

Power Supply Procurement Plan 2024



**BOHOL II ELECTRIC COOPERATIVE, INC.
[BOHECO II]**

HINGOTANAN ISLAND

Historical Consumption Data

Bohol II Electric Cooperative, Inc. (BOHECO II) and National Power Corporation (NPC) had an existing supply contract with a term from 26 March 2021 to 25 December 2023 to supply Cabulan Island. With existing distribution lines, Hingotanan Island with six (6) other new areas were included in the existing contract through Board Resolution No. 87 Series of 2022 titled: "*A Resolution requesting for the inclusion of seven (7) new areas to the existing PSA between NPC and BOHECO II*", with effectiveness term of 26 June 2022 to 25 December 2023.

Hingotanan Island consists of two barangays namely: West Hingotanan and East Hingotanan whose distribution lines were completely constructed in December 2020 and January 2021 respectively. However, due to typhoon Odette the lines were damaged and were only restored in the final quarter of 2022. Furthermore, the energization of the island faced a setback due to delays in obtaining the Certificate of Compliance (COC) from the Energy Regulatory Commission, hindering NPC's ability to proceed with the necessary power supply.

The contract with NPC underwent renewal, now extending over a ten-year term from December 26, 2023, to December 25, 2033. Notably, this renewal was executed without the inclusion of the energization component for the island, reflecting the prevailing challenges in obtaining the required regulatory approvals.

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	0.098	0.099	0.000	0.000		101%	101%	0.00
	Feb	0.092	0.093	0.000	0.000		101%	101%	0.00
	Mar	0.100	0.101	0.000	0.000		101%	101%	0.00
	Apr	0.103	0.104	0.000	0.000		101%	101%	0.00
	May	0.106	0.107	0.000	0.000		101%	101%	0.00
	Jun	0.113	0.114	0.000	0.000		101%	101%	0.00
	Jul	0.100	0.101	0.000	0.000		101%	101%	0.00
	Aug	0.102	0.103	0.000	0.000		101%	101%	0.00
	Sep	0.100	0.101	0.000	0.000		101%	101%	0.00
	Oct	0.101	0.102	0.000	0.000		101%	101%	0.00
	Nov	0.104	0.105	0.000	0.000		101%	101%	0.00
	Dec	0.098	0.099	0.000	0.000		101%	101%	0.00
2025	Jan	0.101	0.103	0.000	0.000		102%	102%	0.00
	Feb	0.096	0.097	0.000	0.000		101%	101%	0.00
	Mar	0.104	0.105	0.000	0.000		101%	101%	0.00
	Apr	0.107	0.108	0.000	0.000		101%	101%	0.00
	May	0.110	0.111	0.000	0.000		101%	101%	0.00
	Jun	0.117	0.119	0.000	0.000		101%	101%	0.00
	Jul	0.104	0.105	0.000	0.000		101%	101%	0.00
	Aug	0.106	0.107	0.000	0.000		101%	101%	0.00
	Sep	0.104	0.105	0.000	0.000		101%	101%	0.00
	Oct	0.105	0.106	0.000	0.000		101%	101%	0.00
	Nov	0.108	0.109	0.000	0.000		101%	101%	0.00
	Dec	0.101	0.103	0.000	0.000		102%	102%	0.00
2026	Jan	0.104	0.107	0.000	0.000		102%	102%	0.00
	Feb	0.099	0.101	0.000	0.000		102%	102%	0.00
	Mar	0.107	0.109	0.000	0.000		102%	102%	0.00
	Apr	0.110	0.113	0.000	0.000		102%	102%	0.00
	May	0.113	0.116	0.000	0.000		102%	102%	0.00

