# **Power Supply Procurement Plan**

2024-2033

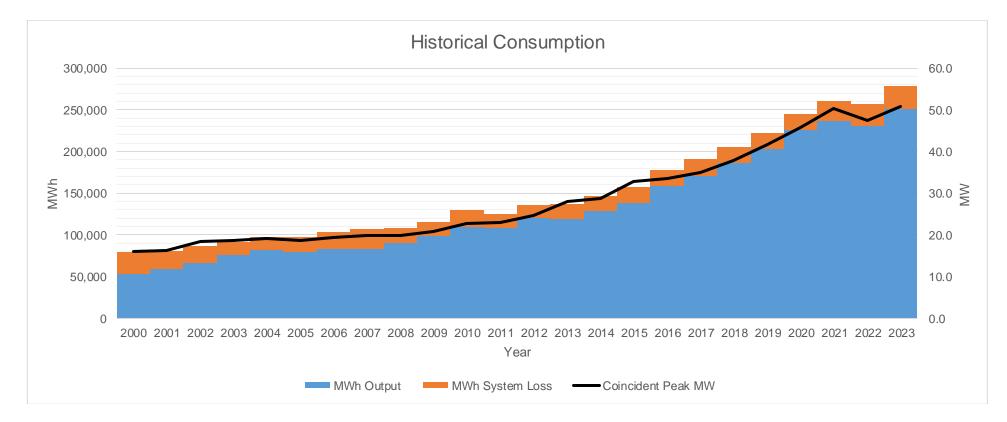
NUEVA ECIJA I ELECTRIC COOPERATIVE INC

# **Historical Consumption Data**

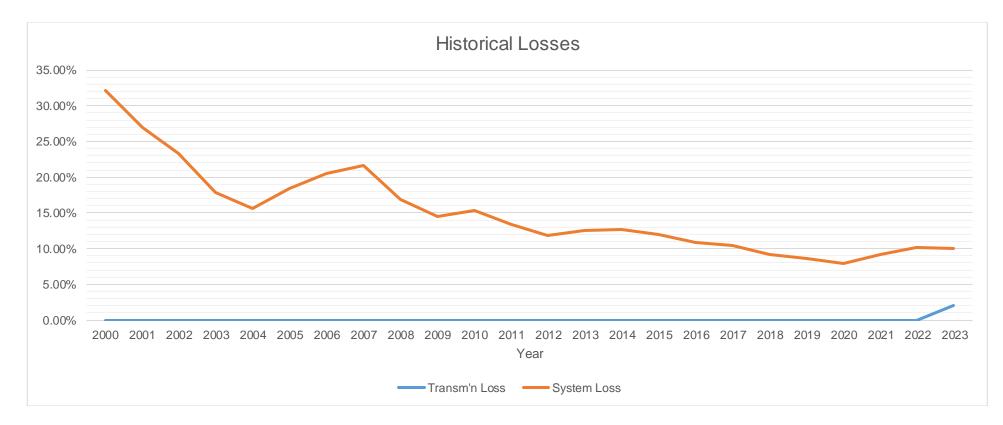
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	16.07	78,818	0	78,818	53,441	25,377	56%	0.00%	0.00%	32.20%
2001	16.30	80,362	0	80,362	58,701	21,661	56%	0.00%	0.00%	26.95%
2002	18.48	86,128	0	86,128	66,058	20,071	53%	0.00%	0.00%	23.30%
2003	18.72	91,731	0	91,731	75,344	16,387	56%	0.00%	0.00%	17.86%
2004	19.07	97,023	0	97,023	81,809	15,214	58%	0.00%	0.00%	15.68%
2005	18.64	97,651	0	97,651	79,620	18,032	60%	0.00%	0.00%	18.47%
2006	19.27	103,827	0	103,827	82,474	21,352	62%	0.00%	0.00%	20.57%
2007	19.72	106,485	0	106,485	83,388	23,098	62%	0.00%	0.00%	21.69%
2008	19.83	108,702	0	108,702	90,415	18,287	63%	0.00%	0.00%	16.82%
2009	20.90	115,864	0	115,864	98,982	16,882	63%	0.00%	0.00%	14.57%
2010	22.65	129,639	0	129,639	109,664	19,975	65%	0.00%	0.00%	15.41%
2011	22.91	124,756	0	124,756	108,108	16,646	62%	0.00%	0.00%	13.34%
2012	24.57	135,842	0	135,842	119,799	16,043	63%	0.00%	0.00%	11.81%
2013	27.91	136,405	1,897	136,405	119,346	17,059	56%	0.00%	0.00%	12.51%
2014	28.64	146,796	1,402	146,796	128,099	18,697	59%	0.00%	0.00%	12.74%
2015	32.87	157,709	8,257	157,709	138,729	18,980	55%	0.00%	0.00%	12.04%
2016	33.40	178,100	20,726	178,100	158,813	19,282	61%	0.00%	0.00%	10.83%
2017	34.91	191,001	20,302	191,001	170,977	20,025	62%	0.00%	0.00%	10.48%
2018	37.84	205,075	31,354	205,075	186,175	18,900	62%	0.00%	0.00%	9.22%
2019	41.73	222,471	42,902	222,471	203,319	19,131	61%	-0.01%	0.00%	8.60%
2020	45.75	244,632	22,053	244,632	225,183	19,451	61%	0.00%	0.00%	7.95%
2021	50.39	260,984	56,675	260,984	236,373	23,921	59%	-0.26%	0.00%	9.17%
2022	47.44	257,939	30,615	257,938	231,057	26,384	62%	-0.19%	0.00%	10.23%
2023	50.68	283,890	101,346	278,170	250,407	27,763	63%	0.00%	2.01%	9.98%

There was a **6.8** % increase in Peak Demand or 47.44 MW in 2022 to 50.68 MW in 2023, attributed to additional large loads such as Robinsons Mall and Robinsons Supermarket in the City of Gapan and other business ventures within the coverage area of NEECO 1. Correspondingly, MWh Offtake increases from 257,939 MWh in 2022 to 283,890 MWh in 2023 or an equivalent percentage of 10.06%. In addition, Load Factor increased from 62% to 63%.

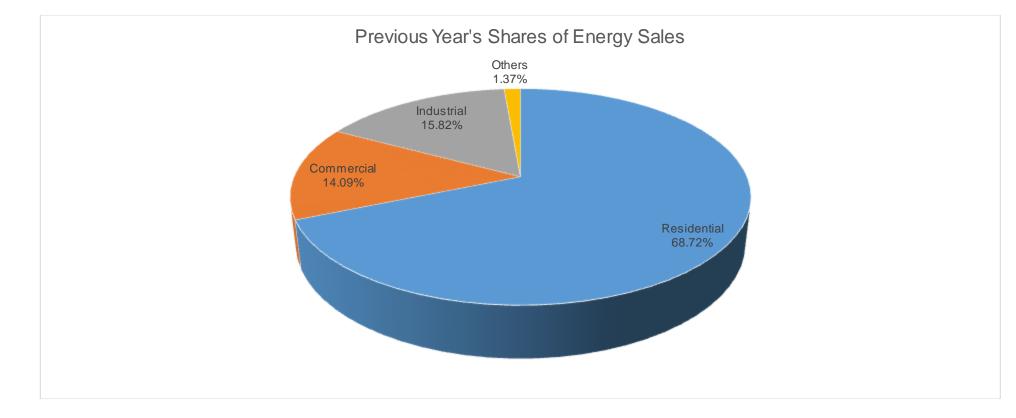
The negative non-technical loss is attributed to the one (1) month delay reading period of NEECO 1 equated to NGCP's reading being conducted every 26<sup>th</sup> day of the month. A further study also revealed that the prolonged reading period of NEECO 1 that lasted for twenty (20) days is likewise a contributory factor of the rise and fall of the non-technical loss. To address this issue, the management is now implementing a gradual adjustment of reading period to synchronize with the NGCP. The sudden rise and fall of the losses is because of the billing cycle. Due to the typhoon Karding, our billing cycle change and all the consumption of this period are allocated to the succeeding month.



