Power Supply Procurement Plan 2024

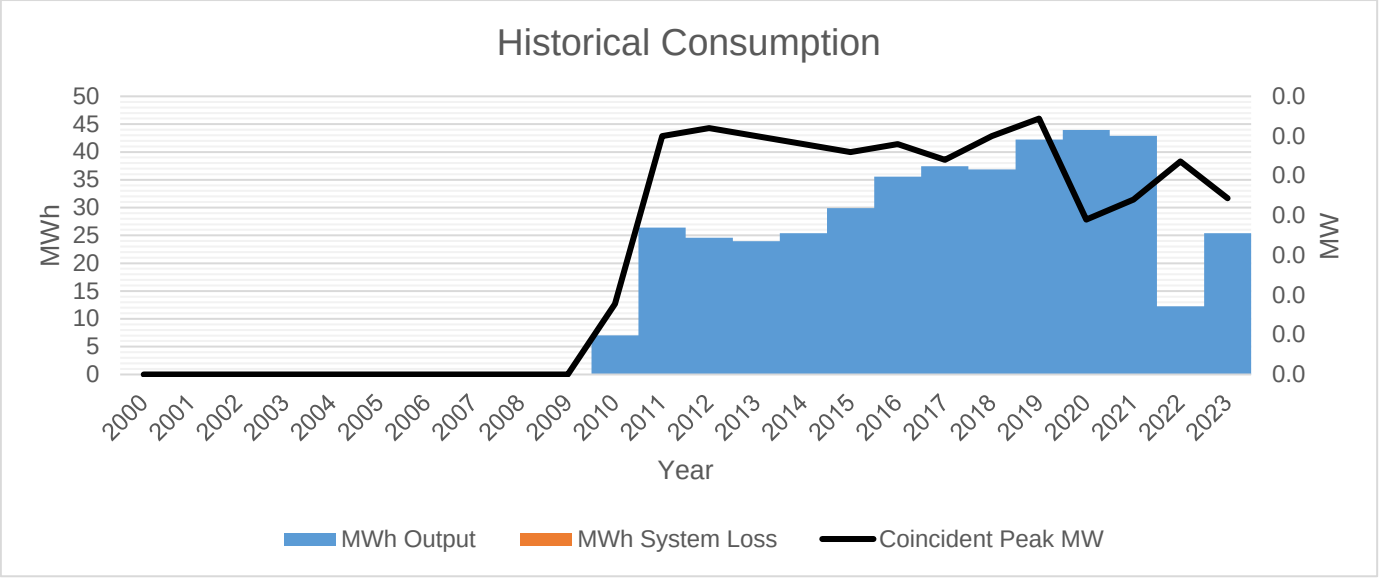
BOHOL I ELECTRIC COOPERATIVE, INC.
(BOHECO I)

BATASAN ISLAND

Historical Consumption Data

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	Load Factor
2010	0.01	7	n/a	7	7	9%
2011	0.03	26	n/a	26	26	10%
2012	0.03	25	n/a	25	25	9%
2013	0.03	24	n/a	24	24	9%
2014	0.03	25	n/a	25	25	10%
2015	0.03	30	n/a	30	30	12%
2016	0.03	36	n/a	36	36	14%
2017	0.03	37	n/a	37	37	16%
2018	0.03	37	n/a	37	37	14%
2019	0.03	42	n/a	42	42	15%
2020	0.02	44	n/a	44	44	26%
2021	0.02	43	n/a	43	43	22%
2022	0.03	12	n/a	12	12	5%
2023	0.02	25	n/a	25	25	13%

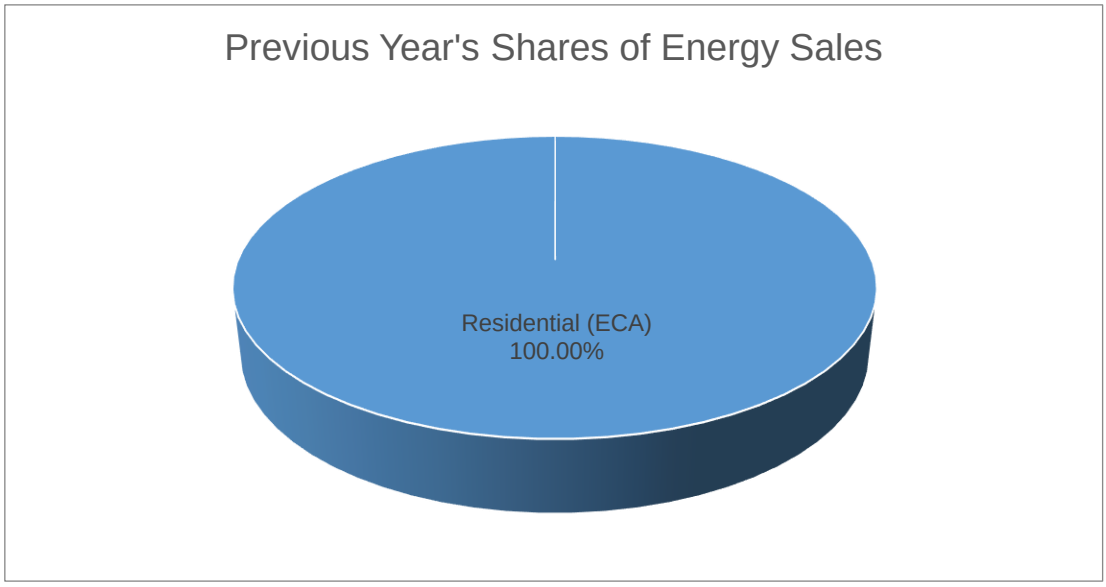
The above historical data was the only available/retrieved data as of the moment. The Peak Demand exhibited minimal increased from 0.01 MW in 2010 to 0.02 MW in 2023 at an average rate of 14.10%. The MWh Offtake also increased from 7 MWh in 2010 to 25 MWh in 2023, marking a growth rate of 27.91% primarily attributed to the escalating load connections. Throughout this period, the Load Factor fluctuated from 5% to 26%. There was an abrupt change in consumption in year 2022 due to the occurrence of Typhoon Odette affecting the entire province of Bohol.



