Power Supply Procurement Plan 2020-2029


Pampanga I Electric Cooperative, Inc.

Historical Consumption Data

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Transm'n Loss	System Loss
2000	17.00	91,211	0	91,211	63,343	27,868	61%	0.00%	30.55%
2001	18.43	96,010	0	96,010	71,180	24,830	59%	0.00%	25.86%
2002	22.48	100,885	0	100,885	79,131	21,753	51%	0.00%	21.56%
2003	24.41	121,365	0	121,365	90,179	31,186	57%	0.00%	25.70%
2004	23.66	128,767	0	128,767	101,982	26,785	62%	0.00%	20.80%
2005	23.96	127,042	0	127,042	103,078	23,964	61%	0.00%	18.86%
2006	24.68	124,321	0	124,321	104,618	19,703	57%	0.00%	15.85%
2007	24.24	125,769	0	125,769	108,338	17,431	59%	0.00%	13.86%
2008	26.53	132,583	0	132,583	116,423	16,160	57%	0.00%	12.19%
2009	25.59	144,962	0	144,962	129,886	15,076	65%	0.00%	10.40%
2010	31.18	164,958	0	164,958	148,805	16,153	60%	0.00%	9.79%
2011	31.21	159,826	0	159,826	145,719	14,107	58%	0.00%	8.83%
2012	30.98	169,228	0	169,228	154,678	14,550	62%	0.00%	8.60%
2013	35.54	185,027	0	185,027	169,409	15,618	59%	0.00%	8.44%
2014	37.94	200,151	0	200,151	184,187	15,964	60%	0.00%	7.98%
2015	39.66	221,442	0	221,442	204,189	17,252	64%	0.00%	7.79%
2016	45.31	249,455	0	249,455	230,199	19,256	63%	0.00%	7.72%
2017	47.77	266,290	0	266,290	245,897	20,393	64%	0.00%	7.66%
2018	52.23	284,426	0	284,426	264,140	20,286	62%	0.00%	7.13%
2019	56.36	310,343	0	310,343	288,424	21,918	63%	0.00%	7.06%

Peak Demand increased from 52.23 MW in 2018 to 56.36 MW in 2019 at a rate of 7.91% due to the influx of some big load commercial and industrial customers. The MWh Offtake increased from 284,426 MWh in 2018 to 310,343 MWh in 2019 at a rate of 9.11% due to the influx of high voltage commercial and industrial consumers. Within 10-year period, the Load Factor ranged from 58% to 64%.

Historical Consumption
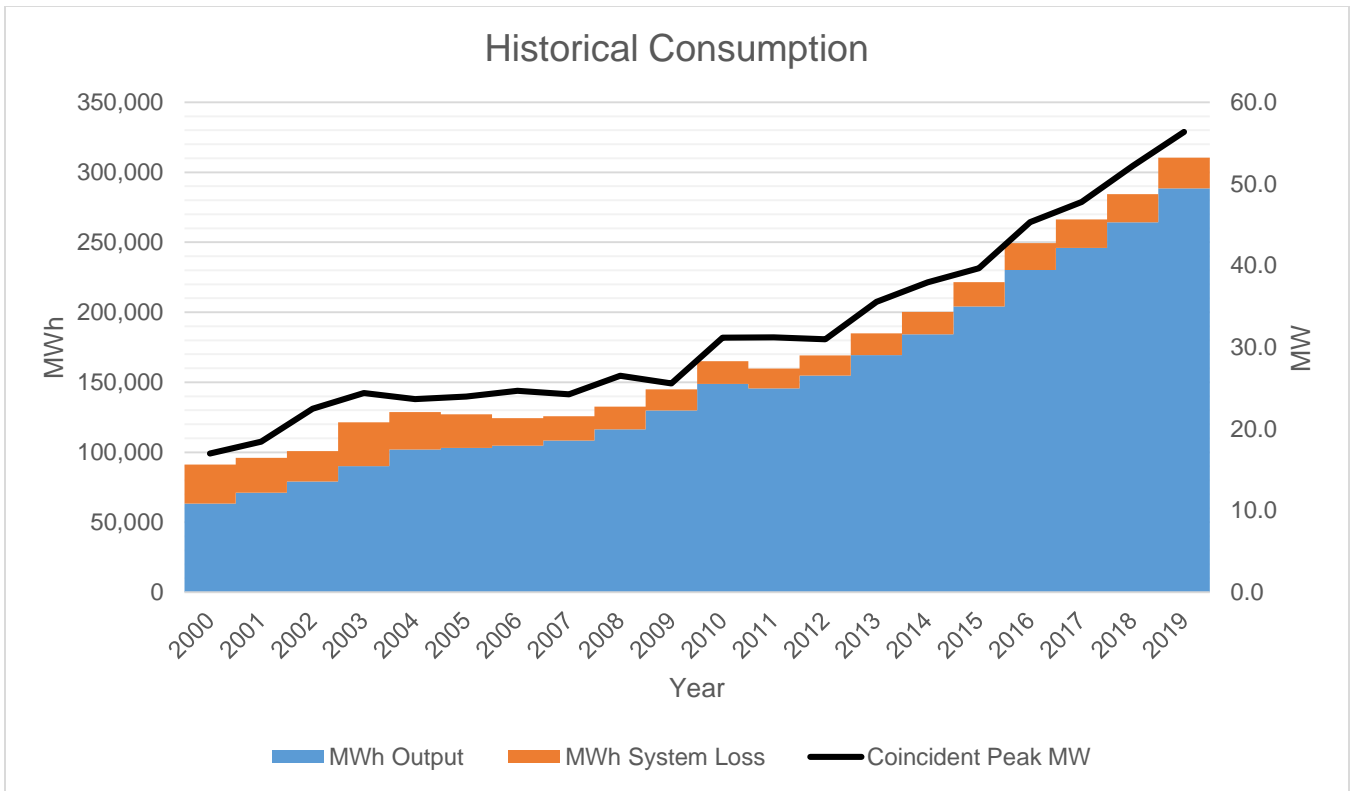
The MWh Output increased from year 2018 to year 2019 at a rate of 9.19%, while the MWh System Loss increased at a rate of 8.04% within the same period.


Historical Losses
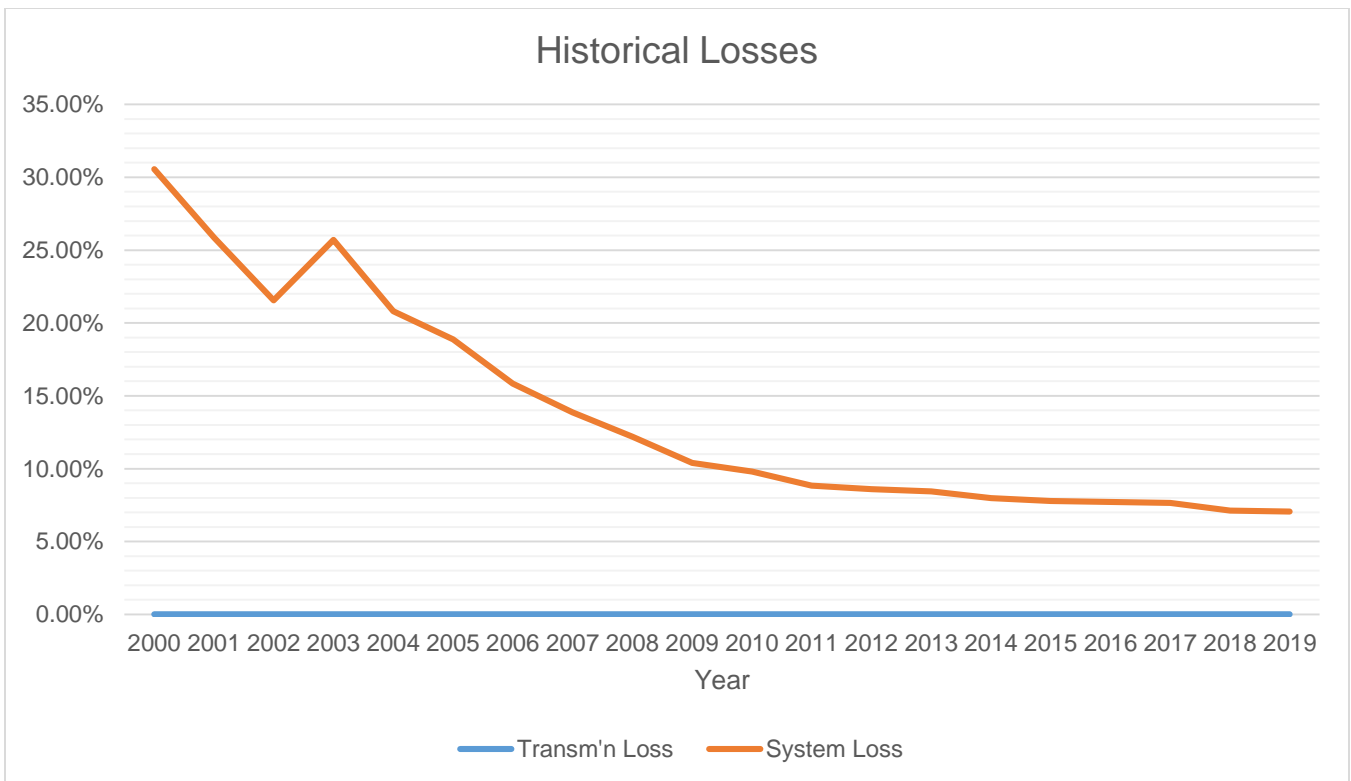
PELCO I is able to minimize the total system loss in its distribution system. In 2019, the total system loss is 7.06%. The reduction was attributed by various improvement and rehabilitation of distribution lines and facilities.

