# Power Supply Procurement Plan 2021

SOUTH COTABATO I ELECTRIC COOPERATIVE, INC. (SOCOTECO I)

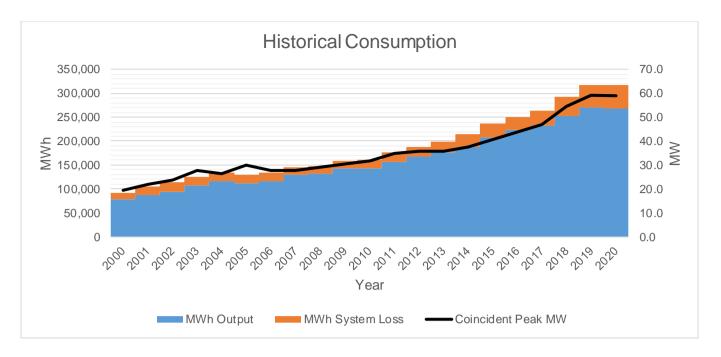
### **Historical Consumption Data**

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	19.47	92,546	0	92,546	78,220	14,326	54%	0.00%	0.00%	15.48%
2001	21.88	104,775	0	104,775	88,151	16,624	55%	0.00%	0.00%	15.87%
2002	23.60	114,227	0	114,227	95,155	19,072	55%	0.00%	0.00%	16.70%
2003	27.77	126,369	0	126,369	107,495	18,874	52%	0.00%	0.00%	14.94%
2004	26.43	134,770	0	134,770	116,204	18,566	58%	0.00%	0.00%	13.78%
2005	29.96	129,779	0	129,779	111,788	17,991	49%	0.00%	0.00%	13.86%
2006	27.62	135,032	0	135,032	116,047	18,985	56%	0.00%	0.00%	14.06%
2007	27.95	144,495	0	144,495	129,686	14,809	59%	0.00%	0.00%	10.25%
2008	28.98	147,134	0	147,134	131,198	15,937	58%	0.00%	0.00%	10.83%
2009	30.64	159,791	0	159,791	142,118	17,673	60%	0.00%	0.00%	11.06%
2010	31.97	162,056	0	162,056	143,556	18,500	58%	0.00%	0.00%	11.42%
2011	35.08	176,484	0	176,484	156,947	19,537	57%	0.00%	0.00%	11.07%
2012	35.76	188,891	0	188,403	166,693	21,710	60%	0.00%	0.26%	11.52%
2013	35.71	200,655	0	198,764	177,013	21,751	64%	0.00%	0.94%	10.94%
2014	37.44	216,757	0	214,425	187,385	27,040	65%	0.00%	1.08%	12.61%
2015	40.71	238,120	0	235,746	207,913	27,833	66%	0.00%	1.00%	11.81%
2016	43.82	259,711	0	249,718	223,751	25,967	65%	0.00%	3.85%	10.40%
2017	46.93	267,686	0	264,552	231,492	33,060	64%	0.00%	1.17%	12.50%
2018	54.52	298,239	0	291,282	251,414	39,868	61%	0.00%	2.33%	13.69%
2019	59.11	320,344	0	316,620	270,473	46,148	61%	0.00%	1.16%	14.58%
2020	59.10	322,507	0	315,931	267,955	47,976	61%	0.00%	2.04%	15.19%

Peak Demand increased from 19.47 MW in 2000 to 59.10 MW in 2020 at a rate of 5.90%. MWh Offtake increased from 92,546 MWh in 2000 to 322,507 MWh in 2020 at a rate of 6.52%. The constant increase in Peak Demand and MWh Offtake since year 2000 is due to steadily progressing economy in South Cotabato. As South Cotabato has been steadily progressing, investors come in and the demand for electricity increases.

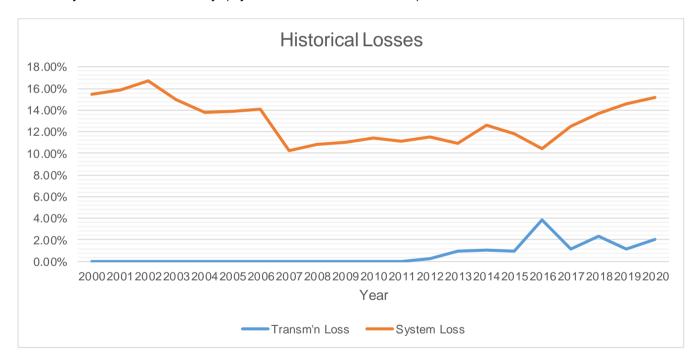
Though comparing 2019 and 2020 peak demand, there is a slightly decrease of about 0.01 MW which is equivalent to -0.02% growth rate. This is primarily due to the effects of the pandemic that significantly affected the economic activities not only in South Cotabato but also for the rest of the world.

On the other hand, the Load Factor was observed to be on a constant trend, which is 61% since 2018. As of 2020, SOCOTECO I is dominantly comprised of residential customers at 90.05% of its total customer population. For reference, the typical load factor for an average residential customer is only about 23%.

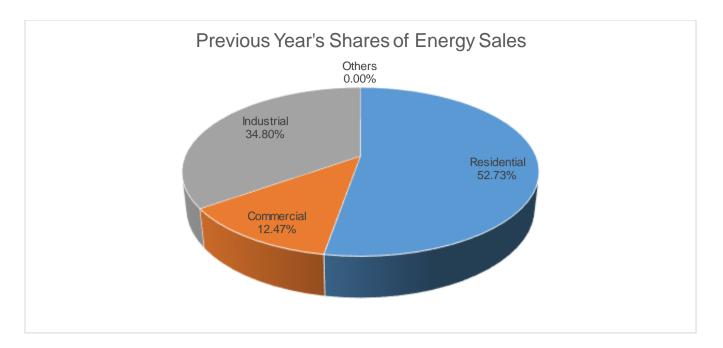


MWh Output increased from year 2000 to year 2020 at a rate of 6.44%, while MWh System Loss increased at a rate of 1.20% from year 2016 to year 2020.