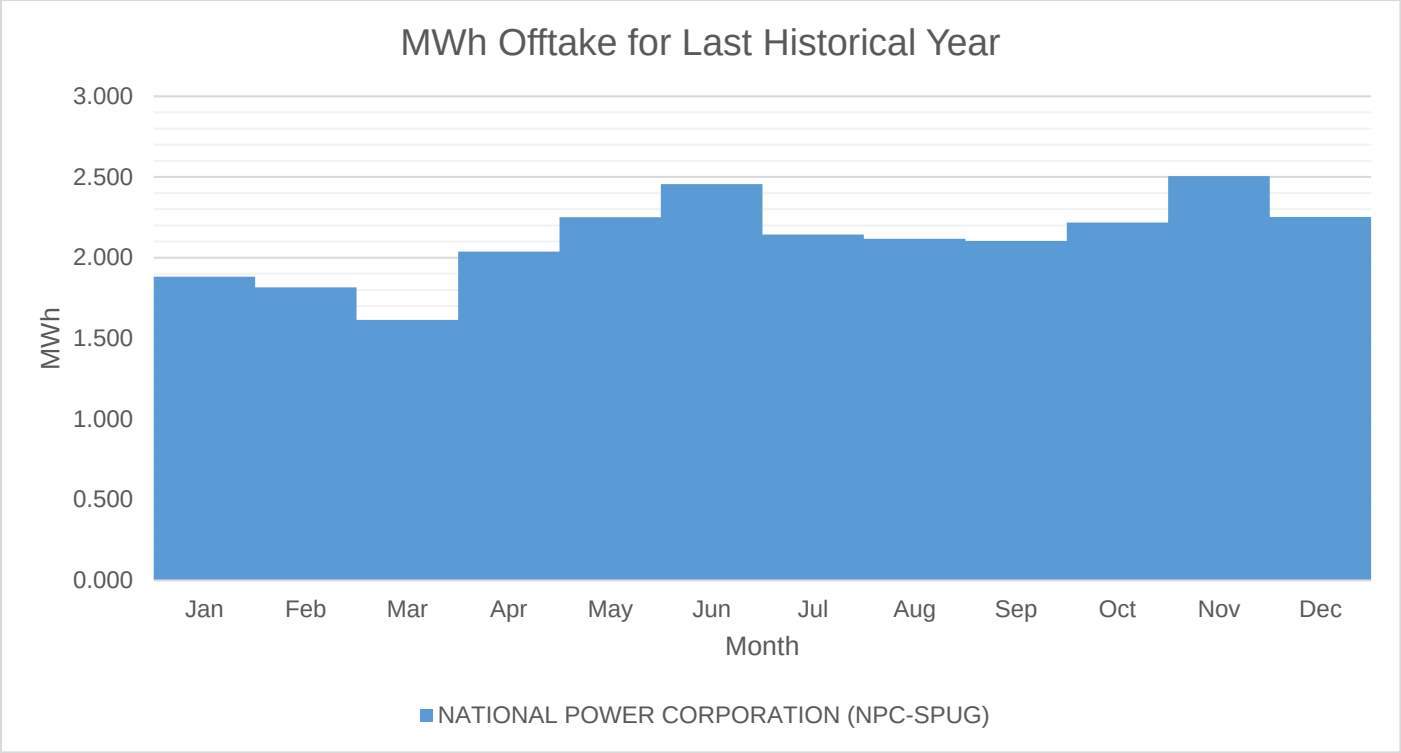
The above figure presents a graphical representation of energy consumption over the past 14 years. The MWh Output demonstrated a consistent increased from year 2010 to year 2023 with an average growth rate of 27.91%. On the other hand, the MWh Output in year 2022 significantly drops to -72.09% due to the occurrence of Typhoon Odette affecting the entire province of Bohol that badly hit the island.

System Loss

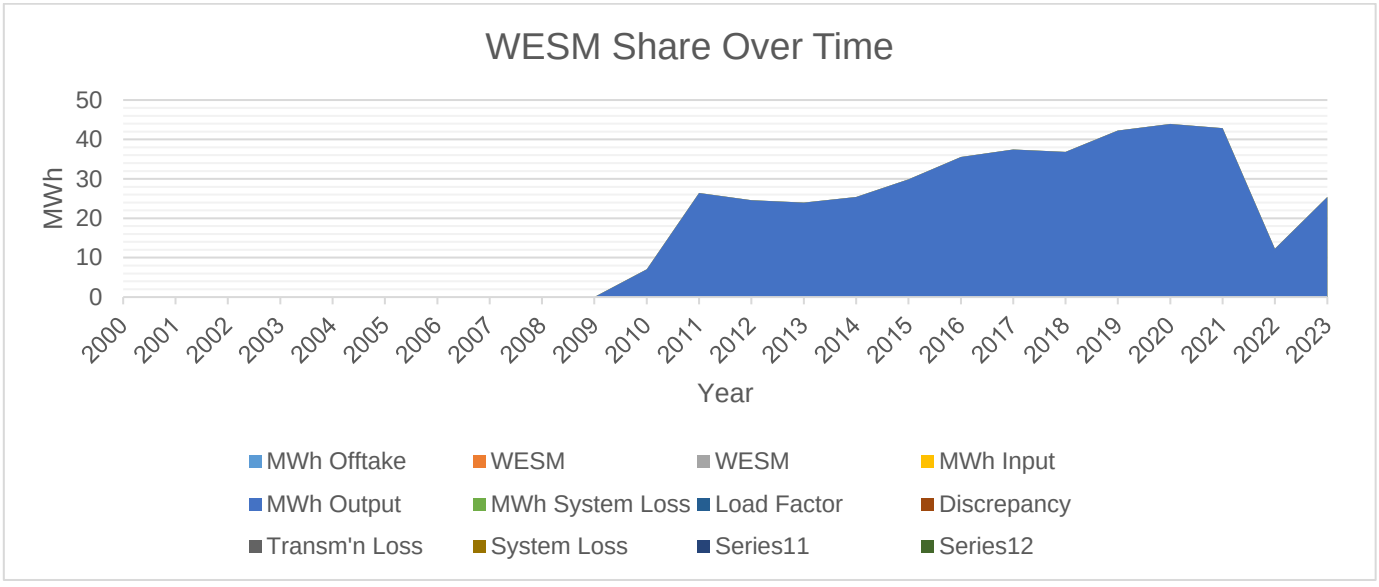
BOHECO I's report shows NO system loss in supplying power to Island Barangays through SPUG. This is because the kWh meter reading used for NPC SPUG's billing to BOHECO I is identical to BOHECO I's meter reading for sales to the Island Barangays. This alignment stems from a clustering setup, employing a single meter known as the Mother Meter for meter reading. NPC SPUG also utilizes this Mother Meter. Individual consumer bills are then generated internally, with the system loss prorated accordingly.



