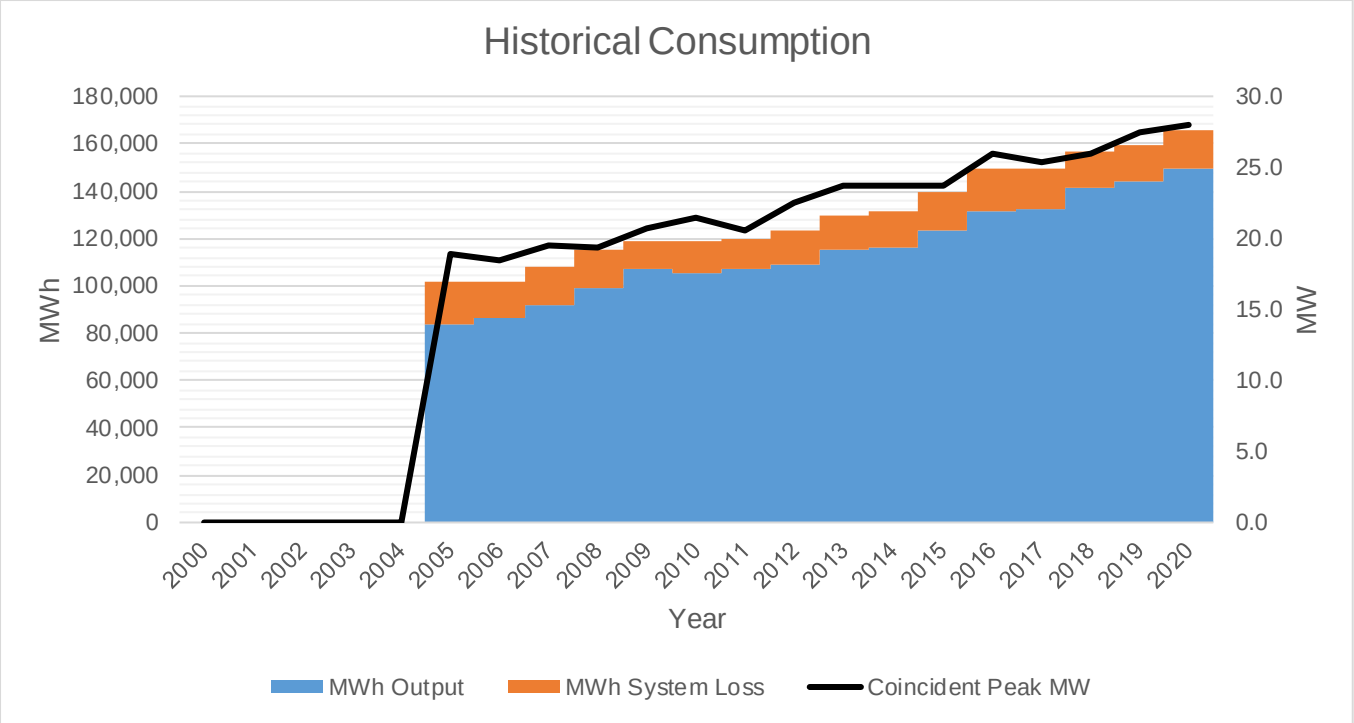
Power Supply Procurement Plan 2021

Misamis Occidental II Electric Cooperative, Inc. (MOELCI-II)

Historical Consumption Data

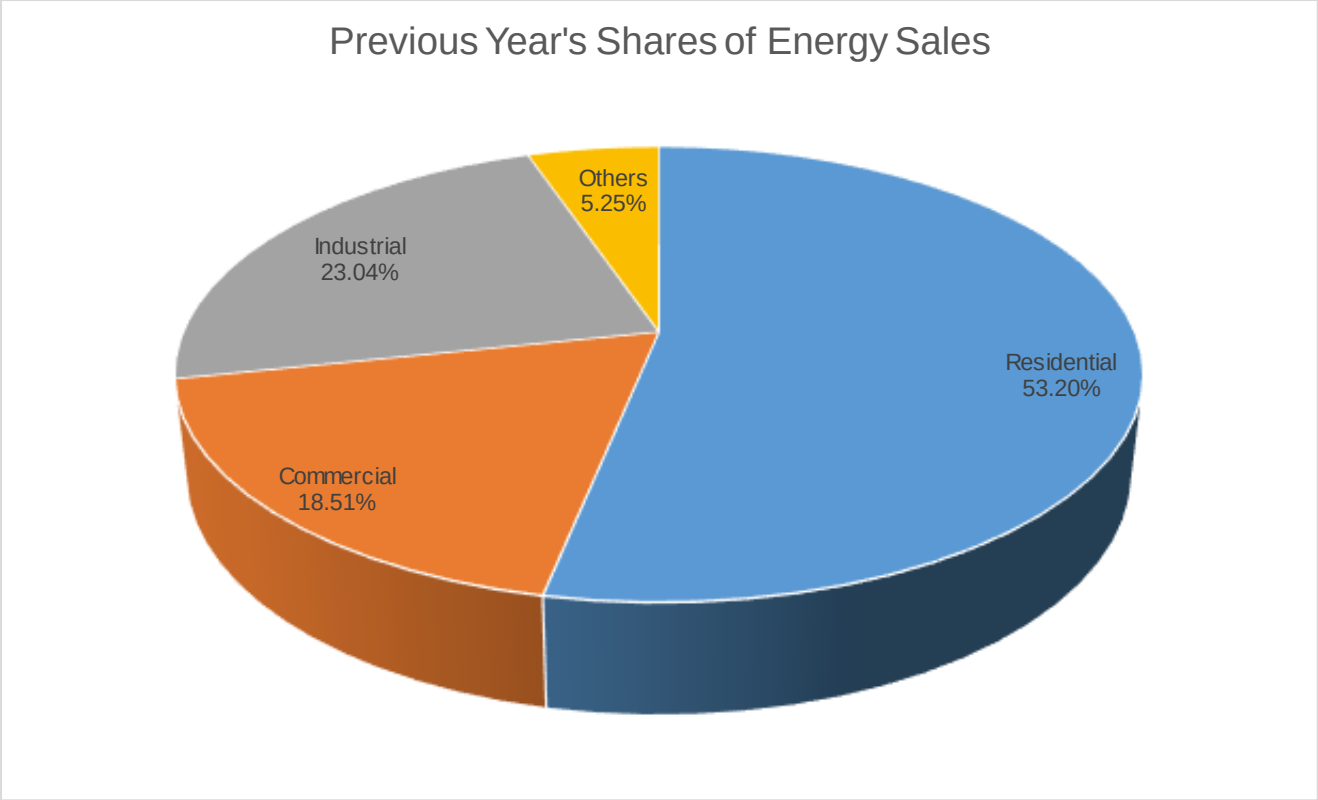
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2005	18.88	101,246	0	101,246	83,909	17,337	61%	0.00%	0.00%	17.12%
2006	18.46	101,528	0	101,528	86,378	15,150	63%	0.00%	0.00%	14.92%
2007	19.45	108,062	0	108,062	92,218	15,843	63%	0.00%	0.00%	14.66%
2008	19.37	114,835	0	114,835	99,242	15,593	68%	0.00%	0.00%	13.58%
2009	20.76	118,799	0	118,799	106,841	11,958	65%	0.00%	0.00%	10.07%
2010	21.45	118,372	0	118,372	105,232	13,141	63%	0.00%	0.00%	11.10%
2011	20.58	119,606	0	119,606	107,058	12,549	66%	0.00%	0.00%	10.49%
2012	22.55	123,173	0	123,173	109,233	13,939	62%	0.00%	0.00%	11.32%
2013	23.77	129,547	0	129,547	114,959	14,588	62%	0.00%	0.00%	11.26%
2014	23.75	131,685	0	131,685	116,136	15,549	63%	0.00%	0.00%	11.81%
2015	23.72	139,988	0	139,988	123,736	16,252	67%	0.00%	0.00%	11.61%
2016	25.99	149,804	0	149,804	131,177	18,627	66%	0.00%	0.00%	12.43%
2017	25.29	149,347	0	149,347	131,915	17,432	67%	0.00%	0.00%	11.67%
2018	25.95	156,929	0	156,929	141,200	15,729	69%	0.00%	0.00%	10.02%
2019	27.49	159,457	0	159,457	144,228	15,229	66%	0.00%	0.00%	9.55%
2020	27.99	169,405	0	165,461	149,688	15,773	67%	0.00%	2.33%	9.53%

Peak Demand increased from 27.49 MW in 2019 to 27.99 MW in 2020 at a rate of 1.79% due to new commercial consumers and operation of OSAMCO during peak month. MWh Purchased increased based on metered quantity from 159,457 MWh in 2019 to 165,461 MWh in 2020 at a rate of 3.63% due to additional customers and impact of pandemic. Within the same period, Load Factor ranged from 66% to69%. There was an abrupt change in consumption on 2016 due to hot summer and additional commercial buildings. It was noted by the DOE evaluator that there were several data that are inconsistent on the previous DDP this is due to some adjustments of billing data that we have made some corrections on the historical data of 2020-2019 DDP. The transmission loss for year 2020 is 3,944 MWh which is equivalent to 2.35% of the MWh offtake. The month of January 2020 indicates negative transmission loss due to some debit and credit Memo of the MWh Offtake quantity from power supplier. No available data of Sub-transmission and Substation Technical loss from 2005 to 2015 it was not yet segregated. The historical own use of coop was inputted for RPS purposes, it was supposedly form part of commercial sales.

