of Dao Substation which is no longer feasible due to over extended distribution lines and capacity problem serving six (6) municipalities.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surpluses/ Deficit
2024	Jan	49.91	31.00	0.00	6.000	3.41	67%	80%	-9.50
	Feb	48.46	31.00	0.00	6.000	3.33	69%	82%	-8.13
	Mar	47.40	31.00	0.00	12.000	3.25	70%	97%	-1.15
	Apr	56.33	31.00	0.00	12.000	3.68	59%	82%	-9.66
	May	60.85	31.00	0.00	12.000	3.51	54%	75%	-14.34
	Jun	62.28	31.00	0.00	12.000	3.57	53%	73%	-15.70
	Jul	55.58	31.00	0.00	12.000	3.69	60%	83%	-8.89
	Aug	56.43	31.00	0.00	12.000	3.54	59%	81%	-9.88
	Sep	56.50	31.00	0.00	12.000	3.48	58%	81%	-10.01
	Oct	58.16	31.00	0.00	12.000	3.44	57%	79%	-11.71
	Nov	57.04	31.00	0.00	12.000	3.47	58%	80%	-10.57
	Dec	54.75	31.00	0.00	12.000	3.39	60%	84%	-8.36
2025	Jan	52.26	31.00	0.00	12.000	3.41	63%	88%	-5.86
	Feb	50.75	31.00	0.00	12.000	3.33	65%	91%	-4.42
	Mar	49.64	31.00	0.00	16.000	3.25	67%	101%	0.61
	Apr	58.99	31.00	0.00	16.000	3.68	56%	85%	-8.32
	May	63.72	31.00	0.00	16.000	3.51	51%	78%	-13.21
	Jun	65.21	31.00	0.00	16.000	3.57	50%	76%	-14.64
	Jul	58.20	31.00	0.00	16.000	3.69	57%	86%	-7.51
	Aug	59.09	31.00	0.00	16.000	3.54	56%	85%	-8.54
	Sep	59.16	31.00	0.00	16.000	3.48	56%	84%	-8.68
	Oct	60.90	31.00	0.00	16.000	3.44	54%	82%	-10.46
	Nov	59.73	31.00	0.00	16.000	3.47	55%	84%	-9.26
	Dec	57.33	31.00	0.00	16.000	3.39	57%	87%	-6.95
2026	Jan	54.53	31.00	0.00	16.000	3.41	61%	92%	-4.12
	Feb	52.94	31.00	0.00	16.000	3.33	62%	95%	-2.61
	Mar	51.79	31.00	0.00	16.000	3.25	64%	97%	-1.54
	Apr	61.54	31.00	0.00	16.000	3.68	54%	81%	-10.87
	May	66.48	31.00	0.00	16.000	3.51	49%	75%	-15.97
	Jun	68.04	31.00	0.00	16.000	3.57	48%	73%	-17.46
	Jul	60.72	31.00	0.00	16.000	3.69	54%	82%	-10.03
	Aug	61.64	31.00	0.00	16.000	3.54	53%	81%	-11.10
	Sep	61.72	31.00	0.00	16.000	3.48	53%	81%	-11.24
	Oct	63.54	31.00	0.00	16.000	3.44	52%	78%	-13.09

