Power Supply Procurement Plan 2020

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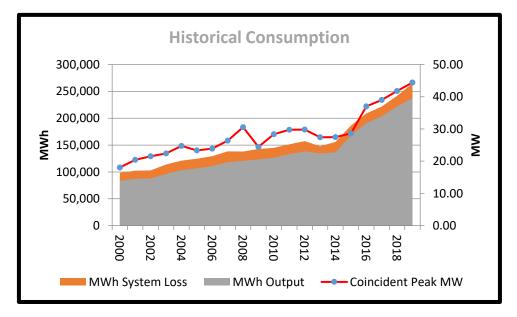
CAPIZ ELECTRIC COOPERATIVE, INC.

(CAPELCO) BURGOS ST., ROXAS CITY, CAPIZ

Historical Consumption Data

YEAR	Coincident Peak MW	MWh Input	WESM	MWh Output	MWh System Loss	Load Factor	Discrepancy	System Loss
2000	18.05	98,519	0	83,294	15,225	55%	0.00%	15.45%
2001	20.41	102,251	0	87,358	14,893	50%	0.00%	14.57%
2002	21.52	102,931	0	87,903	15,028	48%	0.00%	14.60%
2003	22.38	113,741	0	96,209	17,532	51%	0.00%	15.41%
2004	24.75	120,967	0	103,372	17,595	49%	0.00%	14.55%
2005	23.34	124,664	0	106,851	17,813	54%	0.00%	14.29%
2006	23.92	129,484	0	110,827	18,658	54%	0.00%	14.41%
2007	26.39	138,407	0	118,473	19,934	53%	0.00%	14.40%
2008	30.56	138,030	0	120,747	17,283	45%	0.00%	12.52%
2009	24.44	142,638	0	123,466	19,171	59%	0.00%	13.44%
2010	28.38	144,933	0	126,614	18,319	56%	0.00%	12.64%
2011	29.73	151,271	0	133,290	17,981	56%	0.00%	11.89%
2012	29.81	157,271	0	138,222	19,049	59%	0.00%	12.11%
2013	27.44	147,902	0	134,711	13,191	62%	0.00%	8.92%
2014	27.45	155,746	4,979	136,655	19,090	58%	0.00%	12.26%
2015	28.62	186,166	8,615	168,054	18,112	61%	0.00%	9.73%
2016	37.02	208,875	8,850	191,167	17,708	62%	0.00%	8.48%
2017	38.98	221,764	45,412	203,459	18,305	63%	0.00%	8.25%
2018	41.77	241,581	39,121	222,138	19,443	64%	0.00%	8.05%
2019	44.41	264,673	69,667	237,535	27,138	68%	0.00%	10.25%

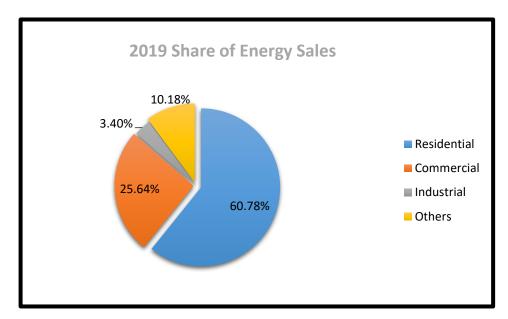
The Table shows the progression of Coincident Peak MW in an increasing manner due to the increase in demand except between the years 2013 and 2014 when CAPELCO was devastated by Typhoon Yolanda and a steady increase of load factor at 68%.



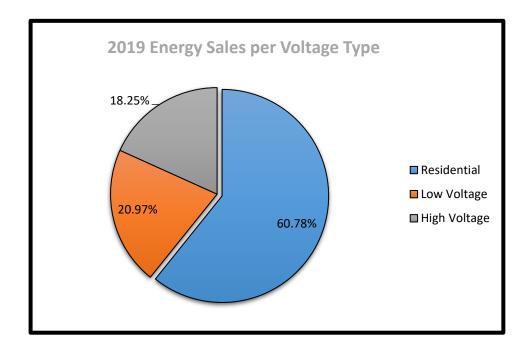
As expected of a growing economy, MWh Output increased steadily. However, there is a sharp upturn in 2014 after Typhoon Yolanda in 2013. This is because 95% of CAPELCO's distribution facilities which are already damaged and dilapidated were

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 which affected our operations and subsequently resulted to a higher system loss in the year 2019. However, System Loss in percentage is steadily decreasing.