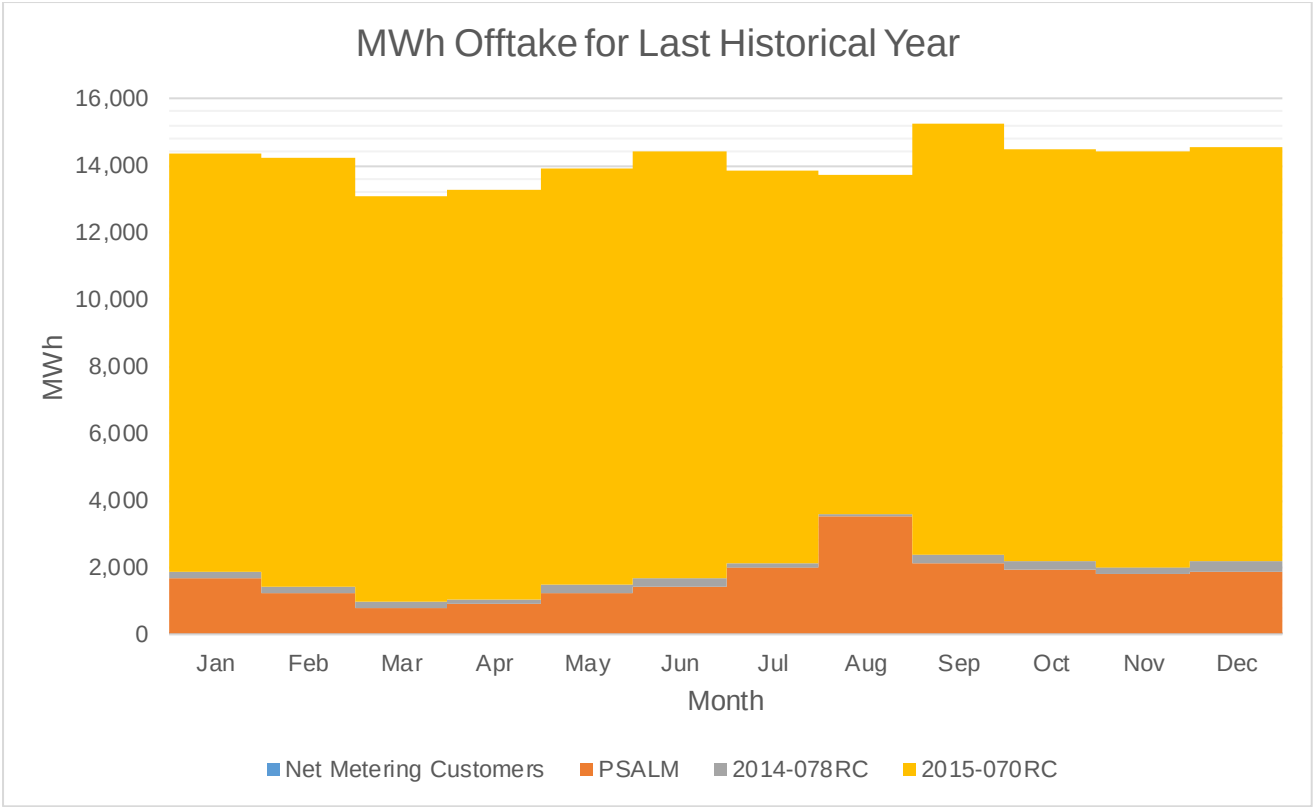


MWh Output increased from year 2019 to year 2020 at a rate of 3.65%, while MWh System Loss decreased from 9.55% to 9.53% at a rate of -0.21% within the same period.

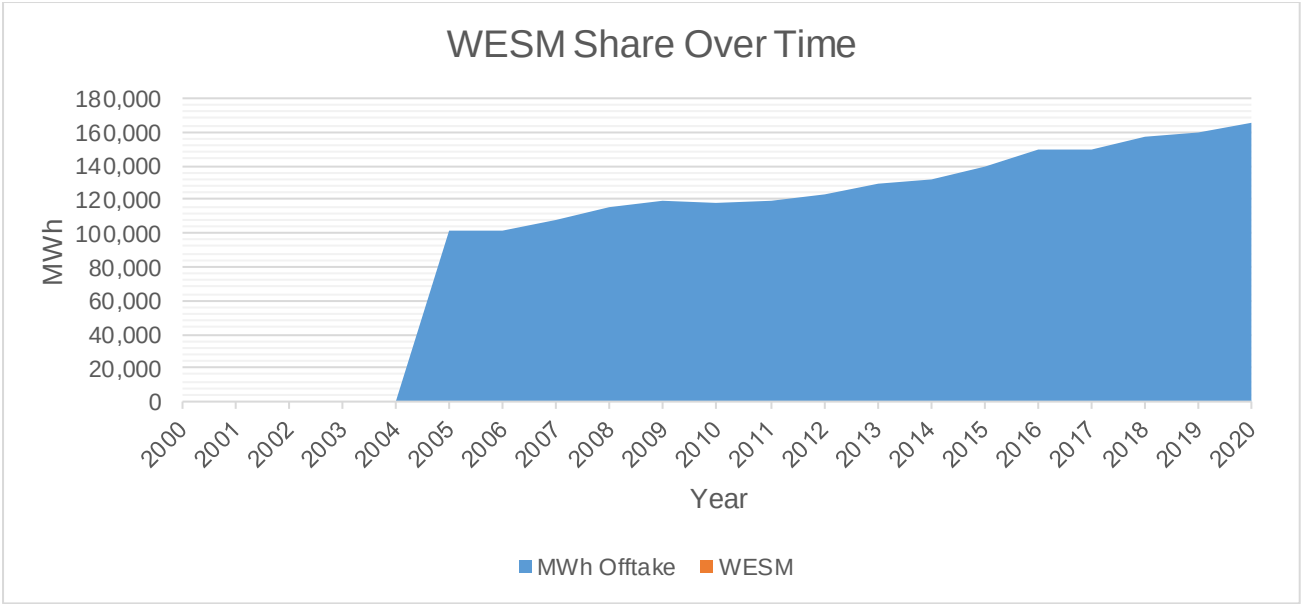
Historically, System Loss ranged from 9.53% to 17.12. System Loss peaked at 17.12% on year 2005 because of pilferage, metering error and other non-technical losses.



Residential customers account for the bulk of energy sales at 53.20% due to the impact of COVID-19 pandemic. Most of the students were staying at home and having on line classes and most of the employee were home based. In contrast, commercial, industrial, public building and street light customers accounted for only 46.8% of energy sales. The business sector was affected by the pandemic and most of the commercial establishments were closed.

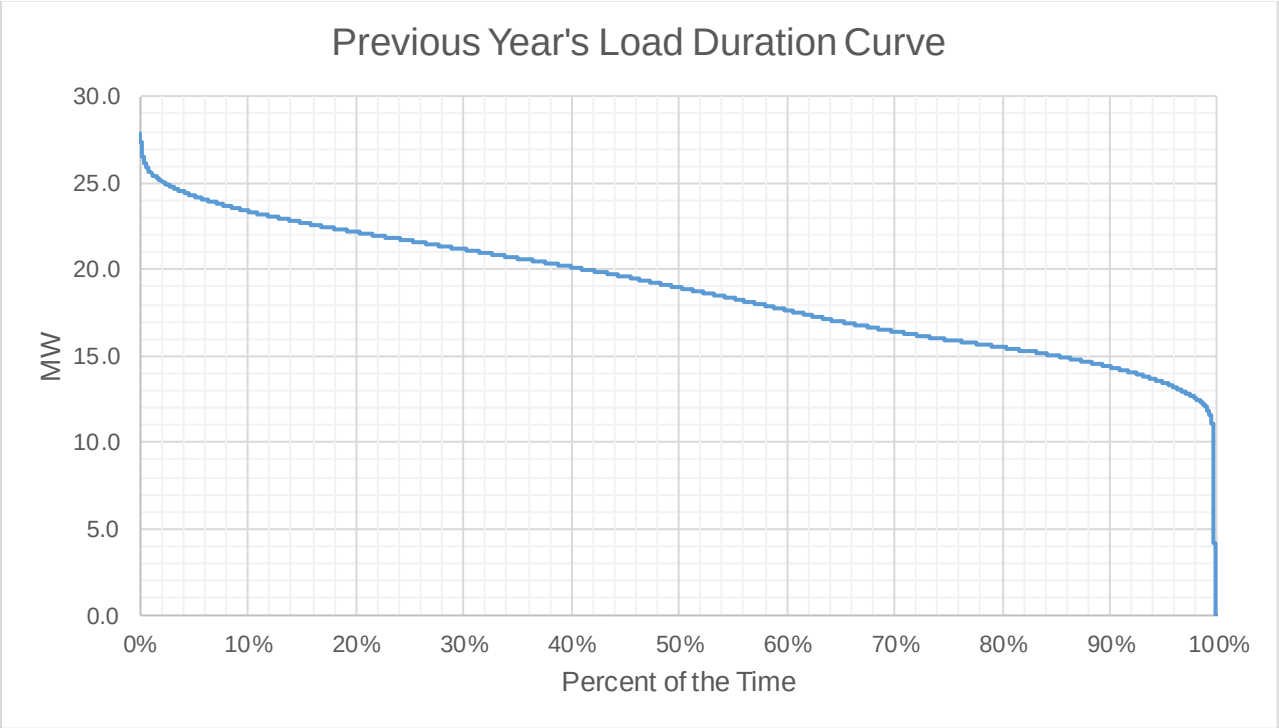


For 2015-070RC, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with 2015-070RC accounts for the bulk of MWh Offtake and for the year 2020 the dispatched Demand was 20MW out of 25MW contract. For the succeeding year the dispatch demand will incrementally increase by 1 MW per year until the 25 MW contracted demand will be fully utilized as verbally agreed between MOELCI-II and FDC.

