Power Supply Procurement Plan 2024

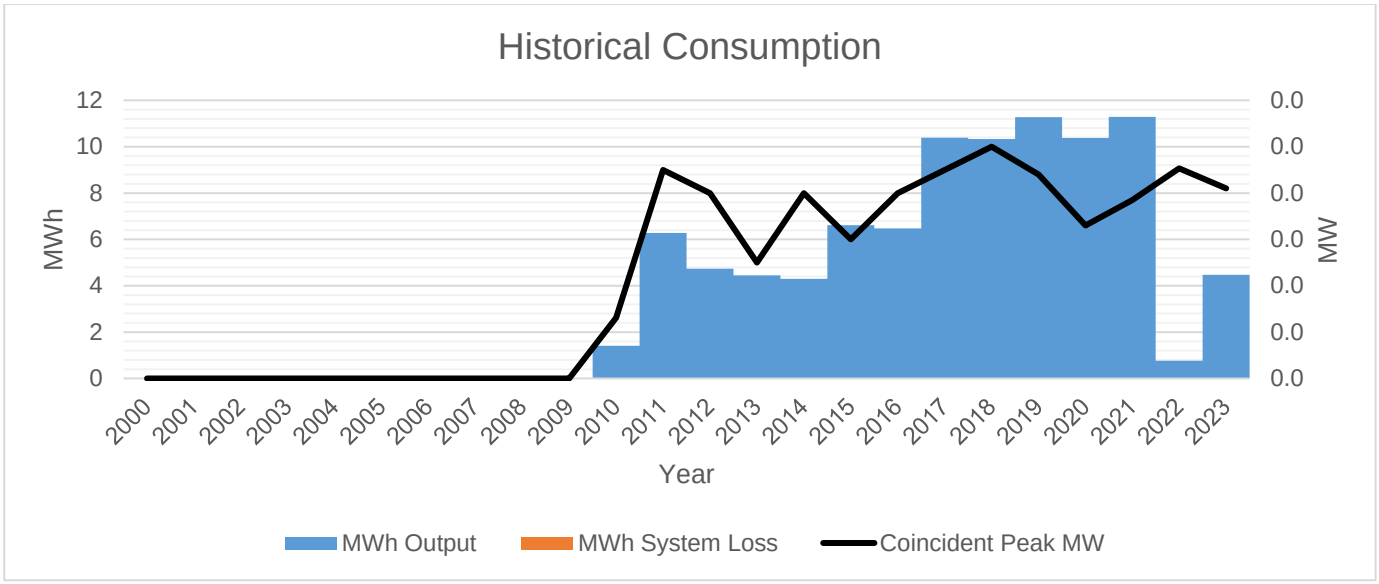
BOHOL I ELECTRIC COOPERATIVE, INC.
(BOHECO I)

UBAY ISLAND

Historical Consumption Data

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	Load Factor
2010	0.00	1	n/a	1	1	6%
2011	0.01	6	n/a	6	6	8%
2012	0.01	5	n/a	5	5	7%
2013	0.01	4	n/a	4	4	10%
2014	0.01	4	n/a	4	4	6%
2015	0.01	7	n/a	7	7	13%
2016	0.01	6	n/a	6	6	9%
2017	0.01	10	n/a	10	10	13%
2018	0.01	10	n/a	10	10	12%
2019	0.01	11	n/a	11	11	15%
2020	0.01	10	n/a	10	10	18%
2021	0.01	11	n/a	11	11	17%
2022	0.01	1	n/a	1	1	1%
2023	0.01	4	n/a	4	4	6%

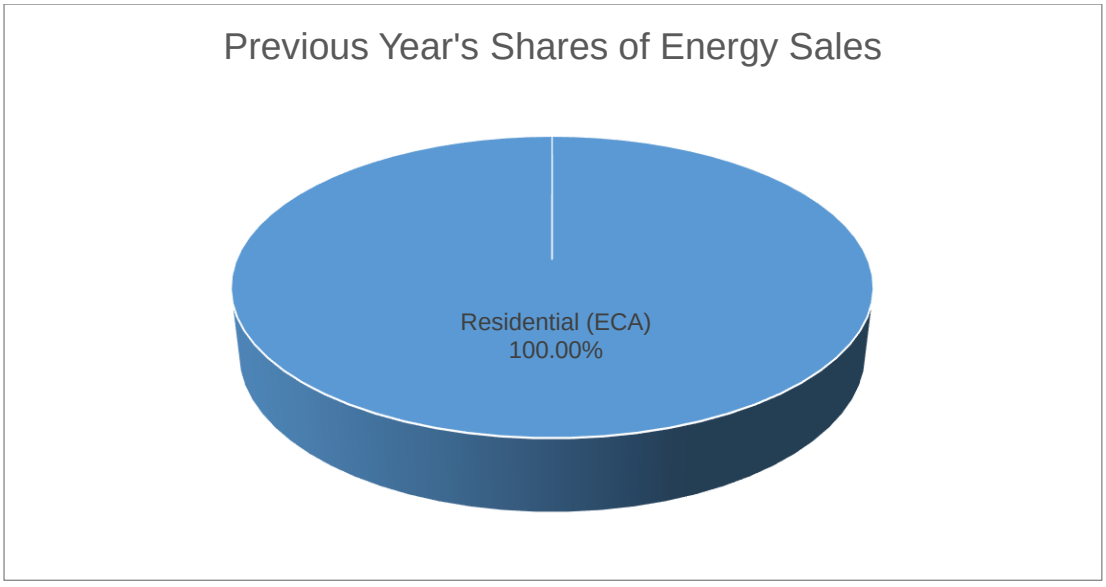
The above historical data was the only available/retrieved data as of the moment. The Peak Demand exhibited was maintained at 0.1 MW. On the other hand, the MWh Offtake also increased from 1 MWh in 2010 to 4 MWh in 2023, marking a growth rate of 62.36% primarily attributed to the load connections. Throughout this period, the Load Factor fluctuated from 1% to 18%. There was an abrupt change in consumption in year 2022 due to the occurrence of Typhoon Odette affecting the entire province of Bohol.



