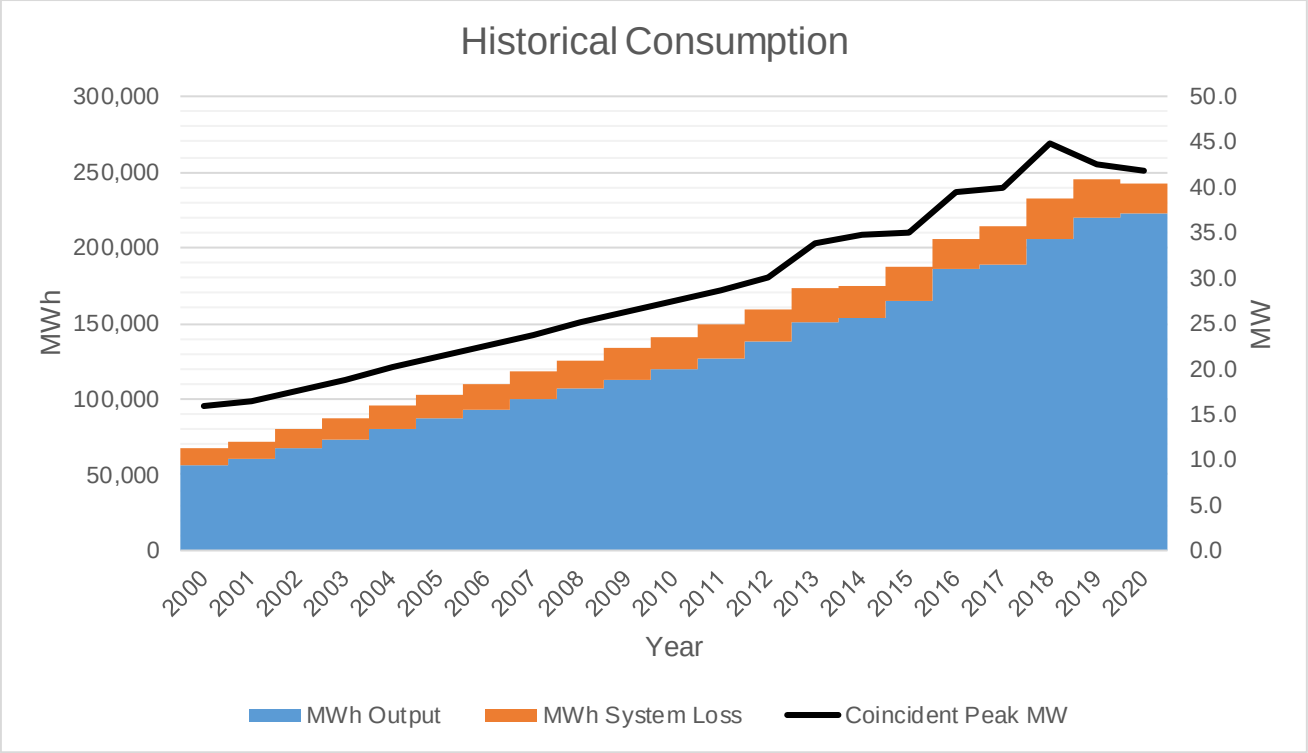
Power Supply Procurement Plan 2021

Cotabato Electric Cooperative, Inc. (COTELCO)

Historical Consumption Data

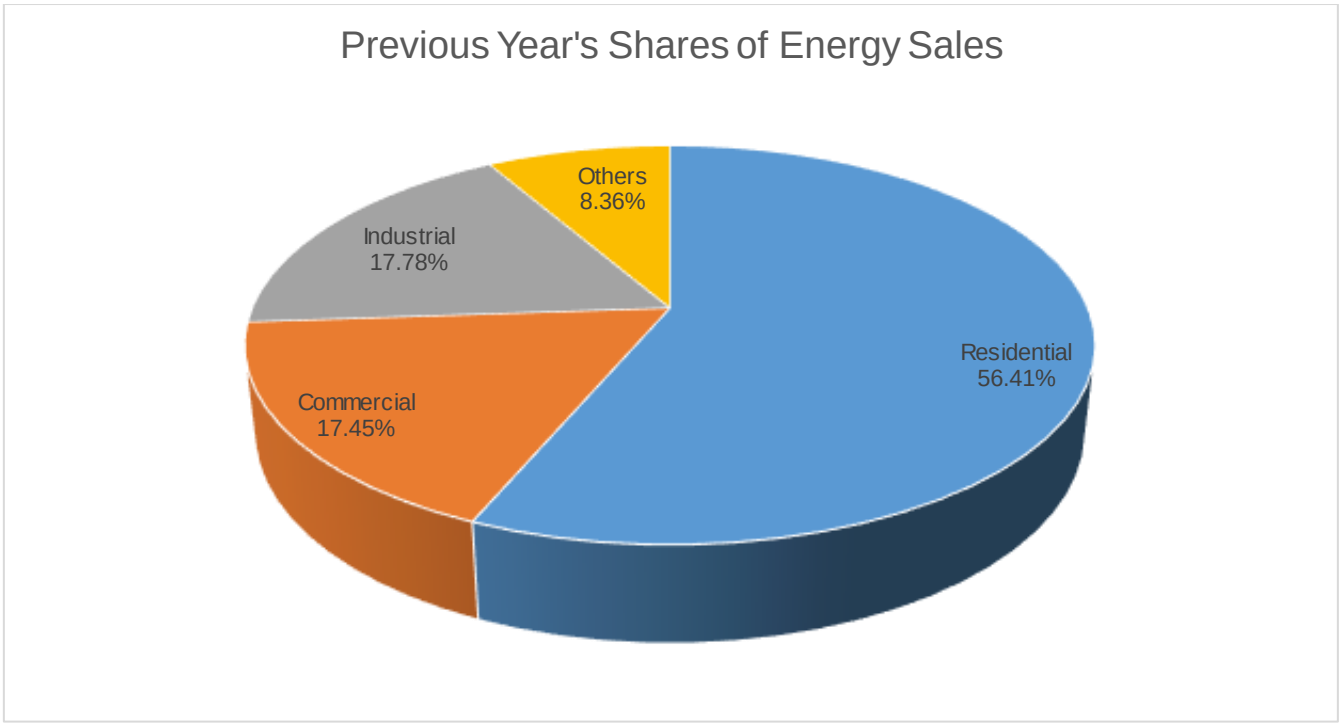
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	15.90	67,199	0	67,199	56,282	10,917	48%	0.00%	0.00%	16.25%
2001	16.42	72,408	0	72,408	60,467	11,941	50%	0.00%	0.00%	16.49%
2002	17.65	80,037	0	80,037	67,072	12,965	52%	0.00%	0.00%	16.20%
2003	18.88	87,666	0	87,666	73,677	13,989	53%	0.00%	0.00%	15.96%
2004	20.11	95,295	0	95,295	80,282	15,013	54%	0.00%	0.00%	15.75%
2005	21.34	102,924	0	102,924	86,887	16,037	55%	0.00%	0.00%	15.58%
2006	22.57	110,553	0	110,553	93,492	17,060	56%	0.00%	0.00%	15.43%
2007	23.80	118,182	0	118,182	100,097	18,084	57%	0.00%	0.00%	15.30%
2008	25.03	125,811	0	125,811	106,702	19,108	57%	0.00%	0.00%	15.19%
2009	26.26	133,440	0	133,440	113,307	20,132	58%	0.00%	0.00%	15.09%
2010	27.49	141,395	0	141,395	120,386	21,010	59%	0.00%	0.00%	14.86%
2011	28.72	149,041	0	149,041	127,008	22,033	59%	0.00%	0.00%	14.78%
2012	30.16	159,694	0	159,694	137,403	22,291	60%	0.00%	0.00%	13.96%
2013	33.80	173,594	0	173,594	151,197	22,397	59%	0.00%	0.00%	12.90%
2014	34.85	175,267	0	175,267	152,913	22,354	57%	0.00%	0.00%	12.75%
2015	35.02	188,008	0	188,008	164,740	23,267	61%	0.00%	0.00%	12.38%
2016	39.37	205,476	0	205,476	185,545	19,931	60%	0.00%	0.00%	9.70%
2017	39.97	213,855	0	213,855	188,299	25,556	61%	0.00%	0.00%	11.95%
2018	44.82	232,911	0	232,911	206,412	26,500	59%	0.00%	0.00%	11.38%
2019	42.59	244,574	0	244,574	219,221	25,354	66%	0.00%	0.00%	10.37%
2020	41.88	242,530	0	242,530	222,287	20,243	66%	0.00%	0.00%	8.35%

Peak Demand decreased from 44.82 MW in 2018 to 41.88 MW in 2020 at a rate of 6.55% due to Series of earthquakes and Covid-19 Pandemic. MWh Offtake decreased from 244,574 MWh in 2019 to 242,530 MWh in 2020 at a rate of 0.835% due to Covid-19 Pandemic. Within the same period, Load Factor ranged from 65% to 67%. There was an abrupt change in consumption on 2020 due to Covid-19 Pandemic Lockdowns.