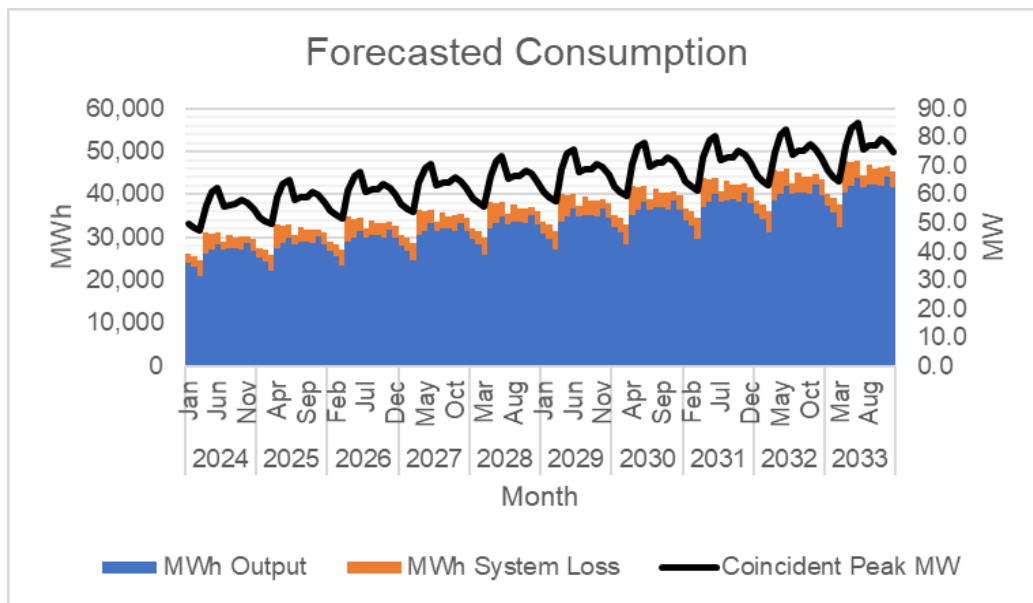
	Nov	62.32	31.00	0.00	16.000	3.47	53%	80%	-11.84
	Dec	59.82	31.00	0.00	16.000	3.39	55%	83%	-9.43
2027	Jan	56.70	31.00	0.00	18.000	3.41	58%	92%	-4.29
	Feb	55.05	31.00	0.00	18.000	3.33	60%	95%	-2.72
	Mar	53.85	31.00	0.00	18.000	3.25	61%	97%	-1.60
	Apr	64.00	31.00	0.00	18.000	3.68	51%	81%	-11.32
	Ma y	69.13	31.00	0.00	18.000	3.51	47%	75%	-16.62
	Jun	70.75	31.00	0.00	18.000	3.57	46%	73%	-18.18
	Jul	63.14	31.00	0.00	18.000	3.69	52%	82%	-10.45
	Aug	64.10	31.00	0.00	18.000	3.54	51%	81%	-11.56
	Sep	64.18	31.00	0.00	18.000	3.48	51%	81%	-11.70
	Oct	66.07	31.00	0.00	18.000	3.44	50%	78%	-13.63
	Nov	64.80	31.00	0.00	18.000	3.47	51%	80%	-12.33
	Dec	62.20	31.00	0.00	18.000	3.39	53%	83%	-9.81
2028	Jan	58.79	31.00	0.00	18.000	3.41	56%	88%	-6.38
	Feb	57.08	31.00	0.00	18.000	3.33	58%	91%	-4.75
	Mar	55.83	31.00	0.00	18.000	3.25	59%	93%	-3.58
	Apr	66.36	31.00	0.00	18.000	3.68	49%	78%	-13.68
	Ma y	71.68	31.00	0.00	18.000	3.51	45%	72%	-19.17
	Jun	73.36	31.00	0.00	18.000	3.57	44%	70%	-20.78
	Jul	65.47	31.00	0.00	18.000	3.69	50%	79%	-12.77
	Aug	66.46	31.00	0.00	18.000	3.54	49%	78%	-13.92
	Sep	66.55	31.00	0.00	18.000	3.48	49%	78%	-14.06
	Oct	68.50	31.00	0.00	18.000	3.44	48%	75%	-16.06
	Nov	67.19	31.00	0.00	18.000	3.47	49%	77%	-14.72
	Dec	64.49	31.00	0.00	18.000	3.39	51%	80%	-12.10
2029	Jan	60.80	31.00	0.00	18.000	3.41	54%	85%	-8.39
	Feb	59.04	31.00	0.00	18.000	3.33	56%	88%	-6.71
	Mar	57.74	31.00	0.00	18.000	3.25	57%	90%	-5.49
	Apr	68.63	31.00	0.00	18.000	3.68	48%	75%	-15.95
	Ma y	74.13	31.00	0.00	18.000	3.51	44%	69%	-21.62
	Jun	75.87	31.00	0.00	18.000	3.57	43%	68%	-23.29
	Jul	67.71	31.00	0.00	18.000	3.69	48%	77%	-15.01
	Aug	68.74	31.00	0.00	18.000	3.54	48%	75%	-16.20
	Sep	68.82	31.00	0.00	18.000	3.48	47%	75%	-16.34
	Oct	70.85	31.00	0.00	18.000	3.44	46%	73%	-18.40
	Nov	69.49	31.00	0.00	18.000	3.47	47%	74%	-17.01
	Dec	66.70	31.00	0.00	18.000	3.39	49%	77%	-14.31
2030	Jan	62.74	31.00	0.00	18.000	3.41	52%	83%	-10.33
	Feb	60.92	31.00	0.00	18.000	3.33	54%	85%	-8.59
	Mar	59.58	31.00	0.00	18.000	3.25	55%	87%	-7.33
	Apr	70.81	31.00	0.00	18.000	3.68	46%	73%	-18.14
	Ma y	76.50	31.00	0.00	18.000	3.51	42%	67%	-23.98
	Jun	78.28	31.00	0.00	18.000	3.57	41%	66%	-25.71
	Jul	69.87	31.00	0.00	18.000	3.69	47%	74%	-17.17
	Aug	70.93	31.00	0.00	18.000	3.54	46%	73%	-18.39
	Sep	71.02	31.00	0.00	18.000	3.48	46%	73%	-18.53

