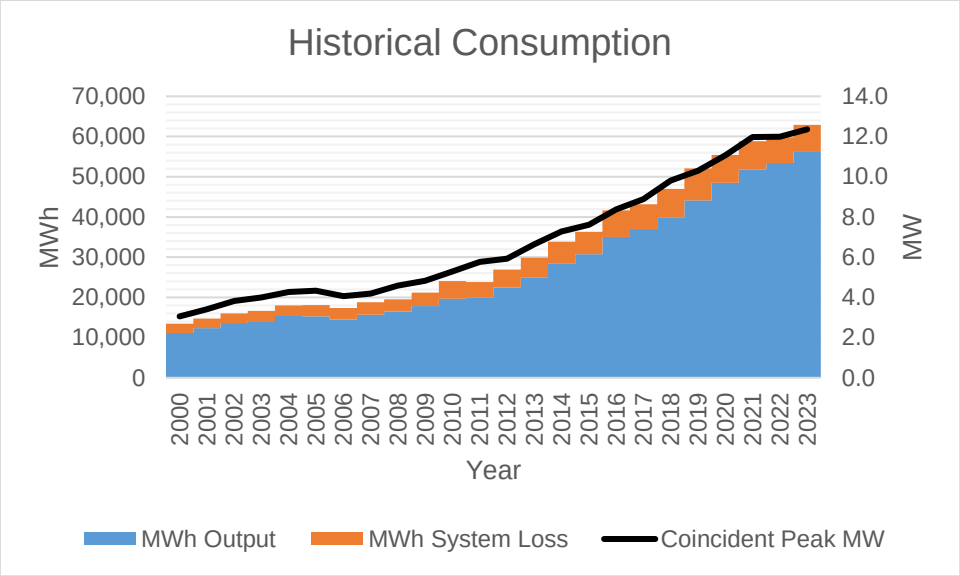
Power Supply Procurement Plan 2024

Quirino Electric Cooperative
(Quirelco)

Historical Consumption Data

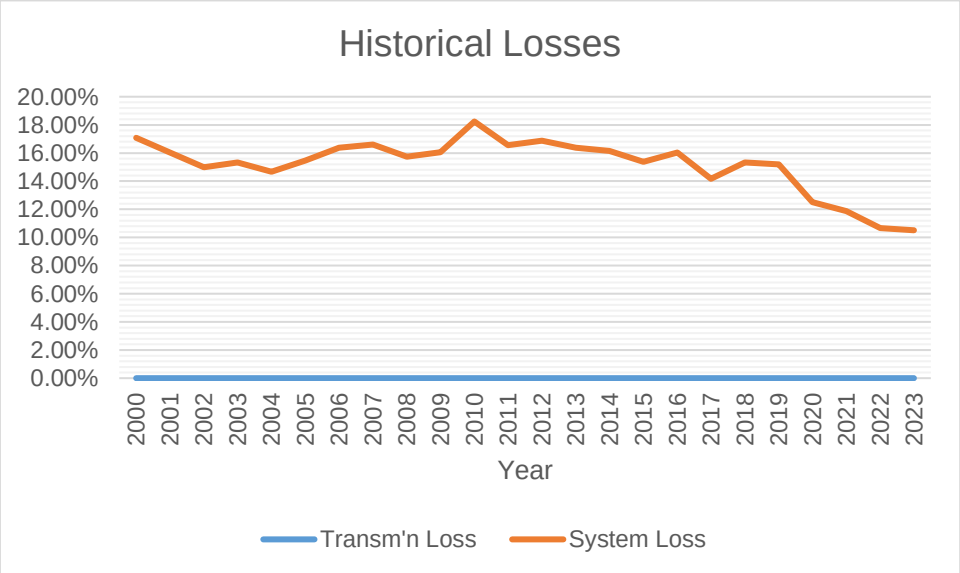
	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Transm'n Loss	System Loss
2000	3.05	13,382	0	13,382	11,146	2,286	50%	0.00%	17.08%
2001	3.41	14,663	0	14,663	12,355	2,352	49%	0.00%	16.04%
2002	3.82	15,982	0	15,982	13,646	2,396	48%	0.00%	14.99%
2003	3.99	16,592	0	16,592	14,108	2,543	47%	0.00%	15.33%
2004	4.28	17,908	0	17,908	15,340	2,626	48%	0.00%	14.66%
2005	4.33	17,985	0	17,985	15,263	2,781	47%	0.00%	15.46%
2006	4.05	17,271	0	17,271	14,502	2,828	49%	0.00%	16.37%
2007	4.19	18,728	0	18,728	15,685	3,109	51%	0.00%	16.60%
2008	4.59	19,450	0	19,450	16,451	3,061	48%	0.00%	15.74%
2009	4.82	21,131	0	21,131	17,805	3,392	50%	0.00%	16.05%
2010	5.28	23,941	0	23,941	19,659	4,367	52%	0.00%	18.24%
2011	5.77	23,682	0	23,682	19,871	3,923	47%	0.00%	16.56%
2012	5.93	26,835	0	26,835	22,414	4,531	52%	0.00%	16.88%
2013	6.64	29,730	0	29,730	24,965	4,872	51%	0.00%	16.39%
2014	7.27	33,699	0	33,699	28,365	5,441	53%	0.00%	16.15%
2015	7.61	36,201	0	36,201	30,737	5,570	54%	0.00%	15.39%
2016	8.38	41,565	0	41,565	35,013	6,668	57%	0.00%	16.04%
2017	8.89	43,018	0	43,018	37,046	6,094	55%	0.00%	14.17%
2018	9.81	46,880	0	46,880	39,824	7,191	55%	0.00%	15.34%
2019	10.30	52,037	0	52,037	44,135	7,903	58%	0.00%	15.19%
2020	11.07	55,296	55,296	55,296	48,517	6,918	57%	0.00%	12.51%
2021	11.98	58,647	58,647	58,647	51,862	6,967	56%	0.00%	11.88%
2022	11.99	59,641	59,641	59,641	53,459	6,361	57%	0.00%	10.67%
2023	12.07	62,772	62,772	62,772	56,339	6,598	58%	0.00%	10.51%

Peak Demand increased from 3.05 MW in year 2000 to 12.07 MW in year 2023 at an average rate of 6.26% per year due to increased load capacity mainly thru the entries of residential and other commercial establishments. MWh Offtake increased from 13,382 MWh in year 2000 to 62,772 MWh in 2023 at an average rate of 7.06% per year due to increase in residential connections. Within the same period, Load Factor ranged from 47% to 58%. There was an abrupt change in consumption on year 2015 to 2016 due to operation of numerous industrial facilities. There are no historical transmission losses since Quirelco does not own a high voltage transmission line.

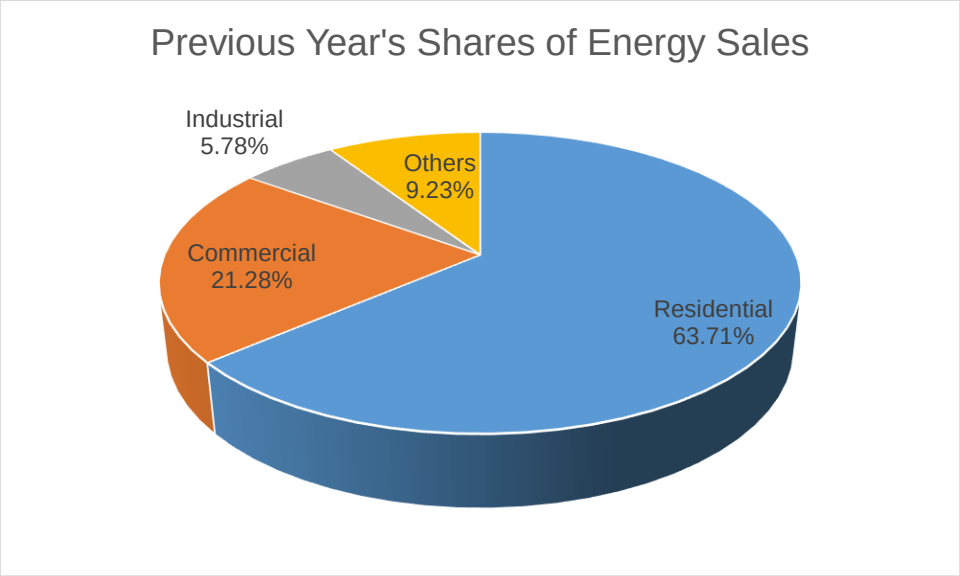


MWh Output increased from year 2000 to year 2023 at an average rate of 7.40%, while MWh System Loss increased at a rate of 5.17% within the same period.

