Power Supply Procurement Plan 2021

SURIGAO DEL NORTE ELECTRIC COOPERATIVE, INC.

(SURNECO)

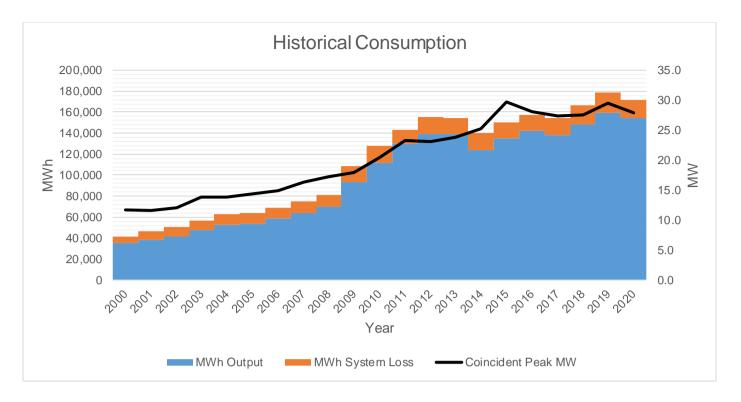
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Historical Consumption Data

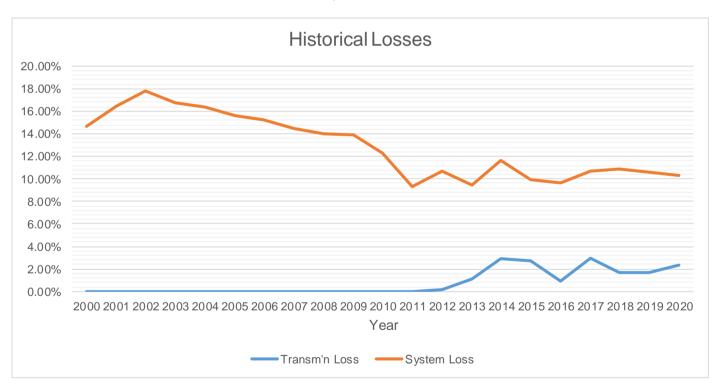
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	11.68	41,481	0	41,481	35,419	6,063	41%	0.00%	0.00%	14.62%
2001	11.60	46,323	0	46,323	38,685	7,638	46%	0.00%	0.00%	16.49%
2002	12.06	50,670	0	50,670	41,651	9,019	48%	0.00%	0.00%	17.80%
2003	13.77	56,449	0	56,449	47,004	9,445	47%	0.00%	0.00%	16.73%
2004	13.78	63,271	0	63,271	52,921	10,350	52%	0.00%	0.00%	16.36%
2005	14.34	64,055	0	64,055	54,040	10,016	51%	0.00%	0.00%	15.64%
2006	14.99	69,191	0	69,191	58,686	10,505	53%	0.00%	0.00%	15.18%
2007	16.37	75,050	0	75,050	64,209	10,841	52%	0.00%	0.00%	14.45%
2008	17.23	81,181	0	81,181	69,804	11,377	54%	0.00%	0.00%	14.01%
2009	17.89	108,579	0	108,579	93,511	15,067	69%	0.00%	0.00%	13.88%
2010	20.39	127,426	0	127,426	111,774	15,652	71%	0.00%	0.00%	12.28%
2011	23.23	143,083	0	143,083	129,754	13,329	70%	0.00%	0.00%	9.32%
2012	23.04	155,606	0	155,347	138,735	16,612	77%	0.00%	0.17%	10.69%
2013	23.86	155,895	0	154,175	139,558	14,618	74%	0.00%	1.10%	9.48%
2014	25.28	144,704	0	140,532	124,219	16,313	63%	0.00%	2.88%	11.61%
2015	29.71	154,483	0	150,229	135,258	14,971	58%	0.00%	2.75%	9.97%
2016	28.10	158,384	0	156,899	141,838	15,061	64%	0.00%	0.94%	9.60%
2017	27.39	159,470	0	154,750	138,156	16,594	64%	0.00%	2.96%	10.72%
2018	27.50	169,154	0	166,325	148,292	18,032	69%	0.00%	1.67%	10.84%
2019	29.54	181,514	0	178,495	159,532	18,963	69%	0.00%	1.66%	10.62%
2020	27.96	176,225	0	172,147	154,465	17,681	70%	0.00%	2.31%	10.27%

Peak Demand increased from 11.60 MW in 2001 to 29.54 MW in 2019 at a rate of 4.10% due to increasing trend of energy used by captive customer. MWh Offtake increased from 41,481 MWh in 2000 to 181,514 MWh in 2019 at a rate of 6.73% due to increasing trend of energy used by captive. Within the same period, Load Factor ranged from 41% to 77%. There was an abrupt change in consumption due to entrance of Large Load such as Mining Industries. In the year 2020, there was a decrease in coincident peak from 29.54 MW in 2019 to 27.96MW in 2020 due to covid-19 pandemic restrictions and lockdowns where commercial, industrial and other customer operations are greatly affected/ even shut downed its operation. During covid-19 lockdowns more people are confined in their homes, energy consumption in the Residential consumers increased while commercial, industrial and other customer sectors are having their limited/ even shut downed operation which resulted to the decrease in their respective energy sales.

The coop use is part of the Commercial/Low voltage mWh Sales. Slight increased of coop use in year 2020 is attributed to the construction of Consumer Centre Phase 1.

