Power Supply Procurement Plan [2021]

[Sorsogon II Electric Cooperative]

Prepared by:

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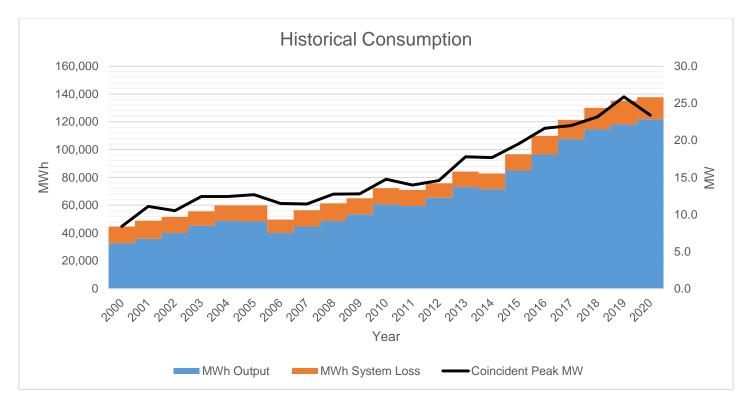
ENGR. JOSEF ERWIN R. TABUENA General Manager

Historical Consumption Data

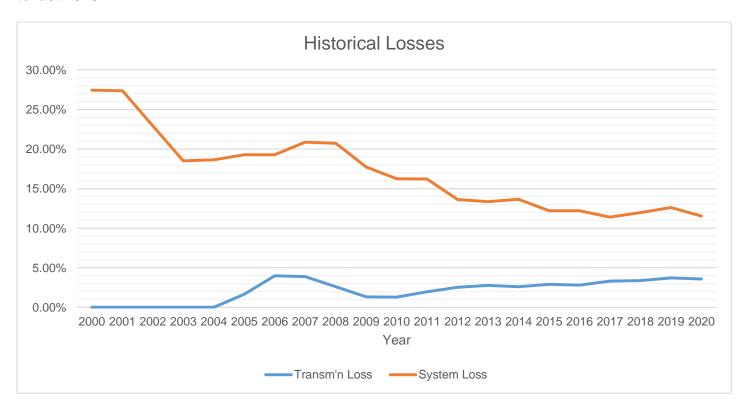
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	8.38	44,039	0	44,039	32,486	12,077	60%	1.19%	0.00%	27.42%
2001	11.08	48,159	0	48,159	35,732	13,175	50%	1.55%	0.00%	27.36%
2002	10.51	50,730	0	50,730	39,963	11,621	55%	1.68%	0.00%	22.91%
2003	12.40	56,141	0	56,141	45,198	10,394	52%	-0.98%	0.00%	18.51%
2004	12.43	59,554	0	59,554	48,684	11,107	55%	0.40%	0.00%	18.65%
2005	12.65	60,821	0	59,804	48,275	11,529	54%	0.00%	1.67%	19.28%
2006	11.49	51,716	0	49,655	40,084	9,571	49%	0.00%	3.99%	19.27%
2007	11.40	58,718	0	56,432	44,649	11,783	57%	0.00%	3.89%	20.88%
2008	12.74	63,046	0	61,407	48,677	12,730	55%	0.00%	2.60%	20.73%
2009	12.79	65,923	0	65,056	53,520	11,536	58%	0.00%	1.31%	17.73%
2010	14.75	73,181	0	72,231	60,502	11,729	56%	0.00%	1.30%	16.24%
2011	13.96	72,340	0	70,928	59,416	11,512	58%	0.00%	1.95%	16.23%
2012	14.59	77,646	0	75,684	65,384	10,300	59%	0.00%	2.53%	13.61%
2013	17.78	86,558	0	84,168	72,934	11,234	54%	0.00%	2.76%	13.35%
2014	17.65	85,054	0	82,839	71,528	11,310	54%	0.00%	2.60%	13.65%
2015	19.48	99,549	0	96,650	84,866	11,783	57%	0.00%	2.91%	12.19%
2016	21.62	112,929	35,072	109,771	96,362	13,410	58%	0.00%	2.80%	12.22%
2017	21.99	125,517	42,604	121,378	107,527	13,852	63%	0.00%	3.30%	11.41%
2018	23.18	134,508	49,585	129,960	114,398	15,562	64%	0.00%	3.38%	11.97%
2019	25.87	140,374	71,804	135,169	118,116	17,053	60%	0.00%	3.71%	12.62%
2020	23.39	142,740	30,789	137,631	121,760	15,870	67%	0.00%	3.58%	11.53%

The system performance of SORECO II is shown in the table above. With Significance to the trend in energy purchase and sales and growth rate, year 2000 marked the highest system loss at 27.42%. Thereafter, the system performance is improving thru continuous reduction in system loss. But in the year 2004 to 2006, system performance is deteriorating due to the impact of climate change, safety deficiencies and power quality problems was detected. But from the year 2007 to 2018, a gradual system loss reduction from 20.88% down to 11.97% was realized due to the implemented capital expenditure projects and programs. However due to unwanted circumstances including the landfall of typhoon 'Tisoy' in SORECO II's franchise area, system loss has again spiked to 12.62%.

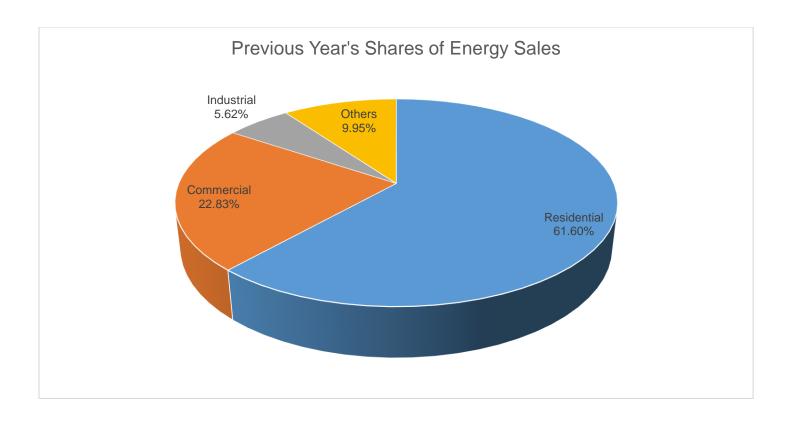
Despite the effects brought about by the pandemic, SORECO II's performance has improved. Although its coincident peak MW has dropped by 2 MW, SORECO II's energy sales has increased as well as its load factor. With its resilience to disasters like typhoons and commitment to reliable and affordable power supply to its member-consumer owners, SORECO II's performance is expected to get better in the coming years.