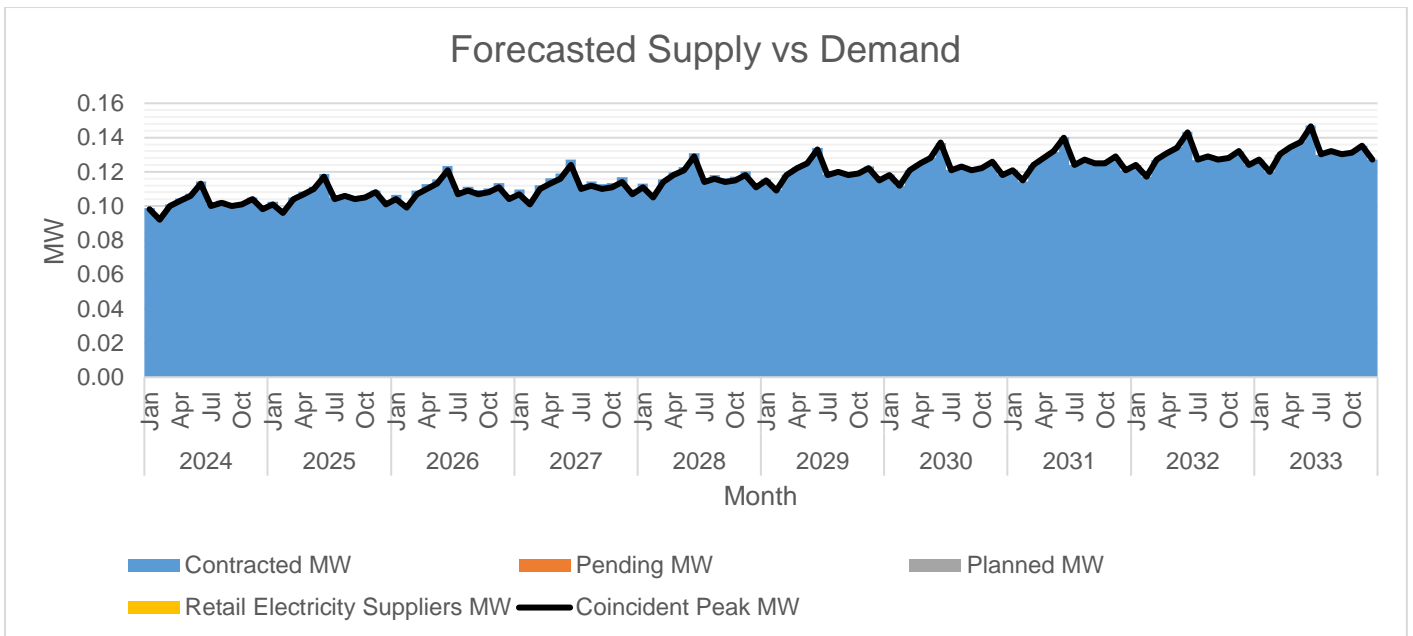
	Jun	0.121	0.123	0.000	0.000		102%	102%	0.00
	Jul	0.107	0.109	0.000	0.000		102%	102%	0.00
	Aug	0.109	0.111	0.000	0.000		102%	102%	0.00
	Sep	0.107	0.109	0.000	0.000		102%	102%	0.00
	Oct	0.108	0.110	0.000	0.000		102%	102%	0.00
	Nov	0.111	0.113	0.000	0.000		102%	102%	0.00
	Dec	0.104	0.107	0.000	0.000		102%	102%	0.00
2027	Jan	0.107	0.110	0.000	0.000		103%	103%	0.00
	Feb	0.101	0.104	0.000	0.000		103%	103%	0.00
	Mar	0.110	0.112	0.000	0.000		102%	102%	0.00
	Apr	0.113	0.116	0.000	0.000		103%	103%	0.00
	May	0.116	0.119	0.000	0.000		103%	103%	0.00
	Jun	0.124	0.127	0.000	0.000		102%	102%	0.00
	Jul	0.110	0.112	0.000	0.000		102%	102%	0.00
	Aug	0.112	0.114	0.000	0.000		102%	102%	0.00
	Sep	0.110	0.113	0.000	0.000		102%	102%	0.00
	Oct	0.111	0.114	0.000	0.000		102%	102%	0.00
	Nov	0.114	0.117	0.000	0.000		102%	102%	0.00
	Dec	0.107	0.110	0.000	0.000		103%	103%	0.00
2028	Jan	0.111	0.113	0.000	0.000		102%	102%	0.00
	Feb	0.105	0.107	0.000	0.000		102%	102%	0.00
	Mar	0.114	0.116	0.000	0.000		102%	102%	0.00
	Apr	0.118	0.120	0.000	0.000		101%	101%	0.00
	May	0.121	0.123	0.000	0.000		101%	101%	0.00
	Jun	0.129	0.131	0.000	0.000		102%	102%	0.00
	Jul	0.114	0.116	0.000	0.000		102%	102%	0.00
	Aug	0.116	0.118	0.000	0.000		102%	102%	0.00
	Sep	0.114	0.116	0.000	0.000		102%	102%	0.00
	Oct	0.115	0.117	0.000	0.000		102%	102%	0.00
	Nov	0.118	0.120	0.000	0.000		102%	102%	0.00
	Dec	0.111	0.113	0.000	0.000		102%	102%	0.00
2029	Jan	0.115	0.116	0.000	0.000		101%	101%	0.00
	Feb	0.109	0.109	0.000	0.000		100%	100%	0.00
	Mar	0.118	0.118	0.000	0.000		100%	100%	0.00