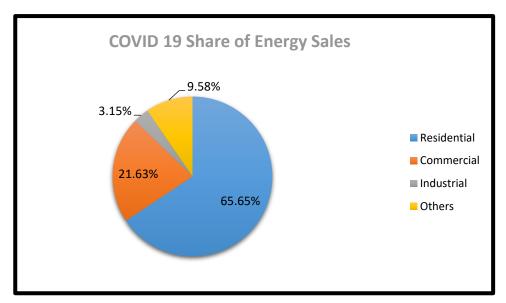
Majority of CAPELCO Member consumer-owners (MCO) are residential customers that account 61% of the total MWh sales. Followed by Commercial customers at 26%, Industrial customers for only 3.41% and 10% of the total energy MWh sales were shared by others.



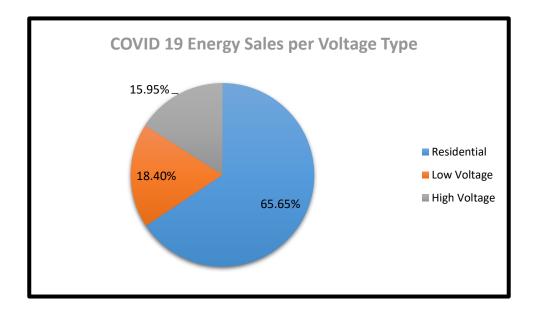
MWh Output is comprised of Residential Customers that account 61% of the total energy sales followed by Low Voltage Customers at 21% and High Voltage Customers at 18% shares of the total energy sales.

Now come the COVID 19 Pandemic that hit the Philippines and dramatically change everyone's lifestyle, health, financial and economic landscapes all over the world.

For the first six (6) months of 2020, CAPELCO observes the drastic effect in the operation brought by the pandemic in terms of share of energy sales versus of year 2019.

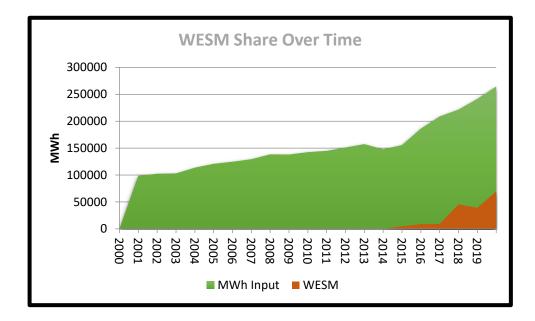


The Residential Customers now accounts share of energy sales of 66% or an increase of 5% while Commercial, Industrial and Others customers decreases by 4%, by 0.30% and by 0.6% respectively.



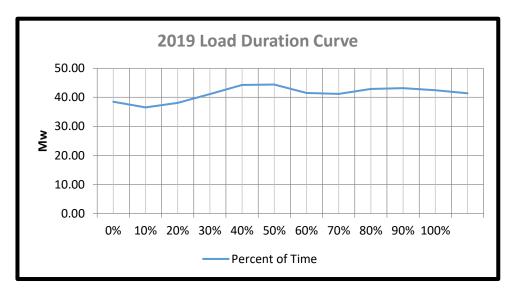
Same effect is also observes in the Energy Sales per Voltage Type as the Residential Customers that account now to 66% of the total energy sales or increase by 5% followed by Low Voltage Customers at 18% or decrease of 3% and High Voltage Customers at 16% shares of the total energy sales or a decrease of 2%.

CAPELCO strive hard to the "New Normal" operation and fervently pray that this suffering of the people caused by COVID 19 will end soon and we can return to normal operation and serves the MCOs with effective and good quality services.