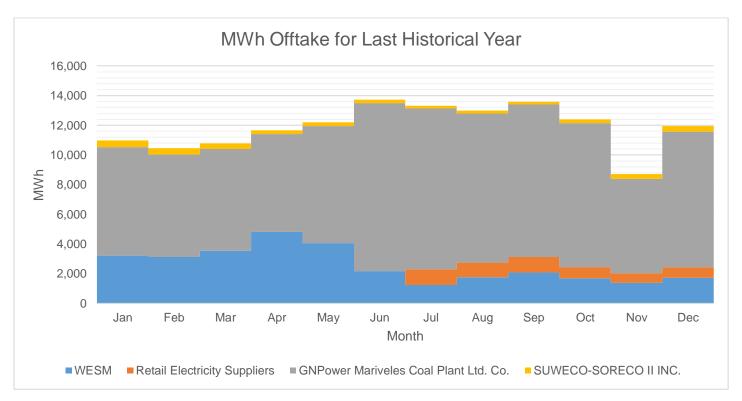
As seen in the graph above, SORECO II's peak demand has dropped by more than 2 MW. It is mainly due to several businesses operating partially and some being closed because of the pandemic. However, since majority of SORECO II's customers are residential consumers, it is seen that its sales has increased by about 3 MWh. SORECO II's system loss also decreased as compared to last 2019.



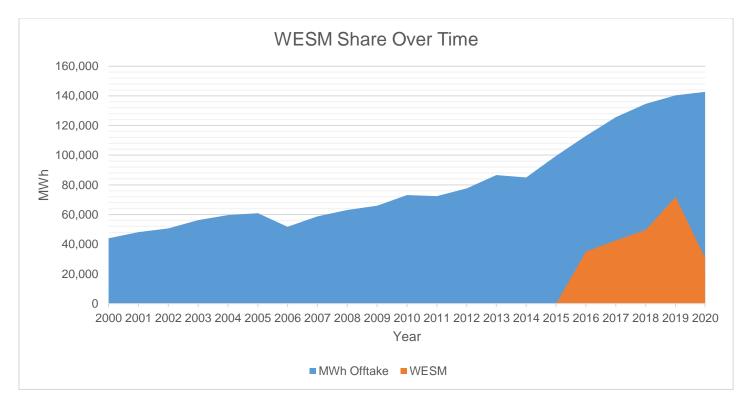
Transmission losses peaked in year 2006 which was 3.99% which is about 0.40% lower than last year's 3.58%. System losses for 2020 is lower than 2019 by about 0.50%.



Residential customers account for the bulk of energy sales last year at 61.60%. It is about 5% higher than the previous year. It is seen as one of the effects of stay-at-home (lockdown) measure of the government to contain the spread of Covid-19. The rest of SORECO II's customers was seen with lower energy sales due to closures and/or partial operations of businesses due to the pandemic.

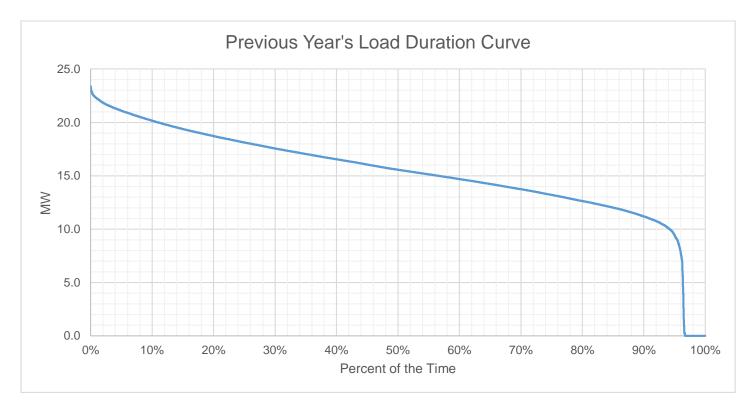


SORECO II's power supply for last year was purchased to GNPower Mariveles Coal Plant Ltd. Co (GMCP) which was 103,250.215 MWh or 75.07% of SORECO II's total energy requirement for 2020.

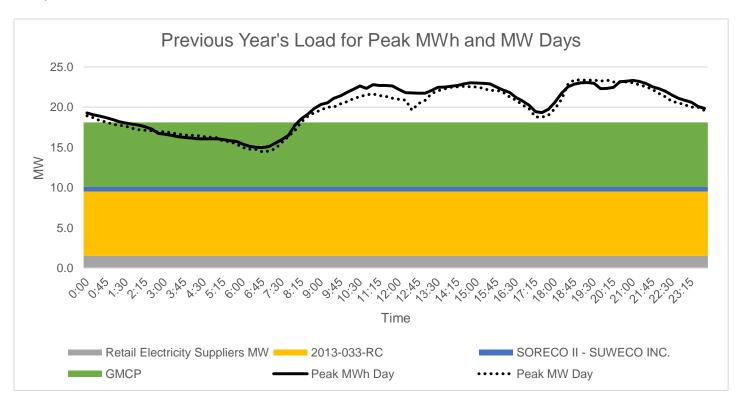


As compared to last 2019's data, SORECO II's WESM offtake has declined last 2020 by 39,792.72 MWh. It shows that SORECO II's exposure to the market has dropped as compared to 2019.