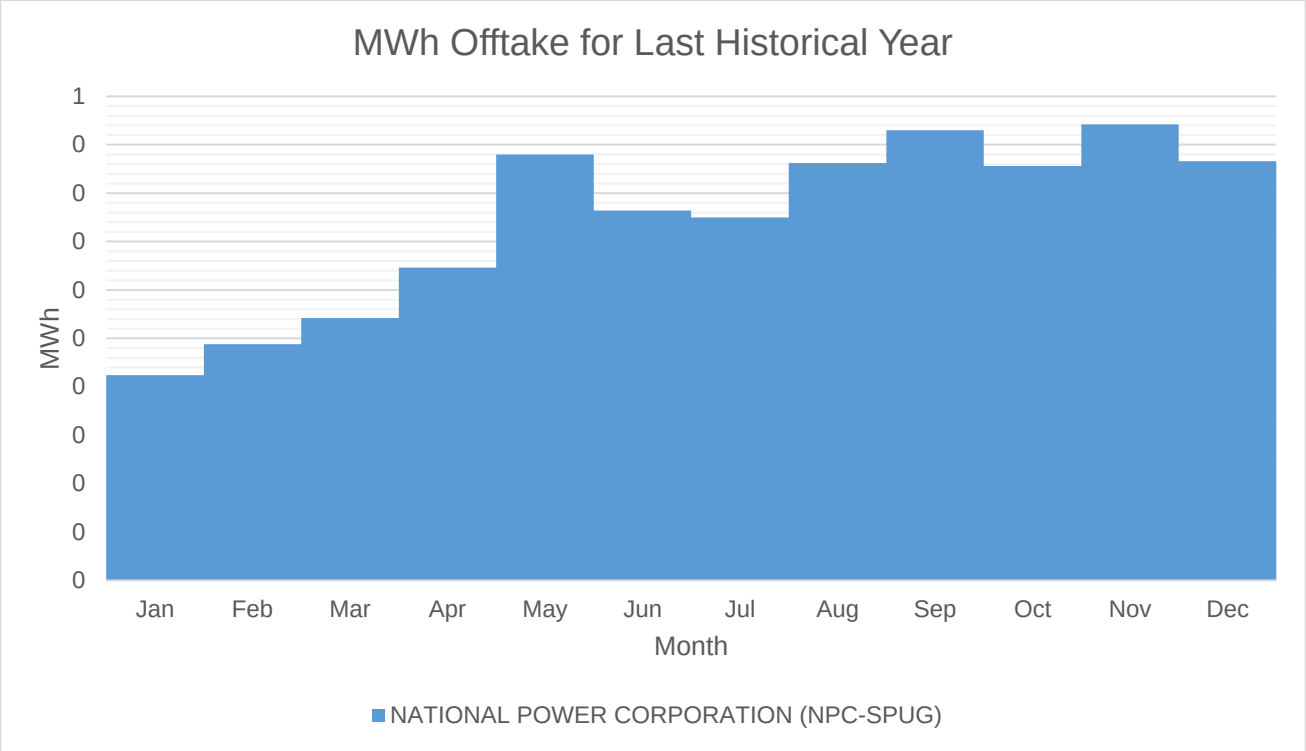
The above figure presents a graphical representation of energy consumption over the past 14 years. The MWh Output demonstrated an increase from year 2010 to year 2023 with an average growth rate of 62.36%. On the other hand, the MWh Output in year 2022 significantly drops to -90.91% due to the occurrence of Typhoon Odette affecting the entire province of Bohol.

System Loss

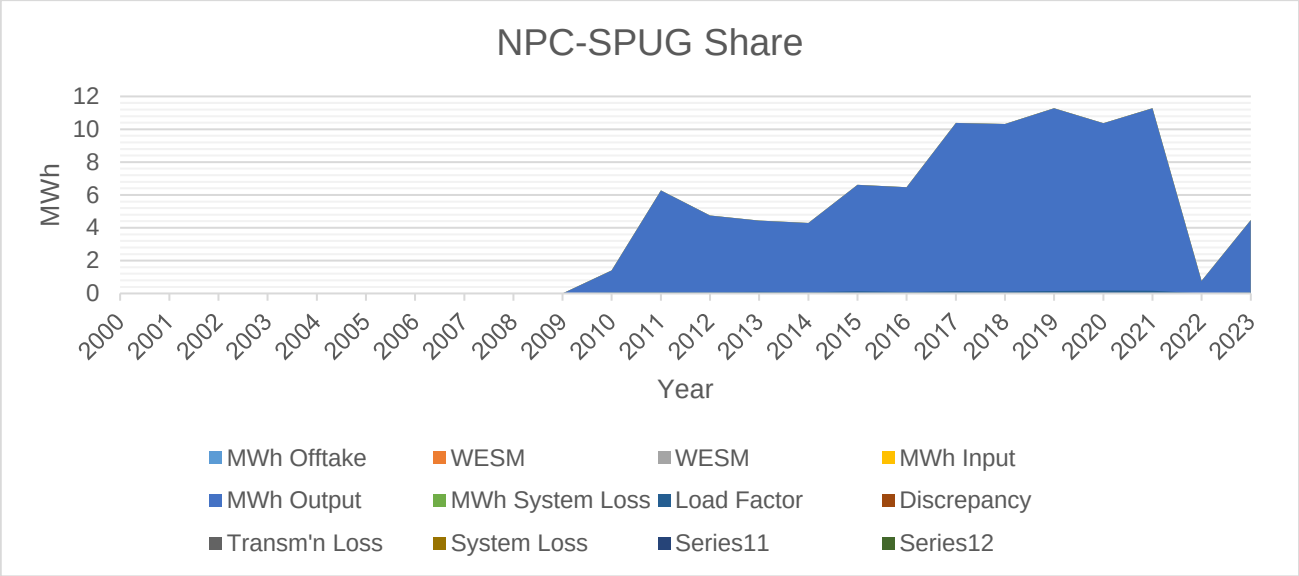
BOHECO I's report shows NO system loss in supplying power to Island Barangays through SPUG. This is because the kWh meter reading used for NPC SPUG's billing to BOHECO I is identical to BOHECO I's meter reading for sales to the Island Barangays. This alignment stems from a clustering setup, employing 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.