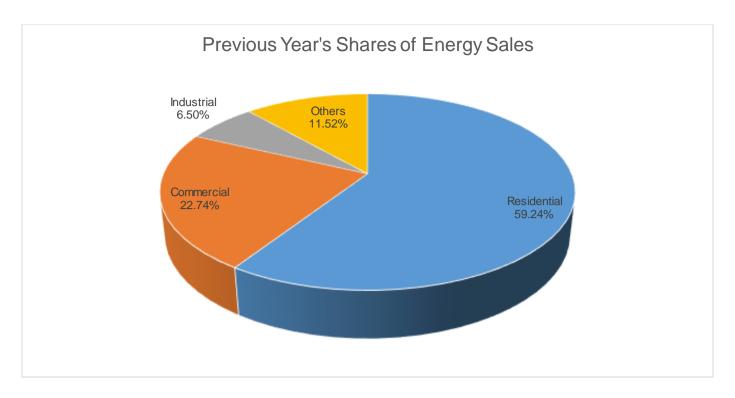


MWh Output increased from year 2020 to year 2020 at a rate of 6.73%, while MWh System Loss increased at a rate of 4.61% within the same period.

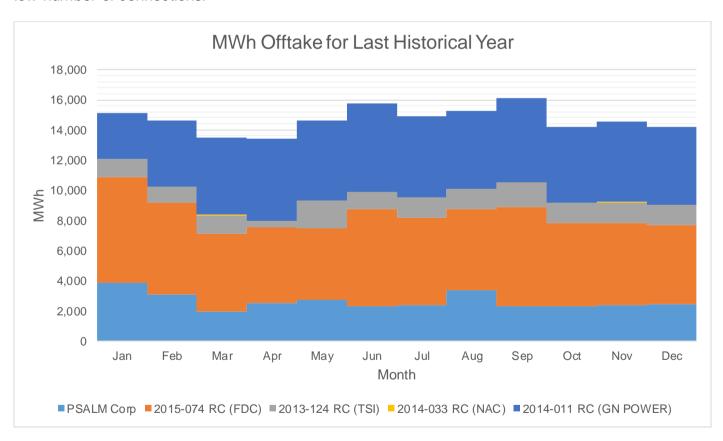


Historically, Transmission Loss ranged from 0.17% to 2.96% while System Loss ranged from 17.80% to 9.32%. Transmission Loss peaked at 2.96% on year 2017 because of steadily increasing load. Our Transmission Loss available system data started in the year 2012 only. System Loss peaked at 17.80% on year 2002 because the substation is located 13kms away from the city properthe system load center.

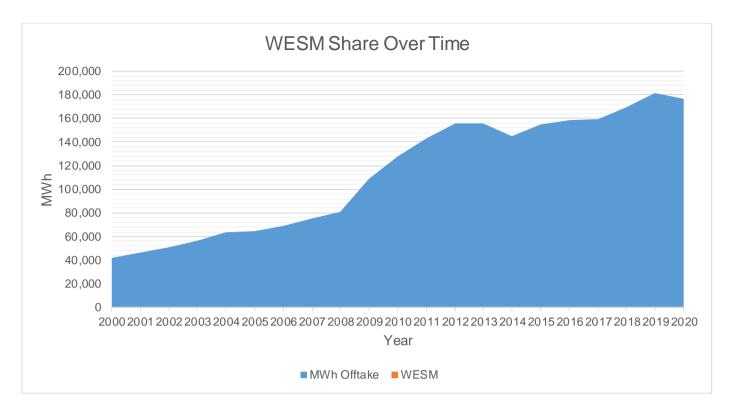
System Loss data for SubTx & SS Technical loss and Non-Technical Loss is only available in year 2014 to present.



Residential customers account for the bulk of energy sales at 59.24% due to the high number of connections. In contrast, Industrial customers accounted for only 6.5% of energy sales due to the low number of connections.



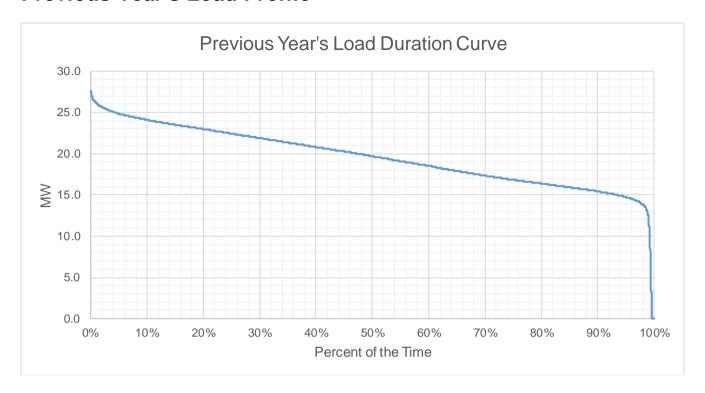
For 2020, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with FDC. accounts for the bulk of MWh Offtake.



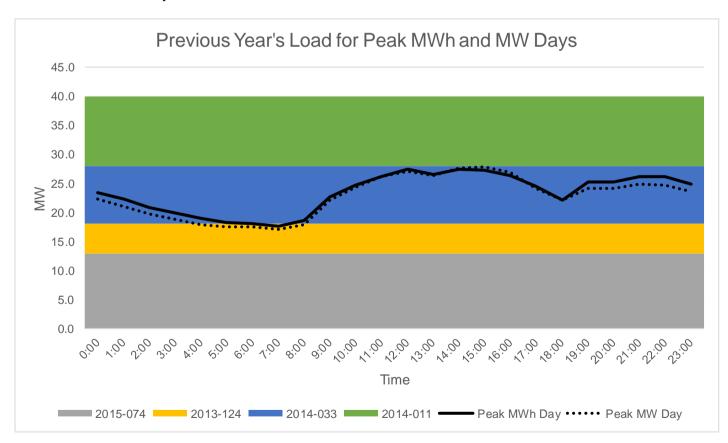
No WESM in Mindanao yet.

