# Power Supply Procurement Plan 2024

## BOHOL I ELECTRIC COOPERATIVE, INC. (BOHECO I) MAIN GRID

#### **1. Historical Consumption Data**

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	13.65	47,009	0	47,009	42,912	4,097	39%	0.00%	0.00%	8.71%
2001	13.50	48,878	0	48,878	45,760	3,118	41%	0.00%	0.00%	6.38%
2002	15.02	55,720	0	55,720	51,076	4,644	42%	0.00%	0.00%	8.33%
2003	17.41	64,483	0	64,483	58,957	5,526	42%	0.00%	0.00%	8.57%
2004	19.71	71,173	0	71,173	65,522	5,652	41%	0.00%	0.00%	7.94%
2005	20.78	76,118	0	76,118	70,240	5,878	42%	0.00%	0.00%	7.72%
2006	18.81	81,212	0	81,212	75,807	5,405	49%	0.00%	0.00%	6.65%
2007	19.42	90,253	0	90,097	84,605	5,492	53%	0.00%	0.17%	6.10%
2008	21.99	96,606	0	95,063	90,453	4,610	49%	0.00%	1.60%	4.85%
2009	23.70	107,583	0	106,585	99,872	6,713	51%	0.00%	0.93%	6.30%
2010	24.78	117,604	0	117,231	109,676	7,554	54%	0.00%	0.32%	6.44%
2011	24.42	123,736	18,463	122,629	113,768	8,861	57%	0.00%	0.89%	7.23%
2012	27.64	131,417	25,638	130,984	121,104	9,880	54%	0.00%	0.33%	7.54%
2013	25.96	130,383	35,943	129,347	120,201	9,146	57%	0.00%	0.79%	7.07%
2014	27.03	133,110	21,997	132,772	125,735	7,037	56%	0.00%	0.25%	5.30%
2015	28.23	154,246	25,490	153,874	146,840	7,034	62%	0.00%	0.24%	4.57%
2016	32.47	181,411	40,206	181,411	170,395	11,017	64%	0.00%	0.00%	6.07%
2017	35.15	195,858	15,184	195,039	188,138	12,166	63%	2.70%	0.42%	6.24%
2018	37.76	224,989	13,738	223,406	215,919	14,070	68%	2.95%	0.70%	6.30%
2019	42.03	249,850	10,486	248,766	244,894	14,248	68%	4.17%	0.43%	5.73%
2020	43.55	239,195	20,637	237,247	232,323	14,786	62%	4.16%	0.81%	6.23%
2021	39.10	236,031	9,877	233,604	228,322	13,418	68%	3.48%	1.03%	5.74%
2022	37.37	197,747	20,772	196,230	196,602	10,825	60%	5.71%	0.77%	5.52%
2023	46.60	288,109	93,125	285,825	286,854	16,457	70%	6.12%	0.79%	5.76%

The Peak Demand exhibited a notable increase from 37.37 MW in 2022 to 46.60 MW in 2023, marking a growth rate of 25%, primarily attributed to the rising number of load connections. Simultaneously, MWh Offtake experienced a significant surge from 197,747 MWh in 2022 to 288,109 MWh in 2023, reflecting a growth rate of 46%, also linked to the escalating load connections. Throughout this period, the Load Factor fluctuated within the range of 60% to 70%. However, there were abrupt changes in consumption in 2013, 2020-2021, and 2022, driven by the earthquake, the impact of the Covid-19 pandemic, and the occurrence of Typhoon Odette, respectively, affecting the entire province of Bohol.



The above figure presents a graphical representation of energy consumption over the past 24 years. MWh Output demonstrated a consistent increase from 2014 to 2023, with an average growth rate of 10.73%. Concurrently, MWh System Loss exhibited a parallel increase, averaging a growth rate of 12.35% during the same period.

Notably, the significant decrease in energy consumption in 2022 is prominently visible in the figure, primarily attributed to the severe impact of the Super Typhoon that severely affected BOHECO I's franchise area. It was only on August 12, 2022 that BOHECO I declared 100% energized after being hit by the typhoon.



In the historical context, Transmission Loss fluctuated between 0.17% and 1.60%, while System Loss varied from 4.57% to 8.71%. The highest recorded Transmission Loss occurred in 2008 at 1.60%, while the peak System Loss was observed in the year 2000 at 8.71%, primarily attributed to elevated non-technical and technical losses during that period.



Residential customers constitute the majority of energy sales, making up 47.09% of the total, primarily due to their substantial number of connections. Conversely, customers categorized as "Public Building and Streetlights (classified as Others)" contribute only 5.06% to energy sales, reflecting their lower number of connections and loads. Additionally, there is an increase in Commercial and Industrial consumers, as the Province of Bohol rebounds from a series of natural phenomenon that previously impacted the province.



During the last historical year, Cebu Energy Development Corporation (CEDC), GN Power Dinginin, and San Miguel Energy Corporation (SMEC) all surpassed the minimum yearly quantity specified in their respective Power Supply Agreements (PSA). The PSA with CEDC constitutes the majority of MWh Offtake, accounting for approximately 34% of the total, followed by GN Power with around 24% of the total Offtake for the year 2023. Notably, BOHECO I ceased its power withdrawal from GN Power following the receipt of the ERC's Order with ERC Case No. 2016-061 RC on



October 6, 2023. Furthermore, GEOP consumers initiated the withdrawal of their power supply in

The WESM Offtake demonstrated substantial growth, increasing from 18,463 MWh in 2011 to 93,125 MWh in 2023, reflecting a growth rate of 43.48% attributed to the escalating load connections. The share of WESM in the total Offtake varied between 4.18% and 32.32%. Notably, the WESM withdrawal spiked significantly in the last quarter of 2023, mainly due to the termination of the Power Supply Agreement (PSA) with GN Power following the ERC's Order as mentioned above.