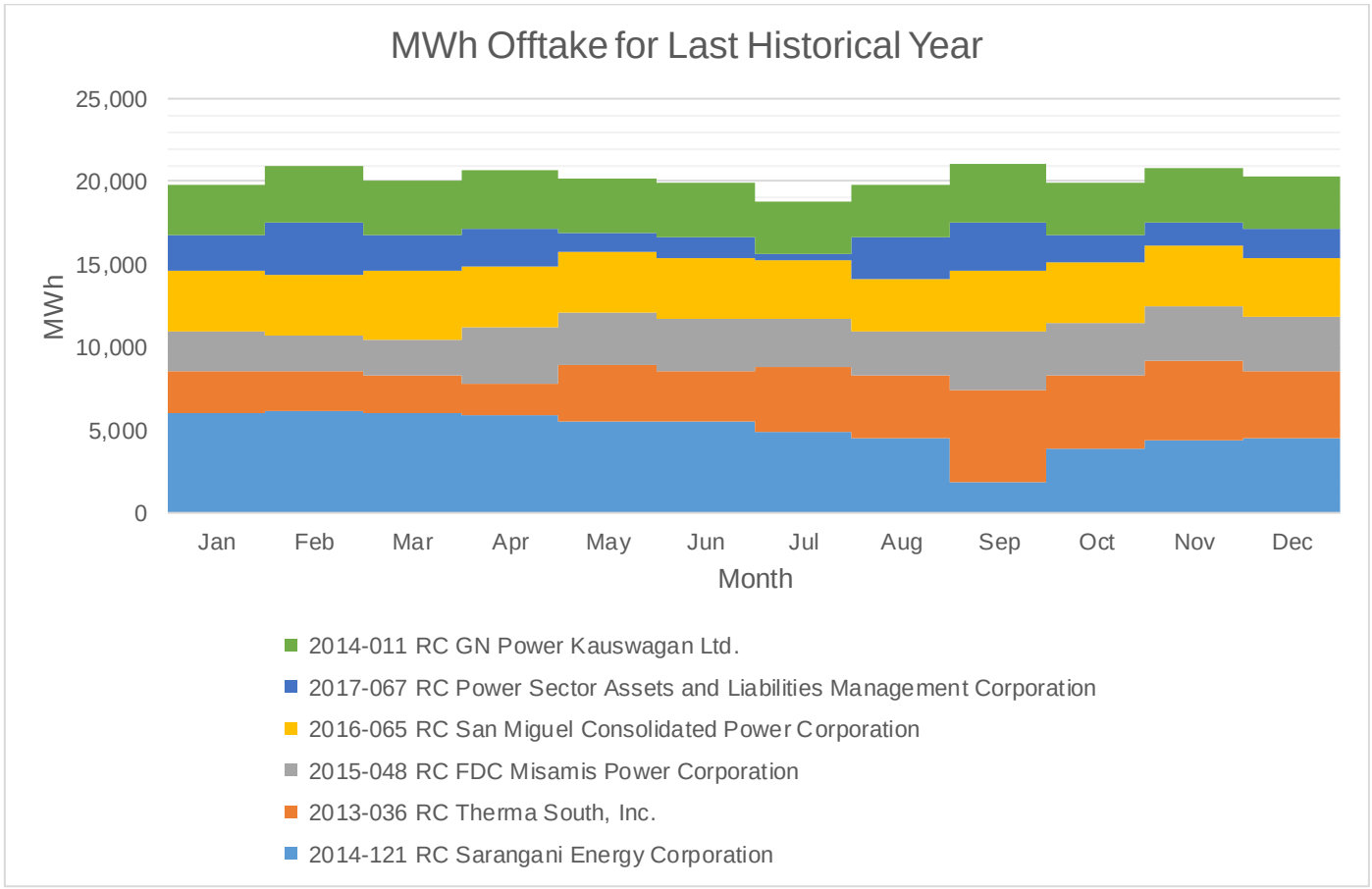


MWh Output increased from year 2019 to year 2020 at a rate of 1.38%, while MWh System Loss decreased at a rate of 2.02% within the same period.

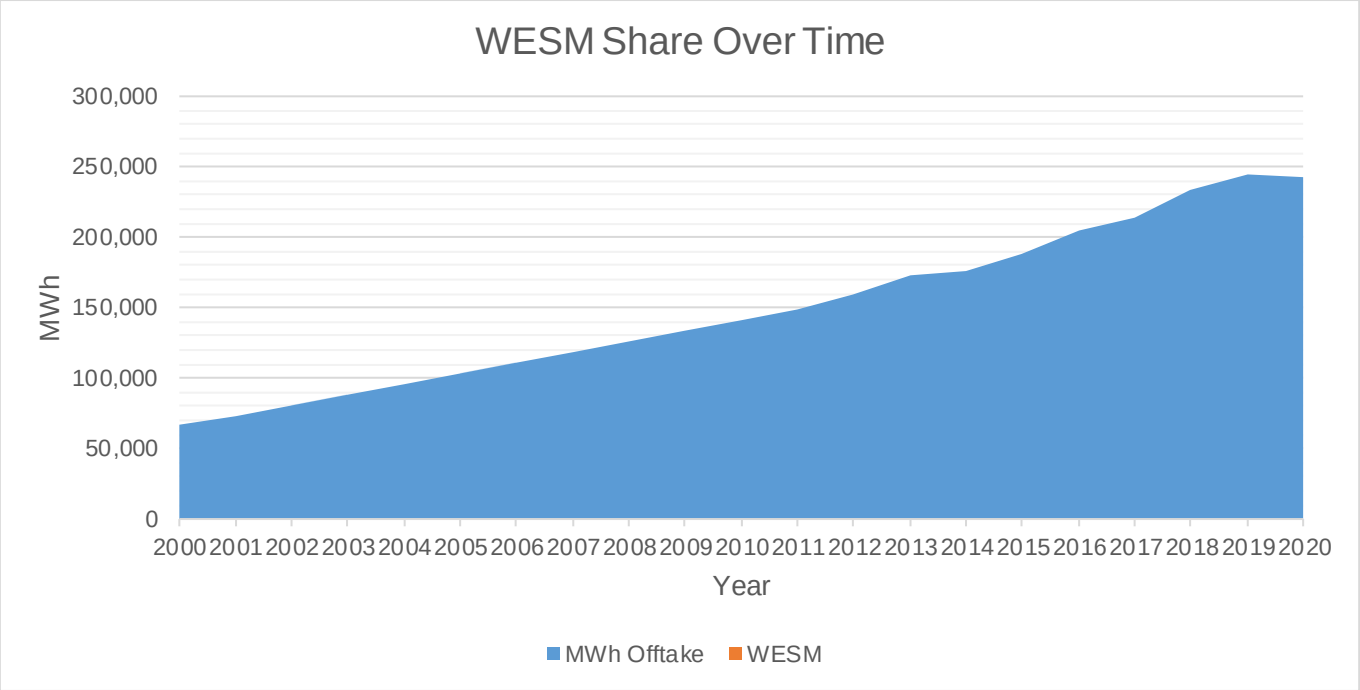
Historically, Transmission Loss is negligible or insignificant while System Loss ranged from 8.35% to 16.25%. System Loss peaked at 16.25% on year 2001 because of System Loss Cap stated on RA7832.



Residential customers account for the bulk of energy sales at 56.41% due to the high number of connections. In contrast, other customers accounted for only 43.59% of energy sales due to the low number of connections.

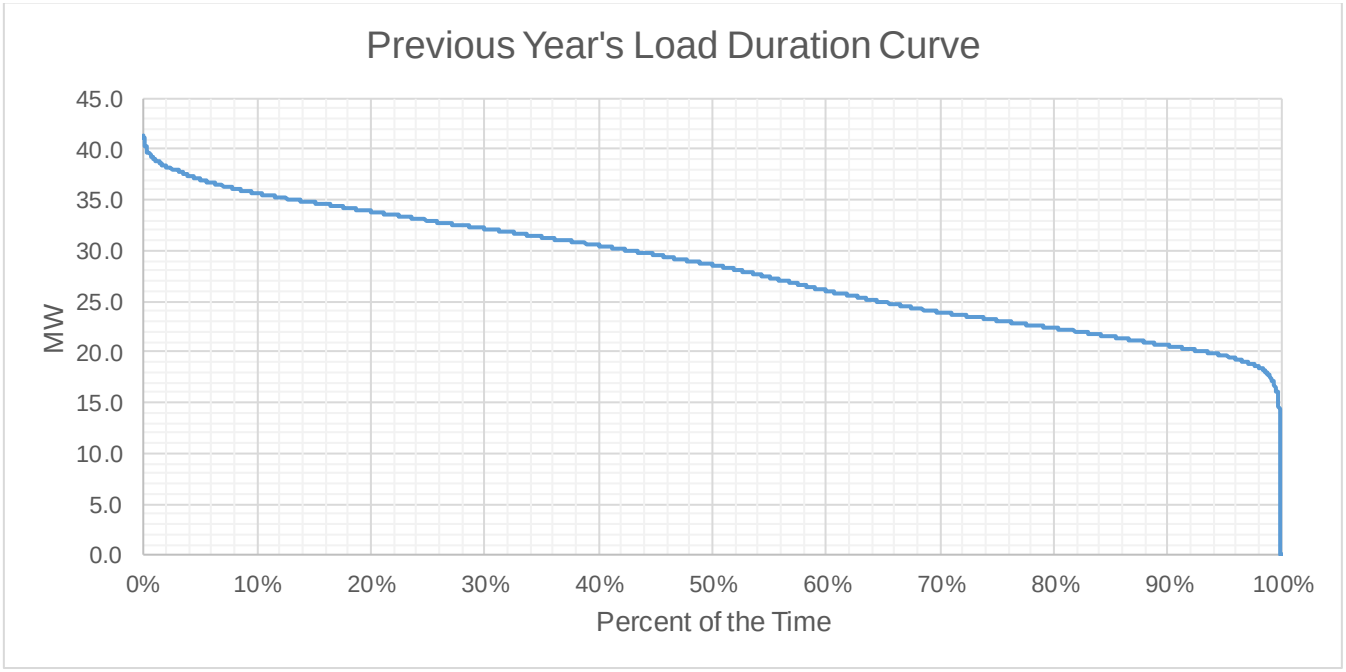


For COTELCO, the total Offtake for the last historical year is almost same the quantity with what is stipulated in the PSA. The PSA with 2014-121 RC accounts for the bulk of MWh Offtake.