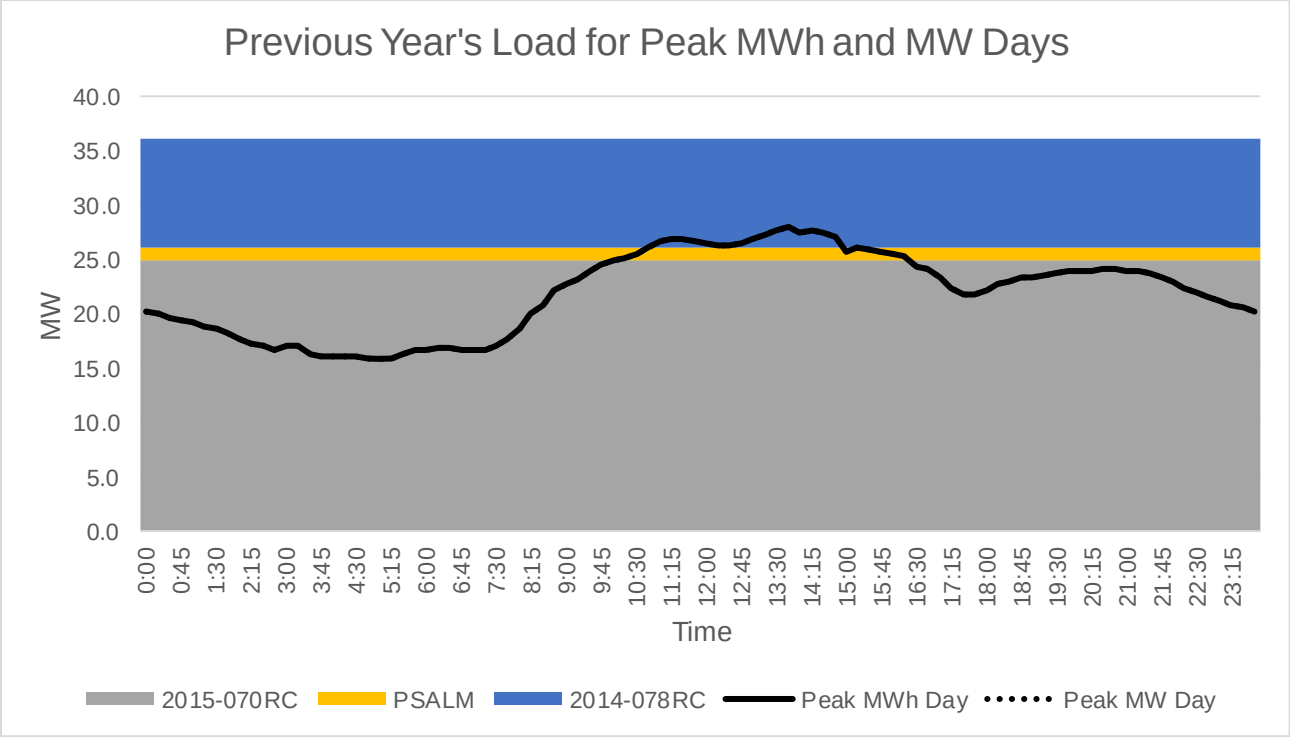


WESM Offtake is zero because it is not yet implemented in Mindanao Grid. Currently, MOELCI-II enrolled as indirect member of WESM through FDC and we are preparing the documents to enroll as direct member.

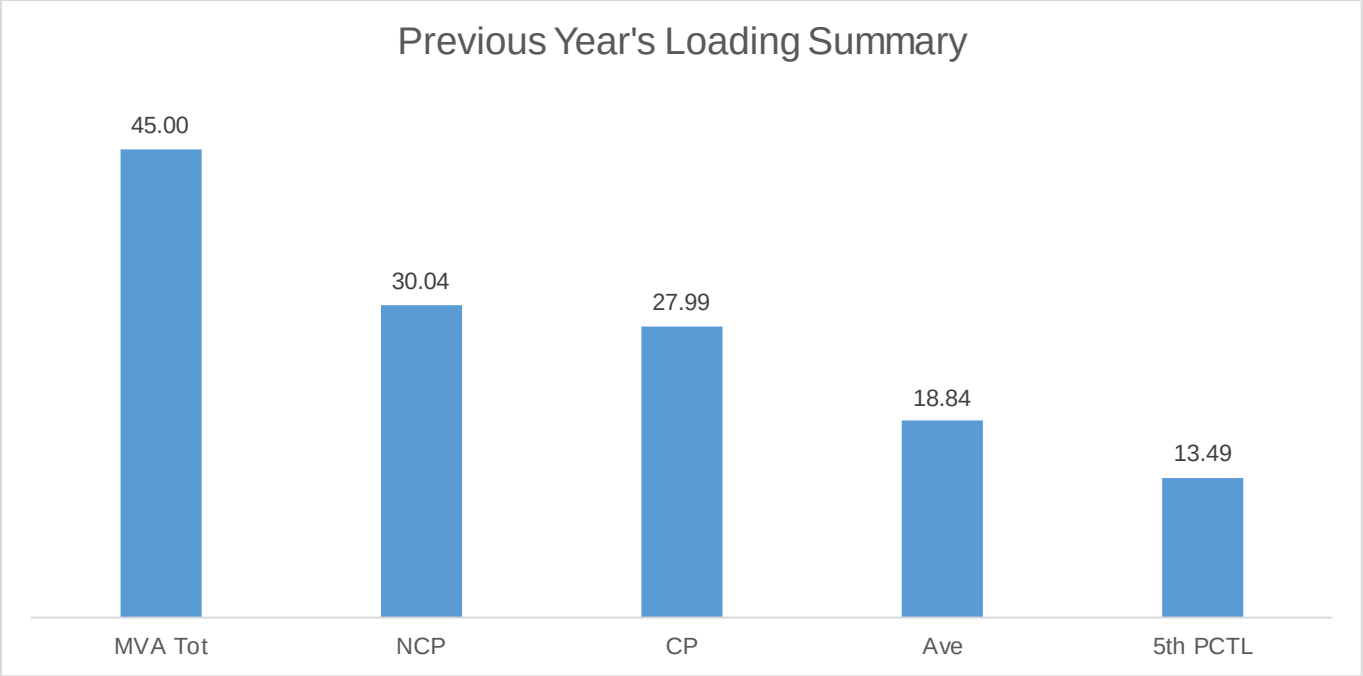
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 12.75 MW and the maximum load is 27.99 MW for the last historical year.



Peak MW occurred on September due to the operation of OSAMCO and TMOMI. Peak daily MWh occurred on September 7, 2020 due to the operation of OSAMCO and TMOMI during this day. As shown in the Load Curves, the available supply is higher than the Peak Demand.



The Non-coincident Peak Demand is 30.04 MW, which is around 68.98% of the total substation capacity of 45 MVA at a power factor of 96.78%. The load factor or the ratio between the Average Load of 18.84 MW and the Non-coincident Peak Demand is 62.72%. A safe estimate of the true minimum load is the fifth percentile load of 13.49 MW which is 44.91% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Bañadero	20	14.688
Tabo-o	5	4.200
Dimalooc	10	6.702
Basirang	10	4.449

The substations loaded at above 70% are Bañadero Substation and Tabo-o Substation. To address the Capacity problem of both 2 substations, MOELCI-II planned to add 2 new substations or replace the existing with higher adequate Capacity.