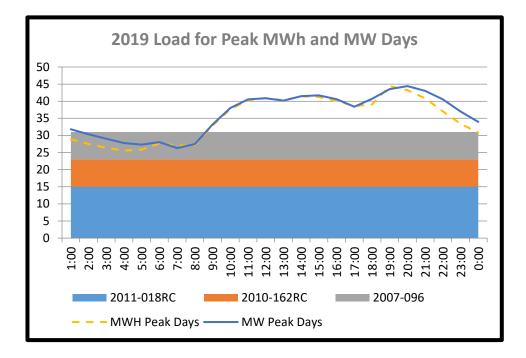
CAPELCO started WESM Energy offtake in 2010. However, due to the lack of data, we were only able to input figures for the year 2014. But, for the last three (3) years, the WESM Energy offtake increased due to the high demand of energy.

For the year 2019, the share of WESM from the MWh Input is equivalent to 26% of the total purchased energy and the remaining 74% are from CAPELCO Power Supply Agreement (PSA).

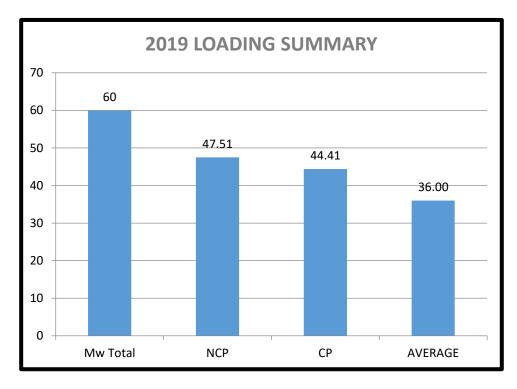


Previous Year's Load Profile

Based on the Load Duration Curve, the minimum load is 36 MW and the maximum load is 44 MW (CP) for the last historical year 2019.



The Peak MW and MWh days occurred in June 2019 due to the increase of demand during summer. It can be seen that there is a substantial gap between the peak load and the available contracted supply. This can be attributed to the sudden increase in loads which was not expected.



The Non-coincident Peak Demand is 47.51 MW, which is around 80% of the total substation capacity of 60 MVA at a power factor of 90%. The load factor or the ratio between the Average Load and the Non-coincident Peak Demand is 68%.

Metering Point	Substation MVA	Substation Peak MW
Panitan	10	10.87
Roxas (Lawaan)	30	22.00
Dao	10	8.05
Pres. Roxas	5	4.16
Mambusao	5	4.12

In the year 2020, an additional 10 MVA of Panitan Substation will be energized to solve the capacity deficiency. Roxas City has an additional 20 MVA on-going construction at Burgos St., Roxas City to augment the Lawaan Substation to cater the incoming big spot loads. A new 5 MVA Substation will be built in Dumalag to serve portion of load of Dao Substation which is no longer feasible due to long distribution line and capacity problem serving six (6) municipalities. Likewise, an additional 5 MVA will be added to Mambusao Substation for the same purpose.

All five (5) substations are loaded well above the 70% loading PDC and PGC standards. This capacity problem will be solved by the year 2020-2021.

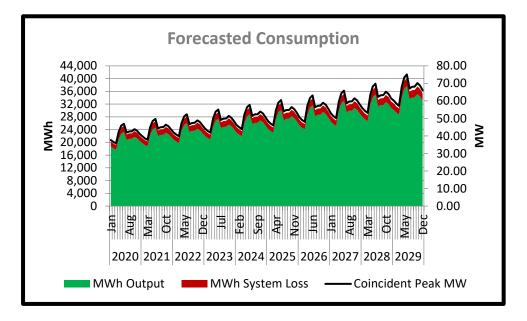
Year	Month	Coincident Peak MW	Contracted MW	Planned MW	MWh Input	MWh Output	MWh System Loss	Existing Contracting Level	Target Contracting Level	System Loss
2020	Jan	37.68	31	0	19,387	17,968	1,418	82%	82%	7.32%
	Feb	36.59	31	0	20,583	18,514	2,069	85%	85%	10.05%
	Mar	35.79	31	0	21,115	17,563	3,552	87%	87%	16.82%
	Apr	42.54	31	6	22,627	22,150	477	73%	87%	2.11%
	May	45.95	31	6	24,560	21,628	2,932	67%	81%	11.94%
	Jun	47.02	31	6	25,105	22,002	3,103	66%	79%	12.36%
	Jul	41.97	31	6	23,464	21,093	2,371	74%	88%	10.10%
	Aug	42.60	31	6	23,821	21,413	2,407	73%	87%	10.11%
	Sep	42.66	31	6	23,851	21,440	2,410	73%	87%	10.11%
	Oct	43.91	31	6	24,552	22,069	2,482	71%	84%	10.11%
	Nov	43.07	31	6	24,080	21,646	2,434	72%	86%	10.11%
	Dec	41.34	31	6	23,114	20,779	2,335	75%	90%	10.10%
2021	Jan	39.81	31	6	22,328	20,117	2,211	78%	93%	9.90%
	Feb	38.66	31	6	21,680	19,535	2,145	80%	96%	9.90%
	Mar	37.81	31	6	21,205	19,108	2,097	82%	98%	9.89%
	Apr	44.94	31	6	25,202	22,702	2,500	69%	82%	9.92%
	May	48.54	31	6	27,224	24,520	2,704	64%	76%	9.93%
	Jun	49.68	31	6	27,860	25,092	2,768	62%	74%	9.94%
	Jul	44.33	31	6	24,864	22,398	2,466	70%	83%	9.92%
	Aug	45.01	31	6	25,242	22,738	2,504	69%	82%	9.92%
	Sep	45.06	31	6	25,274	22,767	2,508	69%	82%	9.92%