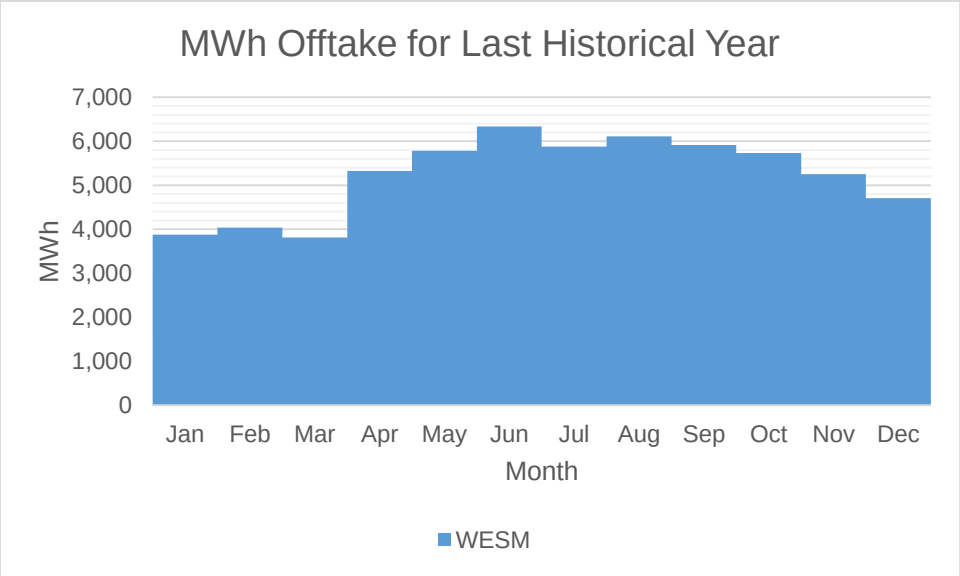
There is a noticeable inconsistency with the MWh system loss for the 2024 PSPP submission as compared with the earlier PSPP submissions. For this year's PSPP submission, the historical MWh losses were broken down into Feeder Technical Loss, SubTx & SS Technical Loss and Non-technical Loss. Unlike the earlier submissions, all MWh losses were accounted for into the Feeder Technical Loss category. This is because of the recently implemented system loss segregation structure of Quirelco using the JAED software, from a private service provider, to address the energy loss segregation problem. Feeder Technical Loss, SubTx & SS Technical Loss and Non-technical Loss values in the historical years were allocated from the result of the simulations using the abovementioned software.



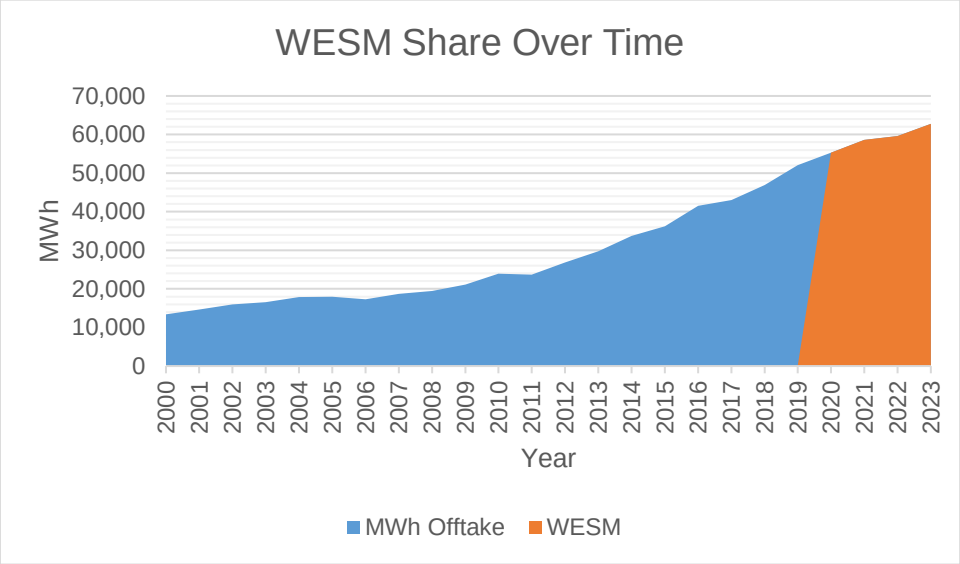
Historically, System Loss ranged from 10.51% to 18.24%. System Loss peaked at 18.24% on year 2010 because of overloaded capacity of power transformer and recorded increased reactive power loss on the last quarter of the same year. There are no historical transmission losses since Quirelco does not own a high voltage transmission line.



Residential customers account for the bulk of energy sales at 63.71% due to the high number of connections. In contrast, industrial customers accounted for only 5.78% of energy sales due to the low number of connections.



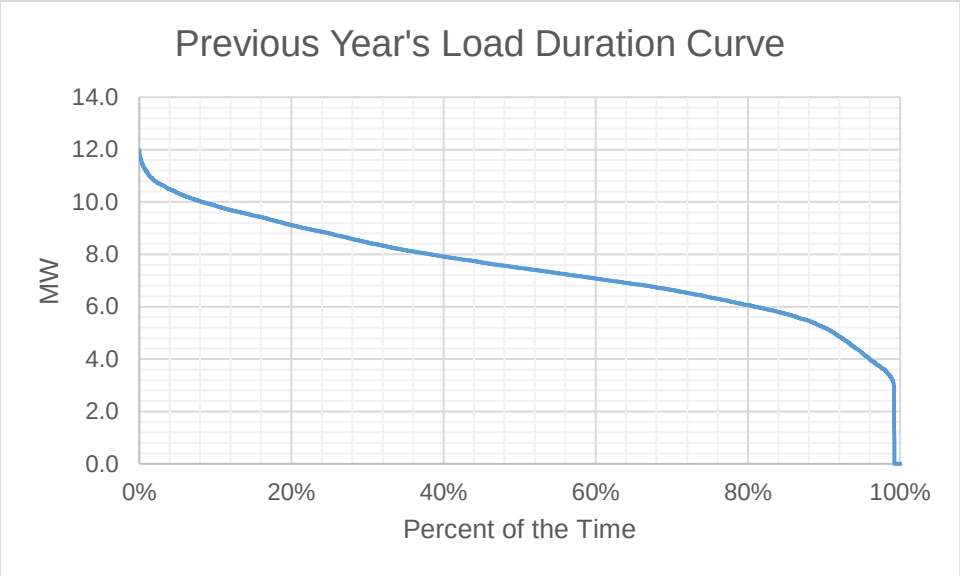
For 2023, the total Offtake for the last historical year is equal to the total quantity consumption of Quirelco. Due to the stalled signing of Power Supply Agreement with Masinloc Power Partners Co. Ltd (MPPCL), all energy offtake of Quirelco for the previous year was from the Wholesale Electricity Spot Market (WESM).



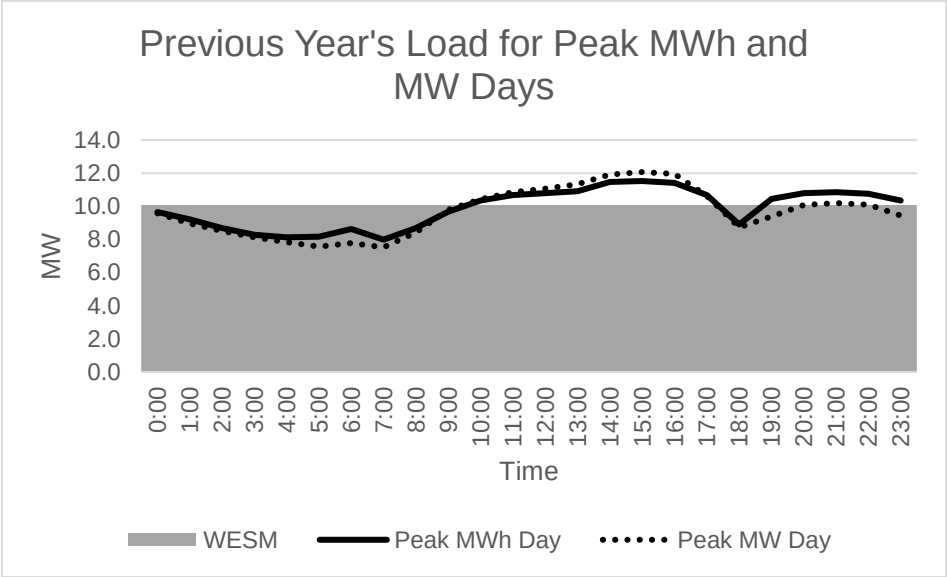
WESM Offtake increased from 55,296 MWh in 2020 to 62,772 MWh in 2023 at a rate of 4.33% per year due to the expired power supply agreement with SN Aboitiz Power, Inc. since 2019. The net WESM transaction is zero from 2000 to 2019 because Quirelco had had firm power supply agreements previously.