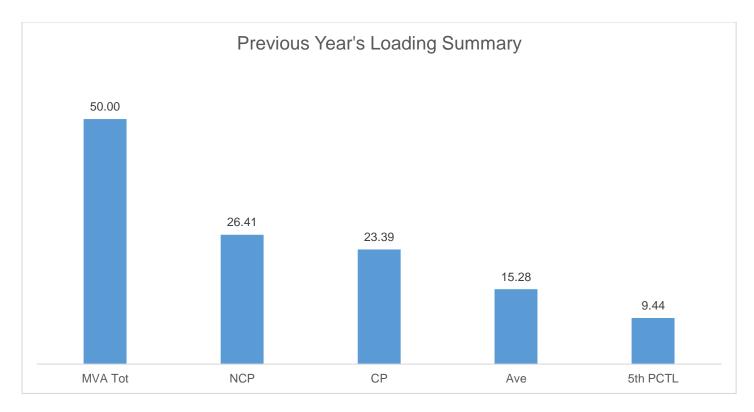
Previous Year's Load Profile



Based on the Load Duration Curve, SORECO II's demand of more than 10 MW happened for more than 90% of the previous year. It is primarily due to its customer types wherein residential class comprises 95% of its total.



Peak MW occurred between 6:00 pm to 8:00 pm due to the fact that majority of SORECO II's customers are residential type. However, since several establishments has opened in SORECO II's franchise area it is also seen in the graph that there is an almost equal peak demand in the afternoon. This shows the economic growth within SORECO II's franchise area.



The Non-coincident Peak Demand is 26.41 MW, which is around 55% of the total substation capacity of 50 MVA at a power factor of 0.96. The load factor or the ratio between the Average Load of 15.28 MW and the Non-coincident Peak Demand is 58% of. A safe estimate of the true minimum load is the fifth percentile load of 9.44 MW which is 36% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
2-MF3MSORSOR201	20	9.484
3-MF3MSORSOR202	10	4.442
5-MF3MSORSOR204	10	5.854
1-MF3MDARSOR205	10	6.629

As seen in the table above, all power transformers are in ideal loading conditions.

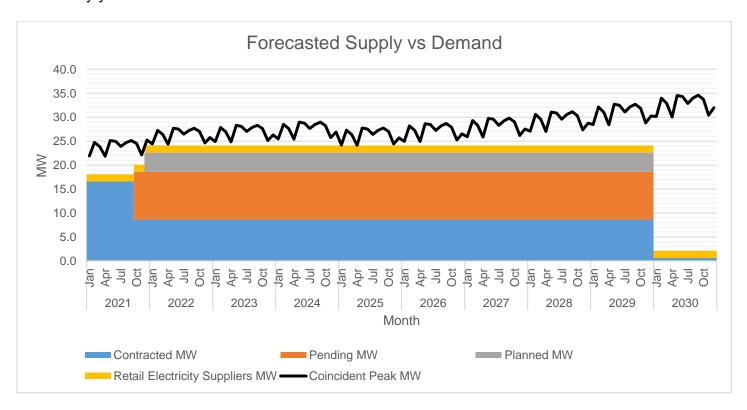
Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2021	Jan	21.89	16.60	0.00	0.000	1.50	81%	81%	-3.79
	Feb	24.72	16.60	0.00	0.000	1.50	71%	71%	-6.62
	Mar	23.87	16.60	0.00	0.000	1.50	74%	74%	-5.77
	Apr	21.84	16.60	0.00	0.000	1.50	82%	82%	-3.74
	May	25.13	16.60	0.00	0.000	1.50	70%	70%	-7.03
	Jun	24.96	16.60	0.00	0.000	1.50	71%	71%	-6.86
	Jul	23.91	16.60	0.00	0.000	1.50	74%	74%	-5.81
	Aug	24.70	16.60	0.00	0.000	1.50	72%	72%	-6.60
	Sep	25.15	16.60	0.00	0.000	1.50	70%	70%	-7.05
	Oct	24.49	8.60	10.00	0.000	1.50	37%	81%	-4.39
	Nov	22.13	8.60	10.00	0.000	1.50	42%	90%	-2.03
	Dec	25.25	8.60	10.00	4.000	1.50	36%	95%	-1.15
2022	Jan	24.38	8.60	10.00	4.000	1.50	38%	99%	-0.28
	Feb	27.27	8.60	10.00	4.000	1.50	33%	88%	-3.17
	Mar	26.41	8.60	10.00	4.000	1.50	35%	91%	-2.31
	Apr	24.33	8.60	10.00	4.000	1.50	38%	99%	-0.23
	May	27.68	8.60	10.00	4.000	1.50	33%	86%	-3.58
	Jun	27.52	8.60	10.00	4.000	1.50	33%	87%	-3.42
	Jul	26.44	8.60	10.00	4.000	1.50	34%	91%	-2.34
	Aug	27.25	8.60	10.00	4.000	1.50	33%	88%	-3.15
	Sep	27.71	8.60	10.00	4.000	1.50	33%	86%	-3.61
	Oct	27.04	8.60	10.00	4.000	1.50	34%	89%	-2.94
	Nov	24.62	8.60	10.00	4.000	1.50	37%	98%	-0.52
	Dec	25.77	8.60	10.00	4.000	1.50	35%	93%	-1.67
2023	Jan	24.90	8.60	10.00	4.000	1.50	37%	97%	-0.80
	Feb	27.86	8.60	10.00	4.000	1.50	33%	86%	-3.76
	Mar	26.97	8.60	10.00	4.000	1.50	34%	89%	-2.87
	Apr	24.85	8.60	10.00	4.000	1.50	37%	97%	-0.75
	May	28.28	8.60	10.00	4.000	1.50	32%	84%	-4.18
	Jun	28.11	8.60	10.00	4.000	1.50	32%	85%	-4.01
	Jul	27.01	8.60	10.00	4.000	1.50	34%	89%	-2.91
	Aug	27.84	8.60	10.00	4.000	1.50	33%	86%	-3.74
	Sep	28.31	8.60	10.00	4.000	1.50	32%	84%	-4.21
	Oct Nov	27.62 25.14	8.60 8.60	10.00 10.00	4.000 4.000	1.50 1.50	33% 36%	87% 96%	-3.52 -1.04
	Dec	26.32	8.60	10.00	4.000	1.50	35%	91%	-1.04
2024	Jan	25.48	8.60	10.00	4.000	1.50	36%	94%	-1.38
2024	Feb	28.51	8.60	10.00	4.000	1.50	32%	84%	-4.41
	Mar	27.61	8.60	10.00	4.000	1.50	33%	87%	-3.51
	Apr	25.43	8.60	10.00	4.000	1.50	36%	94%	-1.33
	May	28.95	8.60	10.00	4.000	1.50	31%	82%	-4.85
	Jun	28.77	8.60	10.00	4.000	1.50	32%	83%	-4.67
	Jul	27.64	8.60	10.00	4.000	1.50	33%	86%	-3.54
	Aug	28.50	8.60	10.00	4.000	1.50	32%	84%	-4.40
	Sep	28.97	8.60	10.00	4.000	1.50	31%	82%	-4.87
	Oct	28.27	8.60	10.00	4.000	1.50	32%	84%	-4.17
	Nov	25.73	8.60	10.00	4.000	1.50	35%	93%	-1.63
	Dec	26.94	8.60	10.00	4.000	1.50	34%	89%	-2.84
2025	Jan	24.16	8.60	10.00	4.000	1.50	38%	100%	-0.06
	Feb	27.28	8.60	10.00	4.000	1.50	33%	88%	-3.18
	Mar	26.34	8.60	10.00	4.000	1.50	35%	91%	-2.24