Forecasted Consumption Data

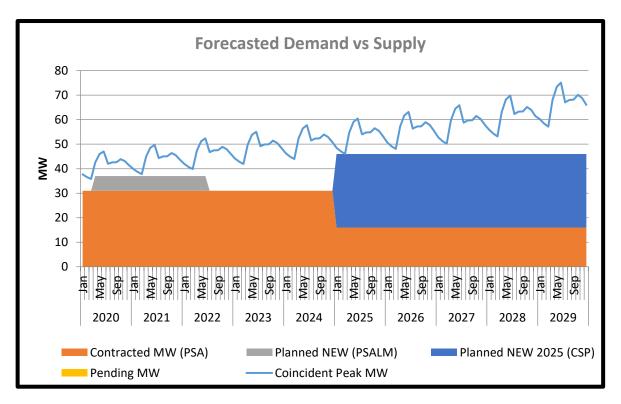
	Oct	46.20	24		26.017	22 425	2 5 9 2	670/	900/	0.020/
		46.39	31	6	26,017	23,435	2,582	67%	80%	9.93%
	Nov	45.50	31	6	25,518	22,985	2,532	68%	81%	9.92%
	Dec	43.67	31	6	24,493	22,065	2,429	71%	85%	9.92%
2022	Jan	41.98	31	6	23,572	21,343	2,229	74%	88%	9.45%
	Feb	40.76	31	6	22,888	20,725	2,163	76%	91%	9.45%
	Mar	39.87	31	6	22,387	20,272	2,115	78%	93%	9.45%
	Apr	47.38	31	6	26,606	24,085	2,521	65%	78%	9.47%
	May	51.18	31	6	28,741	26,015	2,726	61%	72%	9.48%
	Jun	52.38	31	6	29,413	26,622	2,791	59%	71%	9.49%
	Jul	46.75	31	0	26,250	23,763	2,486	66%	66%	9.47%
	Aug	47.46	31	0	26,649	24,124	2,525	65%	65%	9.47%
	Sep	47.52	31	0	26,682	24,154	2,528	65%	65%	9.47%
	Oct	48.91	31	0	27,467	24,863	2,603	63%	63%	9.48%
	Nov	47.98	31	0	26,939	24,387	2,553	65%	65%	9.48%
	Dec	46.05	31	0	25,858	23,410	2,449	67%	67%	9.47%
2023	Jan	44.14	31	0	24,827	22,636	2,190	70%	70%	8.82%
	Feb	42.86	31	0	24,106	21,981	2,126	72%	72%	8.82%
	Mar	41.92	31	0	23,579	21,500	2,078	74%	74%	8.81%
	Apr	49.82	31	0	28,022	25,545	2,477	62%	62%	8.84%
	May	53.82	31	0	30,271	27,591	2,679	58%	58%	8.85%
	Jun	55.08	31	0	30,978	28,235	2,743	56%	56%	8.85%
	Jul	49.15	31	0	27,647	25,203	2,444	63%	63%	8.84%
	Aug	49.90	31	0	28,068	25,586	2,482	62%	62%	8.84%
	Sep	49.96	31	0	28,103	25,618	2,485	62%	62%	8.84%
	Oct	51.43	31	0	28,929	26,370	2,559	60%	60%	8.85%
	Nov	50.45	31	0	28,374	25,864	2,509	61%	61%	8.84%
2024	Dec	48.42 46.29	31 31	0	27,235 26,114	24,828 24,006	2,407	64% 67%	64% 67%	8.84% 8.07%
2024	Jan Feb	40.29	31	0	25,356	23,310	2,108 2,046	69%	69%	8.07%
	Mar	43.97	31	0	23,350	22,801	2,040	71%	71%	8.06%
	Apr	52.25	31	0	29,475	27,090	2,000	59%	59%	8.09%
	May	56.44	31	0	31,840	29,261	2,579	55%	55%	8.10%
	Jun	57.76	31	0	32,584	29,944	2,640	54%	54%	8.10%
	Jul	51.55	31	0	29,080	26,728	2,352	60%	60%	8.09%
	Aug	52.34	31	0	29,522	27,134	2,388	59%	59%	8.09%
	Sep	52.40	31	0	29,559	27,164	2,391	59%	59%	8.09%
	Oct	53.94	31	0	30,428	27,965	2,463	57%	57%	8.09%
	Nov	52.91	31	0	29,844	27,429	2,415	59%	59%	8.09%
	Dec	50.78	31	0	28,646	26,330	2,316	61%	61%	8.09%
2025	Jan	48.48	16	30	27,449	25,457	1,992	33%	95%	7.26%
	Feb	47.07	16	30	26,653	24,719	1,933	34%	98%	7.25%
	Mar	46.04	16	30	26,069	24,179	1,890	35%	100%	7.25%
	Apr	54.72	16	30	30,982	28,729	2,254	29%	84%	7.27%
	May	59.11	16	30	33,468	31,031	2,438	27%	78%	7.28%
	Jun	60.49	16	30	34,251	31,755	2,496	26%	76%	7.29%
	Jul	53.98	16	30	30,567	28,344	2,223	30%	85%	7.27%
	Aug	54.80	16	30	31,032	28,775	2,257	29%	84%	7.27%
	Sep	54.87	16	30	31,071	28,811	2,260	29%	84%	7.27%
	Oct	56.49	16	30	31,985	29,657	2,328	28%	81%	7.28%
	Nov	55.40	16	30	31,370	29,088	2,282	29%	83%	7.28%