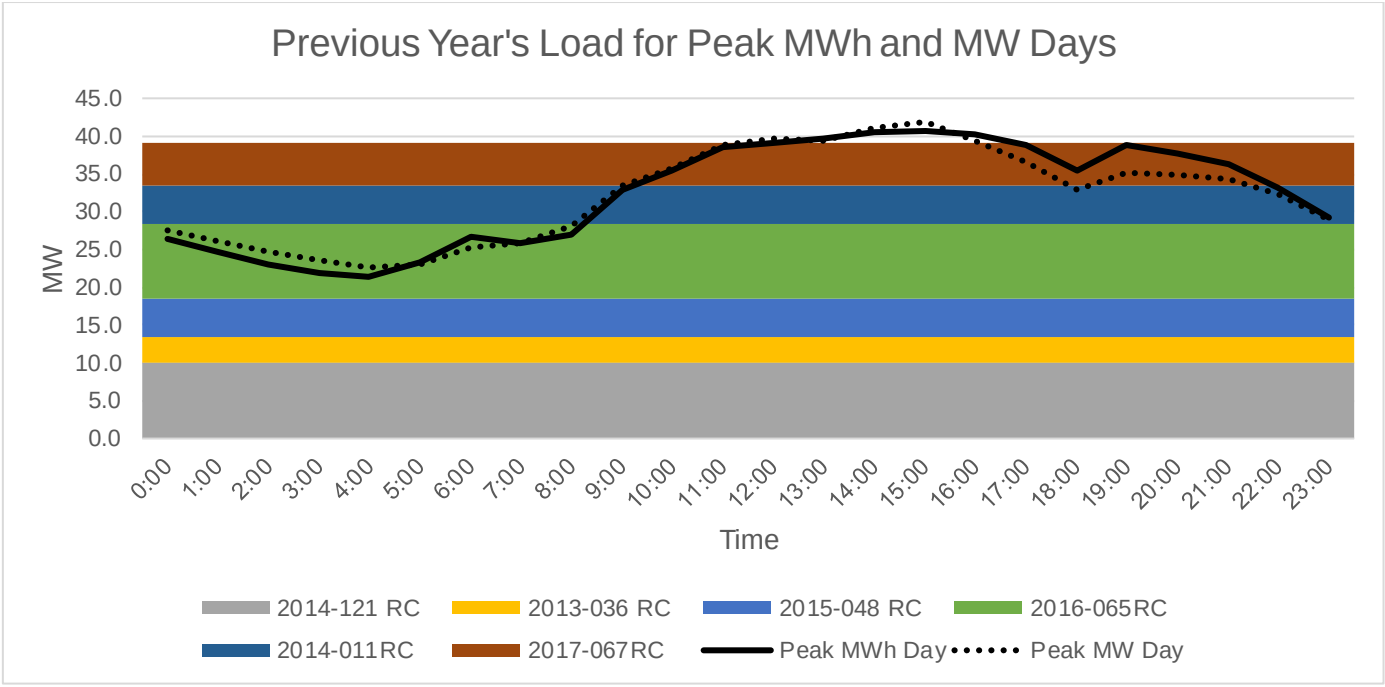


There is no WESM contribution share over time because WESM is not yet operational in Mindanao. COTELCO's application for WESM is already been approved, pending the payment of prudential deposit which is on process.

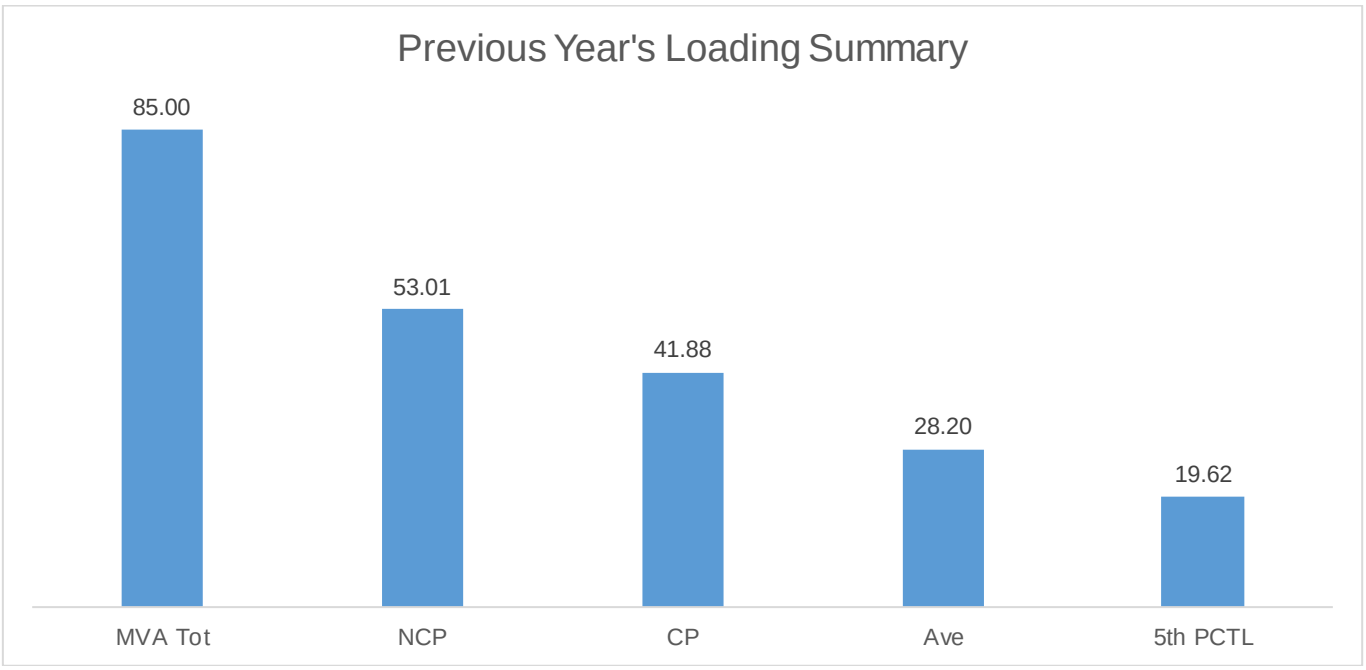
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 19.11 MW and the maximum load is 41.88 MW for the last historical year.



Peak MW occurred on 3:00 PM due to sudden/abrupt utilization residential loads. Peak daily MWh occurred on 3:00 PM also due to utilization residential loads. As shown in the Load Curves, the available supply is lower than the Peak Demand.



The Non-coincident Peak Demand is 41.88 MW, which is around 49.27% of the total substation capacity of 85 MVA at a power factor of 98%. The load factor or the ratio between the Average Load of 28.20 MW and the Non-coincident Peak Demand is 53.01% of 85 MVA. A safe estimate of the true minimum load is the fifth percentile load of 15 MW which is 19.62% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
M1	5	3.145
M2	10	6.884
M3	10	6.507
M4	10	8.904
M5	10	8.530
M6	10	6.611
M7	5	4.356
M8	5	2.590
M9	20	5.488

The substations loaded at above 70% are M4, M5. M7. This loading problem will be solved by additional M10 Substation to augment M5, and re-assignment of loads from other substations.