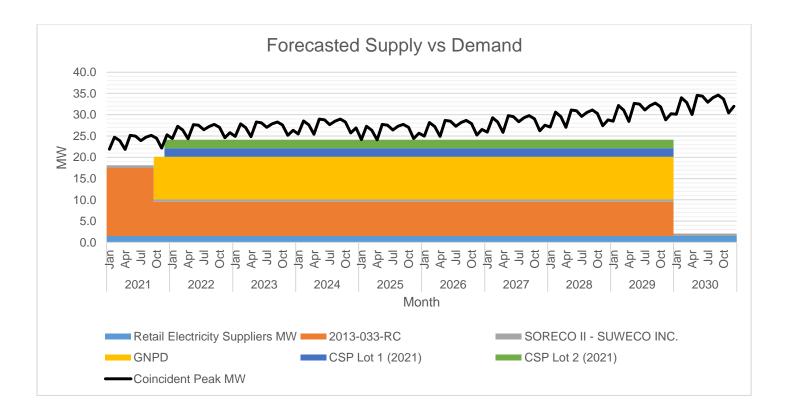
	Apr	24.10	8.60	10.00	4.000	1.50	38%	100%	0.00
	May	27.73	8.60	10.00	4.000	1.50	33%	86%	-3.63
	Jun	27.54	8.60	10.00	4.000	1.50	33%	87%	-3.44
	Jul	26.39	8.60	10.00	4.000	1.50	35%	91%	-2.29
	Aug	27.26	8.60	10.00	4.000	1.50	33%	88%	-3.16
	Sep	27.75	8.60	10.00	4.000	1.50	33%	86%	-3.65
	Oct	27.03	8.60	10.00	4.000	1.50	34%	89%	-2.93
	Nov	24.42	8.60	10.00	4.000	1.50	38%	99%	-0.32
	Dec	25.66	8.60	10.00	4.000	1.50	36%	94%	-1.56
2026	Jan	24.97	8.60	10.00	4.000	1.50	37%	96%	-0.87
	Feb	28.19	8.60	10.00	4.000	1.50	32%	85%	-4.09
	Mar	27.22	8.60	10.00	4.000	1.50	33%	88%	-3.12
	Apr	24.91	8.60	10.00	4.000	1.50	37%	97%	-0.81
	May	28.65	8.60	10.00	4.000	1.50	32%	83%	-4.55
	Jun	28.46	8.60	10.00	4.000	1.50	32%	84%	-4.36
	Jul	27.27	8.60	10.00	4.000	1.50	33%	88%	-3.17
	Aug	28.17	8.60	10.00	4.000	1.50	32%	85%	-4.07
	Sep	28.68	8.60	10.00	4.000	1.50	32%	83%	-4.58
	Oct	27.93	8.60	10.00	4.000	1.50	33%	86%	-3.83
	Nov	25.23	8.60	10.00	4.000	1.50	36%	95%	-1.13
	Dec	26.52	8.60	10.00	4.000	1.50	34%	90%	-2.42
2027	Jan	25.93	8.60	10.00	4.000	1.50	35%	92%	-1.83
	Feb	29.28	8.60	10.00	4.000	1.50	31%	81%	-5.18
	Mar	28.28	8.60	10.00	4.000	1.50	32%	84%	-4.18
	Apr	25.87	8.60	10.00	4.000	1.50	35%	93%	-1.77
	May	29.76	8.60	10.00	4.000	1.50	30%	80%	-5.66
	Jun	29.57	8.60	10.00	4.000	1.50	31%	81%	-5.47
	Jul	28.32	8.60	10.00	4.000	1.50	32%	84%	-4.22
	Aug	29.26	8.60	10.00	4.000	1.50	31%	81%	-5.16
	Sep	29.79	8.60	10.00	4.000	1.50	30%	80%	-5.69
	Oct	29.01	8.60	10.00	4.000	1.50	31%	82%	-4.91
	Nov	26.21	8.60	10.00	4.000	1.50	35%	91%	-2.11
	Dec	27.54	8.60	10.00	4.000	1.50	33%	87%	-3.44
2028	Jan	27.09	8.60	10.00	4.000	1.50	34%	88%	-2.99
	Feb	30.59	8.60	10.00	4.000	1.50	30%	78%	-6.49
	Mar	29.54	8.60	10.00	4.000	1.50	31%	81%	-5.44
	Apr	27.03	8.60	10.00	4.000	1.50	34%	89%	-2.93
	May	31.09	8.60	10.00	4.000	1.50	29%	76%	-6.99
	Jun	30.89	8.60	10.00	4.000	1.50	29%	77%	-6.79
	Jul	29.59	8.60	10.00	4.000	1.50	31%	80%	-5.49
	Aug	30.57	8.60	10.00	4.000	1.50	30%	78%	-6.47
	Sep	31.12	8.60	10.00	4.000	1.50	29%	76%	-7.02
	Oct	30.31	8.60	10.00	4.000	1.50	30%	78%	-6.21
	Nov	27.38	8.60	10.00	4.000	1.50	33%	87%	-3.28
	Dec	28.78	8.60	10.00	4.000	1.50	32%	83%	-4.68
2029	Jan	28.48	8.60	10.00	4.000	1.50	32%	84%	-4.38
	Feb	32.15	8.60	10.00	4.000	1.50	28%	74%	-8.05
	Mar	31.05	8.60	10.00	4.000	1.50	29%	76%	-6.95
	Apr	28.41	8.60	10.00	4.000	1.50	32%	84%	-4.31
	May	32.68	8.60	10.00	4.000	1.50	28%	72%	-8.58
	Jun	32.47	8.60	10.00	4.000	1.50	28%	73%	-8.37
	Jul	31.10	8.60	10.00	4.000	1.50	29%	76%	-7.00
	Aug	32.13	8.60	10.00	4.000	1.50	28%	74%	-8.03
	Sep	32.71	8.60	10.00	4.000	1.50	28%	72%	-8.61
	Oct	31.86	8.60	10.00	4.000	1.50	28%	74%	-7.76
	Nov	28.78	8.60	10.00	4.000	1.50	32%	83%	-4.68
	Dec	30.25	8.60	10.00	4.000	1.50	30%	79%	-6.15