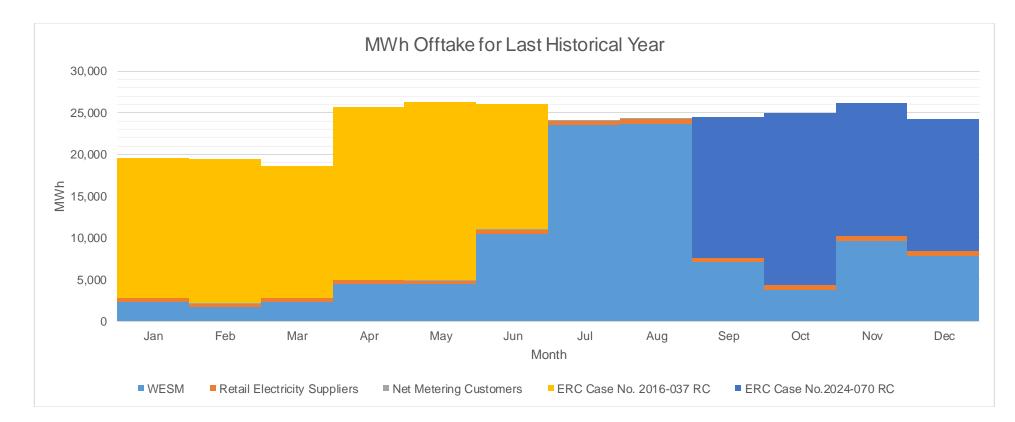
An 8.3 % increase in MWh Output was record in year 2022 to year 2023. System Loss recorded at 9.98% within the same period.



Historically, Transmission Loss ranges from 0.0% to 2.01% while there was a decrease in System Loss from 10.23% to 9.98%. The highest System Loss recorded at 32.22% in year 2000.



The pie graph represents the Residential customers, which dominated the energy sales at 68.72%, Industrial customers at 15.82% and Commercial customers at 14.09%.



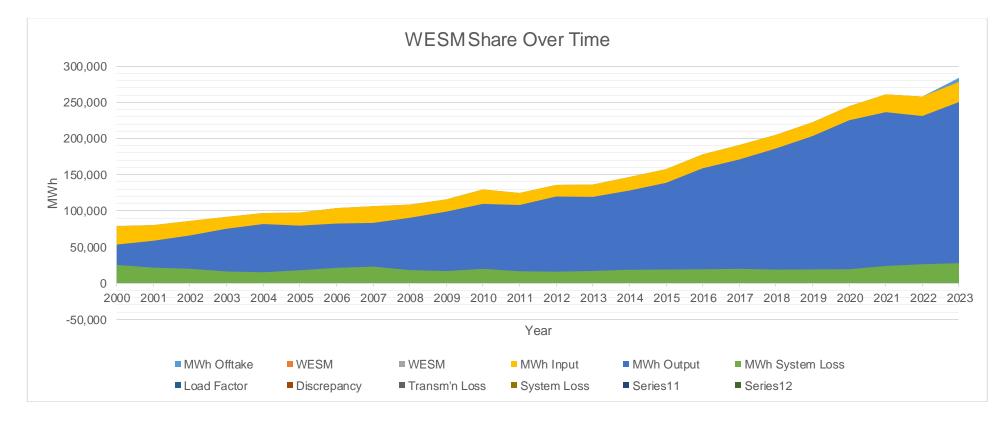
Last June 2023, the PSA contract of NEECO 1 with GNPD (ERC Case No. 2016-037) was cancelled/annulled by the Energy Regulatory Commission (ERC) as form part of the Alyansa Case filed by Evelyn V. Jallorina and Noel Villones. During the month of July and August 2023, our generation supply was sourced out from the Wholesale Electricity Spot Market (WESM) while fortifying an Emergency Power Supply Agreement (EPSA) from a qualified power supplier. In conclusion, the 40 MW Power Supply Agreement (PSA) between MPPCL (ERC Case No. 2024-070) and NEECO I under the EPSA commenced last September 2023 with a validity period for one (1) year.

It should be noted that there is a provision in the existing contract with MPPCL under EPSA which states;

#### ANNEX I CONTRACT CAPACITY AND CONTRACT ENERGY

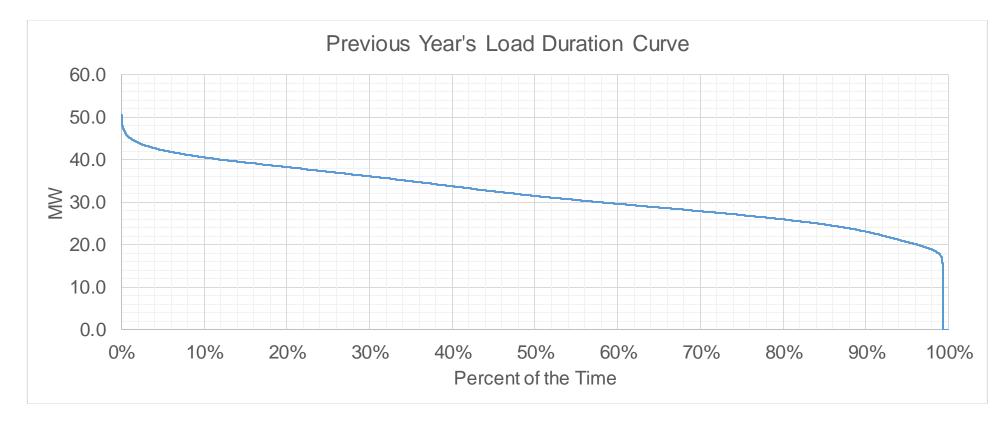
- 1. The Contract Capacity for the duration of the Agreement shall be 40,000 kW.
- 2. BUYER shall commit to a minimum nomination per trading interval of fifty percent (50%) with respect to the Contract Capacity for the duration of the Agreement. Below are the pertinent Monthly Contract Energy for the duration of the Agreement.

