

# **Power Supply Procurement Plan 2024**



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

**MALINGIN 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, Malingin 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.

Malingin Island is constantly applied for BLEP for subsidized projects and was approved funding from the 2017-2021 Subsidy Savings on the third quarter of 2023. With the conclusion of the bidding for the project last October 2023, the construction of distribution lines is targeted to be completed in the last quarter of 2024 or earlier upon release of funds from National Electrification Administration (NEA).

Diesel generators are already available on the Island pending issuance of the Certificate of Compliance from the Energy Regulatory Commission (ERC).

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.

# 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	Oct	0.054	0.054	0.000	0.000		100%	100%	0.00
	Nov	0.056	0.055	0.000	0.000		98%	98%	0.00
	Dec	0.052	0.052	0.000	0.000		100%	100%	0.00
2025	Jan	0.053	0.054	0.000	0.000		102%	102%	0.00
	Feb	0.050	0.051	0.000	0.000		102%	102%	0.00
	Mar	0.054	0.055	0.000	0.000		102%	102%	0.00
	Apr	0.056	0.057	0.000	0.000		102%	102%	0.00
	May	0.057	0.058	0.000	0.000		102%	102%	0.00
	Jun	0.061	0.062	0.000	0.000		102%	102%	0.00
	Jul	0.054	0.055	0.000	0.000		102%	102%	0.00
	Aug	0.055	0.056	0.000	0.000		102%	102%	0.00
	Sep	0.054	0.055	0.000	0.000		102%	102%	0.00
	Oct	0.055	0.056	0.000	0.000		102%	102%	0.00
	Nov	0.056	0.057	0.000	0.000		102%	102%	0.00
	Dec	0.053	0.054	0.000	0.000		102%	102%	0.00
2026	Jan	0.055	0.056	0.000	0.000		102%	102%	0.00
	Feb	0.052	0.052	0.000	0.000		100%	100%	0.00
	Mar	0.056	0.057	0.000	0.000		102%	102%	0.00
	Apr	0.058	0.059	0.000	0.000		102%	102%	0.00
	May	0.060	0.060	0.000	0.000		100%	100%	0.00
	Jun	0.064	0.064	0.000	0.000		100%	100%	0.00
	Jul	0.057	0.057	0.000	0.000		100%	100%	0.00
	Aug	0.058	0.058	0.000	0.000		100%	100%	0.00
	Sep	0.057	0.057	0.000	0.000		100%	100%	0.00
	Oct	0.057	0.057	0.000	0.000		100%	100%	0.00
	Nov	0.059	0.059	0.000	0.000		100%	100%	0.00
	Dec	0.055	0.056	0.000	0.000		102%	102%	0.00
2027	Jan	0.058	0.057	0.000	0.000		98%	98%	0.00
	Feb	0.054	0.054	0.000	0.000		100%	100%	0.00