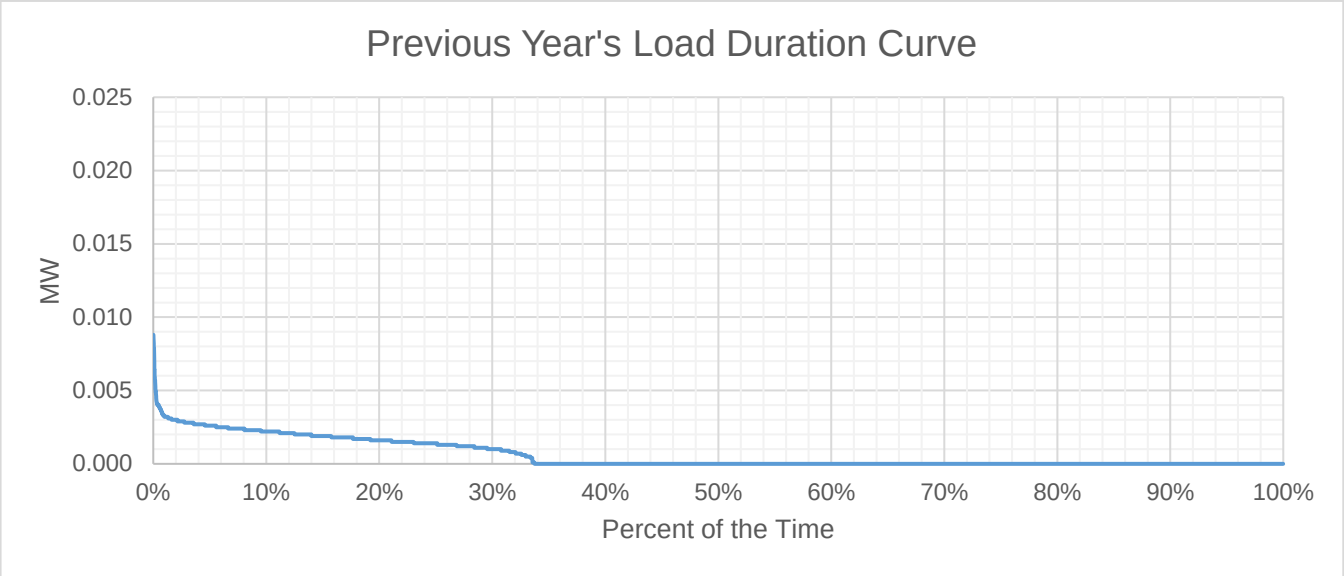


For NPC-SPUG, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with NPC-SPUG constitutes solely for the MWh Offtake.

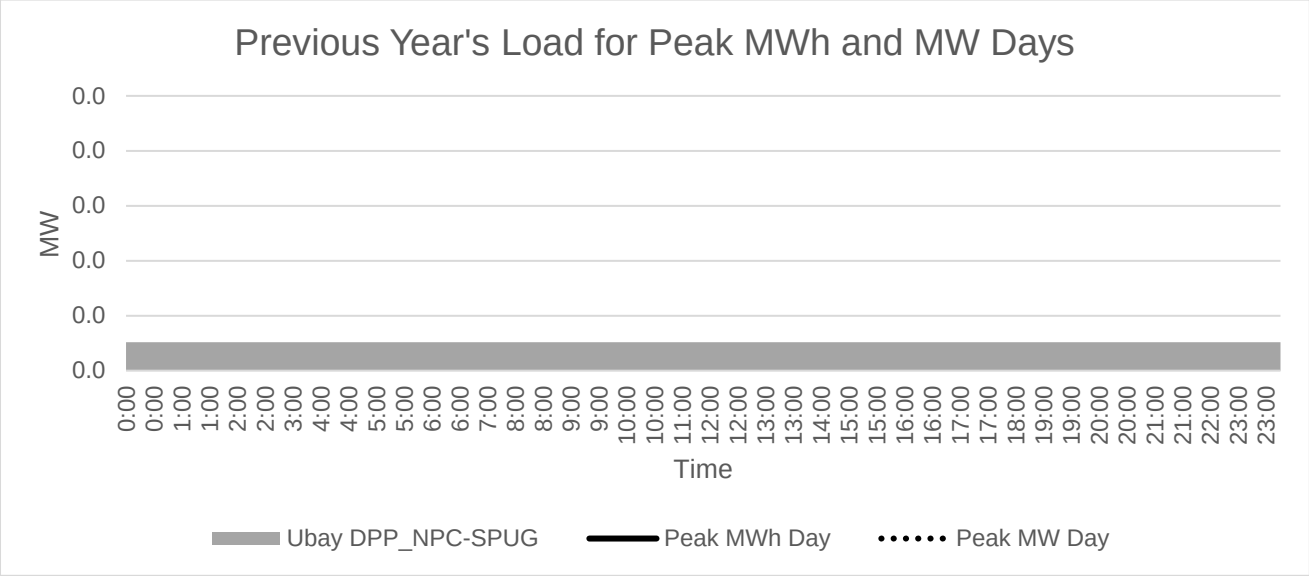


There is no share of WESM in the offtake since this is solely supplied by National Power Corporation – Small Power Utilities Group (NPC-SPUG).

