



ALBAY ELECTRIC COOPERATIVE, INC.

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Power Supply Procurement Plan 2024-2033

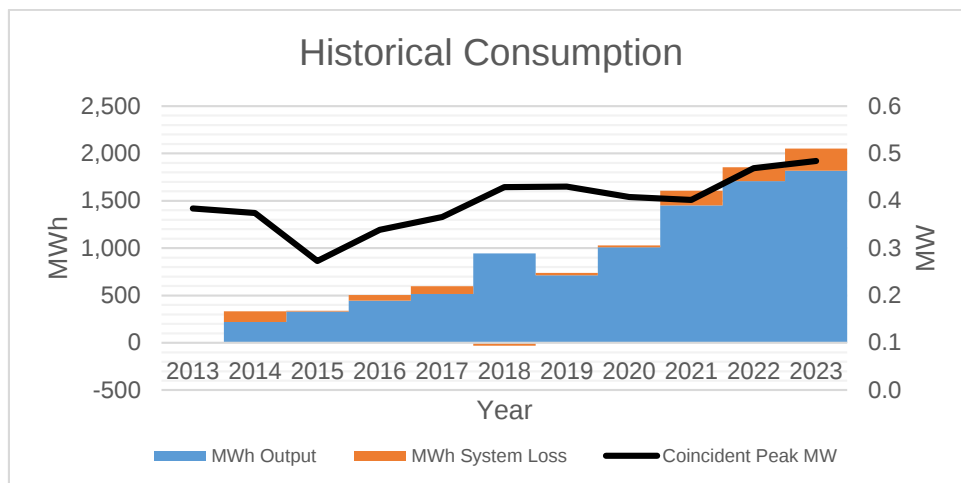
**Off-Grid
(Batan)**

Historical Consumption Data

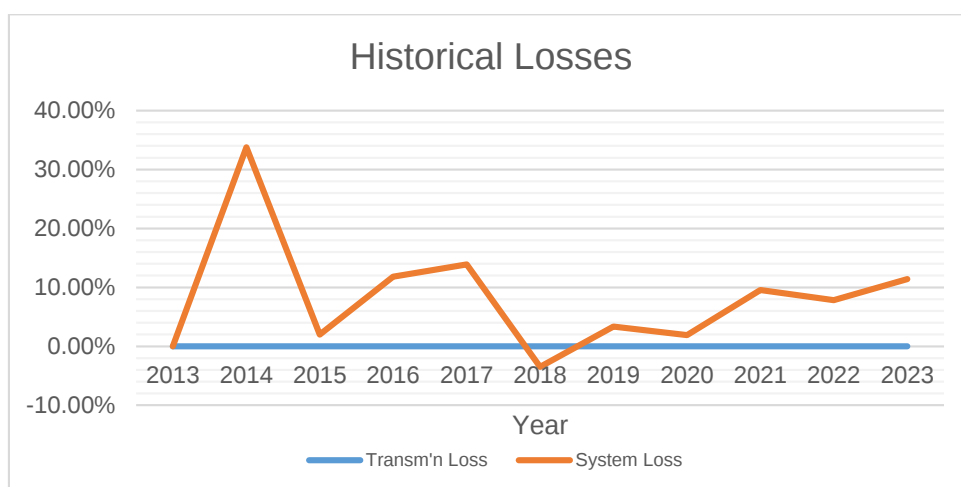
	Coincident Peak MW	MWh Offtake	*WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2013	0.38	588	0	588	0	0	17%	-100.00%	0.00%	0.00%
2014	0.37	334	0	334	221	113	10%	0.00%	0.00%	33.78%
2015	0.27	337	0	337	330	7	14%	0.00%	0.00%	1.98%
2016	0.34	506	0	506	446	60	17%	0.00%	0.00%	11.82%
2017	0.37	598	0	598	515	83	19%	0.00%	0.00%	13.92%
2018	0.43	912	0	912	944	-32	24%	0.00%	0.00%	-3.50%
2019	0.43	738	0	738	713	25	20%	0.00%	0.00%	3.36%
2020	0.41	1,027	0	1,027	1,008	20	29%	0.00%	0.00%	1.91%
2021	0.40	1,606	0	1,606	1,453	153	46%	0.00%	0.00%	9.53%
2022	0.47	1,854	0	1,854	1,709	145	45%	0.00%	0.00%	7.82%
2023	0.48	2,051	0	2,051	1,817	234	48%	0.00%	0.00%	11.43%

* Batan Island is an Off-Grid supplied area. WESM transaction is not applicable.

Peak Demand increased from 0.47 MW in 2022 to 0.48 MW in 2023 at a rate of 2.08% due to the increasing number of establishments and businesses that have been energized. MWh Offtake increased from 1,854 MWh in 2022 to 2,051 MWh in 2022 at a rate of 9.61%. Within the same period, Load Factor ranged from 45% to 48%.

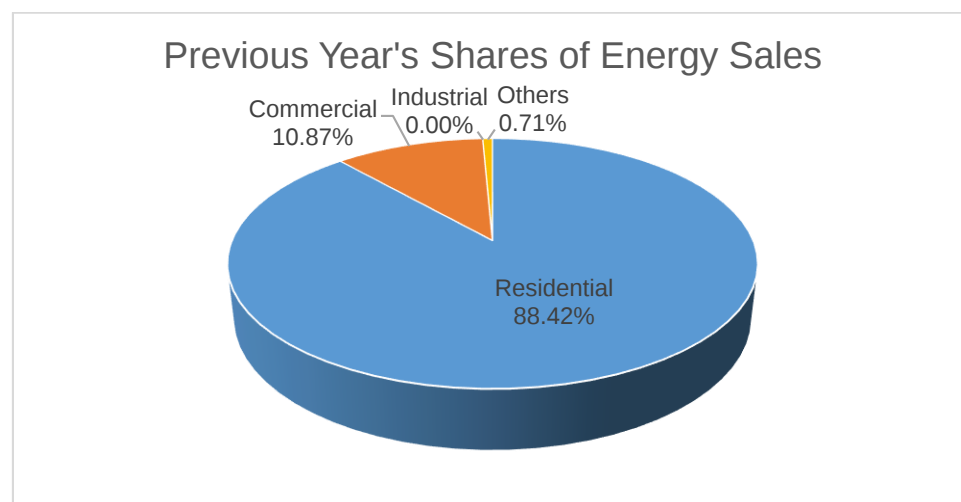


MWh Output increased from year 2022 to year 2023 at a rate of 5.94%, while MWh System Loss increased at a rate of 31.56% within the same period.