Power Supply Contract with SN Aboitiz Power – Magat, Inc. expired in 2019. Pending the result of the conducted CSP in 2020, Quirelco purchased power from the WESM thru SN Aboitiz Power – Magat, Inc. Quirelco, not being a member of the WESM, was nominated by SN Aboitiz Power – Magat, Inc. to purchase power from the WESM.

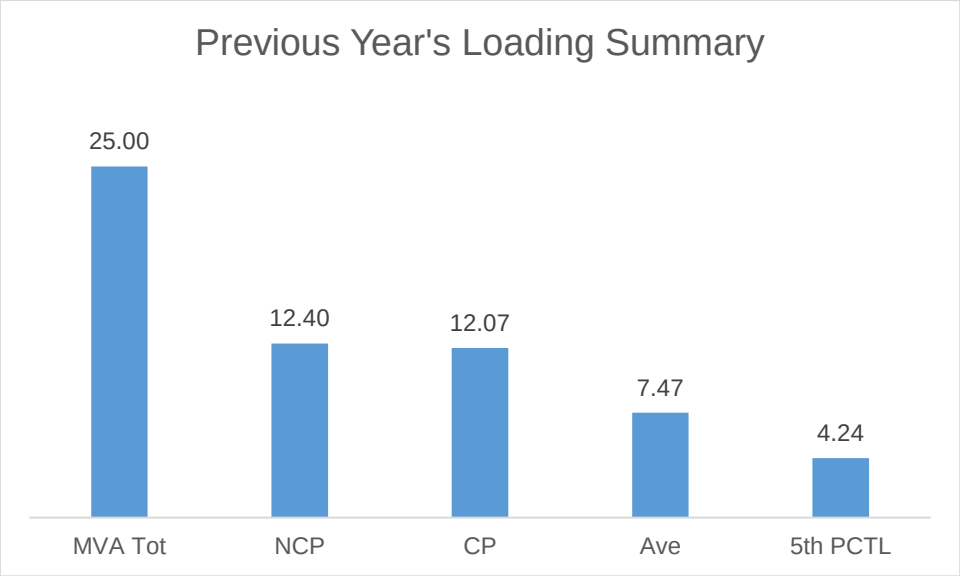
Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 0 MW. However, disregarding supply and distribution system abnormalities or outliers, the approximate minimum load at normal operations is 2.97 MW which occurred on 29 January 2023 and the maximum load is 12.07 MW which occurred on 8 August 2023 for the last historical year.



Peak MW occurred on August 8, 2023 and peak daily MWh occurred on June 20, 2023 mainly due to the high demand on low voltage customers, particularly industrial plants like MJBJ Egg Hatchery and several concrete batching plants. As shown in the Load Curves, the available supply is lower than the Peak Demand.



The Non-coincident Peak Demand is 12.40 MW, which is around 49.60% of the total substation capacity of 25 MVA at a power factor of 99.56%. The load factor or the ratio between the Average Load of 7.47 MW and the Non-coincident Peak Demand is 60.24%. A safe estimate of the true minimum load is the fifth percentile load of 4.24 MW which is 34.19% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Cajel SS	10	7.597
Aglipay SS	5	1.112
Maddela SS	10	3.694

Cajel Substation is loaded a 75.97% of its normal capacity. This impending loading problem will be solved by the commissioning of an additional substation to cater the impending overloading problem.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	9.65	0.00	0.00	0.000	0%	0%	-9.65
	Feb	8.93	0.00	0.00	0.000	0%	0%	-8.93
	Mar	10.67	0.00	4.80	0.000	0%	45%	-5.87
	Apr	10.88	0.00	4.80	0.000	0%	44%	-6.08
	May	12.36	0.00	4.80	0.000	0%	39%	-7.56
	Jun	12.12	0.00	4.80	0.000	0%	40%	-7.32
	Jul	11.99	0.00	4.80	0.000	0%	40%	-7.19
	Aug	12.23	0.00	4.80	0.000	0%	39%	-7.43
	Sep	11.97	0.00	4.80	0.000	0%	40%	-7.17
	Oct	11.32	0.00	4.80	0.000	0%	42%	-6.52
	Nov	10.56	0.00	4.80	0.000	0%	45%	-5.76
	Dec	10.69	0.00	4.80	0.000	0%	45%	-5.89
2025	Jan	10.17	0.00	0.00	0.000	0%	0%	-10.17
	Feb	10.01	0.00	0.00	0.000	0%	0%	-10.01
	Mar	11.28	0.00	0.00	0.000	0%	0%	-11.28
	Apr	11.68	0.00	0.00	0.000	0%	0%	-11.68
	May	12.59	0.00	0.00	0.000	0%	0%	-12.59
	Jun	13.02	0.00	0.00	0.000	0%	0%	-13.02
	Jul	12.71	0.00	0.00	0.000	0%	0%	-12.71
	Aug	12.73	0.00	0.00	0.000	0%	0%	-12.73
	Sep	12.58	0.00	0.00	0.000	0%	0%	-12.58
	Oct	12.32	0.00	0.00	8.431	0%	68%	-3.89
	Nov	11.50	0.00	0.00	7.559	0%	66%	-3.94
	Dec	11.10	0.00	0.00	7.035	0%	63%	-4.06
2026	Jan	10.51	0.00	0.00	9.013	0%	86%	-1.50
	Feb	10.34	0.00	0.00	8.997	0%	87%	-1.34
	Mar	11.65	0.00	0.00	9.870	0%	85%	-1.78
	Apr	12.07	0.00	0.00	10.831	0%	90%	-1.24
	May	13.01	0.00	0.00	11.979	0%	92%	-1.03

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jun	13.46	0.00	0.00	12.374	0%	92%	-1.09
	Jul	13.13	0.00	0.00	11.841	0%	90%	-1.29
	Aug	13.15	0.00	0.00	11.897	0%	90%	-1.26
	Sep	13.00	0.00	0.00	11.707	0%	90%	-1.30
	Oct	12.74	0.00	0.00	11.292	0%	89%	-1.45
	Nov	11.88	0.00	0.00	10.389	0%	87%	-1.49
	Dec	11.47	0.00	0.00	9.814	0%	86%	-1.65
2027	Jan	10.84	0.00	0.00	9.417	0%	87%	-1.42
	Feb	10.66	0.00	0.00	9.401	0%	88%	-1.26
	Mar	12.02	0.00	0.00	10.331	0%	86%	-1.68
	Apr	12.44	0.00	0.00	11.346	0%	91%	-1.10
	May	13.42	0.00	0.00	12.565	0%	94%	-0.85
	Jun	13.88	0.00	0.00	12.982	0%	94%	-0.90
	Jul	13.54	0.00	0.00	12.418	0%	92%	-1.12
	Aug	13.56	0.00	0.00	12.477	0%	92%	-1.09
	Sep	13.41	0.00	0.00	12.275	0%	92%	-1.13
	Oct	13.13	0.00	0.00	11.836	0%	90%	-1.30
	Nov	12.25	0.00	0.00	10.877	0%	89%	-1.37
	Dec	11.82	0.00	0.00	10.268	0%	87%	-1.56
2028	Jan	11.15	0.00	0.00	9.852	0%	88%	-1.30
	Feb	10.97	0.00	0.00	9.834	0%	90%	-1.14
	Mar	12.36	0.00	0.00	10.556	0%	85%	-1.81
	Apr	12.80	0.00	0.00	11.900	0%	93%	-0.90
	May	13.81	0.00	0.00	13.196	0%	96%	-0.61
	Jun	14.28	0.00	0.00	13.637	0%	96%	-0.64
	Jul	13.93	0.00	0.00	13.040	0%	94%	-0.89
	Aug	13.96	0.00	0.00	13.101	0%	94%	-0.85
	Sep	13.80	0.00	0.00	12.886	0%	93%	-0.91
	Oct	13.51	0.00	0.00	12.421	0%	92%	-1.09
	Nov	12.60	0.00	0.00	11.402	0%	90%	-1.20
	Dec	12.17	0.00	0.00	10.757	0%	88%	-1.41