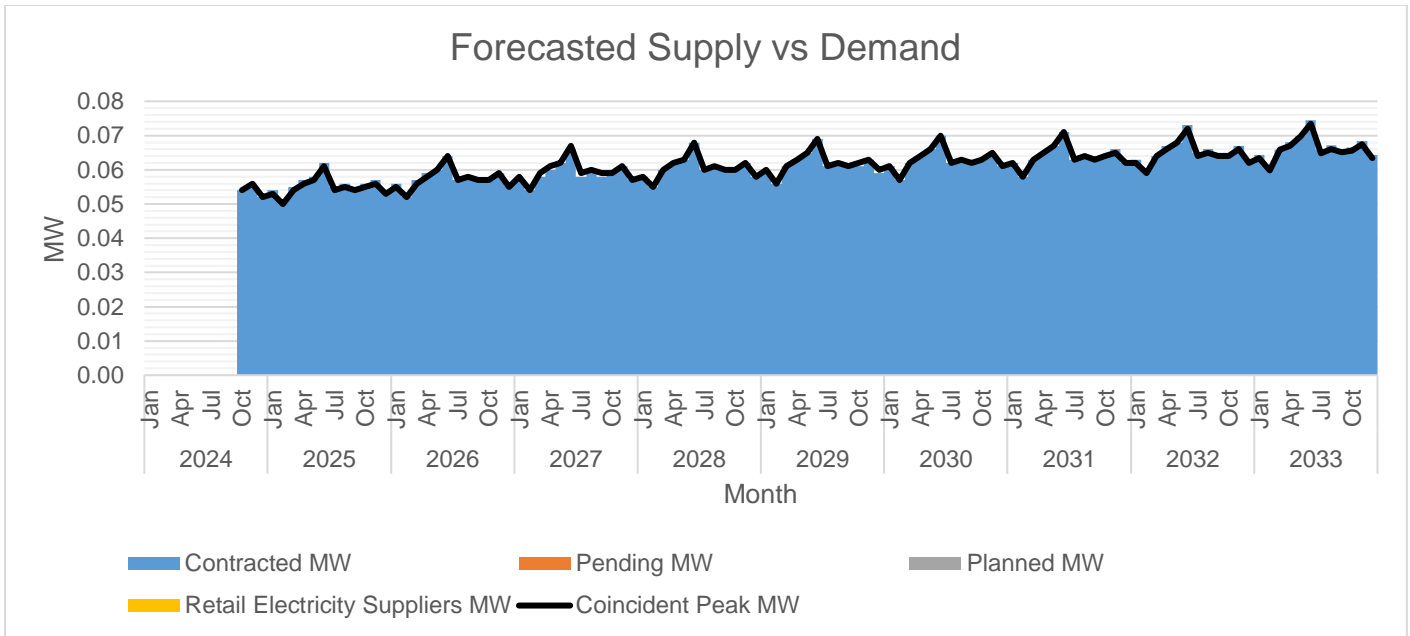
	Mar	0.059	0.058	0.000	0.000		98%	98%	0.00
	Apr	0.061	0.060	0.000	0.000		98%	98%	0.00
	May	0.062	0.062	0.000	0.000		100%	100%	0.00
	Jun	0.067	0.066	0.000	0.000		99%	99%	0.00
	Jul	0.059	0.058	0.000	0.000		98%	98%	0.00
	Aug	0.060	0.059	0.000	0.000		98%	98%	0.00
	Sep	0.059	0.058	0.000	0.000		98%	98%	0.00
	Oct	0.059	0.059	0.000	0.000		100%	100%	0.00
	Nov	0.061	0.061	0.000	0.000		100%	100%	0.00
	Dec	0.057	0.057	0.000	0.000		100%	100%	0.00
2028	Jan	0.058	0.058	0.000	0.000		100%	100%	0.00
	Feb	0.055	0.055	0.000	0.000		100%	100%	0.00
	Mar	0.060	0.060	0.000	0.000		100%	100%	0.00
	Apr	0.062	0.062	0.000	0.000		100%	100%	0.00
	May	0.063	0.063	0.000	0.000		100%	100%	0.00
	Jun	0.068	0.068	0.000	0.000		100%	100%	0.00
	Jul	0.060	0.060	0.000	0.000		100%	100%	0.00
	Aug	0.061	0.061	0.000	0.000		100%	100%	0.00
	Sep	0.060	0.060	0.000	0.000		100%	100%	0.00
	Oct	0.060	0.060	0.000	0.000		100%	100%	0.00
	Nov	0.062	0.062	0.000	0.000		100%	100%	0.00
	Dec	0.058	0.058	0.000	0.000		100%	100%	0.00
2029	Jan	0.060	0.059	0.000	0.000		98%	98%	0.00
	Feb	0.056	0.056	0.000	0.000		100%	100%	0.00
	Mar	0.061	0.061	0.000	0.000		100%	100%	0.00
	Apr	0.063	0.063	0.000	0.000		100%	100%	0.00
	May	0.065	0.065	0.000	0.000		100%	100%	0.00
	Jun	0.069	0.069	0.000	0.000		100%	100%	0.00
	Jul	0.061	0.061	0.000	0.000		100%	100%	0.00
	Aug	0.062	0.062	0.000	0.000		100%	100%	0.00
	Sep	0.061	0.061	0.000	0.000		100%	100%	0.00
	Oct	0.062	0.061	0.000	0.000		98%	98%	0.00
	Nov	0.063	0.063	0.000	0.000		100%	100%	0.00
	Dec	0.060	0.059	0.000	0.000		98%	98%	0.00