## 2. Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 39.48 MW and the maximum load is 46.60 MW for the last historical year. It also shows that most of the time, the demand is about 20 MW.



Peak MW occurred on 10/05/2023. Peak daily MWh occurred on 10/05/2023 at 7:00 A.M. As shown in the Load Curves, the available supply is lower than the Peak Demand.



The Non-coincident Peak Demand is 51.31 MW, which is around 60.36% of the total substation capacity of 85 MVA at a power factor of 98.39%. The load factor or the ratio between the Average Load of 33.36 MW and the Non-coincident Peak Demand is 65.02%. A safe estimate of the true minimum load is the fifth percentile load of 24.06 MW which is 46.89% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
MACA-AS	10	7.779
DAMPAS	10	0.000
CARMEN	10	5.636
LOAY	10	6.411
MARIBOJOC	10	6.408
PANGLAO	10	8.037
CATAGBACAN	5	3.305
SAGASA	5	2.500
BOLOD	15	11.232

The substations loaded at above 70% are Maca-as, Panglao and Bolod. This loading problem will be solved by uprating the power transformers and transferring of loads to neighbouring substation.

## **3. Forecasted Consumption Data**

Table below shows noticeably high value as to its contracting levels as well as MW Surplus/Deficit mainly due to the resulting forecasted Coincident Peak which is lower than the previous year's forecasting results.

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	42.58	40.00	0.00	0.000	2.98	101%	101%	0.40
	Feb	42.50	40.00	0.00	0.000	2.83	101%	101%	0.33
	Mar	42.48	40.00	0.00	0.000	2.88	101%	101%	0.40
	Apr	45.90	40.00	0.00	0.000	3.29	94%	94%	-2.61
	May	46.13	40.00	0.00	0.000	3.51	94%	94%	-2.62
	Jun	46.73	40.00	0.00	0.000	4.63	95%	95%	-2.09
	Jul	46.03	40.00	0.00	0.000	4.46	96%	96%	-1.57
	Aug	49.21	40.00	0.00	0.000	4.41	89%	89%	-4.80
	Sep	47.72	40.00	1.60	0.000	4.59	93%	96%	-1.53
	Oct	50.15	40.00	1.60	0.000	6.07	91%	94%	-2.47
	Nov	48.64	40.00	1.60	0.000	5.55	93%	97%	-1.48
	Dec	48.40	40.00	1.60	0.000	5.35	93%	97%	-1.45
2025	Jan	45.14	44.50	1.60	0.000	3.41	107%	110%	4.37
	Feb	45.06	44.50	1.60	0.000	3.24	106%	110%	4.28
	Mar	45.04	44.50	1.60	0.000	3.30	107%	110%	4.36
	Apr	48.67	44.50	1.60	5.000	3.76	99%	114%	6.19
	May	48.91	44.50	1.60	5.000	4.02	99%	114%	6.21
	Jun	49.54	44.50	1.60	5.000	5.30	101%	116%	6.86
	Jul	48.81	44.50	1.60	5.000	5.10	102%	117%	7.40
	Aug	52.17	44.50	1.60	5.000	5.05	94%	108%	3.97
	Sep	50.59	44.50	1.60	5.000	5.24	98%	113%	5.75
	Oct	53.16	30.50	1.60	5.000	6.94	66%	80%	-9.12
	Nov	51.57	30.50	1.60	5.000	6.35	67%	82%	-8.12
	Dec	51.31	30.50	1.60	5.000	6.11	67%	82%	-8.10

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2026	Jan	47.62	46.50	1.60	5.000	3.84	106%	121%	9.32
	Feb	47.53	46.50	1.60	5.000	3.64	106%	121%	9.21
	Mar	47.51	46.50	1.60	5.000	3.71	106%	121%	9.30
	Apr	51.34	46.50	1.60	5.000	4.23	99%	113%	6.00
	May	51.60	46.50	1.60	5.000	4.52	99%	113%	6.03
	Jun	52.26	46.50	1.60	5.000	5.96	100%	115%	6.81
	Jul	51.48	46.50	1.60	5.000	5.74	102%	116%	7.36
	Aug	55.03	46.50	1.60	5.000	5.68	94%	108%	3.75
	Sep	53.37	46.50	1.60	5.000	5.90	98%	112%	5.63
	Oct	56.08	46.50	1.60	5.000	7.81	96%	110%	4.83
	Nov	54.40	46.50	1.60	5.000	7.15	98%	112%	5.85
	Dec	54.13	46.50	1.60	5.000	6.88	98%	112%	5.85
2027	Jan	50.01	48.50	1.60	5.000	4.26	106%	120%	9.35
	Feb	49.92	48.50	1.60	5.000	4.05	106%	120%	9.23
	Mar	49.90	48.50	1.60	5.000	4.13	106%	120%	9.32
	Apr	53.92	48.50	1.60	5.000	4.71	99%	112%	5.88
	May	54.19	48.50	1.60	5.000	5.02	99%	112%	5.93
	Jun	54.89	48.50	1.60	5.000	6.63	101%	114%	6.84
	Jul	54.07	48.50	1.60	5.000	6.38	102%	116%	7.41
	Aug	57.80	48.50	1.60	5.000	6.31	94%	107%	3.61
	Sep	56.05	48.50	1.60	5.000	6.56	98%	111%	5.60
	Oct	58.90	48.50	1.60	5.000	8.69	97%	110%	4.88
	Nov	57.13	48.50	1.60	5.000	7.94	99%	112%	5.91
	Dec	56.85	48.50	1.60	5.000	7.65	99%	112%	5.89
2028	Jan	52.34	50.50	1.60	7.000	4.69	106%	124%	11.46
	Feb	52.24	50.50	1.60	7.000	4.46	106%	124%	11.32
	Mar	52.22	50.50	1.60	7.000	4.54	106%	124%	11.42
	Apr	56.43	50.50	1.60	7.000	5.18	99%	115%	7.85
	May	56.71	50.50	1.60	7.000	5.53	99%	115%	7.92
	Jun	57.44	50.50	1.60	7.000	7.29	101%	118%	8.96

