Power Supply Procurement Plan 2020

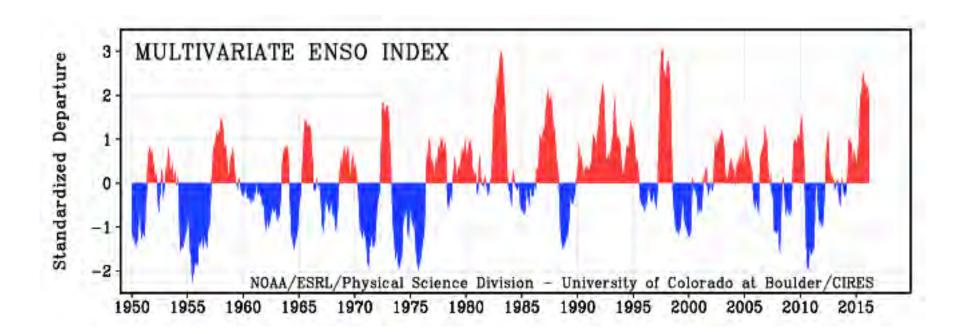
Pampanga II Electric Cooperative, Inc. (PELCO II)

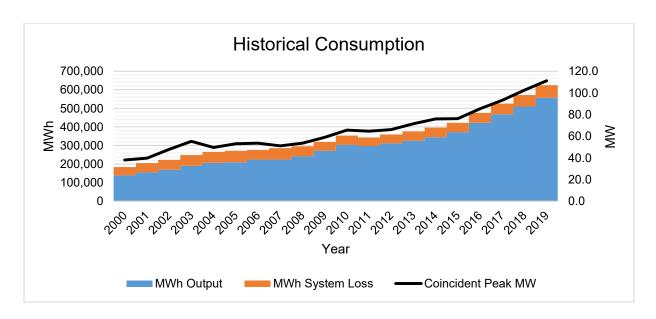
Historical Consumption Data

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	38.13	183,921	0	183,921	138,710	45,210	55%	0.00%	0.00%	24.58%
2001	39.69	206,073	0	206,073	155,191	50,882	59%	0.00%	0.00%	24.69%
2002	47.95	222,216	0	222,216	169,587	52,629	53%	0.00%	0.00%	23.68%
2003	55.35	248,106	0	248,106	191,420	56,686	51%	0.00%	0.00%	22.85%
2004	49.68	265,179	0	265,179	207,063	58,116	61%	0.00%	0.00%	21.92%
2005	53.17	271,262	0	271,262	210,182	61,079	58%	0.00%	0.00%	22.52%
2006	53.56	275,500	0	275,500	223,631	51,869	59%	0.00%	0.00%	18.83%
2007	51.10	285,605	0	285,605	224,470	61,135	64%	0.00%	0.00%	21.41%
2008	53.50	295,834	0	295,834	241,867	53,968	63%	0.00%	0.00%	18.24%
2009	59.06	319,048	0	319,048	272,025	47,024	62%	0.00%	0.00%	14.74%
2010	65.54	352,882	0	352,882	303,686	49,196	61%	0.00%	0.00%	13.94%
2011	64.66	342,729	0	342,729	297,788	44,941	61%	0.00%	0.00%	13.11%
2012	66.19	359,129	0	359,129	311,925	47,204	62%	0.00%	0.00%	13.14%
2013	71.49	375,882	0	375,882	326,546	49,335	60%	0.00%	0.00%	13.13%
2014	75.86	396,134	0	396,134	344,644	51,490	60%	0.00%	0.00%	13.00%
2015	76.31	421,571	0	421,571	372,556	49,015	63%	0.00%	0.00%	11.63%
2016	85.23	474,770	0	474,770	421,727	53,042	64%	0.00%	0.00%	11.17%
2017	93.07	544,219	0	525,216	467,996	57,220	64%	0.00%	3.49%	10.89%
2018	102.41	591,728	216,002	571,507	510,440	61,067	64%	0.00%	3.42%	10.69%
2019	111.09	640,145	215,156	624,097	556,947	67,150	64%	0.00%	2.51%	10.76%