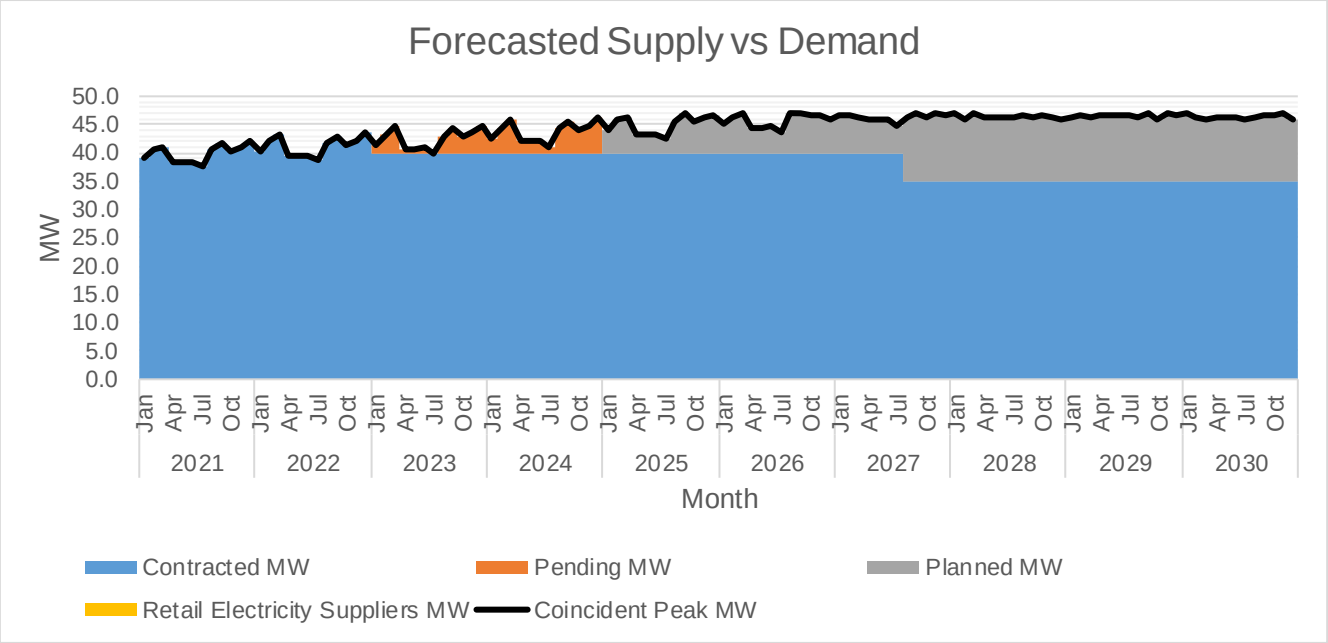
Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2021	Jan	39.01	39.01	0.00	0.000	0.000	100%	100%	0.00
	Feb	40.67	40.67	0.00	0.000	0.000	100%	100%	0.00
	Mar	41.17	41.17	0.00	0.000	0.000	100%	100%	0.00
	Apr	38.42	38.42	0.00	0.000	0.000	100%	100%	0.00
	May	38.41	38.41	0.00	0.000	0.000	100%	100%	0.00
	Jun	38.50	38.50	0.00	0.000	0.000	100%	100%	0.00
	Jul	37.62	37.62	0.00	0.000	0.000	100%	100%	0.00
	Aug	40.48	40.48	0.00	0.000	0.000	100%	100%	0.00
	Sep	41.74	41.74	0.00	0.000	0.000	100%	100%	0.00
	Oct	40.30	40.30	0.00	0.000	0.000	100%	100%	0.00
	Nov	40.96	40.96	0.00	0.000	0.000	100%	100%	0.00
	Dec	42.29	42.29	0.00	0.000	0.000	100%	100%	0.00
2022	Jan	40.18	40.18	0.00	0.000	0.000	100%	100%	0.00
	Feb	41.94	41.94	0.00	0.000	0.000	100%	100%	0.00
	Mar	43.44	43.44	0.00	0.000	0.000	100%	100%	0.00
	Apr	39.57	39.57	0.00	0.000	0.000	100%	100%	0.00
	May	39.56	39.56	0.00	0.000	0.000	100%	100%	0.00
	Jun	39.65	39.65	0.00	0.000	0.000	100%	100%	0.00
	Jul	38.75	38.75	0.00	0.000	0.000	100%	100%	0.00
	Aug	41.69	41.69	0.00	0.000	0.000	100%	100%	0.00
	Sep	43.00	43.00	0.00	0.000	0.000	100%	100%	0.00
	Oct	41.50	41.50	0.00	0.000	0.000	100%	100%	0.00
	Nov	42.19	42.19	0.00	0.000	0.000	100%	100%	0.00
	Dec	43.56	43.56	0.00	0.000	0.000	100%	100%	0.00
2023	Jan	41.39	40.00	1.39	0.000	0.000	97%	100%	0.00
	Feb	43.20	40.00	3.20	0.000	0.000	93%	100%	0.00
	Mar	44.74	40.00	4.74	0.000	0.000	89%	100%	0.00
	Apr	40.76	40.00	0.76	0.000	0.000	98%	100%	0.00
	May	40.74	40.00	0.74	0.000	0.000	98%	100%	0.00
	Jun	40.84	40.00	0.84	0.000	0.000	98%	100%	0.00
	Jul	40.00	40.00	0.00	0.000	0.000	100%	100%	0.00
	Aug	42.94	40.00	2.94	0.000	0.000	93%	100%	0.00
	Sep	44.29	40.00	4.29	0.000	0.000	90%	100%	0.00
	Oct	42.75	40.00	2.75	0.000	0.000	94%	100%	0.00
	Nov	43.46	40.00	3.46	0.000	0.000	92%	100%	0.00
	Dec	44.87	40.00	4.87	0.000	0.000	89%	100%	0.00
2024	Jan	42.63	40.00	2.63	0.000	0.000	94%	100%	0.00
	Feb	44.50	40.00	4.50	0.000	0.000	90%	100%	0.00
	Mar	46.08	40.00	6.08	0.000	0.000	87%	100%	0.00
	Apr	41.98	40.00	1.98	0.000	0.000	95%	100%	0.00
	May	41.97	40.00	1.97	0.000	0.000	95%	100%	0.00
	Jun	42.07	40.00	2.07	0.000	0.000	95%	100%	0.00
	Jul	41.11	40.00	1.11	0.000	0.000	97%	100%	0.00
	Aug	44.23	40.00	4.23	0.000	0.000	90%	100%	0.00

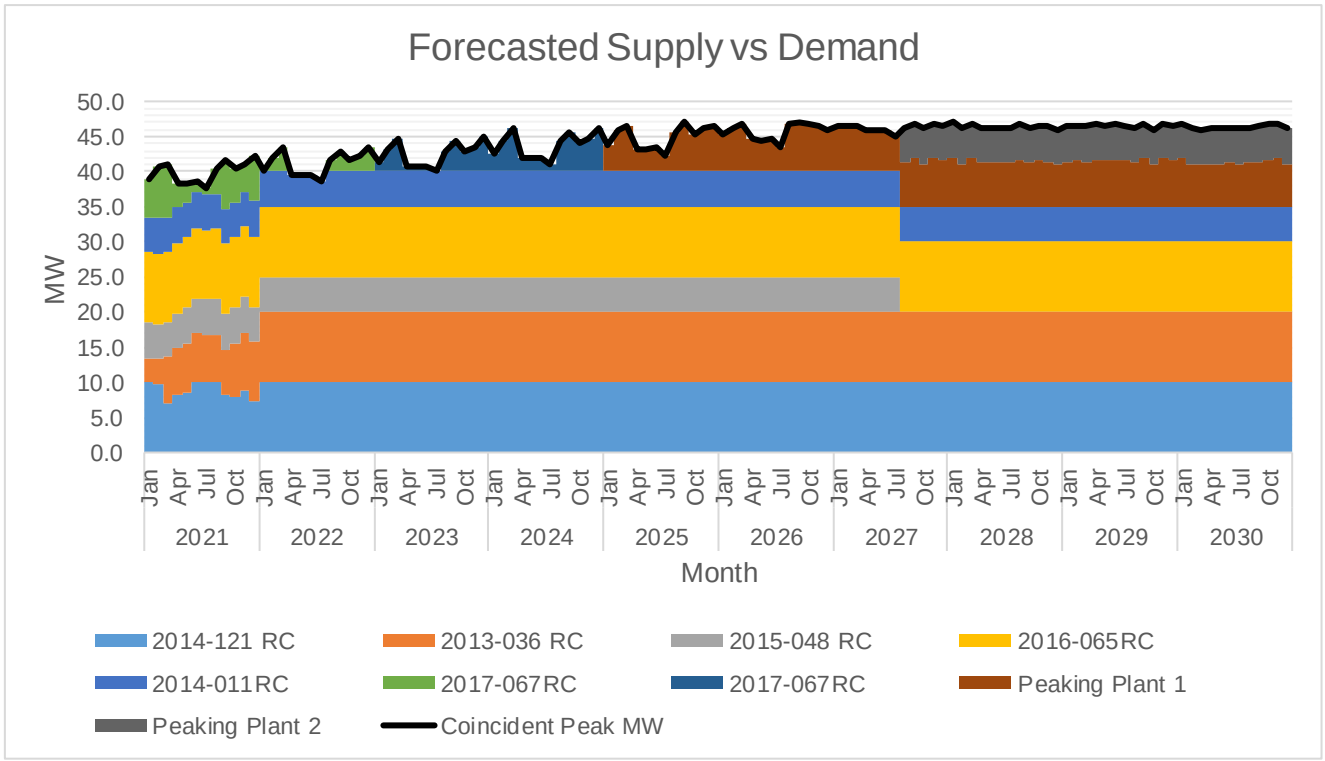
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Sep	45.62	40.00	5.62	0.000	0.000	88%	100%	0.00
	Oct	44.03	40.00	4.03	0.000	0.000	91%	100%	0.00
	Nov	44.76	40.00	4.76	0.000	0.000	89%	100%	0.00
	Dec	46.21	40.00	6.21	0.000	0.000	87%	100%	0.00
2025	Jan	43.91	40.00	0.00	3.909	0.000	91%	100%	0.00
	Feb	45.83	40.00	0.00	5.832	0.000	87%	100%	0.00
	Mar	46.46	40.00	0.00	6.464	0.000	86%	100%	0.00
	Apr	43.24	40.00	0.00	3.240	0.000	93%	100%	0.00
	May	43.23	40.00	0.00	3.226	0.000	93%	100%	0.00
	Jun	43.33	40.00	0.00	3.329	0.000	92%	100%	0.00
	Jul	42.34	40.00	0.00	2.340	0.000	94%	100%	0.00
	Aug	45.56	40.00	0.00	5.558	0.000	88%	100%	0.00
	Sep	46.98	40.00	0.00	6.984	0.000	85%	100%	0.00
	Oct	45.35	40.00	0.00	5.353	0.000	88%	100%	0.00
	Nov	46.11	40.00	0.00	6.105	0.000	87%	100%	0.00
	Dec	46.60	40.00	0.00	6.599	0.000	86%	100%	0.00
2026	Jan	45.23	40.00	0.00	5.226	0.000	88%	100%	0.00
	Feb	46.21	40.00	0.00	6.207	0.000	87%	100%	0.00
	Mar	46.89	40.00	0.00	6.888	0.000	85%	100%	0.00
	Apr	44.54	40.00	0.00	4.537	0.000	90%	100%	0.00
	May	44.52	40.00	0.00	4.523	0.000	90%	100%	0.00
	Jun	44.63	40.00	0.00	4.629	0.000	90%	100%	0.00
	Jul	43.61	40.00	0.00	3.610	0.000	92%	100%	0.00
	Aug	46.93	40.00	0.00	6.925	0.000	85%	100%	0.00
	Sep	47.00	40.00	0.00	7.000	0.000	85%	100%	0.00
	Oct	46.71	40.00	0.00	6.713	0.000	86%	100%	0.00
	Nov	46.49	40.00	0.00	6.489	0.000	86%	100%	0.00
	Dec	46.03	40.00	0.00	6.027	0.000	87%	100%	0.00
2027	Jan	46.58	40.00	0.00	6.583	0.000	86%	100%	0.00
	Feb	46.62	40.00	0.00	6.623	0.000	86%	100%	0.00
	Mar	46.36	40.00	0.00	6.355	0.000	86%	100%	0.00
	Apr	45.87	40.00	0.00	5.873	0.000	87%	100%	0.00
	May	45.86	40.00	0.00	5.858	0.000	87%	100%	0.00
	Jun	45.97	40.00	0.00	5.968	0.000	87%	100%	0.00
	Jul	44.92	40.00	0.00	4.919	0.000	89%	100%	0.00
	Aug	46.33	35.00	0.00	11.333	0.000	76%	100%	0.00
	Sep	46.85	35.00	0.00	11.845	0.000	75%	100%	0.00
	Oct	46.11	35.00	0.00	11.115	0.000	76%	100%	0.00
	Nov	46.91	35.00	0.00	11.913	0.000	75%	100%	0.00
	Dec	46.50	35.00	0.00	11.497	0.000	75%	100%	0.00
2028	Jan	46.98	35.00	0.00	11.980	0.000	74%	100%	0.00
	Feb	46.08	35.00	0.00	11.081	0.000	76%	100%	0.00
	Mar	46.87	35.00	0.00	11.866	0.000	75%	100%	0.00
	Apr	46.25	35.00	0.00	11.249	0.000	76%	100%	0.00
	May	46.23	35.00	0.00	11.234	0.000	76%	100%	0.00
	Jun	46.35	35.00	0.00	11.347	0.000	76%	100%	0.00