Previous Year's Shares of Energy Sales

Industrial
5.45%

Others
4.15%

Commercial
25.05%
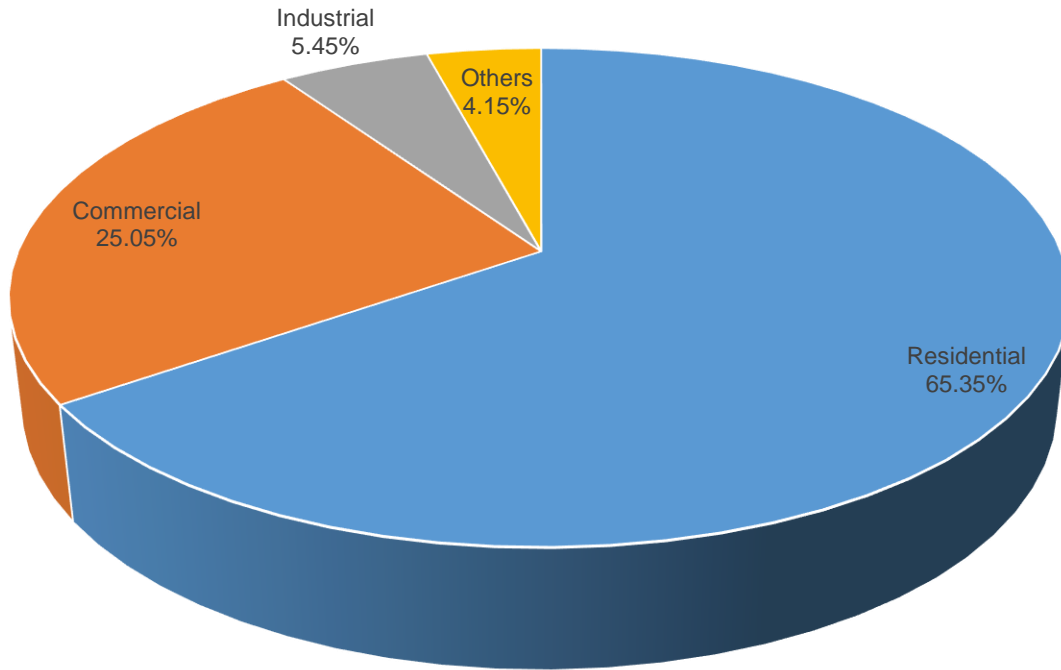
Residential
65.35%

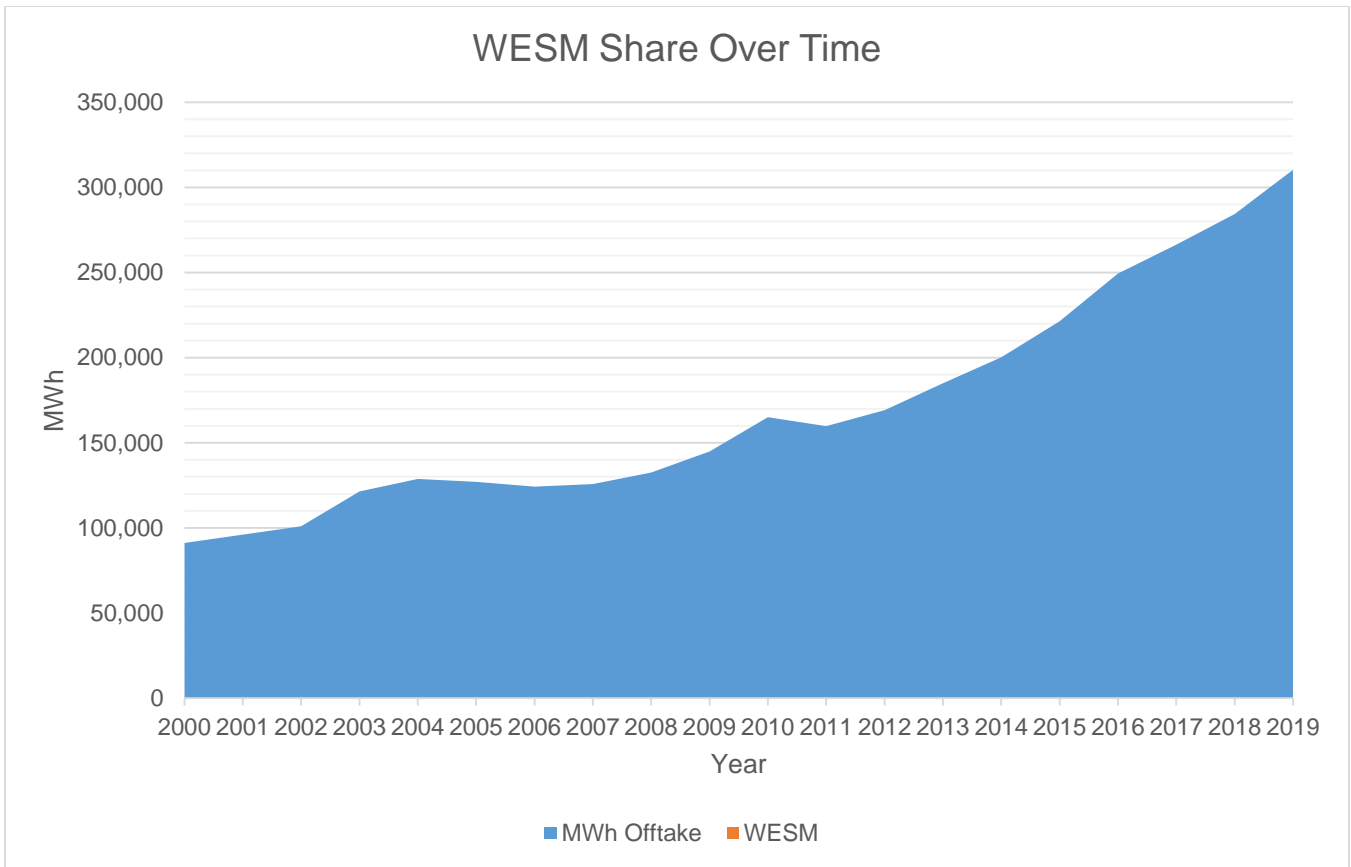PELCO I, being a rural electric cooperative, 64% of its consumers are residential.

MWh Offtake for Last Historical Year

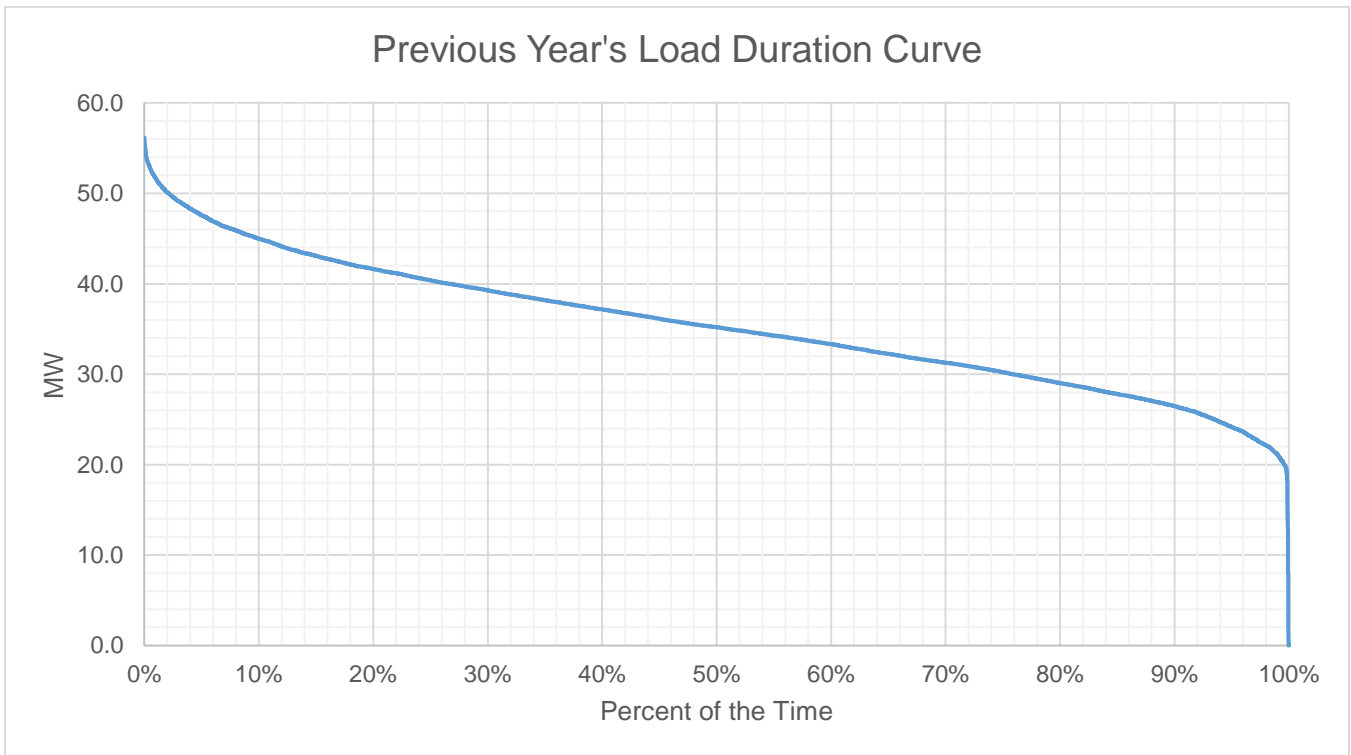Retail Electricity Suppliers   Net Metering Customers   2009-052 RC
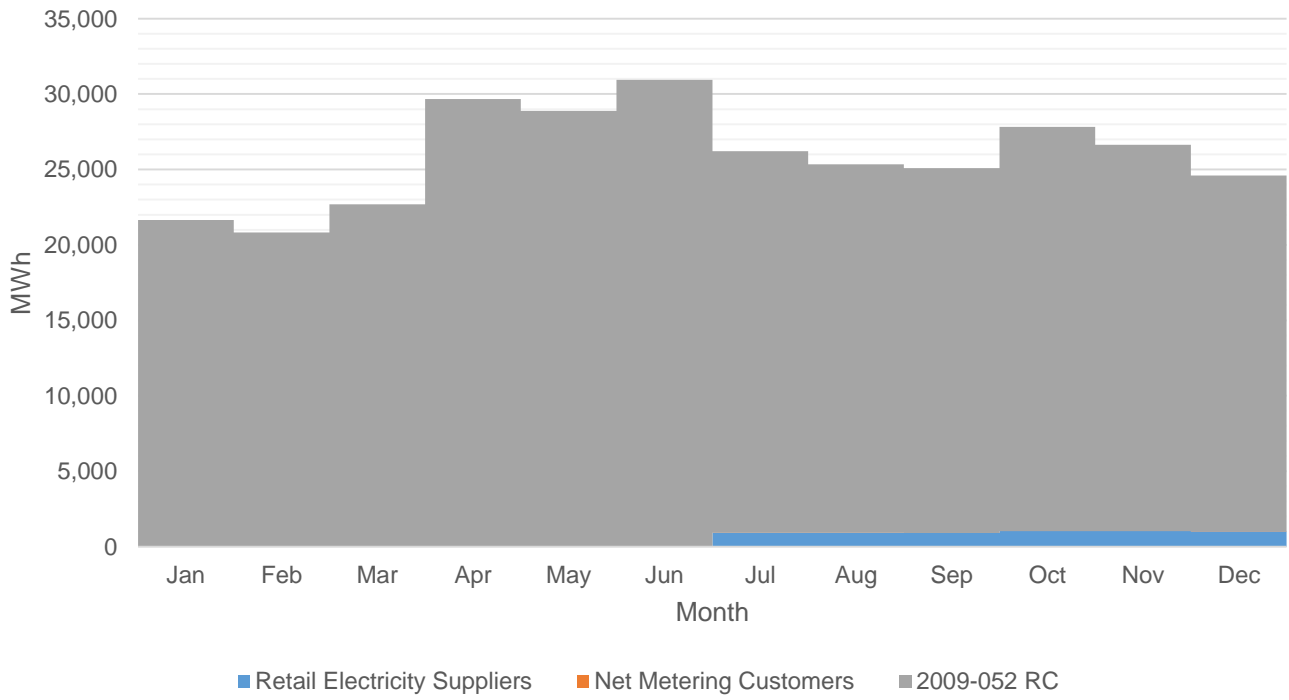
For 2019, the total MWh Offtake for the last historical year is higher than the quantity stipulated in the PSA.
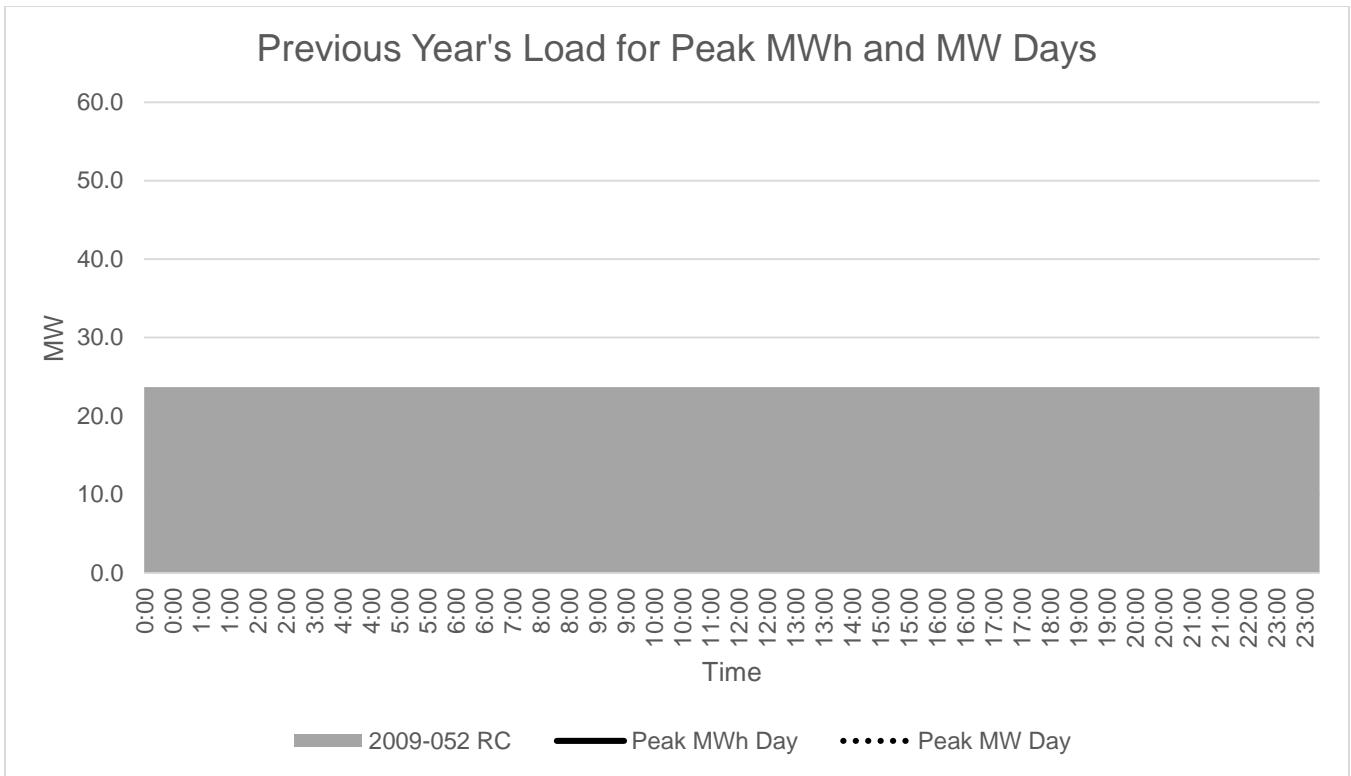
WESM Share Over Time