2030	Jan	0.061	0.061	0.000	0.000		100%	100%	0.00
	Feb	0.057	0.057	0.000	0.000		100%	100%	0.00
	Mar	0.062	0.062	0.000	0.000		100%	100%	0.00
	Apr	0.064	0.064	0.000	0.000		100%	100%	0.00
	May	0.066	0.066	0.000	0.000		100%	100%	0.00
	Jun	0.070	0.070	0.000	0.000		100%	100%	0.00
	Jul	0.062	0.062	0.000	0.000		100%	100%	0.00
	Aug	0.063	0.063	0.000	0.000		100%	100%	0.00
	Sep	0.062	0.062	0.000	0.000		100%	100%	0.00
	Oct	0.063	0.063	0.000	0.000		100%	100%	0.00
	Nov	0.065	0.064	0.000	0.000		98%	98%	0.00
	Dec	0.061	0.061	0.000	0.000		100%	100%	0.00
2031	Jan	0.062	0.062	0.000	0.000		100%	100%	0.00
	Feb	0.058	0.058	0.000	0.000		100%	100%	0.00
	Mar	0.063	0.063	0.000	0.000		100%	100%	0.00
	Apr	0.065	0.065	0.000	0.000		100%	100%	0.00
	May	0.067	0.067	0.000	0.000		100%	100%	0.00
	Jun	0.071	0.071	0.000	0.000		100%	100%	0.00
	Jul	0.063	0.063	0.000	0.000		100%	100%	0.00
	Aug	0.064	0.064	0.000	0.000		100%	100%	0.00
	Sep	0.063	0.063	0.000	0.000		100%	100%	0.00
	Oct	0.064	0.064	0.000	0.000		100%	100%	0.00
	Nov	0.065	0.066	0.000	0.000		102%	102%	0.00
	Dec	0.062	0.062	0.000	0.000		100%	100%	0.00
2032	Jan	0.062	0.063	0.000	0.000		102%	102%	0.00