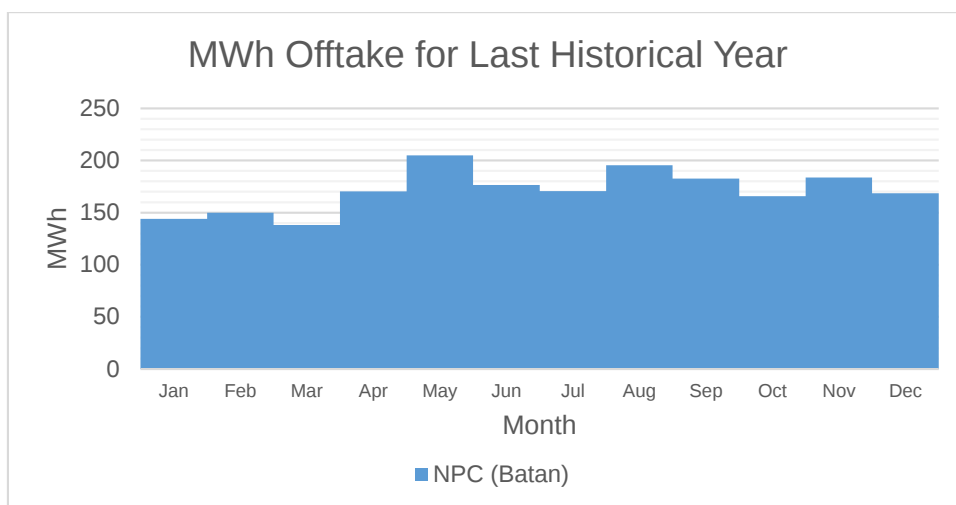


ALECO is still in the process of updating the data detailing the segregated distribution system losses. Details may be provided as soon as we have gathered all of the data.

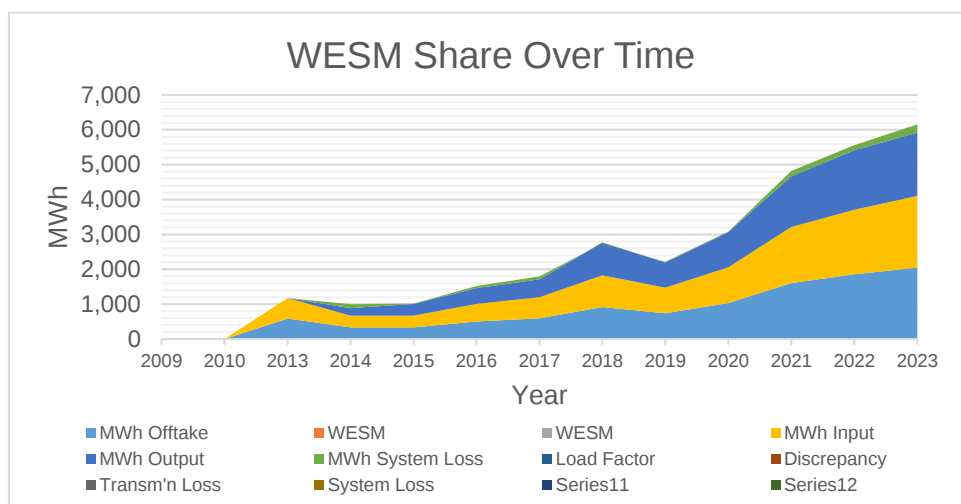
For the above figures, Transmission Loss is at zero percent (0%) because Batan Island is served by an embedded generator under NPC-SPUG. Meanwhile, System Loss was noted to have increased on year 2023 to 11.43% from a slight dip between 2021 and 2022 from 9.53% to 7.82%.



Residential customers account for the bulk of energy sales at 88.42% number of connections. In contrast, Commercial customers accounted for only 10.87% of energy sales and 0.71% accounts for other connections such as public buildings and street lights.

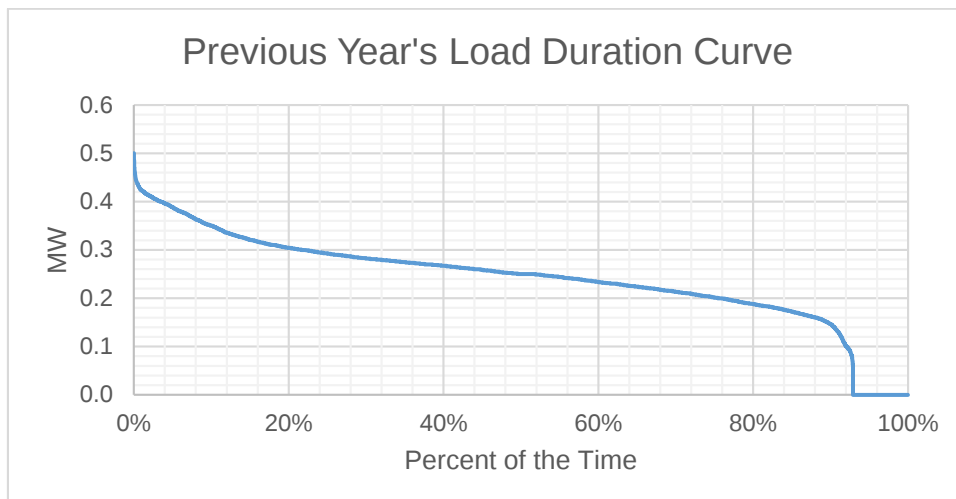


For 2023, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with Residential accounts for the bulk of MWh Offtake.