The historical MWh Output data for industrial is consistent with our DDP submission for the past years. Moreover, there is no MWh Output for Own Use for year 2000-2005 because it is incorporated in the System Loss recovery (System Loss + Admin Use).



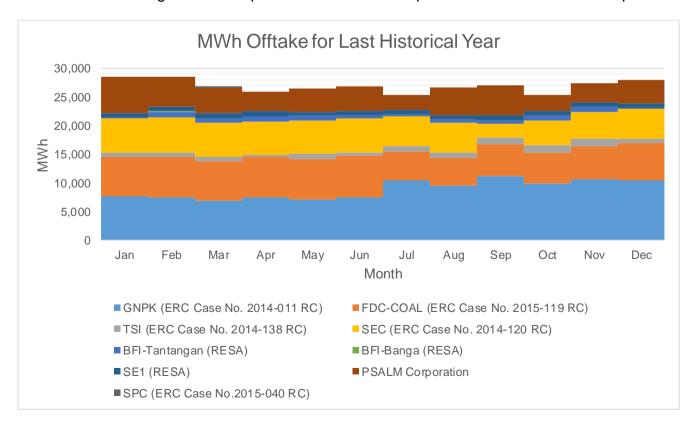
Historically, Transmission Loss ranged from 0.26% to 3.85% while System Loss ranged from 10.25% to 16.70%. The Transmission Loss peaked at 3.85% on year 2016, while System Loss peaked at 16.70% on year 2002.



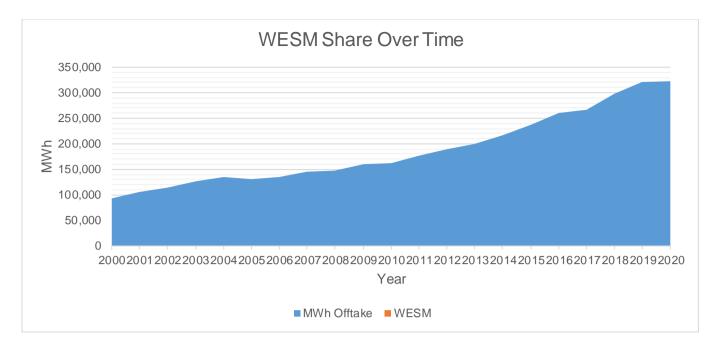
Residential customers account for the bulk of energy sales at 52.73% due to the high number of connections. On the other hand, Industrial customers accounted for 34.80% of energy sales despite of the low number of connections.

Compared to 2019, the 2020 energy sales in residential customer have increased by 7% while the low voltage and higher voltage decreased by 12% and 8%, respectively. This behavior in SOCOTECO I's 2020 energy sales is due to the effects of the pandemic in the customer's load profile.

The slight increase in the DUs Own Use of about 17MWH or 4% increased for year 2020 compared to year 2019 might be the effect of the stay-in duty of some skeletal and maintenance personnel of SOCOTECO I during the time of pandemic where strict quarantine measures were implemented.



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



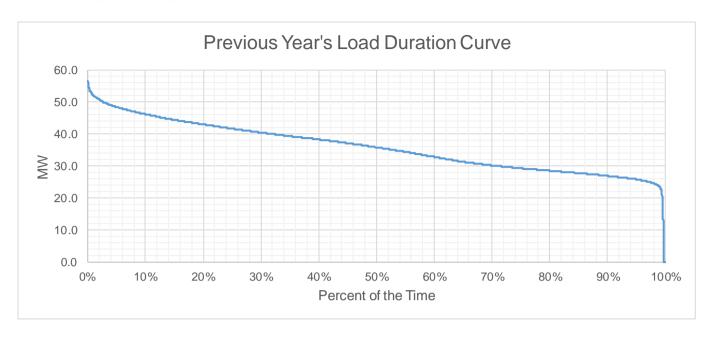
Pursuant with the Department of Energy (DOE) Department Circular No. DC2021-06-0015, declaring the commercial operations of enhanced Wholesale Electricity Spot Market (WESM) design and providing further policies, the DOE declares the commercial operation of the Enhanced WESM Design and Operations (EWDO) effective 26 June 2021 ("Commercial Operation Date") in Luzon, Visayas and Mindanao.

However, for Mindanao, the WESM Central Scheduling shall continue to be implemented until 25 July 2021 based on WESM Central Scheduling Guidelines. During this period, the resulting WESM prices for Mindanao will not be binding on any party and all energy transactions shall be settled in accordance with applicable power supply agreements and thereafter, actual commercial operations shall commence.

As of the latest update from DOE, the WESM is rescheduled for commercial operation on December 26, 2021.

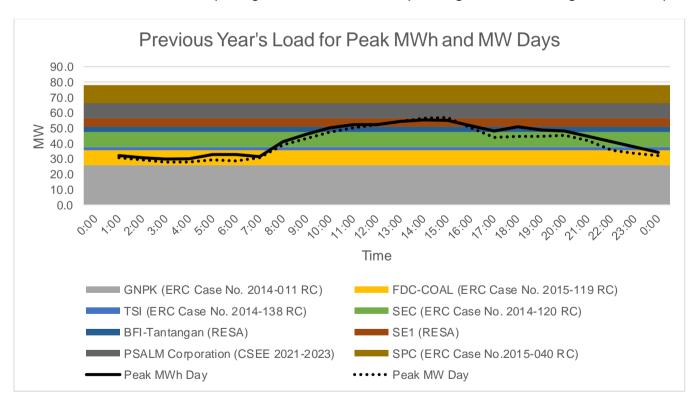
SOCOTECO-1 has applied as a Direct Member in the Wholesale Electricity Spot Market. As of the latest application checklist sent by IEMOP, SOCOTECO-1 is requested to submit an updated Secretary Certificate to reflect the new signatory for Direct WESM related documents and a Proof of Prudential Security to be settled within the three (3) months relaxation period from the actual commercial operations of WESM in Mindanao. Currently, these requirements are being process by SOCOTECO-I in order to complete its registration in the WESM.