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2029	Jan	11.45	0.00	0.00	11.828	0%	103%	0.37
	Feb	11.27	0.00	0.00	11.809	0%	105%	0.54
	Mar	12.70	0.00	0.00	12.642	0%	100%	-0.06
	Apr	13.15	0.00	0.00	14.002	0%	106%	0.85
	May	14.18	0.00	0.00	15.310	0%	108%	1.13
	Jun	14.67	0.00	0.00	15.847	0%	108%	1.18
	Jul	14.31	0.00	0.00	15.144	0%	106%	0.83
	Aug	14.33	0.00	0.00	15.277	0%	107%	0.94
	Sep	14.17	0.00	0.00	15.050	0%	106%	0.88
	Oct	13.88	0.00	0.00	14.488	0%	104%	0.61
	Nov	12.95	0.00	0.00	13.473	0%	104%	0.53
	Dec	12.50	0.00	0.00	12.720	0%	102%	0.22
2030	Jan	11.75	0.00	0.00	12.31	0%	105%	0.57
	Feb	11.56	0.00	0.00	12.29	0%	106%	0.74
	Mar	13.02	0.00	0.00	13.20	0%	101%	0.17
	Apr	13.49	0.00	0.00	14.62	0%	108%	1.13
	May	14.54	0.00	0.00	16.01	0%	110%	1.47
	Jun	15.04	0.00	0.00	16.58	0%	110%	1.54
	Jul	14.68	0.00	0.00	15.84	0%	108%	1.16
	Aug	14.70	0.00	0.00	15.97	0%	109%	1.27
	Sep	14.53	0.00	0.00	15.73	0%	108%	1.20
	Oct	14.23	0.00	0.00	15.14	0%	106%	0.91
	Nov	13.28	0.00	0.00	14.06	0%	106%	0.78
	Dec	12.82	0.00	0.00	13.27	0%	104%	0.45
2031	Jan	12.03	0.00	0.00	12.820	0%	107%	0.79
	Feb	11.84	0.00	0.00	12.799	0%	108%	0.96
	Mar	13.34	0.00	0.00	13.773	0%	103%	0.44
	Apr	13.81	0.00	0.00	15.267	0%	111%	1.45
	May	14.89	0.00	0.00	16.749	0%	112%	1.85
	Jun	15.41	0.00	0.00	17.343	0%	113%	1.94
	Jul	15.03	0.00	0.00	16.563	0%	110%	1.53

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Aug	15.06	0.00	0.00	16.702	0%	111%	1.65
	Sep	14.88	0.00	0.00	16.446	0%	110%	1.56
	Oct	14.58	0.00	0.00	15.824	0%	109%	1.25
	Nov	13.60	0.00	0.00	14.672	0%	108%	1.07
	Dec	13.12	0.00	0.00	13.836	0%	105%	0.71
2032	Jan	12.31	0.00	0.00	13.35	0%	108%	1.04
	Feb	12.11	0.00	0.00	13.32	0%	110%	1.22
	Mar	13.64	0.00	0.00	14.10	0%	103%	0.46
	Apr	14.13	0.00	0.00	15.94	0%	113%	1.81
	May	15.24	0.00	0.00	17.51	0%	115%	2.28
	Jun	15.76	0.00	0.00	18.13	0%	115%	2.38
	Jul	15.38	0.00	0.00	17.31	0%	113%	1.94
	Aug	15.40	0.00	0.00	17.46	0%	113%	2.05
	Sep	15.22	0.00	0.00	17.18	0%	113%	1.96
	Oct	14.91	0.00	0.00	16.53	0%	111%	1.62
	Nov	13.91	0.00	0.00	15.31	0%	110%	1.40
	Dec	13.43	0.00	0.00	14.43	0%	107%	1.00
2033	Jan	12.57	0.00	0.00	13.886	0%	110%	1.31
	Feb	12.37	0.00	0.00	13.863	0%	112%	1.49
	Mar	13.94	0.00	0.00	14.988	0%	108%	1.05
	Apr	14.44	0.00	0.00	16.626	0%	115%	2.19
	May	15.57	0.00	0.00	18.296	0%	118%	2.73
	Jun	16.10	0.00	0.00	18.950	0%	118%	2.85
	Jul	15.71	0.00	0.00	18.088	0%	115%	2.38
	Aug	15.73	0.00	0.00	18.232	0%	116%	2.50
	Sep	15.56	0.00	0.00	17.945	0%	115%	2.39
	Oct	15.24	0.00	0.00	17.261	0%	113%	2.03
	Nov	14.21	0.00	0.00	15.960	0%	112%	1.75
	Dec	13.72	0.00	0.00	15.034	0%	110%	1.32

Quirelco used econometric and trend analysis methodology in conducting the forecast in purchase, sales, peak demand and customers.

The forecasting models formulated were tested for validity. The R^2 and Adjusted R^2 statistics are good measure of fit of the model to the historical data. These statistics must be used to assess whether the addition of independent variable is valid or not. Predictors or independent variables must also be tested for their validity using at least the p-value and t-statistic.

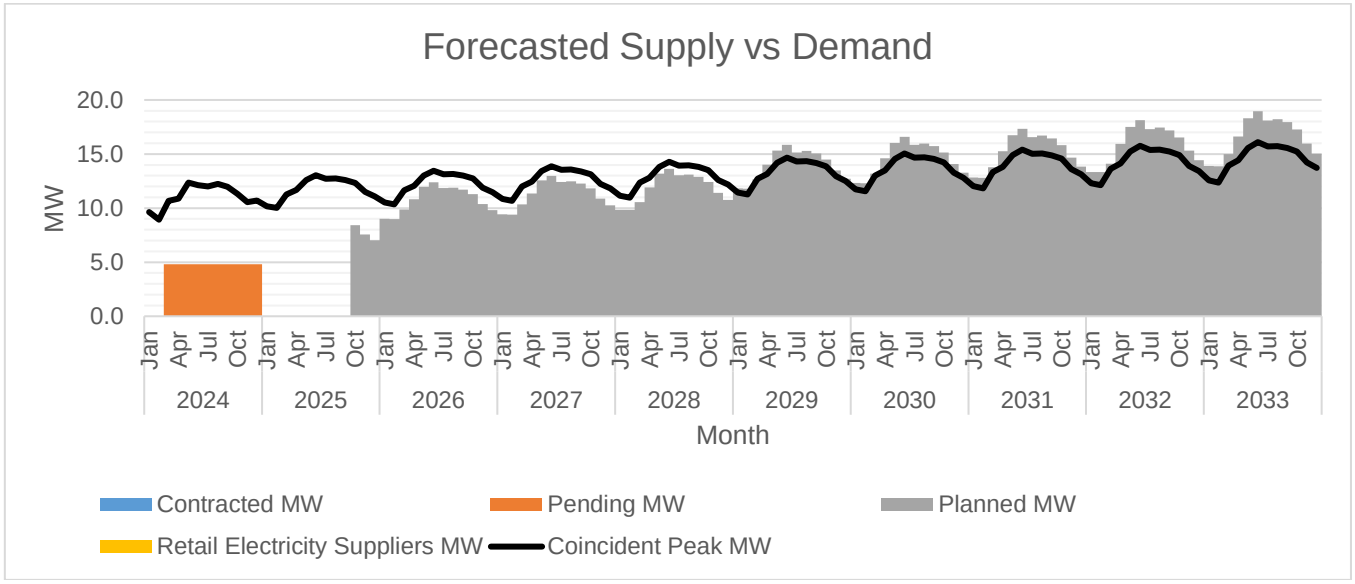
The chosen model must pass the following criteria:

- For econometric models, the Adjusted R^2 statistic should be at least 80%,
- For trend models, it should be at least 99%. In case no forecasting model passed the minimum 99% Adjusted R2, select the model that the best characterizes the expected forecast with Adjusted R2 not less than 95%
- p-value should be lower than 0.1,
- t-statistic should be greater than 2 or less than -2,
- Mean Absolute Percentage Error (MAPE) should not exceed 5%.