	Apr	0.122	0.122	0.000	0.000		100%	100%	0.00
	May	0.125	0.125	0.000	0.000		100%	100%	0.00
	Jun	0.133	0.134	0.000	0.000		101%	101%	0.00
	Jul	0.118	0.118	0.000	0.000		100%	100%	0.00
	Aug	0.120	0.121	0.000	0.000		100%	100%	0.00
	Sep	0.118	0.119	0.000	0.000		101%	101%	0.00
	Oct	0.119	0.120	0.000	0.000		101%	101%	0.00
	Nov	0.122	0.123	0.000	0.000		101%	101%	0.00
	Dec	0.115	0.116	0.000	0.000		101%	101%	0.00
2030	Jan	0.118	0.118	0.000	0.000		100%	100%	0.00
	Feb	0.112	0.112	0.000	0.000		100%	100%	0.00
	Mar	0.121	0.121	0.000	0.000		100%	100%	0.00
	Apr	0.125	0.125	0.000	0.000		100%	100%	0.00
	May	0.128	0.128	0.000	0.000		100%	100%	0.00
	Jun	0.137	0.137	0.000	0.000		100%	100%	0.00
	Jul	0.121	0.121	0.000	0.000		100%	100%	0.00
	Aug	0.123	0.123	0.000	0.000		100%	100%	0.00
	Sep	0.121	0.121	0.000	0.000		100%	100%	0.00
	Oct	0.122	0.122	0.000	0.000		100%	100%	0.00
	Nov	0.126	0.126	0.000	0.000		100%	100%	0.00
	Dec	0.118	0.118	0.000	0.000		100%	100%	0.00
2031	Jan	0.121	0.121	0.000	0.000		100%	100%	0.00
	Feb	0.115	0.114	0.000	0.000		99%	99%	0.00
	Mar	0.124	0.124	0.000	0.000		100%	100%	0.00
	Apr	0.128	0.128	0.000	0.000		100%	100%	0.00
	May	0.132	0.131	0.000	0.000		100%	100%	0.00
	Jun	0.140	0.140	0.000	0.000		100%	100%	0.00
	Jul	0.124	0.124	0.000	0.000		100%	100%	0.00
	Aug	0.127	0.126	0.000	0.000		99%	99%	0.00
	Sep	0.125	0.124	0.000	0.000		99%	99%	0.00
	Oct	0.125	0.125	0.000	0.000		100%	100%	0.00
	Nov	0.129	0.129	0.000	0.000		100%	100%	0.00
	Dec	0.121	0.121	0.000	0.000		100%	100%	0.00
2032	Jan	0.124	0.124	0.000	0.000		100%	100%	0.00

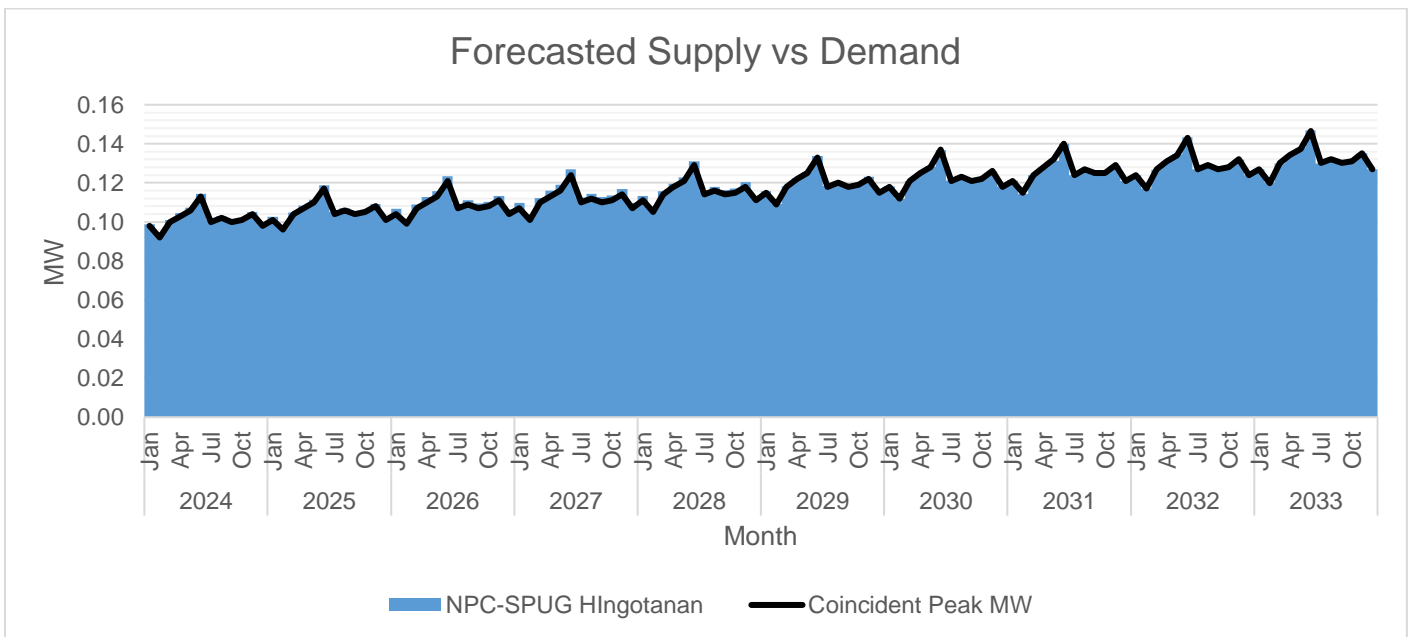
	Feb	0.117	0.117	0.000	0.000		100%	100%	0.00
	Mar	0.127	0.127	0.000	0.000		100%	100%	0.00
	Apr	0.131	0.131	0.000	0.000		100%	100%	0.00
	May	0.134	0.135	0.000	0.000		100%	100%	0.00
	Jun	0.143	0.143	0.000	0.000		100%	100%	0.00
	Jul	0.127	0.127	0.000	0.000		100%	100%	0.00
	Aug	0.129	0.129	0.000	0.000		100%	100%	0.00
	Sep	0.127	0.127	0.000	0.000		100%	100%	0.00
	Oct	0.128	0.128	0.000	0.000		100%	100%	0.00
	Nov	0.132	0.132	0.000	0.000		100%	100%	0.00
	Dec	0.124	0.124	0.000	0.000		100%	100%	0.00
2033	Jan	0.127	0.127	0.000	0.000		100%	100%	0.00
	Feb	0.120	0.120	0.000	0.000		100%	100%	0.00
	Mar	0.130	0.130	0.000	0.000		100%	100%	0.00
	Apr	0.134	0.134	0.000	0.000		100%	100%	0.00
	May	0.137	0.138	0.000	0.000		100%	100%	0.00
	Jun	0.147	0.147	0.000	0.000		100%	100%	0.00
	Jul	0.130	0.130	0.000	0.000		100%	100%	0.00
	Aug	0.132	0.132	0.000	0.000		100%	100%	0.00
	Sep	0.130	0.130	0.000	0.000		100%	100%	0.00
	Oct	0.131	0.131	0.000	0.000		100%	100%	0.00
	Nov	0.135	0.135	0.000	0.000		100%	100%	0.00
	Dec	0.127	0.127	0.000	0.000		100%	100%	0.00