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jul	46.27	35.00	0.00	11.266	0.000	76%	100%	0.00
	Aug	46.78	35.00	0.00	11.783	0.000	75%	100%	0.00
	Sep	46.34	35.00	0.00	11.341	0.000	76%	100%	0.00
	Oct	46.56	35.00	0.00	11.558	0.000	75%	100%	0.00
	Nov	46.38	35.00	0.00	11.381	0.000	75%	100%	0.00
	Dec	46.01	35.00	0.00	11.012	0.000	76%	100%	0.00
2029	Jan	46.42	35.00	0.00	11.420	0.000	75%	100%	0.00
	Feb	46.58	35.00	0.00	11.584	0.000	75%	100%	0.00
	Mar	46.42	35.00	0.00	11.422	0.000	75%	100%	0.00
	Apr	46.67	35.00	0.00	11.667	0.000	75%	100%	0.00
	May	46.65	35.00	0.00	11.651	0.000	75%	100%	0.00
	Jun	46.77	35.00	0.00	11.767	0.000	75%	100%	0.00
	Jul	46.65	35.00	0.00	11.654	0.000	75%	100%	0.00
	Aug	46.28	35.00	0.00	11.276	0.000	76%	100%	0.00
	Sep	46.88	35.00	0.00	11.881	0.000	75%	100%	0.00
	Oct	46.05	35.00	0.00	11.045	0.000	76%	100%	0.00
	Nov	46.89	35.00	0.00	11.892	0.000	75%	100%	0.00
	Dec	46.57	35.00	0.00	11.573	0.000	75%	100%	0.00
2030	Jan	46.90	35.00	0.00	11.902	0.000	75%	100%	0.00
	Feb	46.13	35.00	0.00	11.131	0.000	76%	100%	0.00
	Mar	46.02	35.00	0.00	11.024	0.000	76%	100%	0.00
	Apr	46.13	35.00	0.00	11.127	0.000	76%	100%	0.00
	May	46.11	35.00	0.00	11.110	0.000	76%	100%	0.00
	Jun	46.23	35.00	0.00	11.230	0.000	76%	100%	0.00
	Jul	46.08	35.00	0.00	11.084	0.000	76%	100%	0.00
	Aug	46.28	35.00	0.00	11.280	0.000	76%	100%	0.00
	Sep	46.48	35.00	0.00	11.477	0.000	75%	100%	0.00
	Oct	46.68	35.00	0.00	11.675	0.000	75%	100%	0.00
	Nov	46.87	35.00	0.00	11.874	0.000	75%	100%	0.00
	Dec	46.07	35.00	0.00	11.074	0.000	76%	100%	0.00

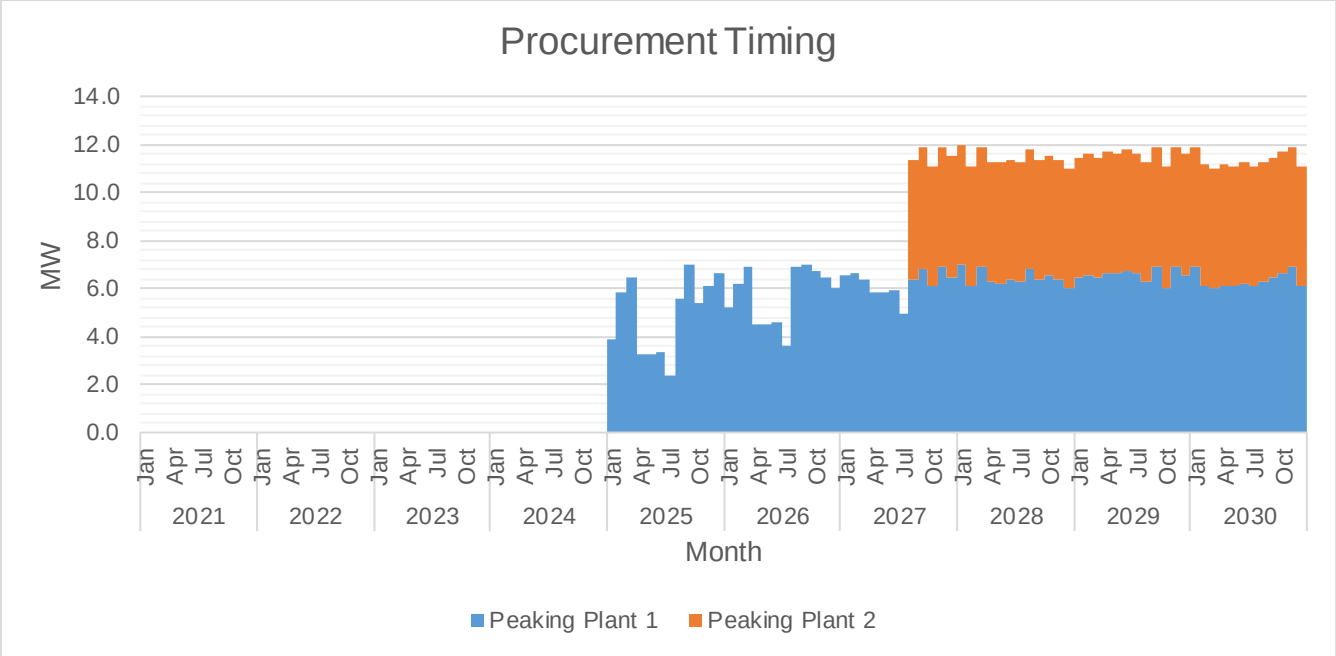
The Peak Demand was forecasted using moving average method and was assumed to occur on the month of December due to Christmas season. Monthly Peak Demand is at its lowest on the month of March due to low production of agricultural products. In general, Peak Demand is expected to grow at a rate of 3.5% annually.