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



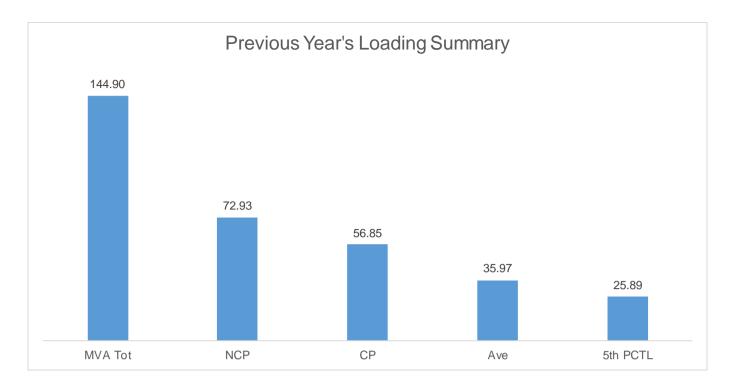
Based on the Load Duration Curve, the minimum load is 0 MW and the maximum load is 56.85 MW (CP) for the last historical year.

The load profile of SOCOTECO I is measured by the summation of the metering totalizer (M7) and the embedded generator's generation output. The profile of BFI Tantangan, BFI Banga, SPC, SE1, and SPGI which have zero input signifies that there is no power generation during that certain period.



Peak MW occurred on March 17, 2020, Tuesday at 3:00 PM. The peak happens to be on typical hot and regular working day, and with no rainfall and clear sky. The highest recorded temperature during this month is at 36 degree Celsius with an average humidity at 64%.

Peak daily MWh occurred on January 16, 2020 (Thursday). As shown in the Load Curves, the available supply is higher than the Peak Demand.



The Non-coincident Peak Demand is 72.93 MW, which is around 57.34% of the total substation capacity of 144.90 MVA at a power factor of 98.35%. The load factor or the ratio between the Average Load of 35.97 MW and the Non-coincident Peak Demand is 49.32%. A safe estimate of the true minimum load is the fifth percentile load of 25.89 MW which is 35.50% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
M7 Totalizer	100	53.520
BFI Tantangan	10	2.953
BFI Banga	10	1.558
SPC	12.395	4.499
SE1	5	4.811
SPGI	7.5	5.586

The substations loaded at above 70% are Matulas, Dajay, Morales and Norala substations. This loading problem will be solved by the installation of new substations in Lamsugod (6.25 max MVA) in year 2021 and Koronadal (25.0 max MVA) in year 2023, and upgrading of Matulas substation from 12.5 max to 25.0 max MVA in year 2021 and Dajay substation from 12.5 max MVA to 25 max MVA in year 2023.

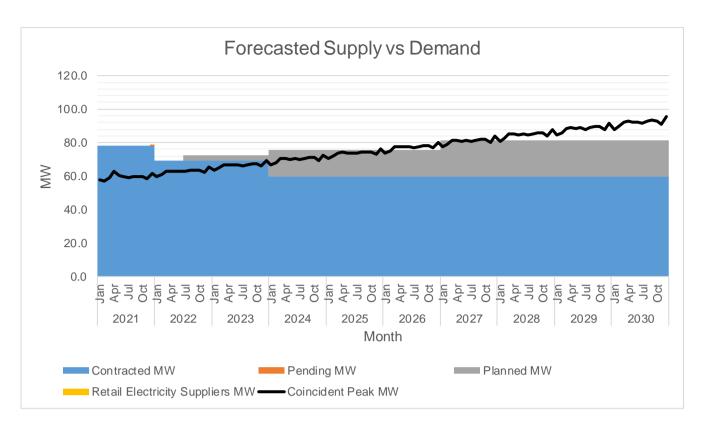
## **Forecasted Consumption Data**

		Coincident	Contracted	Pending	Planned	Retail	Existing	Target	MW
		Peak MW	MW	MW	MW		Contracting	Contracting	
						Suppliers MW	Level	Level	Deficit
2021	Jan	57.57	77.99	0.00	0.000	10.00	135%	135%	20.42
	Feb	57.01	77.99	0.00	0.000		137%	137%	20.98
	Mar	59.01	77.99	0.00	0.000		132%	132%	18.98
	Apr	62.81	77.99	0.00	0.000		124%	124%	15.18
	May	60.27	77.99	0.00	0.000		129%	129%	17.72
	Jun	59.43	77.99	0.00	0.000		131%	131%	18.56
	Jul	58.95	77.99	0.00	0.000		132%	132%	19.04
	Aug	59.56	77.99	0.00	0.000		131%	131%	18.43
	Sep	59.94	77.99	0.00	0.000		130%	130%	18.05
	Oct	59.90	77.99	0.00	0.000		130%	130%	18.09
	Nov	58.70	77.99	0.00	0.000		133%	133%	19.29
	Dec	61.45	77.99	0.75	0.000		127%	128%	17.29
2022	Jan	59.99	69.49	0.00	0.000		116%	116%	9.50
	Feb	61.07	69.49	0.00	0.000		114%	114%	8.42
	Mar	63.01	69.49	0.00	0.000		110%	110%	6.48
	Apr	63.18	69.49	0.00	0.000		110%	110%	6.31
	May	62.79	69.49	0.00	0.000		111%	111%	6.70
	Jun	63.06	69.49	0.00	0.000		110%	110%	6.43
	Jul	62.55	69.49	0.00	3.000		111%	116%	9.94
	Aug	63.19	69.49	0.00	3.000		110%	115%	9.30
	Sep	63.59	69.49	0.00	3.000		109%	114%	8.90
	Oct	63.55	69.49	0.00	3.000		109%	114%	8.94
	Nov	62.28	69.49	0.00	3.000		112%	116%	10.21
	Dec	65.20	69.49	0.00	3.000		107%	111%	7.29
2023	Jan	63.45	69.49	0.00	3.000		110%	114%	9.04
	Feb	64.60	69.49	0.00	3.000		108%	112%	7.89
	Mar	66.65	69.49	0.00	3.000		104%	109%	5.84
	Apr	66.82	69.49	0.00	3.000		104%	108%	5.67
	May	66.41	69.49	0.00	3.000		105%	109%	6.08
	Jun	66.70	69.49	0.00	3.000		104%	109%	5.79
	Jul	66.16	69.49	0.00	3.000		105% 104%	110%	6.33
	Aug Sep	66.84 67.26	69.49 69.49	0.00	3.000		104%	108% 108%	5.65 5.23
	Oct	67.22	69.49	0.00	3.000		103%	108%	5.27
	Nov	65.88	69.49	0.00	3.000		105%	110%	6.61
	Dec	68.96	69.49	0.00	3.000		101%	105%	3.53
2024	Jan	66.92	59.49	0.00	16.000		89%	113%	8.57
2024	Feb	68.13	59.49	0.00	16.000		87%	111%	7.36
	Mar	70.29	59.49	0.00	16.000		85%	107%	5.20
	Apr	70.48	59.49	0.00	16.000		84%	107%	5.01
	May	70.05	59.49	0.00	16.000		85%	108%	5.44
	Jun	70.35	59.49	0.00	16.000		85%	107%	5.14
	Jul	69.78	59.49	0.00	16.000		85%	108%	5.71
	Aug	70.50	59.49	0.00	16.000		84%	107%	4.99
	Sep	70.94	59.49	0.00	16.000		84%	106%	4.55
	Oct	70.90	59.49	0.00	16.000		84%	106%	4.59