	Dec	53.18	16	30	30,111	27,922	2,189	30%	87%	7.27%
2026	Jan	50.61	16	30	28,849	26,996	1,853	32%	91%	6.42%
	Feb	49.14	16	30	28,011	26,213	1,798	33%	94%	6.42%
	Mar	48.07	16	30	27,398	25,640	1,758	33%	96%	6.42%
	Apr	57.13	16	30	32,562	30,465	2,097	28%	81%	6.44%
	May	61.71	16	30	35,175	32,906	2,268	26%	75%	6.45%
	Jun	63.15	16	30	35,997	33,675	2,322	25%	73%	6.45%
	Jul	56.36	16	30	32,126	30,058	2,068	28%	82%	6.44%
	Aug	57.22	16	30	32,614	30,514	2,100	28%	80%	6.44%
	Sep	57.29	16	30	32,656	30,553	2,103	28%	80%	6.44%
	Oct	58.97	16	30	33,615	31,449	2,166	27%	78%	6.44%
	Nov	57.84	16	30	32,970	30,846	2,124	28%	80%	6.44%
	Dec	55.52	16	30	31,647	29,610	2,037	29%	83%	6.44%
2027	Jan	52.80	16	30	30,325	28,625	1,700	30%	87%	5.61%
	Feb	51.27	16	30	29,445	27,795	1,650	31%	90%	5.60%
	Mar	50.15	16	30	28,800	27,187	1,613	32%	92%	5.60%
	Apr	59.60	16	30	34,228	32,304	1,924	27%	77%	5.62%
	May	64.38	16	30	36,974	34,893	2,082	25%	71%	5.63%
	Jun	65.88	16	30	37,839	35,707	2,131	24%	70%	5.63%
	Jul	58.80	16	30	33,769	31,872	1,898	27%	78%	5.62%
	Aug	59.69	16	30	34,283	32,356	1,927	27%	77%	5.62%
	Sep	59.77	16	30	34,326	32,397	1,930	27%	77%	5.62%
	Oct	61.53	16	30	35,335	33,348	1,988	26%	75%	5.63%
	Nov	60.34	16	30	34,657	32,708	1,949	27%	76%	5.62%
	Dec	57.92	16	30	33,266	31,397	1,869	28%	79%	5.62%
2028	Jan	55.96	16	30	29,579	28,038	1,541	29%	82%	5.21%
	Feb	54.34	16	30	28,720	27,225	1,495	29%	85%	5.21%
	Mar	53.15	16	30	28,092	26,630	1,462	30%	87%	5.20%
	Apr	63.16	16	30	33,386	31,641	1,745	25%	73%	5.23%
	May	68.23	16	30	36,065	34,177	1,888	23%	67%	5.23%
	Jun	69.83	16	30	36,908	34,975	1,933	23%	66%	5.24%
	Jul	62.32	16	30	32,939	31,218	1,721	26%	74%	5.22%
	Aug	63.26	16	30	33,440	31,692	1,748	25%	73%	5.23%
	Sep	63.34	16	30	33,482	31,732	1,750	25%	73%	5.23%
	Oct	65.21	16	30	34,466	32,664	1,802	25%	71%	5.23%
	Nov	63.95	16	30	33,804	32,037	1,767	25%	72%	5.23%
	Dec	61.39	16	30	32,448	30,753	1,695	26%	75%	5.22%
2029	Jan	60.20	16	30	31,546	30,163	1,384	27%	76%	4.39%
	Feb	58.46	16	30	30,631	29,288	1,342	27%	79%	4.38%
	Mar	57.18	16	30	29,960	28,648	1,312	28%	80%	4.38%
	Apr	67.95	16	30	35,607	34,040	1,567	24%	68%	4.40%
	May	73.40	16	30	38,464	36,768	1,696	22%	63%	4.41%
	Jun	75.12	16	30	39,363	37,626	1,737	21%	61%	4.41%
	Jul	67.04	16	30	35,130	33,584	1,546	24%	69%	4.40%
	Aug	68.06	16	30	35,664	34,095	1,570	24%	68%	4.40%
	Sep	68.15	16	30	35,709	34,137	1,572	23%	68%	4.40%
	Oct	70.15	16	30	36,759	35,140	1,619	23%	66%	4.40%
	Nov	68.80	16	30	36,053	34,466	1,587	23%	67%	4.40%
	Dec	66.04	16	30	34,606	33,084	1,522	24%	70%	4.40%