No. of Days per Billing Period	Monthly Contract Energy, kWh			
29 Days	13,920,000			
30 Days	14,400,000			
31 Days	14,880,000			

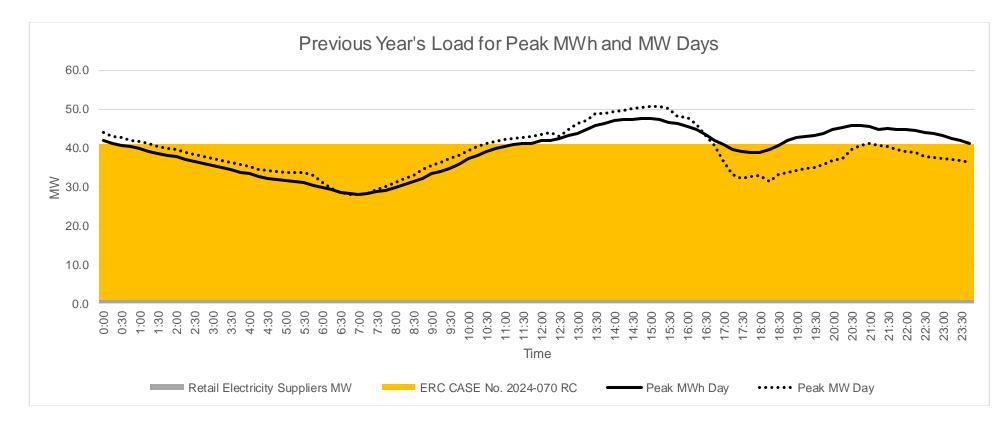


Exposure to WESM increased from 30,615 MWh in 2022 to 101,346 MWh in 2023 at a rate of **231.03 %** attributed to the cancelation of our PSA contract with GNPD last June 2023. The share of WESM in the total Offtake ranges from 11.87% to 36.43%. In October 2022, typh oon Karding hit the entire province of Nueva Ecija that likewise instigated WESM exposure.

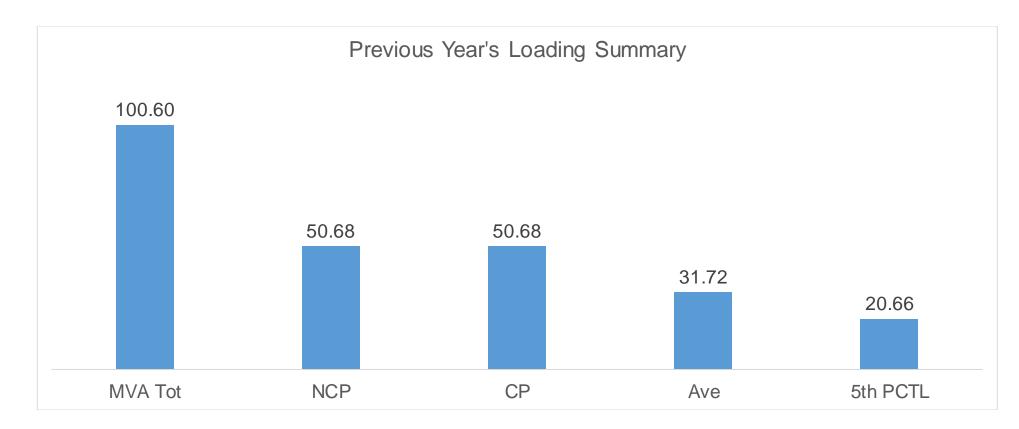
## **Previous Year's Load Profile**



Based on the Load Duration Curve, the minimum load is 22.43 MW and the maximum load is 50.68 MW for the last historical year. Prior to this Load Duration Curve we experience a minimal unwanted interruption that is tolerable and with our annual preventive maintenance that effect to our Load Duration Curve last year.



Peak MW occurred in May 2023 with 50.68 MW, due to hot weather condition in the Province of Nueva Ecija especially to our are a coverage. As shown in the graph, the Load Curves, exert high demand versus to our contracted demand. This is also shown that our peak the demand is in the morning at the range of 3:00 PM afternoon and a minimal peak demand around 9:00 PM in the evening.



The Non-coincident Peak Demand is 50.68 MW, which is around 50.37% of the total substation capacity of 100.60MVA at a power factor of 0.97. The load factor or the ratio between the Average Load of 31.72 MW and the Non-coincident Peak Demand is 62.58%. A safe estimate of the true minimum load is the fifth percentile load of 20.66 MW, which is 40.76% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
GAPAN SS	25	15.711
MALAPIT SS	14.4	7.095
SAN ROQUE SS	11.2	9.629
SAPANG SS	25	14.190
BALUARTE SS	25	4.054

The substations loading above 70% are San Roque Substation in San Roque, San Isidro Nueva Ecija with a percent loading of 85.97%, while the remaining substation are in normal condition. But with the increase of demand and possible investment and establishment that may interconnected to our system. The remaining Sapang Substation (Sapang, Jaen) and Bayanihan Substation (Bayanihan, Gapan City) will be

increase their percentage loading to 70% which can be resolved by putting up additional substations. Currently, the construction of 1-20/25MVA in San Roque, Cabiao to serve the entire municipality of Cabiao is on – going. This project is included in our CAPEX plan.

# **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
2024	Jan	40.30	40.00	0.00	0.000	1.00	102%	102%	0.70
	Feb	41.38	40.00	0.00	0.000	1.00	99%	99%	-0.38
	Mar	45.23	40.00	0.00	0.000	1.00	90%	90%	-4.23
	Apr	52.81	40.00	0.00	0.000	1.00	77%	77%	-11.81
	May	53.40	40.00	0.00	0.000	1.00	76%	76%	-12.40
	Jun	53.47	40.00	0.00	0.000	1.00	76%	76%	-12.47
	Jul	53.09	40.00	0.00	0.000	1.00	77%	77%	-12.09
	Aug	52.38	40.00	0.00	0.000	1.00	78%	78%	-11.38
	Sep	51.96	0.00	0.00	40.000	1.00	0%	78%	-10.96
	Oct	50.75	0.00	0.00	40.000	1.00	0%	80%	-9.75
	Nov	51.35	0.00	0.00	40.000	1.00	0%	79%	-10.35
	Dec	47.53	0.00	0.00	40.000	1.00	0%	86%	-6.53
2025	Jan	42.22	0.00	0.00	40.000	1.00	0%	97%	-1.22
	Feb	43.35	0.00	0.00	40.000	1.00	0%	94%	-2.35
	Mar	47.38	0.00	0.00	40.000	1.00	0%	86%	-6.38
	Apr	55.32	0.00	0.00	40.000	1.00	0%	74%	-14.32
	May	55.94	0.00	0.00	40.000	1.00	0%	73%	-14.94
	Jun	56.02	0.00	0.00	40.000	1.00	0%	73%	-15.02
	Jul	55.61	0.00	0.00	40.000	1.00	0%	73%	-14.61
	Aug	54.87	0.00	0.00	40.000	1.00	0%	74%	-13.87
	Sep	54.43	0.00	0.00	42.000	1.00	0%	79%	-11.43
	Oct	53.16	0.00	0.00	42.000	1.00	0%	81%	-10.16
	Nov	53.80	0.00	0.00	42.000	1.00	0%	80%	-10.80
	Dec	49.79	0.00	0.00	42.000	1.00	0%	86%	-6.79