	Feb	0.059	0.060	0.000	0.000		102%	102%	0.00
	Mar	0.064	0.064	0.000	0.000		100%	100%	0.00
	Apr	0.066	0.067	0.000	0.000		102%	102%	0.00
	May	0.068	0.068	0.000	0.000		100%	100%	0.00
	Jun	0.072	0.073	0.000	0.000		101%	101%	0.00
	Jul	0.064	0.065	0.000	0.000		102%	102%	0.00
	Aug	0.065	0.066	0.000	0.000		102%	102%	0.00
	Sep	0.064	0.065	0.000	0.000		102%	102%	0.00
	Oct	0.064	0.065	0.000	0.000		102%	102%	0.00

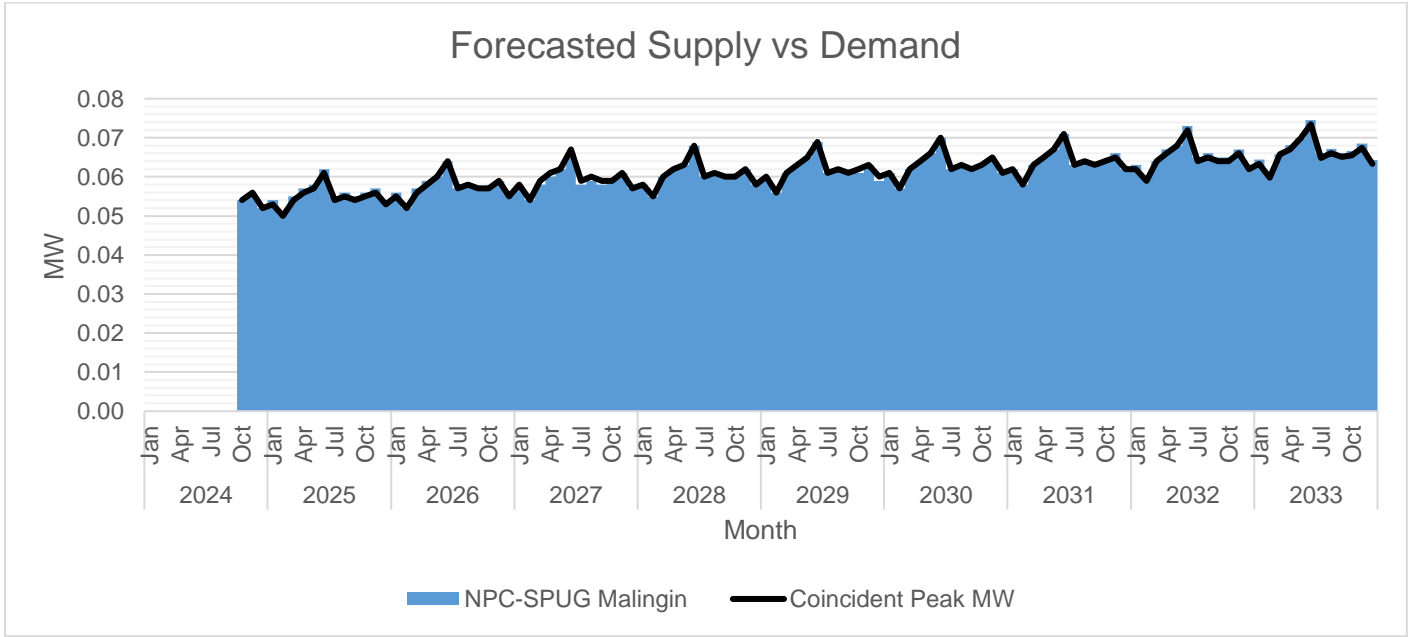
	Nov	0.066	0.067	0.000	0.000		102%	102%	0.00
	Dec	0.062	0.063	0.000	0.000		102%	102%	0.00
2033	Jan	0.063	0.064	0.000	0.000		102%	102%	0.00
	Feb	0.060	0.061	0.000	0.000		102%	102%	0.00
	Mar	0.066	0.066	0.000	0.000		100%	100%	0.00
	Apr	0.067	0.068	0.000	0.000		102%	102%	0.00
	May	0.070	0.070	0.000	0.000		100%	100%	0.00
	Jun	0.073	0.074	0.000	0.000		101%	101%	0.00
	Jul	0.065	0.066	0.000	0.000		102%	102%	0.00
	Aug	0.066	0.067	0.000	0.000		102%	102%	0.00
	Sep	0.065	0.066	0.000	0.000		102%	102%	0.00
	Oct	0.066	0.067	0.000	0.000		102%	102%	0.00
	Nov	0.067	0.068	0.000	0.000		102%	102%	0.00
	Dec	0.063	0.064	0.000	0.000		102%	102%	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.