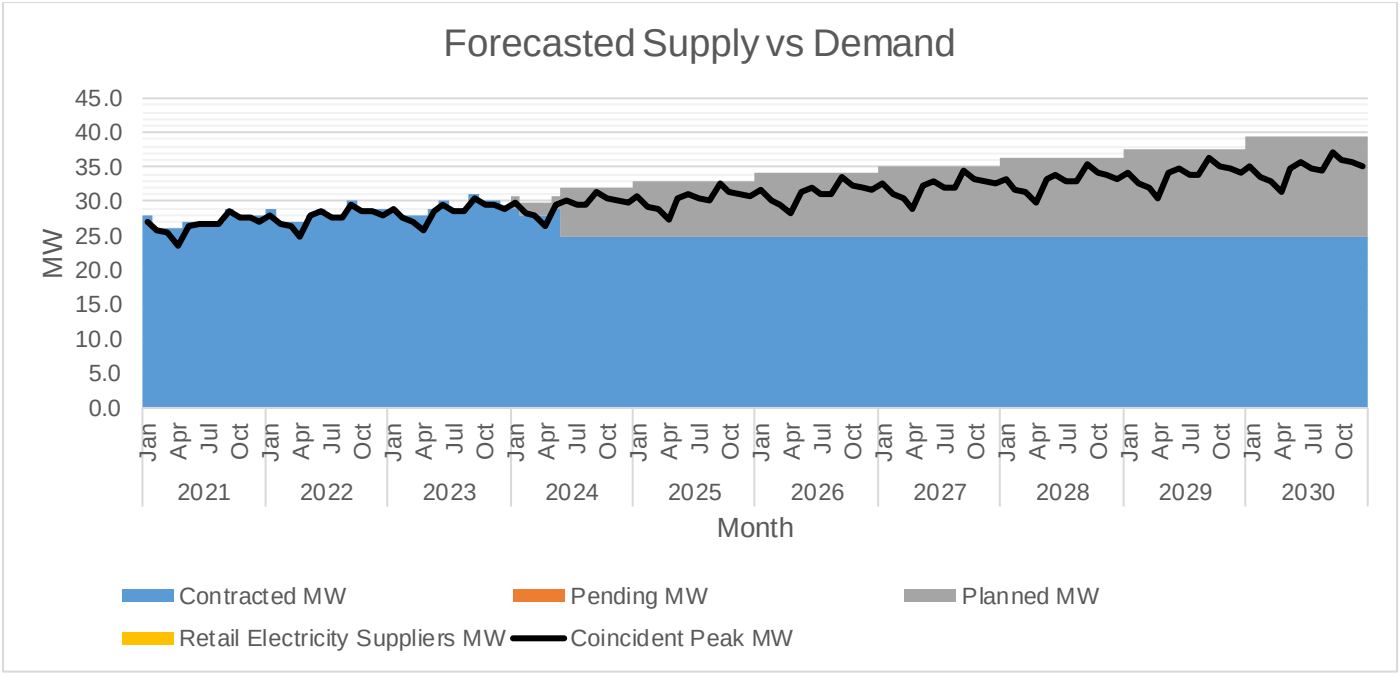
Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2021	Jan	27.17	28.00	0.00	0.000		103%	103%	0.83
	Feb	25.88	26.00	0.00	0.000		100%	100%	0.12
	Mar	25.48	26.00	0.00	0.000		102%	102%	0.52
	Apr	23.57	26.00	0.00	0.000		110%	110%	2.43
	May	26.30	27.00	0.00	0.000		103%	103%	0.70
	Jun	26.88	27.00	0.00	0.000		100%	100%	0.12
	Jul	26.86	27.00	0.00	0.000		101%	101%	0.14
	Aug	26.78	27.00	0.00	0.000		101%	101%	0.22
	Sep	28.74	29.00	0.00	0.000		101%	101%	0.27
	Oct	27.80	28.00	0.00	0.000		101%	101%	0.20
	Nov	27.60	28.00	0.00	0.000		101%	101%	0.40
	Dec	27.18	28.00	0.00	0.000		103%	103%	0.82
2022	Jan	28.05	29.00	0.00	0.000		103%	103%	0.95
	Feb	26.72	27.00	0.00	0.000		101%	101%	0.28
	Mar	26.31	27.00	0.00	0.000		103%	103%	0.69
	Apr	24.99	27.00	0.00	0.000		108%	108%	2.01
	May	27.88	28.00	0.00	0.000		100%	100%	0.13
	Jun	28.50	29.00	0.00	0.000		102%	102%	0.50
	Jul	27.73	28.00	0.00	0.000		101%	101%	0.27
	Aug	27.65	28.00	0.00	0.000		101%	101%	0.35
	Sep	29.67	30.00	0.00	0.000		101%	101%	0.33
	Oct	28.71	29.00	0.00	0.000		101%	101%	0.29
	Nov	28.50	29.00	0.00	0.000		102%	102%	0.50
	Dec	28.07	29.00	0.00	0.000		103%	103%	0.93
2023	Jan	28.94	29.00	0.00	0.000		100%	100%	0.06
	Feb	27.56	28.00	0.00	0.000		102%	102%	0.44
	Mar	27.14	28.00	0.00	0.000		103%	103%	0.86
	Apr	25.78	28.00	0.00	0.000		109%	109%	2.22
	May	28.76	29.00	0.00	0.000		101%	101%	0.25
	Jun	29.40	30.00	0.00	0.000		102%	102%	0.60
	Jul	28.61	29.00	0.00	0.000		101%	101%	0.39
	Aug	28.53	29.00	0.00	0.000		102%	102%	0.47
	Sep	30.61	31.00	0.00	0.000		101%	101%	0.39
	Oct	29.61	30.00	0.00	0.000		101%	101%	0.39
	Nov	29.40	30.00	0.00	0.000		102%	102%	0.60
	Dec	28.95	29.00	0.00	0.000		100%	100%	0.05
2024	Jan	29.82	29.00	0.00	1.700		97%	103%	0.88
	Feb	28.41	28.00	0.00	1.700		99%	105%	1.29
	Mar	27.97	28.00	0.00	1.700		100%	106%	1.73
	Apr	26.57	28.00	0.00	1.700		105%	112%	3.14
	May	29.63	29.00	0.00	1.700		98%	104%	1.07
	Jun	30.30	25.00	0.00	7.145		83%	106%	1.85
	Jul	29.48	25.00	0.00	7.145		85%	109%	2.66
	Aug	29.40	25.00	0.00	7.145		85%	109%	2.75

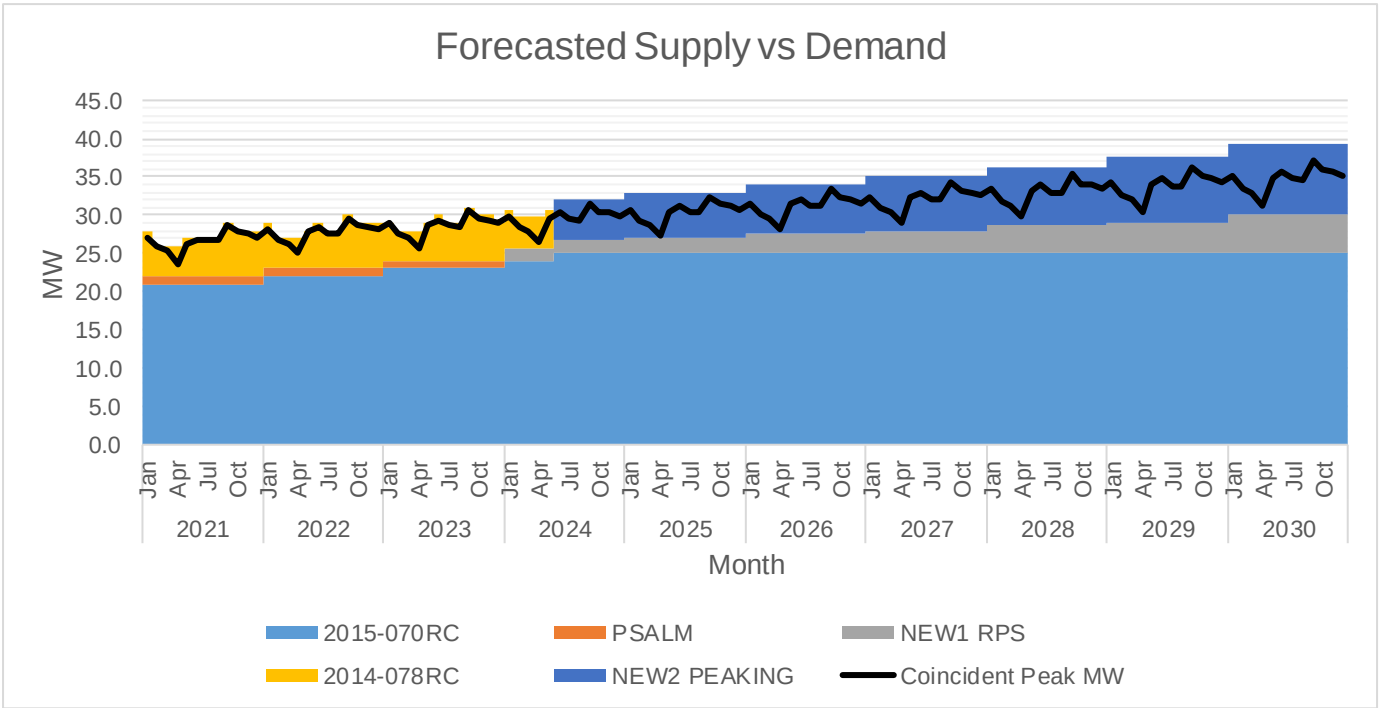
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Sep	31.54	25.00	0.00	7.145		79%	102%	0.60
	Oct	30.52	25.00	0.00	7.145		82%	105%	1.63
	Nov	30.30	25.00	0.00	7.145		83%	106%	1.85
	Dec	29.84	25.00	0.00	7.145		84%	108%	2.31
2025	Jan	30.71	25.00	0.00	7.901		81%	107%	2.19
	Feb	29.25	25.00	0.00	7.901		85%	112%	3.65
	Mar	28.80	25.00	0.00	7.901		87%	114%	4.10
	Apr	27.35	25.00	0.00	7.901		91%	120%	5.55
	May	30.51	25.00	0.00	7.901		82%	108%	2.39
	Jun	31.19	25.00	0.00	7.901		80%	105%	1.71
	Jul	30.36	25.00	0.00	7.901		82%	108%	2.54
	Aug	30.27	25.00	0.00	7.901		83%	109%	2.63
	Sep	32.48	25.00	0.00	7.901		77%	101%	0.42
	Oct	31.42	25.00	0.00	7.901		80%	105%	1.48
	Nov	31.20	25.00	0.00	7.901		80%	105%	1.70
	Dec	30.72	25.00	0.00	7.901		81%	107%	2.18
2026	Jan	31.59	25.00	0.00	9.116		79%	108%	2.52
	Feb	30.09	25.00	0.00	9.116		83%	113%	4.02
	Mar	29.63	25.00	0.00	9.116		84%	115%	4.48
	Apr	28.14	25.00	0.00	9.116		89%	121%	5.97
	May	31.39	25.00	0.00	9.116		80%	109%	2.72
	Jun	32.09	25.00	0.00	9.116		78%	106%	2.02
	Jul	31.23	25.00	0.00	9.116		80%	109%	2.88
	Aug	31.14	25.00	0.00	9.116		80%	110%	2.97
	Sep	33.42	25.00	0.00	9.116		75%	102%	0.70
	Oct	32.33	25.00	0.00	9.116		77%	106%	1.79
	Nov	32.10	25.00	0.00	9.116		78%	106%	2.02
	Dec	31.61	25.00	0.00	9.116		79%	108%	2.51
2027	Jan	32.48	25.00	0.00	10.014		77%	108%	2.54
	Feb	30.94	25.00	0.00	10.014		81%	113%	4.08
	Mar	30.46	25.00	0.00	10.014		82%	115%	4.55
	Apr	28.93	25.00	0.00	10.014		86%	121%	6.08
	May	32.27	25.00	0.00	10.014		77%	108%	2.74
	Jun	32.99	25.00	0.00	10.014		76%	106%	2.02
	Jul	32.11	25.00	0.00	10.014		78%	109%	2.91
	Aug	32.02	25.00	0.00	10.014		78%	109%	3.00
	Sep	34.35	25.00	0.00	10.014		73%	102%	0.66
	Oct	33.23	25.00	0.00	10.014		75%	105%	1.78
	Nov	33.00	25.00	0.00	10.014		76%	106%	2.02
	Dec	32.49	25.00	0.00	10.014		77%	108%	2.52
2028	Jan	33.36	25.00	0.00	11.379		75%	109%	3.02
	Feb	31.78	25.00	0.00	11.379		79%	114%	4.60
	Mar	31.29	25.00	0.00	11.379		80%	116%	5.09
	Apr	29.72	25.00	0.00	11.379		84%	122%	6.66
	May	33.15	25.00	0.00	11.379		75%	110%	3.23
	Jun	33.89	25.00	0.00	11.379		74%	107%	2.49