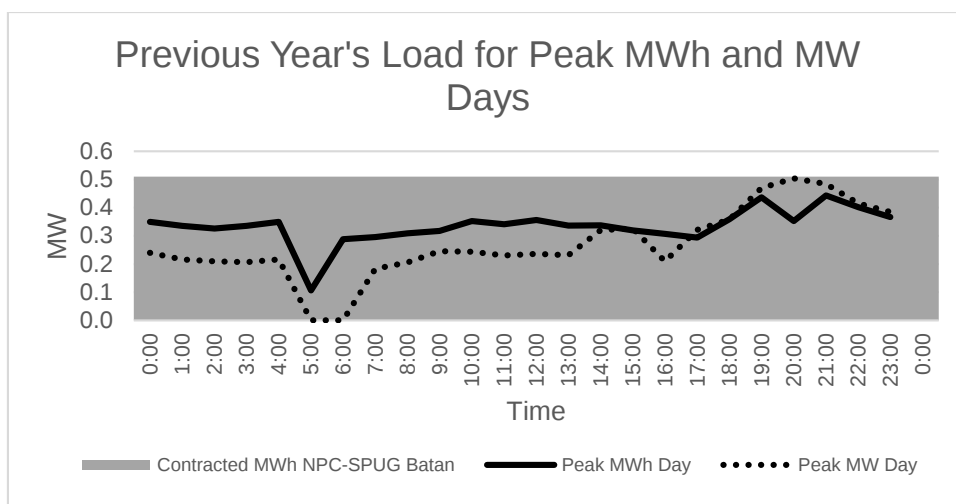


There is no WESM share in the total Offtake as Batan Island is in Off-Grid area. Power supply is fully contracted with NPC-SPUG.

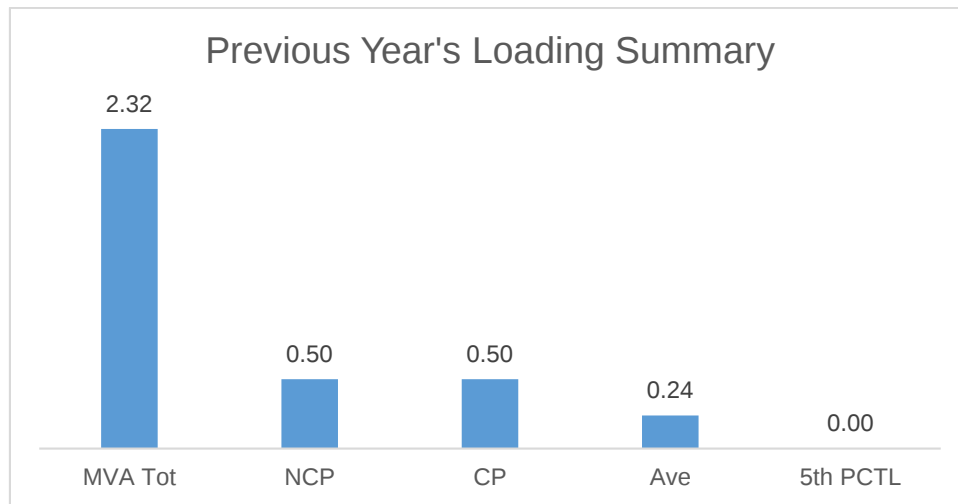
Previous Year's Load Profile



Based on the available load profile data provided by NPC, the Load Duration Curve, the minimum load is **0.060** MW, and the maximum load is **0.504** MW for 2023.



Also, based on the available load profile, peak daily MWh occurred between **1900H and 2100H** due to bulk of residential consumers.



The Non-coincident Peak Demand is **0.5 MW**. The load factor or the ratio between the Average Load of **0.24 MW**.

Metering Point	Substation MVA	Substation Peak MW
NPC-SPUG Batan	2.32 MW	0.504

The substation is owned by the National Power Corporation (NPC) and thus responsible for the monitoring of its loading capacity. The substation rating capacity is at 2.32 MW with a historical maximum load of 0.48 MW.

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	0.51	0.51	0.00	0.000		100%	100%	0.00
	Feb	0.49	0.49	0.00	0.000		100%	100%	0.00
	Mar	0.52	0.52	0.00	0.000		100%	100%	0.00
	Apr	0.53	0.53	0.00	0.000		100%	100%	0.00
	May	0.60	0.60	0.00	0.000		100%	100%	0.00
	Jun	0.58	0.58	0.00	0.000		100%	100%	0.00
	Jul	0.54	0.54	0.00	0.000		100%	100%	0.00
	Aug	0.57	0.57	0.00	0.000		100%	100%	0.00
	Sep	0.55	0.55	0.00	0.000		100%	100%	0.00
	Oct	0.52	0.52	0.00	0.000		100%	100%	0.00
	Nov	0.55	0.55	0.00	0.000		100%	100%	0.00
	Dec	0.54	0.54	0.00	0.000		100%	100%	0.00
2025	Jan	0.53	0.53	0.00	0.000		100%	100%	0.00
	Feb	0.51	0.51	0.00	0.000		100%	100%	0.00
	Mar	0.54	0.54	0.00	0.000		100%	100%	0.00
	Apr	0.56	0.56	0.00	0.000		100%	100%	0.00
	May	0.63	0.63	0.00	0.000		100%	100%	0.00
	Jun	0.61	0.61	0.00	0.000		100%	100%	0.00
	Jul	0.57	0.57	0.00	0.000		100%	100%	0.00
	Aug	0.60	0.60	0.00	0.000		100%	100%	0.00
	Sep	0.58	0.58	0.00	0.000		100%	100%	0.00
	Oct	0.55	0.55	0.00	0.000		100%	100%	0.00
	Nov	0.53	0.53	0.00	0.000		100%	100%	0.00
	Dec	0.56	0.56	0.00	0.000		100%	100%	0.00
2026	Jan	0.56	0.56	0.00	0.000		100%	100%	0.00
	Feb	0.54	0.54	0.00	0.000		100%	100%	0.00