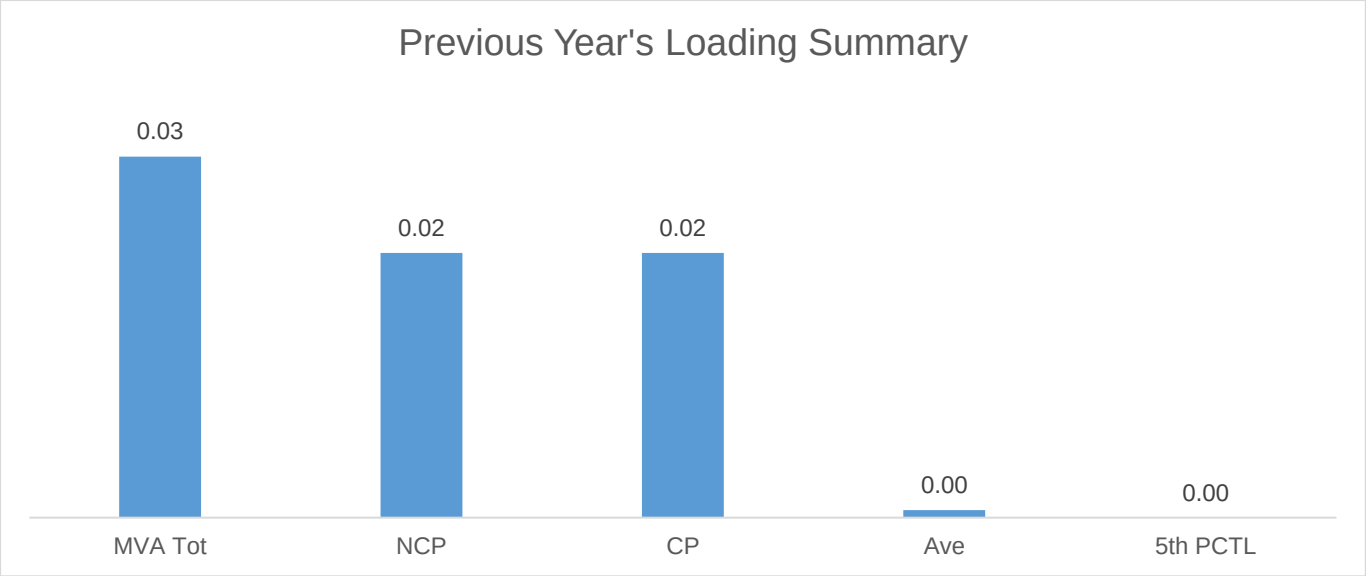
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 0.001 MW and the maximum load is 0.022 MW for the last historical year. The normal operating hours for islands is from 8-10 hours per day.



Peak MW occurred on April 20, 2023. Peak daily MWh occurred on April 20, 2023 at 6:00 P.M.



The Non-coincident Peak Demand is 0.022 MW, which is around 80.59% of the total substation capacity of 0.03 MVA at a power factor of 91%. The load factor or the ratio between the Average Load of 0.00063 MW and the Non-coincident Peak Demand is 2.87%. A safe estimate of the true minimum load is the fifth percentile load of 0 MW.

Metering Point	Substation MVA	Substation Peak MW
UBAY	0.030	0.022

The substation is loaded at above 70% .