SURNECO's application for registration as an Indirect WESM Member (Electric Cooperative Category) has been approved 28 May 2021.

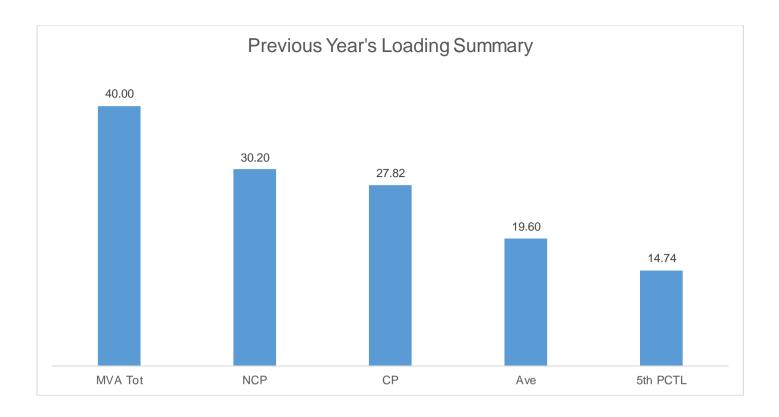
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 0 MW and the maximum load is 27.96 MW for the last historical year.



Peak MW occurred on 12:00 noon due to increase of consumption of captive customers at that time. Peak daily MWh occurred on 12:00 noon due to increase of consumption of captive customers at that time. As shown in the Load Curves, the available supply is higher than the Peak Demand.



The Non-coincident Peak Demand is $\underline{30.20}$ MW, which is around $\underline{75.5}\%$ of the total substation capacity of $\underline{40}$ MVA at a power factor of $\underline{0.755}$. The load factor or the ratio between the Average Load of $\underline{19.60}$ MW and the Non-coincident Peak Demand is $\underline{64.9}\%$ of. A safe estimate of the true minimum load is the fifth percentile load of $\underline{14.74}$ MW which is $\underline{48.81}\%$ of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
M2 Mapaso	5	0.000
M3 Luna	20	18.700
M4 Claver	5	4.915
M6 Tubod	10	6.587

The substations loaded at above 70% are M3-Looc Substation and M4-Ladgaron Substation. This loading problem will be solved by installing new capacity through capital expenditure projects. As of 2020 we have an on-going construction of 10 MVA Substation at Sta. Cruz, Placer, Surigao del Norte which will help resolve temporarily the M3-Looc Substation overloading as well replacement of decommissioned and dilapidated M2-Mapaso 5 MVA Substation.M2-Mapaso 5 MVA Substation was decommissioned last 2019. Additional capex projects will be filed by 2021 to address permanently the overloading problem of the M3-Looc and M4-Ladgaron Substations. The embedded generation Nickel Asia Corporation (NAC) is a peaking plant it has a 15-year Build-Operate-Transfer Contract Scheme with SURNECO. NAC's output energy is in M3-Luna 20MVA Substation to cater the load during peak hours/ in times of slightly deficient supply.

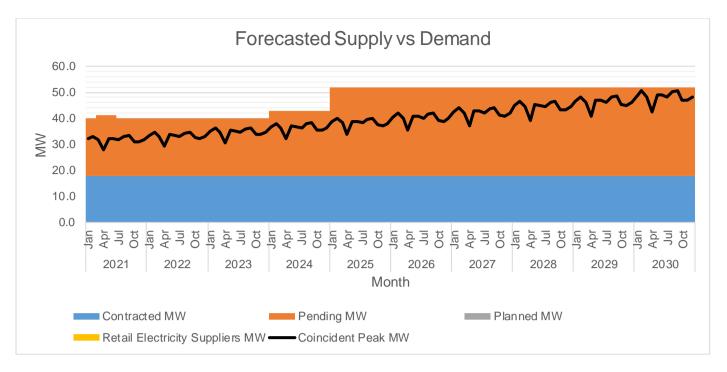
Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2021	Jan	32.00	18.00	22.00	0.000		56%	125%	8.00
	Feb	33.13	18.00	22.00	0.000		54%	121%	6.87
	Mar	31.62	18.00	23.00	0.000		57%	130%	9.38
	Apr	27.89	18.00	23.00	0.000		65%	147%	13.11
	May	32.24	18.00	23.00	0.000		56%	127%	8.76
	Jun	32.08	18.00	23.00	0.000		56%	128%	8.92
	Jul	31.69	18.00	22.00	0.000		57%	126%	8.31
	Aug	32.88	18.00	22.00	0.000		55%	122%	7.12
	Sep	33.23	18.00	22.00	0.000		54%	120%	6.77
	Oct	30.98	18.00	22.00	0.000		58%	129%	9.02
	Nov	30.76	18.00	22.00	0.000		59%	130%	9.24
	Dec	31.61	18.00	22.00	0.000		57%	127%	8.39
2022	Jan	33.48	18.00	22.00	0.000		54%	119%	6.52
	Feb	34.66	18.00	22.00	0.000		52%	115%	5.34
	Mar	33.08	18.00	22.00	0.000		54%	121%	6.92
	Apr	29.18	18.00	22.00	0.000		62%	137%	10.82
	May	33.73	18.00	22.00	0.000		53%	119%	6.27
	Jun	33.56	18.00	22.00	0.000		54%	119%	6.44
	Jul	33.16	18.00	22.00	0.000		54%	121%	6.84
	Aug	34.40	18.00	22.00	0.000		52%	116%	5.60
	Sep	34.77	18.00	22.00	0.000		52%	115%	5.23
	Oct	32.41	18.00	22.00	0.000		56%	123%	7.59
	Nov	32.17	18.00	22.00	0.000		56%	124%	7.83
	Dec	33.07	18.00	22.00	0.000		54%	121%	6.93
2023	Jan	35.06	18.00	22.00	0.000		51%	114%	4.94
	Feb	36.31	18.00	22.00	0.000		50%	110%	3.69
	Mar	34.65	18.00	22.00	0.000		52%	115%	5.35
	Apr	30.56	18.00	22.00	0.000		59%	131%	9.44
	May	35.33	18.00	22.00	0.000		51%	113%	4.67
	Jun	35.15	18.00	22.00	0.000		51%	114%	4.85
	Jul	34.73	18.00	22.00	0.000		52%	115%	5.27
	Aug	36.03	18.00	22.00	0.000		50%	111%	3.97
	Sep	36.41	18.00	22.00	0.000		49%	110%	3.59
	Oct	33.94	18.00	22.00	0.000		53%	118%	6.06
	Nov	33.70	18.00	22.00	0.000		53%	119%	6.30
	Dec	34.63	18.00	22.00	0.000		52%	115%	5.37
2024	Jan	36.75	18.00	25.00	0.000		49%	117%	6.25
	Feb	38.05	18.00	25.00	0.000		47%	113%	4.95
	Mar	36.32	18.00	25.00	0.000		50%	118%	6.68
	Apr	32.03	18.00	25.00	0.000		56%	134%	10.97
	May	37.03	18.00	25.00	0.000		49%	116%	5.97
	Jun	36.84	18.00	25.00	0.000		49%	117%	6.16
	Jul	36.40	18.00	25.00	0.000		49%	118%	6.60
	Aug	37.76	18.00	25.00	0.000		48%	114%	5.24
	Sep	38.17	18.00	25.00	0.000		47%	113%	4.83

