# Power Supply Procurement Plan [2021]

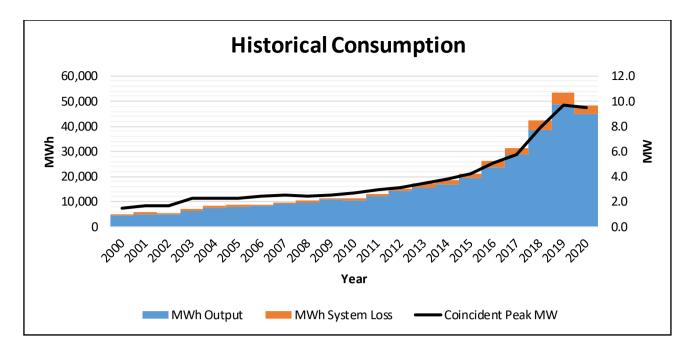
Siargao Electric Cooperative, Inc. [SIARELCO]

### **Historical Consumption Data**

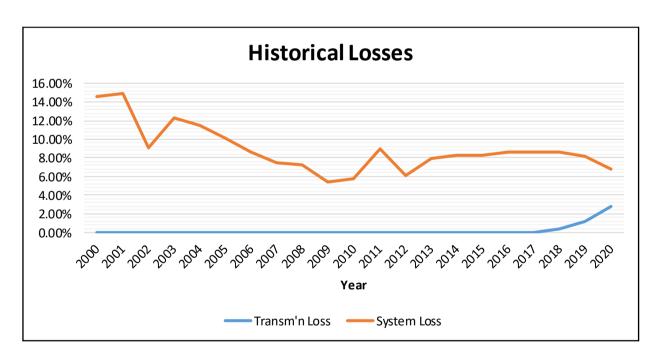
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	1.47	5,075	0	5,075	4,333	742	39%	0.00%	0.00%	14.61%
2001	1.63	5,616	0	5,616	4,779	837	39%	0.00%	0.00%	14.91%
2002	1.71	5,554	0	5,554	5,049	505	37%	0.00%	0.00%	9.10%
2003	2.27	7,196	0	7,196	6,312	884	36%	0.00%	0.00%	12.29%
2004	2.26	8,259	0	8,259	7,314	945	42%	0.00%	0.00%	11.44%
2005	2.30	8,730	0	8,730	7,850	880	43%	0.00%	0.00%	10.08%
2006	2.42	8,970	0	8,970	8,195	775	42%	0.00%	0.00%	8.64%
2007	2.56	9,836	0	9,836	9,098	738	44%	0.00%	0.00%	7.50%
2008	2.46	10,602	0	10,602	9,828	774	49%	0.00%	0.00%	7.30%
2009	2.53	11,424	0	11,424	10,806	619	52%	0.00%	0.00%	5.42%
2010	2.70	11,313	0	11,313	10,658	655	48%	0.00%	0.00%	5.79%
2011	2.92	13,225	0	13,225	12,043	1,182	52%	0.00%	0.00%	8.93%
2012	3.13	15,020	0	15,020	14,111	909	55%	0.00%	0.00%	6.05%
2013	3.46	17,124	0	17,124	15,774	1,350	56%	0.00%	0.00%	7.88%
2014	3.83	18,388	0	18,388	16,858	1,530	55%	0.00%	0.00%	8.32%
2015	4.21	20,952	0	20,952	19,226	1,726	57%	0.00%	0.00%	8.24%
2016	5.10	26,142	0	26,142	23,873	2,269	59%	0.00%	0.00%	8.68%
2017	5.77	31,463	0	31,463	28,738	2,724	62%	0.00%	0.00%	8.66%
2018	7.90	42,320	0	42,178	38,537	3,641	61%	0.00%	0.34%	8.63%
2019	9.69	53,867	0	53,243	48,905	4,338	63%	0.00%	1.16%	8.15%
2020	9.54	49,839	0	48,444	45,128	3,316	58%	0.00%	2.80%	6.84%

Peak Demand increased from 1.47 MW in 2000 to 9.54 MW in 2020 at a rate of 10.27% and MWh Offtake increased from 5,075 MWh in 2000 to 9.54 MWh in 2020 at a rate of 12.59% due to the additional loads but during the outbreak of COVID-19 Pandemic, the peak demand and MWh Offtake was slightly decreased due to the temporary closure of commercial consumers such as hotels and resort business. Within the same period, Load Factor ranged from 39% to 58%. There was an abrupt change in consumption on 2020 due to temporary closure of

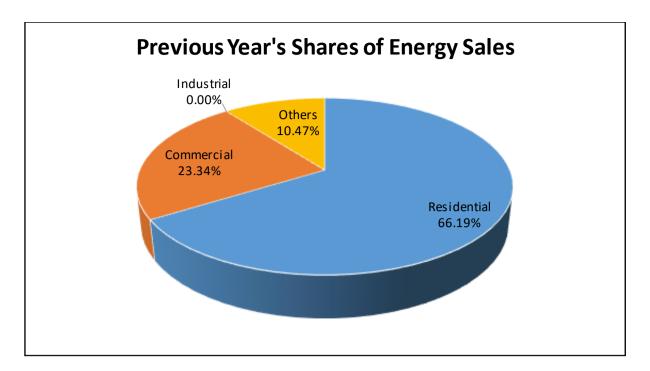
commercial consumers such as hotels and resort business during the outbreak of COVID-19 Pandemic.