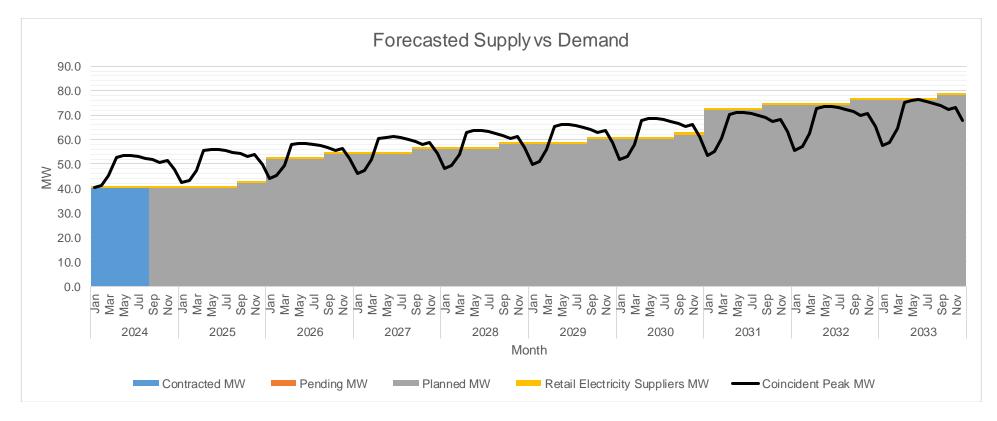
2026	Jan	44.13	0.00	0.00	52.000	1.00	0%	121%	8.87
	Feb	45.31	0.00	0.00	52.000	1.00	0%	117%	7.69
	Mar	49.52	0.00	0.00	52.000	1.00	0%	107%	3.48
	Apr	57.82	0.00	0.00	52.000	1.00	0%	92%	-4.82
	May	58.48	0.00	0.00	52.000	1.00	0%	90%	-5.48
	Jun	58.55	0.00	0.00	52.000	1.00	0%	90%	-5.55
	Jul	58.13	0.00	0.00	52.000	1.00	0%	91%	-5.13
	Aug	57.35	0.00	0.00	52.000	1.00	0%	92%	-4.35
	Sep	56.89	0.00	0.00	54.000	1.00	0%	97%	-1.89
	Oct	55.57	0.00	0.00	54.000	1.00	0%	99%	-0.57
	Nov	56.23	0.00	0.00	54.000	1.00	0%	98%	-1.23
	Dec	52.04	0.00	0.00	54.000	1.00	0%	106%	2.96
2027	Jan	46.04	0.00	0.00	54.000	1.00	0%	120%	8.96
	Feb	47.27	0.00	0.00	54.000	1.00	0%	117%	7.73
	Mar	51.67	0.00	0.00	54.000	1.00	0%	107%	3.33
	Apr	60.32	0.00	0.00	54.000	1.00	0%	91%	-5.32
	May	61.01	0.00	0.00	54.000	1.00	0%	90%	-6.01
	Jun	61.09	0.00	0.00	54.000	1.00	0%	90%	-6.09
	Jul	60.65	0.00	0.00	54.000	1.00	0%	91%	-5.65
	Aug	59.83	0.00	0.00	54.000	1.00	0%	92%	-4.83
	Sep	59.35	0.00	0.00	56.000	1.00	0%	96%	-2.35
	Oct	57.98	0.00	0.00	56.000	1.00	0%	98%	-0.98
	Nov	58.67	0.00	0.00	56.000	1.00	0%	97%	-1.67
	Dec	54.30	0.00	0.00	56.000	1.00	0%	105%	2.70
2028	Jan	47.95	0.00	0.00	56.000	1.00	0%	119%	9.05
	Feb	49.23	0.00	0.00	56.000	1.00	0%	116%	7.77
	Mar	53.81	0.00	0.00	56.000	1.00	0%	106%	3.19
	Apr	62.82	0.00	0.00	56.000	1.00	0%	91%	-5.82
	May	63.53	0.00	0.00	56.000	1.00	0%	90%	-6.53
	Jun	63.62	0.00	0.00	56.000	1.00	0%	89%	-6.62
	Jul	63.16	0.00	0.00	56.000	1.00	0%	90%	-6.16
	Aug	62.31	0.00	0.00	56.000	1.00	0%	91%	-5.31
	Sep	61.81	0.00	0.00	58.000	1.00	0%	95%	-2.81

	Oct	60.38	0.00	0.00	58.000	1.00	0%	98%	-1.38
	Nov	61.10	0.00	0.00	58.000	1.00	0%	97%	-2.10
	Dec	56.54	0.00	0.00	58.000	1.00	0%	104%	2.46
2029	Jan	49.85	0.00	0.00	58.000	1.00	0%	119%	9.15
	Feb	51.18	0.00	0.00	58.000	1.00	0%	116%	7.82
	Mar	55.94	0.00	0.00	58.000	1.00	0%	106%	3.06
	Apr	65.32	0.00	0.00	58.000	1.00	0%	90%	-6.32
	May	66.05	0.00	0.00	58.000	1.00	0%	89%	-7.05
	Jun	66.14	0.00	0.00	58.000	1.00	0%	89%	-7.14
	Jul	65.67	0.00	0.00	58.000	1.00	0%	90%	-6.67
	Aug	64.79	0.00	0.00	58.000	1.00	0%	91%	-5.79
	Sep	64.27	0.00	0.00	60.000	1.00	0%	95%	-3.27
	Oct	62.77	0.00	0.00	60.000	1.00	0%	97%	-1.77
	Nov	63.52	0.00	0.00	60.000	1.00	0%	96%	-2.52
	Dec	58.79	0.00	0.00	60.000	1.00	0%	104%	2.21
2030	Jan	51.75	0.00	0.00	60.000	1.00	0%	118%	9.25
	Feb	53.13	0.00	0.00	60.000	1.00	0%	115%	7.87
	Mar	58.07	0.00	0.00	60.000	1.00	0%	105%	2.93
	Apr	67.80	0.00	0.00	60.000	1.00	0%	90%	-6.80
	May	68.57	0.00	0.00	60.000	1.00	0%	89%	-7.57
	Jun	68.66	0.00	0.00	60.000	1.00	0%	89%	-7.66
	Jul	68.17	0.00	0.00	60.000	1.00	0%	89%	-7.17
	Aug	67.25	0.00	0.00	60.000	1.00	0%	91%	-6.25
	Sep	66.71	0.00	0.00	62.000	1.00	0%	94%	-3.71
	Oct	65.17	0.00	0.00	62.000	1.00	0%	97%	-2.17
	Nov	65.94	0.00	0.00	62.000	1.00	0%	95%	-2.94
	Dec	61.03	0.00	0.00	62.000	1.00	0%	103%	1.97
2031	Jan	53.65	0.00	0.00	72.000	1.00	0%	137%	19.35
	Feb	55.08	0.00	0.00	72.000	1.00	0%	133%	17.92
	Mar	60.20	0.00	0.00	72.000	1.00	0%	122%	12.80
	Apr	70.29	0.00	0.00	72.000	1.00	0%	104%	2.71
	May	71.09	0.00	0.00	72.000	1.00	0%	103%	1.92
	Jun	71.18	0.00	0.00	72.000	1.00	0%	103%	1.82