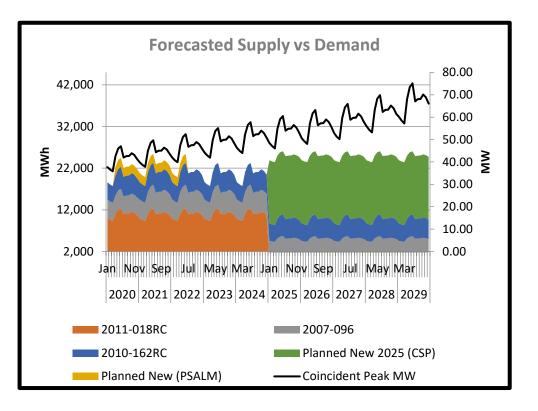
The Peak Demand was forecasted using NEA 50 forecast models - linear with smoothing and was assumed to occur in the month of June due to the summer and climate change. Monthly Peak Demand is at its lowest in the month of March due to the cool weather caused by easterly wind from Siberia. In general, Peak Demand is expected to grow at a rate of 5% annually.



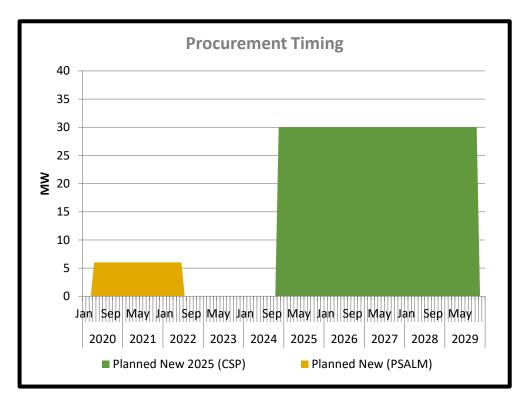
MWh Input is expected to steadily increase while System Loss in percentage is expected to be in the single digit ranges.