2030	Jan	30.12	0.60	0.00	0.000	1.50	2%	2%	-28.02
	Feb	34.01	0.60	0.00	0.000	1.50	2%	2%	-31.91
	Mar	32.85	0.60	0.00	0.000	1.50	2%	2%	-30.75
	Apr	30.05	0.60	0.00	0.000	1.50	2%	2%	-27.95
	May	34.57	0.60	0.00	0.000	1.50	2%	2%	-32.47
	Jun	34.34	0.60	0.00	0.000	1.50	2%	2%	-32.24
	Jul	32.90	0.60	0.00	0.000	1.50	2%	2%	-30.80
	Aug	33.99	0.60	0.00	0.000	1.50	2%	2%	-31.89
	Sep	34.60	0.60	0.00	0.000	1.50	2%	2%	-32.50
	Oct	33.69	0.60	0.00	0.000	1.50	2%	2%	-31.59
	Nov	30.44	0.60	0.00	0.000	1.50	2%	2%	-28.34
	Dec	31.99	0.60	0.00	0.000	1.50	2%	2%	-29.89

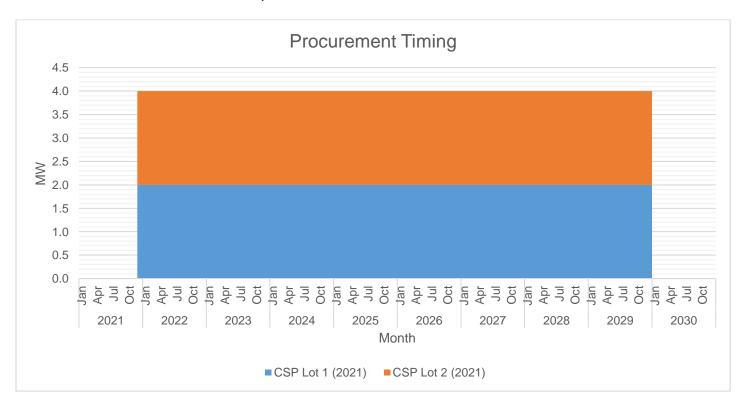
The table above shows SORECO II's forecasted demand and its existing, pending, and planned PSAs. As seen in the table, SORECO II is planning to conduct Competitive Selection Process (CSP) in order to secure power supply of 2 MW base load and 2 MW peaking capacities. This activity will secure SORECO II's power supply especially that it will be hosting a spot load of more than 2 MW. The said CSP will also ensure SORECO II's compliance with the RPS in which it will be having experiencing shortfall by year 2023.



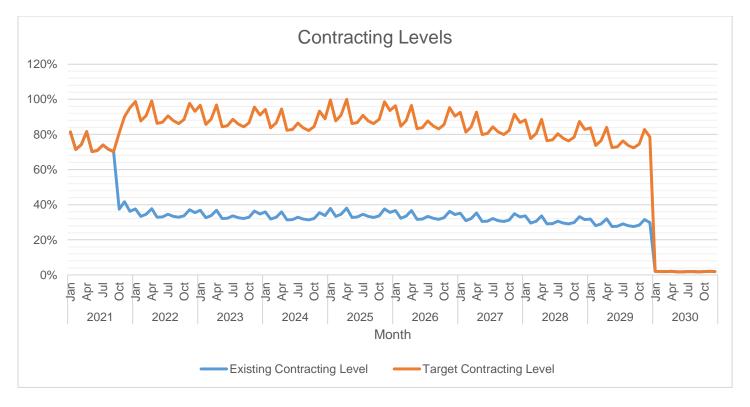
The available supply is generally below the peak demand. It is because SORECO II's customers are primarily residential customers in which peak demand happens only for a short period of time, usually at about 6 to 8 hours per day. Also seen in the figure is that SORECO II's power supply agreement ends in 2030.