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jul	56.59	50.50	1.60	7.000	7.02	102%	119%	9.54
	Aug	60.49	50.50	1.60	7.000	6.94	94%	110%	5.56
	Sep	58.66	50.50	1.60	7.000	7.22	98%	115%	7.66
	Oct	61.64	50.50	1.60	7.000	9.56	97%	113%	7.02
	Nov	59.79	50.50	1.60	7.000	8.74	99%	116%	8.05
	Dec	59.49	50.50	1.60	7.000	8.41	99%	116%	8.02
2029	Jan	54.59	52.50	1.60	10.000	5.12	106%	130%	14.63
	Feb	54.49	52.50	1.60	10.000	4.86	106%	129%	14.47
	Mar	54.47	52.50	1.60	10.000	4.95	106%	129%	14.58
	Apr	58.86	52.50	1.60	10.000	5.65	99%	120%	10.89
	May	59.15	52.50	1.60	10.000	6.03	99%	121%	10.98
	Jun	59.91	52.50	1.60	10.000	7.96	101%	123%	12.15
	Jul	59.02	52.50	1.60	10.000	7.66	102%	125%	12.74
	Aug	63.09	52.50	1.60	10.000	7.58	95%	115%	8.58
	Sep	61.19	52.50	1.60	10.000	7.87	98%	120%	10.79
	Oct	64.29	52.50	1.60	10.000	10.43	97%	119%	10.23
	Nov	62.36	52.50	1.60	10.000	9.54	99%	121%	11.28
	Dec	62.06	52.50	1.60	10.000	9.18	99%	121%	11.22
2030	Jan	56.78	52.50	1.60	10.000	5.55	102%	125%	12.86
	Feb	56.68	52.50	1.60	10.000	5.27	102%	125%	12.69
	Mar	56.66	52.50	1.60	10.000	5.37	102%	125%	12.81
	Apr	61.22	52.50	1.60	10.000	6.12	95%	116%	9.00
	May	61.53	52.50	1.60	10.000	6.54	95%	117%	9.11
	Jun	62.32	52.50	1.60	10.000	8.62	98%	119%	10.41
	Jul	61.39	52.50	1.60	10.000	8.31	99%	121%	11.01
	Aug	65.63	52.50	1.60	10.000	8.21	91%	112%	6.68
	Sep	63.64	52.50	1.60	10.000	8.53	95%	116%	8.99
	Oct	66.88	52.50	1.60	10.000	11.30	94%	115%	8.52
	Nov	64.87	52.50	1.60	10.000	10.33	96%	118%	9.57
	Dec	64.55	52.50	1.60	10.000	9.95	96%	117%	9.50

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2031	Jan	58.92	52.50	1.60	10.000	5.98	99%	121%	11.16
	Feb	58.81	52.50	1.60	10.000	5.67	99%	121%	10.97
	Mar	58.79	52.50	1.60	10.000	5.78	99%	121%	11.09
	Apr	63.52	52.50	1.60	10.000	6.59	92%	113%	7.18
	May	63.84	52.50	1.60	10.000	7.04	92%	113%	7.30
	Jun	64.66	52.50	1.60	10.000	9.29	95%	116%	8.73
	Jul	63.70	52.50	1.60	10.000	8.95	96%	117%	9.35
	Aug	68.09	52.50	1.60	10.000	8.84	89%	108%	4.85
	Sep	66.03	52.50	1.60	10.000	9.19	92%	113%	7.26
	Oct	69.39	52.50	1.60	10.000	12.17	92%	112%	6.88
	Nov	67.30	52.50	1.60	10.000	11.13	93%	114%	7.93
	Dec	66.97	52.50	1.60	10.000	10.71	93%	114%	7.84
2032	Jan	60.99	52.50	0.00	10.000	6.40	96%	114%	7.91
	Feb	60.88	52.50	0.00	10.000	6.08	96%	114%	7.70
	Mar	60.86	52.50	0.00	10.000	6.19	96%	114%	7.84
	Apr	65.76	52.50	0.00	10.000	7.07	89%	106%	3.81
	May	66.09	52.50	0.00	10.000	7.54	90%	107%	3.96
	Jun	66.93	52.50	0.00	10.000	9.95	92%	110%	5.52
	Jul	65.94	52.50	0.00	10.000	9.59	93%	111%	6.14
	Aug	70.49	52.50	0.00	10.000	9.48	86%	102%	1.49
	Sep	68.36	52.50	0.00	10.000	9.85	90%	107%	3.99
	Oct	71.83	52.50	0.00	10.000	13.04	89%	106%	3.71
	Nov	69.67	52.50	0.00	10.000	11.93	91%	108%	4.75
	Dec	69.33	52.50	0.00	10.000	11.48	91%	108%	4.65
2033	Jan	63.02	52.50	0.00	10.000	6.83	93%	111%	6.31
	Feb	62.90	52.50	0.00	10.000	6.49	93%	111%	6.09
	Mar	62.88	52.50	0.00	10.000	6.61	93%	111%	6.23
	Apr	67.94	52.50	0.00	10.000	7.54	87%	103%	2.10
	May	68.28	52.50	0.00	10.000	8.05	87%	104%	2.27
	Jun	69.16	52.50	0.00	10.000	10.62	90%	107%	3.96

	Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
Jul	68.13	52.50	0.00	10.000	10.23	91%	108%	4.59
Aug	72.83	52.50	0.00	10.000	10.11	84%	100%	-0.22
Sep	70.63	52.50	0.00	10.000	10.51	87%	104%	2.38
Oct	74.22	52.50	0.00	10.000	13.91	87%	104%	2.20
Nov	71.99	52.50	0.00	10.000	12.73	89%	105%	3.24
Dec	71.63	52.50	0.00	10.000	12.25	88%	105%	3.11

Employing an Excel-based forecasting model, the Peak Demand was projected to peak in October, strategically aligning from the previous years actual data. Conversely, the Monthly Peak Demand experiences its lowest point in March, a phenomenon attributed to a shorter billing cycle, which effectively reduces the number of days in that particular month.

It is crucial to underscore that this forecasting and consideration of factors like tourist influx and billing cycles contribute to the accuracy of the predictions. In a broader context, the Peak Demand is anticipated to exhibit a growth trajectory, with an average annual rate of 4.26%, underscoring the sustained upward trend in energy consumption patterns. This strategic and comprehensive forecasting approach ensures a robust understanding of the dynamics shaping the energy landscape in the coverage area.





In the context of this forecasting model, it's important to emphasize that the available supply shall not surpass the Peak Demand as displayed in the above figure to avoid over-contracting. However, the exceptionality of the PSA of 2010-095RC (CEDC) and 2023-112 RC (EDC) is that BOHECO I have the right to Schedule a Dispatch at least 50% of its Contracted Capacity in accordance with the agreed dispatch protocol. Considering this protocol, the figure below will relatively reduce the over contracted demand in the above figure and table.



The drop in supply during October-December 2025 is be attributed to the expiration of the PSA outlined in ERC Case 2010-095 RC (CEDC). Subsequently, in 2026, the PSA under 2023-112 RC (EDC) was augmented to 40MW to mitigate the shortage.



Within this realm of available supply, the most substantial contribution comes from the 26 MW to 50 MW (escalating) allocation from 2023-112 RC (EDC). This notable figure is followed closely by the 14 MW supply from 2010-095RC (CEDC). It is noteworthy to highlight the robust nature of the available supply, particularly the significant contributions from these key sources, ensuring a resilient and well-supported energy infrastructure for BOHECO I.

Table below will show the Forecasted Consumption Data considering the <u>right to Schedule</u> <u>a Dispatch of at least 50% of its Contracted Capacity from EDC and/or CEDC.</u>