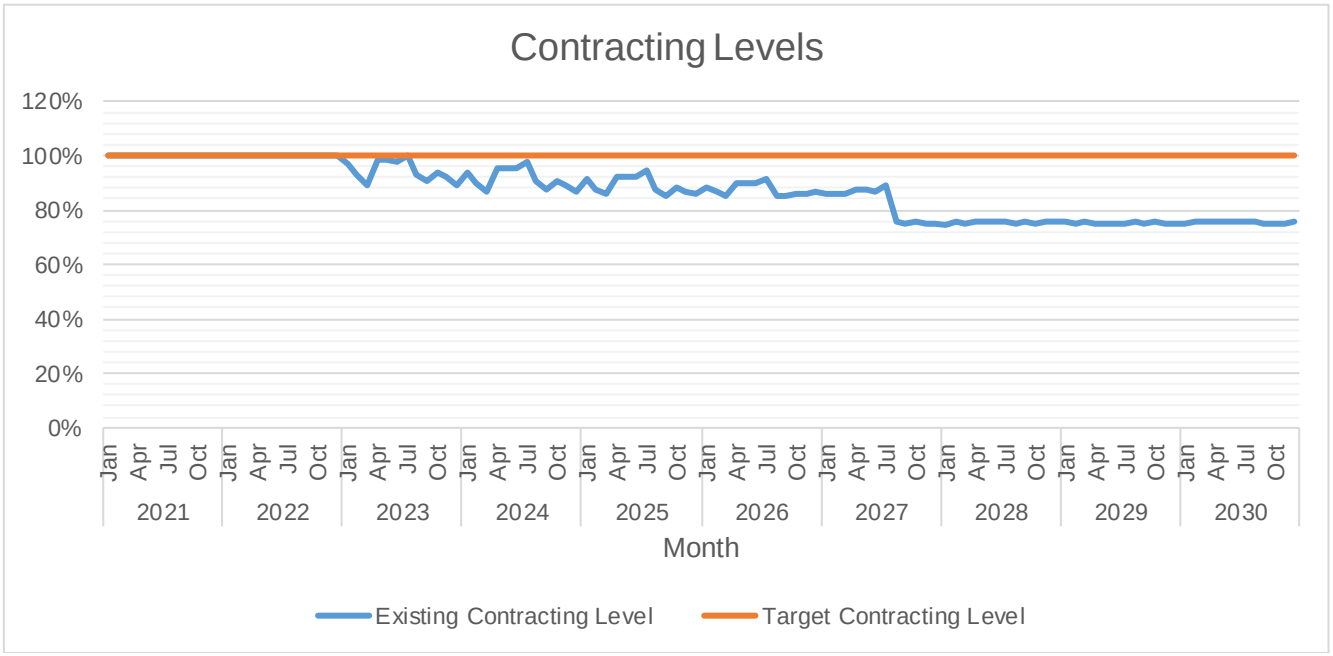
The available supply is generally below the Peak Demand. This is because contracted capacity is not sufficient to cater abrupt demand.



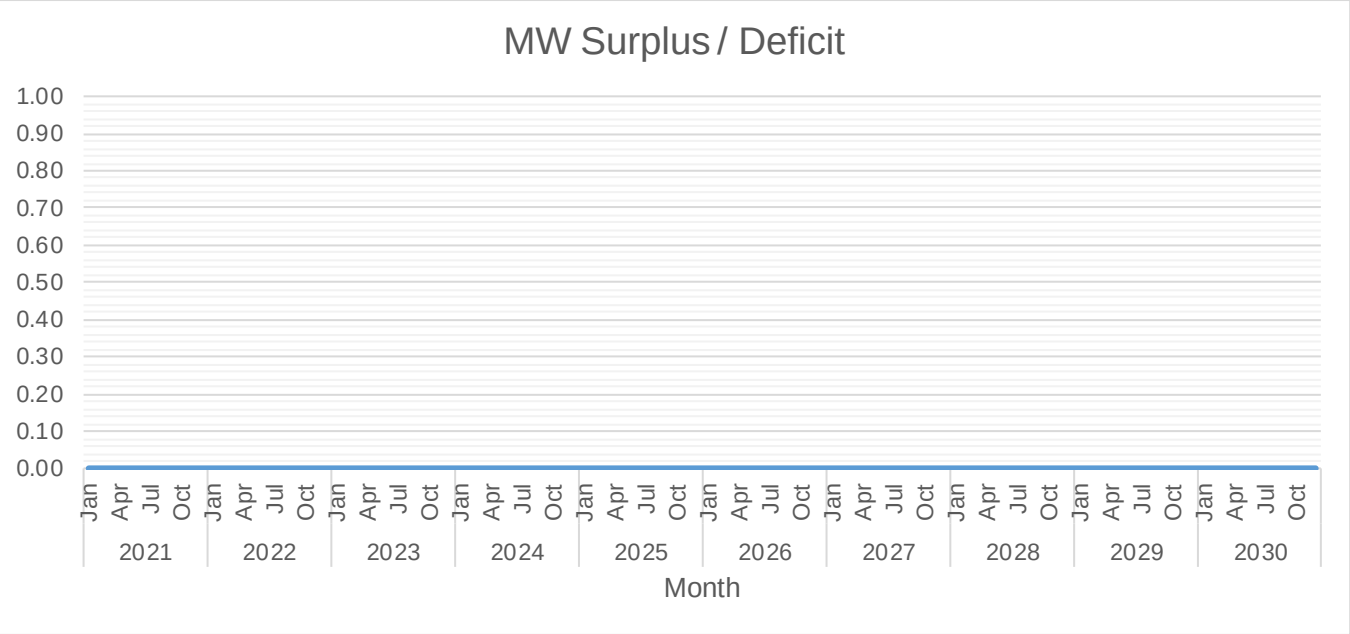
Of the available supply, the largest is 10 MW from 2013-036 RC. This is followed by 10 MW from 2014-121 RC and 2016-065 RC respectively.



The first wave of supply procurement will be for 7 MW planned to be available by the month of March 2025. This will be followed by 5 MW on April 2027. COTELCO now is on the process of crafting the composition of TPBAC for the purpose of Competitive Selection Process (CSP).



Currently, there is under-contacting by 2.3%. The highest target contracting level is 100% which is expected to occur on September 2022. The lowest target contracting level is 75% which is expected to occur on September 2027.



Currently, there is negligible under-contacting/over-contracting. The highest deficit is 2 MW which is expected to occur on the month of December. The lowest deficit is 0 MW which is expected to occur on the month of March.

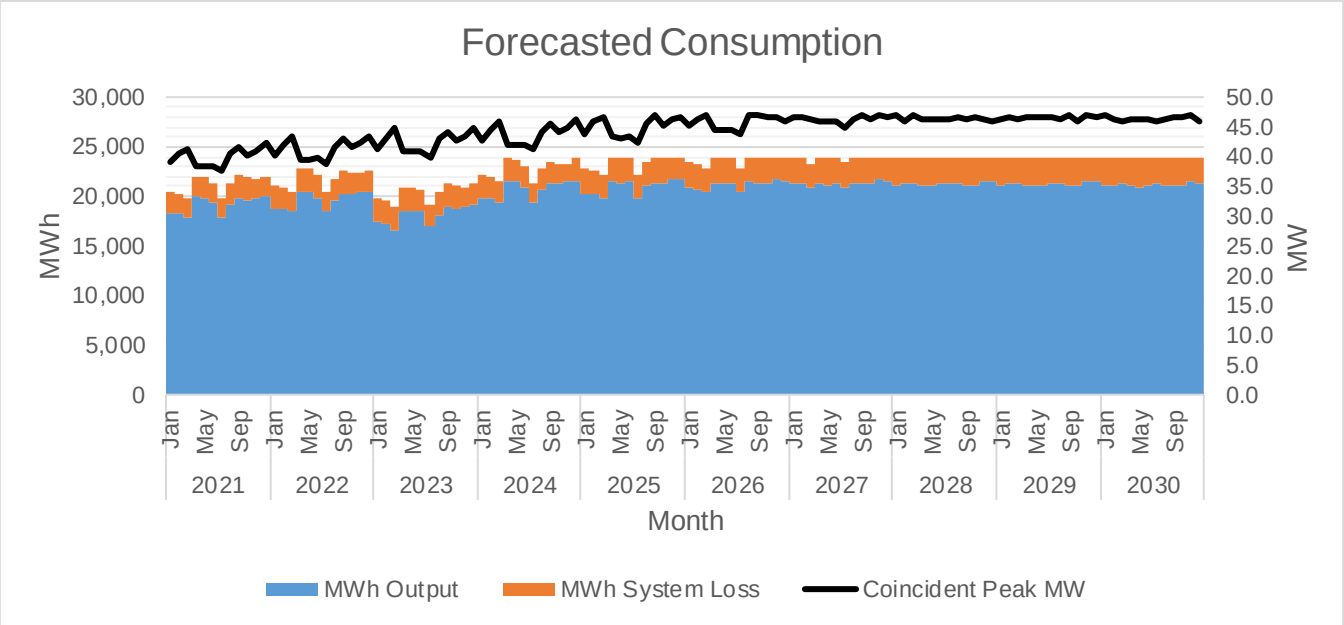
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	20,381	18,345	2,036	0.00%	9.99%
	Feb	20,205	18,268	1,938	0.00%	9.59%
	Mar	19,795	17,940	1,855	0.00%	9.37%
	Apr	21,996	19,915	2,081	0.00%	9.46%
	May	21,982	19,848	2,134	0.00%	9.71%
	Jun	21,359	19,339	2,021	0.00%	9.46%
	Jul	19,815	17,956	1,859	0.00%	9.38%
	Aug	21,265	19,121	2,144	0.00%	10.08%
	Sep	22,092	19,812	2,280	0.00%	10.32%
	Oct	21,888	19,639	2,249	0.00%	10.27%
	Nov	21,744	19,833	1,911	0.00%	8.79%
	Dec	22,034	20,023	2,011	0.00%	9.13%
2022	Jan	21,126	18,822	2,304	0.00%	10.91%
	Feb	20,946	18,742	2,204	0.00%	10.52%
	Mar	20,525	18,407	2,119	0.00%	10.32%
	Apr	22,783	20,433	2,350	0.00%	10.32%
	May	22,769	20,364	2,405	0.00%	10.56%
	Jun	22,130	19,841	2,289	0.00%	10.34%
	Jul	20,545	18,423	2,123	0.00%	10.33%
	Aug	21,818	19,618	2,200	0.00%	10.08%
	Sep	22,667	20,327	2,339	0.00%	10.32%
	Oct	22,457	20,150	2,307	0.00%	10.27%
	Nov	22,309	20,349	1,960	0.00%	8.79%
	Dec	22,607	20,543	2,063	0.00%	9.13%
2023	Jan	19,711	17,347	2,364	0.00%	12.00%
	Feb	19,527	17,266	2,261	0.00%	11.58%
	Mar	18,841	16,668	2,174	0.00%	11.54%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Apr	20,930	18,519	2,411	0.00%	11.52%
	May	20,985	18,518	2,467	0.00%	11.76%
	Jun	20,759	18,411	2,348	0.00%	11.31%
	Jul	19,179	17,001	2,178	0.00%	11.36%
	Aug	20,421	18,164	2,257	0.00%	11.05%
	Sep	21,292	18,892	2,400	0.00%	11.27%
	Oct	21,140	18,773	2,367	0.00%	11.20%
	Nov	20,925	18,914	2,011	0.00%	9.61%
	Dec	21,294	19,177	2,117	0.00%	9.94%
2024	Jan	22,239	19,813	2,426	0.00%	10.91%
	Feb	22,049	19,730	2,320	0.00%	10.52%
	Mar	21,607	19,376	2,230	0.00%	10.32%
	Apr	23,983	21,509	2,474	0.00%	10.32%
	May	23,665	21,437	2,228	0.00%	9.42%
	Jun	22,926	20,887	2,039	0.00%	8.90%
	Jul	21,318	19,393	1,925	0.00%	9.03%
	Aug	22,735	20,651	2,084	0.00%	9.17%
	Sep	23,564	21,398	2,166	0.00%	9.19%
	Oct	23,325	21,211	2,114	0.00%	9.06%
	Nov	23,248	21,421	1,828	0.00%	7.86%
	Dec	23,798	21,626	2,172	0.00%	9.13%
2025	Jan	22,817	20,328	2,489	0.00%	10.91%
	Feb	22,623	20,243	2,380	0.00%	10.52%
	Mar	22,168	19,880	2,288	0.00%	10.32%
	Apr	23,989	21,450	2,538	0.00%	10.58%
	May	23,889	21,291	2,597	0.00%	10.87%
	Jun	23,902	21,430	2,472	0.00%	10.34%
	Jul	22,190	19,897	2,293	0.00%	10.33%
	Aug	23,564	21,188	2,376	0.00%	10.08%
	Sep	23,889	21,362	2,527	0.00%	10.58%
	Oct	23,889	21,397	2,492	0.00%	10.43%
	Nov	23,889	21,771	2,117	0.00%	8.86%
	Dec	23,889	21,660	2,228	0.00%	9.33%
2026	Jan	23,410	20,857	2,554	0.00%	10.91%
	Feb	23,211	20,769	2,442	0.00%	10.52%
	Mar	22,745	20,397	2,348	0.00%	10.32%
	Apr	23,889	21,284	2,604	0.00%	10.90%
	May	23,889	21,224	2,665	0.00%	11.16%
	Jun	23,889	21,352	2,536	0.00%	10.62%
	Jul	22,767	20,415	2,352	0.00%	10.33%
	Aug	23,889	21,450	2,438	0.00%	10.21%
	Sep	23,889	21,296	2,592	0.00%	10.85%
	Oct	23,889	21,332	2,556	0.00%	10.70%
	Nov	23,889	21,716	2,172	0.00%	9.09%
	Dec	23,889	21,602	2,286	0.00%	9.57%
2027	Jan	23,889	21,269	2,620	0.00%	10.97%
	Feb	23,814	21,309	2,505	0.00%	10.52%