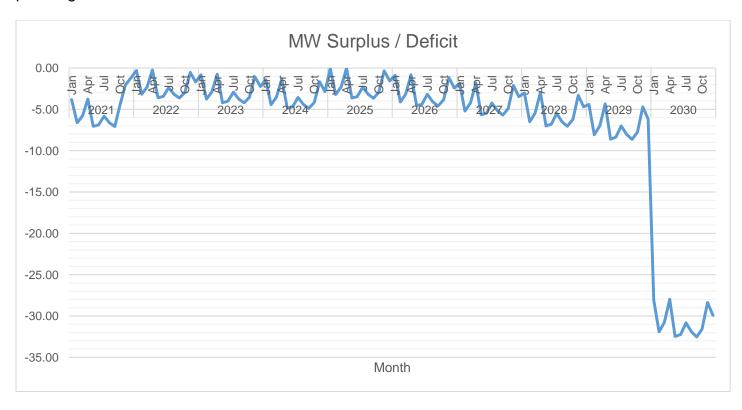
SORECO II's existing contracted power supply is 8 MW from GNPower Mariveles Coal Plant. Ltd. Co. (GMCP) which will end in 2029. There is also a pending 10-MW contract GNPD as a result of a competitive selection process conducted last 2019. The said contract will last until 2029. SORECO II is also being supplied by an embedded 0.60 MW hydroelectric power plant. Also seen in the above chart, SORECO II is planning to conduct CSP (base load and peaking) to secure power supply from 2021 to 2029. It will also be in compliance with the RPS.



The above chart shows SORECO II's plan to procure its 4-MW power supply from December 2021 to December 2029. The CSP will include a 2-MW base load and 2-MW peaking load, both will be from renewable sources in compliance of the RPS.



As seen in the above chart, there is a significant discrepancy between SORECO II's existing and target contracting levels. This is due to the fact the SORECO II has a pending PSA and also SORECO II is planning to conduct another CSP within 2021.



As seen the figure above, SORECO II is forecasted to have a deficit of about less than 5 MW in the next five years. This is due to the fact that SORECO II has a pending 10-MW contract and SORECO II is planning to conduct CSP for renewable power supply of 2-MW base load and 2-MW peaking load.

2021	Jan	11,556	10,390	1,166	0.00%	10.09%
2021	Feb	11,350	10,181	1,168	0.00%	10.29%
	Mar	11,340	10,130	1,209	0.00%	10.66%
	Apr	12,963	11,591	1,372	0.00%	10.58%
	May	12,837	11,116	1,721	0.00%	13.41%
	Jun	14,644	12,904	1,741	0.00%	11.89%
	Jul	14,128	12,510	1,618	0.00%	11.45%
	Aug	13,683	12,154	1,529	0.00%	11.18%
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	Sep	14,542	12,957	1,585	0.00%	10.90%
	Oct	13,222	11,760	1,463	0.00%	11.06%
	Nov	9,943	8,678	1,265	0.00%	12.72%
0000	Dec	12,537	11,557	981	0.00%	7.82%
2022	Jan	12,372	11,184	1,188	0.00%	9.61%
	Feb	12,151	10,961	1,190	0.00%	9.80%
	Mar	12,136	10,904	1,232	0.00%	10.15%
	Apr	13,869	12,471	1,398	0.00%	10.08%
	May	13,713	11,959	1,754	0.00%	12.79%
	Jun	15,650	13,876	1,774	0.00%	11.33%
	Jul	15,108	13,460	1,648	0.00%	10.91%
	Aug	14,635	13,077	1,558	0.00%	10.65%
	Sep	15,555	13,940	1,615	0.00%	10.38%
	Oct	14,151	12,661	1,491	0.00%	10.53%
	Nov	10,633	9,345	1,289	0.00%	12.12%
	Dec	13,440	12,441	999	0.00%	7.43%
2023	Jan	13,254	12,050	1,205	0.00%	9.09%
	Feb	13,020	11,813	1,207	0.00%	9.27%
	Mar	12,999	11,750	1,249	0.00%	9.61%
	Apr	14,839	13,422	1,417	0.00%	9.55%
	May	14,654	12,876	1,778	0.00%	12.13%
	Jun	16,734	14,936	1,798	0.00%	10.74%
	Jul	16,165	14,494	1,671	0.00%	10.34%
	Aug	15,661	14,082	1,580	0.00%	10.09%
	Sep	16,648	15,010	1,637	0.00%	9.83%
	Oct	15,151	13,640	1,511	0.00%	9.97%
	Nov	11,378	10,072	1,306	0.00%	11.48%
	Dec	14,410	13,398	1,013	0.00%	7.03%
2024	Jan	14,210	12,996	1,214	0.00%	8.55%
	Feb	13,963	12,747	1,216	0.00%	8.71%
	Mar	13,933	12,674	1,259	0.00%	9.04%
	Apr	15,881	14,452	1,428	0.00%	8.99%
	May	15,667	13,875	1,792	0.00%	11.44%
	Jun	17,906	16,094	1,812	0.00%	10.12%
	Jul	17,305	15,621	1,684	0.00%	9.73%
	Aug	16,768	15,176	1,592	0.00%	9.49%
	Sep	17,826	16,176	1,650	0.00%	9.26%
	Oct	16,226	14,703	1,523	0.00%	9.39%
	Nov	12,182	10,865	1,317	0.00%	10.81%
	Dec	15,455	14,434	1,021	0.00%	6.61%
2025	Jan	15,246	14,030	1,216	0.00%	7.98%
	Feb	14,987	13,769	1,218	0.00%	8.13%
	Mar	14,947	13,686	1,261	0.00%	8.44%
	Apr	16,997	15,567	1,431	0.00%	8.42%
	May	16,758	14,964	1,795	0.00%	10.71%
	Jun	19,173	17,358	1,815	0.00%	9.47%
	Jul	18,537	16,850	1,687	0.00%	9.47 %
	Aug	17,963	16,369	1,595	0.00%	8.88%
		*			0.00%	8.65%
	Sep	19,099	17,446	1,653	0.00%	0.03%