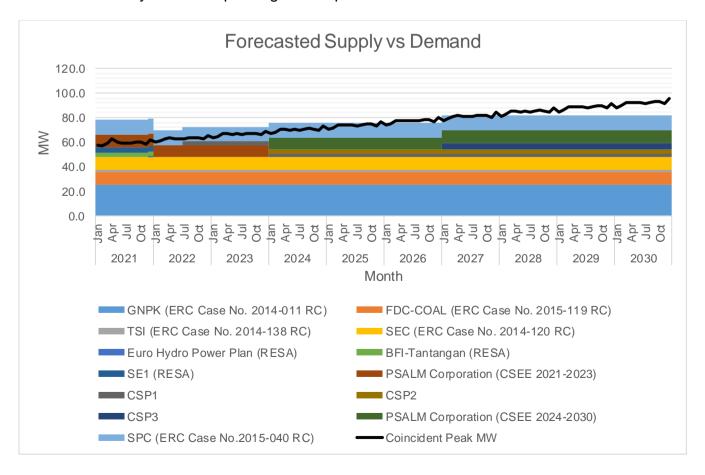
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW			Target Contracting	
						Suppliers MW	Level	Level	Deficit
	Nov	69.48	59.49	0.00	16.000		86%	109%	6.01
	Dec	72.74	59.49	0.00	16.000		82%	104%	2.75
2025	Jan	70.40	59.49	0.00	16.000		84%	107%	5.09
	Feb	71.67	59.49	0.00	16.000		83%	105%	3.82
	Mar	73.95	59.49	0.00	16.000		80%	102%	1.54
	Apr	74.15	59.49	0.00	16.000		80%	102%	1.34
	May	73.69	59.49	0.00	16.000		81%	102%	1.80
	Jun	74.01	59.49	0.00	16.000		80%	102%	1.48
	Jul	73.41	59.49	0.00	16.000		81%	103%	2.08
	Aug	74.16	59.49	0.00	16.000		80%	102%	1.33
	Sep	74.63	59.49	0.00	16.000		80%	101%	0.86
	Oct	74.59	59.49	0.00	16.000		80%	101%	0.90
	Nov	73.10	59.49	0.00	16.000		81%	103%	2.39
	Dec	76.52	59.49	0.00	16.000		78%	99%	-1.03
2026	Jan	73.89	59.49	0.00	16.000		81%	102%	1.60
	Feb	75.22	59.49	0.00	16.000		79%	100%	0.27
	Mar	77.61	59.49	0.00	16.000		77%	97%	-2.12
	Apr	77.82	59.49	0.00	16.000		76%	97%	-2.33
	May	77.34	59.49	0.00	16.000		77%	98%	-1.85
	Jun	77.67	59.49	0.00	16.000		77%	97%	-2.18
	Jul	77.04	59.49	0.00	16.000		77%	98%	-1.55
	Aug	77.83	59.49	0.00	16.000		76%	97%	-2.34
	Sep	78.33	59.49	0.00	16.000		76%	96%	-2.84
	Oct	78.28	59.49	0.00	16.000		76%	96%	-2.79
	Nov	76.72	59.49	0.00	16.000		78%	98%	-1.23
	Dec	80.31	59.49	0.00	16.000		74%	94%	-4.82
2027	Jan	77.38	59.49	0.00	22.000		77%	105%	4.11
	Feb	78.78	59.49	0.00	22.000		76%	103%	2.71
	Mar	81.28	59.49	0.00	22.000		73%	100%	0.21
	Apr	81.49	59.49	0.00	22.000		73%	100%	0.00
	May	80.99	59.49	0.00	22.000		73%	101%	0.50
	Jun	81.34	59.49	0.00	22.000		73%	100%	0.15
	Jul	80.68	59.49	0.00	22.000		74%	101%	0.81
	Aug	81.51	59.49	0.00	22.000		73%	100%	-0.02
	Sep	82.03	59.49	0.00	22.000		73%	99%	-0.54
	Oct	81.98	59.49	0.00	22.000		73%	99%	-0.49
	Nov	80.34	59.49	0.00	22.000		74%	101%	1.15
	Dec	84.10	59.49	0.00	22.000		71%	97%	-2.61
2028	Jan	80.87	59.49	0.00	22.000		74%	101%	0.62
	Feb	82.33	59.49	0.00	22.000		72%	99%	-0.84
	Mar	84.95	59.49	0.00	22.000		70%	96%	-3.46
	Apr	85.17	59.49	0.00	22.000		70%	96%	-3.68
	May	84.65	59.49	0.00	22.000		70%	96%	-3.16
	Jun	85.01	59.49	0.00	22.000		70%	96%	-3.52
	Jul	84.32	59.49	0.00	22.000		71%	97%	-2.83
	Aug	85.19	59.49	0.00	22.000		70%	96%	-3.70
	Sep	85.73	59.49	0.00	22.000		69%	95%	-4.24
	Oct	85.68	59.49	0.00	22.000		69%	95%	-4.19