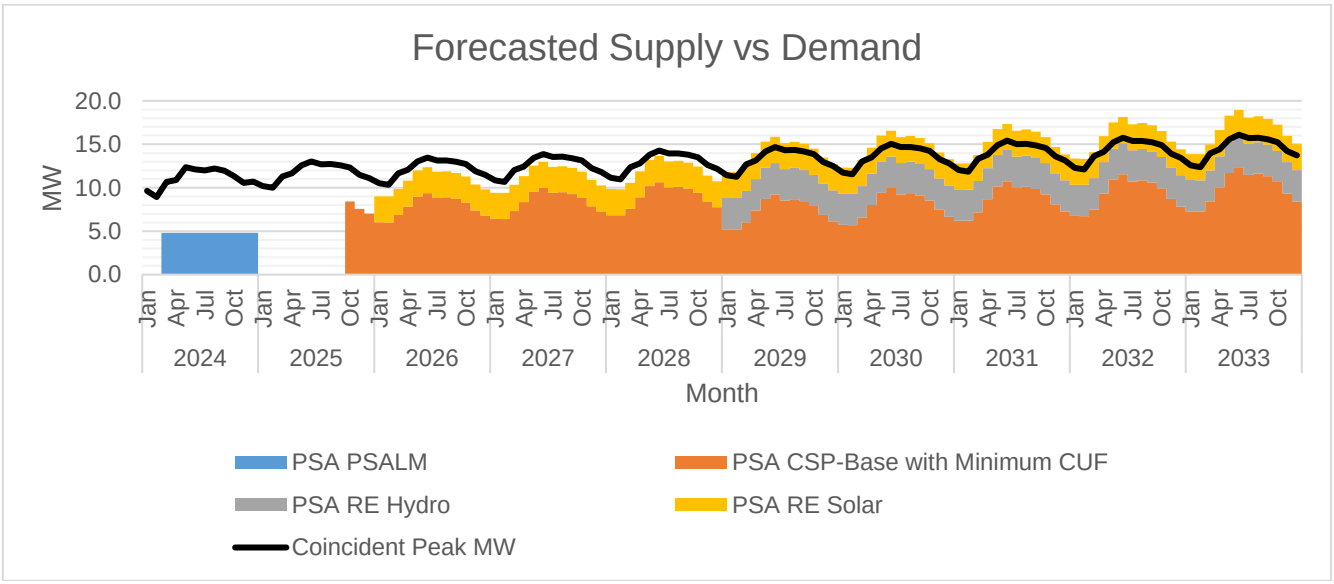
The Peak Demand was assumed to occur on the month of June. Monthly Peak Demand is at its lowest on the month of February. In general, Peak Demand is expected to grow at a rate of 5.15% annually.

Forecast MW offtake from 2023 to 2028 was supposed to be supplied by Masinloc Power Partners Company, Ltd, the lowest calculated and responsive bidder in the Competitive Selection Process conducted in 2021. It was selected to provide for full energy requirements due to the load following scheme. Unfortunately, prior to the signing of the PSA, war broke in Europe and global rise in inflation resulted in a significant price increase in coal, the fuel utilized by MPPCL's nominated power plant. Hence the PSA signing was stalled due to the fear that the PSA would yield to a significantly higher generation rate compared to the one offered by MPPCL during the CSP.

Quirelco's Third Party Bids and Awards Committee (TPBAC) and Board of Directors, through separate resolutions, have expressed their intention to cease from pursuing MPPCL and to nullify the results of the previously conducted CSP.



The forecasted available supply is generally lower than the Peak Demand for the first five forecast years. This is because Quirelco's planned supply for these years is based on its average capacity utilization which is lower than the peak demand. For the succeeding years where solar and hydro embedded generation facilities are planned, the planned MW goes higher than the peak demand because these technologies have low availability factors to produce the energy required.



Currently, majority of Quirelco's power supply comes from the WESM. The 4.8 MW Contract for the Supply of Electric Energy (CSEE) with the Power Sector Assets and Liabilities Corporation (PSALM) starting 26 December 2023 to 25 December 2024 is exempted from the conduct of Competitive Selection Process. However, the planned supply effective date did not materialize as Quirelco was currently applying for Direct WESM membership at the time. It was a requisite of the CSEE for Quirelco to be a Direct WESM Member. It was only in March 2024 that Quirelco was granted a Direct WESM Membership. The CSEE with PSALM is still for filing with the ERC. Before the start of actual power supply delivery in March 2024, Quirelco has authorized PSALM to file the CSEE to the ERC for approval on its behalf.

Of the forecasted supply, the largest is the upcoming CSP for the procurement of capacity based "PSA CSP-Base with Minimum CUF". For this CSP, the contracted capacity is varying per year and Minimum Capacity Utilization Factor (CUF) is set at sixty (60) percent:

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
No. of Months	3	12	12	12	12	12	12	12	12	12	9
No. of Days	91	365	365	366	365	365	365	366	365	365	274
Baseload, MW	8.43	9.37	9.98	10.64	9.25	9.98	10.74	11.53	12.35	13.19	14.04

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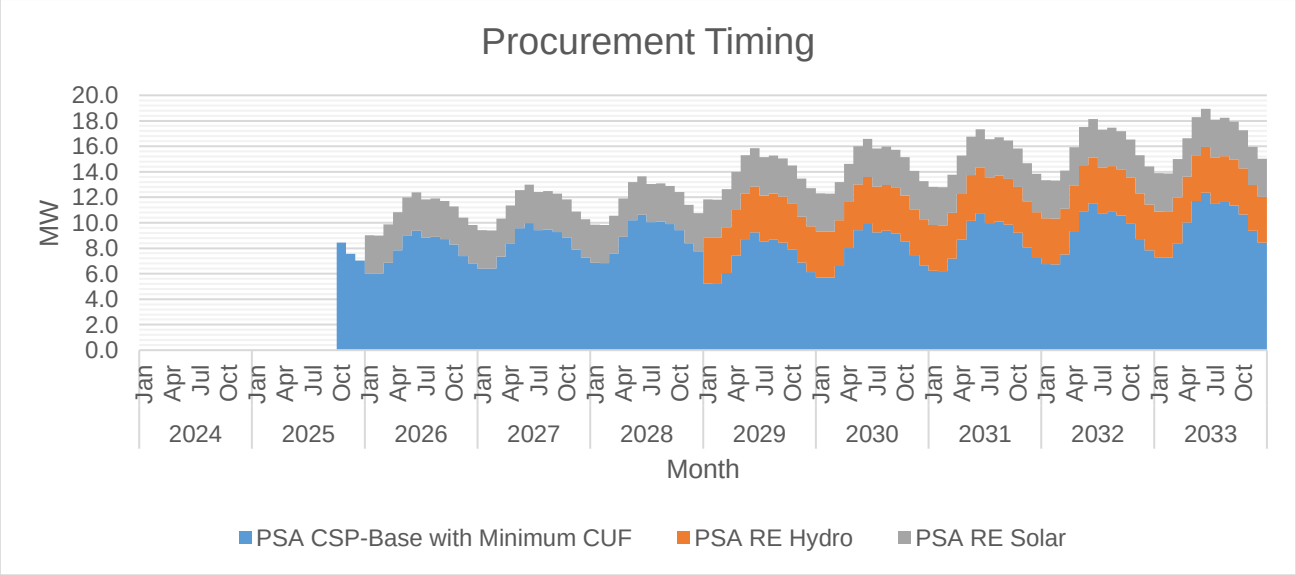
This CSP is designed to provide for the full energy requirements, with carve out provisions for the Renewable Portfolio Standards (RPS) compliance of Quirelco.

Additional peaking demand supply would come from a planned 3 MW solar Embedded Generation Facility (EGF) in 2026 and baseload demand supply would come from a planned 3.6 MW hydro EGF in 2029. Quirelco is currently in pre-development negotiations with potential joint venture partners for this planned RE embedded generation facility.