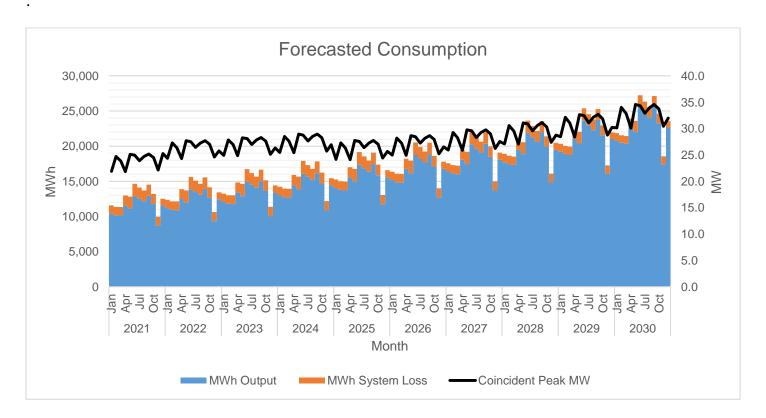
	Oct	17,384	15,859	1,526	0.00%	8.78%
	Nov	13,051	11,732	1,319	0.00%	10.11%
	Dec	16,578	15,555	1,023	0.00%	6.17%
2026	Jan	16,369	15,159	1,210	0.00%	7.39%
	Feb	16,100	14,888	1,212	0.00%	7.53%
	Mar	16,047	14,793	1,254	0.00%	7.82%
	Apr	18,196	16,773	1,423	0.00%	7.82%
	May	17,935	16,150	1,785	0.00%	9.95%
	Jun	20,545	18,740	1,805	0.00%	8.79%
	Jul	19,868	18,190	1,678	0.00%	8.45%
	Aug	19,254	17,668	1,586	0.00%	8.24%
	Sep	20,474	18,830	1,644	0.00%	8.03%
	Oct	18,631	17,114	1,517	0.00%	8.14%
	Nov	13,990	12,678	1,312	0.00%	9.38%
	Dec	17,785	16,768	1,017	0.00%	5.72%
2027	Jan	17,585	16,392	1,194	0.00%	6.79%
	Feb	17,307	16,112	1,196	0.00%	6.91%
	Mar	17,239	16,002	1,237	0.00%	7.18%
	Apr	19,480	18,076	1,404	0.00%	7.21%
	May	19,203	17,441	1,761	0.00%	9.17%
	Jun	22,030	20,249	1,781	0.00%	8.09%
	Jul	21,306	19,651	1,656	0.00%	7.77%
	Aug	20,647	19,083	1,565	0.00%	7.58%
	Sep	21,959	20,337	1,622	0.00%	7.39%
	Oct	19,973	18,476	1,497	0.00%	7.50%
	Nov	15,004	13,709	1,294	0.00%	8.63%
	Dec	19,083	18,079	1,003	0.00%	5.26%
2028	Jan	18,902	17,735	1,167	0.00%	6.17%
2020	Feb	18,617	17,733	1,169	0.00%	6.28%
	Mar	18,532	17,446	1,210	0.00%	6.53%
	Apr	20,857	19,484	1,373	0.00%	6.58%
	May	20,568	18,846	1,722	0.00%	8.37%
	Jun	23,636	21,894	1,742	0.00%	7.37%
	Jul	22,859	21,094	1,619	0.00%	7.08%
	Aug	22,059	20,621	1,530	0.00%	6.91%
					0.00%	6.73%
	Sep Oct	23,561	21,975	1,586		
	Nov	21,415	19,951	1,464	0.00%	6.84%
		16,098	14,833	1,266	0.00%	7.86%
2020	Dec	20,476	19,495	981	0.00%	4.79%
2029	Jan	20,327	19,198	1,129	0.00%	5.56%
	Feb	20,035	18,904	1,131	0.00%	5.64%
	Mar	19,931	18,761	1,171	0.00%	5.87%
	Apr	22,331	21,003	1,328	0.00%	5.95%
	May	22,038	20,372	1,666	0.00%	7.56%
	Jun	25,372	23,687	1,685	0.00%	6.64%
	Jul	24,534	22,968	1,566	0.00%	6.38%
	Aug	23,772	22,292	1,480	0.00%	6.23%
	Sep	25,288	23,754	1,535	0.00%	6.07%
	Oct	22,965	21,548	1,416	0.00%	6.17%
	Nov	17,278	16,054	1,224	0.00%	7.09%
0000	Dec	21,970	21,021	949	0.00%	4.32%
2030	Jan	21,866	20,787	1,079	0.00%	4.93%
	Feb	21,570	20,489	1,081	0.00%	5.01%
	Mar	21,444	20,325	1,119	0.00%	5.22%
	Apr	23,908	22,639	1,269	0.00%	5.31%
	May	23,618	22,026	1,592	0.00%	6.74%
	Jun	27,247	25,636	1,610	0.00%	5.91%

Jul	26,338	24,842	1,497	0.00%	5.68%
Aug	25,518	24,103	1,415	0.00%	5.54%
Sep	27,148	25,682	1,466	0.00%	5.40%
Oct	24,628	23,274	1,353	0.00%	5.50%
Nov	18,549	17,379	1,170	0.00%	6.31%
Dec	23,570	22,663	907	0.00%	3.85%