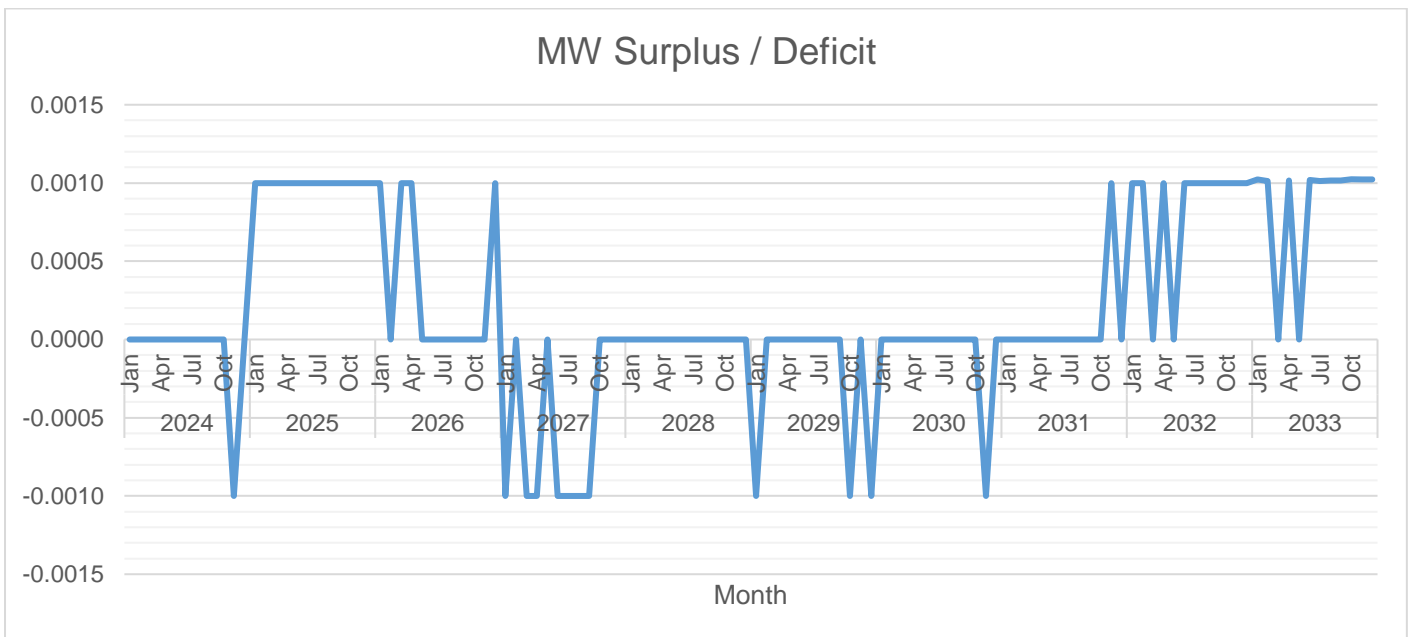
The available supply is generally above the Peak Demand. This is because the expected total capacity installed of the diesel generator is 0.060 MW, higher than the Peak Demand.