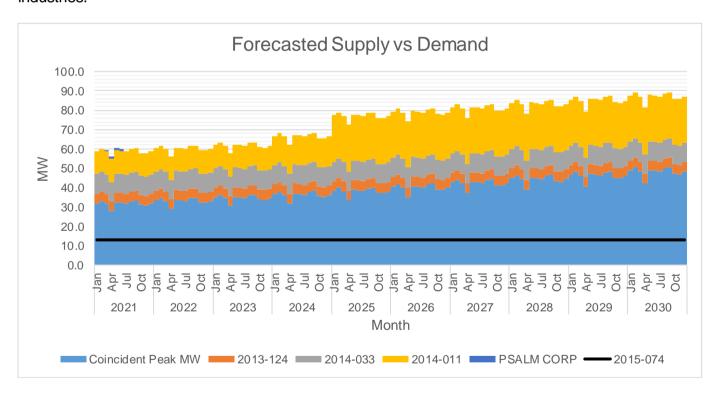
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Oct	35.58	18.00	25.00	0.000		51%	121%	7.42
	Nov	35.32	18.00	25.00	0.000		51%	122%	7.68
	Dec	36.30	18.00	25.00	0.000		50%	118%	6.70
2025	Jan	38.57	18.00	33.80	0.000		47%	134%	13.23
	Feb	39.94	18.00	33.80	0.000		45%	130%	11.86
	Mar	38.12	18.00	33.80	0.000		47%	136%	13.68
	Apr	33.62	18.00	33.80	0.000		54%	154%	18.18
	May	38.86	18.00	33.80	0.000		46%	133%	12.94
	Jun	38.67	18.00	33.80	0.000		47%	134%	13.13
	Jul	38.20	18.00	33.80	0.000		47%	136%	13.60
	Aug	39.63	18.00	33.80	0.000		45%	131%	12.17
	Sep	40.06	18.00	33.80	0.000		45%	129%	11.74
	Oct	37.34	18.00	33.80	0.000		48%	139%	14.46
	Nov	37.07	18.00	33.80	0.000		49%	140%	14.73
	Dec	38.10	18.00	33.80	0.000		47%	136%	13.70
2026	Jan	40.51	18.00	33.80	0.000		44%	128%	11.29
	Feb	41.95	18.00	33.80	0.000		43%	123%	9.85
	Mar	40.04	18.00	33.80	0.000		45%	129%	11.76
	Apr	35.31	18.00	33.80	0.000		51%	147%	16.49
	May	40.82	18.00	33.80	0.000		44%	127%	10.98
	Jun	40.61	18.00	33.80	0.000		44%	128%	11.19
	Jul	40.13	18.00	33.80	0.000		45%	129%	11.67
	Aug	41.63	18.00	33.80	0.000		43%	124%	10.17
	Sep	42.07	18.00	33.80	0.000		43%	123%	9.73
	Oct	39.22	18.00	33.80	0.000		46%	132%	12.58
	Nov	38.94	18.00	33.80	0.000		46%	133%	12.86
	Dec	40.02	18.00	33.80	0.000		45%	129%	11.78
2027	Jan	42.59	18.00	33.80	0.000		42%	122%	9.21
	Feb	44.10	18.00	33.80	0.000		41%	117%	7.70
	Mar	42.09	18.00	33.80	0.000		43%	123%	9.71
	Apr	37.12	18.00	33.80	0.000		48%	140%	14.68
	May	42.91	18.00	33.80	0.000		42%	121%	8.89
	Jun	42.69	18.00	33.80	0.000		42%	121%	9.11
	Jul	42.18	18.00	33.80	0.000		43%	123%	9.62
	Aug	43.76	18.00	33.80	0.000		41%	118%	8.04
	Sep	44.23	18.00	33.80	0.000		41%	117%	7.57
	Oct	41.23	18.00	33.80	0.000		44%	126%	10.57
	Nov	40.93	18.00	33.80	0.000		44%	127%	10.87
	Dec	42.06	18.00	33.80	0.000		43%	123%	9.74
2028	Jan	44.82	18.00	33.80	0.000		40%	116%	6.98
	Feb	46.41	18.00	33.80	0.000		39%	112%	5.39
	Mar	44.29	18.00	33.80	0.000		41%	117%	7.51
	Apr	39.06	18.00	33.80	0.000		46%	133%	12.74
	May	45.16	18.00	33.80	0.000		40%	115%	6.64
	Jun	44.93	18.00	33.80	0.000		40%	115%	6.87
	Jul	44.39	18.00	33.80	0.000		41%	117%	7.41
	Aug	46.05	18.00	33.80	0.000		39%	112%	5.75
	Sep	46.55	18.00	33.80	0.000		39%	111%	5.25