Forecasting of Peak Demand is determined by the quotient of forecasted energy and by the product of time (t) in year [8760 hours] and the system load factor. Furthermore, for the purpose of calculation, the system load factor was assumed to vary from 53% to 73% in the next succeeding period of forecasting based on its historical trend in the previous year.

The Peak Demand was assumed to occur in the month of June. Monthly Peak Demand is at its lowest on the month of February. In general, Peak Demand is expected to grow at an average rate of 3% annually.



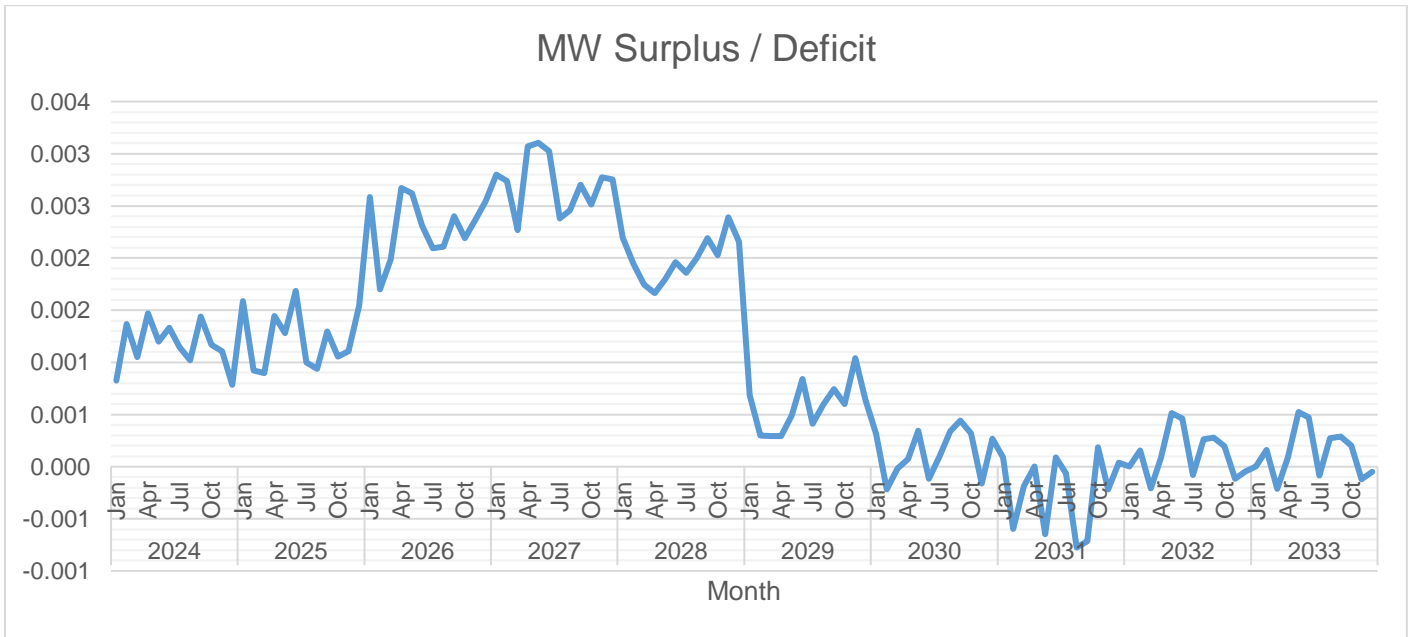
The available supply is generally above the Peak Demand. This is because the expected total capacity installed of the diesel generator is 0.175MW, higher than the Peak Demand.