Residential customers constitute the entire energy sales on this island.

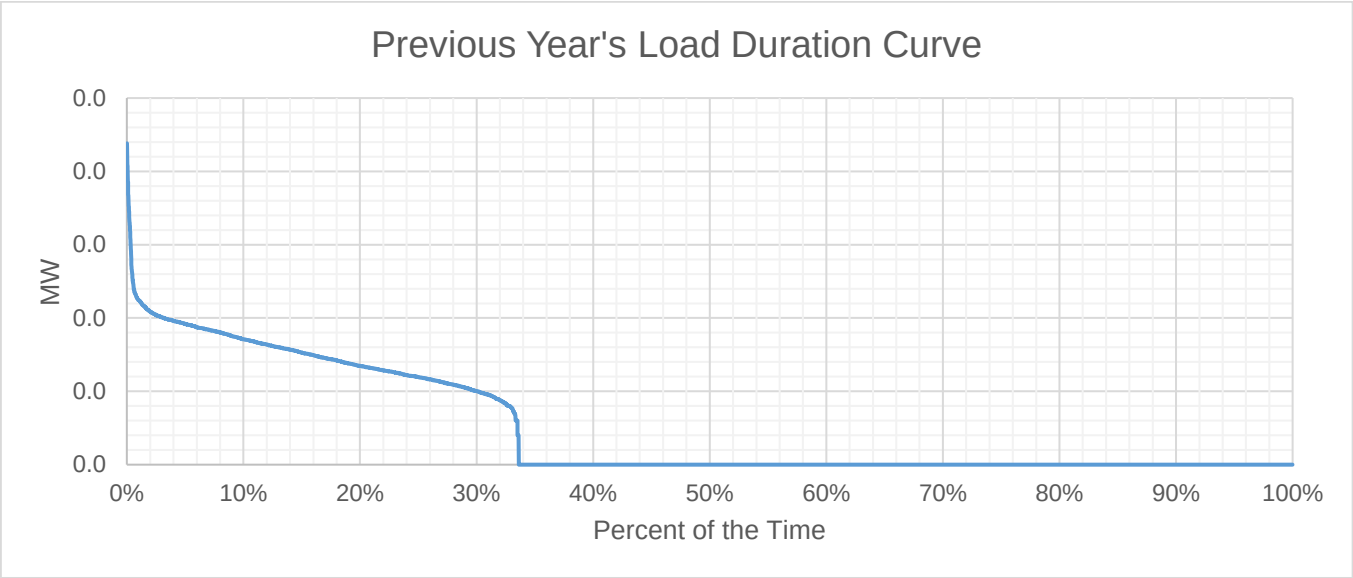


For NPC-SPUG, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with NPC-SPUG constitutes solely for the MWh Offtake.

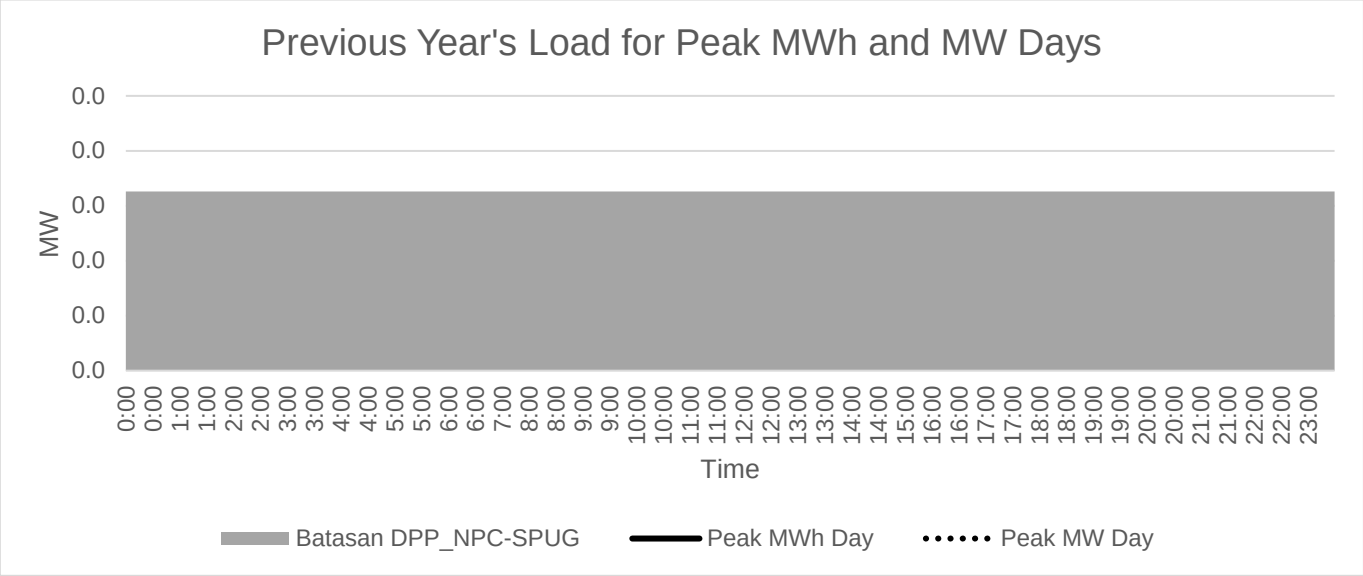


There is no share of WESM in the offtake since this is solely supplied by National Power Corporation – Small Power Utilities Group (NPC-SPUG).