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Mar	0.57	0.57	0.00	0.000		100%	100%	0.00
	Apr	0.59	0.59	0.00	0.000		100%	100%	0.00
	May	0.66	0.66	0.00	0.000		100%	100%	0.00
	Jun	0.64	0.64	0.00	0.000		100%	100%	0.00
	Jul	0.59	0.59	0.00	0.000		100%	100%	0.00
	Aug	0.63	0.63	0.00	0.000		100%	100%	0.00
	Sep	0.61	0.61	0.00	0.000		100%	100%	0.00
	Oct	0.58	0.58	0.00	0.000		100%	100%	0.00
	Nov	0.56	0.56	0.00	0.000		100%	100%	0.00
	Dec	0.59	0.59	0.00	0.000		100%	100%	0.00
2027	Jan	0.58	0.58	0.00	0.000		100%	100%	0.00
	Feb	0.56	0.56	0.00	0.000		100%	100%	0.00
	Mar	0.60	0.60	0.00	0.000		100%	100%	0.00
	Apr	0.62	0.62	0.00	0.000		100%	100%	0.00
	May	0.69	0.69	0.00	0.000		100%	100%	0.00
	Jun	0.67	0.67	0.00	0.000		100%	100%	0.00
	Jul	0.62	0.62	0.00	0.000		100%	100%	0.00
	Aug	0.66	0.66	0.00	0.000		100%	100%	0.00
	Sep	0.63	0.63	0.00	0.000		100%	100%	0.00
	Oct	0.60	0.60	0.00	0.000		100%	100%	0.00
	Nov	0.58	0.58	0.00	0.000		100%	100%	0.00
	Dec	0.62	0.62	0.00	0.000		100%	100%	0.00
2028	Jan	0.71	0.00	0.00	0.709		0%	100%	0.00
	Feb	0.58	0.00	0.00	0.579		0%	100%	0.00
	Mar	0.54	0.00	0.00	0.541		0%	100%	0.00
	Apr	0.57	0.00	0.00	0.570		0%	100%	0.00
	May	0.68	0.00	0.00	0.677		0%	100%	0.00
	Jun	0.62	0.00	0.00	0.620		0%	100%	0.00
	Jul	0.64	0.00	0.00	0.639		0%	100%	0.00

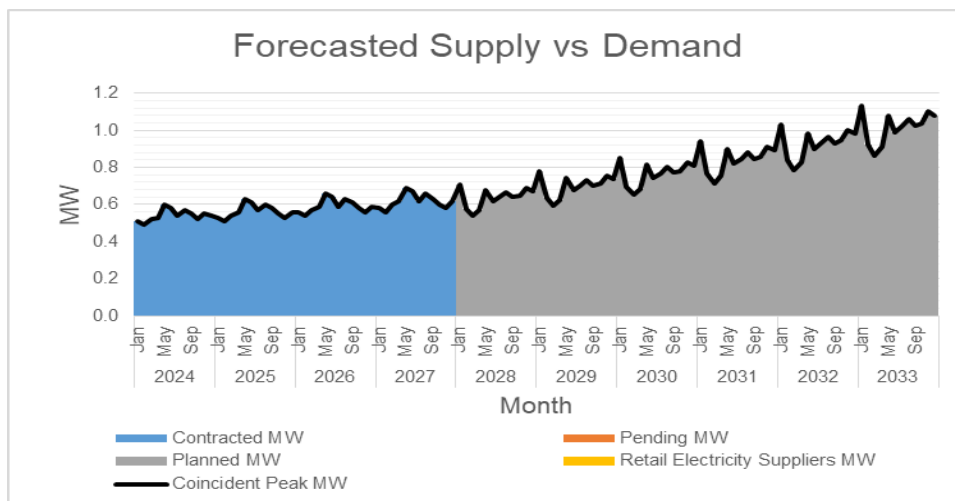
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Aug	0.67	0.00	0.00	0.665		0%	100%	0.00
	Sep	0.64	0.00	0.00	0.640		0%	100%	0.00
	Oct	0.65	0.00	0.00	0.649		0%	100%	0.00
	Nov	0.69	0.00	0.00	0.689		0%	100%	0.00
	Dec	0.67	0.00	0.00	0.674		0%	100%	0.00
2029	Jan	0.78	0.00	0.00	0.778		0%	100%	0.00
	Feb	0.63	0.00	0.00	0.635		0%	100%	0.00
	Mar	0.59	0.00	0.00	0.593		0%	100%	0.00
	Apr	0.63	0.00	0.00	0.625		0%	100%	0.00
	May	0.74	0.00	0.00	0.742		0%	100%	0.00
	Jun	0.68	0.00	0.00	0.680		0%	100%	0.00
	Jul	0.70	0.00	0.00	0.701		0%	100%	0.00
	Aug	0.73	0.00	0.00	0.729		0%	100%	0.00
	Sep	0.70	0.00	0.00	0.702		0%	100%	0.00
	Oct	0.71	0.00	0.00	0.712		0%	100%	0.00
	Nov	0.76	0.00	0.00	0.755		0%	100%	0.00
	Dec	0.74	0.00	0.00	0.739		0%	100%	0.00
2030	Jan	0.85	0.00	0.00	0.854		0%	100%	0.00
	Feb	0.70	0.00	0.00	0.697		0%	100%	0.00
	Mar	0.65	0.00	0.00	0.651		0%	100%	0.00
	Apr	0.69	0.00	0.00	0.686		0%	100%	0.00
	May	0.82	0.00	0.00	0.815		0%	100%	0.00
	Jun	0.75	0.00	0.00	0.746		0%	100%	0.00
	Jul	0.77	0.00	0.00	0.769		0%	100%	0.00
	Aug	0.80	0.00	0.00	0.801		0%	100%	0.00
	Sep	0.77	0.00	0.00	0.771		0%	100%	0.00
	Oct	0.78	0.00	0.00	0.782		0%	100%	0.00
	Nov	0.83	0.00	0.00	0.829		0%	100%	0.00
	Dec	0.81	0.00	0.00	0.812		0%	100%	0.00