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Oct	43.39	18.00	33.80	0.000		41%	119%	8.41
	Nov	43.08	18.00	33.80	0.000		42%	120%	8.72
	Dec	44.27	18.00	33.80	0.000		41%	117%	7.53
2029	Jan	46.71	18.00	33.80	0.000		39%	111%	5.09
	Feb	48.37	18.00	33.80	0.000		37%	107%	3.43
	Mar	46.16	18.00	33.80	0.000		39%	112%	5.64
	Apr	40.71	18.00	33.80	0.000		44%	127%	11.09
	May	47.06	18.00	33.80	0.000		38%	110%	4.74
	Jun	46.83	18.00	33.80	0.000		38%	111%	4.97
	Jul	46.26	18.00	33.80	0.000		39%	112%	5.54
	Aug	48.00	18.00	33.80	0.000		38%	108%	3.80
	Sep	48.51	18.00	33.80	0.000		37%	107%	3.29
	Oct	45.22	18.00	33.80	0.000		40%	115%	6.58
	Nov	44.89	18.00	33.80	0.000		40%	115%	6.91
	Dec	46.14	18.00	33.80	0.000		39%	112%	5.66
2030	Jan	48.69	18.00	33.80	0.000		37%	106%	3.11
	Feb	50.42	18.00	33.80	0.000		36%	103%	1.38
	Mar	48.12	18.00	33.80	0.000		37%	108%	3.68
	Apr	42.44	18.00	33.80	0.000		42%	122%	9.36
	May	49.06	18.00	33.80	0.000		37%	106%	2.74
	Jun	48.81	18.00	33.80	0.000		37%	106%	2.99
	Jul	48.23	18.00	33.80	0.000		37%	107%	3.57
	Aug	50.03	18.00	33.80	0.000		36%	104%	1.77
	Sep	50.57	18.00	33.80	0.000		36%	102%	1.23
	Oct	47.14	18.00	33.80	0.000		38%	110%	4.66
	Nov	46.80	18.00	33.80	0.000		38%	111%	5.00
	Dec	48.10	18.00	33.80	0.000		37%	108%	3.70

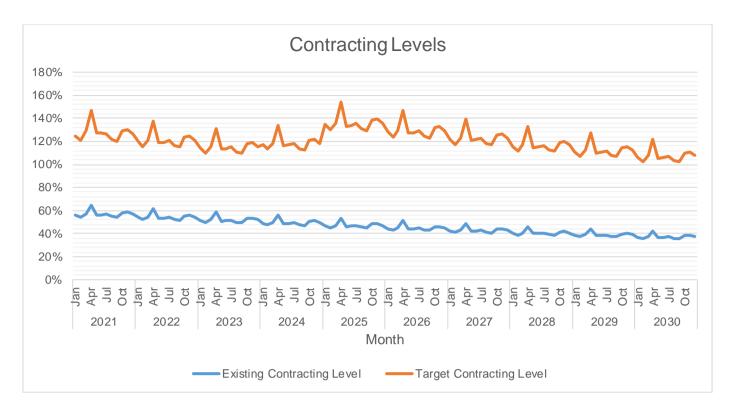
The Peak Demand was forecasted using trend analysis and was assumed to occur on the month of September due to increase in energy consumption during Surigao City fiesta. Monthly Peak Demand is at its lowest on the month of February due to low energy consumption of captive customers. In general, Peak Demand is expected to grow at a rate of 4.56% annually. The supply and demand are greatly affected by the large load-mining industries shut downed brought by government regulations, expected loads in these customers are not meet as forecasted that resulted to Excess Capacity. Some mining industries are starting their rehabilitation for possible re-operation but no schedules of load are given hence, this cannot be reflected in the forecast. The re- operation of mining industries is expected to have a ripple effect in the surrounding Residential, industrial and commercial sectors in terms of increase demand and energy consumption.