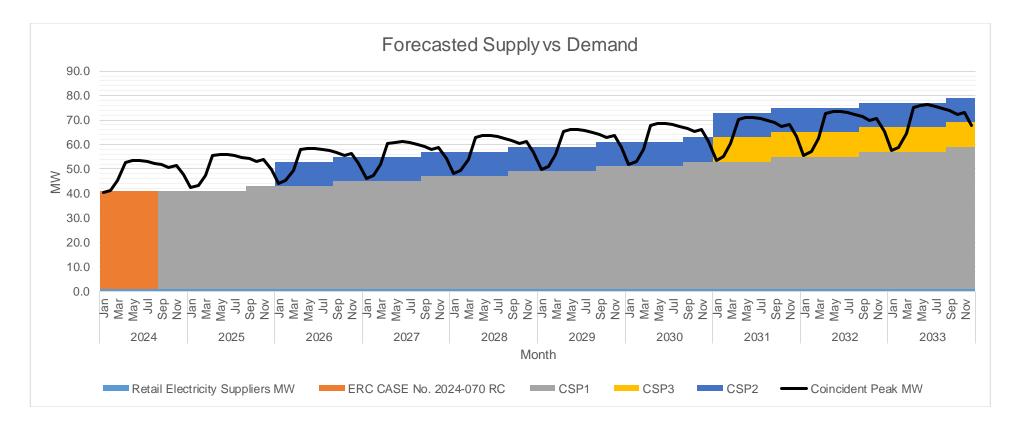
	Jul	70.67	0.00	0.00	72.000	1.00	0%	103%	2.33
	Aug	69.72	0.00	0.00	72.000	1.00	0%	105%	3.28
	Sep	69.16	0.00	0.00	74.000	1.00	0%	109%	5.84
	Oct	67.55	0.00	0.00	74.000	1.00	0%	111%	7.45
	Nov	68.36	0.00	0.00	74.000	1.00	0%	110%	6.64
	Dec	63.27	0.00	0.00	74.000	1.00	0%	119%	11.73
2032	Jan	55.54	0.00	0.00	74.000	1.00	0%	136%	19.46
	Feb	57.02	0.00	0.00	74.000	1.00	0%	132%	17.98
	Mar	62.33	0.00	0.00	74.000	1.00	0%	121%	12.67
	Apr	72.77	0.00	0.00	74.000	1.00	0%	103%	2.23
	May	73.59	0.00	0.00	74.000	1.00	0%	102%	1.41
	Jun	73.69	0.00	0.00	74.000	1.00	0%	102%	1.31
	Jul	73.16	0.00	0.00	74.000	1.00	0%	103%	1.84
	Aug	72.18	0.00	0.00	74.000	1.00	0%	104%	2.82
	Sep	71.60	0.00	0.00	76.000	1.00	0%	108%	5.40
	Oct	69.94	0.00	0.00	76.000	1.00	0%	110%	7.06
	Nov	70.77	0.00	0.00	76.000	1.00	0%	109%	6.23
	Dec	65.50	0.00	0.00	76.000	1.00	0%	118%	11.50
2033	Jan	57.43	0.00	0.00	76.000	1.00	0%	135%	19.57
	Feb	58.97	0.00	0.00	76.000	1.00	0%	131%	18.04
	Mar	64.45	0.00	0.00	76.000	1.00	0%	120%	12.55
	Apr	75.25	0.00	0.00	76.000	1.00	0%	102%	1.75
	May	76.10	0.00	0.00	76.000	1.00	0%	101%	0.90
	Jun	76.20	0.00	0.00	76.000	1.00	0%	101%	0.80
	Jul	75.65	0.00	0.00	76.000	1.00	0%	102%	1.35
	Aug	74.64	0.00	0.00	76.000	1.00	0%	103%	2.36
	Sep	74.04	0.00	0.00	78.000	1.00	0%	107%	4.96
	Oct	72.32	0.00	0.00	78.000	1.00	0%	109%	6.68
	Nov	73.18	0.00	0.00	78.000	1.00	0%	108%	5.82
	Dec	67.73	0.00	0.00	78.000	1.00	0%	117%	11.27

The Peak Demand is projected to occur in the month of May or summer season attributed to the continuous demand growth in our area coverage. Monthly Peak Demand is at its lowest in the month of January due to the cold weather condition brought by the Amihan season. In

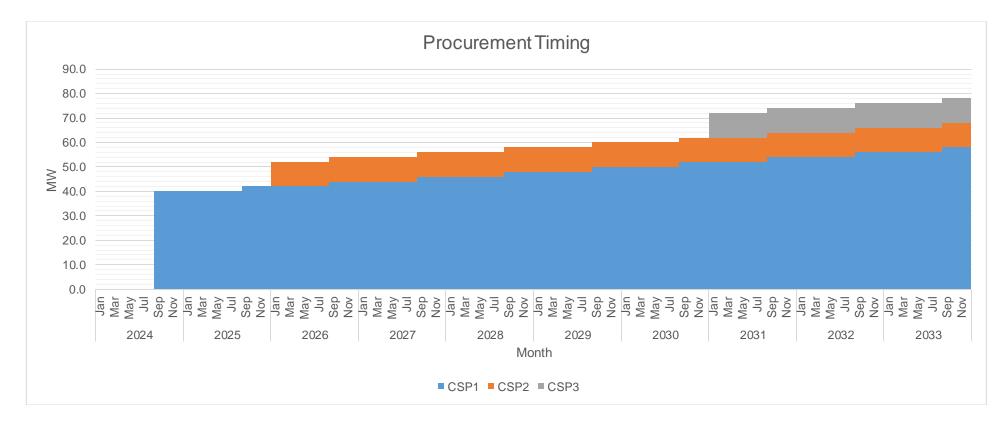
general, Peak Demand is expected to grow at a rate of 4.02 annually. The negative MW deficit occurs if the coincident peak (MW) is higher than the contracted MW. The negative MW deficit will be augmented by either WESM exposure or another series of Competitive Selection Process.



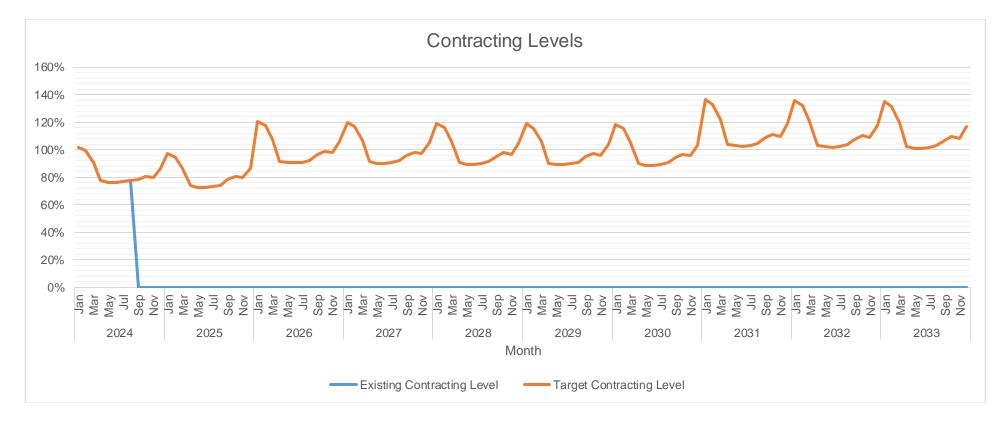
With the expiration of the Power Supply Agreement of 40 MW under EPSA by August 2024, a Competitive Selection Process (CSP) will be undertaken immediately to meet the power requirement of NEECO 1's captive consumers.