The available supply that ranges from 0.049 MW to 0.074 MW will solely come from NPC's Malingin Diesel Power Plant.



The highest target contracting level is 102% which is expected to occur in January 2025. The lowest target contracting level is 98% which is expected to occur in May 2024.



The highest surplus is 0.001 MW which is expected to occur in the month of January 2025. The highest deficit is -0.001 MW which is expected to occur in the month of May 2024.

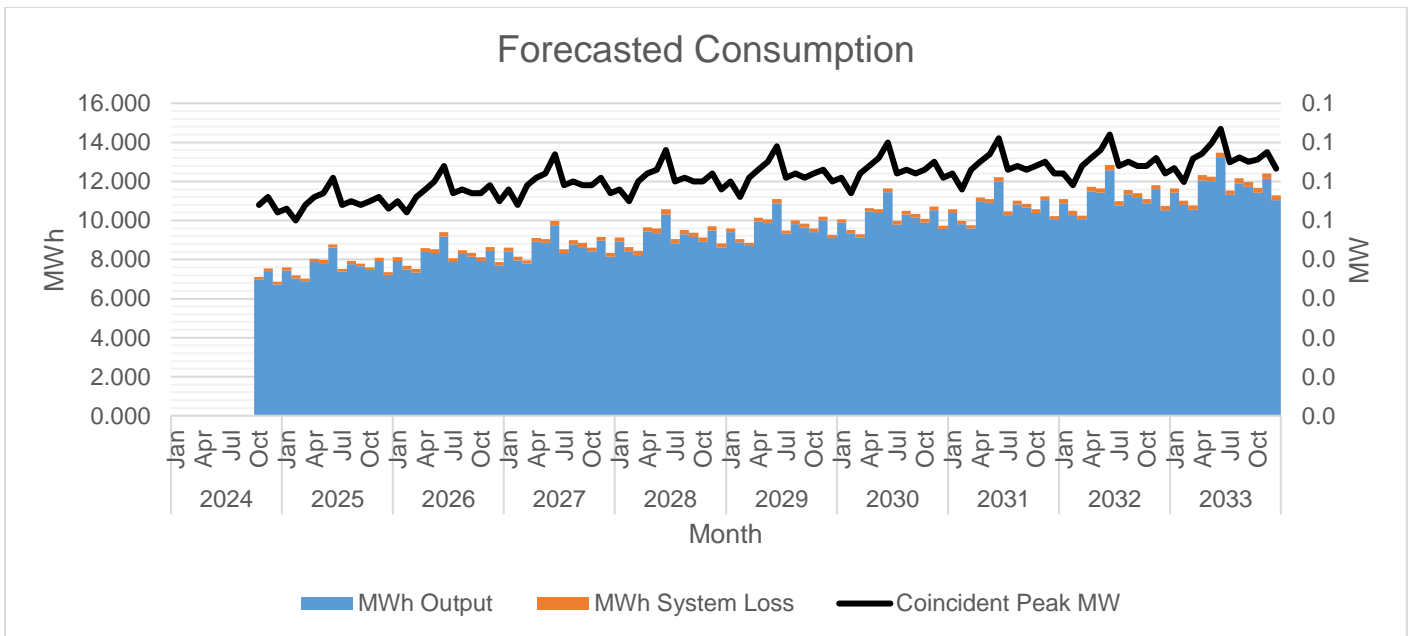


		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Oct	7.102	6.962	0.140	0.00%	1.97%
	Nov	7.550	7.401	0.149	0.00%	1.97%
	Dec	6.867	6.732	0.135	0.00%	1.97%
2025	Jan	7.595	7.448	0.148	0.00%	1.95%
	Feb	7.176	7.036	0.140	0.00%	1.95%
	Mar	7.015	6.878	0.137	0.00%	1.95%
	Apr	8.029	7.873	0.156	0.00%	1.95%
	May	7.973	7.818	0.155	0.00%	1.95%
	Jun	8.787	8.616	0.171	0.00%	1.95%
	Jul	7.523	7.377	0.146	0.00%	1.95%
	Aug	7.918	7.764	0.154	0.00%	1.95%
	Sep	7.796	7.644	0.152	0.00%	1.95%
	Oct	7.599	7.451	0.148	0.00%	1.95%
	Nov	8.078	7.921	0.157	0.00%	1.95%
	Dec	7.348	7.205	0.143	0.00%	1.95%
2026	Jan	8.127	7.936	0.191	0.00%	2.35%
	Feb	7.678	7.498	0.180	0.00%	2.35%
	Mar	7.506	7.330	0.176	0.00%	2.35%
	Apr	8.591	8.390	0.202	0.00%	2.35%
	May	8.532	8.331	0.200	0.00%	2.35%
	Jun	9.402	9.182	0.221	0.00%	2.35%
	Jul	8.050	7.861	0.189	0.00%	2.35%
	Aug	8.472	8.273	0.199	0.00%	2.35%
	Sep	8.342	8.146	0.196	0.00%	2.35%
	Oct	8.131	7.940	0.191	0.00%	2.35%
	Nov	8.644	8.441	0.203	0.00%	2.35%
	Dec	7.862	7.677	0.184	0.00%	2.35%
2027	Jan	8.615	8.425	0.189	0.00%	2.20%
	Feb	8.139	7.960	0.179	0.00%	2.20%
	Mar	7.956	7.781	0.175	0.00%	2.20%
	Apr	9.107	8.907	0.200	0.00%	2.20%
	May	9.044	8.845	0.199	0.00%	2.20%
	Jun	9.967	9.747	0.219	0.00%	2.20%
	Jul	8.533	8.345	0.188	0.00%	2.20%
	Aug	8.980	8.783	0.197	0.00%	2.20%
	Sep	8.843	8.648	0.194	0.00%	2.20%
	Oct	8.619	8.429	0.190	0.00%	2.20%
	Nov	9.162	8.961	0.201	0.00%	2.20%
	Dec	8.334	8.150	0.183	0.00%	2.20%
2028	Jan	9.132	8.914	0.217	0.00%	2.38%
	Feb	8.628	8.422	0.205	0.00%	2.38%
	Mar	8.434	8.233	0.201	0.00%	2.38%
	Apr	9.653	9.423	0.230	0.00%	2.38%
	May	9.586	9.358	0.228	0.00%	2.38%
	Jun	10.565	10.313	0.252	0.00%	2.38%
	Jul	9.045	8.830	0.215	0.00%	2.38%
	Aug	9.519	9.292	0.227	0.00%	2.38%
	Sep	9.373	9.150	0.223	0.00%	2.38%