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2031	Jan	0.94	0.00	0.00	0.939		0%	100%	0.00
	Feb	0.77	0.00	0.00	0.766		0%	100%	0.00
	Mar	0.72	0.00	0.00	0.716		0%	100%	0.00
	Apr	0.75	0.00	0.00	0.755		0%	100%	0.00
	May	0.90	0.00	0.00	0.896		0%	100%	0.00
	Jun	0.82	0.00	0.00	0.820		0%	100%	0.00
	Jul	0.85	0.00	0.00	0.846		0%	100%	0.00
	Aug	0.88	0.00	0.00	0.881		0%	100%	0.00
	Sep	0.85	0.00	0.00	0.848		0%	100%	0.00
	Oct	0.86	0.00	0.00	0.859		0%	100%	0.00
	Nov	0.91	0.00	0.00	0.912		0%	100%	0.00
	Dec	0.89	0.00	0.00	0.892		0%	100%	0.00
2032	Jan	1.03	0.00	0.00	1.032		0%	100%	0.00
	Feb	0.84	0.00	0.00	0.842		0%	100%	0.00
	Mar	0.79	0.00	0.00	0.787		0%	100%	0.00
	Apr	0.83	0.00	0.00	0.829		0%	100%	0.00
	May	0.98	0.00	0.00	0.985		0%	100%	0.00
	Jun	0.90	0.00	0.00	0.902		0%	100%	0.00
	Jul	0.93	0.00	0.00	0.929		0%	100%	0.00
	Aug	0.97	0.00	0.00	0.968		0%	100%	0.00
	Sep	0.93	0.00	0.00	0.932		0%	100%	0.00
	Oct	0.94	0.00	0.00	0.944		0%	100%	0.00
	Nov	1.00	0.00	0.00	1.002		0%	100%	0.00
	Dec	0.98	0.00	0.00	0.981		0%	100%	0.00
2033	Jan	1.13	0.00	0.00	1.133		0%	100%	0.00
	Feb	0.92	0.00	0.00	0.925		0%	100%	0.00
	Mar	0.86	0.00	0.00	0.864		0%	100%	0.00
	Apr	0.91	0.00	0.00	0.911		0%	100%	0.00
	May	1.08	0.00	0.00	1.081		0%	100%	0.00

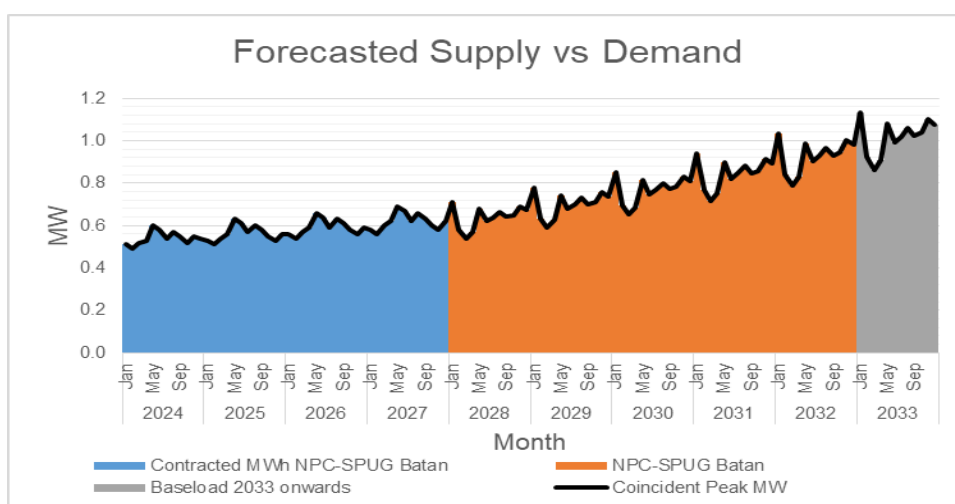
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jun	0.99	0.00	0.00	0.990		0%	100%	0.00
	Jul	1.02	0.00	0.00	1.021		0%	100%	0.00
	Aug	1.06	0.00	0.00	1.063		0%	100%	0.00
	Sep	1.02	0.00	0.00	1.023		0%	100%	0.00
	Oct	1.04	0.00	0.00	1.037		0%	100%	0.00
	Nov	1.10	0.00	0.00	1.100		0%	100%	0.00
	Dec	1.08	0.00	0.00	1.077		0%	100%	0.00

**Retail Electricity Suppliers MW not applicable in Batan Island.*

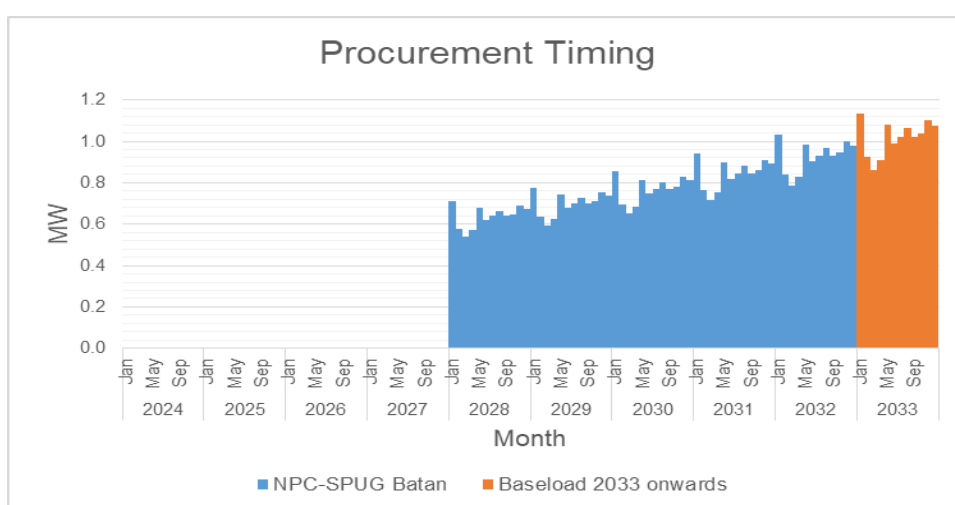
The Peak Demand was forecasted using exponential smoothing algorithm and was assumed to occur on the month of January due to historical and seasonal considerations. Peak Demand is expected to increase at an average rate of **7.18%** annually



The available supply is generally equal to the Peak Demand. NPC will still be able to cater ALECO's contracted level until 2033.