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	42.58	39.60	0.00	0.000	2.98	100%	100%	0.00
	Feb	42.50	39.67	0.00	0.000	2.83	100%	100%	0.00
	Mar	42.48	39.60	0.00	0.000	2.88	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
	Apr	45.90	40.00	0.00	0.000	3.29	94%	94%	-2.61
	May	46.13	40.00	0.00	0.000	3.51	94%	94%	-2.62
	Jun	46.73	40.00	0.00	0.000	4.63	95%	95%	-2.09
	Jul	46.03	40.00	0.00	0.000	4.46	96%	96%	-1.57
	Aug	49.21	40.00	0.00	0.000	4.41	89%	89%	-4.80
	Sep	47.72	40.00	1.60	0.000	4.59	93%	96%	-1.53
	Oct	50.15	40.00	1.60	0.000	6.07	91%	94%	-2.47
	Nov	48.64	40.00	1.60	0.000	5.55	93%	97%	-1.48
	Dec	48.40	40.00	1.60	0.000	5.35	93%	97%	-1.45
2025	Jan	45.14	40.13	1.60	0.000	3.41	96%	100%	0.00
	Feb	45.06	40.22	1.60	0.000	3.24	96%	100%	0.00
	Mar	45.04	40.14	1.60	0.000	3.30	96%	100%	0.00
	Apr	48.67	38.31	1.60	5.000	3.76	85%	100%	0.00
	May	48.91	38.29	1.60	5.000	4.02	85%	100%	0.00
	Jun	49.54	37.64	1.60	5.000	5.30	85%	100%	0.00
	Jul	48.81	37.10	1.60	5.000	5.10	85%	100%	0.00
	Aug	52.17	40.53	1.60	5.000	5.05	86%	100%	0.00
	Sep	50.59	38.75	1.60	5.000	5.24	85%	100%	0.00
	Oct	53.16	30.50	1.60	5.000	6.94	66%	80%	-9.12
	Nov	51.57	30.50	1.60	5.000	6.35	67%	82%	-8.12
	Dec	51.31	30.50	1.60	5.000	6.11	67%	82%	-8.10
2026	Jan	47.62	37.18	1.60	5.000	3.84	85%	100%	0.00
	Feb	47.53	37.29	1.60	5.000	3.64	85%	100%	0.00
	Mar	47.51	37.20	1.60	5.000	3.71	85%	100%	0.00
	Apr	51.34	40.50	1.60	5.000	4.23	86%	100%	0.00
	May	51.60	40.47	1.60	5.000	4.52	86%	100%	0.00
	Jun	52.26	39.69	1.60	5.000	5.96	86%	100%	0.00
	Jul	51.48	39.14	1.60	5.000	5.74	86%	100%	0.00
	Aug	55.03	42.75	1.60	5.000	5.68	87%	100%	0.00
	Sep	53.37	40.87	1.60	5.000	5.90	86%	100%	0.00
	Oct	56.08	41.67	1.60	5.000	7.81	86%	100%	0.00
	Nov	54.40	40.65	1.60	5.000	7.15	86%	100%	0.00
	Dec	54.13	40.65	1.60	5.000	6.88	86%	100%	0.00
2027	Jan	50.01	39.15	1.60	5.000	4.26	86%	100%	0.00
	Feb	49.92	39.27	1.60	5.000	4.05	86%	100%	0.00
	Mar	49.90	39.18	1.60	5.000	4.13	86%	100%	0.00
	Apr	53.92	42.62	1.60	5.000	4.71	87%	100%	0.00
	May	54.19	42.57	1.60	5.000	5.02	87%	100%	0.00
	Jun	54.89	41.66	1.60	5.000	6.63	86%	100%	0.00
	Jul	54.07	41.09	1.60	5.000	6.38	86%	100%	0.00
	Aug	57.80	44.89	1.60	5.000	6.31	87%	100%	0.00
	Sep	56.05	42.90	1.60	5.000	6.56	87%	100%	0.00
	Oct	58.90	43.62	1.60	5.000	8.69	87%	100%	0.00
	Nov	57.13	42.59	1.60	5.000	7.94	87%	100%	0.00
	Dec	56.85	42.61	1.60	5.000	7.65	87%	100%	0.00
2028	Jan	52.34	41.04	1.60	5.000	4.69	86%	100%	0.00
	Feb	52.24	41.18	1.60	5.000	4.46	86%	100%	0.00
	Mar	52.22	41.08	1.60	5.000	4.54	86%	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
	Apr	56.43	42.65	1.60	7.000	5.18	83%	100%	0.00
	May	56.71	42.58	1.60	7.000	5.53	83%	100%	0.00
	Jun	57.44	41.54	1.60	7.000	7.29	83%	100%	0.00
	Jul	56.59	40.96	1.60	7.000	7.02	83%	100%	0.00
	Aug	60.49	44.94	1.60	7.000	6.94	84%	100%	0.00
	Sep	58.66	42.84	1.60	7.000	7.22	83%	100%	0.00
	Oct	61.64	43.48	1.60	7.000	9.56	83%	100%	0.00
	Nov	59.79	42.45	1.60	7.000	8.74	83%	100%	0.00
	Dec	59.49	42.48	1.60	7.000	8.41	83%	100%	0.00