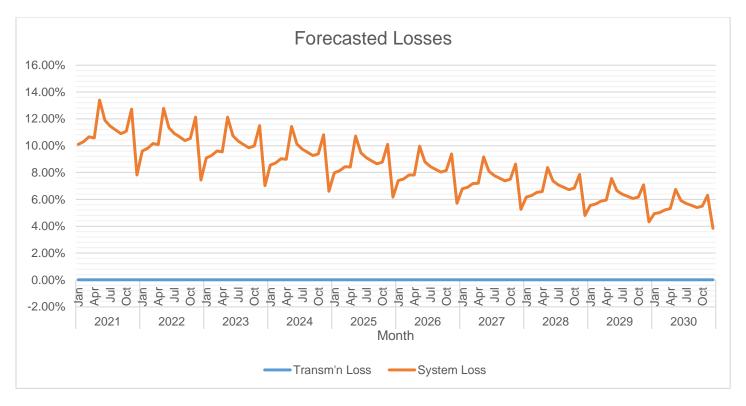
The forecasting approach and methodology that we used was the Trend Analysis which requires the latest historical data. The forecasting models formulated were being tested for validity. These statistics were used in the assessment whether the addition of independent variable is valid or not. For trend models, the Adjusted R2 statistic should be at least 99% for the model to be valid. Predictors or independent variables were also being tested for their validity using at least the p-value and t-statistic. For the variable to be valid, the p-value should be lower than 0.1 while the t-statistic should be greater than 2 or less than -2. For all the valid forecasting models formulated, the Mean Absolute Percentage Error (MAPE) was also computed. The MAPE of the final forecasting model should not exceed ±3%. Moreover, the growth rate was also considered significantly in determining the best and final forecast result.

For the other data that passed the statistical criteria using the cubic trend with horizon and/or double horizon by regression, the Adjusted R2, t-statistics and P-value were again computed without the set horizon using matrix and ms-excel solver. In our case, most of our data failed in the computed Adjusted R2. What we did was just get optimum value of Adjusted R2 by using ms-excel solver while the t-statistics and P-value should pass as the minimum requirement. The MAPE and growth rate were also taken into significant considerations.

One of the outputs of the forecasts conducted are in the table above. It would be seen in the table that SORECO II's system loss is on the down trend considering that the growth rate of forecasted energy sales is higher than that of energy offtake.



MWh Output was expected to grow at a rate of 7% annually.



System loss is forecasted to be on down trend which will be about 11% in 2021. However, it is projected that SORECO II's system loss will be above 12% in at least 2 months for 2021. For the rest of the year, SORECO II's system loss is below 12%.

Power Supply

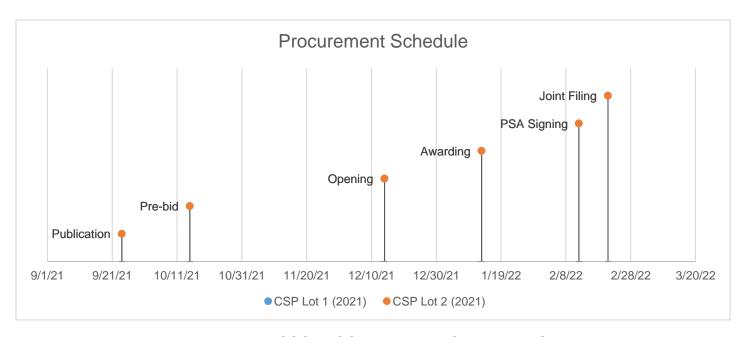
Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2013-033-RC	Base	GN Power Mariveles Coal Plant Ltd.	11.00		12/26/2012	2/25/2029
SUWECO - SORECO II INC.	Base	SUWECO - SORECO II, Inc.	0.60		12/26/2012	2/25/2029

SORECO II's Power Supply Agreement (2013-033RC) with GNPower Mariveles Coal Plant Ltd. Co. (GMCP) started last December 26, 2012. It will end on February 25, 2029. This 11-MW baseload PSA diminished to 8 MW last 2019 until 2029 as part of the contract, however while SORECO II was conducting its Competitive Selection Process (CSP), it was able to negotiate additional 3 MW of contracted capacity to minimize SORECO II's exposure to the spot market.

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
	Base	GN Power Dinginin	10.00		10/26/2021	12/25/2029

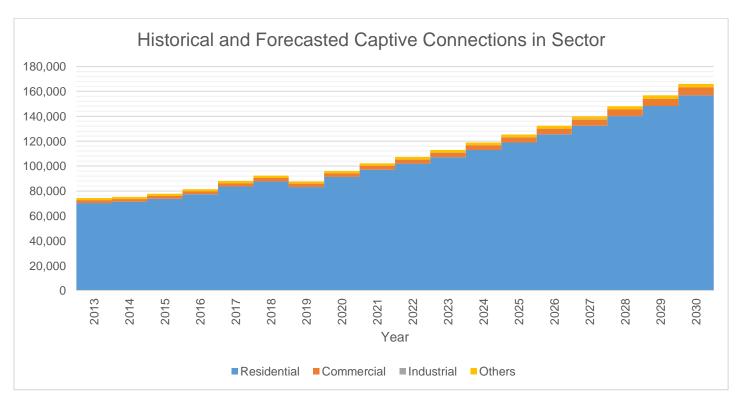
The table above shows SORECO II's pending PSA as a result of the conducted CSP.

	CSP Lot 1 (2021)	CSP Lot 2 (2021)
Туре	Base	Peaking
Minimum MW	2.00	2.00
Minimum MWh/yr		
PSA Start	12/26/2021	12/26/2021
PSA End	12/25/2029	12/25/2029
Publication	10/24/2021	10/24/2021
Pre-bid	11/14/2021	11/14/2021
Opening	1/13/2022	1/13/2022
Awarding	2/12/2022	2/12/2022
PSA Signing	3/14/2022	3/14/2022
Joint Filing	3/23/2022	3/23/2022



The above table shows the timeline of SORECO II's planned Competitive Selection Process.

Captive Customer Connections



As seen in the chart above, SORECO II's captive customer is comprised mainly of residential customers which are expected to further increase in the coming years. The growth rate of residential customers is about 5% annually while commercial customers are projected with a growth rate of 8% annually. The rest of customer types have 2% to 9% projected growth rate.