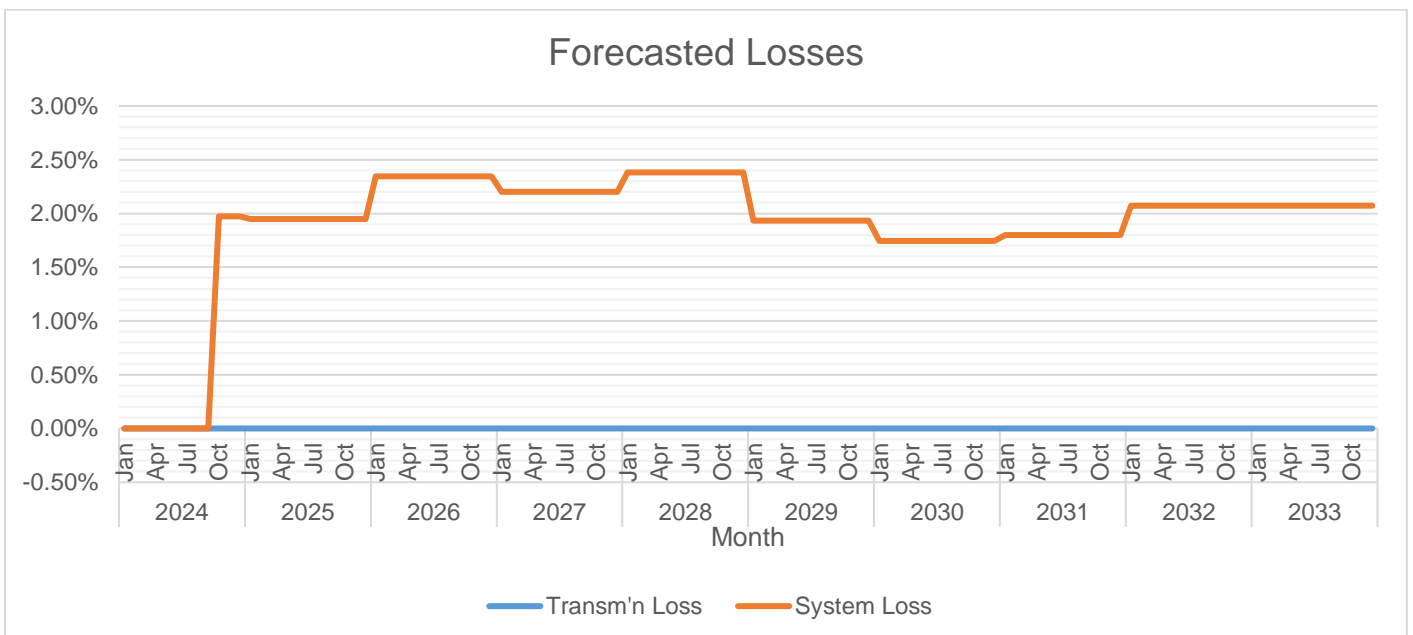
	Oct	9.136	8.919	0.218	0.00%	2.38%
	Nov	9.712	9.481	0.231	0.00%	2.38%
	Dec	8.834	8.623	0.210	0.00%	2.38%
2029	Jan	9.588	9.403	0.185	0.00%	1.93%
	Feb	9.059	8.884	0.175	0.00%	1.93%
	Mar	8.855	8.684	0.171	0.00%	1.93%
	Apr	10.136	9.940	0.196	0.00%	1.93%
	May	10.065	9.871	0.194	0.00%	1.93%
	Jun	11.093	10.879	0.214	0.00%	1.93%
	Jul	9.497	9.314	0.183	0.00%	1.93%
	Aug	9.995	9.802	0.193	0.00%	1.93%
	Sep	9.842	9.652	0.190	0.00%	1.93%
	Oct	9.593	9.408	0.185	0.00%	1.93%
	Nov	10.198	10.001	0.197	0.00%	1.93%
	Dec	9.275	9.096	0.179	0.00%	1.93%
2030	Jan	10.068	9.892	0.176	0.00%	1.75%
	Feb	9.512	9.346	0.166	0.00%	1.75%
	Mar	9.298	9.136	0.162	0.00%	1.75%
	Apr	10.643	10.457	0.186	0.00%	1.75%
	May	10.569	10.384	0.184	0.00%	1.75%
	Jun	11.647	11.444	0.203	0.00%	1.75%
	Jul	9.972	9.798	0.174	0.00%	1.75%
	Aug	10.495	10.312	0.183	0.00%	1.75%
	Sep	10.334	10.153	0.180	0.00%	1.75%
	Oct	10.073	9.897	0.176	0.00%	1.75%
	Nov	10.708	10.521	0.187	0.00%	1.75%
	Dec	9.739	9.569	0.170	0.00%	1.75%
2031	Jan	10.571	10.381	0.190	0.00%	1.80%
	Feb	9.987	9.808	0.180	0.00%	1.80%
	Mar	9.763	9.587	0.176	0.00%	1.80%
	Apr	11.175	10.974	0.201	0.00%	1.80%
	May	11.097	10.897	0.200	0.00%	1.80%
	Jun	12.230	12.010	0.220	0.00%	1.80%
	Jul	10.471	10.282	0.188	0.00%	1.80%
	Aug	11.020	10.821	0.198	0.00%	1.80%
	Sep	10.851	10.655	0.195	0.00%	1.80%
	Oct	10.576	10.386	0.190	0.00%	1.80%
	Nov	11.243	11.041	0.202	0.00%	1.80%
	Dec	10.226	10.042	0.184	0.00%	1.80%
2032	Jan	11.100	10.870	0.230	0.00%	2.07%
	Feb	10.487	10.270	0.217	0.00%	2.07%
	Mar	10.251	10.039	0.212	0.00%	2.07%
	Apr	11.734	11.490	0.243	0.00%	2.07%
	May	11.652	11.411	0.241	0.00%	2.07%
	Jun	12.841	12.575	0.266	0.00%	2.07%
	Jul	10.994	10.767	0.228	0.00%	2.07%
	Aug	11.571	11.331	0.240	0.00%	2.07%
	Sep	11.393	11.157	0.236	0.00%	2.07%
	Oct	11.105	10.875	0.230	0.00%	2.07%
	Nov	11.805	11.561	0.245	0.00%	2.07%
	Dec	10.737	10.515	0.222	0.00%	2.07%