	Oct	73.10	31.00	0.00	18.000	3.44	45%	70%	-20.66
	Nov	71.70	31.00	0.00	18.000	3.47	45%	72%	-19.23
	Dec	68.82	31.00	0.00	18.000	3.39	47%	75%	-16.44
2031	Jan	64.61	31.00	0.00	18.000	3.41	51%	80%	-12.20
	Feb	62.73	31.00	0.00	18.000	3.33	52%	82%	-10.40
	Mar	61.36	31.00	0.00	18.000	3.25	53%	84%	-9.11
	Apr	72.92	31.00	0.00	18.000	3.68	45%	71%	-20.25
	Ma y	78.77	31.00	0.00	18.000	3.51	41%	65%	-26.26
	Jun	80.62	31.00	0.00	18.000	3.57	40%	64%	-28.04
	Jul	71.95	31.00	0.00	18.000	3.69	45%	72%	-19.25
	Aug	73.04	31.00	0.00	18.000	3.54	45%	71%	-20.50
	Sep	73.13	31.00	0.00	18.000	3.48	45%	70%	-20.65
	Oct	75.28	31.00	0.00	18.000	3.44	43%	68%	-22.84
	Nov	73.84	31.00	0.00	18.000	3.47	44%	70%	-21.36
	Dec	70.87	31.00	0.00	18.000	3.39	46%	73%	-18.49
2032	Jan	66.41	31.00	0.00	18.000	3.41	49%	78%	-14.00
	Feb	64.48	31.00	0.00	18.000	3.33	51%	80%	-12.15
	Mar	63.07	31.00	0.00	18.000	3.25	52%	82%	-10.82
	Apr	74.96	31.00	0.00	18.000	3.68	43%	69%	-22.28
	Ma y	80.97	31.00	0.00	18.000	3.51	40%	63%	-28.46
	Jun	82.87	31.00	0.00	18.000	3.57	39%	62%	-30.29
	Jul	73.96	31.00	0.00	18.000	3.69	44%	70%	-21.26
	Aug	75.08	31.00	0.00	18.000	3.54	43%	68%	-22.54
	Sep	75.18	31.00	0.00	18.000	3.48	43%	68%	-22.69
	Oct	77.38	31.00	0.00	18.000	3.44	42%	66%	-24.94
	Nov	75.90	31.00	0.00	18.000	3.47	43%	68%	-23.43
	Dec	72.85	31.00	0.00	18.000	3.39	45%	71%	-20.47
2033	Jan	68.16	31.00	0.00	18.000	3.41	48%	76%	-15.75
	Feb	66.18	31.00	0.00	18.000	3.33	49%	78%	-13.85
	Mar	64.73	31.00	0.00	18.000	3.25	50%	80%	-12.48
	Apr	76.93	31.00	0.00	18.000	3.68	42%	67%	-24.25
	Ma y	83.10	31.00	0.00	18.000	3.51	39%	62%	-30.59
	Jun	85.04	31.00	0.00	18.000	3.57	38%	60%	-32.47
	Jul	75.90	31.00	0.00	18.000	3.69	43%	68%	-23.20
	Aug	77.05	31.00	0.00	18.000	3.54	42%	67%	-24.51
	Sep	77.15	31.00	0.00	18.000	3.48	42%	67%	-24.67
	Oct	79.42	31.00	0.00	18.000	3.44	41%	64%	-26.97
	Nov	77.89	31.00	0.00	18.000	3.47	42%	66%	-25.42
	Dec	74.77	31.00	0.00	18.000	3.39	43%	69%	-22.38