Of the available supply, the highest for 2024 is **0.60** MW from NPC – SPUG (Batan).

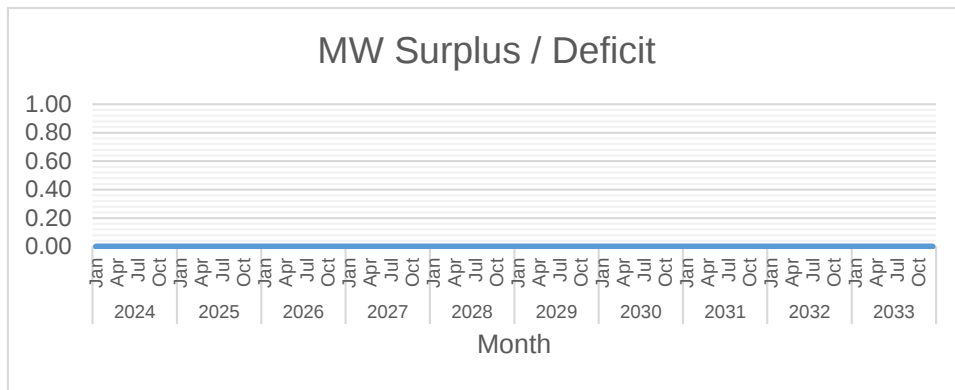


Since, ALECO had executed a five-year PSA with NPC-SPUG for a contract period of December 26, 2022 to December 25, 2027, procurement for the next PSA would be a year before the end of the five-year PSA with NPC-SPUG will be on year 2026 then for the next supply period on 2032.

The first wave of supply procurement for the 0.54 MW / 3,669 MWh for base load is by the month of February 2027 while for the 0.91 MW / 5,998 MWh will commence by June 2031.



Currently, 100% of Batan Island’s power requirement is being sourced from NPC-SPUG and this will continue until the year 2027. With NPC-SPUG having sufficient supply with their addition of hybrid solar-diesel power plant, we expect that ALECO will still have 100% contracting levels until 2032 and with a new contract from 2033 and beyond.

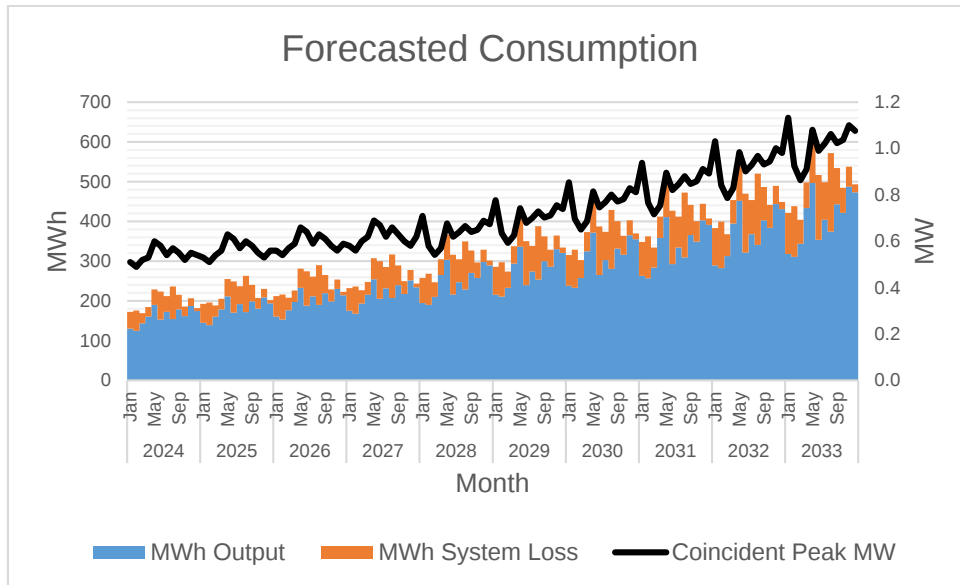


From year 2024 to 2027 there is sufficient supply contract and by year 2028 and beyond will have planned contracts for Batan Island.