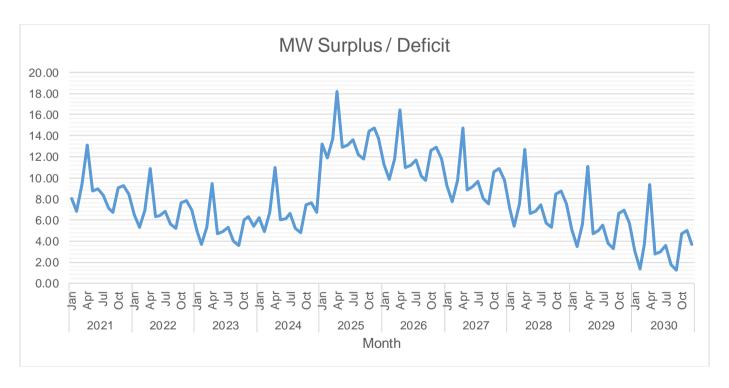
The available supply is generally above the Peak Demand. This is because the contracted supply capacity is generally higher than the demand due to shutting down of large load like mining industries.



Of the available supply, the largest is 23.8 MW from GN Power-Kauswagan Inc. This is followed by 13 MW from FDC-Misamis Corporation.



Currently, there is over-contracting by 143.05%. The highest target contracting level is 154% which is expected to occur in April 2025. The lowest target contracting level is 102% which is expected to occur in September 2030. NAC and GNPK are still having a provisionally approved PSA with ERC; the two-generation supplier has corresponding capacities of 10MW and 23.8MW respectively.



Currently, there is over-contracting by 12.04 MW. The highest surplus is 11.86 MW which is expected to occur on the month of February 2025. The lowest surplus is 1.23 MW which is expected to occur on the month of September 2030.

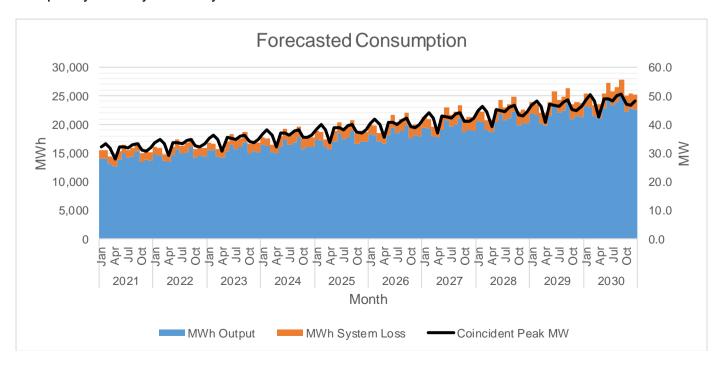
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	15,674	14,067	1,482	0.80%	9.53%
	Feb	15,597	13,951	1,550	0.62%	10.00%
	Mar	14,427	13,016	1,298	0.78%	9.07%
	Apr	14,280	12,795	1,363	0.86%	9.62%
	May	15,385	13,840	1,421	0.81%	9.31%
	Jun	16,600	14,940	1,499	0.97%	9.12%
	Jul	15,642	14,141	1,380	0.77%	8.89%
	Aug	16,027	14,452	1,443	0.82%	9.08%
	Sep	16,870	15,231	1,520	0.71%	9.07%
	Oct	15,052	13,504	1,451	0.64%	9.70%
	Nov	15,390	13,829	1,432	0.84%	9.38%
	Dec	15,164	13,716	1,364	0.56%	9.04%
2022	Jan	16,131	14,773	1,225	0.82%	7.66%
	Feb	15,938	14,653	1,147	0.87%	7.26%
	Mar	15,000	13,670	1,114	1.44%	7.53%
	Apr	14,958	13,436	1,377	0.97%	9.30%
	May	16,117	14,534	1,529	0.34%	9.52%
	Jun	17,394	15,689	1,607	0.56%	9.29%
	Jul	16,387	14,851	1,484	0.32%	9.08%
	Aug	16,896	15,178	1,557	0.96%	9.30%
	Sep	17,783	15,995	1,647	0.79%	9.34%
	Oct	15,857	14,182	1,584	0.58%	10.05%
	Nov	16,122	14,522	1,532	0.43%	9.54%
	Dec	15,975	14,405	1,468	0.64%	9.25%
2023	Jan	16,967	15,554	1,323	0.53%	7.84%
	Feb	16,757	15,428	1,241	0.53%	7.44%
	Mar	15,656	14,393	1,204	0.38%	7.72%
	Apr	15,707	14,144	1,486	0.49%	9.51%
	May	17,026	15,300	1,649	0.45%	9.73%
	Jun	18,372	16,518	1,724	0.71%	9.45%
	Jul	17,310	15,635	1,588	0.50%	9.22%
	Aug	17,746	15,979	1,659	0.61%	9.40%
	Sep	18,681	16,840	1,756	0.46%	9.44%
	Oct	16,736	14,931	1,705	0.60%	10.25%
	Nov	17,023	15,289	1,648	0.51%	9.73%
	Dec	16,761	15,166	1,574	0.12%	9.40%
2024	Jan	18,017	16,411	1,421	1.03%	7.97%
	Feb	17,777	16,279	1,329	0.95%	7.55%
	Mar	16,712	15,186	1,292	1.40%	7.84%
	Apr	16,657	14,920	1,594	0.86%	9.65%
	May	17,947	16,141	1,760	0.26%	9.83%
	Jun	19,364	17,426	1,846	0.47%	9.58%
	Jul	18,346	16,496	1,711	0.76%	9.40%
	Aug	18,812	16,858	1,785	0.90%	9.58%
	Sep	19,796	17,767	1,887	0.71%	9.60%
	Oct	17,735	15,752	1,822	0.90%	10.37%
	Nov	18,036	16,130	1,757	0.82%	9.83%
	Dec	17,856	16,001	1,685	0.95%	9.53%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2025	Jan	18,970	17,344	1,515	0.58%	8.04%
	Feb	18,704	17,205	1,422	0.41%	7.63%
	Mar	17,508	16,049	1,382	0.44%	7.93%
	Apr	17,604	15,766	1,702	0.77%	9.74%
	May	19,067	17,058	1,879	0.68%	9.92%
	Jun	20,464	18,416	1,971	0.38%	9.67%
	Jul	19,383	17,434	1,823	0.65%	9.47%
	Aug	19,881	17,816	1,905	0.81%	9.66%
	Sep	20,921	18,777	2,012	0.63%	9.68%
	Oct	18,710	16,648	1,936	0.67%	10.42%
	Nov	19,080	17,046	1,887	0.78%	9.96%
	Dec	18,848	16,911	1,809	0.68%	9.66%
2026	Jan	20,209	18,355	1,638	1.07%	8.19%
	Feb	20,217	18,209	1,530	2.36%	7.75%
	Mar	18,690	16,985	1,497	1.12%	8.10%
	Apr	18,629	16,683	1,833	0.61%	9.90%
	May	20,272	18,050	2,026	0.96%	10.09%
	Jun	21,656	19,489	2,117	0.23%	9.80%
	Jul	20,606	18,449	1,967	0.93%	9.63%
	Aug	21,039	18,854	2,050	0.64%	9.81%
	Sep	22,139	19,870	2,168	0.45%	9.84%
	Oct	19,876	17,617	2,092	0.84%	10.61%
	Nov	20,248	18,038	2,026	0.91%	10.10%
	Dec	20,023	17,896	1,939	0.94%	9.78%
2027	Jan	21,337	19,444	1,755	0.65%	8.28%
	Feb	21,115	19,290	1,650	0.83%	7.88%
	Mar	19,788	17,993	1,606	0.96%	8.19%
	Apr	19,734	17,670	1,962	0.51%	10.00%
	May	21,362	19,119	2,171	0.34%	10.20%
	Jun	23,040	20,644	2,269	0.55%	9.90%
	Jul	21,816	19,543	2,103	0.78%	9.72%
	Aug	22,287	19,971	2,195	0.54%	9.90%
	Sep	23,451	21,049	2,314	0.38%	9.90%
	Oct	21,124	18,661	2,234	1.08%	10.69%
	Nov	21,530	19,107	2,167	1.19%	10.19%
	Dec	21,180	18,957	2,077	0.69%	9.87%
2028	Jan	22,653	20,611	1,867	0.77%	8.31%
	Feb	22,700	20,449	1,751	2.20%	7.89%
	Mar	20,986	19,073	1,706	0.99%	8.21%
	Apr	20,918	18,728	2,082	0.51%	10.01%
	May	22,737	20,265	2,305	0.73%	10.21%
	Jun	24,416	21,882	2,403	0.54%	9.90%
	Jul	23,113	20,716	2,234	0.71%	9.73%
	Aug	23,623	21,169	2,326	0.55%	9.90%
	Sep	24,858	22,311	2,459	0.35%	9.93%
	Oct	22,356	19,781	2,373	0.90%	10.71%
	Nov	22,697	20,252	2,299	0.64%	10.19%
	Dec	22,420	20,095	2,200	0.56%	9.87%