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jul	32.98	25.00	0.00	11.379		76%	110%	3.40
	Aug	32.89	25.00	0.00	11.379		76%	111%	3.49
	Sep	35.29	25.00	0.00	11.379		71%	103%	1.09
	Oct	34.14	25.00	0.00	11.379		73%	107%	2.24
	Nov	33.90	25.00	0.00	11.379		74%	107%	2.48
	Dec	33.38	25.00	0.00	11.379		75%	109%	3.00
2029	Jan	34.25	25.00	0.00	12.526		73%	110%	3.28
	Feb	32.62	25.00	0.00	12.526		77%	115%	4.91
	Mar	32.12	25.00	0.00	12.526		78%	117%	5.41
	Apr	30.51	25.00	0.00	12.526		82%	123%	7.02
	May	34.03	25.00	0.00	12.526		73%	110%	3.50
	Jun	34.79	25.00	0.00	12.526		72%	108%	2.74
	Jul	33.86	25.00	0.00	12.526		74%	111%	3.67
	Aug	33.76	25.00	0.00	12.526		74%	111%	3.77
	Sep	36.22	25.00	0.00	12.526		69%	104%	1.30
	Oct	35.04	25.00	0.00	12.526		71%	107%	2.48
	Nov	34.80	25.00	0.00	12.526		72%	108%	2.73
	Dec	34.26	25.00	0.00	12.526		73%	110%	3.26
2030	Jan	35.13	25.00	0.00	14.372		71%	112%	4.24
	Feb	33.46	25.00	0.00	14.372		75%	118%	5.91
	Mar	32.95	25.00	0.00	14.372		76%	119%	6.42
	Apr	31.29	25.00	0.00	14.372		80%	126%	8.08
	May	34.91	25.00	0.00	14.372		72%	113%	4.46
	Jun	35.69	25.00	0.00	14.372		70%	110%	3.68
	Jul	34.73	25.00	0.00	14.372		72%	113%	4.64
	Aug	34.63	25.00	0.00	14.372		72%	114%	4.74
	Sep	37.16	25.00	0.00	14.372		67%	106%	2.21
	Oct	35.95	25.00	0.00	14.372		70%	110%	3.42
	Nov	35.69	25.00	0.00	14.372		70%	110%	3.68
	Dec	35.15	25.00	0.00	14.372		71%	112%	4.22

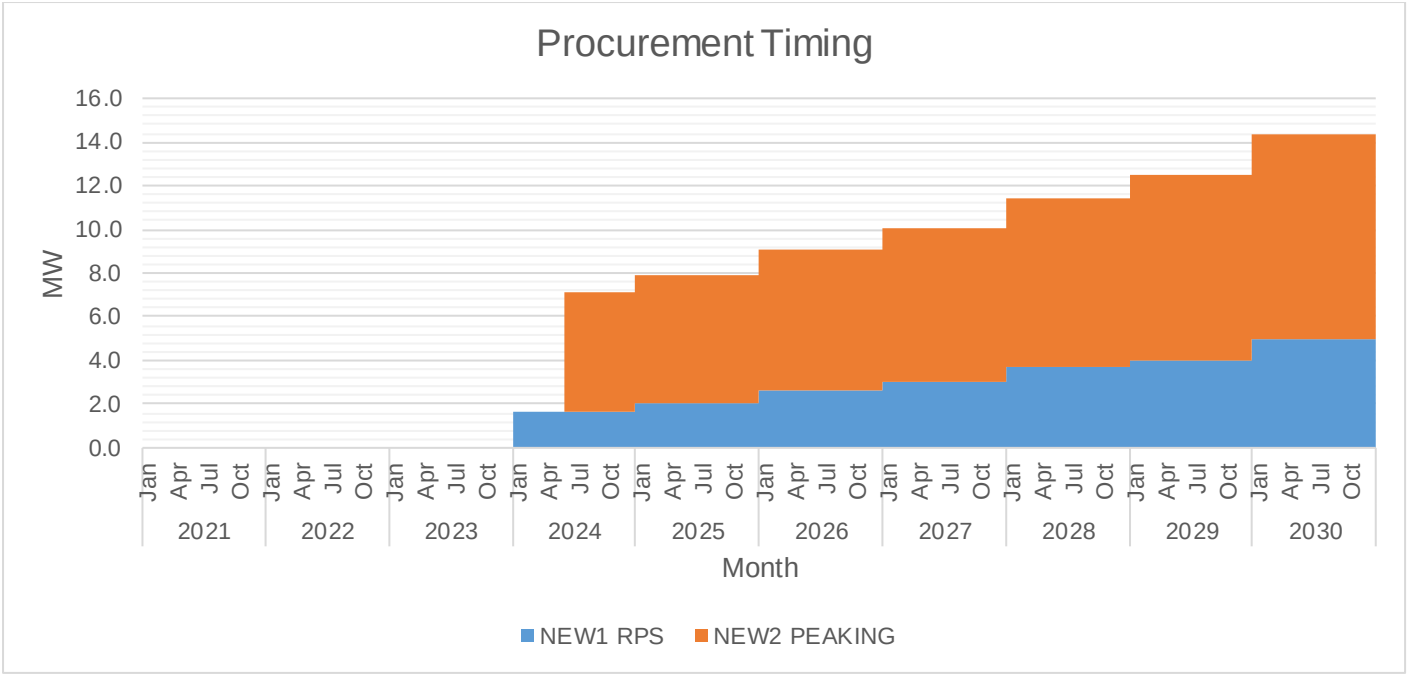
The Peak Demand was forecasted using Regression analysis and was assumed to occur on the billing month of June and September due to high demand during summer time and operation of rice mills and oil mills. Monthly Peak Demand is at its lowest on the month of April due to some changes of school calendar and holy week. In general, Peak Demand is expected to grow at a rate of 3.55% annually. PSALM 1 MW contract was still on the process of securing Certificate Of Exemption (COE) to conduct CSP from DOE. RPS compliance of EC is already included in planned CSP starting year 2024. The Indicated Monthly Capacity of RPS is based on assumption of maximum generation from solar technology as our plan to comply RPS requirements. RPS power supplier will address the energy requirements during day time and the peaking supply will address peak demand during night time. On May 2024 our peaking supply contract will expire and we planned to have a Peaking power supply of 5.45 MW on top of Contracted 25MW from FDC. We planned also to have a minimum 7,917MWh energy contract for RPS requirement. It is highly recommended that the Peaking requirements of EC will be RE Eligible so that the EC could be compliant with RPS and at the same time it will address the peaking intervals of MOELCI-II.



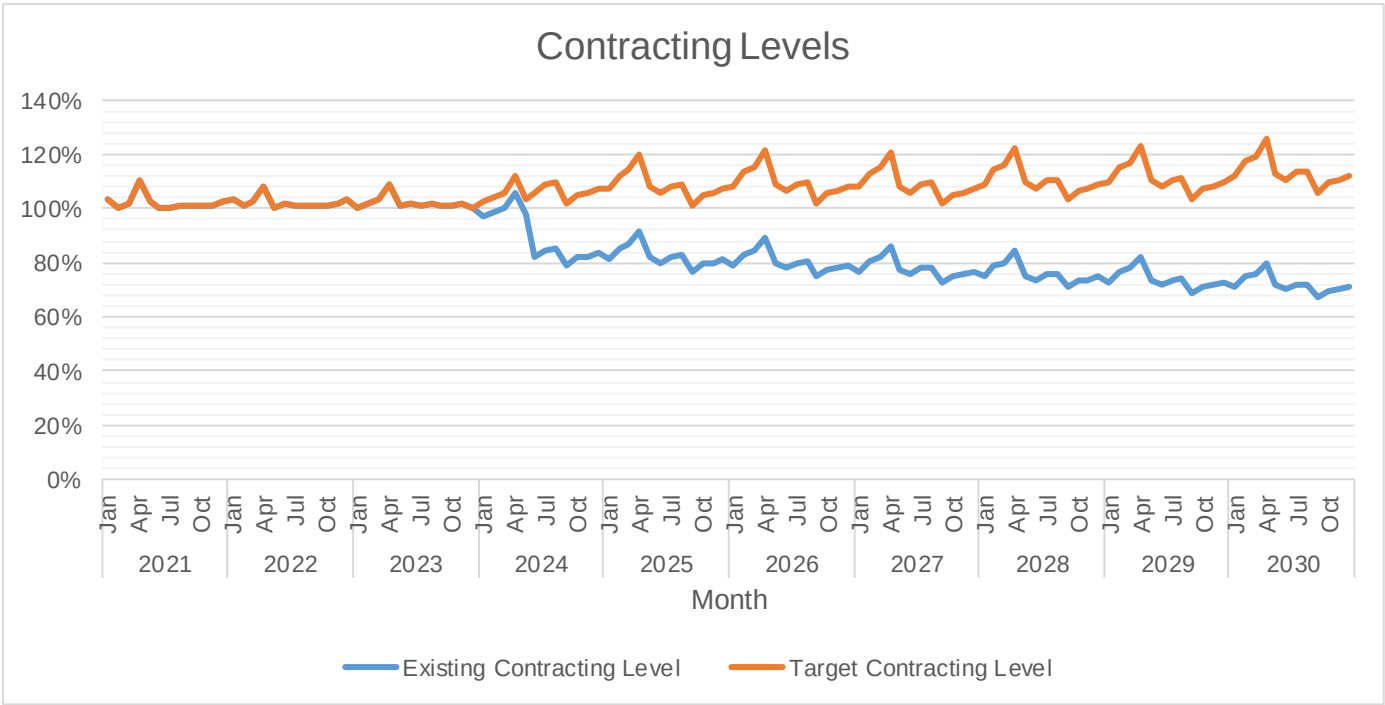
The available supply is generally above the Peak Demand. This is because of the 25MW Contracted capacity with FDC. For the year 2020 the dispatched and billed capacity is 20MW and for the year 2021 is 21MW respectively. By year 2024 the Contracted level is lower than the Peak demand due to the expiration of KEGI contract.