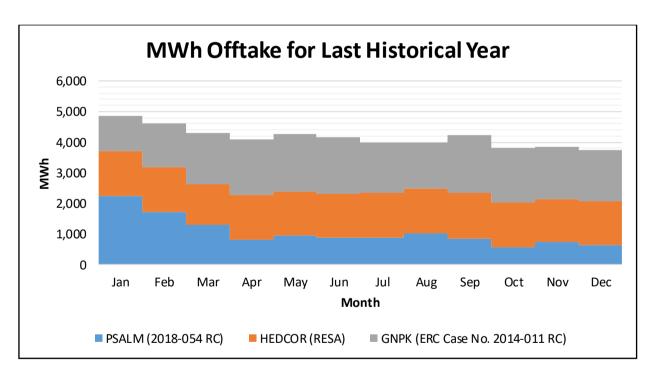
MWh Output increased from year 2000 to year 2019 at a rate while MWh System Loss increased of 13.93% but during the outbreak of COVID-19 Pandemic, it decreased from year 2019 to year 2021 at a rate of 7.72%, while MWh System Loss decreased at a rate of 11.75% from the year 2000 to year 2020.



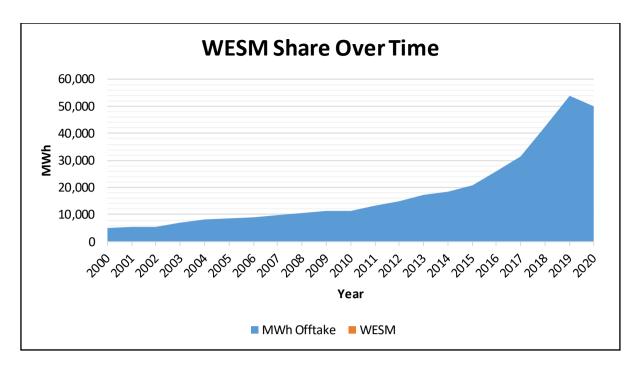
Historically, Transmission Loss ranged from 0.34% to 2.80% while System Loss ranged from 14.61% to 6.84%.



Residential customers account for the bulk of energy sales at 66.19% due to the high number of connections. In contrast, other customers classified as public buildings and street lights customers accounted for only 10.47% of energy sales due to the low number of connections.

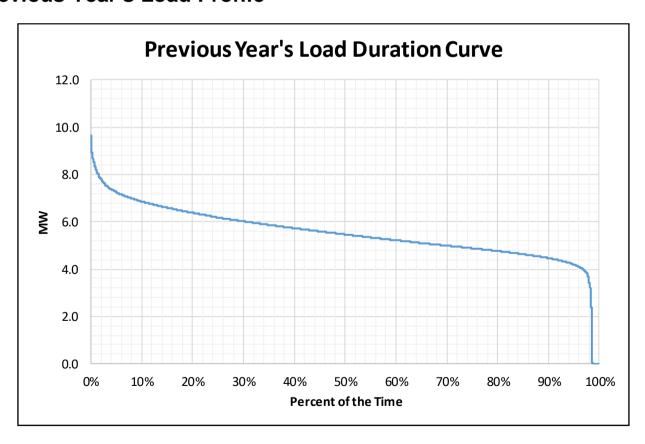


For year 2020, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with PSALM, GNPK & HEDCOR accounts for the bulk of MWh Offtake.

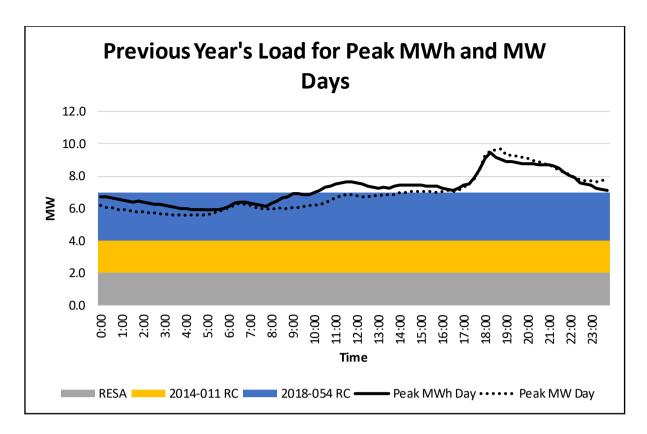


Last August 16, 2021, IEMOP approved our registration as Direct WESM Member (Electric Cooperative Category) in the Philippine Wholesale Electricity Spot Market (WESM).

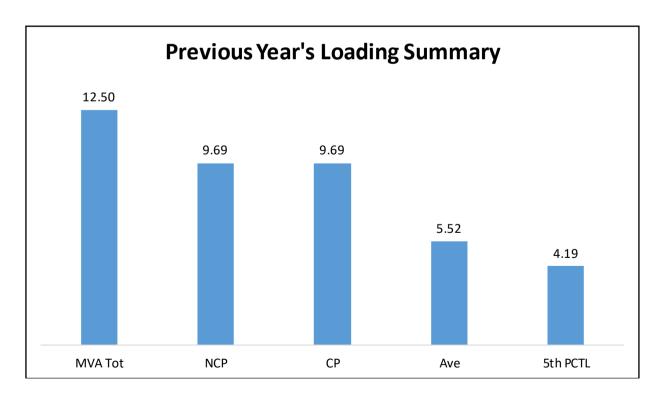
#### **Previous Year's Load Profile**



Based on the Load Duration Curve, the minimum load is 1.47 MW and the maximum load is 9.69 MW for the last historical year.