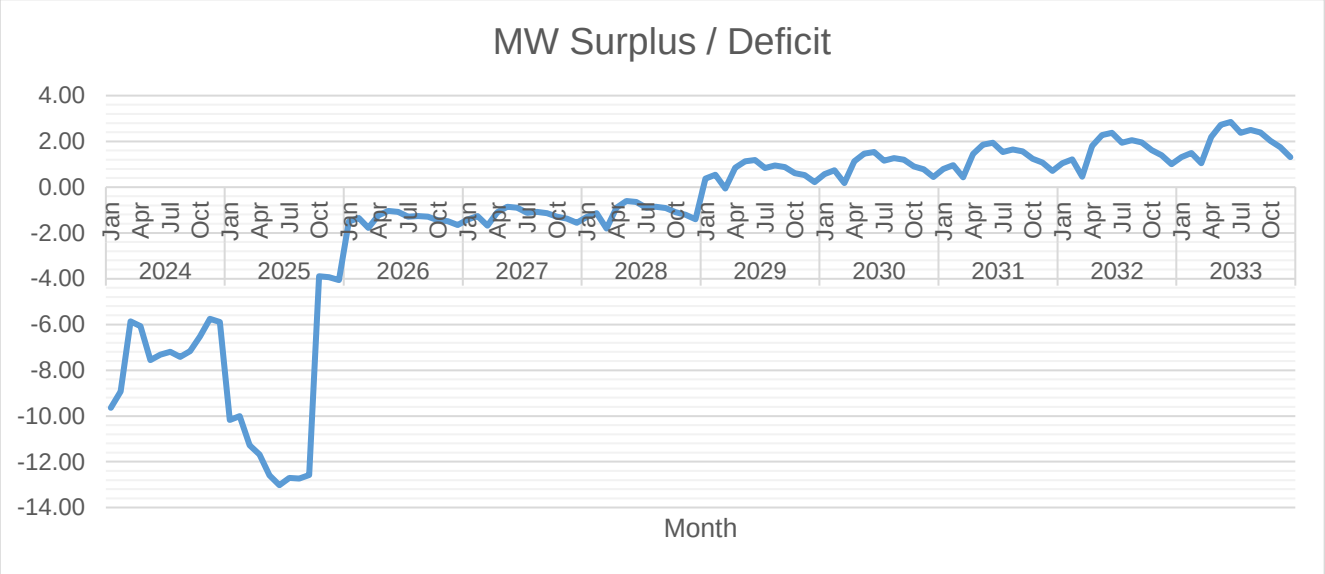


For the procurement of capacity based “PSA CSP-Base with Minimum CUF” which is planned to be available on September 26, 2025, the first publication or launch of CSP will be on April 3, 2025. Joint filing is planned on August 31, 2025, or 150 days later, in accordance with DOE’s 2023 CSP Policy (DOE DC No. DC2023-06-0021).

Moreover, associated energy between the minimum CUF and the maximum contracted capacity may be traded to the WESM during times where Quirelco expects that WESM prices may be lower than the contracted generation rate. For this PSPP submission however, it is simply assumed and presented that all associated energy will be coming from the “PSA CSP-Base with Minimum CUF”. But at any time Quirelco wishes, energy supply may be supplied by the WESM. Consequently, a portion of the energy offtake from this PSA as provided in the “Forc” sheet of the PSPP excel file may be allocated to the WESM at any time, providing Quirelco the full control of its WESM exposure. For this PSPP submission however, it is presently assumed that all associated energy will be supplied by this planned PSA.

This will be followed by PSA RE Solar for a 3.0 MW embedded solar power supply planned to be available on January 2026 and PSA RE Hydro for a 3.6 MW embedded hydro power supply planned to be available on January 2029 which are both under CSP exemption.

Starting 2026, power supply contracting levels are seen to significantly increase. Contracting levels are also observed to go above 100% because of the planned power supply procurement activities.



Demand deficit scenarios are clearly observed from the chart above for the first two years. For the succeeding years, MW surplus is observed due to the injection of solar and hydro embedded generation facilities which have low availability factors to produce the required energy by Quirelco.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	4,410	3,985	426	0.00%	9.65%
	Feb	4,400	3,917	483	0.00%	10.98%
	Mar	4,538	3,980	558	0.00%	12.30%
	Apr	5,620	4,995	625	0.00%	11.12%
	May	6,191	5,497	693	0.00%	11.20%
	Jun	6,645.92	5,899	747	0.00%	11.23%
	Jul	6,101.59	5,548	553	0.00%	9.07%
	Aug	6,328.92	5,749	580	0.00%	9.16%
	Sep	6,202.39	5,587	615	0.00%	9.92%
	Oct	5,748.26	5,327	421	0.00%	7.32%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	5,325.66	4,908	418	0.00%	7.85%
	Dec	4,796.86	4,405	392	0.00%	8.17%
2025	Jan	4,657	4,224	433	0.00%	9.29%
	Feb	4,646	4,152	494	0.00%	10.63%
	Mar	4,792	4,220	573	0.00%	11.95%
	Apr	5,934	5,296	639	0.00%	10.76%
	May	6,537	5,828	709	0.00%	10.85%
	Jun	7,018	6,254	764	0.00%	10.88%
	Jul	6,443	5,882	561	0.00%	8.71%
	Aug	6,683	6,095	588	0.00%	8.80%
	Sep	6,550	5,924	626	0.00%	9.56%
	Oct	6,070	5,648	422	0.00%	6.95%
	Nov	5,624	5,203	421	0.00%	7.48%
	Dec	5,065	4,670	395	0.00%	7.81%
2026	Jan	4,932	4,485	447	0.00%	9.06%
	Feb	4,920	4,409	511	0.00%	10.39%
	Mar	5,075	4,481	595	0.00%	11.72%
	Apr	6,285	5,623	662	0.00%	10.53%
	May	6,923	6,188	735	0.00%	10.61%
	Jun	7,432	6,641	791	0.00%	10.65%
	Jul	6,824	6,246	578	0.00%	8.47%
	Aug	7,078	6,472	606	0.00%	8.56%
	Sep	6,936	6,290	646	0.00%	9.32%
	Oct	6,428	5,997	431	0.00%	6.71%
	Nov	5,956	5,525	431	0.00%	7.24%
	Dec	5,364	4,959	406	0.00%	7.57%
2027	Jan	5,233	4,766	466	0.00%	8.91%
	Feb	5,220	4,685	535	0.00%	10.25%
	Mar	5,385	4,761	623	0.00%	11.58%
	Apr	6,668	5,975	693	0.00%	10.39%
	May	7,345	6,576	769	0.00%	10.47%
	Jun	7,885	7,057	828	0.00%	10.51%
	Jul	7,239	6,637	603	0.00%	8.32%
	Aug	7,509	6,877	632	0.00%	8.41%
	Sep	7,359	6,684	675	0.00%	9.18%
	Oct	6,820	6,373	447	0.00%	6.56%
	Nov	6,319	5,870	448	0.00%	7.09%
	Dec	5,691	5,269	422	0.00%	7.42%
2028	Jan	5,556	5,065	491	0.00%	8.84%
	Feb	5,543	4,979	564	0.00%	10.18%
	Mar	5,717	5,059	658	0.00%	11.51%
	Apr	7,080	6,349	730	0.00%	10.32%
	May	7,799	6,988	811	0.00%	10.40%
	Jun	8,373	7,499	874	0.00%	10.44%
	Jul	7,687	7,053	634	0.00%	8.25%
	Aug	7,973	7,308	665	0.00%	8.34%
	Sep	7,814	7,102	711	0.00%	9.11%
	Oct	7,242	6,772	470	0.00%	6.49%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	6,709	6,238	471	0.00%	7.02%
	Dec	6,043	5,599	444	0.00%	7.35%
2029	Jan	5,900	5,379	521	0.00%	8.82%
	Feb	5,886	5,288	598	0.00%	10.16%
	Mar	6,071	5,373	698	0.00%	11.49%
	Apr	7,518	6,743	774	0.00%	10.30%
	May	8,281	7,421	860	0.00%	10.38%
	Jun	8,890	7,964	926	0.00%	10.42%
	Jul	8,162	7,490	672	0.00%	8.24%
	Aug	8,466	7,762	705	0.00%	8.33%
	Sep	8,297	7,543	754	0.00%	9.09%
	Oct	7,690	7,192	498	0.00%	6.47%
	Nov	7,124	6,625	499	0.00%	7.00%
	Dec	6,417	5,947	470	0.00%	7.33%
2030	Jan	6,261	5,707	554	0.00%	8.85%
	Feb	6,246	5,610	636	0.00%	10.19%
	Mar	6,443	5,701	742	0.00%	11.51%
	Apr	7,978	7,155	824	0.00%	10.32%
	May	8,789	7,874	915	0.00%	10.41%
	Jun	9,435	8,450	985	0.00%	10.44%
	Jul	8,662	7,947	715	0.00%	8.26%
	Aug	8,985	8,235	750	0.00%	8.35%
	Sep	8,805	8,003	802	0.00%	9.11%
	Oct	8,161	7,631	530	0.00%	6.49%
	Nov	7,561	7,029	531	0.00%	7.03%
	Dec	6,810	6,309	501	0.00%	7.35%
2031	Jan	6,638	6,047	591	0.00%	8.90%
	Feb	6,623	5,944	678	0.00%	10.24%
	Mar	6,831	6,041	790	0.00%	11.56%
	Apr	8,459	7,581	878	0.00%	10.37%
	May	9,318	8,344	975	0.00%	10.46%
	Jun	10,003	8,954	1,050	0.00%	10.49%
	Jul	9,184	8,421	763	0.00%	8.31%
	Aug	9,526	8,726	800	0.00%	8.40%
	Sep	9,336	8,480	856	0.00%	9.16%
	Oct	8,652	8,086	566	0.00%	6.55%
	Nov	8,016	7,448	568	0.00%	7.08%
	Dec	7,220	6,685	535	0.00%	7.41%
2032	Jan	7,029	6,398	631	0.00%	8.97%
	Feb	7,012	6,289	723	0.00%	10.31%
	Mar	7,233	6,391	841	0.00%	11.63%
	Apr	8,956	8,021	936	0.00%	10.45%
	May	9,866	8,828	1,039	0.00%	10.53%
	Jun	10,592	9,473	1,119	0.00%	10.56%
	Jul	9,724	8,909	815	0.00%	8.38%
	Aug	10,087	9,232	855	0.00%	8.47%
	Sep	9,885	8,972	913	0.00%	9.24%
	Oct	9,161	8,555	607	0.00%	6.62%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	8,488	7,880	607	0.00%	7.16%
	Dec	7,645	7,073	572	0.00%	7.48%
2033	Jan	7,432	6,758	673	0.00%	9.06%
	Feb	7,414	6,643	771	0.00%	10.39%
	Mar	7,647	6,751	896	0.00%	11.72%
	Apr	9,470	8,472	997	0.00%	10.53%
	May	10,432	9,324	1,107	0.00%	10.61%
	Jun	11,199	10,006	1,192	0.00%	10.65%
	Jul	10,282	9,411	871	0.00%	8.47%
	Aug	10,665	9,752	913	0.00%	8.56%
	Sep	10,451	9,477	974	0.00%	9.32%
	Oct	9,686	9,036	650	0.00%	6.71%
	Nov	8,974	8,324	650	0.00%	7.24%
	Dec	8,083	7,471	612	0.00%	7.57%