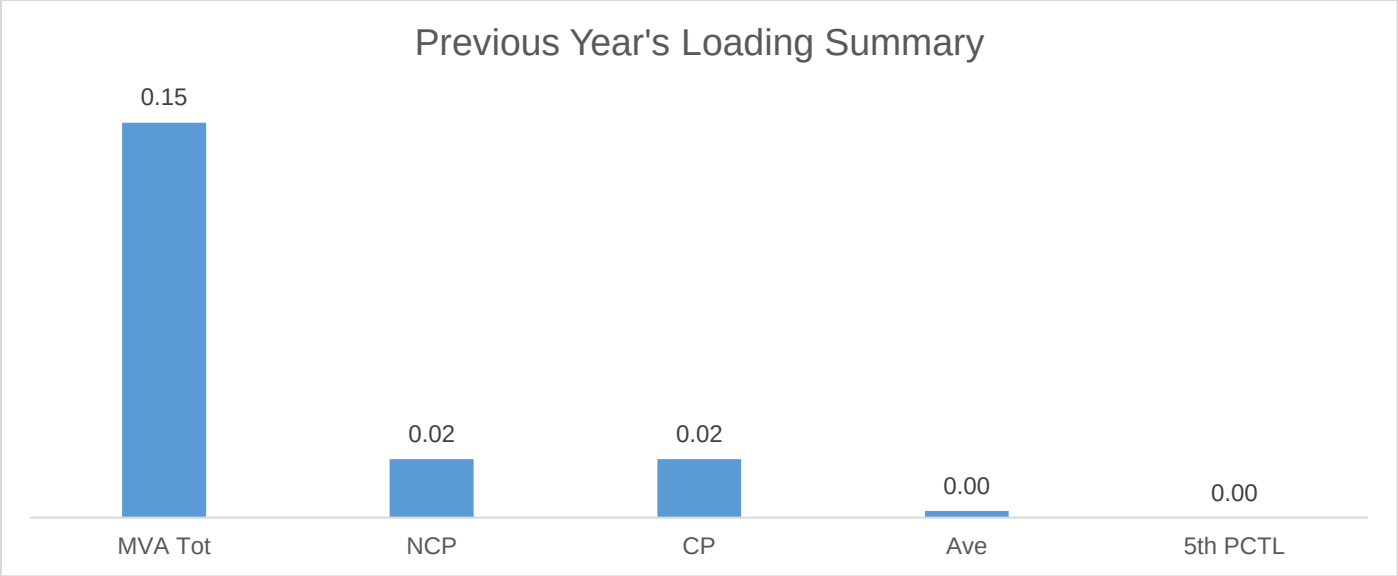
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 0.002 MW and the maximum load is 0.022 MW for the last historical year. The normal operating hours for the island is from 8-10 hours per day.



Peak MW occurred on May 26, 2023. Peak daily MWh occurred on May 26, 2023 from 5:00 P.M. to 6:00 P.M.



The Non-coincident Peak Demand is 0.02218 MW, which is around 16.25% of the total substation capacity of 0.15 MVA at a power factor of 91%. The load factor or the ratio between the Average Load of 0. 0.0025 MW and the Non-coincident Peak Demand is 11.35%. A safe estimate of the true minimum load is the fifth percentile load of 0 MW.

Metering Point	Substation MVA	Substation Peak MW
BATASAN	0.150	0.022

There is no substation loaded at 70% and above.

Forecasted Consumption Data

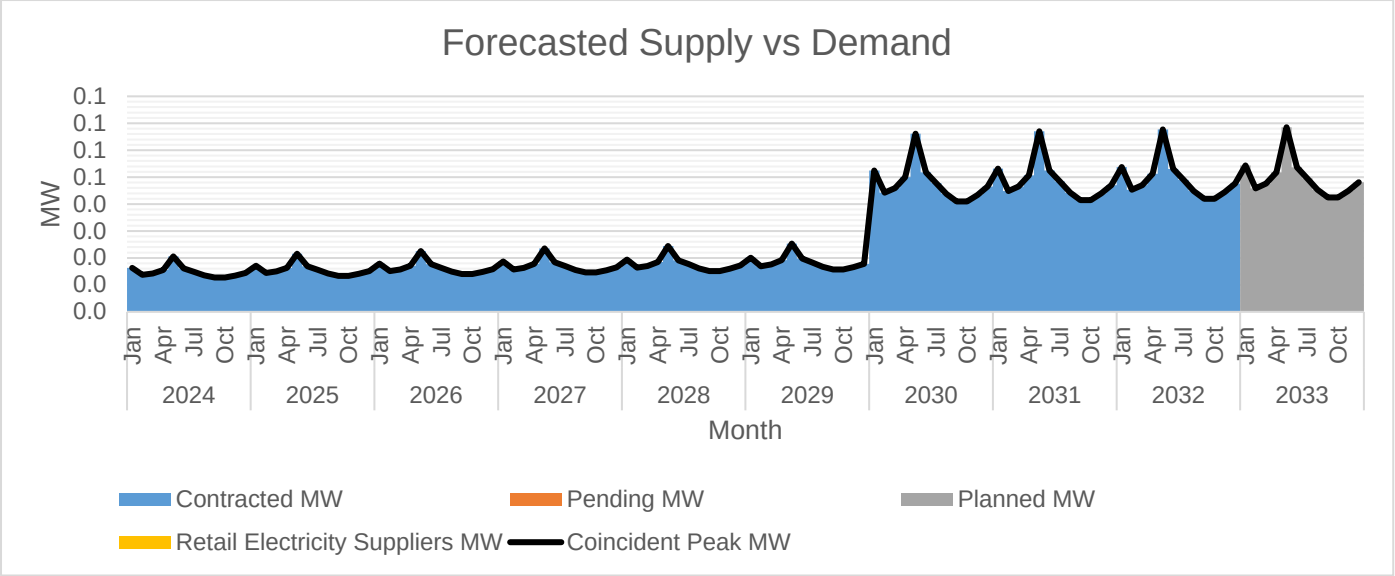
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	May	0.021	0.021	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.013	0.013	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.013	0.013	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.013	0.013	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
2025	Jan	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	May	0.022	0.022	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.013	0.013	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.013	0.013	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
2026	Jan	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	May	0.023	0.023	0.000	0.000	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
	Jun	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
2027	Jan	0.019	0.019	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	May	0.024	0.024	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
2028	Jan	0.019	0.019	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	May	0.024	0.024	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.019	0.019	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.015	0.015	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
2029	Jan	0.020	0.020	0.000	0.000	0.000	100%	100%	0.00