2029	Jan	54.59	37.87	1.60	10.000	5.12	77%	100%	0.00
	Feb	54.49	38.03	1.60	10.000	4.86	77%	100%	0.00
	Mar	54.47	37.92	1.60	10.000	4.95	77%	100%	0.00
	Apr	58.86	41.61	1.60	10.000	5.65	78%	100%	0.00
	May	59.15	41.52	1.60	10.000	6.03	78%	100%	0.00
	Jun	59.91	40.35	1.60	10.000	7.96	78%	100%	0.00
	Jul	59.02	39.76	1.60	10.000	7.66	77%	100%	0.00
	Aug	63.09	43.92	1.60	10.000	7.58	79%	100%	0.00
	Sep	61.19	41.71	1.60	10.000	7.87	78%	100%	0.00
	Oct	64.29	42.27	1.60	10.000	10.43	78%	100%	0.00
	Nov	62.36	41.22	1.60	10.000	9.54	78%	100%	0.00
	Dec	62.06	41.28	1.60	10.000	9.18	78%	100%	0.00
2030	Jan	56.78	39.64	1.60	10.000	5.55	77%	100%	0.00
	Feb	56.68	39.81	1.60	10.000	5.27	77%	100%	0.00
	Mar	56.66	39.69	1.60	10.000	5.37	77%	100%	0.00
	Apr	61.22	43.50	1.60	10.000	6.12	79%	100%	0.00
	May	61.53	43.39	1.60	10.000	6.54	79%	100%	0.00
	Jun	62.32	42.09	1.60	10.000	8.62	78%	100%	0.00
	Jul	61.39	41.49	1.60	10.000	8.31	78%	100%	0.00
	Aug	65.63	45.82	1.60	10.000	8.21	80%	100%	0.00
	Sep	63.64	43.51	1.60	10.000	8.53	79%	100%	0.00
	Oct	66.88	43.98	1.60	10.000	11.30	79%	100%	0.00
	Nov	64.87	42.93	1.60	10.000	10.33	79%	100%	0.00
	Dec	64.55	43.00	1.60	10.000	9.95	79%	100%	0.00
2031	Jan	58.92	41.34	1.60	10.000	5.98	78%	100%	0.00
	Feb	58.81	41.53	1.60	10.000	5.67	78%	100%	0.00
	Mar	58.79	41.41	1.60	10.000	5.78	78%	100%	0.00
	Apr	63.52	45.32	1.60	10.000	6.59	80%	100%	0.00
	May	63.84	45.20	1.60	10.000	7.04	80%	100%	0.00
	Jun	64.66	43.77	1.60	10.000	9.29	79%	100%	0.00
	Jul	63.70	43.15	1.60	10.000	8.95	79%	100%	0.00
	Aug	68.09	47.65	1.60	10.000	8.84	80%	100%	0.00
	Sep	66.03	45.24	1.60	10.000	9.19	80%	100%	0.00
	Oct	69.39	45.62	1.60	10.000	12.17	80%	100%	0.00
	Nov	67.30	44.57	1.60	10.000	11.13	79%	100%	0.00
	Dec	66.97	44.66	1.60	10.000	10.71	79%	100%	0.00
2032	Jan	60.99	44.59	0.00	10.000	6.40	82%	100%	0.00
	Feb	60.88	44.80	0.00	10.000	6.08	82%	100%	0.00
	Mar	60.86	44.66	0.00	10.000	6.19	82%	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
	Apr	65.76	48.69	0.00	10.000	7.07	83%	100%	0.00
	May	66.09	48.54	0.00	10.000	7.54	83%	100%	0.00
	Jun	66.93	46.98	0.00	10.000	9.95	82%	100%	0.00
	Jul	65.94	46.36	0.00	10.000	9.59	82%	100%	0.00
	Aug	70.49	51.01	0.00	10.000	9.48	84%	100%	0.00
	Sep	68.36	48.51	0.00	10.000	9.85	83%	100%	0.00
	Oct	71.83	48.79	0.00	10.000	13.04	83%	100%	0.00
	Nov	69.67	47.75	0.00	10.000	11.93	83%	100%	0.00
	Dec	69.33	47.85	0.00	10.000	11.48	83%	100%	0.00
2033	Jan	63.02	46.19	0.00	10.000	6.83	82%	100%	0.00
	Feb	62.90	46.41	0.00	10.000	6.49	82%	100%	0.00
	Mar	62.88	46.27	0.00	10.000	6.61	82%	100%	0.00
	Apr	67.94	50.40	0.00	10.000	7.54	83%	100%	0.00
	May	68.28	50.23	0.00	10.000	8.05	83%	100%	0.00
	Jun	69.16	48.54	0.00	10.000	10.62	83%	100%	0.00
	Jul	68.13	47.91	0.00	10.000	10.23	83%	100%	0.00
	Aug	72.83	52.50	0.00	10.000	10.11	84%	100%	-0.22
	Sep	70.63	50.12	0.00	10.000	10.51	83%	100%	0.00
	Oct	74.22	50.30	0.00	10.000	13.91	83%	100%	0.00
	Nov	71.99	49.26	0.00	10.000	12.73	83%	100%	0.00
	Dec	71.63	49.39	0.00	10.000	12.25	83%	100%	0.00