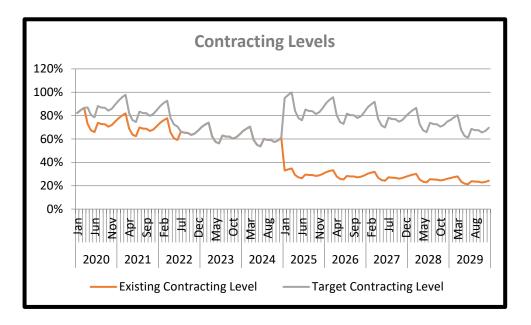
Currently, CAPELCO is under-contracted and is planning to enter into an agreement with PSALM for six (6) MW power supply from June 2020 to July 2022. And by 2025, this will be addressed by a new planned 30 MW Power Supply Agreement (PSA).



The 15 MW Power Supply Agreement (PSA) with Green Core Geothermal, Inc. (GCGI) with ERC case no. 2011-018RC will expire in 2024.



This will be augmented by a 6 MW agreement with PSALM and will be replaced by a 30 MW Power Supply Agreement (PSA) by the year 2025 which will be subjected to Competitive Selection Process (CSP).



Contracting level is currently at 82% and will rise to 98% if the planned 6 MW from PSALM will materialize as scheduled and up to June 2022. It is expected to drop to 27% by 2024. However, the new PSA to be procured by 2025 will raise the contracting level at 100% for a substantial period.

Case No.	Туре	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	7/16/2024
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 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 recently re-negotiated for additional 3 MW power supply to make it 15 MW for another ten (10) years with MEOT 131,400 MWh It was selected to provide for Base requirements which started in 2010 and will end in year 2024.

Lastly, an embedded diesel/bunker power plant Enervantage Suppliers Company, Inc. (ESCI) with ERC under Case No. 2007-096 with 8 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 has already availed the RE power and affected the contracted energy by the Cooperative. Two (2) contestable Customers with an average demand of 4MW have voluntarily applied for RCOA but the Supreme Court issued a TRO in its implementation.

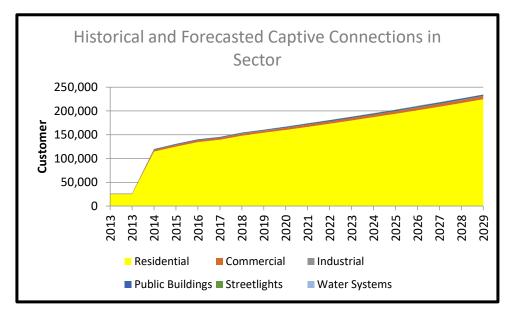
Planned New (PSALM)					
Туре	Intermediate				
Minimum MW	6				
Minimum MWh/yr	25,920				
PSA Start	6/26/2020				
PSA End	7/25/2022				

CAPELCO is intending to enter into an agreement with PSALM when it offered at a lower rate and will not pass through a Competitive Selection Process (CSP). It will provide for intermediate requirements of six (6) MW power supply with a minimum 25,920 MWh annually starting June 2020 to July 2022.

Planned New 2025 (PSA)					
Туре	Intermediate				
Minimum MW	30				
Minimum MWh/yr	181,440				
PSA Start	12/26/2024				
PSA End	12/25/2029				
Publication	12/26/2022				
Pre-bid	1/16/2023				
Opening	3/17/2023				
Awarding	4/16/2023				
PSA Signing	5/16/2023				
Joint Filing	5/25/2023				

CAPELCO will again launch through Competitive Selection Process (CSP) for the 30 MW Power Supply Agreement (PSA) by 26 December 2022 or two years before the intended commercial operations date to have an ample time for associated delays. Joint filing with ERC is projected to be on 25 May 2023 or 150 days after CSP launch in line with DOE's 2018 CSP Policy.

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. Said customer class is expected to account for 5% of the total consumption.