There is no WESM Offtake since the energy imbalances are provided by the existing supplier.

Previous Year's Load Profile

Based on the load curve, the base-load is 30MW, mid-merit is 10MW and peaking 15MW.

Previous Year's Load for Peak MWh and MW Days

The PELCO I's residential consumers contribute to the day and night time peak. PELCO I has 56MW coincident peak demand in 2019. The contracted demand is 26MW only.

Previous Year's Loading Summary

MVA Tot	NCP	CP	Ave	5th PCTL
75.00	59.40	56.36	35.43	24.17
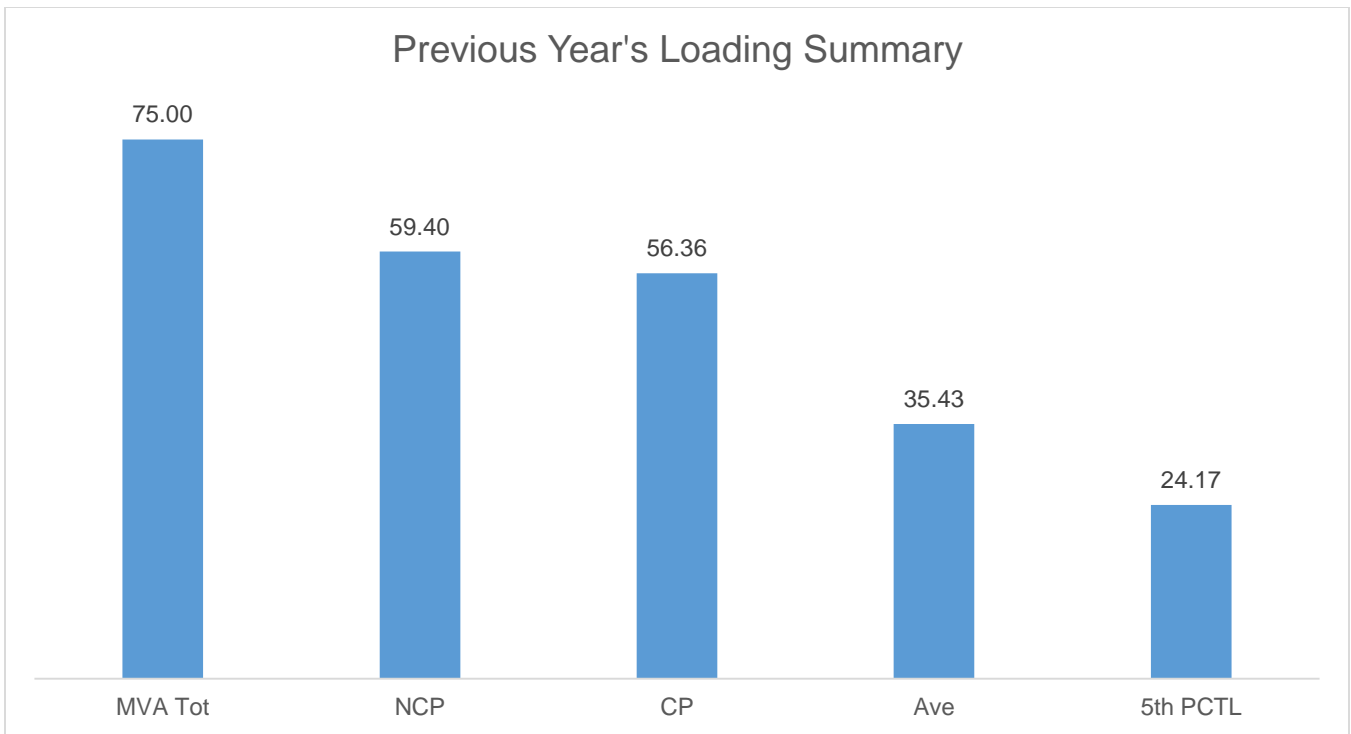
The Non-coincident Peak Demand is 59.4 MW, which is around 80% of the total substation capacity of 75 MVA at a power factor of 0.98. The load factor or the ratio between the Average Load of 35.43 MW and the Non-coincident Peak Demand is 60%. A safe estimate of the true minimum load is the fifth percentile load of 24.17 MW which is 41% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Sto. Domingo	15	12.009
Plaza Luma	10	9.326
Pandacaqui	10	6.487
San Isidro	10	4.693
Sta. Monica	10	10.227
San Nicolas	10	8.608
Lagundi	10	8.050

The substations loaded at above 70% are Sto. Domingo, Plaza Luma, Sta. Monica, San Nicolas and Lagundi. This loading problem will be solved by implementation of Capital Expenditure Projects in 2020-2021.

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
2020	Jan	43.57	23.67	0.00	0.000		54%	54%	-19.91
	Feb	41.15	23.24	0.00	0.000		56%	56%	-17.92
	Mar	49.78	24.58	0.00	0.000		49%	49%	-25.19
	Apr	58.07	25.59	0.00	0.000		44%	44%	-32.49
	May	57.71	26.40	0.00	0.000		46%	46%	-31.30
	Jun	60.36	26.12	0.00	0.000		43%	43%	-34.24
	Jul	53.31	25.70	0.00	0.000		48%	48%	-27.61
	Aug	49.63	25.11	0.00	0.000		51%	51%	-24.53
	Sep	51.22	25.52	0.00	0.000		50%	50%	-25.70
	Oct	54.51	24.63	0.00	0.000		45%	45%	-29.89
	Nov	51.20	25.49	0.00	0.000		50%	50%	-25.71
	Dec	45.06	25.01	0.00	0.000		55%	55%	-20.05
2021	Jan	46.60	23.85	0.00	15.000		51%	83%	-7.75
	Feb	44.01	23.41	0.00	15.000		53%	87%	-5.60
	Mar	53.23	24.78	0.00	15.000		47%	75%	-13.46
	Apr	62.11	25.79	0.00	15.000		42%	66%	-21.32
	May	61.72	26.61	0.00	15.000		43%	67%	-20.11
	Jun	64.55	26.32	0.00	15.000		41%	64%	-23.23
	Jul	57.02	25.90	0.00	15.000		45%	72%	-16.11
	Aug	53.08	25.30	0.00	15.000		48%	76%	-12.78
	Sep	54.78	25.72	0.00	15.000		47%	74%	-14.06
	Oct	58.30	24.83	0.00	15.000		43%	68%	-18.47
	Nov	54.75	25.69	0.00	15.000		47%	74%	-14.06
	Dec	48.19	25.21	0.00	15.000		52%	83%	-7.98
2022	Jan	49.64	24.03	0.00	15.000		48%	79%	-10.61
	Feb	46.88	23.59	0.00	15.000		50%	82%	-8.30
	Mar	56.71	24.97	0.00	15.000		44%	70%	-16.73
	Apr	66.16	25.99	0.00	15.000		39%	62%	-25.17
	May	65.74	26.81	0.00	15.000		41%	64%	-23.93
	Jun	68.76	26.53	0.00	15.000		39%	60%	-27.23