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Nov	83.97	59.49	0.00	22.000		71%	97%	-2.48
	Dec	87.90	59.49	0.00	22.000		68%	93%	-6.41
2029	Jan	84.37	59.49	0.00	22.000		71%	97%	-2.88
	Feb	85.89	59.49	0.00	22.000		69%	95%	-4.40
	Mar	88.62	59.49	0.00	22.000		67%	92%	-7.13
	Apr	88.85	59.49	0.00	22.000		67%	92%	-7.36
	May	88.30	59.49	0.00	22.000		67%	92%	-6.81
	Jun	88.69	59.49	0.00	22.000		67%	92%	-7.20
	Jul	87.97	59.49	0.00	22.000		68%	93%	-6.48
	Aug	88.87	59.49	0.00	22.000		67%	92%	-7.38
	Sep	89.44	59.49	0.00	22.000		67%	91%	-7.95
	Oct	89.38	59.49	0.00	22.000		67%	91%	-7.89
	Nov	87.60	59.49	0.00	22.000		68%	93%	-6.11
	Dec	91.70	59.49	0.00	22.000		65%	89%	-10.21
2030	Jan	87.87	59.49	0.00	22.000		68%	93%	-6.38
	Feb	89.45	59.49	0.00	22.000		67%	91%	-7.96
	Mar	92.29	59.49	0.00	22.000		64%	88%	-10.80
	Apr	92.54	59.49	0.00	22.000		64%	88%	-11.05
	May	91.97	59.49	0.00	22.000		65%	89%	-10.48
	Jun	92.36	59.49	0.00	22.000		64%	88%	-10.87
	Jul	91.61	59.49	0.00	22.000		65%	89%	-10.12
	Aug	92.56	59.49	0.00	22.000		64%	88%	-11.07
	Sep	93.15	59.49	0.00	22.000		64%	87%	-11.66
	Oct	93.09	59.49	0.00	22.000		64%	88%	-11.60
	Nov	91.23	59.49	0.00	22.000		65%	89%	-9.74
	Dec	95.50	59.49	0.00	22.000		62%	85%	-14.01

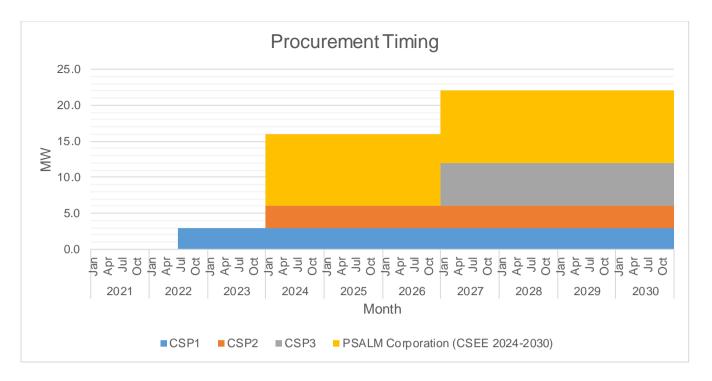
The Peak Demand was forecasted using historical Coincidental Peak and was assumed to occur on the month of December based on SOCOTECOI historical demand trend. Monthly Peak Demand is at its lowest on the month of January based on historical data. In general, Peak Demand is expected to grow at a rate of 5.02% annually.



The available supply is generally above the Peak Demand for years 2021-2027. This is because of the sufficient contracted supply of SOCOTECO I. For years 2028 and beyond, SOCOTECO I may decide to enter into new power supply contracts on the next few years or to source out its supply from the electricity market depending on the performance of the WESM Mindanao.



Of the available supply, the largest is 25.59 MW from GNPK. This is followed by 11.90 MW from SPC.

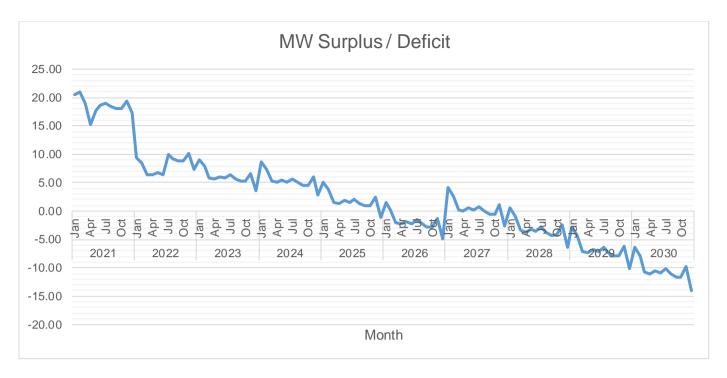


The first wave of supply procurement will be for 3.0MW (RPS) planned to be available by July 2022. This will be followed by 10MW and 3.0MW (RPS) in year 2024. 6.0MW (RPS) planned to be by year 2027.

The 10MW requirement in year 2024 is planned to be source out from PSALM Corporation. SOCOTECO-I will secure the DOE COE-CSP for the future renewal of CSEE with PSALM Corporation.



Currently, there is a surplus power supply of about 11% to 20% based on the monthly forecasted Coincidental Peak MW versus the Contracted MW of year 2021. The highest contracting level is 119% which is in February 2021. However in years 2022-2030, the existing contracting level will be on a decreasing trend compare to the target contracting level. The uncontracted level (deficit) is planned to be sourced out from the WESM. The lowest target contracting level is at 85% which is expected to occur on December 2030.



In year 2021, there is a MW surplus by 8.04 to 20.98 MW. The highest surplus happened in the month of February 2021. The highest deficit is 14.01 MW which is expected to occur on the month of December 2030.