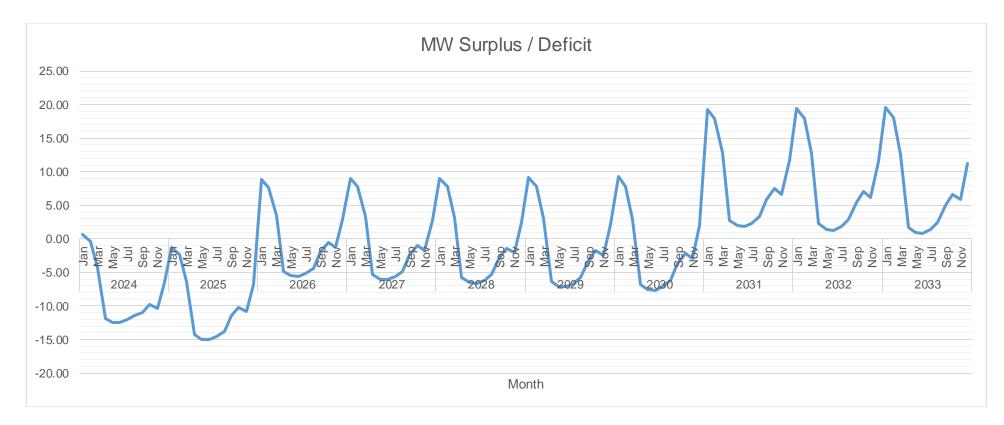
The first wave of supply procurement is EPSA 40 MW that will be expiring on August 2024 planned CSP to be available by the month of September 2024 for ten (10) years. This will be followed by Ten (10) MW for the Renewable Portfolio Standard (RPS) for Fifteen (15) Years. By 2031 additional CSP will be conducted to cater the increasing demand and possible investment to the succeeding year.



After the expiration of our EPSA by the month of August 2024, NEECO1 is planning of a 40MW base load contract to the period of ten (10) years with an increment of 2MW per year. By the year 2026 we plan an RPS compliance to put up embedded generator with a 10MW capacity as intermediate supply as 2<sup>nd</sup> CSP for fifteen (15) years. The 3<sup>rd</sup> CSP will be additional base load is added to cater the increasing of demand to the succeeding year.



Currently, we experience a peak demand of 56.532 MW last April of this current year of 2024. The highest target contracting level is 136.76% this due to the lease demand during off peak season and with limited interruption, which expected to the peak month of May, June, and July. This month is mostly summer season and the demand is high that may we experience an average of 70% to 80% of our current demand.



There is under-contracted with an average of 9.25MW from year 2024 to 2033 based on the contracted demand and forecasted peak demand. The highest deficit is 19.57 MW which is expected to occur on the month of May. With this average under-contracted demand will be compensate to the WESM exposure that may occur to the month of May of the succeeding year.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	20,598	18,455	1,695	2.18%	8.41%
	Feb	20,161	18,445	1,277	2.18%	6.47%
	Mar	18,313	17,702	213	2.18%	1.19%
	Apr	27,169	24,148	2,429	2.18%	9.14%
	May	28,276	24,726	2,934	2.18%	10.61%
	Jun	28,119	24,462	3,045	2.18%	11.07%
	Jul	26,688	22,661	3,446	2.18%	13.20%
	Aug	25,416	22,807	2,056	2.18%	8.27%

	Sep	25,852	23,018	2,271	2.18%	8.98%
	Oct	27,144	23,539	3,014	2.18%	11.35%
	Nov	28,950	24,634	3,685	2.18%	13.01%
	Dec	25,405	22,868	1,984	2.18%	7.98%
2025	Jan	21,878	19,740	1,665	2.16%	7.78%
	Feb	21,447	19,730	1,254	2.16%	5.98%
	Mar	19,566	18,934	209	2.16%	1.09%
	Apr	28,839	25,830	2,387	2.16%	8.46%
	May	29,978	26,448	2,883	2.16%	9.83%
	Jun	29,801	26,166	2,992	2.16%	10.26%
	Jul	28,235	24,239	3,386	2.16%	12.26%
	Aug	26,998	24,395	2,020	2.16%	7.65%
	Sep	27,445	24,621	2,232	2.16%	8.31%
	Oct	28,761	25,178	2,961	2.16%	10.52%
	Nov	30,632	26,350	3,621	2.16%	12.08%
	Dec	26,993	24,461	1,950	2.16%	7.38%
2026	Jan	23,145	21,166	1,523	1.97%	6.71%
	Feb	22,750	21,155	1,147	1.97%	5.14%
	Mar	20,901	20,302	191	1.95%	0.93%
	Apr	30,492	27,695	2,183	2.01%	7.31%
	May	31,633	28,358	2,637	2.02%	8.51%
	Jun	31,426	28,056	2,736	2.02%	8.89%
	Jul	29,683	25,990	3,097	2.01%	10.65%
	Aug	28,577	26,157	1,848	2.00%	6.60%
	Sep	29,022	26,400	2,041	2.00%	7.18%
	Oct	30,315	26,997	2,709	2.01%	9.12%
	Nov	32,215	28,253	3,312	2.02%	10.49%
	Dec	28,583	26,228	1,783	2.00%	6.37%
2027	Jan	24,612	22,734	1,393	1.97%	5.77%
	Feb	24,249	22,723	1,049	1.97%	4.41%
	Mar	22,418	21,806	175	1.95%	0.80%
	Apr	32,395	29,748	1,997	2.01%	6.29%
	May	33,547	30,460	2,412	2.01%	7.34%
	Jun	33,308	30,135	2,503	2.01%	7.67%
	Jul	31,378	27,916	2,833	2.01%	9.21%