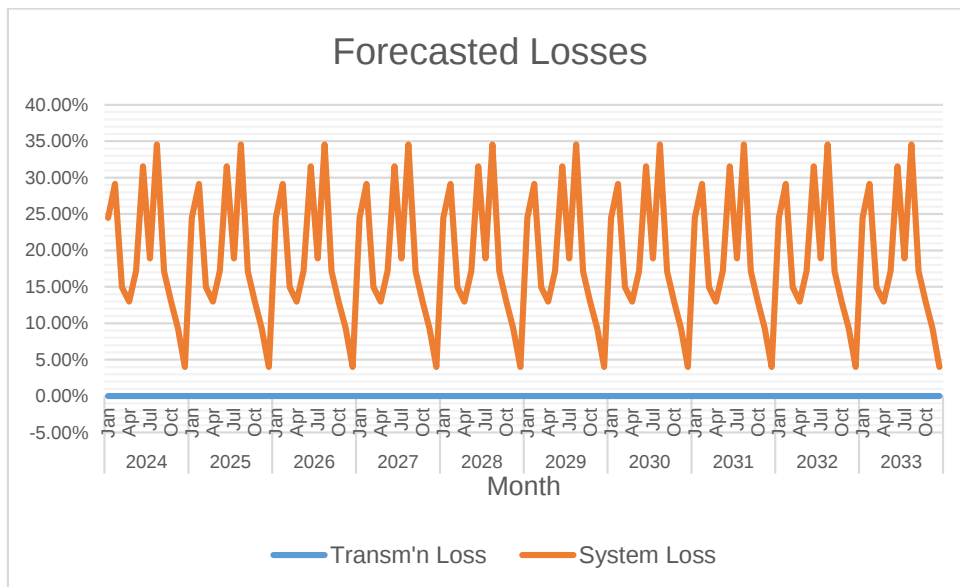
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	173	130	42	0.00%	24.50%
	Feb	176	125	51	0.00%	29.13%
	Mar	169	144	25	0.00%	14.96%
	Apr	184	160	24	0.00%	12.99%
	May	229	190	39	0.00%	17.19%
	Jun	223	153	70	0.00%	31.54%
	Jul	212	172	40	0.00%	18.93%
	Aug	236	155	82	0.00%	34.54%
	Sep	216	179	37	0.00%	17.14%
	Oct	186	162	24	0.00%	13.03%
	Nov	207	188	19	0.00%	9.33%
	Dec	182	174	7	0.00%	4.00%
2025	Jan	192	145	47	0.00%	24.50%
	Feb	196	139	57	0.00%	29.13%
	Mar	188	160	28	0.00%	14.96%
	Apr	205	179	27	0.00%	12.99%
	May	255	211	44	0.00%	17.19%
	Jun	249	170	78	0.00%	31.54%
	Jul	237	192	45	0.00%	18.93%
	Aug	263	172	91	0.00%	34.54%
	Sep	240	199	41	0.00%	17.14%
	Oct	207	180	27	0.00%	13.03%
	Nov	230	209	21	0.00%	9.33%
	Dec	202	194	8	0.00%	4.00%
2026	Jan	212	160	52	0.00%	24.50%
	Feb	216	153	63	0.00%	29.13%
	Mar	208	177	31	0.00%	14.96%
	Apr	226	197	29	0.00%	12.99%
	May	281	233	48	0.00%	17.19%
	Jun	274	188	87	0.00%	31.54%
	Jul	261	212	49	0.00%	18.93%
	Aug	290	190	100	0.00%	34.54%
	Sep	265	219	45	0.00%	17.14%
	Oct	229	199	30	0.00%	13.03%
	Nov	254	230	24	0.00%	9.33%
	Dec	223	214	9	0.00%	4.00%
2027	Jan	232	175	57	0.00%	24.50%
	Feb	237	168	69	0.00%	29.13%
	Mar	227	193	34	0.00%	14.96%
	Apr	248	215	32	0.00%	12.99%
	May	308	255	53	0.00%	17.19%
	Jun	300	205	95	0.00%	31.54%
	Jul	285	231	54	0.00%	18.93%
	Aug	317	208	110	0.00%	34.54%
	Sep	290	240	50	0.00%	17.14%
	Oct	250	217	33	0.00%	13.03%
	Nov	278	252	26	0.00%	9.33%
	Dec	244	234	10	0.00%	4.00%
2028	Jan	258	195	63	0.00%	24.50%
	Feb	268	190	78	0.00%	29.13%
	Mar	247	210	37	0.00%	14.96%
	Apr	305	265	40	0.00%	12.99%
	May	367	304	63	0.00%	17.19%
	Jun	316	216	100	0.00%	31.54%
	Jul	305	247	58	0.00%	18.93%
	Aug	350	229	121	0.00%	34.54%
	Sep	327	271	56	0.00%	17.14%
	Oct	297	258	39	0.00%	13.03%
	Nov	329	298	31	0.00%	9.33%
	Dec	302	290	12	0.00%	4.00%
2029	Jan	286	216	70	0.00%	24.50%
	Feb	297	211	87	0.00%	29.13%
	Mar	274	233	41	0.00%	14.96%
	Apr	338	294	44	0.00%	12.99%
	May	406	337	70	0.00%	17.19%
	Jun	350	240	110	0.00%	31.54%
	Jul	338	274	64	0.00%	18.93%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Aug	388	254	134	0.00%	34.54%
	Sep	362	300	62	0.00%	17.14%
	Oct	329	286	43	0.00%	13.03%
	Nov	364	330	34	0.00%	9.33%
	Dec	334	321	13	0.00%	4.00%
2030	Jan	316	238	77	0.00%	24.50%
	Feb	329	233	96	0.00%	29.13%
	Mar	303	258	45	0.00%	14.96%
	Apr	373	325	49	0.00%	12.99%
	May	449	372	77	0.00%	17.19%
	Jun	387	265	122	0.00%	31.54%
	Jul	374	303	71	0.00%	18.93%
	Aug	429	281	148	0.00%	34.54%
	Sep	401	332	69	0.00%	17.14%
	Oct	363	316	47	0.00%	13.03%
	Nov	403	365	38	0.00%	9.33%
	Dec	370	355	15	0.00%	4.00%
2031	Jan	348	263	85	0.00%	24.50%
	Feb	363	257	106	0.00%	29.13%
	Mar	334	284	50	0.00%	14.96%
	Apr	412	358	54	0.00%	12.99%
	May	496	410	85	0.00%	17.19%
	Jun	427	292	135	0.00%	31.54%
	Jul	412	334	78	0.00%	18.93%
	Aug	473	309	163	0.00%	34.54%
	Sep	442	366	76	0.00%	17.14%
	Oct	401	349	52	0.00%	13.03%
	Nov	444	403	41	0.00%	9.33%
	Dec	408	391	16	0.00%	4.00%
2032	Jan	383	290	94	0.00%	24.50%
	Feb	399	283	116	0.00%	29.13%
	Mar	368	313	55	0.00%	14.96%
	Apr	453	395	59	0.00%	12.99%
	May	546	452	94	0.00%	17.19%
	Jun	470	322	148	0.00%	31.54%
	Jul	454	368	86	0.00%	18.93%
	Aug	520	341	180	0.00%	34.54%
	Sep	486	403	83	0.00%	17.14%
	Oct	441	384	57	0.00%	13.03%
	Nov	489	443	46	0.00%	9.33%
	Dec	449	431	18	0.00%	4.00%
2033	Jan	421	318	103	0.00%	24.50%
	Feb	439	311	128	0.00%	29.13%
	Mar	404	344	60	0.00%	14.96%
	Apr	498	433	65	0.00%	12.99%
	May	599	496	103	0.00%	17.19%
	Jun	516	354	163	0.00%	31.54%
	Jul	499	404	94	0.00%	18.93%
	Aug	572	374	198	0.00%	34.54%
	Sep	534	443	92	0.00%	17.14%
	Oct	485	422	63	0.00%	13.03%
	Nov	537	487	50	0.00%	9.33%
	Dec	493	473	20	0.00%	4.00%