|		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jul	60.74	26.11	0.00	15.000		43%	68%	-19.63
	Aug	56.54	25.50	0.00	15.000		45%	72%	-16.04
	Sep	58.35	25.92	0.00	15.000		44%	70%	-17.43
	Oct	62.10	0.00	0.00	51.000		0%	82%	-11.10
	Nov	58.33	0.00	0.00	51.000		0%	87%	-7.33
	Dec	51.33	0.00	0.00	51.000		0%	99%	-0.33
2023	Jan	52.69	0.00	0.00	61.000		0%	116%	8.31
	Feb	49.76	0.00	0.00	61.000		0%	123%	11.24
	Mar	60.19	0.00	0.00	61.000		0%	101%	0.81
	Apr	70.22	0.00	0.00	61.000		0%	87%	-9.22
	May	69.78	0.00	0.00	61.000		0%	87%	-8.78
	Jun	72.98	0.00	0.00	61.000		0%	84%	-11.98
	Jul	64.47	0.00	0.00	61.000		0%	95%	-3.47
	Aug	60.01	0.00	0.00	61.000		0%	102%	0.99
	Sep	61.94	0.00	0.00	61.000		0%	98%	-0.94
	Oct	65.92	0.00	0.00	61.000		0%	93%	-4.92
	Nov	61.91	0.00	0.00	61.000		0%	99%	-0.91
	Dec	54.48	0.00	0.00	61.000		0%	112%	6.52
2024	Jan	55.74	0.00	0.00	61.000		0%	109%	5.26
	Feb	52.65	0.00	0.00	61.000		0%	116%	8.35
	Mar	63.68	0.00	0.00	61.000		0%	96%	-2.68
	Apr	74.29	0.00	0.00	61.000		0%	82%	-13.29
	May	73.83	0.00	0.00	61.000		0%	83%	-12.83
	Jun	77.22	0.00	0.00	61.000		0%	79%	-16.22
	Jul	68.20	0.00	0.00	61.000		0%	89%	-7.20
	Aug	63.49	0.00	0.00	61.000		0%	96%	-2.49
	Sep	65.53	0.00	0.00	61.000		0%	93%	-4.53
	Oct	69.74	0.00	0.00	61.000		0%	87%	-8.74
	Nov	65.50	0.00	0.00	61.000		0%	93%	-4.50
	Dec	57.64	0.00	0.00	61.000		0%	106%	3.36
2025	Jan	58.80	0.00	0.00	61.000		0%	104%	2.20
	Feb	55.54	0.00	0.00	61.000		0%	110%	5.46

			Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
		Mar	67.17	0.00	0.00	61.000		0%	91%	-6.17
		Apr	78.37	0.00	0.00	61.000		0%	78%	-17.37
		May	77.88	0.00	0.00	61.000		0%	78%	-16.88
		Jun	81.45	0.00	0.00	61.000		0%	75%	-20.45
		Jul	71.95	0.00	0.00	61.000		0%	85%	-10.95
		Aug	66.98	0.00	0.00	61.000		0%	91%	-5.98
		Sep	69.13	0.00	0.00	61.000		0%	88%	-8.13
		Oct	73.57	0.00	0.00	61.000		0%	83%	-12.57
		Nov	69.09	0.00	0.00	61.000		0%	88%	-8.09
		Dec	60.81	0.00	0.00	61.000		0%	100%	0.19
2026		Jan	61.87	0.00	0.00	61.000		0%	99%	-0.87
		Feb	58.43	0.00	0.00	61.000		0%	104%	2.57
		Mar	70.67	0.00	0.00	61.000		0%	86%	-9.67
		Apr	82.45	0.00	0.00	61.000		0%	74%	-21.45
		May	81.94	0.00	0.00	61.000		0%	74%	-20.94
		Jun	85.70	0.00	0.00	61.000		0%	71%	-24.70
		Jul	75.70	0.00	0.00	61.000		0%	81%	-14.70
		Aug	70.47	0.00	0.00	61.000		0%	87%	-9.47
		Sep	72.73	0.00	0.00	61.000		0%	84%	-11.73
		Oct	77.40	0.00	0.00	61.000		0%	79%	-16.40
		Nov	72.69	0.00	0.00	61.000		0%	84%	-11.69
		Dec	63.97	0.00	0.00	61.000		0%	95%	-2.97
2027		Jan	64.94	0.00	0.00	61.000		0%	94%	-3.94
		Feb	61.33	0.00	0.00	61.000		0%	99%	-0.33
		Mar	74.18	0.00	0.00	61.000		0%	82%	-13.18
		Apr	86.54	0.00	0.00	61.000		0%	70%	-25.54
		May	86.00	0.00	0.00	61.000		0%	71%	-25.00
		Jun	89.95	0.00	0.00	61.000		0%	68%	-28.95
		Jul	79.45	0.00	0.00	61.000		0%	77%	-18.45
		Aug	73.96	0.00	0.00	61.000		0%	82%	-12.96
		Sep	76.34	0.00	0.00	61.000		0%	80%	-15.34
		Oct	81.24	0.00	0.00	61.000		0%	75%	-20.24

|		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Nov	76.30	0.00	0.00	61.000		0%	80%	-15.30
	Dec	67.15	0.00	0.00	61.000		0%	91%	-6.15
2028	Jan	68.01	0.00	0.00	61.000		0%	90%	-7.01
	Feb	64.23	0.00	0.00	61.000		0%	95%	-3.23
	Mar	77.69	0.00	0.00	61.000		0%	79%	-16.69
	Apr	90.63	0.00	0.00	61.000		0%	67%	-29.63
	May	90.07	0.00	0.00	61.000		0%	68%	-29.07
	Jun	94.20	0.00	0.00	61.000		0%	65%	-33.20
	Jul	83.21	0.00	0.00	61.000		0%	73%	-22.21
	Aug	77.46	0.00	0.00	61.000		0%	79%	-16.46
	Sep	79.94	0.00	0.00	61.000		0%	76%	-18.94
	Oct	85.08	0.00	0.00	61.000		0%	72%	-24.08
	Nov	79.90	0.00	0.00	61.000		0%	76%	-18.90
	Dec	70.32	0.00	0.00	61.000		0%	87%	-9.32
2029	Jan	71.08	0.00	0.00	61.000		0%	86%	-10.08
	Feb	67.13	0.00	0.00	61.000		0%	91%	-6.13
	Mar	81.20	0.00	0.00	61.000		0%	75%	-20.20
	Apr	94.73	0.00	0.00	61.000		0%	64%	-33.73
	May	94.13	0.00	0.00	61.000		0%	65%	-33.13
	Jun	98.46	0.00	0.00	61.000		0%	62%	-37.46
	Jul	86.96	0.00	0.00	61.000		0%	70%	-25.96
	Aug	80.96	0.00	0.00	61.000		0%	75%	-19.96
	Sep	83.56	0.00	0.00	61.000		0%	73%	-22.56
	Oct	88.92	0.00	0.00	61.000		0%	69%	-27.92
	Nov	83.51	0.00	0.00	61.000		0%	73%	-22.51
	Dec	73.50	0.00	0.00	61.000		0%	83%	-12.50

In compliance with the rules for preparation of capital expenditure program, PELCO I adopted the Trend Analysis Approach Forecast Method in projecting Annual Energy Sales, Customer and Demand utilizing the seven (7) years normalized historical data. The forecast models used have passed the criteria as prescribed in Article 2.4 of Electric Cooperative Distribution Utility Planning Manual (ECDUPM). The summary of forecasting models are as follows:

Summary of Forecast Models

| Model No.	Forecasting Model	Model Description	Validity Tests	Accuracy Tests	Remarks (Pass/Fail)
5	Peak Demand : $Y = at + bt_{-1} + e$	Linear with Smoothing	Ajt. R2 = 0.994	MAPE = 0.91%	Pass
55	Total Purchase : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.992	MAPE = 1.03%	Pass
55	Total Sales : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.995	MAPE = 0.85%	Pass
55	Total Customer : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.998	MAPE = 0.20%	Pass
55	Customer - Residential : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.999	MAPE = 0.13%	Pass
19	Customer - LV Commercial : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.992	MAPE = 0.53%	Pass
31	Customer - HV Commercial : $Y = at3 + bt2 + d$	Cubic Logarithmic (2 variables)	Ajt. R2 = 0.998	MAPE = 1.84%	Pass
35	Customer - Public Building : $Y = a\ln(t)3 + c\ln(t) + d$	Cubic Logarithmic	Ajt. R2 = 0.995	MAPE = 0.51%	Pass
5	Customer - Street Lights : $Y = at + b(t^{-1}) + e$	Linear with Smoothing	Ajt. R2 = 0.997	MAPE = 0.10%	Pass
55	Sales Residential : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.993	MAPE = 0.92%	Pass
55	Sales LV Commercial : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.998	MAPE = 0.68%	Pass
27	Sales HV Commercial : $Y = a\ln(t)3 + b\ln(t)2 + c\ln(t) + d$	Cubic Logarithmic	Ajt. R2 = 0.997	MAPE = 1.98%	Pass
55	Sales LV Industrial : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 1.000	MAPE = 0.10%	Pass
35	Sales HV Industrial : $Y = a\ln(t)3 + c\ln(t) + d$	Cubic Logarithmic	Ajt. R2 = 0.992	MAPE = 1.01%	Pass
5	Sales Public Building : $Y = at + b(t^{-1}) + e$	Linear with Smoothing	Ajt. R2 = 1.000	MAPE = 0.12%	Pass
55	Sales Street Lights : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.990	MAPE = 0.29%	Pass
55	Sales LV Irrigation : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.998	MAPE = 0.15%	Pass
35	Sales HV Irrigation : $Y = a\ln(t)3 + c\ln(t) + d$	Cubic Logarithmic	Ajt. R2 = 0.992	MAPE = 1.01%	Pass
21	Sales Admin Use : $Y = at2 + ct_{-1} + e$	Quadratic with Smoothing (2 variable)	Ajt. R2 = 0.994	MAPE = 0.34%	Pass
55	Sales Station Use : $Y = a\ln(t)3 + dt_{-1} + e$	Cubic Logarithmic with Smoothing	Ajt. R2 = 0.996	MAPE = 0.88%	Pass