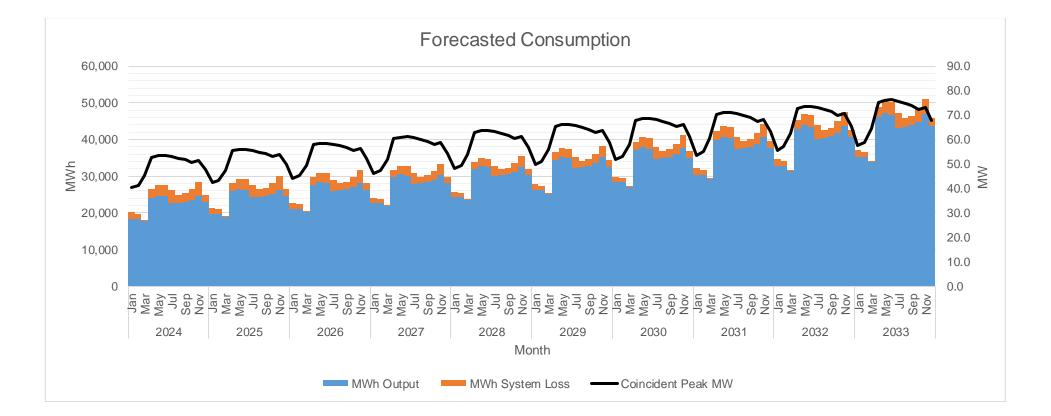
	Aug	30,393	28,095	1,690	2.00%	5.67%
	Sep	30,840	28,356	1,867	2.00%	6.18%
	Oct	32,120	28,997	2,478	2.01%	7.87%
	Nov	34,062	30,347	3,029	2.02%	9.08%
	Dec	30,410	28,171	1,631	2.00%	5.47%
2028	Jan	26,304	24,446	1,340	1.97%	5.20%
	Feb	25,953	24,434	1,009	1.97%	3.97%
	Mar	24,087	23,448	168	1.95%	0.71%
	Apr	34,602	31,988	1,921	2.00%	5.66%
	May	35,792	32,753	2,320	2.01%	6.61%
	Jun	35,525	32,404	2,407	2.01%	6.91%
	Jul	33,411	30,018	2,724	2.00%	8.32%
	Aug	32,485	30,211	1,625	2.00%	5.11%
	Sep	32,945	30,491	1,795	2.00%	5.56%
	Oct	34,250	31,181	2,383	2.00%	7.10%
	Nov	36,275	32,632	2,913	2.01%	8.20%
	Dec	32,510	30,292	1,569	1.99%	4.92%
2029	Jan	28,307	26,303	1,442	1.98%	5.20%
	Feb	27,929	26,289	1,086	1.98%	3.97%
	Mar	25,921	25,229	181	1.97%	0.71%
	Apr	37,236	34,417	2,068	2.02%	5.67%
	May	38,517	35,241	2,497	2.02%	6.62%
	Jun	38,229	34,865	2,591	2.02%	6.92%
	Jul	35,955	32,297	2,933	2.02%	8.32%
	Aug	34,958	32,505	1,750	2.01%	5.11%
	Sep	35,453	32,807	1,933	2.01%	5.56%
	Oct	36,858	33,549	2,565	2.02%	7.10%
	Nov	39,036	35,110	3,136	2.02%	8.20%
	Dec	34,984	32,593	1,689	2.01%	4.93%
2030	Jan	30,466	28,305	1,553	2.00%	5.20%
	Feb	30,060	28,290	1,170	2.00%	3.97%
	Mar	27,898	27,149	195	1.98%	0.71%
	Apr	40,076	37,036	2,226	2.03%	5.67%
	May	41,454	37,922	2,688	2.03%	6.62%
	Jun	41,144	37,518	2,790	2.03%	6.92%

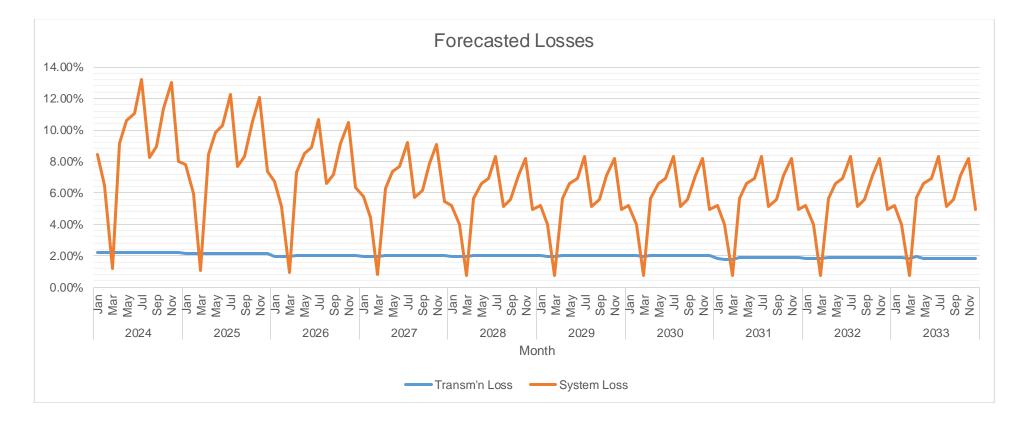
	Jul	38,697	34,755	3,157	2.03%	8.33%
	Aug	37,624	34,979	1,884	2.02%	5.11%
	Sep	38,157	35,303	2,081	2.03%	5.57%
	Oct	39,669	36,102	2,761	2.03%	7.11%
	Nov	42,014	37,782	3,376	2.04%	8.20%
	Dec	37,653	35,073	1,818	2.02%	4.93%
2031	Jan	32,711	30,452	1,671	1.80%	5.20%
	Feb	32,273	30,436	1,259	1.79%	3.97%
	Mar	29,946	29,209	210	1.76%	0.71%
	Apr	43,050	39,845	2,396	1.88%	5.67%
	May	44,533	40,799	2,894	1.89%	6.62%
	Jun	44,200	40,364	3,003	1.89%	6.92%
	Jul	41,567	37,392	3,398	1.87%	8.33%
	Aug	40,412	37,632	2,027	1.86%	5.11%
	Sep	40,985	37,981	2,240	1.87%	5.57%
	Oct	42,613	38,841	2,972	1.88%	7.11%
	Nov	45,136	40,648	3,634	1.89%	8.21%
	Dec	40,443	37,734	1,957	1.86%	4.93%
2032	Jan	35,186	32,745	1,798	1.83%	5.21%
	Feb	34,715	32,728	1,354	1.82%	3.97%
	Mar	32,212	31,408	226	1.80%	0.71%
	Apr	46,305	42,846	2,577	1.90%	5.67%
	May	47,900	43,871	3,113	1.91%	6.63%
	Jun	47,542	43,403	3,230	1.91%	6.93%
	Jul	44,711	40,207	3,656	1.90%	8.33%
	Aug	43,467	40,466	2,181	1.89%	5.11%
	Sep	44,084	40,841	2,409	1.89%	5.57%
	Oct	45,834	41,765	3,198	1.90%	7.11%
	Nov	48,548	43,709	3,910	1.92%	8.21%
	Dec	43,501	40,575	2,105	1.89%	4.93%
2033	Jan	37,823	35,184	1,933	1.87%	5.21%
	Feb	37,317	35,166	1,456	1.86%	3.98%
	Mar	34,627	33,748	243	1.84%	0.71%
	Apr	49,773	46,037	2,770	1.94%	5.68%
	May	51,430	47,139	3,346	1.84%	6.63%

Jun	51,045	46,637	3,472	1.84%	6.93%
Jul	48,003	43,202	3,930	1.81%	8.34%
Aug	46,667	43,480	2,344	1.80%	5.12%
Sep	47,330	43,884	2,590	1.81%	5.57%
Oct	49,211	44,876	3,437	1.82%	7.11%
Nov	52,127	46,964	4,202	1.84%	8.21%
Dec	46,702	43,598	2,263	1.80%	4.93%

Using Quadratic Trending with Horizon, MWh was forecasted with assumed load factor of 62%.