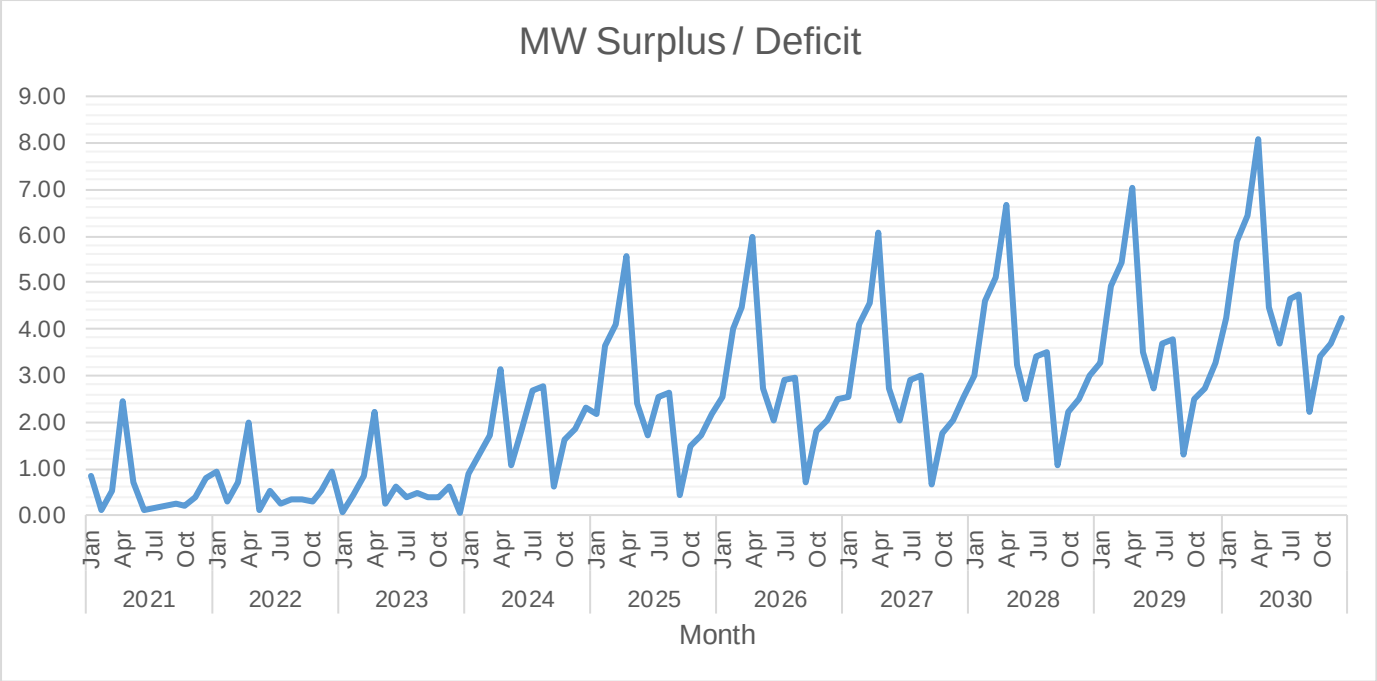
Of the available supply, the largest is 25 MW from FDC. This is followed by 10 MW from KEGI.



The first wave of supply procurement will be for 7,917 MWh planned energy contract of RE generator to supply the RPS compliance of the EC to be available by the billing month of January 2024. This will be followed by 5.45MW peaking supply contract on billing month of June 2024 to replace the expired 10MW contract of KEGI.



Currently, there is surplus contracted capacity by 31%. The highest target contracting level is 148% which is expected to occur on April 2021. The lowest target contracting level is 118% which is expected to occur on May 2024.



Currently, there is Surplus Supply due to the contract of 2015-070RC.The increase of surplus starting 2024 is due to the assumption that the RPS supply is solar technology which is can cater only daytime load and the peaking supply that will address night time peak was added. Supposedly RPS requirements is a technology neutral. However, the fastest technology that will immediately construct is a solar technology.

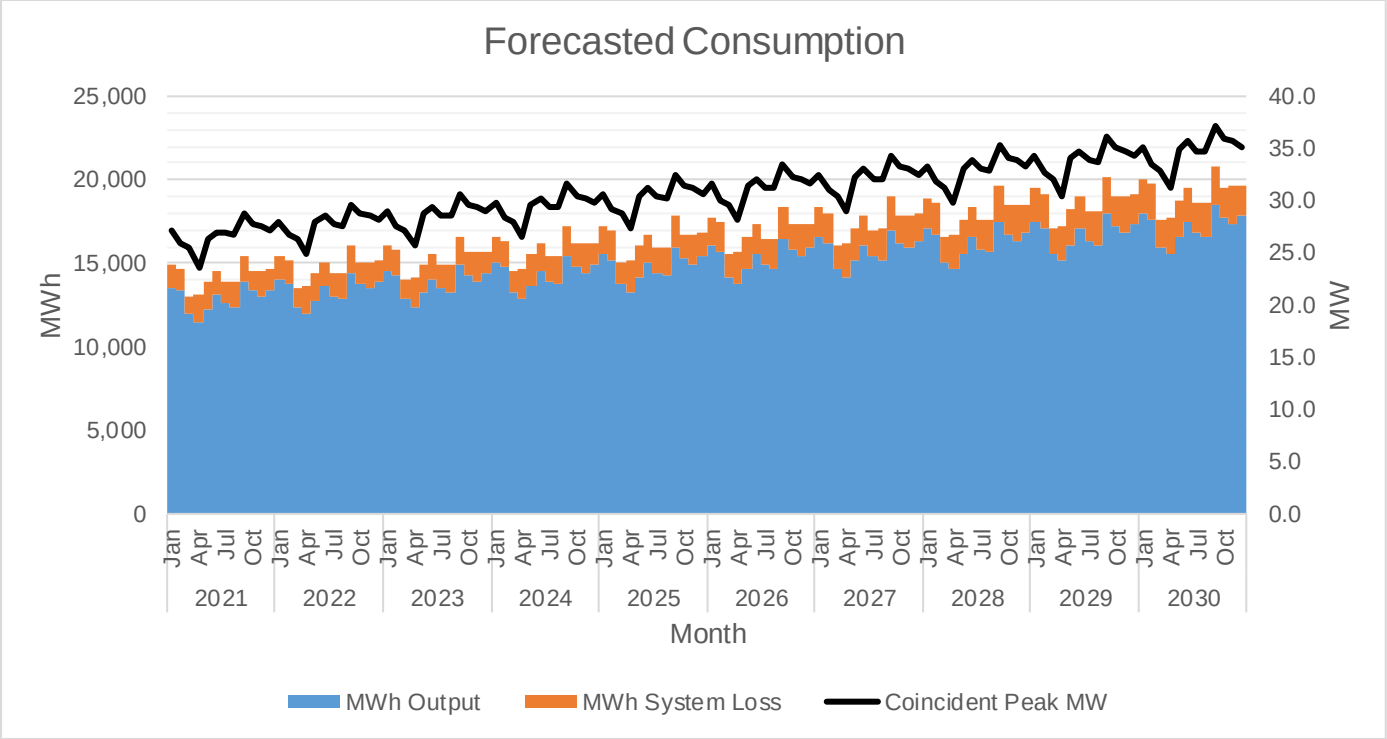
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	14,923	13,573	1,350	0.00%	9.05%
	Feb	14,686	13,345	1,341	0.00%	9.13%
	Mar	13,057	11,968	1,089	0.00%	8.34%
	Apr	13,196	11,517	1,679	0.00%	12.72%
	May	13,927	12,281	1,646	0.00%	11.82%
	Jun	14,542	13,093	1,449	0.00%	9.97%
	Jul	13,854	12,564	1,290	0.00%	9.31%
	Aug	13,875	12,359	1,516	0.00%	10.93%
	Sep	15,467	13,878	1,590	0.00%	10.28%
	Oct	14,567	13,326	1,241	0.00%	8.52%
	Nov	14,569	12,987	1,582	0.00%	10.86%
	Dec	14,614	13,415	1,199	0.00%	8.21%
2022	Jan	15,459	14,061	1,398	0.00%	9.05%
	Feb	15,213	13,815	1,399	0.00%	9.19%
	Mar	13,526	12,408	1,118	0.00%	8.26%
	Apr	13,670	11,964	1,707	0.00%	12.49%
	May	14,427	12,750	1,677	0.00%	11.63%
	Jun	15,065	13,581	1,484	0.00%	9.85%
	Jul	14,352	13,028	1,324	0.00%	9.23%
	Aug	14,373	12,824	1,549	0.00%	10.78%
	Sep	16,023	14,383	1,640	0.00%	10.23%
	Oct	15,090	13,811	1,279	0.00%	8.48%
	Nov	15,092	13,466	1,626	0.00%	10.78%
	Dec	15,139	13,906	1,234	0.00%	8.15%
2023	Jan	16,034	14,552	1,481	0.00%	9.24%
	Feb	15,779	14,288	1,491	0.00%	9.45%
	Mar	14,029	12,852	1,177	0.00%	8.39%
	Apr	14,178	12,412	1,766	0.00%	12.46%
	May	14,963	13,221	1,742	0.00%	11.64%
	Jun	15,624	14,071	1,553	0.00%	9.94%
	Jul	14,885	13,494	1,391	0.00%	9.34%
	Aug	14,907	13,292	1,615	0.00%	10.83%
	Sep	16,619	14,892	1,727	0.00%	10.39%
	Oct	15,651	14,298	1,353	0.00%	8.64%
	Nov	15,653	13,948	1,705	0.00%	10.89%
	Dec	15,702	14,399	1,303	0.00%	8.30%
2024	Jan	16,606	15,046	1,560	0.00%	9.39%
	Feb	16,342	14,763	1,579	0.00%	9.66%
	Mar	14,529	13,298	1,231	0.00%	8.48%
	Apr	14,684	12,862	1,822	0.00%	12.41%
	May	15,497	13,694	1,803	0.00%	11.63%
	Jun	16,182	14,564	1,618	0.00%	10.00%
	Jul	15,416	13,963	1,454	0.00%	9.43%
	Aug	15,439	13,762	1,677	0.00%	10.86%
	Sep	17,212	15,403	1,809.1360	0.00%	10.51%
	Oct	16,209	14,788	1,422	0.00%	8.77%
	Nov	16,212	14,431	1,780	0.00%	10.98%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Dec	16,262	14,895	1,367	0.00%	8.41%
2025	Jan	17,181	15,541	1,640	0.00%	9.55%
	Feb	16,908	15,240	1,668	0.00%	9.87%
	Mar	15,033	13,745	1,287	0.00%	8.56%
	Apr	15,193	13,314	1,879	0.00%	12.37%
	May	16,034	14,169	1,866	0.00%	11.63%
	Jun	16,742	15,058	1,684	0.00%	10.06%
	Jul	15,950	14,432	1,518	0.00%	9.52%
	Aug	15,974	14,234	1,740	0.00%	10.89%
	Sep	17,808	15,914	1,893	0.00%	10.63%
	Oct	16,771	15,279	1,492	0.00%	8.90%
	Nov	16,773	14,917	1,857	0.00%	11.07%
	Dec	16,825	15,392	1,434	0.00%	8.52%
2026	Jan	17,755	16,038	1,717	0.00%	9.67%
	Feb	17,472	15,718	1,754	0.00%	10.04%
	Mar	15,534	14,194	1,340	0.00%	8.63%
	Apr	15,700	13,766	1,934	0.00%	12.32%
	May	16,569	14,644	1,925	0.00%	11.62%
	Jun	17,301	15,553	1,748	0.00%	10.10%
	Jul	16,483	14,903	1,580	0.00%	9.59%
	Aug	16,507	14,706	1,801	0.00%	10.91%
	Sep	18,402	16,427	1,975	0.00%	10.73%
	Oct	17,330	15,770	1,560	0.00%	9.00%
	Nov	17,333	15,403	1,930	0.00%	11.14%
	Dec	17,387	15,890	1,497	0.00%	8.61%
2027	Jan	18,330	16,535	1,795	0.00%	9.79%
	Feb	18,038	16,196	1,841	0.00%	10.21%
	Mar	16,037	14,643	1,394	0.00%	8.70%
	Apr	16,208	14,218	1,990	0.00%	12.28%
	May	17,106	15,120	1,986	0.00%	11.61%
	Jun	17,861	16,048	1,813	0.00%	10.15%
	Jul	17,016	15,374	1,643	0.00%	9.65%
	Aug	17,042	15,179	1,863	0.00%	10.93%
	Sep	18,998	16,941	2,057	0.00%	10.83%
	Oct	17,892	16,263	1,629	0.00%	9.10%
	Nov	17,894	15,889	2,005	0.00%	11.21%
	Dec	17,950	16,388	1,562	0.00%	8.70%
2028	Jan	18,906	17,032	1,874	0.00%	9.91%
	Feb	18,605	16,676	1,930	0.00%	10.37%
	Mar	16,542	15,092	1,449	0.00%	8.76%
	Apr	16,718	14,671	2,047	0.00%	12.25%
	May	17,644	15,596	2,048	0.00%	11.61%
	Jun	18,423	16,544	1,879	0.00%	10.20%
	Jul	17,552	15,845	1,707	0.00%	9.72%
	Aug	17,578	15,652	1,926	0.00%	10.95%
	Sep	19,596	17,455	2,141	0.00%	10.92%
	Oct	18,455	16,756	1,699	0.00%	9.21%