The first wave of supply procurement will be for 5 MW planned to be available by the 1<sup>st</sup> quarter of the year 2025. The planned CSP will address the Renewable Portfolio Standard (RPS) compliance of BOHECO I as well as its peaking requirement.



The highest target contracting level is 100% which is expected to occur this year 2024. The lowest target contracting level is 80% which is expected to occur on October 2025.



The drop in supply during October-December 2025 can be attributed to the expiration of the PSA outlined in ERC Case 2010-095 RC (CEDC). Subsequently, in 2026, the PSA under 2023-112 RC (EDC) was augmented to 40MW to mitigate the shortage.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	27,295	25,820	1,475	0.00%	5.41%
	Feb	25,485	24,179	1,306	0.00%	5.13%
	Mar	26,342	25,790	552	0.00%	2.10%
	Apr	26,779	25,147	1,632	0.00%	6.10%
	May	27,305	26,024	1,281	0.00%	4.69%
	Jun	27,049	25,644	1,405	0.00%	5.19%
	Jul	28,047	26,384	1,663	0.00%	5.93%
	Aug	27,555	26,374	1,182	0.00%	4.29%
	Sep	27,558	25,633	1,926	0.00%	6.99%
	Oct	28,340	26,984	1,356	0.00%	4.78%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	27,542	25,994	1,548	0.00%	5.62%
	Dec	27,621	26,706	915	0.00%	3.31%
2025	Jan	29,082	27,494	1,587	0.00%	5.46%
	Feb	26,306	24,900	1,406	0.00%	5.34%
	Mar	28,055	27,461	594	0.00%	2.12%
	Apr	28,539	26,782	1,756	0.00%	6.15%
	May	29,096	27,718	1,378	0.00%	4.74%
	Jun	28,840	27,328	1,511	0.00%	5.24%
	Jul	29,902	28,113	1,789	0.00%	5.98%
	Aug	29,372	28,101	1,272	0.00%	4.33%
	Sep	29,387	27,315	2,072	0.00%	7.05%
	Oct	30,230	28,772	1,459	0.00%	4.83%
	Nov	29,378	27,712	1,666	0.00%	5.67%
	Dec	29,451	28,467	984	0.00%	3.34%
2026	Jan	30,750	29,051	1,699	0.00%	5.52%
	Feb	27,816	26,312	1,504	0.00%	5.41%
	Mar	29,650	29,015	636	0.00%	2.14%
	Apr	30,184	28,304	1,880	0.00%	6.23%
	May	30,769	29,294	1,475	0.00%	4.79%
	Jun	30,516	28,899	1,617	0.00%	5.30%
	Jul	31,638	29,724	1,915	0.00%	6.05%
	Aug	31,071	29,710	1,361	0.00%	4.38%
	Sep	31,101	28,884	2,217	0.00%	7.13%
	Oct	32,002	30,441	1,561	0.00%	4.88%
	Nov	31,099	29,316	1,783	0.00%	5.73%
	Dec	31,164	30,110	1,053	0.00%	3.38%
2027	Jan	32,371	30,562	1,810	0.00%	5.59%
	Feb	29,284	27,681	1,603	0.00%	5.47%
	Mar	31,199	30,522	677	0.00%	2.17%
	Apr	31,783	29,781	2,002	0.00%	6.30%
	May	32,395	30,824	1,571	0.00%	4.85%
	Jun	32,147	30,424	1,723	0.00%	5.36%
	Jul	33,328	31,288	2,040	0.00%	6.12%
	Aug	32,723	31,273	1,450	0.00%	4.43%
	Sep	32,770	30,408	2,362	0.00%	7.21%
	Oct	33,728	32,065	1,663	0.00%	4.93%
	Nov	32,775	30,876	1,899	0.00%	5.79%
	Dec	32,829	31,707	1,122	0.00%	3.42%
2028	Jan	33,866	31,946	1,920	0.00%	5.67%
	Feb	31,617	29,917	1,700	0.00%	5.38%
	Mar	32,621	31,903	/18	0.00%	2.20%
	Apr	33,260	31,135	2,124	0.00%	0.39%
	May	33,895	32,228	1,667	0.00%	4.92%
	Jun	33,656	31,828	1,828	0.00%	5.43%
	Jul	34,891	32,727	2,164	0.00%	6.20%
	Aug	34,248	32,710	1,538	0.00%	4.49%
	Sep	34,316	31,810	2,506	0.00%	7.30%
	Oct	35,326	33,562	1,764	0.00%	4.99%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	34,327	32,313	2,015	0.00%	5.87%
	Dec	34,368	33,177	1,191	0.00%	3.46%
2029	Jan	35,486	33,457	2,029	0.00%	5.72%
	Feb	32,104	30,307	1,797	0.00%	5.60%
	Mar	34,170	33,411	759	0.00%	2.22%
	Apr	34,858	32,613	2,246	0.00%	6.44%
	May	35,520	33,759	1,762	0.00%	4.96%
	Jun	35,286	33,354	1,932	0.00%	5.48%
	Jul	36,580	34,292	2,287	0.00%	6.25%
	Aug	35,899	34,274	1,626	0.00%	4.53%
	Sep	35,983	33,334	2,649	0.00%	7.36%
	Oct	37,051	35,186	1,865	0.00%	5.03%
	Nov	36,002	33,872	2,130	0.00%	5.92%
	Dec	36,033	34,775	1,258	0.00%	3.49%
2030	Jan	36,965	34,848	2,117	0.00%	5.73%
	Feb	33,443	31,568	1,875	0.00%	5.61%
	Mar	35,590	34,798	792	0.00%	2.23%
	Apr	36,316	33,973	2,343	0.00%	6.45%
	May	37,007	35,169	1,838	0.00%	4.97%
	Jun	36,779	34,763	2,016	0.00%	5.48%
	Jul	38,123	35,737	2,386	0.00%	6.26%
	Aug	37,413	35,717	1,696	0.00%	4.53%
	Sep	37,506	34,742	2,763	0.00%	7.37%
	Oct	38,635	36,689	1,946	0.00%	5.04%
	Nov	37,537	35,316	2,222	0.00%	5.92%
	Dec	37,564	36,251	1,313	0.00%	3.49%
2031	Jan	38,406	36,204	2,203	0.00%	5.74%
	Feb	34,749	32,798	1,951	0.00%	5.61%
	Mar	36,974	36,150	824	0.00%	2.23%
	Apr	37,738	35,300	2,437	0.00%	6.46%
	May	38,456	36,544	1,912	0.00%	4.97%
	Jun	38,237	36,140	2,097	0.00%	5.48%
	Jul	39,630	37,147	2,483	0.00%	6.26%
	Aug	38,890	37,125	1,764	0.00%	4.54%
	Sep	38,992	36,117	2,875	0.00%	7.37%
	Oct	40,182	38,158	2,024	0.00%	5.04%
	Nov	39,037	36,725	2,311	0.00%	5.92%
	Dec	39,059	37,694	1,366	0.00%	3.50%
2032	Jan	39,716	37,430	2,286	0.00%	5.76%
	Feb	37,078	35,054	2,024	0.00%	5.46%
	Mar	38,229	37,374	855	0.00%	2.24%
	Apr	39,032	36,502	2,530	0.00%	6.48%
	May	39,775	37,790	1,984	0.00%	4.99%
	Jun	39,567	37,390	2,1/6	0.00%	5.50%
	Jul	41,005	38,428	2,577	0.00%	6.28%
	Aug	40,236	38,405	1,831	0.00%	4.55%
	Sep	40,350	37,366	2,984	0.00%	7.39%
	Oct	41,598	39,497	2,101	0.00%	5.05%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	40,409	38,010	2,399	0.00%	5.94%
	Dec	40,424	39,006	1,418	0.00%	3.51%
2033	Jan	41,188	38,821	2,368	0.00%	5.75%
	Feb	37,269	35,173	2,097	0.00%	5.63%
	Mar	39,646	38,761	886	0.00%	2.23%
	Apr	40,483	37,863	2,620	0.00%	6.47%
	May	41,256	39,200	2,055	0.00%	4.98%
	Jun	41,054	38,800	2,254	0.00%	5.49%
	Jul	42,541	39,873	2,669	0.00%	6.27%
	Aug	41,744	39,848	1,897	0.00%	4.54%
	Sep	41,864	38,774	3,090	0.00%	7.38%
	Oct	43,176	41,001	2,176	0.00%	5.04%
	Nov	41,937	39,453	2,484	0.00%	5.92%
	Dec	41,951	40,483	1,468	0.00%	3.50%

MWh Offtake was forecasted using an Excel-based forecasting model. The assumed load factor is 70%.

System Loss was calculated through a Load Flow Study conducted by Planning and Design Engineer using PSS Sincal software. Based on the same study, the Distribution System can adequately convey electricity to customers.



MWh Output was expected to grow at an average rate of 5.52% annually.

	Forecasted Losses
10.00° 5.00°	
-5.00	

Transmission Loss is expected to be at 0% while System Loss is expected to range from 2.10% to 6.99% for the year 2024.