With the aid of Synergi Software, System Loss was calculated through Load Flow Study, which resulted to steady state and reliable power Distribution System. During the negative non-technical loss is base to our adjusted reading period as shown to the last historical year.





MWh output is expected to have a growth rate of 7.43 % annually.

Overall system Loss is expected to be reduced from 9.98% in the year 2023 to 9.4% for the year 2024. With the on - going construction of 1-20/25 MVA substation to serve solely the municipality of Cabiao will definitely resolve the overloading issue of 1-10MVA presently serving the area. A proposed additional 1-33 MVA in the City of Gapan is projected to be installed by 2026 to cater big loading such as SM, Gapan Medical Center among others. Massive rehabilitation and uprating of dilapidated lines/conductors, conversion of single or V-phase primary lines to Three Phase primary lines will be simultaneously implemented to resolve low voltage issue. The negative transmission loss are based to the historically IMOP billing monthly.

# **Power Supply**

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	Maximum MW	Maximum MWh/yr	PSA Start	PSA End
ERC CASE No. 2024-070 RC	Base	Masinloc Power Partners Company, Ltd.	20.00	175,200	60	527,040	8/26/2023	8/25/2024

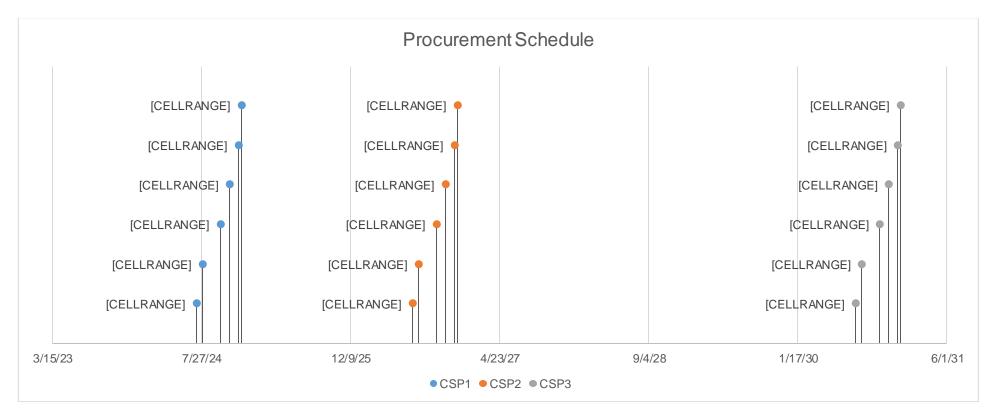
The existing Power Supply Agreement (PSA) with Masinloc Power Partners Company, Ltd. under the Emergency Power Supply Agreement docketed as **ERC Case No.2024-070 RC**, is a one (1) year contract period which will expire on August 25, 2024. Based on the existing PSA under EPSA, a 50% to 100% hourly nomination is allowable as specified in the provision of the existing contract. This is the reason why WESM exposure is evident which resulted to an increased energy purchased sourced from the WESM. A provision in the existing contract with Masinloc Power Partners Company Ltd under the EPSA with regards to minimum nomination states;

### ANNEX I CONTRACT CAPACITY AND CONTRACT ENERGY

- 1. The Contract Capacity for the duration of the Agreement shall be 40,000 kW.
- 2. BUYER shall commit to a minimum nomination per trading interval of fifty percent (50%) with respect to the Contract Capacity for the duration of the Agreement. Below are the pertinent Monthly Contract Energy for the duration of the Agreement.

No. of Days per Billing Period	Monthly Contract Energy, kWh					
29 Days	13,920,000					
30 Days	14,400,000					
31 Days	14,880,000					

	CSP1	CSP2	CSP3	
Туре	Base	Intermediate	Base	
Minimum MW	20.00	2.00	5.00	
Minimum MWh/yr	153,300	17,568	39,528	
Maximum MW	60	10	10	
Maximum MWh/yr	527,040	87,840	87,840	
PSA Start	8/26/2024	12/26/2025	12/26/2030	
PSA End	8/25/2034	12/25/2040	12/25/2033	
Publication	7/10/2024	7/4/2026	7/30/2030	
Pre-bid	7/31/2024	7/25/2026	8/20/2030	
Opening	9/29/2024	9/23/2026	10/19/2030	
Awarding	10/29/2024	10/23/2026	11/18/2030	
PSA Signing	11/28/2024	11/22/2026	12/18/2030	
Joint Filing	12/7/2024	12/1/2026	12/27/2030	

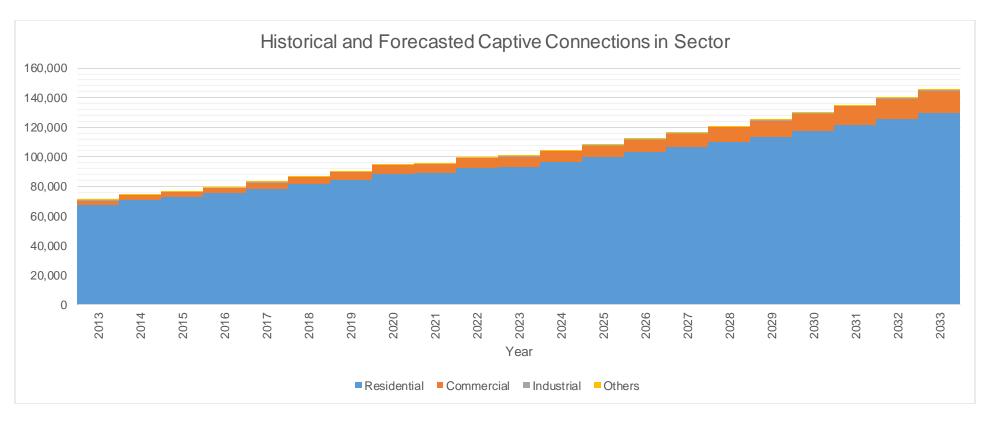


For the procurement of 40 MW of supply, which is planned to be available on August 26, 2024, or upon expiration of existing PSA under EPSA, the first publication or launch of CSP will be on June 10, 2024 upon issuance of Certificate of Conformity from the National Electrification Administration (NEA). Joint filing is planned on June 30, 2024, or 150 days in accordance with DOE's 2023 CSP Policy. This April 2024, the maximum peak demand recorded is 56.532 MW. The CSP3 is to cater the possible abrupt increase in number of consumer connected and this is to serve that a possible CSP in the future loading of NEECOI.

The procurement of 40MW for the year of 2024 with the increment of two (2) MW for the succeeding year till year 2033 as shown in the table below the procurement process of the CSP:

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ERC Case No.2024-070 RC	40									
CSP1		42.00	44.00	46.00	48.00	50.00	52.00	54.00	56.00	58.00
CSP2			10.00	10.00	10.00	10.00	10.00			
CSP3								10.00	10.00	10.00

## **Captive Customer Connections**



A growth rate of 3.32% annually for residential connections, dominating 68.72% of the total energy consumption of NEECO I is projected.

A growth rate 3.32% annually for commercial connection with the total 14.09% of the total energy

For industrial consumer of 15.82% and all others connection including public building and water system shared by 1.37%.

The data for number of consumers for higher and low voltage 2013-2022 are actual data gathered from the segregation.