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	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	May	0.004	0.004	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
2025	Jan	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	May	0.004	0.004	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Sep	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
2026	Jan	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	May	0.004	0.004	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.003	0.003	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
	Sep	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
2027	Jan	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	May	0.004	0.004	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
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	Aug	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
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	Oct	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
2028	Jan	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.002	0.002	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
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	Jul	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
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	Sep	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Oct	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
2029	Jan	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	May	0.005	0.005	0.000	0.000	0.000	100%	100%	0.00
	Jun	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Jul	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Aug	0.003	0.003	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
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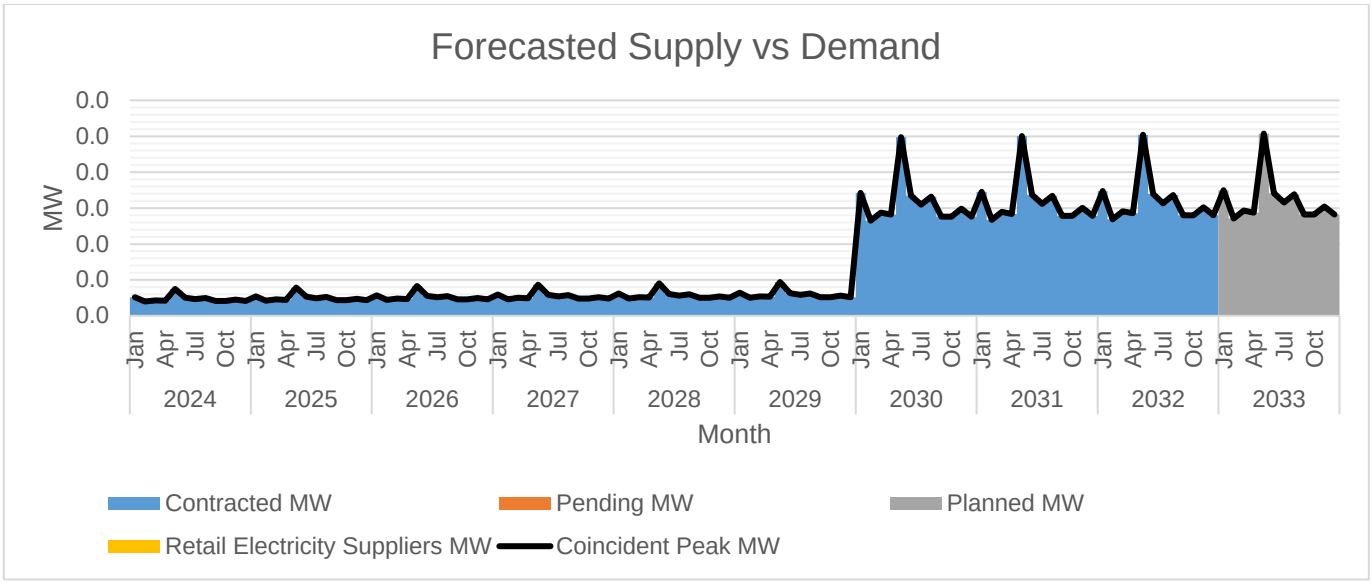
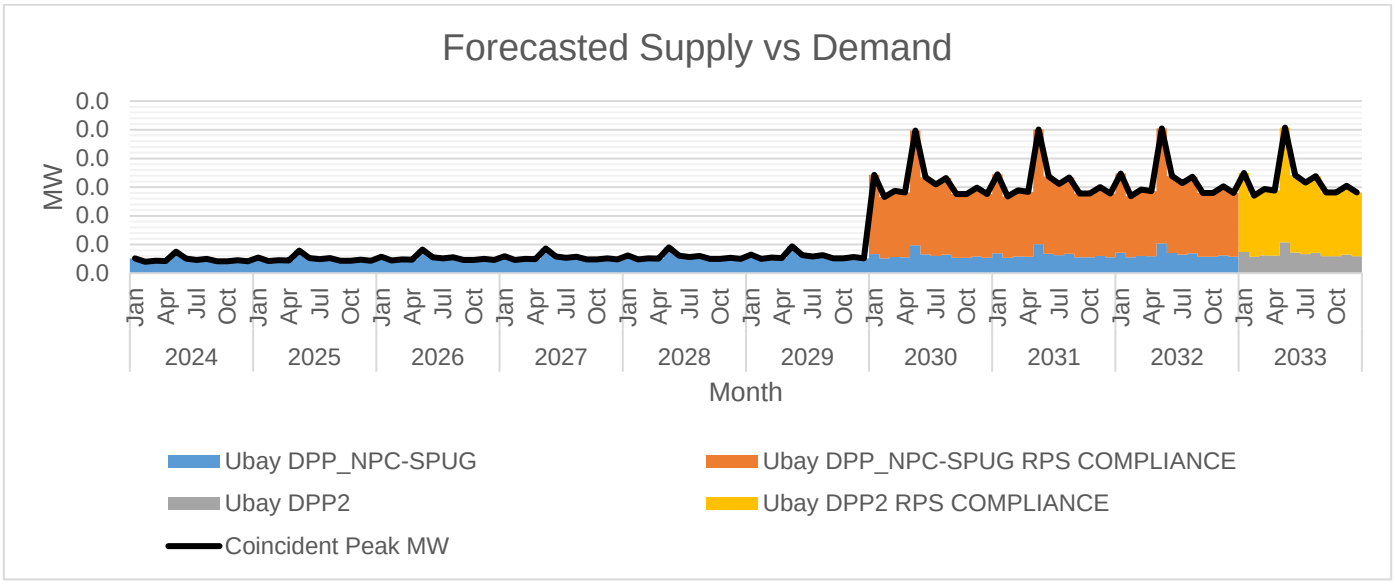
	Oct	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Nov	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
	Dec	0.003	0.003	0.000	0.000	0.000	100%	100%	0.00
2030	Jan	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.013	0.013	0.000	0.000	0.000	100%	100%	0.00
	Mar	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
	Apr	0.014	0.014	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	0.017	0.017	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	0.017	0.017	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	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
2031	Jan	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.013	0.013	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	0.014	0.014	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	0.017	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	0.017	0.017	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	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
2032	Jan	0.017	0.017	0.000	0.000	0.000	100%	100%	0.00
	Feb	0.013	0.013	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	0.014	0.014	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	0.017	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	0.017	0.017	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
	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	0.014	0.014	0.000	0.000	0.000	100%	100%	0.00
2033	Jan	0.017	0.000	0.000	0.017	0.000	0%	100%	0.00
	Feb	0.014	0.000	0.000	0.014	0.000	0%	100%	0.00
	Mar	0.015	0.000	0.000	0.015	0.000	0%	100%	0.00
	Apr	0.014	0.000	0.000	0.014	0.000	0%	100%	0.00
	May	0.025	0.000	0.000	0.025	0.000	0%	100%	0.00
	Jun	0.017	0.000	0.000	0.017	0.000	0%	100%	0.00
	Jul	0.016	0.000	0.000	0.016	0.000	0%	100%	0.00
	Aug	0.017	0.000	0.000	0.017	0.000	0%	100%	0.00
	Sep	0.014	0.000	0.000	0.014	0.000	0%	100%	0.00
	Oct	0.014	0.000	0.000	0.014	0.000	0%	100%	0.00
	Nov	0.015	0.000	0.000	0.015	0.000	0%	100%	0.00
	Dec	0.014	0.000	0.000	0.014	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 February due to less economic activities. In general, the Peak Demand is anticipated to exhibit a growth trajectory with an average annual rate of 50.56%.



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.