Peak MW occurred on 1800H considering that 93.56% of SIARELCO's consumers are residential which usually turned on their appliances such as air conditioning units during this time. As shown in the Load Curves, the available supply is lower than the Peak Demand. Thus, SIARELCO allocates more than the contracted capacity to GNPK and PSALM.



The Non-coincident Peak Demand is 9.69 MW, which is around 78% of the total substation capacity of 10/12.5 MVA at a power factor of 0.99. The load factor or the ratio between the Average Load of 5.52 MW and the Non-coincident Peak Demand is 57% of. A safe estimate of the true minimum load is the fifth percentile load of 4.19 MW which is 43% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Cagdianao SS	12.5	9.686

The substation located in Cagdianao, Claver, Surigao del Norte is loaded above 70%. This loading problem will be solved by uprating of the existing Power Transformer from 10/12.5MVA to 20/25MVA to cater the additional loads in Siargao Island.

# **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	9.53	7.00	0.00	0.000		73%	73%	-2.53
	Feb	8.46	7.00	0.00	0.000		83%	83%	-1.46
	Mar	8.72	7.00	0.00	0.000		80%	80%	-1.72
	Apr	10.02	7.00	0.00	0.000		70%	70%	-3.02
	May	10.91	7.00	0.00	0.000		64%	64%	-3.91
	Jun	10.97	7.00	0.00	0.000		64%	64%	-3.97
	Jul	11.23	7.00	0.00	0.000		62%	62%	-4.23
	Aug	11.39	7.00	0.00	0.000		61%	61%	-4.39
	Sep	11.08	7.00	0.00	0.000		63%	63%	-4.08
	Oct	11.51	7.00	0.00	0.000		61%	61%	-4.51
	Nov	11.06	7.00	0.00	0.000		63%	63%	-4.06
	Dec	11.09	7.00	0.00	0.000		63%	63%	-4.09
2022	Jan	10.79	7.00	0.00	5.000		65%	111%	1.21
	Feb	9.58	7.00	0.00	5.000		73%	125%	2.42
	Mar	9.87	7.00	0.00	5.000		71%	122%	2.13
	Apr	11.34	7.00	0.00	5.000		62%	106%	0.66
	May	12.35	7.00	0.00	6.000		57%	105%	0.65
	Jun	12.42	7.00	0.00	6.000		56%	105%	0.58
	Jul	12.71	7.00	0.00	6.000		55%	102%	0.29
	Aug	12.89	7.00	0.00	6.000		54%	101%	0.11
	Sep	12.54	7.00	0.00	6.000		56%	104%	0.46
	Oct	13.03	7.00	0.00	7.000		54%	107%	0.97
	Nov	12.52	7.00	0.00	7.000		56%	112%	1.48
	Dec	12.55	7.00	0.00	7.000		56%	112%	1.45
2023	Jan	12.03	2.00	0.00	11.000		17%	108%	0.97
	Feb	10.68	2.00	0.00	11.000		19%	122%	2.32
	Mar	11.00	2.00	0.00	11.000		18%	118%	2.00
	Apr	12.65	2.00	0.00	11.000		16%	103%	0.35
	May	13.78	2.00	0.00	12.000		15%	102%	0.22

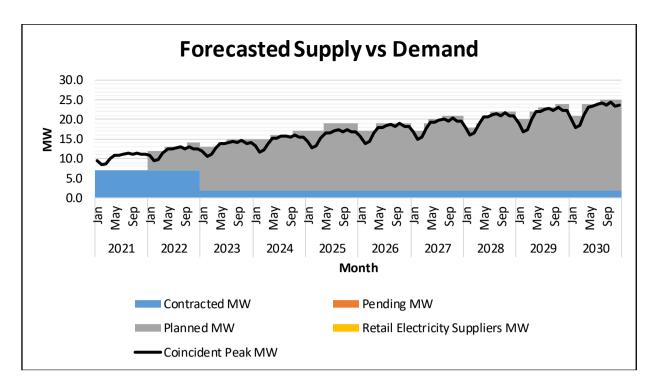
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jun	13.85	2.00	0.00	12.000		14%	101%	0.15
	Jul	14.18	2.00	0.00	13.000		14%	106%	0.82
	Aug	14.37	2.00	0.00	13.000		14%	104%	0.63
	Sep	13.99	2.00	0.00	13.000		14%	107%	1.01
	Oct	14.53	2.00	0.00	13.000		14%	103%	0.47
	Nov	13.97	2.00	0.00	13.000		14%	107%	1.03
	Dec	14.00	2.00	0.00	13.000		14%	107%	1.00
2024	Jan	13.26	2.00	0.00	13.000		15%	113%	1.74
	Feb	11.77	2.00	0.00	13.000		17%	127%	3.23
	Mar	12.13	2.00	0.00	13.000		16%	124%	2.87
	Apr	13.94	2.00	0.00	13.000		14%	108%	1.06
	May	15.18	2.00	0.00	14.000		13%	105%	0.82
	Jun	15.27	2.00	0.00	14.000		13%	105%	0.73
	Jul	15.63	2.00	0.00	14.000		13%	102%	0.37
	Aug	15.84	2.00	0.00	14.000		13%	101%	0.16
	Sep	15.42	2.00	0.00	14.000		13%	104%	0.58
	Oct	16.01	2.00	0.00	15.000		12%	106%	0.99
	Nov	15.39	2.00	0.00	15.000		13%	110%	1.61
	Dec	15.42	2.00	0.00	15.000		13%	110%	1.58
2025	Jan	14.47	2.00	0.00	15.000		14%	117%	2.53
	Feb	12.84	2.00	0.00	15.000		16%	132%	4.16
	Mar	13.23	2.00	0.00	15.000		15%	128%	3.77
	Apr	15.21	2.00	0.00	15.000		13%	112%	1.79
	May	16.57	2.00	0.00	17.000		12%	115%	2.43
	Jun	16.66	2.00	0.00	17.000		12%	114%	2.34
	Jul	17.05	2.00	0.00	17.000		12%	111%	1.95
	Aug	17.29	2.00	0.00	17.000		12%	110%	1.71
	Sep	16.82	2.00	0.00	17.000		12%	113%	2.18
	Oct	17.47	2.00	0.00	17.000		11%	109%	1.53
	Nov	16.79	2.00	0.00	17.000		12%	113%	2.21
	Dec	16.83	2.00	0.00	17.000		12%	113%	2.17