The available supply that ranges from 0.093 MW to 0.147 MW will solely come from NPC's Hingotanan Diesel Power Plant.



Currently, there is over-contracting by 101%. The highest target contracting level is 103% which is expected to occur on January 2027. The lowest target contracting level is 99% which is expected to occur on February 2031.



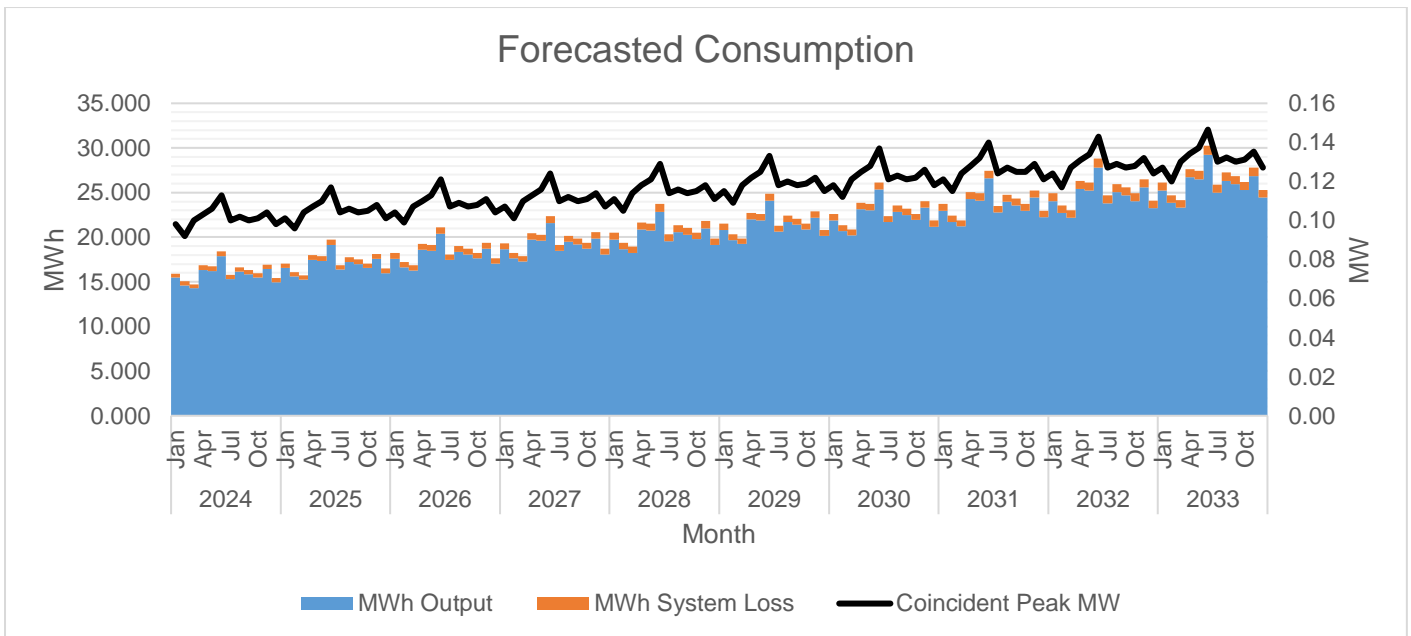
Currently, there is over-contracting by 0.001 MW. The highest surplus is 0.003 MW which is expected to occur in the month of January 2026. The lowest surplus is 0.001 MW which is expected to occur in the month of January 2024.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	15.930	15.461	0.470	0.00%	2.95%
	Feb	15.051	14.607	0.444	0.00%	2.95%
	Mar	14.713	14.279	0.434	0.00%	2.95%
	Apr	16.840	16.344	0.497	0.00%	2.95%
	May	16.723	16.230	0.493	0.00%	2.95%
	Jun	18.430	17.887	0.543	0.00%	2.95%
	Jul	15.779	15.314	0.465	0.00%	2.95%
	Aug	16.607	16.117	0.490	0.00%	2.95%
	Sep	16.352	15.870	0.482	0.00%	2.95%
	Oct	15.938	15.468	0.470	0.00%	2.95%
	Nov	16.943	16.443	0.500	0.00%	2.95%
	Dec	15.411	14.956	0.454	0.00%	2.95%
2025	Jan	17.046	16.534	0.511	0.00%	3.00%
	Feb	16.105	15.621	0.483	0.00%	3.00%
	Mar	15.743	15.270	0.472	0.00%	3.00%
	Apr	18.019	17.479	0.541	0.00%	3.00%
	May	17.894	17.357	0.537	0.00%	3.00%
	Jun	19.720	19.129	0.592	0.00%	3.00%
	Jul	16.884	16.377	0.507	0.00%	3.00%
	Aug	17.769	17.236	0.533	0.00%	3.00%
	Sep	17.496	16.971	0.525	0.00%	3.00%
	Oct	17.054	16.542	0.512	0.00%	3.00%
	Nov	18.129	17.585	0.544	0.00%	3.00%
	Dec	16.489	15.995	0.495	0.00%	3.00%
2026	Jan	18.239	17.608	0.631	0.00%	3.46%
	Feb	17.232	16.636	0.596	0.00%	3.46%
	Mar	16.845	16.262	0.583	0.00%	3.46%
	Apr	19.281	18.613	0.667	0.00%	3.46%
	May	19.147	18.484	0.663	0.00%	3.46%
	Jun	21.101	20.371	0.730	0.00%	3.46%
	Jul	18.066	17.441	0.625	0.00%	3.46%
	Aug	19.013	18.355	0.658	0.00%	3.46%
	Sep	18.721	18.073	0.648	0.00%	3.46%
	Oct	18.248	17.616	0.631	0.00%	3.46%
	Nov	19.398	18.727	0.671	0.00%	3.46%
	Dec	17.644	17.033	0.611	0.00%	3.46%
2027	Jan	19.333	18.681	0.652	0.00%	3.37%
	Feb	18.266	17.650	0.616	0.00%	3.37%
	Mar	17.855	17.253	0.602	0.00%	3.37%
	Apr	20.437	19.748	0.689	0.00%	3.37%
	May	20.295	19.611	0.684	0.00%	3.37%
	Jun	22.367	21.613	0.754	0.00%	3.37%
	Jul	19.150	18.504	0.646	0.00%	3.37%
	Aug	20.154	19.474	0.680	0.00%	3.37%
	Sep	19.844	19.175	0.669	0.00%	3.37%
	Oct	19.343	18.690	0.652	0.00%	3.37%
	Nov	20.562	19.868	0.693	0.00%	3.37%
	Dec	18.702	18.072	0.631	0.00%	3.37%