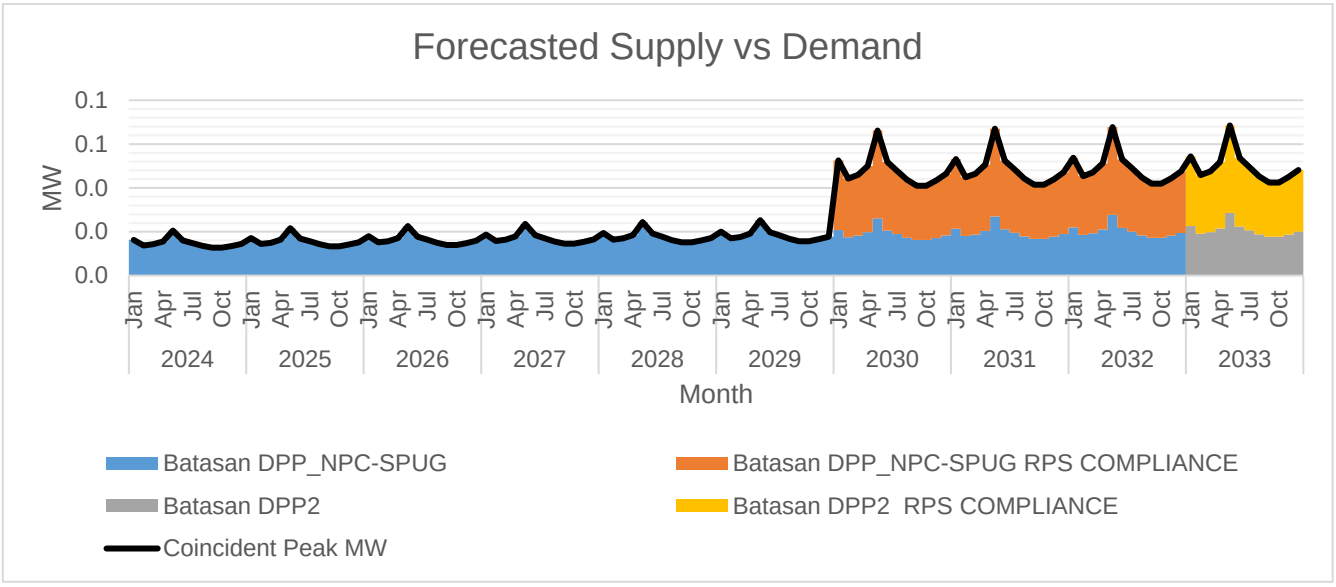
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Feb	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.019	0.019	0.000	0.000	0.000	100%	100%	0.00
	May	0.025	0.025	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.020	0.020	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.016	0.016	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.018	0.018	0.000	0.000	0.000	100%	100%	0.00
2030	Jan	0.052	0.052	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.044	0.044	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.046	0.046	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.050	0.050	0.000	0.000	0.000	100%	100%	0.00
	May	0.066	0.066	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.052	0.052	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.048	0.048	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.044	0.044	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.041	0.041	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.041	0.041	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.043	0.043	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.046	0.046	0.000	0.000	0.000	100%	100%	0.00
2031	Jan	0.053	0.053	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.045	0.045	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.046	0.046	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.051	0.051	0.000	0.000	0.000	100%	100%	0.00
	May	0.067	0.067	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.052	0.052	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.048	0.048	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.044	0.044	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.042	0.042	0.000	0.000	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
	Oct	0.042	0.042	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.044	0.044	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.047	0.047	0.000	0.000	0.000	100%	100%	0.00
2032	Jan	0.054	0.054	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.045	0.045	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.047	0.047	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.051	0.051	0.000	0.000	0.000	100%	100%	0.00
	May	0.068	0.068	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.053	0.053	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.049	0.049	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.045	0.045	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.042	0.042	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.042	0.042	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.044	0.044	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.048	0.048	0.000	0.000	0.000	100%	100%	0.00
2033	Jan	0.054	0.000	0.000	0.054	0.000	0%	100%	0.00
	Feb	0.046	0.000	0.000	0.046	0.000	0%	100%	0.00
	Mar	0.048	0.000	0.000	0.048	0.000	0%	100%	0.00
	Apr	0.052	0.000	0.000	0.052	0.000	0%	100%	0.00
	May	0.069	0.000	0.000	0.069	0.000	0%	100%	0.00
	Jun	0.054	0.000	0.000	0.054	0.000	0%	100%	0.00
	Jul	0.050	0.000	0.000	0.050	0.000	0%	100%	0.00
	Aug	0.045	0.000	0.000	0.045	0.000	0%	100%	0.00
	Sep	0.042	0.000	0.000	0.042	0.000	0%	100%	0.00
	Oct	0.042	0.000	0.000	0.042	0.000	0%	100%	0.00
	Nov	0.045	0.000	0.000	0.045	0.000	0%	100%	0.00
	Dec	0.048	0.000	0.000	0.048	0.000	0%	100%	0.00

Employing an Excel-based forecasting model, the Peak Demand was projected to peak in May due to high temperature and high economic activities of small businesses in the island during summer season. Conversely, the Monthly Peak Demand experiences its lowest point is in September and October maybe due to low economic activities. In general, the Peak Demand is anticipated to exhibit a growth trajectory with an average annual rate of 20.67%.



The available supply is generally equal to the Demand. This is because the kWh meter reading used for NPC SPUG's billing to BOHECO I is identical to BOHECO I's meter reading for sales to the Island Barangays. This alignment stems from a clustering setup, employing a single meter known as the Mother Meter for meter reading. NPC SPUG also utilizes this Mother Meter.



Power Supply Contracting.