The Peak Demand was forecasted using exponential smoothing algorithm and was assumed to occur on the month of May due to historical and seasonal considerations. In general, Peak Demand is expected to grow at an average rate of **5.34%** annually for the first five years.



MWh Output was expected to grow at a rate of 10.1% annually.



Data and computation of Losses will be in place after the facility study on distribution assets is completed while initial System Loss computation for the first forecasted year is expected to have an average of 18.94%.

For the System Loss, ALECO shall update the data detailing the distribution system losses.

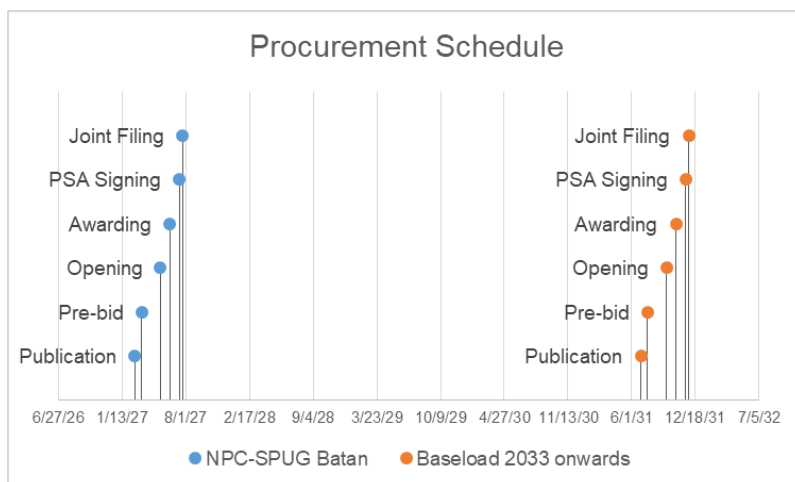
Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
Contracted MWh NPC-SPUG Batan	Base	National Power Corporation	0.46	2,122.75	12/26/2022	12/25/2027

ALECO secured a five (5) year power supply contract with NPC-SPUG to serve member-consumers at Batan Island from December 26, 2022 to December 25, 2027. Subsequent power requirements were planned to be sourced/renewed still from NPC-SPUG which, are now implementing expansion project of hybrid solar-diesel power plant in the area. Contracted capacities will likely be increased to meet the increasing demand for electricity on the island.

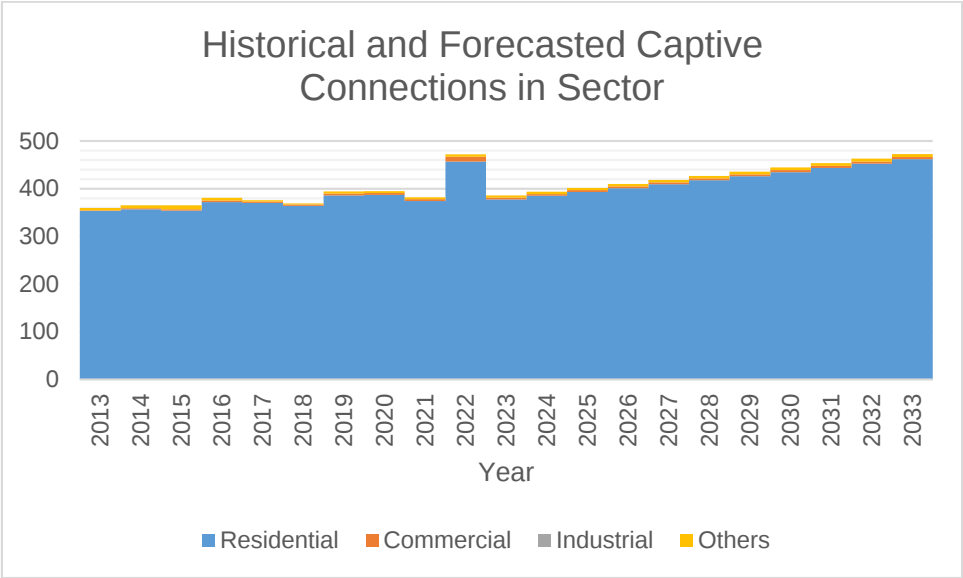
Should NPC-SPUG won't be able to accommodate the increase in demand, ALECO will result to the conduct of CSP to source power provider for the island of Batan.

	NPC-SPUG Batan	Baseload 2033 onwards
Type	Base	Base
Minimum MW	0.54	0.91
Minimum MWh/yr	3,669	5,998
PSA Start	12/26/2027	12/26/2032
PSA End	12/25/2032	12/25/2042
Publication	2/22/2027	6/30/2031
Pre-bid	3/15/2027	7/21/2031
Opening	5/14/2027	9/19/2031
Awarding	6/13/2027	10/19/2031
PSA Signing	7/13/2027	11/18/2031
Joint Filing	7/22/2027	11/27/2031



For the renewal/ sourcing/procurement of 0.54 MW of supply which is planned to be available on December 26, 2027, the first publication or launch of CSP will be on February 22, 2027. Joint filing is planned on July 22, 2027, or 150 days later, in accordance with the latest issuances on CSP.

Captive Customer Connections



The number of captive connections is expected to grow at a rate of 2.00% annually.