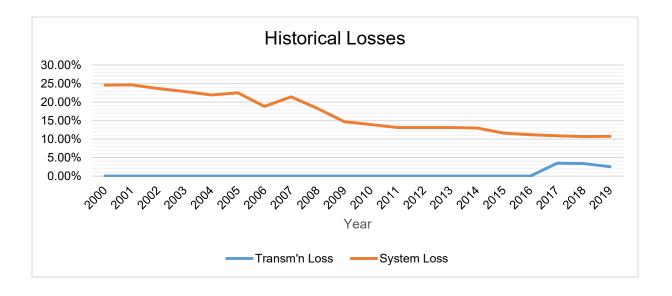
The Coincident Peak Demand increased from 38.13 MW in year 2000 to 111.09 MW last 2019 at a rate of 5.49% and 7.80% using the Compounded Annually Growth (CAGR) of 20-year and last 5-year period, respectively. Also, the MWh Offtake increased from

183,920 MWh in year 2000 to 640,144 MWh last 2019 at a rate of 6.43% and 8.71% using the 20-year and last 5-year CAGR, respectively (see *Annex "D"* for details). The increase was due multiple factors such as increase number of customers, weather condition (i.e. El Niño and La Niña phenomenon) and the way of living now-a-days which is highly dependent in the use of electricity. Within the same 20-year period, annual load factor ranged from 51% to 64%. There was an abrupt change in consumption on 2010 and 2011 due to el niño followed by a la niña phenomenon (see figure below).

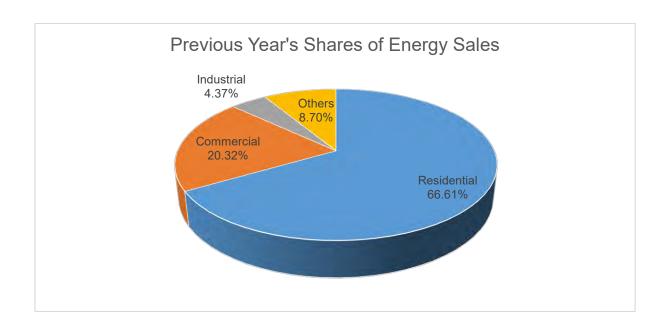




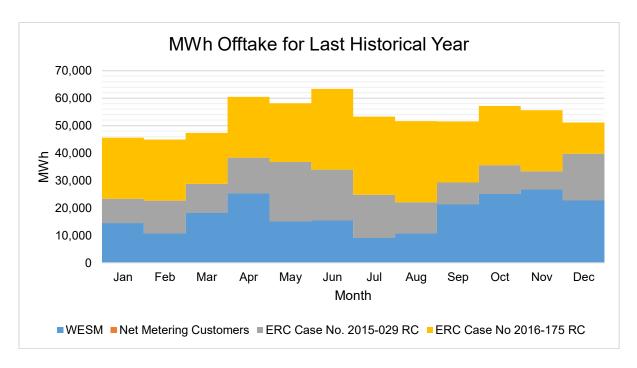
The MWh Output increased from 138,710 in year 2000 to 546,963 last year 2019 at a CAGR of 7% to 8%, while the MWh System Loss increased at a rate of 2.00% within the same period (see *Annex "D"* for details).



Historically, Transmission Loss ranged from 3.49% in year 2017 to 2.51% in year 2019 while System Loss ranged from 24.58% in year 2000 to 10.76% last year. Based on historical data, Transmission Loss peaked at 3.49% on year 2017 because of overloaded transmission line of provider, the National Grid Corporation of the Philippines (NGCP). System Loss peaked at 24.69% on year 2001 because of technical losses incurred from overloaded distribution lines and transformers and also due to the high non- technical loss from pilferages in the system. (see *Annex "D"* for details).

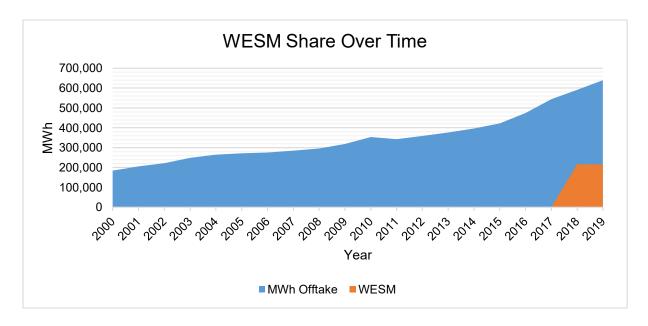


Residential customers account for the bulk of energy sales at 66.61% due to the high number of connections which account for 87.49% of the total number of connected captive customers. In contrast, Other customers which consist of irrigation, public building, street lights and potential contestable customers accounted for only 8.70% of energy sales which came from the 8.63% of the number of connections (see *Annex "C"* for details).