Forecasted Supply vs Demand
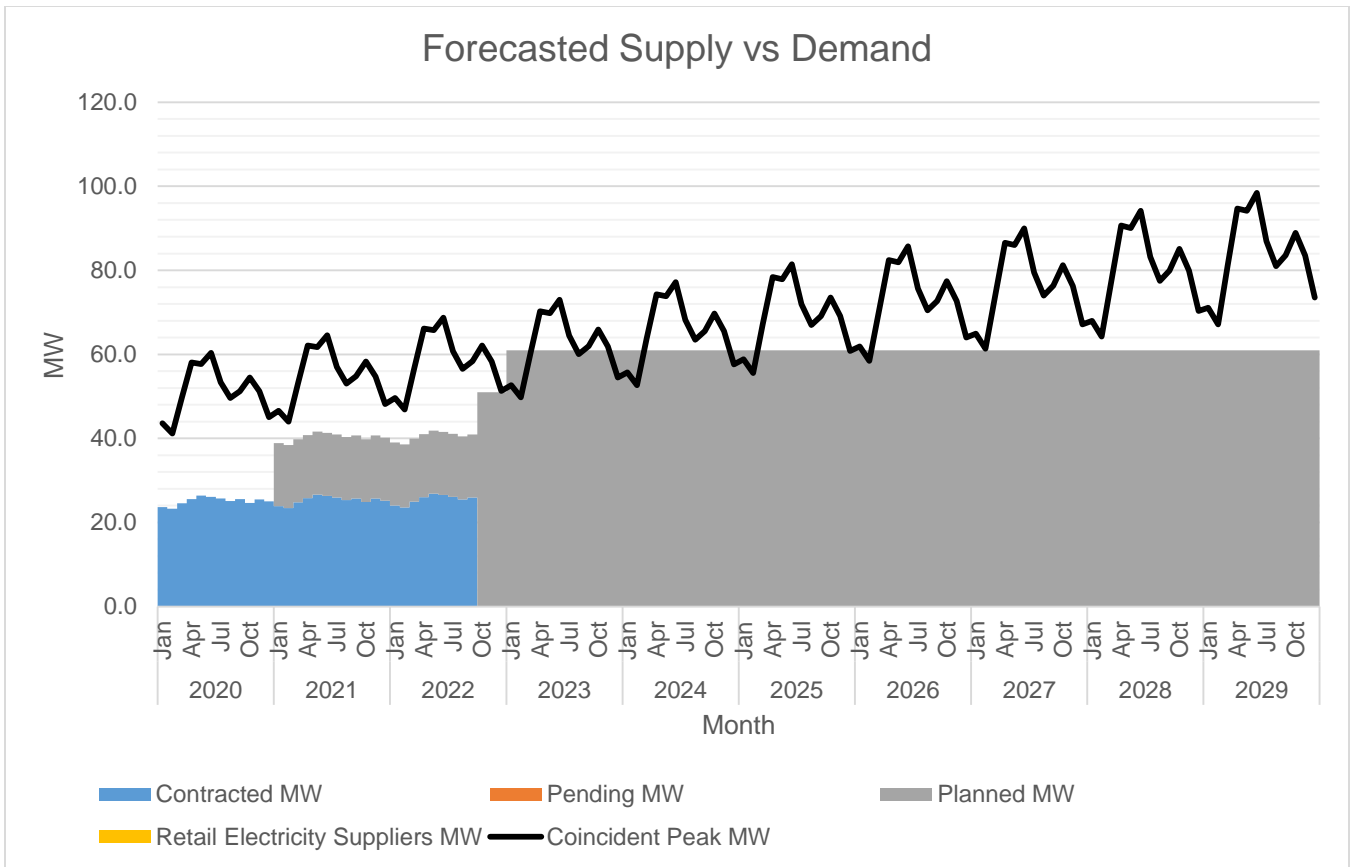
The uncontracted demand, i.e., part of peaking, will be taken from the WESM.


Forecasted Supply vs Demand
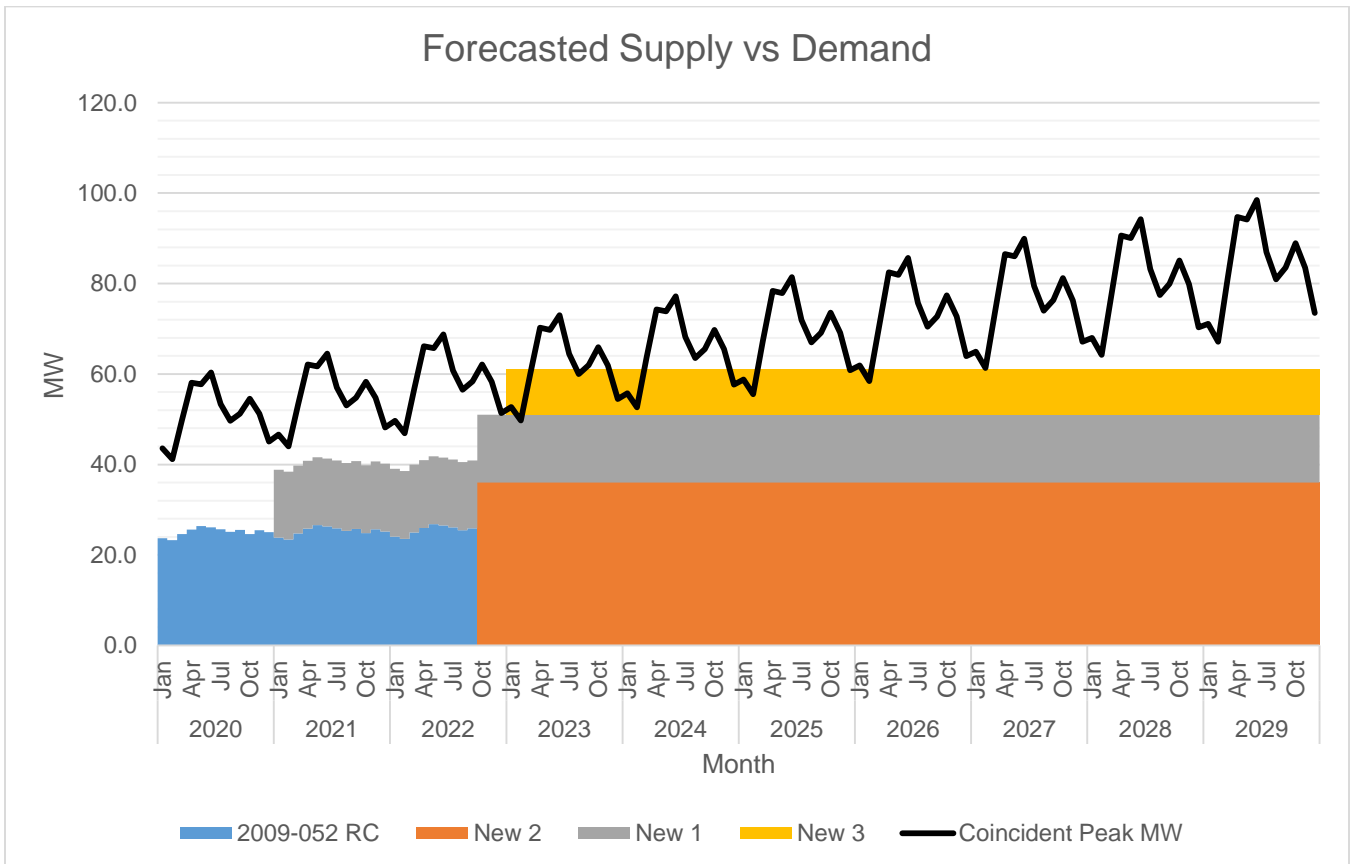
The contracting levels consider the schedule of the CSP.