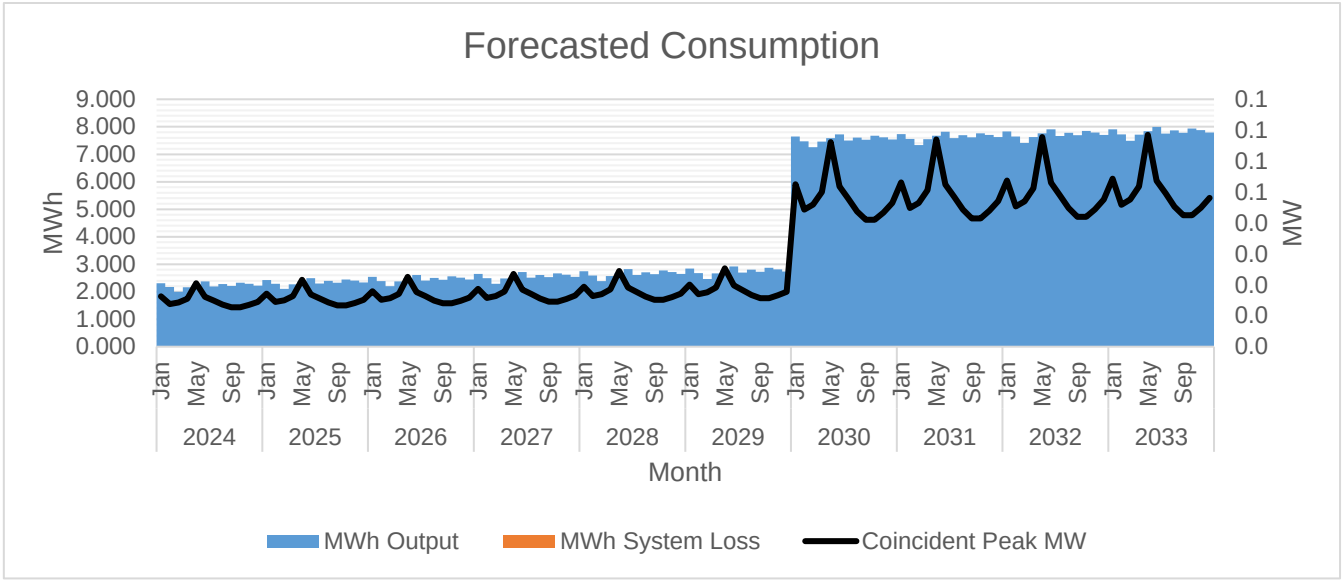
The highest target contracting level is 100% which is expected to occur in the entire contract period.

		MWh Offtake	MWh Output
2024	Jan	2.308	2.308
	Feb	2.173	2.173
	Mar	2.002	2.002
	Apr	2.163	2.163
	May	2.258	2.258
	Jun	2.372	2.372
	Jul	2.190	2.190
	Aug	2.275	2.275
	Sep	2.214	2.214
	Oct	2.328	2.328
	Nov	2.284	2.284
	Dec	2.222	2.222
2025	Jan	2.426	2.426
	Feb	2.284	2.284
	Mar	2.104	2.104
	Apr	2.274	2.274
	May	2.373	2.373
	Jun	2.493	2.493
	Jul	2.302	2.302
	Aug	2.391	2.391
	Sep	2.327	2.327
	Oct	2.447	2.447
	Nov	2.401	2.401
	Dec	2.335	2.335
2026	Jan	2.538	2.538
	Feb	2.389	2.389
	Mar	2.200	2.200
	Apr	2.378	2.378
	May	2.482	2.482
	Jun	2.607	2.607
	Jul	2.408	2.408
	Aug	2.501	2.501
	Sep	2.434	2.434
	Oct	2.559	2.559
	Nov	2.511	2.511
	Dec	2.443	2.443
2027	Jan	2.644	2.644
	Feb	2.489	2.489
	Mar	2.293	2.293
	Apr	2.478	2.478
	May	2.586	2.586
	Jun	2.717	2.717
	Jul	2.509	2.509
	Aug	2.606	2.606

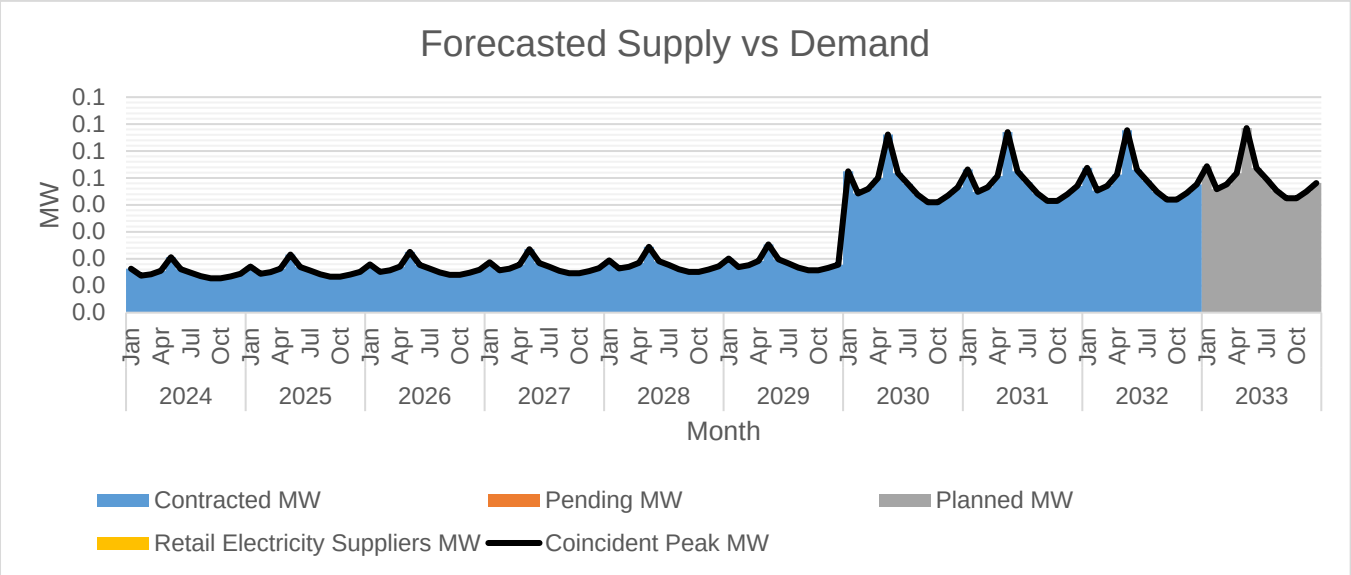
		MWh Offtake	MWh Output
	Sep	2.536	2.536
	Oct	2.666	2.666
	Nov	2.616	2.616
	Dec	2.545	2.545
2028	Jan	2.746	2.746
	Feb	2.585	2.585
	Mar	2.381	2.381
	Apr	2.574	2.574
	May	2.686	2.686
	Jun	2.822	2.822
	Jul	2.606	2.606
	Aug	2.706	2.706
	Sep	2.634	2.634
	Oct	2.769	2.769
	Nov	2.717	2.717
	Dec	2.643	2.643
2029	Jan	2.844	2.844
	Feb	2.677	2.677
	Mar	2.466	2.466
	Apr	2.665	2.665
	May	2.782	2.782
	Jun	2.922	2.922
	Jul	2.699	2.699
	Aug	2.802	2.802
	Sep	2.728	2.728
	Oct	2.868	2.868
	Nov	2.814	2.814
	Dec	2.737	2.737
2030	Jan	7.647	7.647
	Feb	7.475	7.475
	Mar	7.257	7.257
	Apr	7.463	7.463
	May	7.583	7.583
	Jun	7.728	7.728
	Jul	7.497	7.497
	Aug	7.604	7.604
	Sep	7.527	7.527
	Oct	7.672	7.672
	Nov	7.616	7.616
	Dec	7.537	7.537
2031	Jan	7.738	7.738
	Feb	7.561	7.561
	Mar	7.335	7.335
	Apr	7.548	7.548
	May	7.672	7.672
	Jun	7.821	7.821
	Jul	7.583	7.583
	Aug	7.694	7.694