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2026	Jan	15.66	2.00	0.00	15.000		13%	109%	1.34
	Feb	13.90	2.00	0.00	15.000		14%	122%	3.10
	Mar	14.32	2.00	0.00	15.000		14%	119%	2.68
	Apr	16.47	2.00	0.00	15.000		12%	103%	0.53
	May	17.93	2.00	0.00	17.000		11%	106%	1.07
	Jun	18.03	2.00	0.00	17.000		11%	105%	0.97
	Jul	18.45	2.00	0.00	17.000		11%	103%	0.55
	Aug	18.71	2.00	0.00	17.000		11%	102%	0.29
	Sep	18.21	2.00	0.00	17.000		11%	104%	0.79
	Oct	18.91	2.00	0.00	17.000		11%	100%	0.09
	Nov	18.17	2.00	0.00	17.000		11%	105%	0.83
	Dec	18.21	2.00	0.00	17.000		11%	104%	0.79
2027	Jan	16.83	2.00	0.00	15.000		12%	101%	0.17
	Feb	14.94	2.00	0.00	15.000		13%	114%	2.06
	Mar	15.39	2.00	0.00	15.000		13%	110%	1.61
	Apr	17.70	2.00	0.00	17.000		11%	107%	1.30
	May	19.27	2.00	0.00	18.000		10%	104%	0.73
	Jun	19.38	2.00	0.00	18.000		10%	103%	0.62
	Jul	19.83	2.00	0.00	18.000		10%	101%	0.17
	Aug	20.11	2.00	0.00	19.000		10%	104%	0.89
	Sep	19.57	2.00	0.00	19.000		10%	107%	1.43
	Oct	20.32	2.00	0.00	19.000		10%	103%	0.68
	Nov	19.53	2.00	0.00	19.000		10%	108%	1.47
	Dec	19.57	2.00	0.00	19.000		10%	107%	1.43
2028	Jan	17.98	2.00	0.00	16.000		11%	100%	0.02
	Feb	15.96	2.00	0.00	16.000		13%	113%	2.04
	Mar	16.44	2.00	0.00	16.000		12%	109%	1.56
	Apr	18.90	2.00	0.00	17.000		11%	101%	0.10
	May	20.58	2.00	0.00	19.000		10%	102%	0.42
	Jun	20.70	2.00	0.00	19.000		10%	101%	0.30
	Jul	21.19	2.00	0.00	20.000		9%	104%	0.81

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Aug	21.48	2.00	0.00	20.000		9%	102%	0.52
	Sep	20.90	2.00	0.00	20.000		10%	105%	1.10
	Oct	21.71	2.00	0.00	20.000		9%	101%	0.29
	Nov	20.87	2.00	0.00	20.000		10%	105%	1.13
	Dec	20.91	2.00	0.00	20.000		10%	105%	1.09
2029	Jan	19.11	2.00	0.00	18.000		10%	105%	0.89
	Feb	16.96	2.00	0.00	18.000		12%	118%	3.04
	Mar	17.48	2.00	0.00	18.000		11%	114%	2.52
	Apr	20.09	2.00	0.00	20.000		10%	109%	1.91
	May	21.88	2.00	0.00	20.000		9%	101%	0.12
	Jun	22.00	2.00	0.00	21.000		9%	105%	1.00
	Jul	22.52	2.00	0.00	21.000		9%	102%	0.48
	Aug	22.83	2.00	0.00	21.000		9%	101%	0.17
	Sep	22.22	2.00	0.00	21.000		9%	104%	0.78
	Oct	23.07	2.00	0.00	22.000		9%	104%	0.93
	Nov	22.18	2.00	0.00	22.000		9%	108%	1.82
	Dec	22.23	2.00	0.00	22.000		9%	108%	1.77
2030	Jan	20.22	2.00	0.00	19.000		10%	104%	0.78
	Feb	17.95	2.00	0.00	19.000		11%	117%	3.05
	Mar	18.49	2.00	0.00	19.000		11%	114%	2.51
	Apr	21.26	2.00	0.00	22.000		9%	113%	2.74
	May	23.15	2.00	0.00	22.000		9%	104%	0.85
	Jun	23.28	2.00	0.00	22.000		9%	103%	0.72
	Jul	23.83	2.00	0.00	22.000		8%	101%	0.17
	Aug	24.16	2.00	0.00	23.000		8%	103%	0.84
	Sep	23.51	2.00	0.00	23.000		9%	106%	1.49
	Oct	24.42	2.00	0.00	23.000		8%	102%	0.58
	Nov	23.47	2.00	0.00	23.000		9%	107%	1.53
	Dec	23.52	2.00	0.00	23.000		9%	106%	1.48