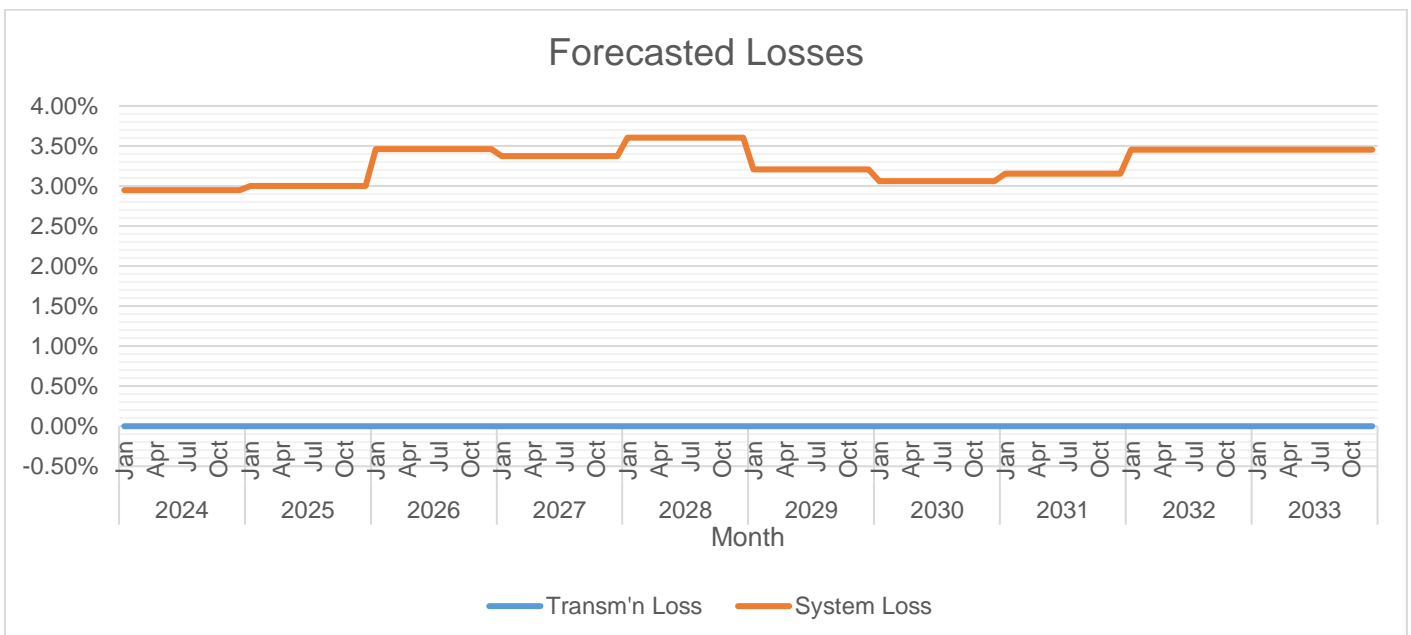
2028	Jan	20.493	19.755	0.738	0.00%	3.60%
	Feb	19.362	18.664	0.698	0.00%	3.60%
	Mar	18.927	18.245	0.682	0.00%	3.60%
	Apr	21.664	20.883	0.781	0.00%	3.60%
	May	21.513	20.738	0.775	0.00%	3.60%
	Jun	23.709	22.854	0.854	0.00%	3.60%
	Jul	20.299	19.567	0.731	0.00%	3.60%
	Aug	21.363	20.593	0.770	0.00%	3.60%
	Sep	21.035	20.277	0.758	0.00%	3.60%
	Oct	20.503	19.764	0.739	0.00%	3.60%
	Nov	21.796	21.010	0.785	0.00%	3.60%
	Dec	19.824	19.110	0.714	0.00%	3.60%
2029	Jan	21.518	20.828	0.690	0.00%	3.21%
	Feb	20.330	19.678	0.652	0.00%	3.21%
	Mar	19.873	19.236	0.637	0.00%	3.21%
	Apr	22.747	22.018	0.729	0.00%	3.21%
	May	22.589	21.865	0.724	0.00%	3.21%
	Jun	24.894	24.096	0.798	0.00%	3.21%
	Jul	21.314	20.630	0.683	0.00%	3.21%
	Aug	22.431	21.712	0.719	0.00%	3.21%
	Sep	22.087	21.379	0.708	0.00%	3.21%
	Oct	21.528	20.838	0.690	0.00%	3.21%
	Nov	22.885	22.152	0.734	0.00%	3.21%
	Dec	20.816	20.148	0.667	0.00%	3.21%
2030	Jan	22.594	21.902	0.692	0.00%	3.06%
	Feb	21.346	20.692	0.654	0.00%	3.06%
	Mar	20.867	20.227	0.639	0.00%	3.06%
	Apr	23.884	23.152	0.732	0.00%	3.06%
	May	23.718	22.992	0.727	0.00%	3.06%
	Jun	26.139	25.338	0.801	0.00%	3.06%
	Jul	22.379	21.694	0.686	0.00%	3.06%
	Aug	23.552	22.831	0.721	0.00%	3.06%
	Sep	23.191	22.481	0.710	0.00%	3.06%
	Oct	22.605	21.912	0.692	0.00%	3.06%
	Nov	24.030	23.294	0.736	0.00%	3.06%
	Dec	21.856	21.187	0.670	0.00%	3.06%
2031	Jan	23.723	22.975	0.748	0.00%	3.15%
	Feb	22.414	21.707	0.707	0.00%	3.15%
	Mar	21.910	21.219	0.691	0.00%	3.15%
	Apr	25.078	24.287	0.791	0.00%	3.15%
	May	24.904	24.119	0.786	0.00%	3.15%
	Jun	27.446	26.580	0.866	0.00%	3.15%
	Jul	23.498	22.757	0.741	0.00%	3.15%
	Aug	24.730	23.950	0.780	0.00%	3.15%
	Sep	24.351	23.582	0.768	0.00%	3.15%
	Oct	23.735	22.986	0.749	0.00%	3.15%
	Nov	25.231	24.435	0.796	0.00%	3.15%
	Dec	22.949	22.225	0.724	0.00%	3.15%
2032	Jan	24.910	24.048	0.861	0.00%	3.46%
	Feb	23.534	22.721	0.814	0.00%	3.46%
	Mar	23.005	22.210	0.795	0.00%	3.46%