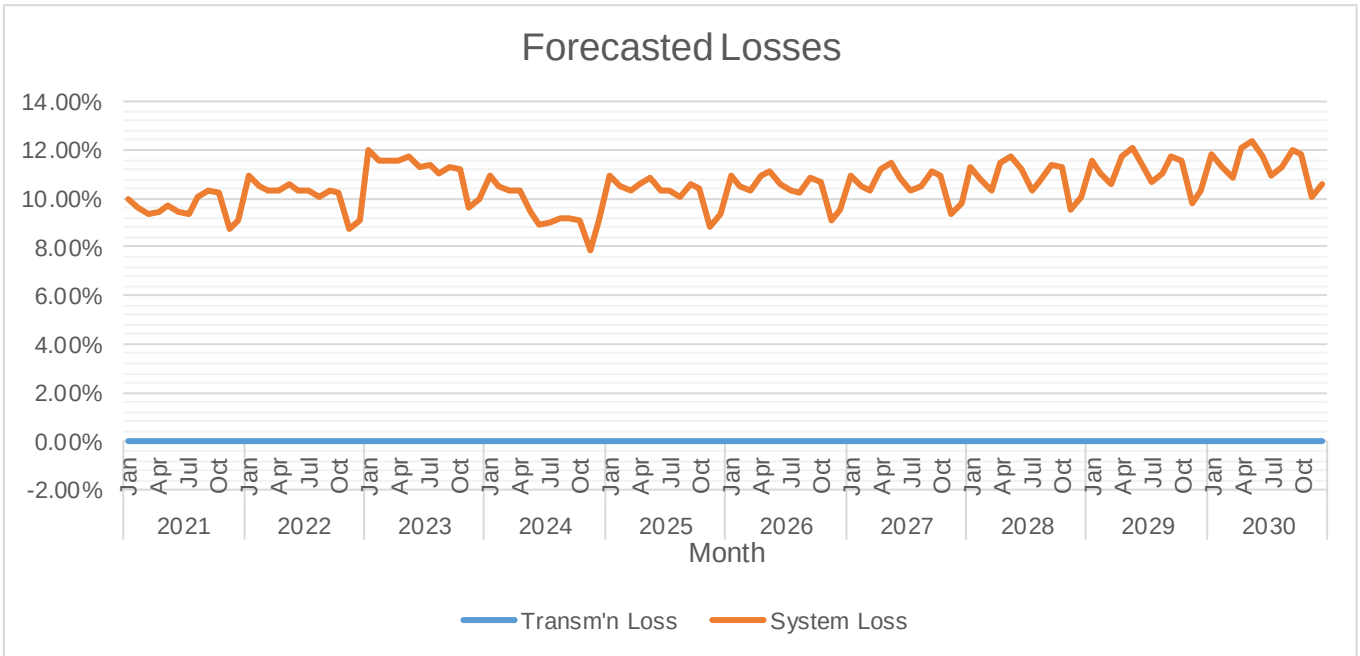
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Mar	23,336	20,927	2,409	0.00%	10.32%
	Apr	23,889	21,216	2,672	0.00%	11.19%
	May	23,889	21,155	2,734	0.00%	11.45%
	Jun	23,889	21,286	2,602	0.00%	10.89%
	Jul	23,359	20,945	2,413	0.00%	10.33%
	Aug	23,889	21,387	2,502	0.00%	10.47%
	Sep	23,889	21,229	2,660	0.00%	11.13%
	Oct	23,889	21,266	2,623	0.00%	10.98%
	Nov	23,889	21,660	2,229	0.00%	9.33%
	Dec	23,889	21,543	2,346	0.00%	9.82%
2028	Jan	23,889	21,200	2,688	0.00%	11.25%
	Feb	23,889	21,318	2,571	0.00%	10.76%
	Mar	23,889	21,417	2,471	0.00%	10.35%
	Apr	23,889	21,147	2,742	0.00%	11.48%
	May	23,889	21,083	2,805	0.00%	11.74%
	Jun	23,889	21,219	2,670	0.00%	11.18%
	Jul	23,889	21,413	2,476	0.00%	10.36%
	Aug	23,889	21,322	2,567	0.00%	10.74%
	Sep	23,889	21,160	2,729	0.00%	11.42%
	Oct	23,889	21,198	2,691	0.00%	11.27%
	Nov	23,889	21,602	2,287	0.00%	9.57%
	Dec	23,889	21,482	2,407	0.00%	10.08%
2029	Jan	23,889	21,131	2,758	0.00%	11.55%
	Feb	23,889	21,251	2,637	0.00%	11.04%
	Mar	23,889	21,353	2,536	0.00%	10.61%
	Apr	23,889	21,076	2,813	0.00%	11.78%
	May	23,889	21,010	2,878	0.00%	12.05%
	Jun	23,889	21,149	2,739	0.00%	11.47%
	Jul	23,889	21,348	2,540	0.00%	10.63%
	Aug	23,889	21,255	2,633	0.00%	11.02%
	Sep	23,889	21,089	2,800	0.00%	11.72%
	Oct	23,889	21,128	2,761	0.00%	11.56%
	Nov	23,889	21,543	2,346	0.00%	9.82%
	Dec	23,889	21,419	2,469	0.00%	10.34%
2030	Jan	23,889	21,059	2,830	0.00%	11.85%
	Feb	23,889	21,183	2,706	0.00%	11.33%
	Mar	23,889	21,287	2,601	0.00%	10.89%
	Apr	23,889	21,003	2,886	0.00%	12.08%
	May	23,889	20,936	2,953	0.00%	12.36%
	Jun	23,889	21,078	2,811	0.00%	11.77%
	Jul	23,889	21,282	2,606	0.00%	10.91%
	Aug	23,889	21,187	2,702	0.00%	11.31%
	Sep	23,889	21,016	2,873	0.00%	12.03%
	Oct	23,889	21,056	2,833	0.00%	11.86%
	Nov	23,889	21,482	2,407	0.00%	10.08%
	Dec	23,889	21,355	2,534	0.00%	10.61%

MWh Offtake was forecasted using moving average method. The assumed load factor is 60%.