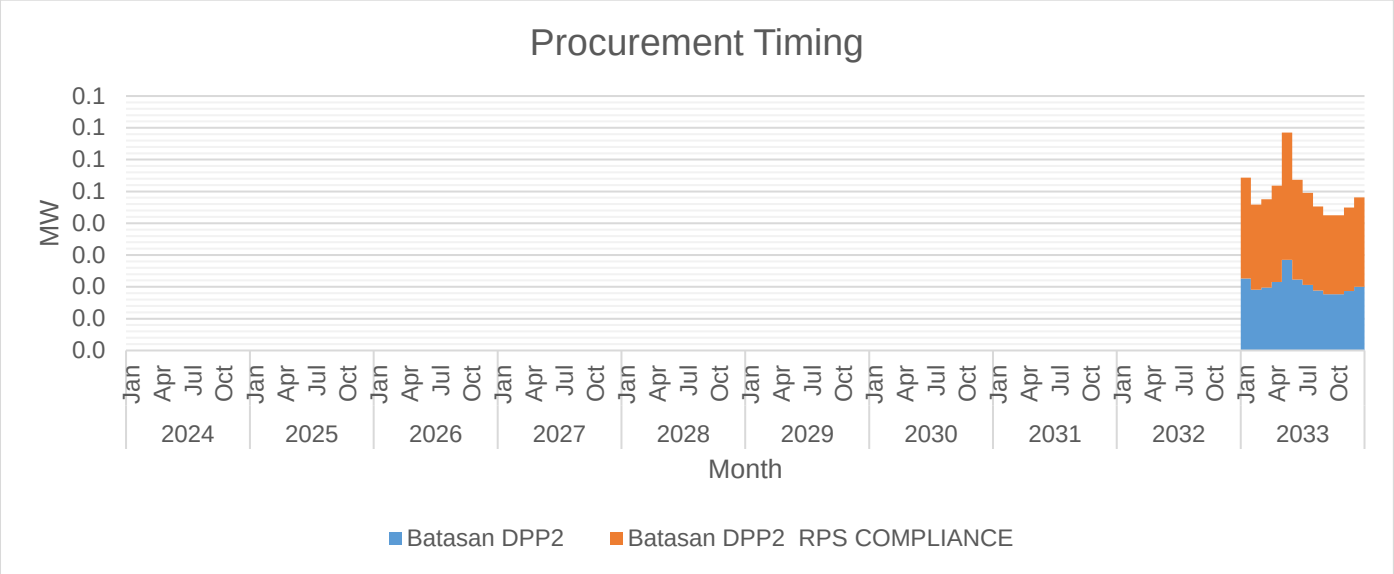
		MWh Offtake	MWh Output
	Sep	7.614	7.614
	Oct	7.764	7.764
	Nov	7.706	7.706
	Dec	7.625	7.625
2032	Jan	7.826	7.826
	Feb	7.643	7.643
	Mar	7.412	7.412
	Apr	7.630	7.630
	May	7.758	7.758
	Jun	7.912	7.912
	Jul	7.667	7.667
	Aug	7.781	7.781
	Sep	7.699	7.699
	Oct	7.852	7.852
	Nov	7.793	7.793
	Dec	7.709	7.709
2033	Jan	7.911	7.911
	Feb	7.724	7.724
	Mar	7.486	7.486
	Apr	7.710	7.710
	May	7.841	7.841
	Jun	7.999	7.999
	Jul	7.748	7.748
	Aug	7.865	7.865
	Sep	7.780	7.780
	Oct	7.938	7.938
	Nov	7.878	7.878
	Dec	7.791	7.791

MWh Offtake was forecasted using an Excel-based forecasting model. The assumed load factor averages at 14.88%.



MWh Output was expected to grow at an average rate of 21.03% annually.





The first wave of supply procurement will be for 0.018 MW minimum and 0.040 MW minimum from an elegible RE which is planned to be available on December 26, 2032. The planned CSP will address the forecasted demand requirement for the year 2033 onwards.