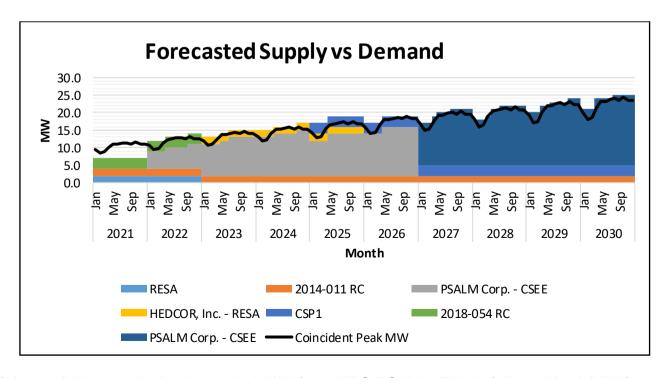
The Peak Demand was forecasted based on the forecasted energy sales using the Cubic and Logarithmic Trending and assumed load factor based on the 2020 data. Previously, the peak demand occur on the month of October as be seen in the last 5 years due to the tourists and guests in General Luna after the Surfing event which shall be held every last week of September every year. The Monthly Peak Demand is at its lowest on the month of February which maybe a break of the tourists before summer comes April and May. But on the year 2020, the peak demand occurs on the month of January and it slightly decreased due to the outbreak of COVID-19 Pandemic since some of commercial consumers such as hotels and resorts were temporarily closed.

In general, peak demand is expected to grow at an average rate of 9.9% for the ten year forecast due to the booming tourism business in the Island of Siargao.

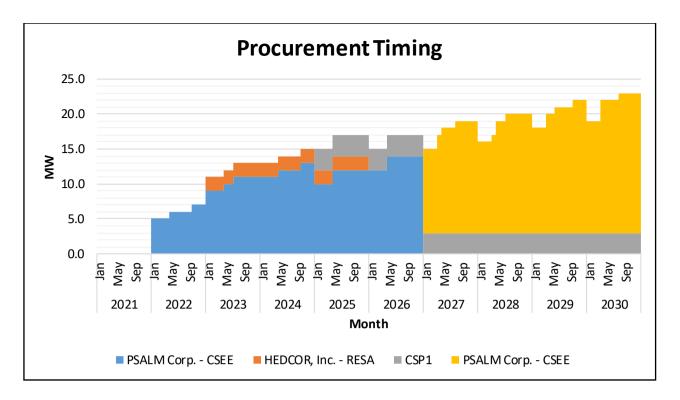


The available supply is generally above the Peak Demand if the Planned MW will be considered. This is because SIARELCO ensures the adequate Power Supply without being over contracted to Power Suppliers to avoid high cost of electricity in the island.

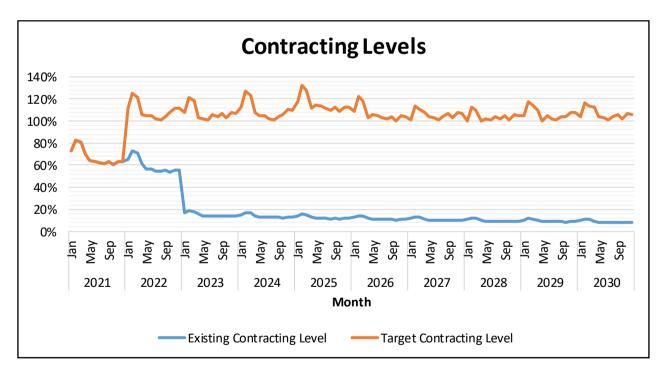
There is a slight deficiency in power supply on 2021 during peak hours since we need to be conservative in our data because as of today we are still facing economic crisis brought by COVID-19 Pandemic and it will addressed through allocating more than the contracted capacity of SIARELCO to GNPK and PSALM since they have an available capacity to supply our demand and energy requirements. This solution has the least effect to SIARELCO's power rate which will be remunerated by Member-Consumer-Owners as compared to having a contract with a new power supplier wherein the cooperative pays a monthly capacity fee whether or not the contract is fully utilized, aside from the energy it would dispatch.



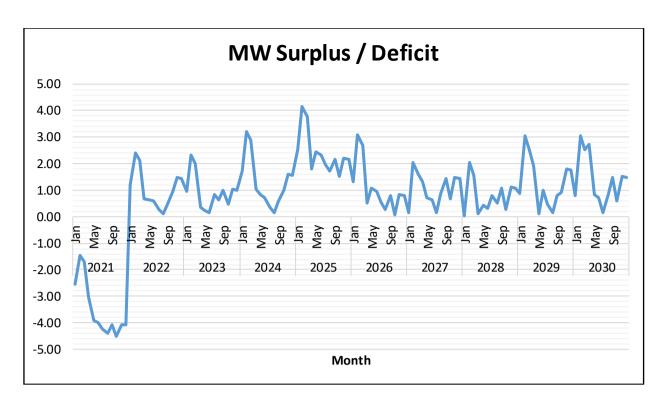
Of the available supply, the largest is 8 MW from NPC PSALM. This is followed by 3 MW from the winning bidder of the planned CSP.