SOCOTECO I will proceed with the planned CSPs. SOCOTECO I is also considering the slight deficit in our power supply starting from year 2026 on a conservative manner. Taking into account the effects of regulatory changes in the power supply industry which may affect the power supply and demand of SOCOTECO I such as but not limited to GEOP, Net Metering, RCOA, and WESM.

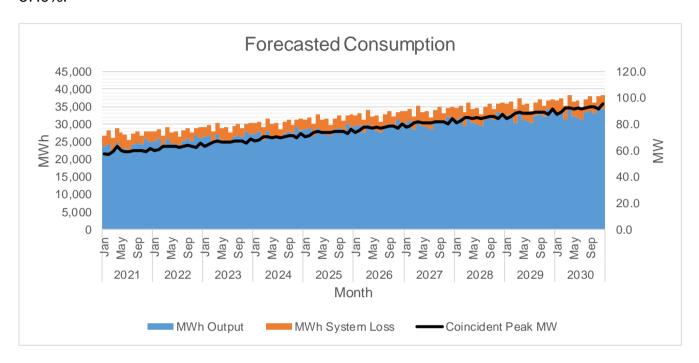
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	26,812	23,575	3,236	0.00%	12.07%
	Feb	28,189	24,177	4,012	0.00%	14.23%
	Mar	26,239	22,333	3,906	0.00%	14.89%
	Apr	28,925	24,645	4,280	0.00%	14.80%
	May	27,706	23,060	4,647	0.00%	16.77%
	Jun	27,068	23,138	3,930	0.00%	14.52%
	Jul	25,563	22,747	2,817	0.00%	11.02%
	Aug	27,277	24,223	3,054	0.00%	11.20%
	Sep	27,953	24,612	3,342	0.00%	11.95%
	Oct	26,666	24,167	2,499	0.00%	9.37%
	Nov	27,842	25,707	2,135	0.00%	7.67%
	Dec	28,098	24,939	3,159	0.00%	11.24%
2022	Jan	27,964	25,324	2,641	0.00%	9.44%
	Feb	28,465	25,707	2,758	0.00%	9.69%
	Mar	26,843	23,684	3,159	0.00%	11.77%
	Apr	29,222	25,801	3,421	0.00%	11.71%
	May	27,767	24,503	3,264	0.00%	11.75%
	Jun	28,045	24,175	3,869	0.00%	13.80%
	Jul	26,486	23,766	2,719	0.00%	10.27%
	Aug	28,261	25,309	2,952	0.00%	10.45%
	Sep	28,962	25,715	3,247	0.00%	11.21%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Oct	27,628	25,251	2,377	0.00%	8.60%
	Nov	28,847	26,860	1,987	0.00%	6.89%
	Dec	29,112	26,058	3,054	0.00%	10.49%
2023	Jan	29,140	26,391	2,749	0.00%	9.43%
	Feb	29,662	26,792	2,871	0.00%	9.68%
	Mar	27,972	24,683	3,289	0.00%	11.76%
	Apr	30,451	26,889	3,562	0.00%	11.70%
	May	28,935	25,537	3,398	0.00%	11.74%
	Jun	29,224	25,195	4,029	0.00%	13.79%
	Jul	27,599	24,769	2,831	0.00%	10.26%
	Aug	29,450	26,376	3,073	0.00%	10.44%
	Sep	30,180	26,800	3,380	0.00%	11.20%
	Oct	28,790	26,315	2,474	0.00%	8.59%
	Nov	30,060	27,993	2,067	0.00%	6.88%
	Dec	30,336	27,156	3,179	0.00%	10.48%
2024	Jan	30,291	27,440	2,851	0.00%	9.41%
	Feb	30,833	27,856	2,978	0.00%	9.66%
	Mar	29,076	25,663	3,413	0.00%	11.74%
	Apr	31,653	27,957	3,696	0.00%	11.68%
	May	30,077	26,551	3,527	0.00%	11.73%
	Jun	30,378	26,195	4,182	0.00%	13.77%
	Jul	28,689	25,752	2,937	0.00%	10.24%
	Aug	30,612	27,424	3,189	0.00%	10.42%
	Sep	31,371	27,864	3,507	0.00%	11.18%
	Oct	29,926	27,361	2,566	0.00%	8.57%
	Nov	31,246	29,104	2,142	0.00%	6.86%
	Dec	31,534	28,235	3,299	0.00%	10.46%
2025	Jan	31,419	28,468	2,951	0.00%	9.39%
	Feb	31,982	28,899	3,082	0.00%	9.64%
	Mar	30,159	26,624	3,534	0.00%	11.72%
	Apr	32,832	29,004	3,828	0.00%	11.66%
	May	31,198	27,546	3,652	0.00%	11.71%
	Jun	31,509	27,177	4,332	0.00%	13.75%
	Jul	29,758	26,717	3,040	0.00%	10.22%
	Aug	31,752	28,451	3,301	0.00%	10.40%
	Sep	32,539	28,908	3,632	0.00%	11.16%
	Oct	31,041	28,386	2,655	0.00%	8.55%
	Nov	32,410	30,195	2,215	0.00%	6.83%
	Dec	32,708	29,293	3,415	0.00%	10.44%
2026	Jan 	32,525	29,476	3,048	0.00%	9.37%
	Feb	33,107	29,923	3,184	0.00%	9.62%
	Mar	31,220	27,568	3,652	0.00%	11.70%
	Apr	33,987	30,032	3,956	0.00%	11.64%
	May	32,295	28,521	3,774	0.00%	11.69%
	Jun	32,618	28,140	4,478	0.00%	13.73%
	Jul	30,805	27,664	3,141	0.00%	10.20%
	Aug	32,870	29,459	3,411	0.00%	10.38%