Procurement Timing
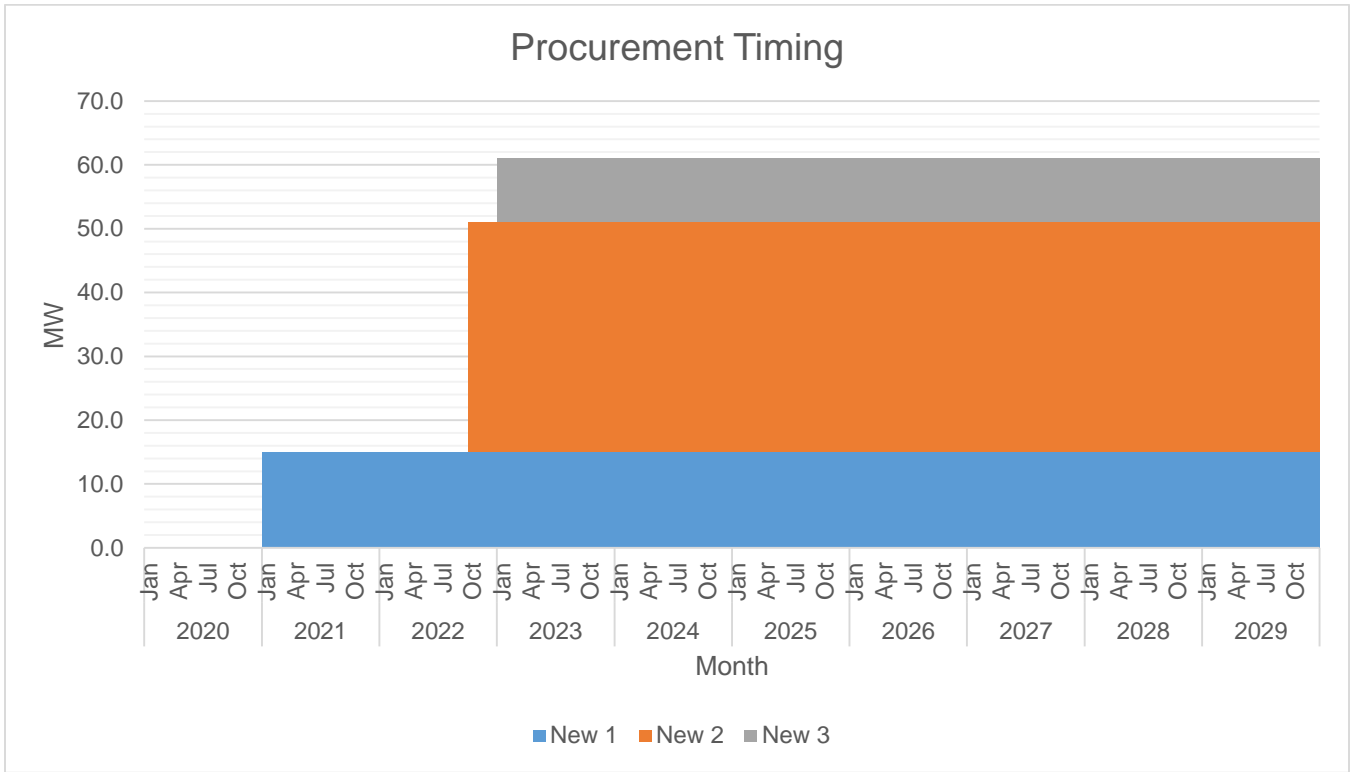
The first wave of supply procurement will be for 15 MW planned to be available by the month of January 2021. This will be followed by 36 MW in October 2022. Then, another 10 MW in January 2023.
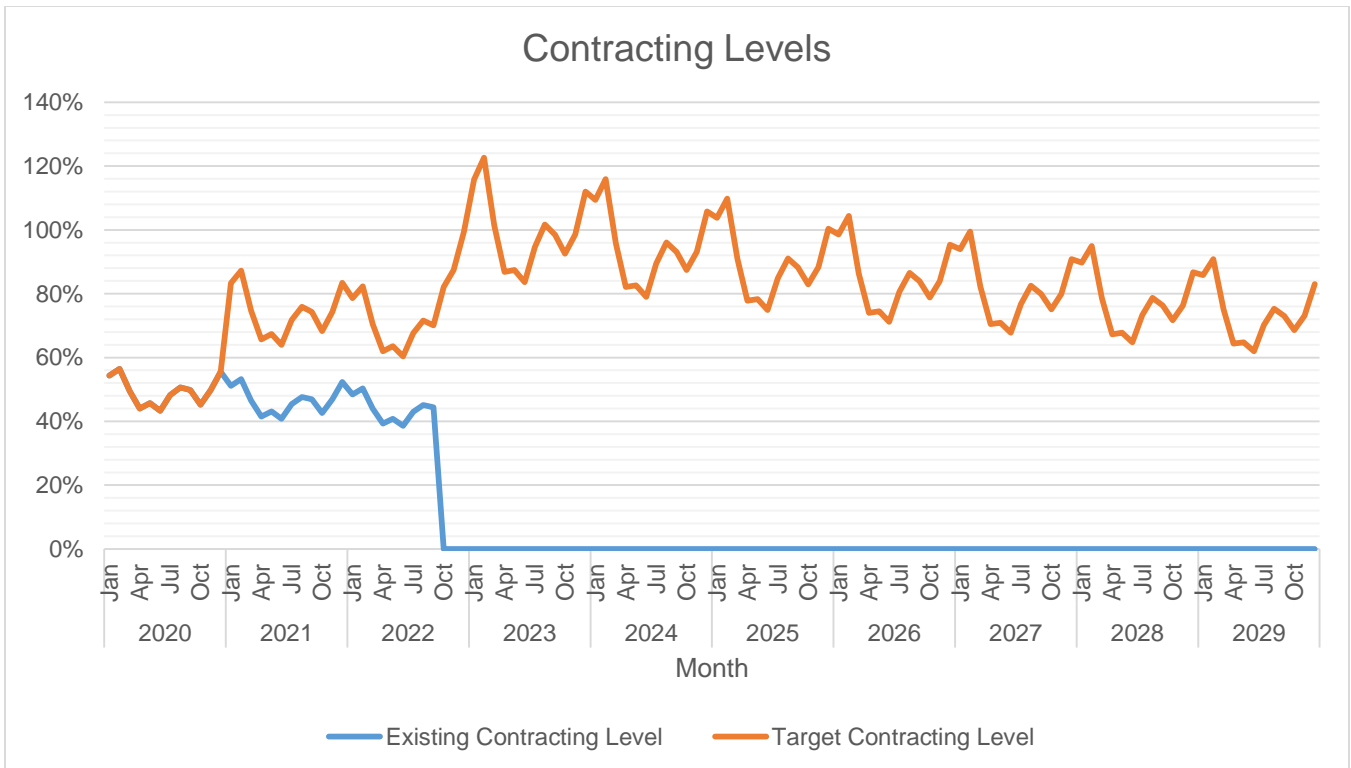
Contracting Levels

Currently, there is no under/over-contracted because energy imbalances are provided by the existing supplier. The highest target contracting level is 123% which is expected to occur on February 2023. The lowest target contracting level is 43% which is expected to occur on June 2020.
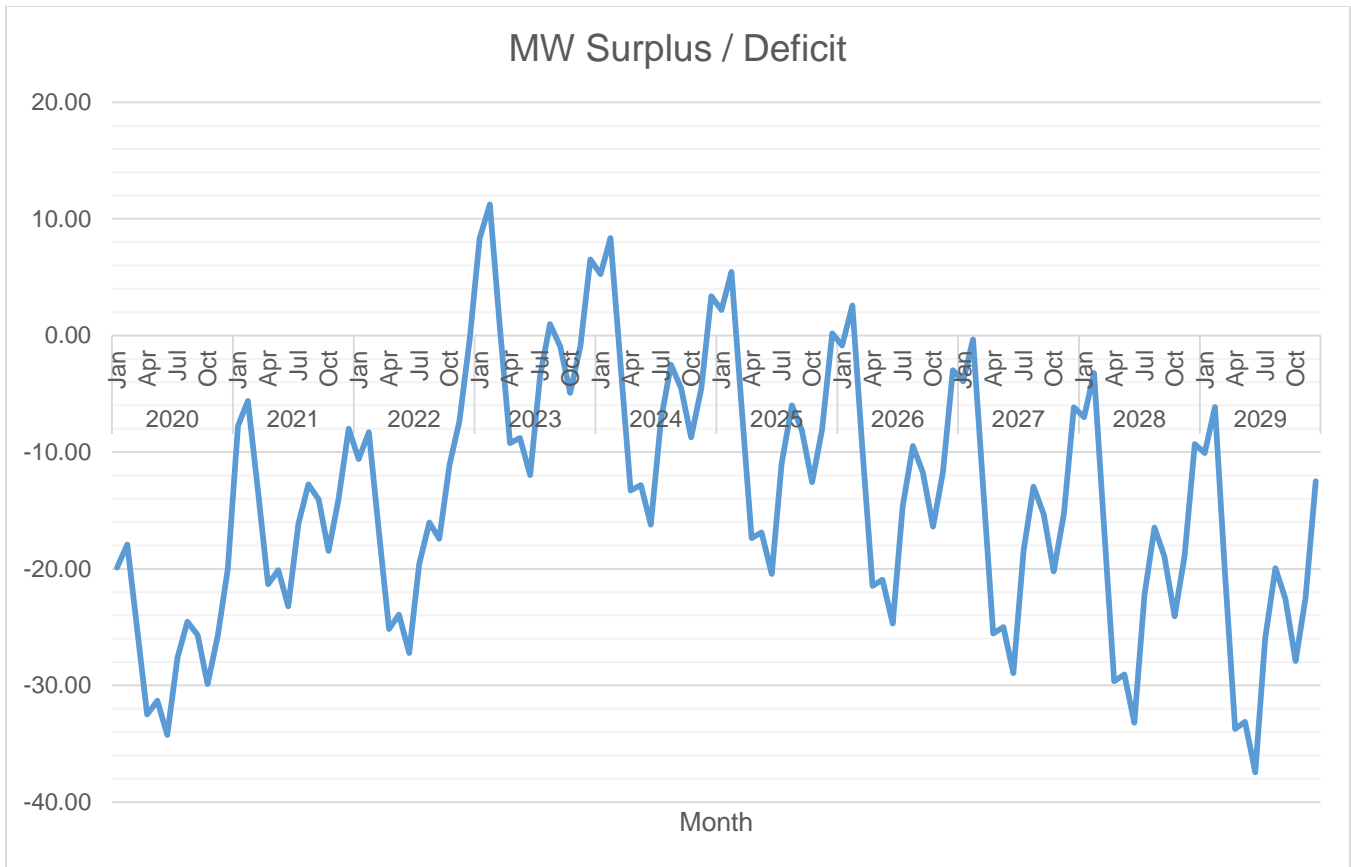
MW Surplus / Deficit