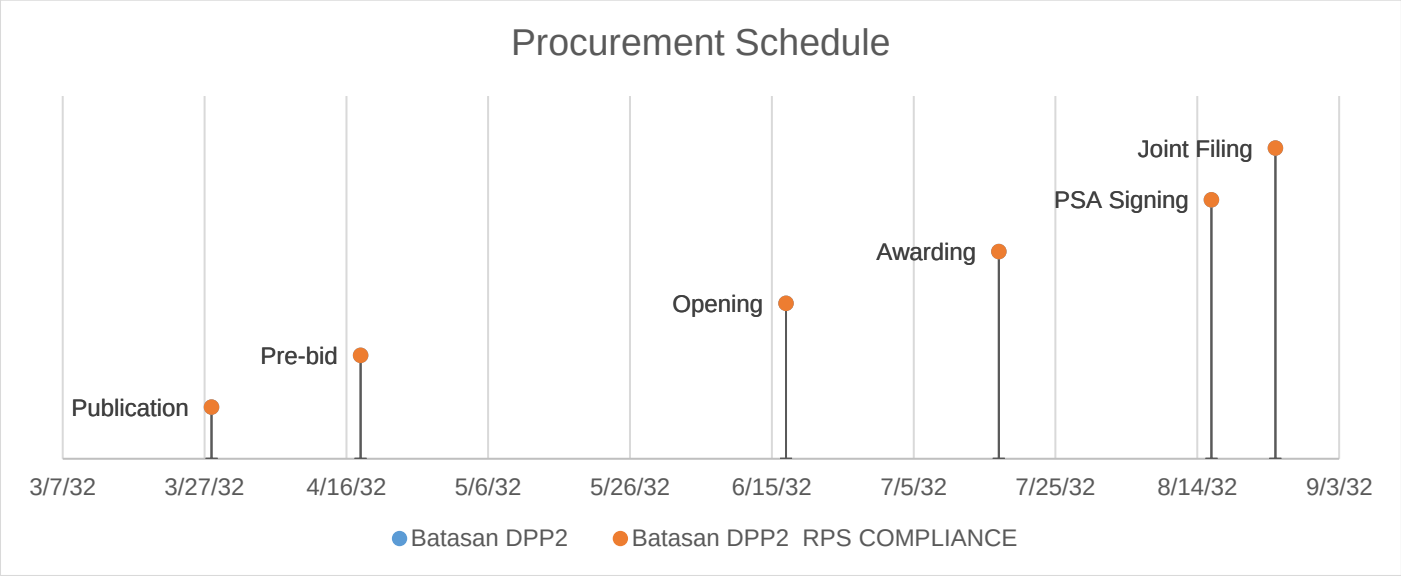
Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
Batasan DPP_NPC-SPUG	Base	National Power Corporation	0.012	67	12/26/2022	12/25/2032
Batasan DPP_NPC-SPUG RPS COMPLIANCE	Base	National Power Corporation	0.040	57	12/26/2022	12/25/2032

The Power Supply Agreement (PSA) with Batasan Island as well as other islands under the coverage area of BOHECO I was renewed up to ten years. Under Section 3 of the approved PSA states that, "*This PSA shall remain in full force and effect for TEN (10) years from 26 December 2022 to 25 December 2032 covering the areas of Bagongbanwa, Balicasag, Batasan,*

Bilangbilangan, Cuaming. Hambongan, Mantatao, Mocaboc, Pamilacan, Pangapasan, and Ubay, renewable by mutual consent of the Parties."

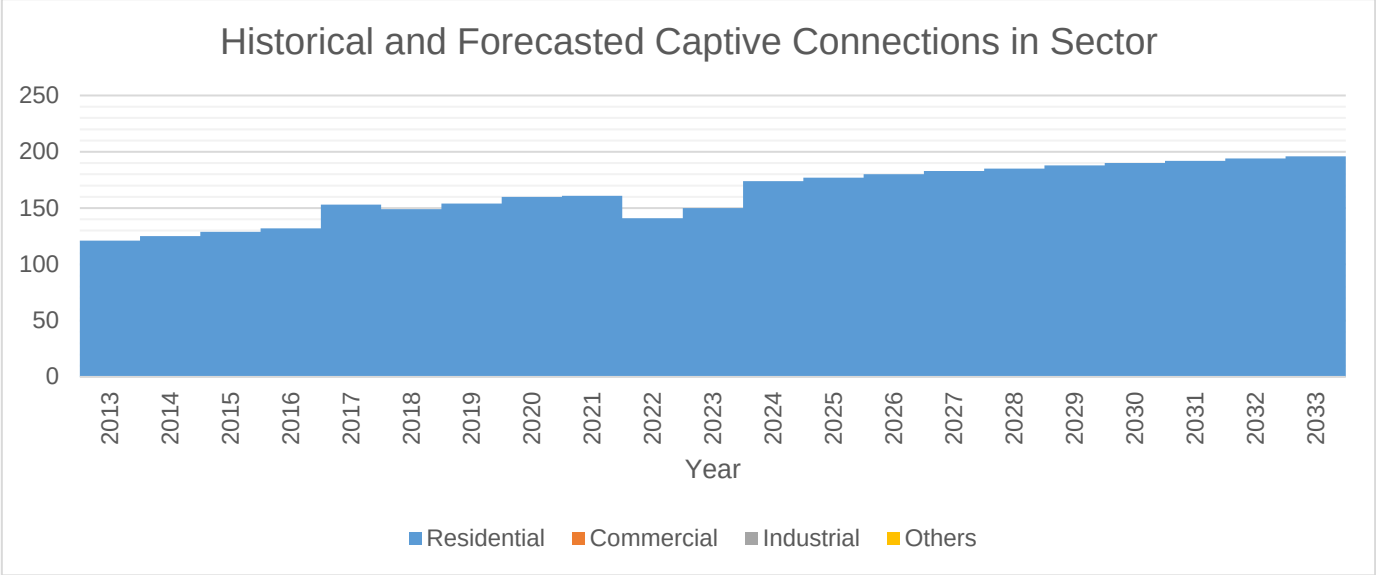
	Batasan DPP2	Batasan DPP2 RPS COMPLIANCE
Type	Base	Base
Minimum MW	0.018	0.040
Minimum MWh/yr	37	57
PSA Start	12/26/2032	12/26/2032
PSA End	12/25/2042	12/25/2042
Publication	3/28/2032	3/28/2032
Pre-bid	4/18/2032	4/18/2032
Opening	6/17/2032	6/17/2032
Awarding	7/17/2032	7/17/2032
PSA Signing	8/16/2032	8/16/2032
Joint Filing	8/25/2032	8/25/2032



For the procurement of 0.018 MW minimum and 0.040 MW minimum from an eligible RE which is planned to be available on December 26, 2032, the first publication or launch of CSP will be on March 28, 2032. The planned CSP will address the forecasted demand requirement of BATASAN ISLAND.

Joint filing is planned on August 25, 2032. However, the above schedule is subject to change to comply the CSP rulings and/or the completeness of the CSP process.

Captive Customer Connections



The number of Residential connections is expected to grow at an average rate of 1.33% annually. Said customer class is expected to account for 100% of the total consumption.