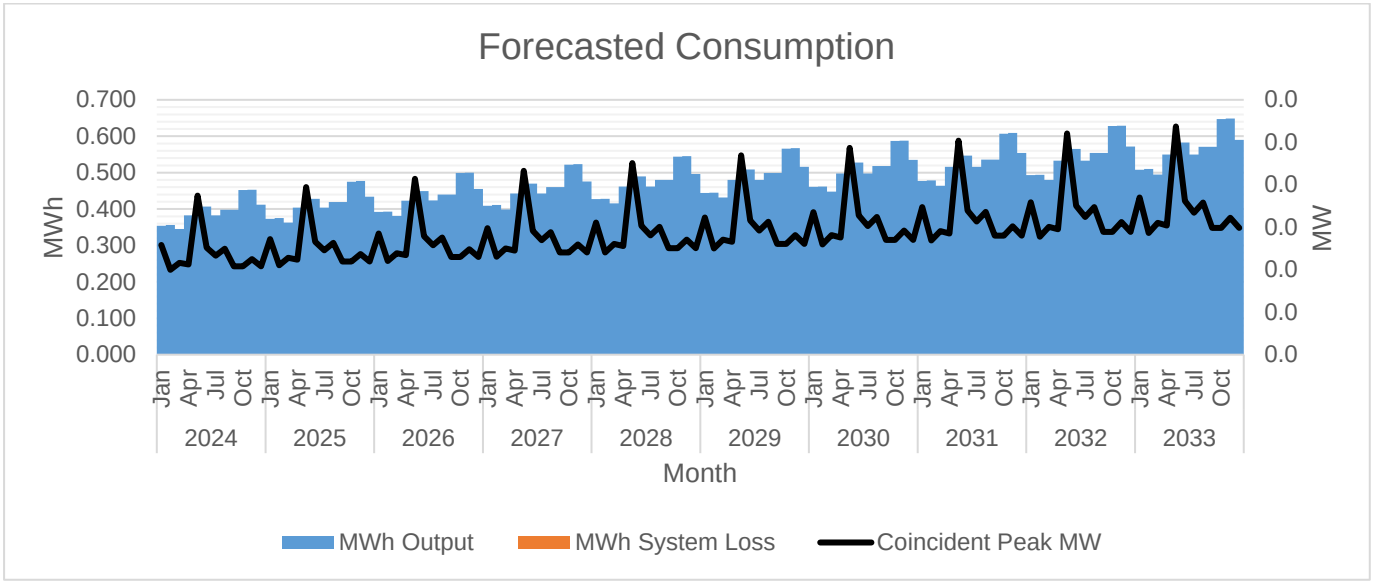
The highest target contracting level is 100% which is expected to occur in the entire contract period.

		MWh Offtake	MWh Output
2024	Jan	0.354	0.354
	Feb	0.356	0.356
	Mar	0.345	0.345
	Apr	0.383	0.383
	May	0.386	0.386
	Jun	0.407	0.407
	Jul	0.383	0.383
	Aug	0.398	0.398
	Sep	0.398	0.398
	Oct	0.452	0.452
	Nov	0.453	0.453
	Dec	0.412	0.412
2025	Jan	0.373	0.373
	Feb	0.375	0.375
	Mar	0.363	0.363
	Apr	0.404	0.404
	May	0.406	0.406
	Jun	0.428	0.428
	Jul	0.404	0.404
	Aug	0.419	0.419
	Sep	0.419	0.419
	Oct	0.475	0.475
	Nov	0.477	0.477
	Dec	0.434	0.434
2026	Jan	0.392	0.392
	Feb	0.393	0.393
	Mar	0.381	0.381
	Apr	0.423	0.423
	May	0.426	0.426
	Jun	0.449	0.449
	Jul	0.424	0.424
	Aug	0.440	0.440
	Sep	0.440	0.440
	Oct	0.499	0.499
	Nov	0.500	0.500
	Dec	0.455	0.455
2027	Jan	0.409	0.409
	Feb	0.411	0.411
	Mar	0.399	0.399
	Apr	0.443	0.443
	May	0.446	0.446
	Jun	0.470	0.470
	Jul	0.443	0.443
	Aug	0.460	0.460
	Sep	0.460	0.460
	Oct	0.522	0.522

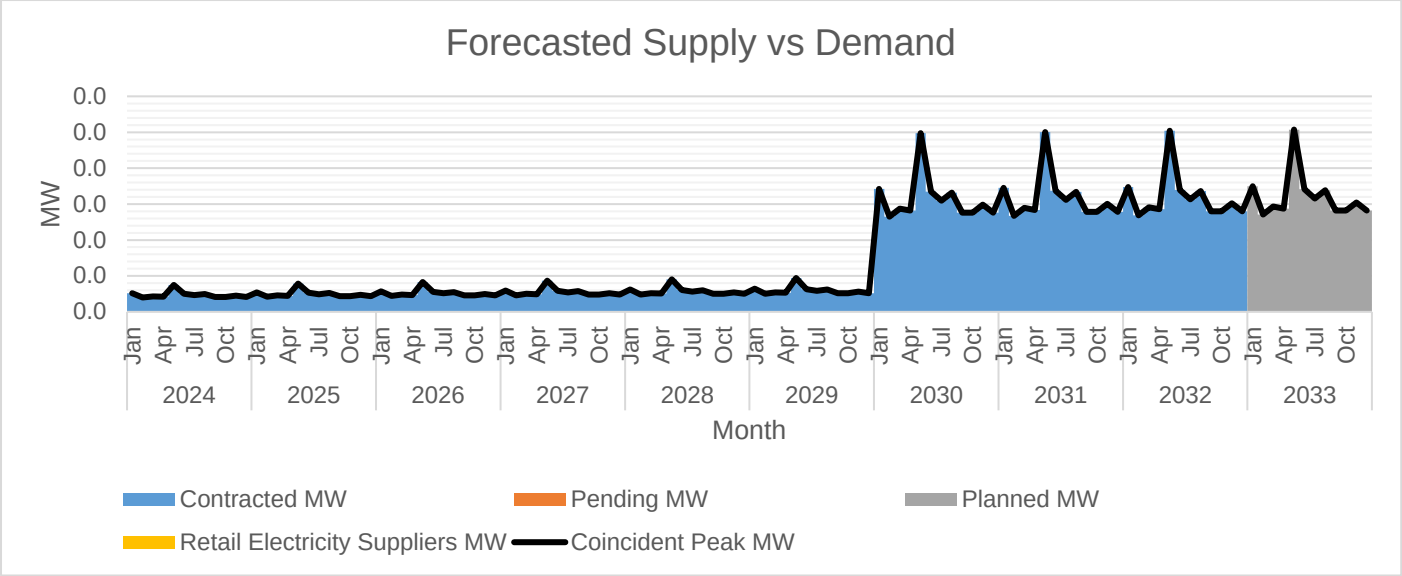
		MWh Offtake	MWh Output
	Nov	0.523	0.523
	Dec	0.476	0.476
2028	Jan	0.427	0.427
	Feb	0.428	0.428
	Mar	0.416	0.416
	Apr	0.462	0.462
	May	0.465	0.465
	Jun	0.490	0.490
	Jul	0.462	0.462
	Aug	0.480	0.480
	Sep	0.480	0.480
	Oct	0.544	0.544
	Nov	0.545	0.545
	Dec	0.496	0.496
2029	Jan	0.444	0.444
	Feb	0.445	0.445
	Mar	0.432	0.432
	Apr	0.480	0.480
	May	0.483	0.483
	Jun	0.509	0.509
	Jul	0.480	0.480
	Aug	0.499	0.499
	Sep	0.499	0.499
	Oct	0.566	0.566
	Nov	0.567	0.567
	Dec	0.516	0.516
2030	Jan	2.840	2.840
	Feb	2.841	2.841
	Mar	2.827	2.827
	Apr	2.877	2.877
	May	2.880	2.880
	Jun	2.907	2.907
	Jul	2.877	2.877
	Aug	2.897	2.897
	Sep	2.897	2.897
	Oct	2.966	2.966
	Nov	2.967	2.967
	Dec	2.914	2.914
2031	Jan	2.856	2.856
	Feb	2.858	2.858
	Mar	2.843	2.843
	Apr	2.895	2.895
	May	2.898	2.898
	Jun	2.926	2.926
	Jul	2.895	2.895
	Aug	2.915	2.915
	Sep	2.915	2.915
	Oct	2.986	2.986
	Nov	2.988	2.988
	Dec	2.933	2.933