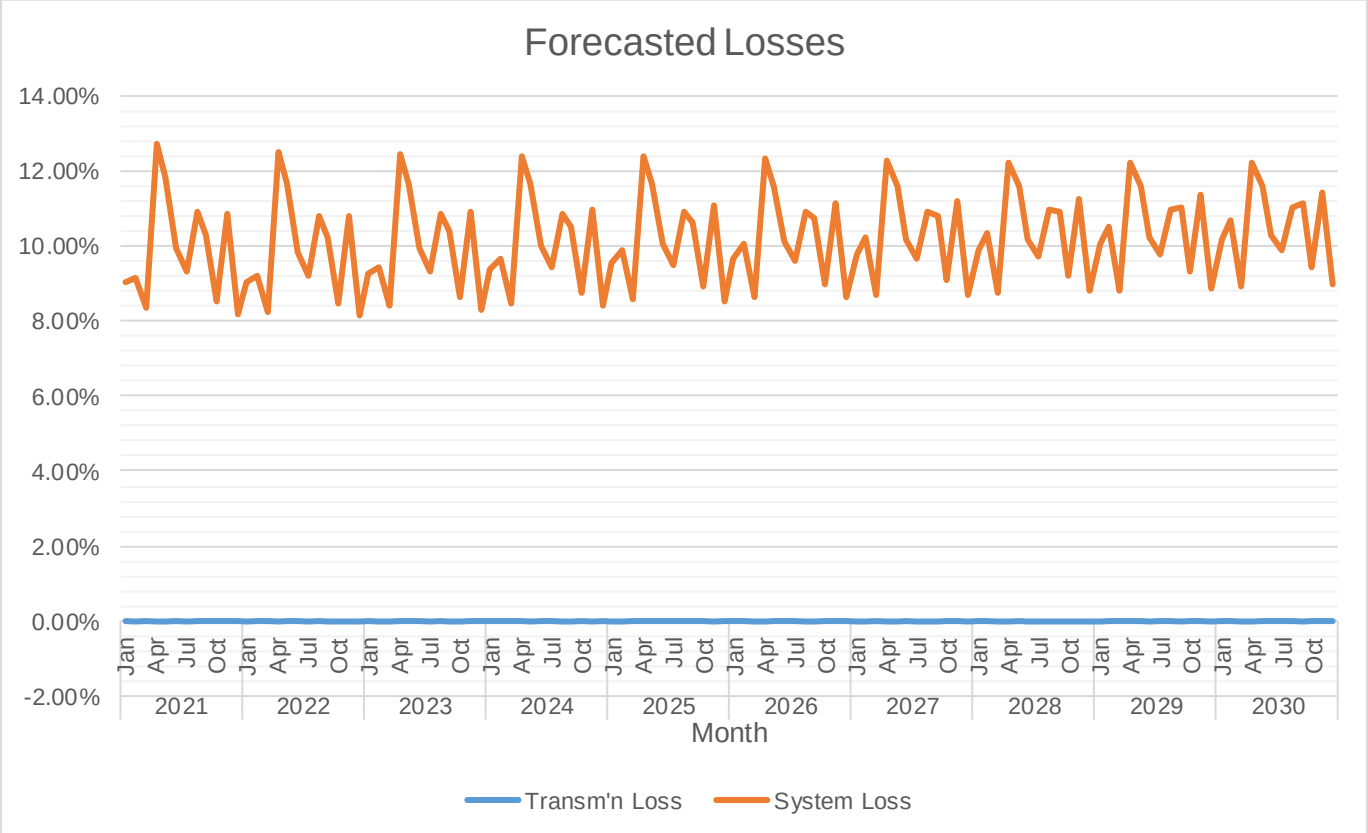
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	18,457	16,376	2,081	0.00%	11.28%
	Dec	18,515	16,887	1,627	0.00%	8.79%
2029	Jan	19,484	17,529	1,954	0.00%	10.03%
	Feb	19,174	17,155	2,019	0.00%	10.53%
	Mar	17,047	15,542	1,505	0.00%	8.83%
	Apr	17,229	15,124	2,105	0.00%	12.22%
	May	18,183	16,072	2,111	0.00%	11.61%
	Jun	18,986	17,040	1,946	0.00%	10.25%
	Jul	18,088	16,317	1,772	0.00%	9.79%
	Aug	18,115	16,126	1,989	0.00%	10.98%
	Sep	20,194	17,969	2,225	0.00%	11.02%
	Oct	19,018	17,249	1,770	0.00%	9.31%
	Nov	19,021	16,863	2,158	0.00%	11.35%
	Dec	19,080	17,386	1,694	0.00%	8.88%
2030	Jan	20,063	18,027	2,036	0.00%	10.15%
	Feb	19,743	17,634	2,110	0.00%	10.68%
	Mar	17,554	15,992	1,562	0.00%	8.90%
	Apr	17,741	15,577	2,164	0.00%	12.20%
	May	18,723	16,548	2,175	0.00%	11.62%
	Jun	19,550	17,536	2,014	0.00%	10.30%
	Jul	18,625	16,788	1,837	0.00%	9.87%
	Aug	18,653	16,599	2,054	0.00%	11.01%
	Sep	20,794	18,483	2,311	0.00%	11.11%
	Oct	19,583	17,741	1,842	0.00%	9.41%
	Nov	19,586	17,350	2,236	0.00%	11.42%
	Dec	19,647	17,885	1,762	0.00%	8.97%

MWh Offtake was forecasted using Regression model. The assumed load factor is 62.31%.