	Apr	26.332	25.422	0.910	0.00%	3.46%
	May	26.149	25.245	0.904	0.00%	3.46%
	Jun	28.818	27.822	0.996	0.00%	3.46%
	Jul	24.673	23.820	0.853	0.00%	3.46%
	Aug	25.967	25.069	0.898	0.00%	3.46%
	Sep	25.568	24.684	0.884	0.00%	3.46%
	Oct	24.922	24.060	0.861	0.00%	3.46%
	Nov	26.493	25.577	0.916	0.00%	3.46%
	Dec	24.097	23.264	0.833	0.00%	3.46%
2033	Jan	26.155	25.251	0.904	0.00%	3.46%
	Feb	24.711	23.857	0.854	0.00%	3.46%
	Mar	24.156	23.321	0.835	0.00%	3.46%
	Apr	27.649	26.693	0.956	0.00%	3.46%
	May	27.457	26.508	0.949	0.00%	3.46%
	Jun	30.259	29.213	1.046	0.00%	3.46%
	Jul	25.907	25.011	0.896	0.00%	3.46%
	Aug	27.265	26.322	0.942	0.00%	3.46%
	Sep	26.846	25.918	0.928	0.00%	3.46%
	Oct	26.168	25.263	0.905	0.00%	3.46%
	Nov	27.817	26.856	0.962	0.00%	3.46%
	Dec	25.301	24.427	0.875	0.00%	3.46%

MWh Offtake was forecasted using the average hourly consumption per consumer from the existing Cabul-an Island multiplied by the number of potential consumers and eight (8) hours of operational hours. For forecasting simulation, the growth rate used varies from 5% to 8%.