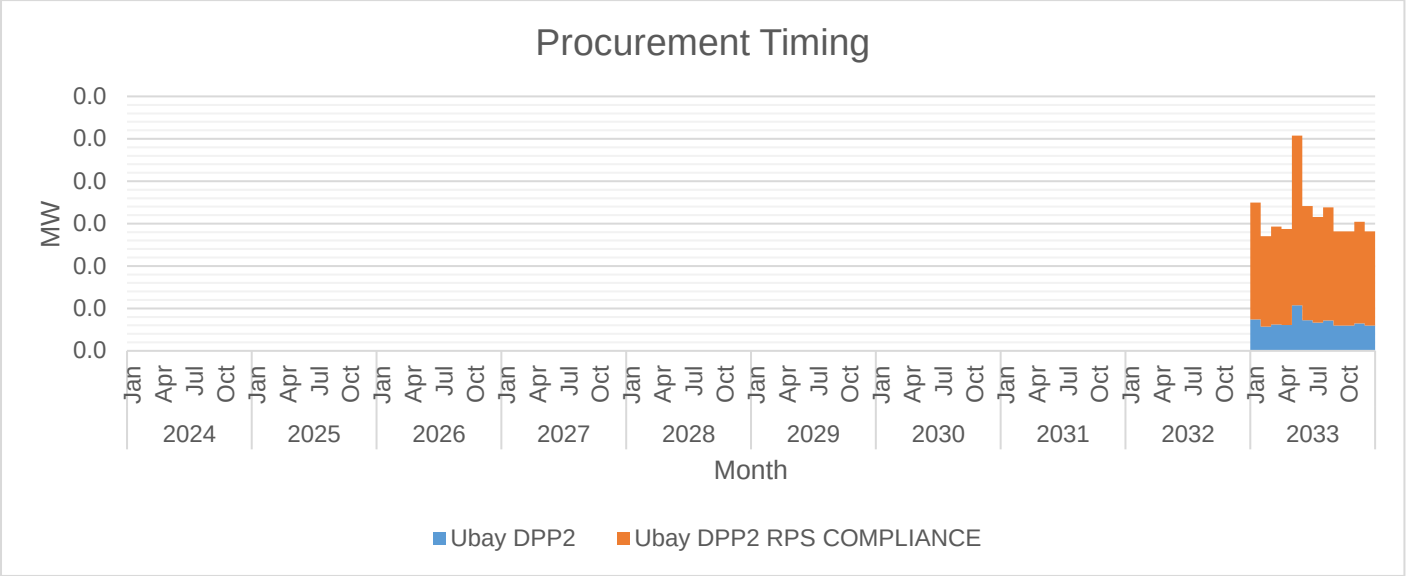
		MWh Offtake	MWh Output
2032	Jan	2.872	2.872
	Feb	2.873	2.873
	Mar	2.859	2.859
	Apr	2.912	2.912
	May	2.915	2.915
	Jun	2.944	2.944
	Jul	2.912	2.912
	Aug	2.933	2.933
	Sep	2.933	2.933
	Oct	3.007	3.007
	Nov	3.008	3.008
	Dec	2.951	2.951
2033	Jan	2.887	2.887
	Feb	2.889	2.889
	Mar	2.874	2.874
	Apr	2.929	2.929
	May	2.932	2.932
	Jun	2.962	2.962
	Jul	2.929	2.929
	Aug	2.950	2.950
	Sep	2.950	2.950
	Oct	3.026	3.026
	Nov	3.028	3.028
	Dec	2.969	2.969

MWh Offtake was forecasted using an Excel-based forecasting model. The assumed load factor averages at 14.40%.



MWh Output was expected to grow at an average rate of 49.80% annually.