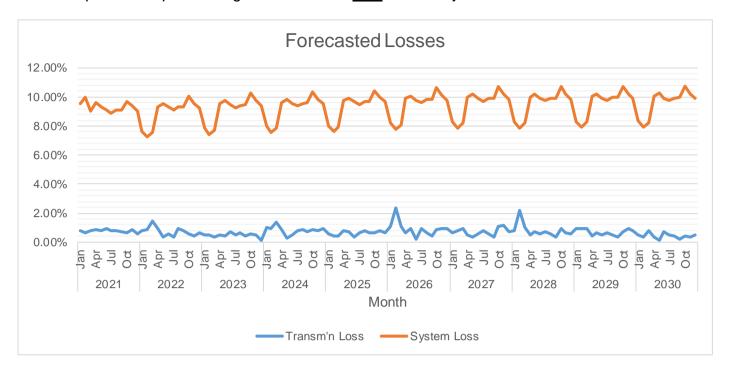
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2029	Jan	24,075	21,857	1,986	0.96%	8.33%
	Feb	23,771	21,686	1,867	0.92%	7.93%
	Mar	22,254	20,226	1,823	0.92%	8.27%
	Apr	22,181	19,858	2,223	0.45%	10.07%
	May	24,098	21,488	2,450	0.67%	10.23%
	Jun	25,885	23,203	2,559	0.47%	9.93%
	Jul	24,497	21,967	2,373	0.64%	9.75%
	Aug	25,051	22,447	2,482	0.48%	9.95%
	Sep	26,360	23,659	2,616	0.32%	9.95%
	Oct	23,670	20,975	2,522	0.73%	10.73%
	Nov	24,150	21,475	2,450	0.93%	10.24%
	Dec	23,845	21,309	2,346	0.79%	9.92%
2030	Jan	25,456	23,207	2,114	0.53%	8.35%
	Feb	25,112	23,026	1,989	0.39%	7.95%
	Mar	23,602	21,476	1,931	0.83%	8.25%
	Apr	23,525	21,082	2,360	0.35%	10.07%
	May	25,446	22,811	2,603	0.13%	10.24%
	Jun	27,547	24,630	2,716	0.73%	9.93%
	Jul	25,969	23,322	2,526	0.46%	9.77%
	Aug	26,568	23,832	2,631	0.40%	9.94%
	Sep	27,957	25,118	2,779	0.21%	9.96%
	Oct	25,067	22,272	2,682	0.45%	10.75%
	Nov	25,489	22,801	2,600	0.34%	10.23%
	Dec	25,252	22,626	2,494	0.52%	9.93%

MWh Offtake was forecasted using trend analysis. The assumed load factor is 65%.