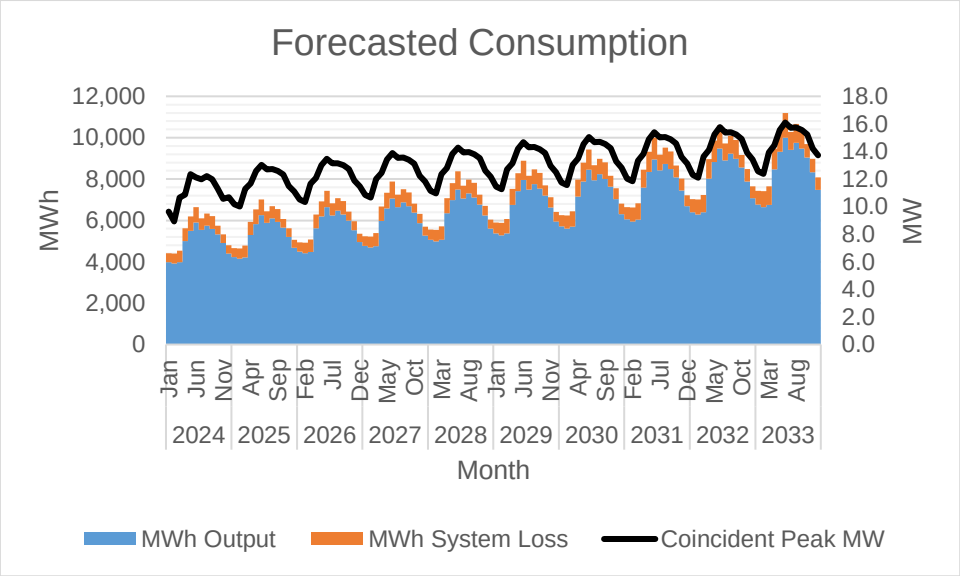
Quirelco used econometric and trend analysis methodology in conducting the forecast in purchase, sales, peak demand and customers.

The forecasting models formulated were tested for validity. The R^2 and Adjusted R^2 statistics are good measure of fit of the model to the historical data. These statistics must be used to assess whether the addition of independent variable is valid or not. Predictors or independent variables must also be tested for their validity using at least the p-value and t-statistic.

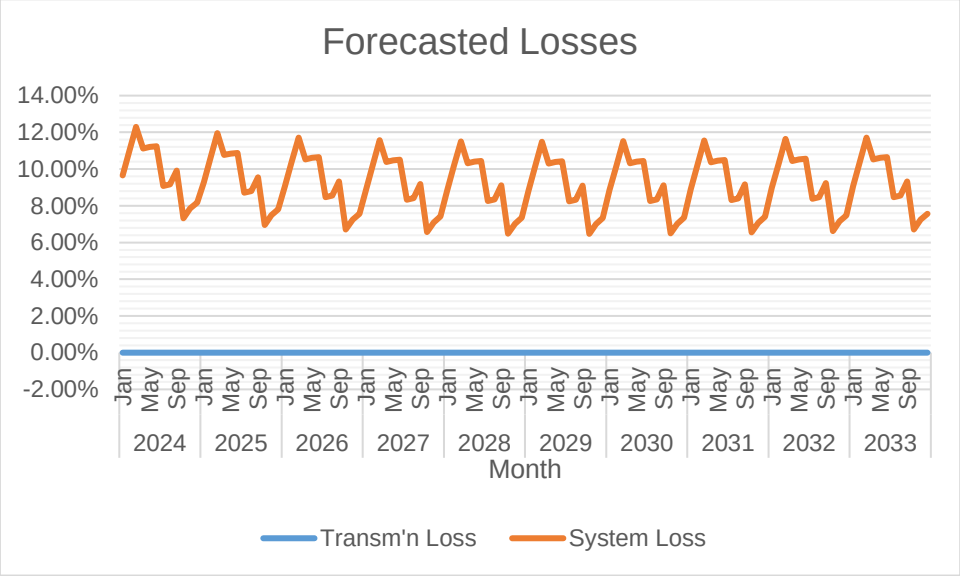
The chosen model must pass the following criteria:

- For econometric models, the Adjusted R^2 statistic should be at least 80%,
- For trend models, it should be at least 99%. In case no forecasting model passed the minimum 99% Adjusted R2, select the model that the best characterizes the expected forecast with Adjusted R2 not less than 95%
- p-value should be lower than 0.1,
- t-statistic should be greater than 2 or less than -2,
- Mean Absolute Percentage Error (MAPE) should not exceed 5%.

System Loss breakdown and analysis were calculated through a Load Flow Study using a credible engineering software of JAED (a private company) whom was awarded the contract for the simulation of Quirelco's distribution system loss data.



MWh Output was expected to grow at a rate of 6.05% annually.



System Loss is expected to range from 6.47% to 12.30% per year from 2024 to 2033. There are no forecasted transmission losses since Quirelco does not own a high voltage transmission line. To mitigate the impact of high energy losses, Quirelco has implemented several system loss reduction projects. To reduce technical losses, Quirelco has implemented massive kilowatt-hour meters replacement. Old kilowatt-hour meters contributing high internal meter losses were replaced with new meters having minimal internal meter losses. Quirelo also has shifted to using amorphous core from the previous silicon core distribution transformers. CapEx projects were also applied to the ERC relevant to system loss reduction like additional power transformer capacity, upgrading, reconductoring and conversion of distribution lines. As for the non-technical losses, Quirelco is actively engaged in anti-pilferage activities to prevent further energy losses and to recover lost energy.

Power Supply

The Power Supply Agreement (PSA) with SN ABOITIZ POWER – MAGAT, filed with Energy Regulatory Commission (ERC) under Case No. 2012-118RC, was procured through bilateral agreement. It was selected to provide for full energy requirements due to load following scheme. Historically, the utilization of the PSA is at 30%. SN ABOITIZ POWER - MAGAT did not avail of supplier outage allowance during the contract to the advantage of QUIRELCO.

The PSA with SN ABOITIZ POWER – MAGAT expired on December 25, 2018. ERC RESOLUTION NO.1 ("A Resolution Clarifying the Effectivity of ERC Resolution No.13, series of 2015") provides one (1) automatic renewal or extension for a period not exceeding one (1) year from the end of PSA term. This is effective for all PSAs approved by the ERC prior to the effectivity of ERC RESOLUTION NO.1 on April 30, 2016.