System Loss was calculated through a Load Flow Study conducted on March 2020 by using DSL Segregator software. Based on the same study, the Distribution System cannot adequately convey electricity to customers.



MWh Output was expected to grow at a rate of 3.46% annually.



Systems Loss is expected to increase on the next following year due to primary metering of substation. System Loss is expected to range from 8.26% to 12.95%.

Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2015-070RC	Base	FDC Misamis Power Corporation	10.00	87,600	12/26/2017	12/25/2042
2014-078RC	Peaking	King Energy Generation, Inc.	0.00	0	5/26/2014	5/25/2024
PSALM	Intermediate	Power Sector Assets and Liabilities Management Corporation	1.00	15,800	12/25/2020	12/26/2023

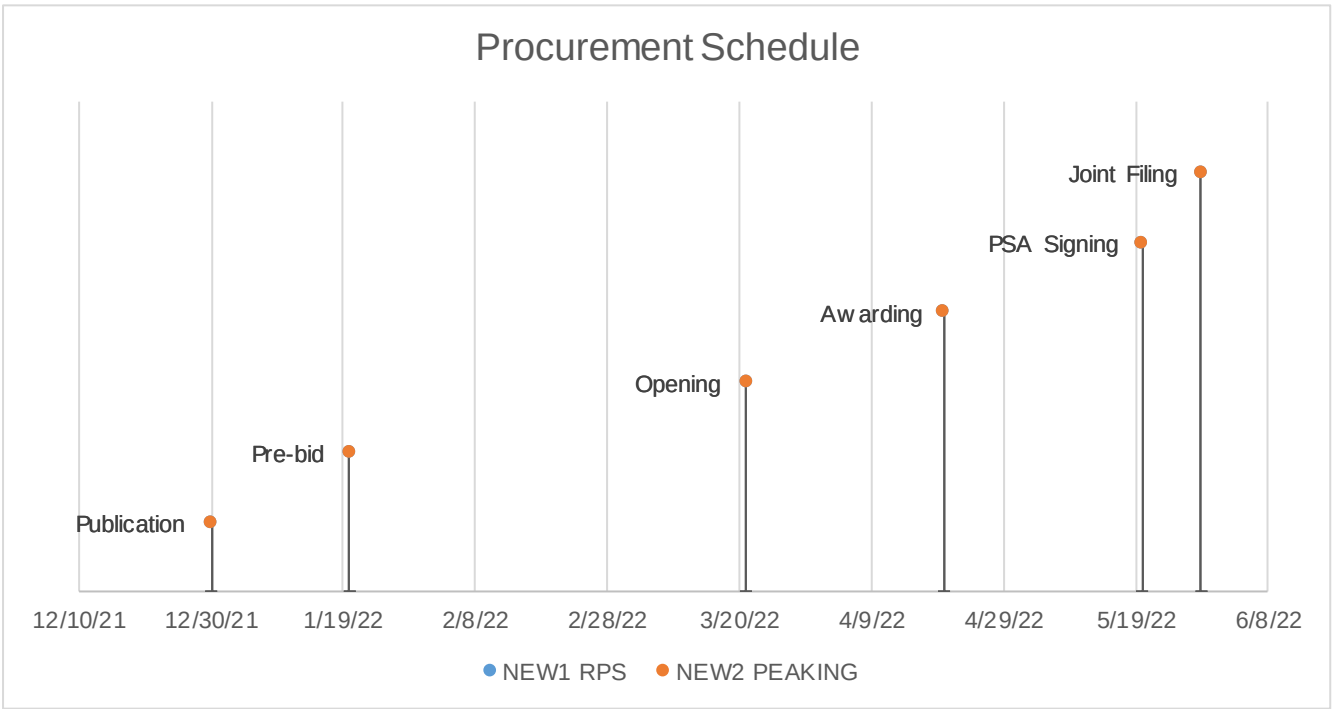
The PSA with FDC Misamis Power Corporation filed with ERC under Case No. 2015-070RC was procured through direct negotiation. It was selected to provide for base requirements due to low variable cost. Historically, the utilization of the PSA is more or less 80%. Outages of the plant led to unserved energy of around 1789.8933MWh in the past year. The actual billed overall monthly charge under the PSA is 6.87P/KWh average for the past year.

The PSA with King Energy Generation, Inc. filed with ERC under Case No. 2014-078RC was procured through direct negotiation. It was selected to provide for intermediate/peaking requirements due to low CRF and high variable cost. The actual billed overall monthly charge under the PSA average for the whole year is 55.99 P/kWh. The high rate was due to lesser kWh dispatched from the power plant.

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
PSALM	Intermediate	Power Sector Assets and Liabilities Management Corporation	1.00	14,791	12/26/2020	12/25/2021

The CSEE with PSALM filed with ERC was procured through Negotiation. It was selected to provide for base load/intermediate requirements due to its low energy cost.

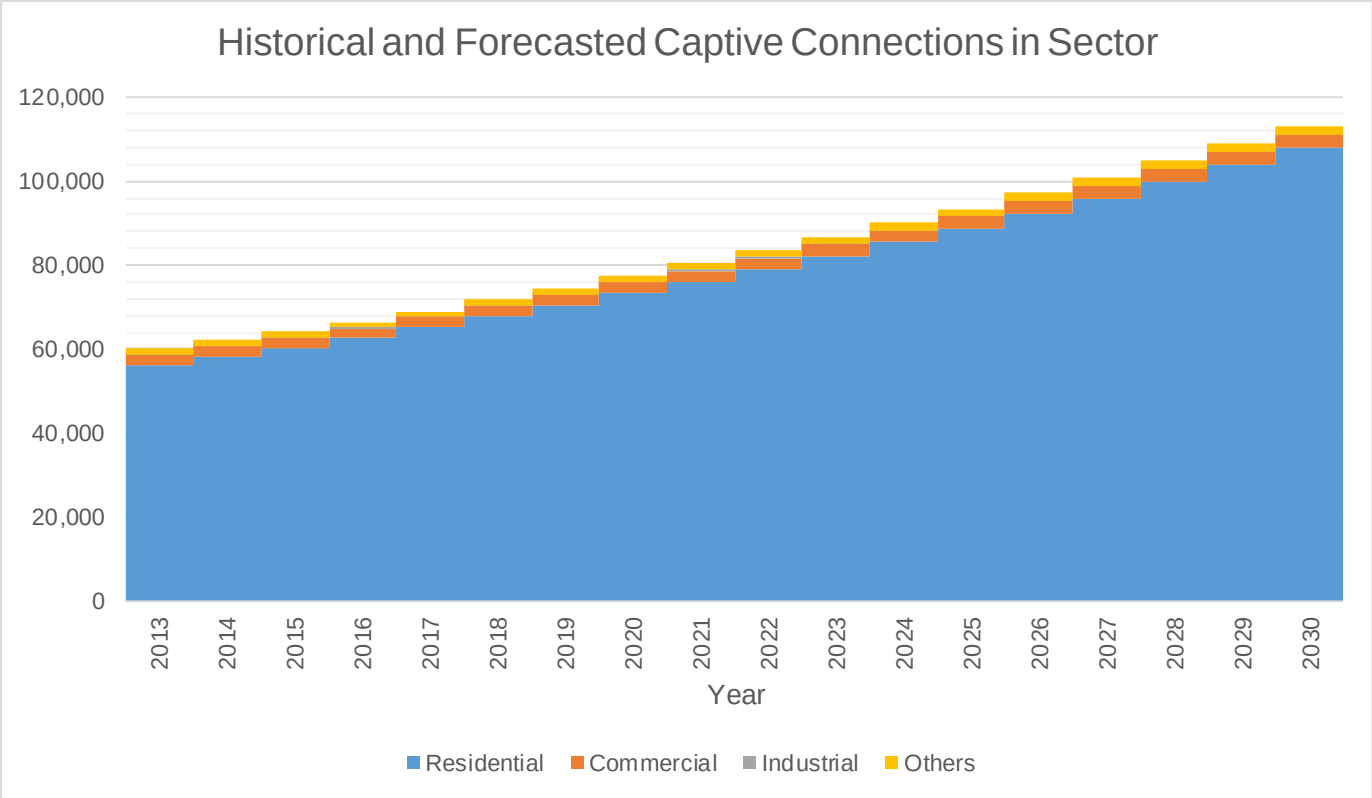
	NEW1 RPS	NEW2 PEAKING
Type	Intermediate	Peaking
Minimum MW	3	5.45
Minimum MWh/yr	7,917	1,761
PSA Start	12/26/2023	5/26/2024
PSA End	12/25/2029	5/26/2030
Publication	12/30/2021	12/30/2021
Pre-bid	1/20/2022	1/20/2022
Opening	3/21/2022	3/21/2022
Awarding	4/20/2022	4/20/2022
PSA Signing	5/20/2022	5/20/2022
Joint Filing	5/29/2022	5/29/2022



For the procurement of 5.44 MW peaking supply of which is planned to be available on May 26, 2024, the first publication or launch of CSP will be on December 30, 2021. Joint filing is planned on May 29, 2022 or 150 days later, in accordance with DOE's 2018 CSP Policy.

For the procurement of 7,917 MWH of supply for RPS requirements which is planned to be available on December 26, 2023, the first publication or launch of CSP will be on December 30, 2021. Joint filing is planned on May 29, 2022 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 4.82% annually. Said customer class is expected to account for 51.66% of the total consumption.