MWh Output was expected to grow at an average rate of 6% annually.



System Loss is expected to range from 2.95% to 3.60%.

System loss is anticipated to increase due to the rising demand on the island, which puts additional strain on the existing infrastructure. As more residents and businesses require electricity, the system may become less efficient, leading to higher overall losses. Furthermore, it is important to note that there are currently no non-technical losses reflected in the submission. This is primarily because BOHECO II has yet to implement a system for segregating its off-grid system losses. Without this segregation, it becomes challenging to accurately identify and address areas of non-technical loss, such as theft, billing inaccuracies, and administrative inefficiencies.

Power Supply

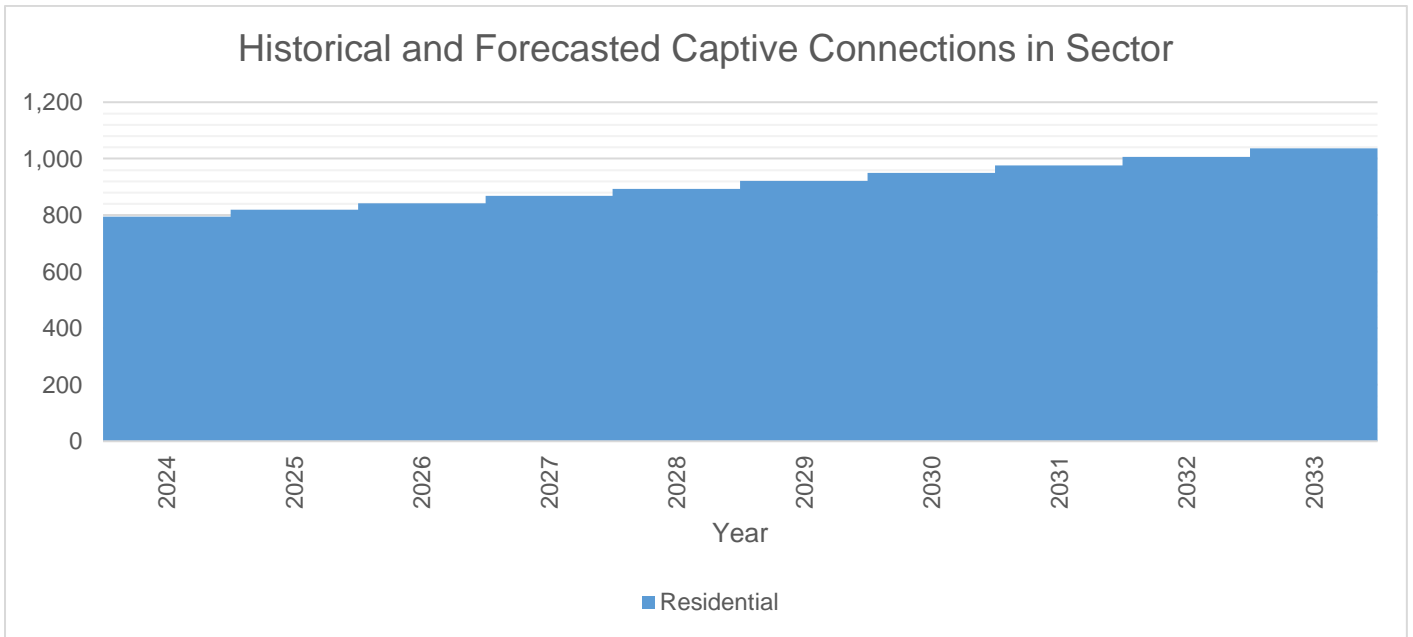
Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
NPC-SPUG Hingotanan	Base	National Power Corporation	0.093	194.718	12/26/2023	12/25/2033

The Power Supply Agreement on the Sale of Electricity with the National Power Corporation (NPC) is pursuant to Section 70 of Republic Act No. 9136 and Section 1.a and Section 3.a of Rule 13 of the Implementing Rules and Regulations (IRR) of Republic Act No. 9136, which provides that the Small Power Utilities Group (SPUG) of NPC is responsible for providing power generation and its associated power delivery systems in areas that are not connected to the transmission system.

Through BOHECO II Board Resolution No. 87 Series of 2022 titled: “*A Resolution requesting for the inclusion of seven (7) new areas to the existing PSA between NPC and BOHECO II*”, the Island of Hingotanan, being one of the new seven areas, was granted supply contract effective 26 June 2022 to 25 December 2033. The initial energization target was scheduled on the 2nd quarter of 2022 but was delayed due to the challenge NPC is facing on securing a Certificate of Compliance (COC) from the Energy Regulatory Commission (ERC). The distribution lines are ready for energization.

The contract was then renewed for a ten-year period (December 26, 2023 – December 25, 2033) without the energization of the island, reflecting the prevailing challenges in obtaining the required regulatory approvals.

Captive Customer Connections



The number of Residential connections is expected to grow at a rate of 3% annually. Said customer class accounts for 100% of the total consumption.