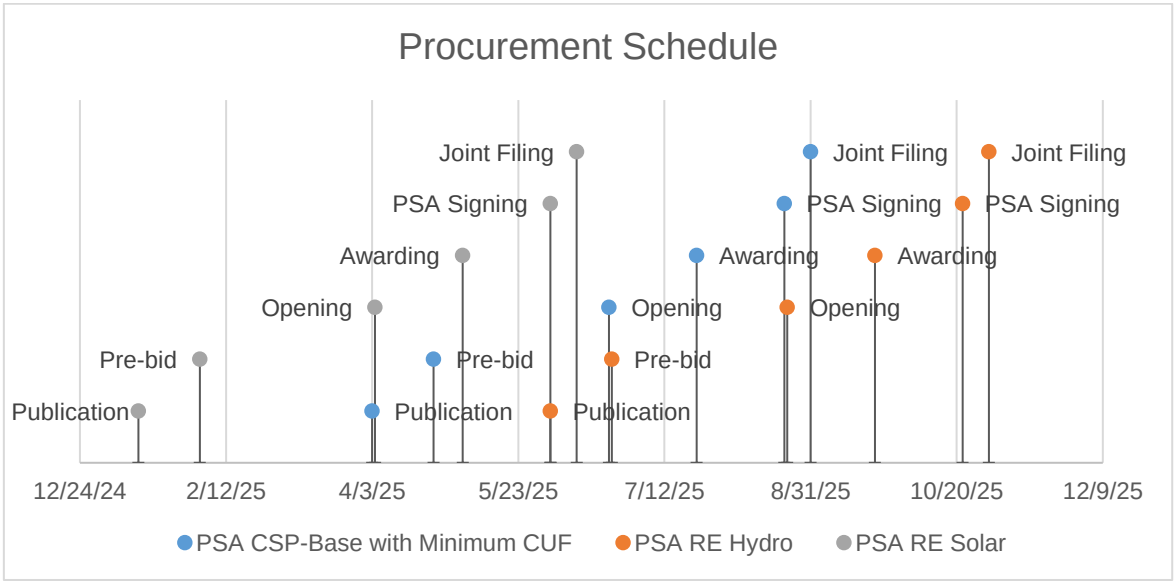
Due to the automatic one-year renewal, the PSA was extended until December 25, 2019. Quirelco exerted utmost effort to apply for extension or immediate relief of another one year to the ERC but to no avail. To allow uninterrupted power supply, Quirelco and SN ABOITIZ POWER – MAGAT had a bilateral agreement to continue the terms of the PSA from December 26, 2019 to December 26, 2020 pending the ongoing Competitive Selection Process (CSP) for the power supply requirements of Quirelco. Hence, Quirelco was obliged to undertake CSP in July 2020. However, due to the COVID 19 pandemic, the CSP schedule was hampered and it exceeded the allowable period of five months without fruition.

Quirelco's energy requirement was then purchased, thru the nomination of SN ABOITIZ POWER – MAGAT, from the Independent Electricity Market Operator of the Philippines (IEMOP) of the Wholesale Electricity Spot Market (WESM) starting January 2020. This was due to Quirelco having no contracted power supply and being an indirect member of the WESM.

A re-conduct of the CSP was immediately pursued by Quirelco in July 2021. Masinloc Power Partners Company, Ltd. (MPPCL) was awarded the power supply contract for five years as a result of the re-conduct of CSP. It was selected to provide for full energy requirements due to the load following scheme. Unfortunately, prior to the signing of the PSA, war broke in Europe and global rise in inflation resulted in a significant price increase in coal, the fuel utilized by MPPCL's nominated power plant. Hence the PSA signing was stalled due to the fear that the PSA would yield to a significantly higher generation rate compared to the one offered by MPPCL during the CSP.

Quirelco's Third Party Bids and Awards Committee (TPBAC) and Board of Directors, through separate resolutions, have expressed their intention to cease from pursuing MPPCL and to nullify the results of the previously conducted CSP.

	PSA CSP-Base with Minimum CUF	PSA RE Hydro	PSA RE Solar
Type	Base	Base	Peaking
Minimum MW	5.06	3.60	3.00
Minimum MWh/yr	18,412	18,626	5,500
Maximum MW	14.04	3.60	3.00
Maximum MWh/yr	115,513.52	18,626	5,500
PSA Start	9/26/2025	12/26/2028	12/26/2025
PSA End	9/25/2035	12/26/2049	12/26/2040
Publication	4/3/2025	6/3/2025	1/13/2025
Pre-bid	4/24/2025	6/24/2025	2/3/2025
Opening	6/23/2025	8/23/2025	4/4/2025
Awarding	7/23/2025	9/22/2025	5/4/2025
PSA Signing	8/22/2025	10/22/2025	6/3/2025
Joint Filing	8/31/2025	10/31/2025	6/12/2025



For the procurement of capacity based “PSA CSP-Base with Minimum CUF” which is planned to be available on September 26, 2025, the first publication or launch of CSP will be on April 3, 2025. Joint filing is planned on August 31, 2025, or 150 days later, in accordance with DOE’s 2023 CSP Policy (DOE DC No. DC2023-06-0021). For this CSP, the contracted capacity is varying per year and minimum Capacity Utilization Factor (CUF) is set at sixty (60) percent:

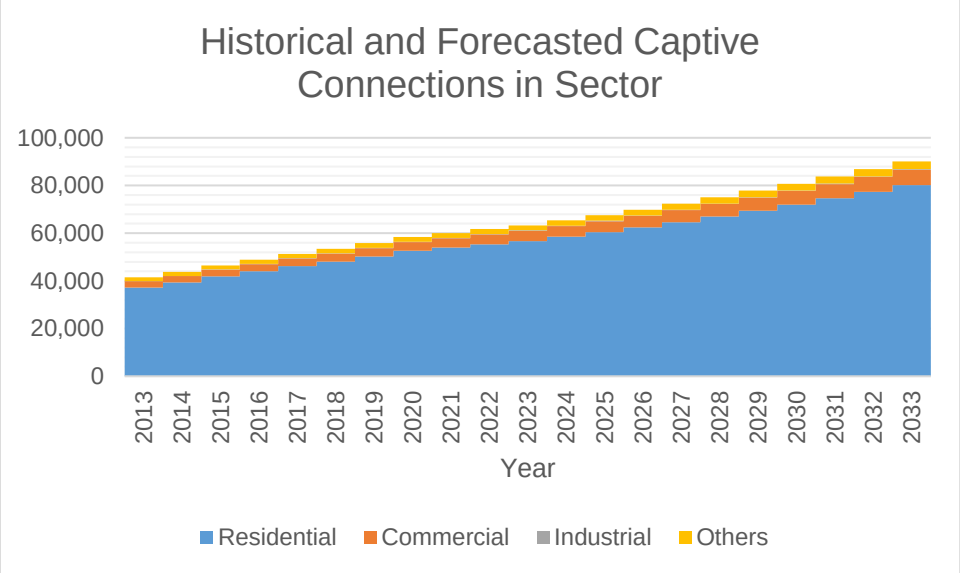
Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
No. of Months	3	12	12	12	12	12	12	12	12	12	9
No. of Days	91	365	365	366	365	365	365	366	365	365	274
Baseload, MW	8.43	9.37	9.98	10.64	9.25	9.98	10.74	11.53	12.35	13.19	14.04

Moreover, associated energy between the minimum CUF and the maximum contracted capacity may be traded to the WESM during times where Quirelco expects that WESM prices may be lower than the contracted generation rate. For this PSPP submission however, it is simply assumed and presented that all associated energy will be coming from the “PSA CSP-Base with Minimum CUF”. But at any time Quirelco wishes, energy supply may be supplied by the WESM.

The procurement of 3.0 MW supply from a solar embedded generation facility which is planned to be available on December 26, 2025 is exempted from the conduct of CSP in accordance with DOE’s 2023 CSP Policy (DOE DC No. DC2023-06-0021). Quirelco is currently in pre-development negotiations with potential joint venture partners for this planned RE embedded generation facility.

For the procurement of 3.6 MW supply from a hydro embedded generation facility which is planned to be available on December 26, 2028 is exempted from the conduct of CSP in accordance with DOE’s 2023 CSP Policy (DOE DC No. DC2023-06-0021). Quirelco is currently in pre-development negotiations with potential joint venture partners for this planned RE embedded generation facility.

Captive Customer Connections



The number of residential connections is expected to grow at an average rate of 3.52% average annually from 2024 to 2033. Said customer class is expected to account for 63.71% of the total consumption.