The first wave of supply procurement will be for 5MW planned to be available by the month of January 2022. This will be followed by 2MW to be available by month of January 2023, 3MW by the month of January 2025 and 12MW by the month of January 2027.



The highest target contracting level is 132% which is expected to occur on February 2025. The lowest target contracting level is 61% which is expected to occur on August and October 2021.



The highest surplus is 4.16MW which is expected to occur on the month of February 2025. The lowest surplus is -4.51MW which is expected to occur on the month of October 2021.

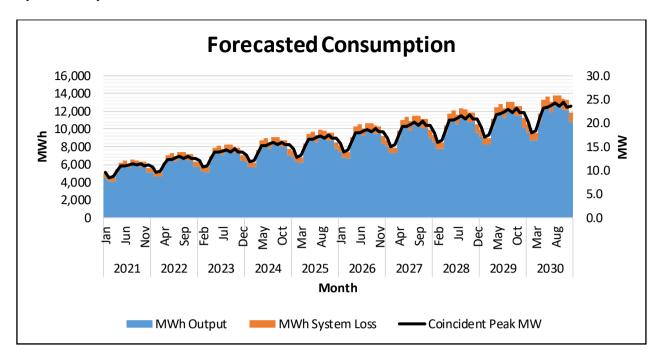
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	4,538	4,519	446.913	-9.42%	9.00%
	Feb	4,538	4,135	408.996	-0.13%	9.00%
	Mar	4,099	4,096	405.077	-9.80%	9.00%
	Apr	4,538	5,033	497.752	-21.86%	9.00%
	May	4,392	5,682	561.954	-42.17%	9.00%
	Jun	4,538	5,843	577.852	-41.47%	9.00%
	Jul	4,392	5,590	552.887	-39.87%	9.00%
	Aug	4,538	5,933	586.817	-43.67%	9.00%
	Sep	4,538	5,918	585.272	-43.29%	9.00%
	Oct	4,392	5,737	567.359	-43.53%	9.00%
	Nov	4,538	5,727	566.433	-38.68%	9.00%
	Dec	4,392	5,098	504.185	-27.55%	9.00%
2022	Jan	6,398	5,114	505.802	12.17%	9.00%
	Feb	5,654	4,680	462.890	9.04%	9.00%
	Mar	5,443	4,635	458.454	6.42%	9.00%
	Apr	6,398	5,696	563.341	2.17%	9.00%
	May	7,416	6,431	636.002	4.71%	9.00%
	Jun	7,663	6,613	653.996	5.18%	9.00%
	Jul	7,416	6,327	625.741	6.25%	9.00%
	Aug	7,663	6,715	664.142	3.70%	9.00%
	Sep	7,663	6,698	662.393	3.96%	9.00%
	Oct	7,920	6,493	642.120	9.92%	9.00%
	Nov	7,663	6,482	641.072	7.05%	9.00%
	Dec	6,912	5,770	570.622	8.27%	9.00%
2023	Jan	6,994	5,703.86	564.118	10.38%	9.00%
	Feb	6,324	5,219.94	516.258	9.29%	9.00%
	Mar	6,317	5,169.91	511.310	10.06%	9.00%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Apr	7,663	6,352.71	628.290	8.90%	9.00%
	May	7,920	7,172.10	709.329	0.49%	9.00%
	Jun	8,184	7,375.01	729.397	0.97%	9.00%
	Jul	8,424	7,056.38	697.884	7.95%	9.00%
	Aug	8,705	7,489.43	740.713	5.45%	9.00%
	Sep	8,705	7,469.71	738.762	5.70%	9.00%
	Oct	8,424	7,241.09	716.152	5.54%	9.00%
	Nov	8,705	7,229.27	714.982	8.74%	9.00%
	Dec	7,632	6,434.81	636.410	7.35%	9.00%
2024	Jan	7,068	6,285.85	621.678	2.27%	9.00%
	Feb	7,068	5,752.56	568.934	10.56%	9.00%
	Mar	6,612	5,697.43	563.482	5.31%	9.00%
	Apr	8,705	7,000.91	692.398	11.62%	9.00%
	May	8,928	7,903.91	781.705	2.71%	9.00%
	Jun	9,226	8,127.52	803.821	3.19%	9.00%
	Jul	8,928	7,776.38	769.093	4.28%	9.00%
	Aug	9,226	8,253.62	816.292	1.69%	9.00%
	Sep	9,226	8,231.88	814.142	1.95%	9.00%
	Oct	9,432	7,979.94	789.225	7.03%	9.00%
	Nov	9,746	7,966.91	787.936	10.17%	9.00%
	Dec	8,496	7,091.39	701.346	8.28%	9.00%
2025	Jan	8,184	6,859.17	678.379	7.90%	9.00%
	Feb	7,440	6,277.24	620.826	7.28%	9.00%
	Mar	7,440	6,217.08	614.876	8.17%	9.00%
	Apr	9,672	7,639.45	755.550	13.20%	9.00%
	May	10,224	8,624.81	853.003	7.30%	9.00%
	Jun	10,565	8,868.81	877.135	7.75%	9.00%
	Jul	10,224	8,485.65	839.240	8.79%	9.00%
	Aug	10,565	9,006.41	890.744	6.32%	9.00%
	Sep	10,565	8,982.69	888.398	6.57%	9.00%
	Oct	10,224	8,707.77	861.208	6.41%	9.00%
	Nov	10,565	8,693.55	859.802	9.57%	9.00%
	Dec	9,360	7,738.18	765.315	9.15%	9.00%
2026	Jan	9,077	7,423.26	734.169	10.13%	9.00%
	Feb	8,184	6,793.47	671.882	8.78%	9.00%
	Mar	8,198	6,728.37	665.443	9.81%	9.00%
	Apr	9,970	8,267.72	817.686	8.87%	9.00%
	May	10,656	9,334.11	923.153	3.74%	9.00%
	Jun	11,011	9,598.18	949.271	4.21%	9.00%
	Jul	10,656	9,183.50	908.259	5.30%	9.00%
	Aug	11,011	9,747.09	963.998	2.73%	9.00%
	Sep	11,011	9,721.42	961.460	2.98%	9.00%
	Oct	10,656	9,423.89	932.033	2.82%	9.00%
	Nov	11,011	9,408.50	930.511	6.10%	9.00%
2027	Dec	9,648	8,374.56	828.254	4.61%	9.00%
2027	Jan	9,077	7,977.90	789.023	3.41%	9.00%
	Feb	8,184	7,301.05	722.082	1.97%	9.00%
	Mar	8,198	7,231.08	715.162	3.08%	9.00%