Currently, there is no under/over-contracted because energy imbalances are provided by the existing supplier. The highest deficit is 37.46 MW which is expected to occur on the month of June 2029. The lowest deficit is 0.33 MW which is expected to occur on the month of February 2027.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2020	Jan	23,684	23,593	92	0.00%	0.39%
	Feb	22,695	21,216	1,479	0.00%	6.52%
	Mar	24,750	22,992	1,758	0.00%	7.10%
	Apr	32,315	29,695	2,619	0.00%	8.11%
	May	31,411	29,174	2,237	0.00%	7.12%
	Jun	33,676	30,706	2,970	0.00%	8.82%
	Jul	28,556	26,271	2,285	0.00%	8.00%
	Aug	27,633	26,006	1,628	0.00%	5.89%
	Sep	27,357	25,564	1,793	0.00%	6.55%
	Oct	30,323	28,069	2,254	0.00%	7.43%
	Nov	28,986	26,768	2,218	0.00%	7.65%
	Dec	26,797	24,500	2,298	0.00%	8.57%
2021	Jan	25,533	25,435	98	0.00%	0.38%
	Feb	24,416	22,837	1,579	0.00%	6.47%
	Mar	26,598	24,721	1,877	0.00%	7.06%
	Apr	34,694	31,898	2,796	0.00%	8.06%
	May	33,722	31,334	2,388	0.00%	7.08%
	Jun	36,163	32,992	3,170	0.00%	8.77%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Jul	30,699	28,260	2,439	0.00%	7.95%
	Aug	29,726	27,989	1,738	0.00%	5.85%
	Sep	29,439	27,525	1,914	0.00%	6.50%
	Oct	32,606	30,200	2,407	0.00%	7.38%
	Nov	31,181	28,813	2,368	0.00%	7.59%
	Dec	28,813	26,360	2,453	0.00%	8.51%
2022	Jan	27,374	27,270	104	0.00%	0.38%
	Feb	26,127	24,451	1,676	0.00%	6.42%
	Mar	28,434	26,441	1,993	0.00%	7.01%
	Apr	37,057	34,088	2,969	0.00%	8.01%
	May	36,016	33,480	2,536	0.00%	7.04%
	Jun	38,631	35,265	3,366	0.00%	8.71%
	Jul	32,829	30,239	2,590	0.00%	7.89%
	Aug	31,807	29,962	1,845	0.00%	5.80%
	Sep	31,508	29,476	2,032	0.00%	6.45%
	Oct	34,875	32,319	2,555	0.00%	7.33%
	Nov	33,363	30,849	2,514	0.00%	7.54%
	Dec	30,816	28,212	2,604	0.00%	8.45%
2023	Jan	29,201	29,091	110	0.00%	0.38%
	Feb	27,822	26,051	1,771	0.00%	6.37%
	Mar	30,252	28,146	2,106	0.00%	6.96%
	Apr	39,395	36,258	3,137	0.00%	7.96%
	May	38,286	35,607	2,679	0.00%	7.00%
	Jun	41,074	37,517	3,557	0.00%	8.66%
	Jul	34,939	32,202	2,737	0.00%	7.83%
	Aug	33,868	31,919	1,949	0.00%	5.76%
	Sep	33,559	31,412	2,147	0.00%	6.40%
	Oct	37,121	34,421	2,700	0.00%	7.27%
	Nov	35,523	32,867	2,656	0.00%	7.48%
	Dec	32,799	30,048	2,752	0.00%	8.39%
2024	Jan	31,009	30,893	116	0.00%	0.37%
	Feb	29,497	27,634	1,863	0.00%	6.32%
	Mar	32,048	29,833	2,215	0.00%	6.91%
	Apr	41,703	38,403	3,300	0.00%	7.91%
	May	40,526	37,708	2,818	0.00%	6.95%
	Jun	43,485	39,744	3,741	0.00%	8.60%
	Jul	37,022	34,143	2,879	0.00%	7.78%
	Aug	35,905	33,854	2,051	0.00%	5.71%
	Sep	35,586	33,327	2,259	0.00%	6.35%
	Oct	39,340	36,500	2,840	0.00%	7.22%
	Nov	37,658	34,864	2,794	0.00%	7.42%
	Dec	34,758	31,863	2,895	0.00%	8.33%
2025	Jan	32,795	32,674	121	0.00%	0.37%
	Feb	31,149	29,197	1,952	0.00%	6.27%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Mar	33,820	31,499	2,321	0.00%	6.86%
	Apr	43,979	40,521	3,458	0.00%	7.86%
	May	42,735	39,782	2,953	0.00%	6.91%
	Jun	45,861	41,941	3,920	0.00%	8.55%
	Jul	39,076	36,060	3,017	0.00%	7.72%
	Aug	37,914	35,766	2,149	0.00%	5.67%
	Sep	37,585	35,218	2,367	0.00%	6.30%
	Oct	41,528	38,552	2,976	0.00%	7.17%
	Nov	39,764	36,836	2,928	0.00%	7.36%
	Dec	36,689	33,656	3,033	0.00%	8.27%
2026	Jan	34,559	34,432	127	0.00%	0.37%
	Feb	32,778	30,740	2,038	0.00%	6.22%
	Mar	35,565	33,142	2,424	0.00%	6.81%
	Apr	46,219	42,609	3,610	0.00%	7.81%
	May	44,911	41,828	3,083	0.00%	6.87%
	Jun	48,201	44,108	4,093	0.00%	8.49%
	Jul	41,100	37,951	3,149	0.00%	7.66%
	Aug	39,895	37,651	2,243	0.00%	5.62%
	Sep	39,556	37,085	2,471	0.00%	6.25%
	Oct	43,684	40,577	3,107	0.00%	7.11%
	Nov	41,839	38,782	3,057	0.00%	7.31%
	Dec	38,592	35,425	3,167	0.00%	8.21%
2027	Jan	36,298	36,167	132	0.00%	0.36%
	Feb	34,383	32,262	2,121	0.00%	6.17%
	Mar	37,284	34,762	2,522	0.00%	6.76%
	Apr	48,424	44,667	3,757	0.00%	7.76%
	May	47,052	43,843	3,209	0.00%	6.82%
	Jun	50,503	46,244	4,259	0.00%	8.43%
	Jul	43,093	39,816	3,278	0.00%	7.61%
	Aug	41,845	39,511	2,335	0.00%	5.58%
	Sep	41,497	38,925	2,572	0.00%	6.20%
	Oct	45,807	42,574	3,233	0.00%	7.06%
	Nov	43,883	40,702	3,181	0.00%	7.25%
	Dec	40,465	37,169	3,296	0.00%	8.14%
2028	Jan	38,013	37,877	137	0.00%	0.36%
	Feb	35,962	33,761	2,201	0.00%	6.12%
	Mar	38,976	36,358	2,617	0.00%	6.72%
	Apr	50,593	46,695	3,899	0.00%	7.71%
	May	49,159	45,829	3,330	0.00%	6.77%
	Jun	52,768	48,348	4,420	0.00%	8.38%
	Jul	45,055	41,653	3,401	0.00%	7.55%
	Aug	43,766	41,343	2,423	0.00%	5.54%
	Sep	43,409	40,740	2,669	0.00%	6.15%
	Oct	47,897	44,542	3,355	0.00%	7.01%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	45,894	42,593	3,301	0.00%	7.19%
	Dec	42,308	38,888	3,420	0.00%	8.08%
2029	Jan	39,704	39,562	141	0.00%	0.36%
	Feb	37,517	35,239	2,278	0.00%	6.07%
	Mar	40,640	37,932	2,709	0.00%	6.67%
	Apr	52,727	48,692	4,035	0.00%	7.65%
	May	51,231	47,785	3,446	0.00%	6.73%
	Jun	54,996	50,422	4,575	0.00%	8.32%
	Jul	46,985	43,465	3,520	0.00%	7.49%
	Aug	45,657	43,149	2,507	0.00%	5.49%
	Sep	45,290	42,528	2,762	0.00%	6.10%
	Oct	49,953	46,481	3,473	0.00%	6.95%
	Nov	47,874	44,457	3,417	0.00%	7.14%
	Dec	44,121	40,581	3,540	0.00%	8.02%

The MWh Offtake was forecasted using Trend Analysis Approach Forecast Method. The assumed annual load factor is 63%.

System Loss was calculated through a Load Flow Study conducted on monthly basis by the technical/engineering department using Synergee software. Based on the same study, the Distribution System can adequately convey electricity to customers.
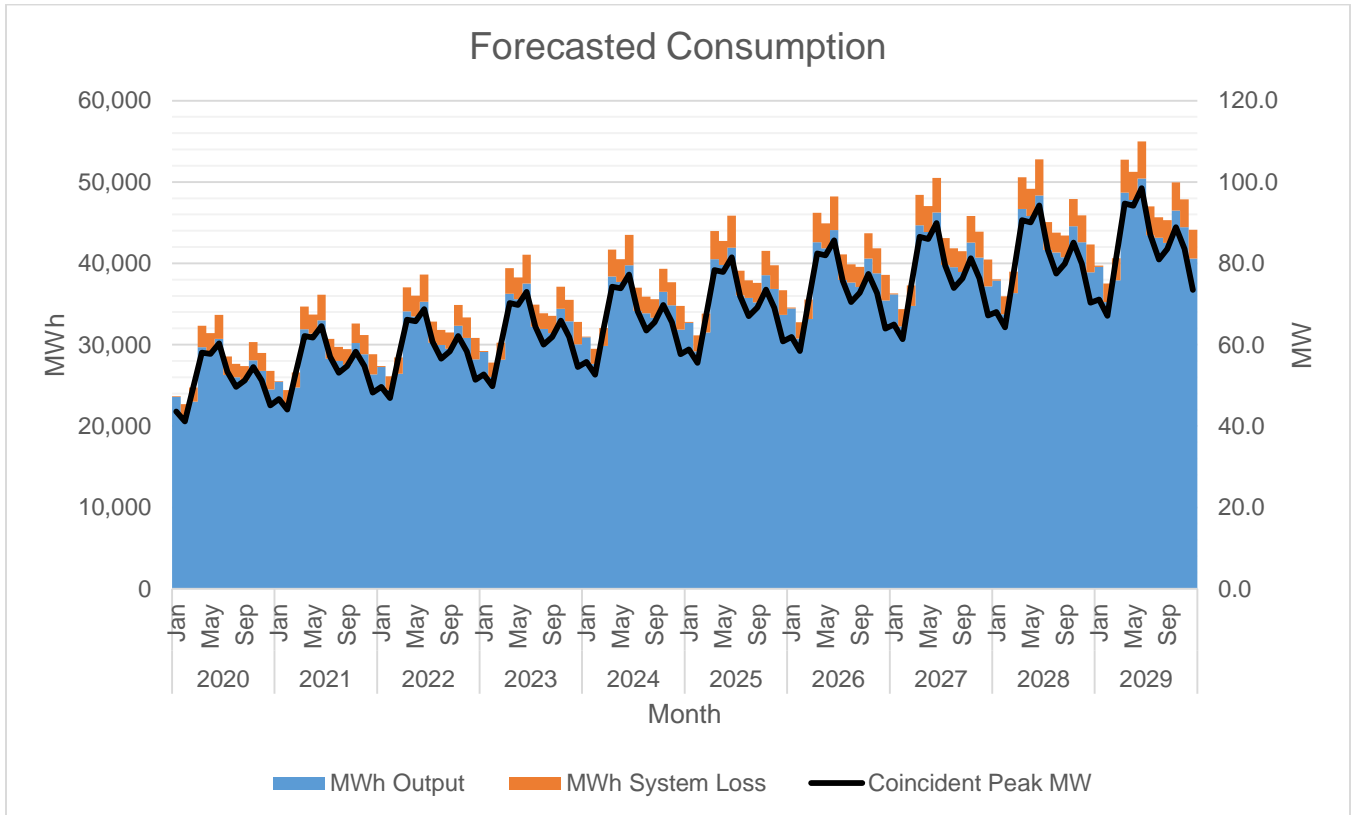
The MWh Output was expected to grow at a rate of 7% annually.