System Loss was calculated through a Load Flow Study conducted monthly by Engr. Jaykarl Samar using DSAS 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 5% annually.



Transmission Loss is expected to range from 0.1% to 0.3% while System Loss is expected to range from 8% to 12.36%.

Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2014-121 RC	Base	Sarangani Energy Corporation	10.00	79,200	10/10/2019	10/9/2044
2013-036 RC	Base	Therma South, Inc.	10.00	79,200	9/18/2015	9/17/2040
2015-048 RC	Base	FDC Misamis Power Corporation	5.00	43,800	8/26/2016	8/25/2031
2016-065RC	Base	San Miguel Consolidated Power Corporation	10.00	79,200	7/26/2017	7/25/2027
2014-011RC	Base	GN Power Kauswagan Ltd.	5.00	37,680	6/26/2019	6/25/2039
2017-067RC	Intermediate	Power Sector Assets and Liabilities Management Corporation	5.35	25,408	12/26/2017	12/25/2022

The **PSA with Sarangani Energy Corporation filed with ERC under Case No. 2014-121 RC** was procured through negotiation. It was selected to provide for base requirements due to insufficiency of power supply on base load. Historically, the utilization of the PSA is 100%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 5.25P/kWh to 6.80 P/KWh in the same period.

The **PSA with Therma South, Inc. filed with ERC under Case No. 2013-036 RC** was procured through negotiation. It was selected to provide for base requirements due to insufficiency of power supply on base load. Historically, the utilization of the PSA is 100%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 5.99 P/kWh to 8.22 P/KWh in the same period.

The **PSA with FDC Misamis Power Corporation filed with ERC under Case No. 2015-048 RC** was procured through negotiation. It was selected to provide for base requirements due to insufficiency of power supply on base load. Historically, the utilization of the PSA is 100%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 4.71 P/kWh to 6.52 P/KWh in the same period.

The **PSA with San Miguel Consolidated Power Corporation filed with ERC under Case No. 2016-065RC** was procured through negotiation. It was selected to provide for base requirements due to insufficiency of power supply on base load. Historically, the utilization of the PSA is 100%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 4.57 P/kWh to 5.54 P/KWh in the same period.

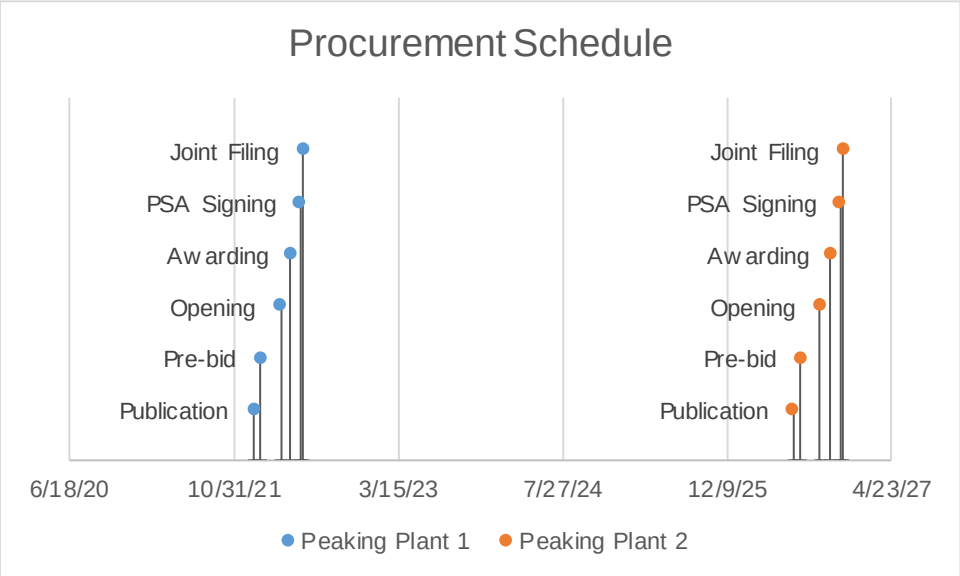
The **PSA with GN Power Kauswagan Ltd. filed with ERC under Case No. 2014-011RC** was procured through negotiation. It was selected to provide for base requirements due to insufficiency of power supply on base load. Historically, the utilization of the PSA is 100%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 4.04 P/kWh to 4.47 P/KWh in the same period.

The **CSEE with Power Sector Assets and Liabilities Management Corporation filed with ERC under Case No. 2017-067RC** was procured through negotiation. It was selected to provide for intermediate requirements due to insufficiency of power supply on intermediate load. Historically, the utilization of the PSA is 50%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 2.71 P/kWh to 3.08 P/KWh in the same period.

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2017-067RC	Peaking	Power Sector Assets and Liabilities Management Corporation	5.35	25,408	12/26/2022	12/25/2024

The **CSEE with Power Sector Assets and Liabilities Management Corporation filed with ERC under Case No. 2017-067RC** was procured through request for contract extension and DOE CSP exemption. It was selected to provide for intermediate requirements due to insufficient intermediate power supply. Historically, the utilization of the PSA is 50%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 2.71 P/kWh to 3.08 P/KWh in the same period.

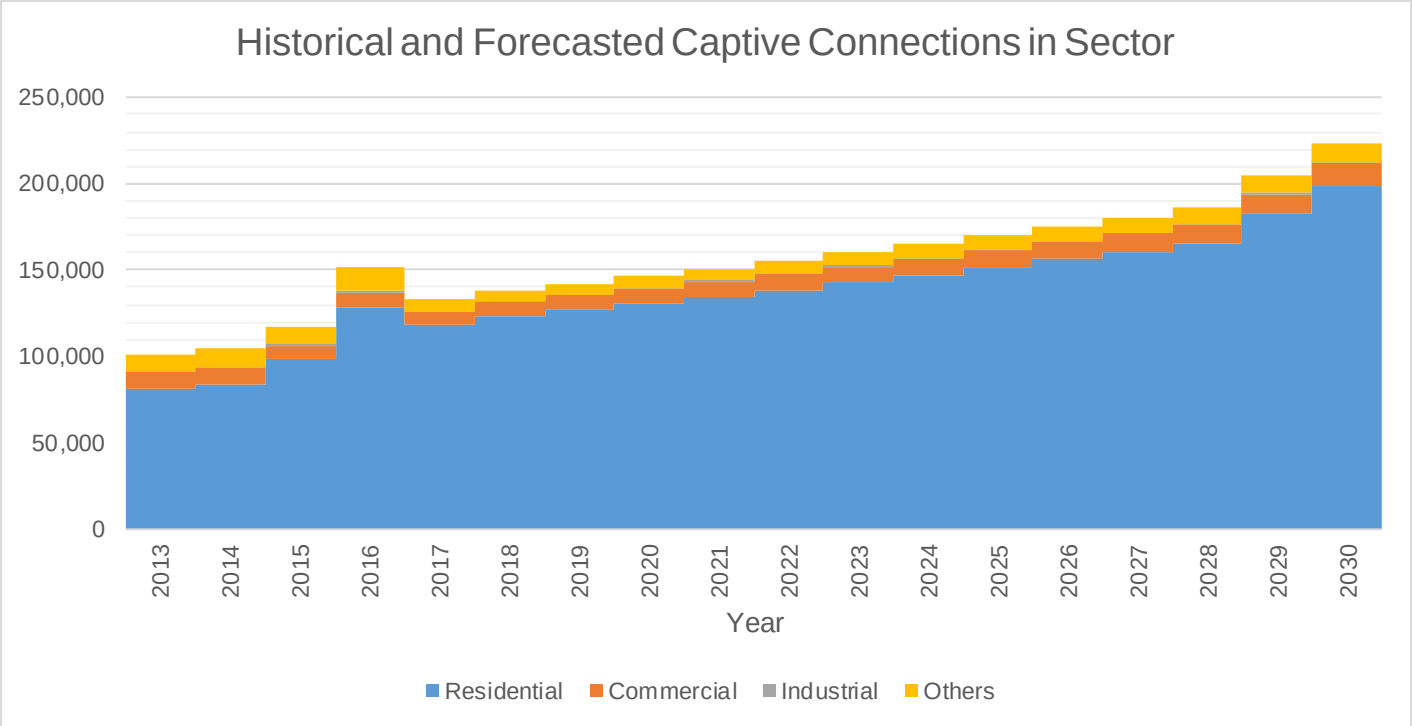
	Peaking Plant 1	Peaking Plant 2
Type	Peaking	Peaking
Minimum MW	7.00	5.00
Minimum MWh/yr	60,480	43,200
PSA Start	1/26/2025	8/26/2027
PSA End	12/25/2040	12/25/2040
Publication	1/1/2022	7/1/2026
Pre-bid	1/22/2022	7/22/2026
Opening	3/23/2022	9/20/2026
Awarding	4/22/2022	10/20/2026
PSA Signing	5/22/2022	11/19/2026
Joint Filing	5/31/2022	11/28/2026



For the procurement of 7 MW of supply which is planned to be available on January 2025, the first publication or launch of CSP will be on January 2022. Joint filing is planned on May 31, 2022, or 150 days later, in accordance with DOE's 2018 CSP Policy.

For the procurement of 5 MW of supply which is planned to be available on August 2027, the first publication or launch of CSP will be on June 1, 2026. Joint filing is planned on November 28, 2026, 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% annually. Said customer class is expected to account for 56% of the total consumption.