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2010-095RC	Base	Cebu Energy Development Corporation (CEDC)	14.00	85,848	9/26/2010	9/25/2025
2016-061RC	Base	GN Power Dinginin Coal Plant Ltd. (GNPower)	12.00	73,584	12/26/2018	12/25/2023
2019-020RC	Base	San Miguel Energy Corporation (SMEC)	1.20	7,358	6/26/2019	12/25/2023
JMHP	Base	DU-owned	5.00	15,330	12/26/2001	12/25/2035
2023-112 RC	Base	Energy Development Corporation (EDC)	26.00	159,869	12/26/2023	12/25/2033

## 4. Power Supply

The Power Supply Agreement (PSA) with Cebu Energy Development Corporation, filed under ERC Case No. 2010-095RC, was strategically secured through Direct Negotiation, a choice dictated by the absence of applicable Competitive Selection Process (CSP) regulations at the time. This decision was made with precision to meet the fundamental base requirements following the expiration of a prior PSA with a different power supplier. Historically, the PSA has about 80% utilization rate for the year 2023. In the same year, the actual billed overall monthly charge under this PSA showcased a range from 7.1986 P/kWh to 10.4105 P/kWh, with spikes primarily attributed to heightened fluctuations in the price of its fuel source, namely Coal.

In contrast, the PSA with GN Power Dinginin Coal Plant Ltd., documented under ERC Case No. 2016-061RC, underwent a Competitive Selection Process (CSP) to fulfil BOHECO I's base power requirements. The average rate for this agreement varied between 5.4956 P/kWh and 7.6007 P/kWh in 2023. Similar to the former, sporadic spikes in rates were primarily influenced by fluctuations in the price of Coal. However, this PSA was terminated earlier on November 6, 2023, in compliance with the ERC's Order under ERC Case No. 2016-061 RC.

The PSA with San Miguel Energy Corporation (SMEC) was also procured through a CSP under ERC Case No. 2019-020RC to meet BOHECO I's base power requirement. The average rate for this agreement fluctuated between 5.0757 P/kWh and 10.8247 P/kWh in 2023. Similar to the

previous agreements, irregular spikes in rates were primarily influenced by fluctuations in the price of Coal in the market.

The PSA with the Energy Development Corporation (EDC) was procured through a CSP via the aggregation of the three Distribution Utilities (DUs) in the Province of Bohol: BOHECO I, BOHECO II, and BLCI. The joint PSA (BOHECO I and EDC) was applied to ERC with ERC Case No. 2023-112 RC. BOHECO I received Provisional Authority from the ERC to draw power from EDC, as per the order promulgated on December 13, 2024, and received by BOHECO I on December 29, 2023. The table below outlines the contracted demand (MW) and minimum contracted energy (MWh) for the specific contract year.

Contract Year	Baseload Contracted Demand (MW)	Minimum Contracted Energy, 70% CUF, MWh per year
2024	26	159,868.80
2025	28	171,696.00
2026	44	269,808.00
2027	46	282,072.00
2028	48	295,142.40
2029	50	306,600.00
2030	50	306,600.00
2031	50	306,600.00
2032	50	307,440.00
2033	50	306,600.00

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
Pre-filed to ERC_BSMHC	Base	BOHECO I – Sevilla Mini Hydro Power Plant Corporation (BSMHC)	1.60	9,838	4/26/2024	12/25/2031

The PSA with BOHECO I-Sevilla Mini-Hydro Corporation (BSMHC) entered into through direct negotiation after two (2) failed CSPs, which was initially pre-filed before the ERC last September 2021. However, after it was being totally submerged during the typhoon Odette, the compliance of the necessary documentation as required for the pre-filing process was temporarily deferred, as the BSMHC declared a force majeure, without certainty for the period of its restoration. The restoration of the BSMHC power plant has been initiated and is expected to be completed on the first quarter of year 2024.

The BSMHC was a replacement contract for the expired PSA between BOHECO I and Sta. Clara Power Corporation – Loboc Hydro Electric Plant (SPC-LHEP). This will augment the baseload requirements of BOHECO I. As per the PSA, the member-consumer-owners of BOHECO I will enjoy a power generation rate of PhP 4.3711/kWh.

	Peaking CSP - RPS 1	Peaking CSP - RPS 2
Туре	Peaking	Peaking
Minimum MW	5.00	7.00
Minimum MWh/yr	10,950	15,372
PSA Start	Thursday, December 26, 2024	Sunday, March 26, 2028
PSA End	Saturday, December 25, 2027	Sunday, December 25, 2033
Publication	Sunday, August 18, 2024	Sunday, August 22, 2027
Pre-bid	Friday, September 6, 2024	Monday, September 13, 2027
Opening	Thursday, November 7, 2024	Thursday, November 11, 2027
Awarding	Monday, December 9, 2024	Friday, December 10, 2027
PSA Signing	Monday, January 6, 2025	Monday, January 10, 2028
Joint Filing	Wednesday, January 15, 2025	Wednesday, January 19, 2028



For the procurement of 5.0 MW of supply which is planned to be available on March 26, 2025, the first publication or launch of CSP will be on August 18, 2024. The planned CSP will address the Renewable Portfolio Standard (RPS) compliance of BOHECO I as well as the peaking requirement of BOHECO I.

Joint filing is planned on January 15, 2025. However, the above schedule is subject to change to comply the CSP rulings and/or the completeness of the CSP process.

#### 5. Captive Customer Connections



The number of Residential connections is expected to grow at an average rate of 1.97% annually. Said customer class is expected to account for 55.40% of the total consumption.