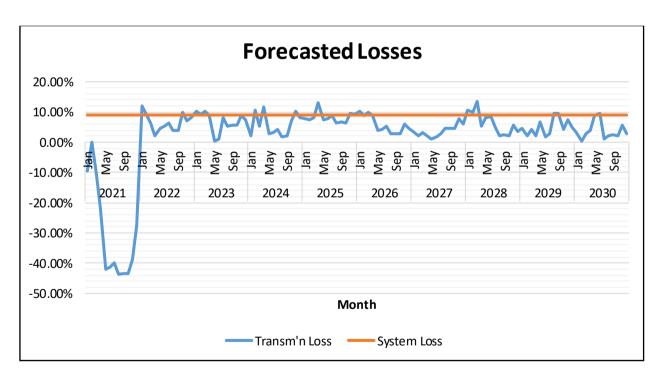
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Apr	9,970	8,885.44	878.780	2.06%	9.00%
	May	11,160	10,031.51	992.127	1.22%	9.00%
	Jun	11,532	10,315.31	1,020.196	1.70%	9.00%
	Jul	11,160	9,869.65	976.120	2.82%	9.00%
	Aug	12,053	10,475.35	1,036.024	4.49%	9.00%
	Sep	12,053	10,447.77	1,033.296	4.74%	9.00%
	Oct	11,664	10,128.00	1,001.671	4.58%	9.00%
	Nov	12,053	10,111.46	1,000.035	7.81%	9.00%
	Dec	10,512	9,000.27	890.137	5.91%	9.00%
2028	Jan	10,490	8,523.03	842.937	10.72%	9.00%
	Feb	9,523	7,799.93	771.422	10.00%	9.00%
	Mar	9,814	7,725.18	764.029	13.50%	9.00%
	Apr	11,011	9,492.59	938.827	5.27%	9.00%
	May	12,816	10,716.96	1,059.920	8.11%	9.00%
	Jun	13,243	11,020.16	1,089.906	8.56%	9.00%
	Jul	12,168	10,544.05	1,042.818	4.78%	9.00%
	Aug	12,574	11,191.14	1,106.816	2.19%	9.00%
	Sep	12,574	11,161.66	1,103.901	2.45%	9.00%
	Oct	12,168	10,820.05	1,070.115	2.28%	9.00%
	Nov	12,574	10,802.38	1,068.368	5.59%	9.00%
	Dec	10,944	9,615.26	950.960	3.45%	9.00%
2029	Jan	10,416	9,058.75	895.920	4.43%	9.00%
	Feb	9,300	8,290.20	819.910	2.04%	9.00%
	Mar	9,408	8,210.75	812.052	4.09%	9.00%
	Apr	11,309	10,089.25	997.838	1.96%	9.00%
	May	13,392	11,390.58	1,126.541	6.53%	9.00%
	Jun	13,094	11,712.84	1,158.413	1.70%	9.00%
	Jul	12,672	11,206.80	1,108.365	2.82%	9.00%
	Aug	14,434	11,894.56	1,176.385	9.44%	9.00%
	Sep Oct	14,434 13,176	11,863.24 11,500.15	1,173.287 1,137.378	9.68% 4.09%	9.00% 9.00%
	Nov	13,176	11,481.37	1,135.520	7.33%	9.00%
	Dec	11,808	10,219.64	1,010.733	4.89%	9.00%
2030	Jan	10,862	9,585.22	947.989	3.03%	9.00%
2000	Feb	9,672	8,772.01	867.561	0.34%	9.00%
	Mar	9,811	8,687.94	859.247	2.69%	9.00%
	Apr	12,202	10,675.61	1,055.830	3.85%	9.00%
	May	14,544	12,052.58	1,192.013	8.93%	9.00%
	Jun	15,029	12,393.56	1,225.737	9.38%	9.00%
	Jul	13,176	11,858.12	1,172.781	1.10%	9.00%
	Aug	14,136	12,585.84	1,244.754	2.16%	9.00%
	Sep	14,136	12,552.70	1,241.476	2.42%	9.00%
	Oct	13,680	12,168.52	1,203.480	2.25%	9.00%
	Nov	14,136	12,148.64	1,201.514	5.56%	9.00%
	Dec	12,240	10,813.58	1,069.475	2.92%	9.00%

MWh Offtake was forecasted using Cubic & Logarithmic Trending. The assumed load factor is 69%.