2033	Jan	11.655	11.413	0.241	0.00%	2.07%
	Feb	11.011	10.783	0.228	0.00%	2.07%
	Mar	10.764	10.541	0.223	0.00%	2.07%
	Apr	12.320	12.065	0.255	0.00%	2.07%
	May	12.235	11.981	0.253	0.00%	2.07%
	Jun	13.483	13.204	0.279	0.00%	2.07%
	Jul	11.544	11.305	0.239	0.00%	2.07%
	Aug	12.149	11.898	0.252	0.00%	2.07%
	Sep	11.963	11.715	0.248	0.00%	2.07%
	Oct	11.660	11.419	0.242	0.00%	2.07%
	Nov	12.395	12.139	0.257	0.00%	2.07%
	Dec	11.274	11.041	0.234	0.00%	2.07%

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 1.75% to 2.38%.

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

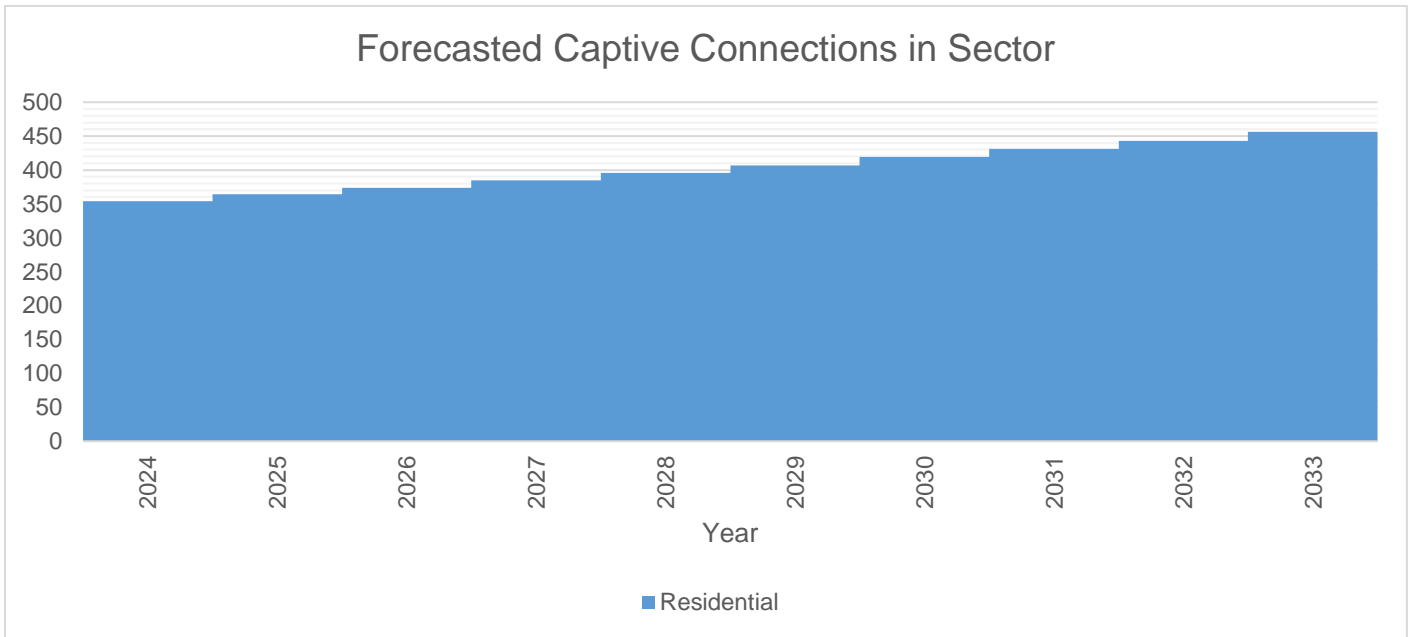
Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
NPC-SPUG Malingin	Base	National Power Corporation	0.049	86.765	12/26/2023	12/25/2033

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 Malingin, being one of the new seven areas, was granted supply contract effective 26 June 2022 to 25 December 2033. Construction of distribution lines are scheduled in the last quarter of 2024 or earlier upon release of funds from NEA.

The contract was then renewed for a ten-year period (December 26, 2023 – December 25, 2033) without the energization of the island.

# 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.