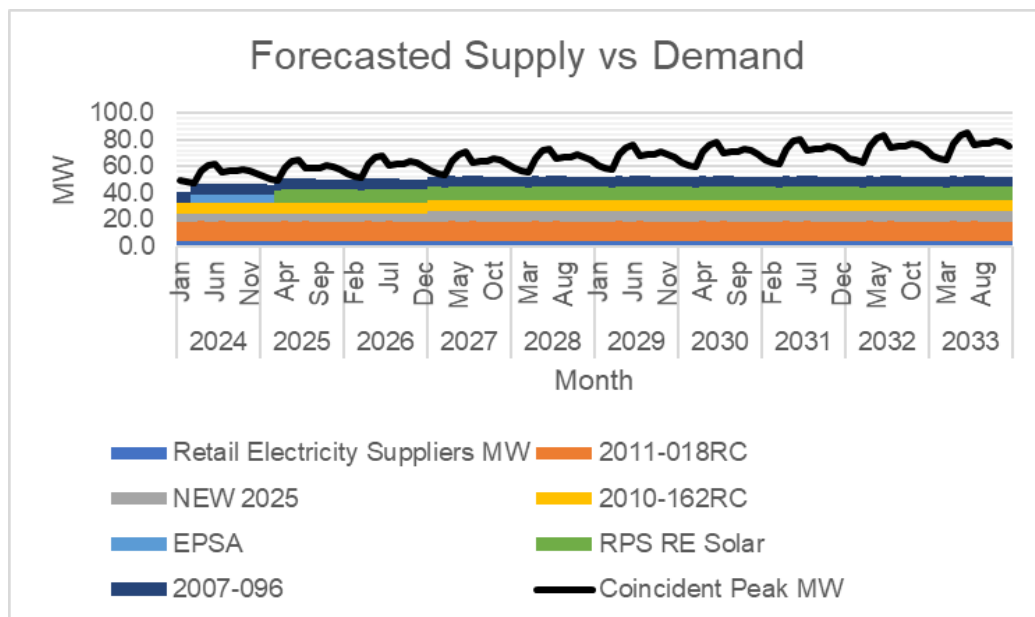
The Peak Demand was forecasted using NEA 50 forecast models - linear with smoothing and was assumed to occur in the month of May due to the summer and climate change. In general, Peak Demand is expected to grow at a rate of 6.60% annually.

Further, due to the abnormality of operation caused by the pandemic for the year 2019-2020, forecasted data using the actual 2017-2023 historical data was normalized due to erratic forecasted data results. And after series of forecasting, we decided and

picked the result that is confident enough that it is within the bound of our sales target of CAPELCO operation.



MWh Input is expected to steadily increase while System Loss in percentage is expected to be in the single digit ranges.



Currently, CAPELCO participated on the on-going bidding from initial of six (6) MW in 2024 to eight (8) MW in 2026 for a coal power supply. Additionally, the cooperative has an Emergency Power Supply Agreement withstanding six (6) MW starting on March 2024. Moreover, to comply with the RPS amendment needing an RE source, there is a planned RE Solar supply having ten (10) MW starting March 2025.

Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2010-162RC	Intermediate	Panay Energy Development Corporation	8	56,064	7/4/2012	7/29/2037
2011-018RC	Base	Green Core Geothermal, Inc.	15	131,400	7/2/2010	7/16/2040
2007-096	Peaking	Enervantage Suppliers Company, Inc.	8	60,499	7/1/2009	7/26/2034

CAPELCO Power Supply Agreement (PSA) with ERC under Case No. 2010-162RC was supplied by a coal powered plant, Panay Energy Development Corporation (PDC). It was selected to provide for intermediate requirements with 8.0 MW and Minimum Energy Offtake (MEOT) 56,064 MWh which started in 2012 and will end in year 2037.

A geothermal power plant Greencore Geothermal, Inc. (GCGI) PSA with ERC under Case No. 2011-018RC supplied 15 MW with a MEOT of 131,400 MWh It was selected to provide for Base requirements which started in 2010 and will end in year 2040.

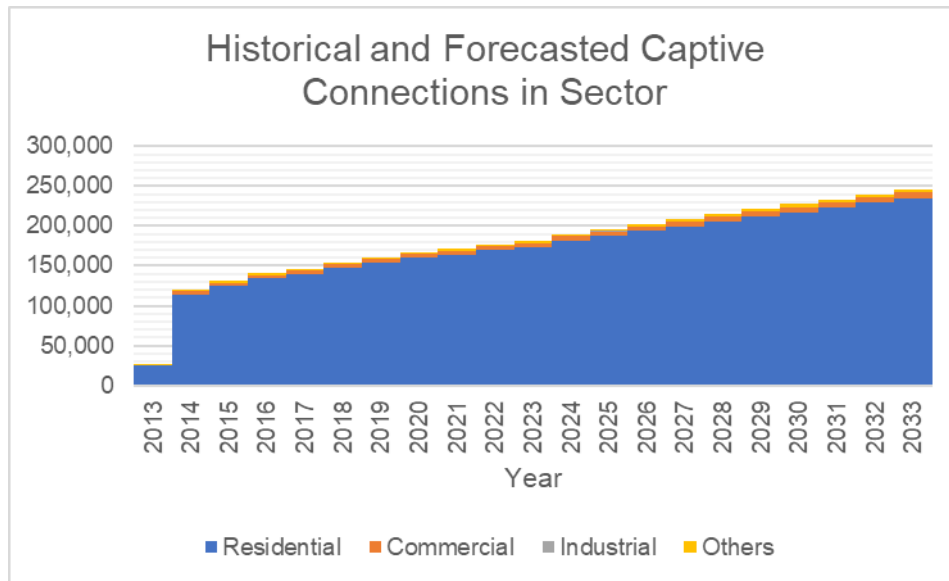
Lastly, an embedded diesel/bunker power plant Enervantage Suppliers Company, Inc. (ESCI) with ERC under Case No. 2007-096 with 8.0 MW and MEOT 60,499 MWh was selected to provide for peaking requirements which started in 2009 and will end in year 2034.

Spot loads were not included in the forecasting due to the onset of RE law and RCOA Rule. It was already experienced that some big loads in the franchised area have already availed the RE power and affected the contracted energy by the Cooperative. Two (2) contestable Customers with an average demand of 3.0MW had voluntarily applied for RCOA and one of which is Robinson Mall Roxas and avail and enter contract with Retail Electricity Supplier (RES).

Moreover, the cooperative has been implementing the Green Energy Option Program (GEOP) for its 100kW above customers. Where the GEOP is the ability of the customer to choose their own respective source of power but restrictive to renewable only. Currently, the cooperative has three existing GEOP customers shown in the table below, and another applicant pending for approval.

Customer Name	Address	Supply Type
Robinson Place Roxas	Pueblo De Panay, Roxas City	RCOA
Gaisano City	Arnaldo Blvd, Roxas City	GEOP
Gaisano Marketplace	San Roque Extension, Roxas City	GEOP
Globe Baybay	Baybay, Roxas City	GEOP

Captive Customer Connections



CAPELCO expects an increase in the number of customer connections especially with residential connections due to Sitio Electrification Program (SEP) Projects and the influx of commercial customers due to the rapid commercial growth of Roxas City. With the increase in connections comes an increase in total energy consumption.

The number of Captive Customer connections is expected to grow at a rate of 4% annually.