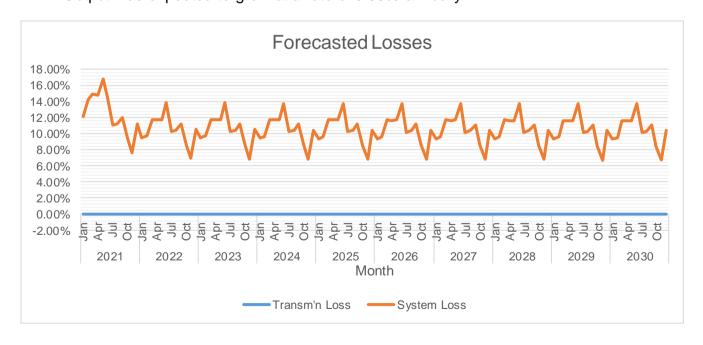
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Sep	33,685	29,932	3,753	0.00%	11.14%
	Oct	32,133	29,391	2,742	0.00%	8.53%
	Nov	33,551	31,264	2,286	0.00%	6.81%
	Dec	33,859	30,330	3,528	0.00%	10.42%
2027	Jan	33,608	30,465	3,143	0.00%	9.35%
	Feb	34,210	30,927	3,283	0.00%	9.60%
	Mar	32,260	28,492	3,768	0.00%	11.68%
	Apr	35,120	31,039	4,080	0.00%	11.62%
	May	33,371	29,478	3,893	0.00%	11.67%
	Jun	33,705	29,084	4,621	0.00%	13.71%
	Jul	31,831	28,592	3,239	0.00%	10.18%
	Aug	33,965	30,447	3,518	0.00%	10.36%
	Sep	34,807	30,936	3,871	0.00%	11.12%
	Oct	33,204	30,377	2,826	0.00%	8.51%
	Nov	34,668	32,313	2,355	0.00%	6.79%
	Dec	34,987	31,348	3,639	0.00%	10.40%
2028	Jan	34,671	31,435	3,236	0.00%	9.33%
	Feb	35,292	31,911	3,380	0.00%	9.58%
	Mar	33,280	29,400	3,880	0.00%	11.66%
	Apr	36,230	32,027	4,202	0.00%	11.60%
	May	34,426	30,417	4,009	0.00%	11.65%
	Jun	34,770	30,010	4,760	0.00%	13.69%
	Jul	32,837	29,502	3,335	0.00%	10.16%
	Aug	35,038	31,417	3,622	0.00%	10.34%
	Sep	35,907	31,921	3,986	0.00%	11.10%
	Oct	34,253	31,344	2,909	0.00%	8.49%
	Nov	35,764	33,342	2,422	0.00%	6.77%
	Dec	36,093	32,346	3,747	0.00%	10.38%
2029	Jan	35,712	32,387	3,326	0.00%	9.31%
	Feb	36,352	32,878	3,474	0.00%	9.56%
	Mar	34,280	30,290	3,990	0.00%	11.64%
	Apr	37,318	32,997	4,321	0.00%	11.58%
	May	35,460	31,338	4,123	0.00%	11.63%
	Jun	35,815	30,918	4,896	0.00%	13.67%
	Jul	33,824	30,395	3,429	0.00%	10.14%
	Aug	36,091	32,368	3,723	0.00%	10.32%
	Sep	36,986	32,887	4,098	0.00%	11.08%
	Oct	35,282	32,293	2,989	0.00%	8.47%
	Nov	36,839	34,351	2,487	0.00%	6.75%
	Dec	37,177	33,325	3,852	0.00%	10.36%
2030	Jan	36,734	33,322	3,412	0.00%	9.29%
	Feb	37,392	33,827	3,565	0.00%	9.53%
	Mar	35,260	31,164	4,096	0.00%	11.62%
	Apr	38,386	33,950	4,436	0.00%	11.56%
	May	36,475	32,243	4,232	0.00%	11.60%
	Jun	36,839	31,811	5,028	0.00%	13.65%
	Jul	34,791	31,273	3,518	0.00%	10.11%

	MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
Aug	37,123	33,302	3,821	0.00%	10.29%
Sep	38,044	33,837	4,207	0.00%	11.06%
Oct	36,291	33,226	3,065	0.00%	8.45%
Nov	37,892	35,344	2,549	0.00%	6.73%
Dec	38,241	34,288	3,953	0.00%	10.34%

MWh Offtake was forecasted using MWh purchased historical data. The assumed load factor is 57.0%.



MWh Output was expected to grow at a rate of 3.60% annually.



System Loss is expected to range from 6.73% to 16.77%.

## **Power Supply**

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
GNPK (ERC Case No. 2014-011 RC)	Base	GN Power Kauswagan Ltd.	25.59	168,126	8/7/2019	8/7/2039
FDC-COAL (ERC Case No. 2015-119 RC)	Base	FDC Misamis Power Corporation	10.00	35,040	10/14/2016	10/14/2041
TSI (ERC Case No. 2014-138 RC)	Base	Therma South, Inc.	10.00	35,040	12/18/2015	12/18/2040
SEC (ERC Case No. 2014-120 RC)	Base	Sarangani Energy Corporation	10.00	35,040	6/1/2019	6/1/2044
BFI-Tantangan (RESA)	Intermediate	Other	3.50		5/8/2018	12/26/2021
SE1 (RESA)	Intermediate	nv vogt Philippines Solar Energy One, Inc.	5.00		10/25/2015	12/26/2021
SPC (ERC Case No.2015-040 RC)	Peaking	Supreme Power Corporation	11.90		5/6/2016	5/6/2031
PSALM Corporation (CSEE 2021-2023)	Intermediate	Power Sector Assets and Liabilities Management Corporation	10.00	26,280	12/26/2020	12/26/2023

The **PSA** with **GNPK** filed with **ERC** under **Case No. 2014-011 RC** was procured through negotiation. It was selected to provide for base requirements since it is a coal-fired power plant. Historically, the utilization of the PSA is 47.4%. The actual billed overall monthly charge under the PSA ranged from 4.96 P/kWh to 5.81 P/KWh in the same period.

The **PSA** with **FDC-Coal filed with ERC under Case No. 2015-119 RC** was procured through negotiation. It was selected to provide for base requirements since it is a coal-fired power plant. Historically, the utilization of the PSA is 85.8%. The actual billed overall monthly charge under the PSA ranged from 5.89 P/kWh to 7.57 P/KWh in the same period.