System Loss was calculated through a Load Flow Study conducted on using Synergi Electric Power 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 7.31% annually.



Transmission Loss is expected to range from 4.65% to 2.92% while System Loss is expected around 9%.

## **Power Supply**

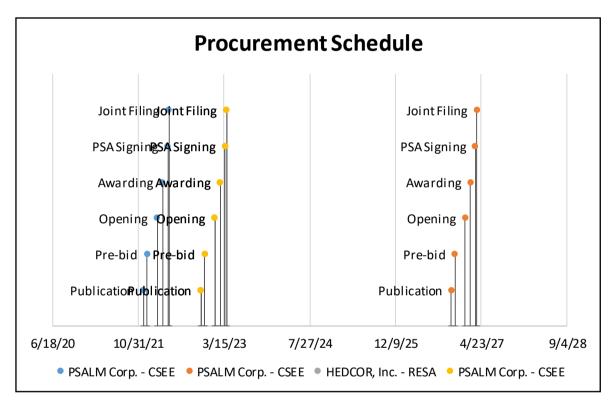
Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2018-054 RC	Intermediate	Power Sector Assets and Liabilities Management Corporation	3.00	6,068	12/26/2020	12/25/2022
RESA	Base	Hedcor, Inc.	2.00	8,760	6/1/2018	12/31/2022
2014-011 RC	Base	GN Power Kauswagan Ltd.	2.00	11,300	6/26/2019	6/26/2044

The Contract for the Supply of Electric Energy (CSEE) with NPC-PSALM and DUs in Mindanao was filed to ERC under Case No. 2018-054 RC. It was selected to provide for intermediate power requirements of SIARELCO as the optimized blend based on our simulation. The actual billed overall monthly charge under the CSEE ranged from 2.0306 P/kWh to 3.2920 P/KWh in the same period.

The Renewable Energy Supply Agreement (RESA) with HEDCOR BUKIDNON, INC. was executed last June 2018 with a 1MW interim supply arrangement and another 1MW last June 5, 2019. This will served as baseload as stated in the RESA to be a priority dispatch.

The Power Purchase and Sale Agreement with GN Power Ltd. Co. and Participating Electric Cooperative members of AMRECO PSAG CORP. filed to ERC under Case No. 2018-054 RC was procured through Competitive Bidding. This Power Supply will provide the baseload power requirement of SIARELCO

	PSALM Corp. - CSEE	PSALM Corp. - CSEE	HEDCOR, Inc. - RESA	CSP1
Туре	Intermediate	Intermediate	Base	Base
Minimum MW	5.00	12.00	2.00	3.00
Minimum MWh/yr	30,775	83,815	17,520	26,280
PSA Start	1/1/2022	1/1/2027	1/31/2023	1/31/2025
PSA End	12/31/2026	1/31/2030	12/31/2025	1/31/2040
Publication			10/31/2022	10/31/2022
Pre-bid			11/21/2022	11/21/2022
Opening			1/20/2023	1/20/2023
Awarding			2/19/2023	2/19/2023
PSA Signing			3/21/2023	3/21/2023
Joint Filing			3/30/2023	3/30/2023



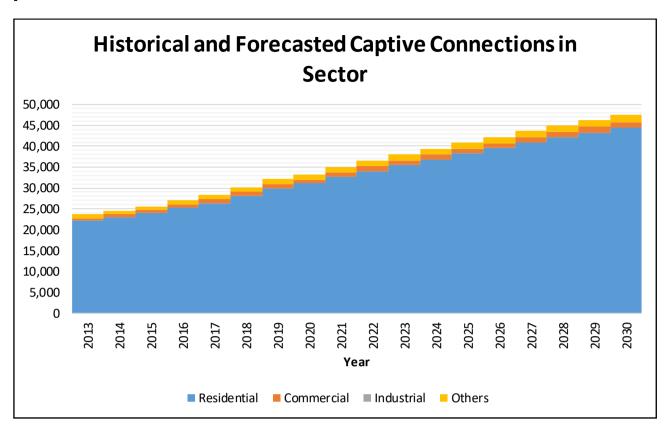
The additional contracted capacity of 5MW from PSALM Corp. is planned to be available on January 2022 and the COE-CSP from the DOE for the additional/renewal of CSEE will be secure on December 2021.

The extension of 2MW from HEDCOR is planned to be available on January 2023.

For the procurement of 3 MW of supply which is planned to be available on 2025, the first publication or launch of CSP will be on October 2022. Joint filing is planned on March 2023, or 150 days later, in accordance with DOE's 2018 CSP Policy

The renewal on contracted capacity of 12MW from PSALM Corp. is planned to be available on January 2027 and the COE-CSP from the DOE for the additional/renewal of CSEE will be secure on November 2026.

# **Captive Customer Connections**



The number of residential connections is expected to grow at a rate of 4.72% annually. Said customer class is expected to account for 93.31% of the total consumption.