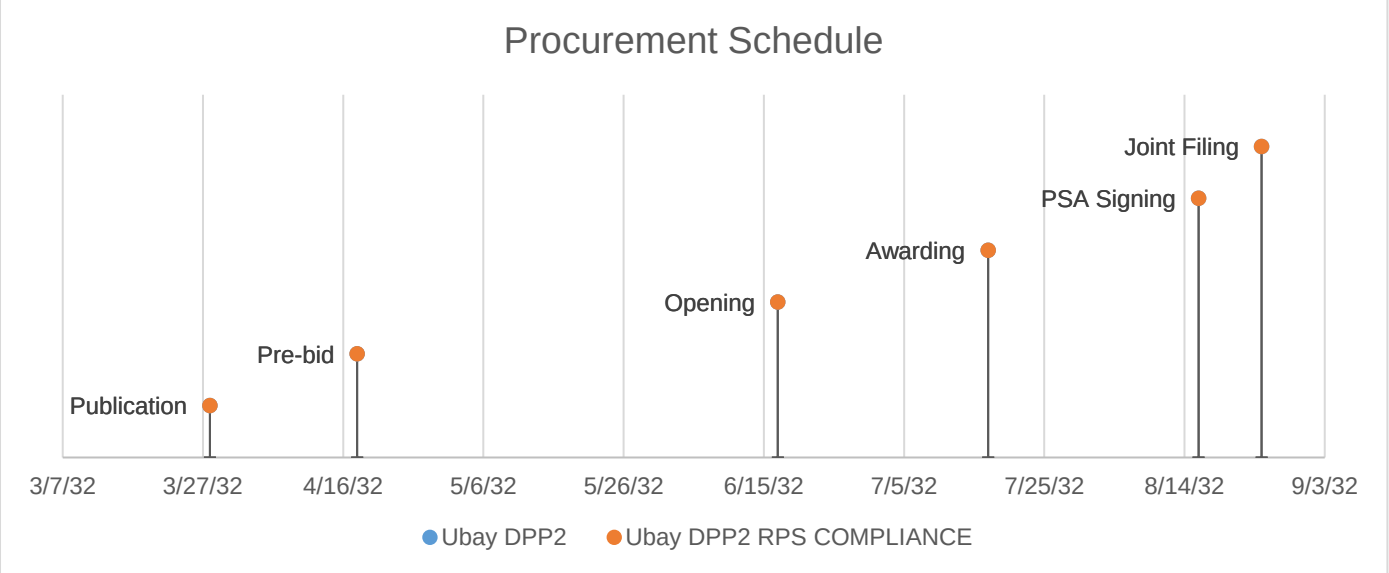
The first wave of supply procurement will be for 0.003 MW minimum and 0.020 MW minimum from an eligible RE which is planned to be available on December 26, 2032. The planned CSP will address the forecasted demand requirement for the year 2033 onwards.

Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
Ubay DPP_NPC-SPUG	Base	National Power Corporation	0.002	5	12/26/2022	12/25/2032
Ubay DPP_NPC-SPUG RPS COMPLIANCE	Base	National Power Corporation	0.020	29	12/26/2022	12/25/2032

The Power Supply Agreement (PSA) with Ubay 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*."

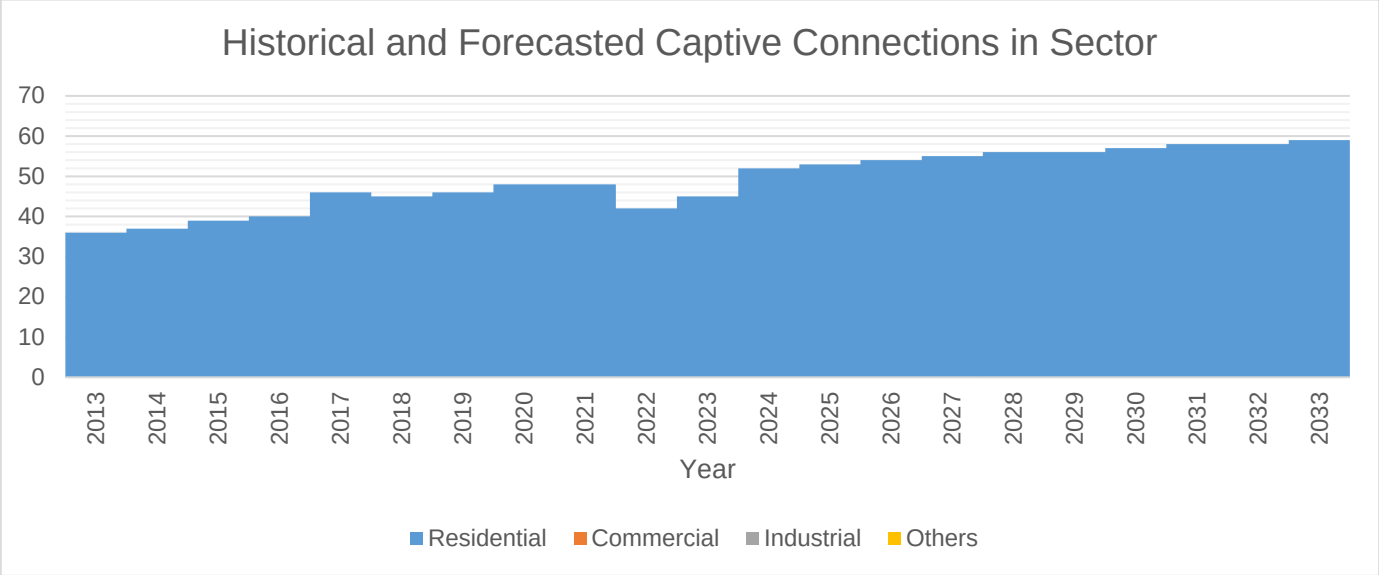
	Ubay DPP2	Ubay DPP2 RPS COMPLIANCE
Type	Base	Base
Minimum MW	0.003	0.020
Minimum MWh/yr	7	29
PSA Start	12/26/2032	12/26/2032
PSA End	12/25/2042	12/25/2042
Publication	3/28/2032	3/28/2032
Pre-bid	4/18/2032	4/18/2032
Opening	6/17/2032	6/17/2032
Awarding	7/17/2032	7/17/2032
PSA Signing	8/16/2032	8/16/2032
Joint Filing	8/25/2032	8/25/2032



For the procurement of 0.003 MW minimum and 0.020 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 UBAY 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 1.42% annually. Said customer class is expected to account for 100% of the total consumption.