The **PSA with TSI filed with ERC under Case No. 2014-138 RC** was procured through negotiation. It was selected to provide for base requirements since it is a coal-fired power plant. Historically, the utilization of the PSA is 61.2%. The actual billed overall monthly charge under the PSA ranged from 5.86 P/kWh to 8.07 P/KWh in the same period.

The **PSA with SEC filed with ERC under Case No. 2014-120 RC** was procured through negotiation. It was selected to provide for base requirements since it is a coal-fired power plant. Historically, the utilization of the PSA is 71.6%. The actual billed overall monthly charge under the PSA ranged from 5.77 P/kWh to 11.22 P/kWh in the same period.

The **RESA with BFI-Tantangan, SE1 and the CSEE with PSALM**, and was procured through negotiation. It was selected to provide for intermediate requirements because of its supply characteristics (biomass, solar and hydro). The utilization of PSALM-CSEE for last year is at 24.9%.

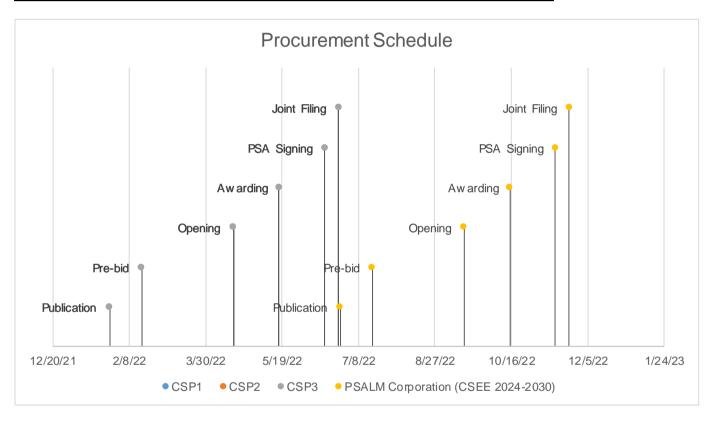
The **PSA with SPC filed with ERC under Case No. 2015-040 RC** was procured through negotiation. It was selected to provide for peaking requirements. Historically, the utilization of the PSA is 0.1%.

DOE CSP-COE was given to the CSEE of SOCOTECO-I and PSALM Corporation for years 2021-2023. The actual billed overall monthly charge under the previous CSEE ranged from 1.17 P/kWh to 2.47 P/KWh.

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
Euro Hydro Power Plan (RESA)	Base	Other	0.75	1,512	11/26/2021	12/26/2021

Currently, there is an ongoing negotiation for the **RESA of Euro Hydro** for its revision following the ERC pro forma. The power plant is just waiting for FIT-COC approval/issuance from ERC. However, the commercial operation of WESM Mindanao will tentatively start in December 26, 2021 which will be the termination date of every RESA in Mindanao.

	CSP1	CSP2	CSP3	PSALM Corporation (CSEE 2024- 2030)
Туре	Intermediate	Intermediate	Intermediate	Intermediate
Minimum MW	3.00	3.00	6.00	10.00
Minimum MWh/yr	5,961	5,961	23,642	26,280
PSA Start	6/26/2022	1/1/2024	1/1/2027	12/26/2023
PSA End	6/26/2047	12/31/2048	12/31/2051	12/26/2030
Publication	1/26/2022	1/26/2022	1/26/2022	6/26/2022
Pre-bid	2/16/2022	2/16/2022	2/16/2022	7/17/2022
Opening	4/17/2022	4/17/2022	4/17/2022	9/15/2022
Awarding	5/17/2022	5/17/2022	5/17/2022	10/15/2022
PSA Signing	6/16/2022	6/16/2022	6/16/2022	11/14/2022
Joint Filing	6/25/2022	6/25/2022	6/25/2022	11/23/2022

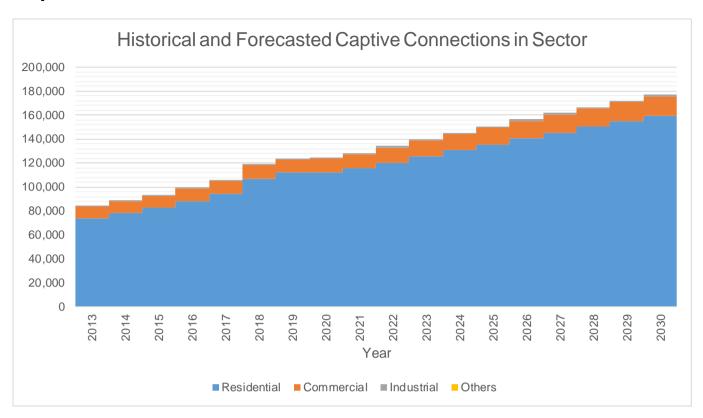


For the procurement of 3.0 MW of supply which is planned to be available on July 2022, the first publication or launch of CSP will be on January 26, 2022. Joint filing is planned on June 25, 2022, or 150 days later, in accordance with DOE's 2018 CSP Policy. This PSA shall be for the compliance of SOCOTECO-I with the Renewable Portfolio Standard (RPS).

The same with the procurement of 3.0 MW and 6.0 MW of supply which is planned to be available on January 2024 and January 2027 respectively, the first publication or launch of CSP will also be on January 26, 2022. The same with the joint filing, which is also planned on June 25, 2022, or 150 days later, in accordance with DOE's 2018 CSP Policy. These PSAs shall also be for the compliance of SOCOTECO-I with the Renewable Portfolio Standard (RPS).

Another CSEE with PSALM shall be negotiated for the years 2024-2030. SOCOTECO-I shall process with the DOE the Certificate of Exemption for the conduct of Competitive Selection Process for this future power supply requirement.

## **Captive Customer Connections**



The number of Residential connections is expected to grow at a rate of 3.5% annually. Said customer class is expected to account for 53% of the total consumption.

The number of Commercial connections is expected to grow at a rate of 3.7% annually. Said customer class is expected to account for 12% of the total consumption.

The number of Industrial connections is expected to grow at a rate of 4.1% annually. Said customer class is expected to account for 35% of the total consumption.

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