Forecasted Losses
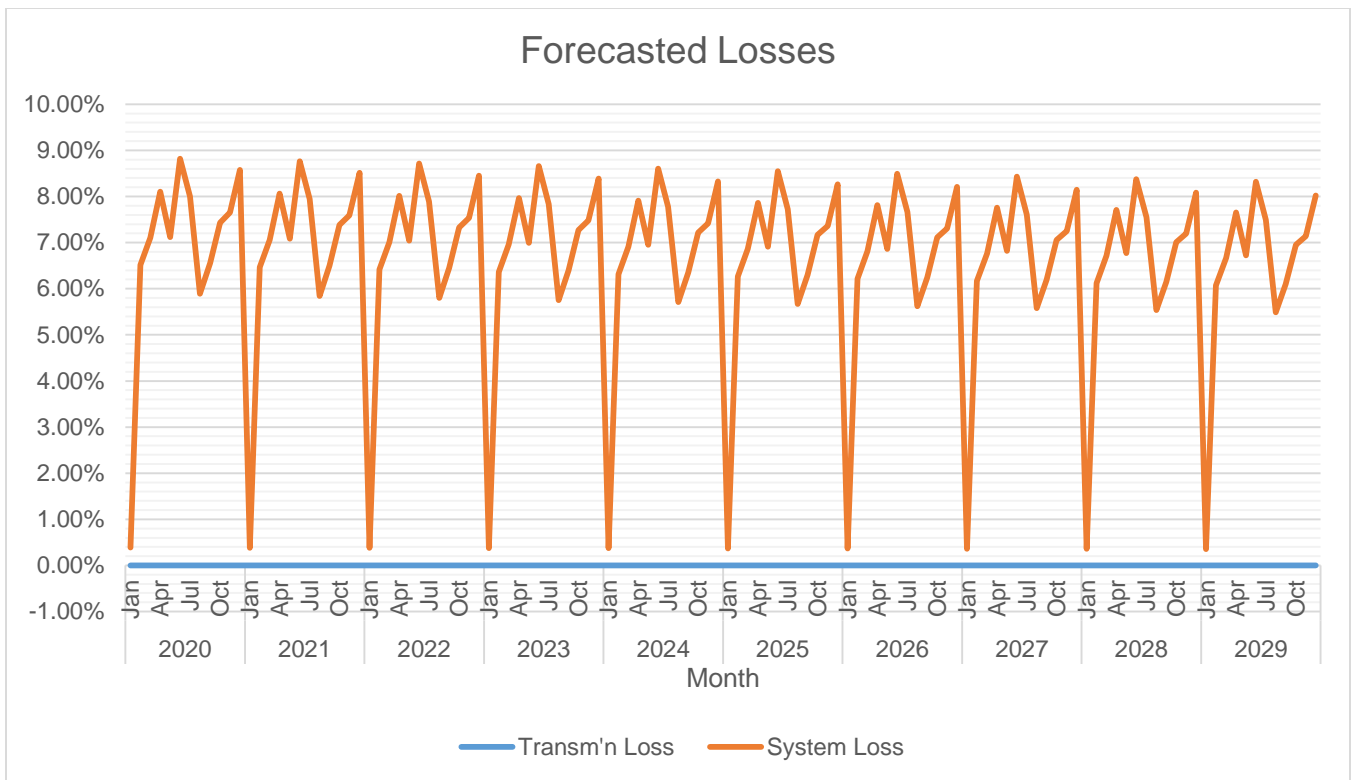
In 2020, the monthly System Loss is expected to range from 0.39% to 8.82. The target annual System Loss for 2020 is 6.99%.

Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2009-052 RC	Base	Masinloc Power Partners Company, Ltd.	22.00	137,300	10/26/2009	09/25/2022

This PSA was procured thru negotiation in 2009. It serves as base load and peaking since its execution.

PELCO I entered into a power supply agreement with MPPCL. MPPCL has maintained a good operational performance.

The provisionally approved rate is 4.38 Ph/kWh subject to indexation on forex, us cpi and coal price.

The average generation rate of PELCO I is 5.00 Ph/kWh.

	New 1	New 2	New 3
Type	Peaking	Base	Peaking
Minimum MW	15.00	36.00	10.00
Minimum MWh/yr	65,700	308,131	15,768
PSA Start	12/26/2020	9/26/2022	12/26/2022
PSA End	12/25/2030	12/25/2032	12/25/2032
Publication	10/4/2019	11/23/2020	4/1/2021
Pre-bid	10/25/2019	12/14/2020	4/22/2021
Opening	1/15/2020	2/12/2021	6/21/2021
Awarding	3/4/2020	3/14/2021	7/21/2021
PSA Signing	9/2/2020	4/10/2021	8/20/2021
Joint Filing	9/10/2020	4/19/2021	8/29/2021

Procurement Schedule
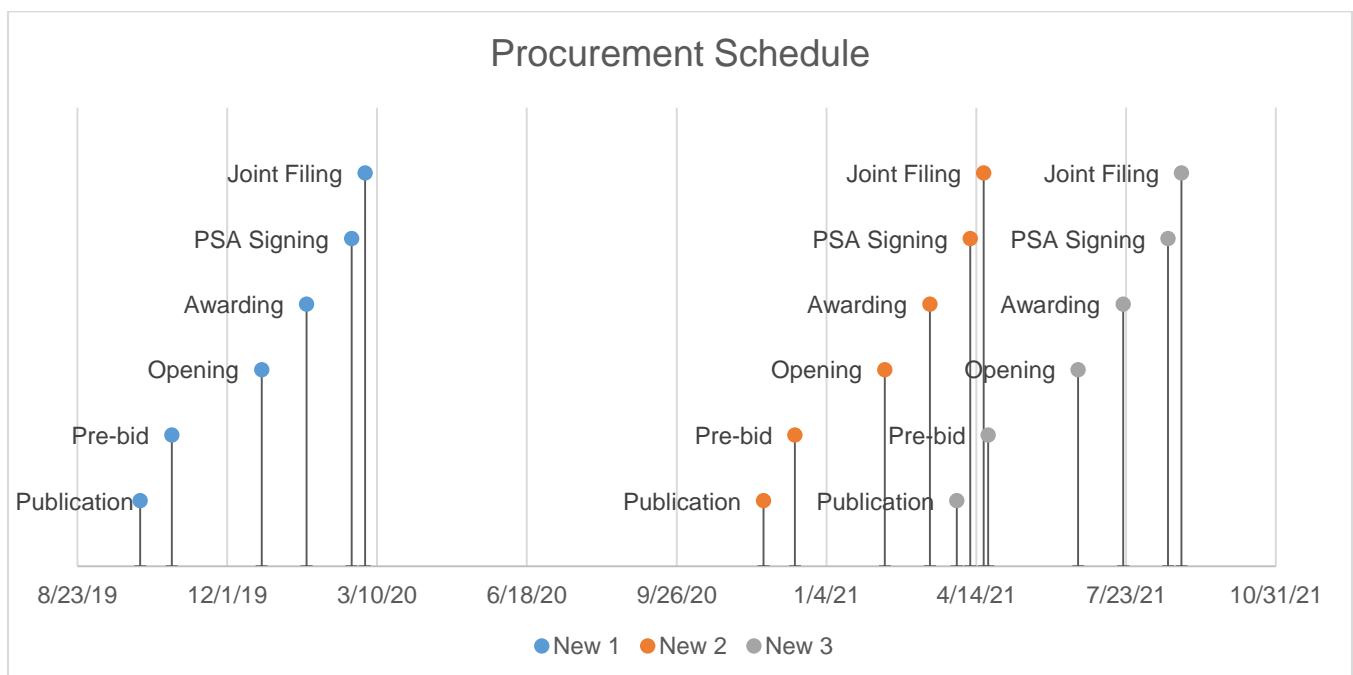
PELCO I will conduct CSP as per above target schedule.

Captive Customer Connections
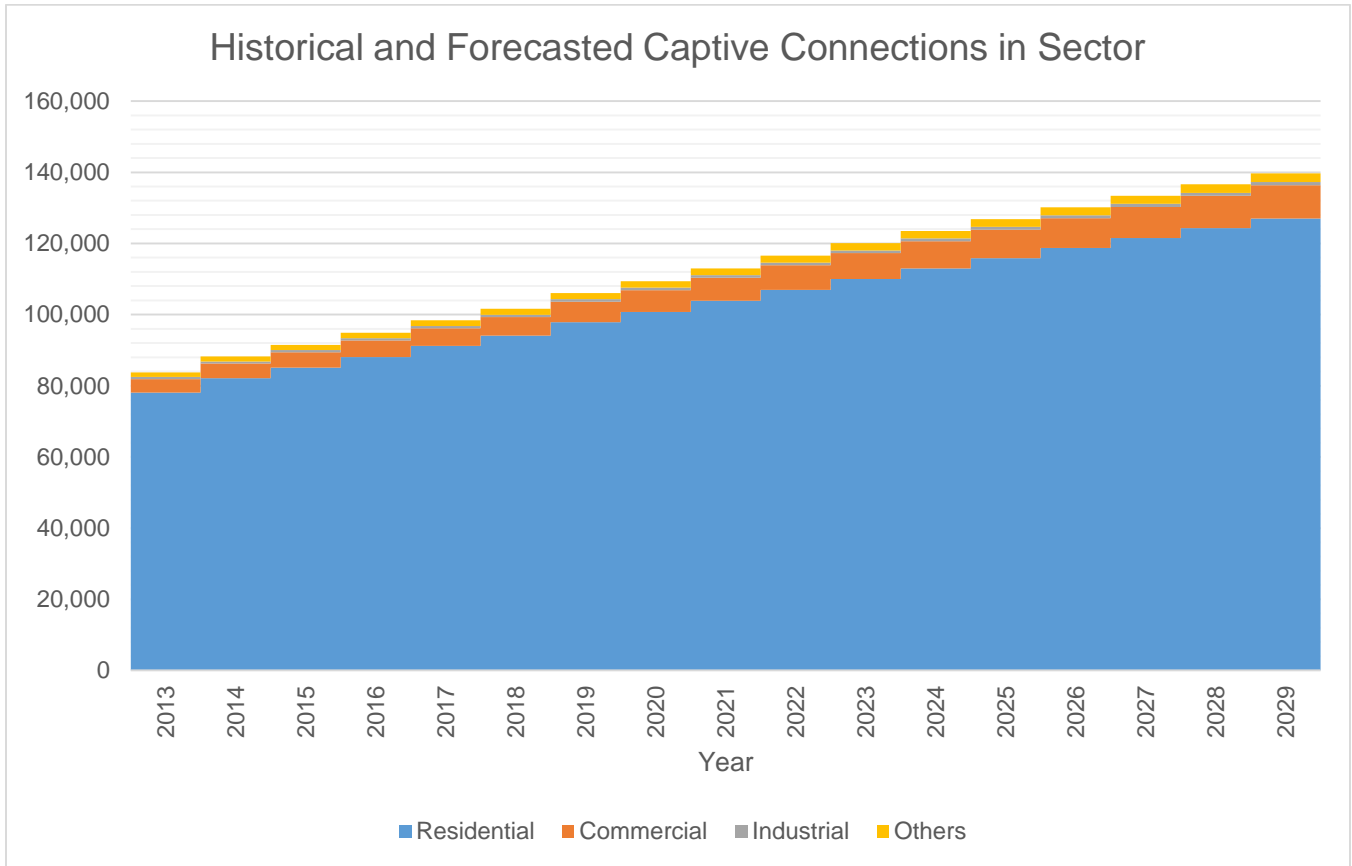
The number of residential consumers are increasing due to the growing number of low-cost housing units within franchise area.

The number and sales requirement of high-voltage commercial and industrial consumers are significantly increasing.