System Loss was calculated through a Load Flow Study conducted by Technical Services Department using DSAS software. Based on the same study, the Distribution System can adequately convey electricity to customers.



MWh Output was expected to grow at a rate of <u>5.41</u>% annually.



Transmission Loss is expected to range from 0.12% to 3.70% while System Loss is expected to range from 7.26% to 10.76%.

Power Supply

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2015-074	Base	FDC Misamis Power Corporation	5.20	45,552	10/14/2016	10/13/2031
2013-124	Base	Therma South, Inc.	2.00	17,552	9/18/2015	9/17/2040

The **PSA with FDC Misamis Power Corporation filed with ERC under Case No. 2015-074RC** was procured through negotiation. It was selected to provide for base requirements due to energy crisis at that time. Historically, the utilization of the PSA is 57%. Outages of the plant led to unserved energy of around 2,808 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 7.5375 P/kWh to 9.0694 P/KWh in the same period.

The **PSA with Thema South Inc. (TSI) filed with ERC under Case No. 2013-124RC** was procured through negotiation. It was selected to provide for base requirements due to energy crisis at that time. Historically, the utilization of the PSA is 35%. Outages of the plant led to unserved energy of around 13,357.50 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 8.2727 P/kWh to 9.2499 P/KWh in the same period.

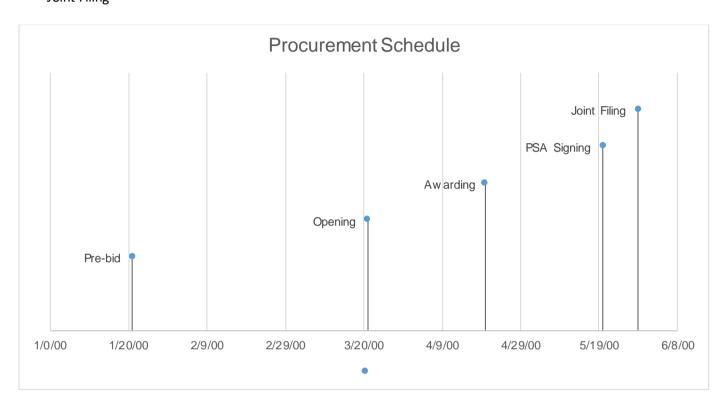
Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2014-033	Base	Nickel Asia Corporation	0.00	0	6/26/2018	6/25/2033
2014-011	Base	GN Power Kauswagan Ltd.	18.00	156,366	12/26/2019	12/25/2039
PSALM CORP	Base	Power Sector Assets and Liabilities Management Corporation	2.78	30,715	12/26/2017	7/28/2021

The PSA with Nickel Asia Corporation filed with ERC under Case No 2014-033RC was procured through negotiation. It was selected to provide for peaking requirements energy crisis at that time. Historically, the utilization of the PSA is 0%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 1,510.2879 P/kWh to 15 million in the same period. Currently, NAC secured Provisional Authority from ERC and the PSA is still pending for approval. As per contract, there is no minimum MW and MWhr requirement but for the reason of technical efficiency of the plant units, it is recommended for each unit to run at 30% of the maximum MW capacity per unit-this is approximately equivalent to 1.0944 MW.

The **PSA with GN Power Kauswagan Ltd. filed with ERC under Case No. 2014-011RC** was procured through negotiation. It was selected to provide for base requirements due to energy crisis at that time. Historically, the utilization of the PSA is 77%. Outages of the plant led to unserved energy of around 0 MWh in the past year. The actual billed overall monthly charge under the PSA ranged from 5.3659 P/kWh to 7.6583 P/kWh in the same period. Currently, GN Power Kauswagan Ltd. secured Provisional Authority from ERC and the PSA is still pending for approval.

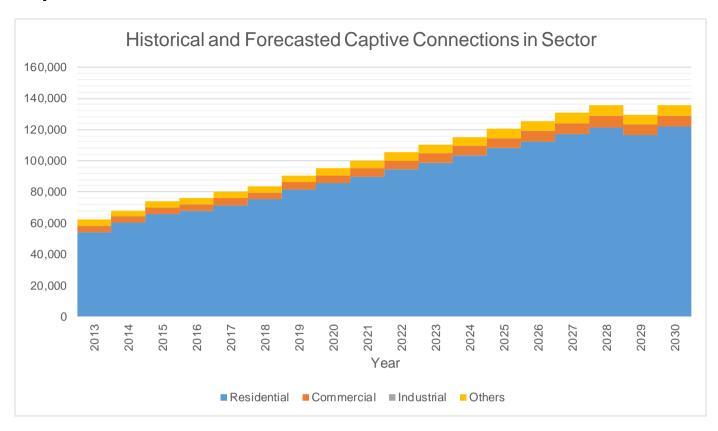
Туре	
Minimum MW	
Minimum MWh/yr	
PSA Start	
PSA End	
Publication	

Pre-bid Opening Awarding PSA Signing Joint Filing



SURNEO's has no plan for Competitive Selection Process considering that the supply is more than enough to cater the expected load until 2030.

Captive Customer Connections



The number of total captive connections composed of Residential, Commercial, Industrial, Public Building and Streetlights is expected to grow at a rate of 4.45% annually. Said customer class is expected to account for 100% of the total consumption.