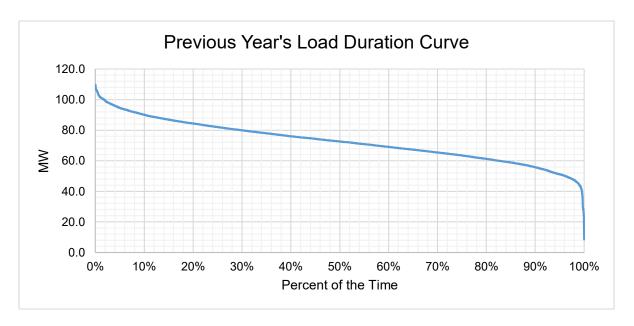
For San Miguel Energy Corporation (SMEC) under ERC Case No. 2015-029 RC, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA.

This is because in the said contract, PELCO II can nominate a bilateral contract quantity (BCQ) provided that the 35% lower limit of the contract capacity is maintained. The PSA with Bacman Geothermal Inc. (BGI) under the ERC Case No. 2016-175 RC accounts for the bulk of MWh Offtake.

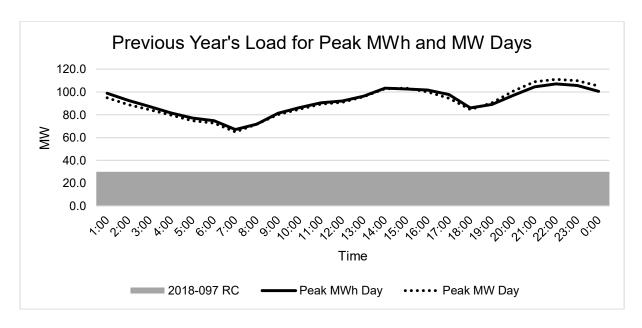


WESM Offtake decreased a little from 216,002 MWh in 2018 to 215,156 MWh in 2019 at a rate of 0.39% due to increase offtake from the bilateral contract with BGI and SMEC. The share of WESM in the total Offtake ranged from 36.50% in year 2018 to 33.61% in 2019 (see *Annex "E"* for details).

Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 39.017 MW and the maximum coincident load is 111.089 MW for the last historical year (see *Annex "F"* for details).



The Peak MW and MWh occurred on June 20, 2019 at 9:45 P.M. due to high electricity consumption brought by the hot weather (see *Annex "F"* for details).



The Non-coincident Peak Demand is 113.59 MW, which is around 64.26% of the total substation capacity of 176.75 MVA at a power factor of 96.36%. The load factor or the ratio between the Average Load of 72.73 MW and the Non-coincident Peak Demand is 64.03%. A safe estimate of the true minimum load is the fifth percentile load of 51.13 MW which is 45.02% of the Non-coincident Peak Demand (see *Annex "F"* for details).

Metering Point	Substation MVA	Substation Peak MW	Location
MF3MHERPEL201	37.5	30.739	San Matias, Guagua, Pampanga
MF3MMEXPEL202	64.25	40.785	Mabiga, Mabalacat City, Pampanga
MF3MHERPEL204	18.75	12.065	Pio, Porac, Pampanga
MF3MHERPEL205	12.5	10.061	Remedios, Lubao, Pampanga
MF3MHERPEL206	12.5	8.308	Santa Cruz, Lubao, Pampanga
MF3MHERPEL207	31.25	11.551	Manibaug, Porac, Pampanga

The substations loaded at above 70% are MF3MHERPEL201 and MF3MHERPEL205. This loading problem will be solved by uprating and additional substation projects as indicated in the CAPEX program (see *Annex "F"* for details).

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	92.52	30.00	0.00	0.000	0.00	32%	32%	-62.52
	Feb	93.09	30.00	0.00	0.000	0.00	32%	32%	-63.09
	Mar	104.79	30.00	0.00	0.000	0.00	29%	29%	-74.79
	Apr	114.27	30.00	0.00	0.000	0.00	26%	26%	-84.27
	May	116.51	30.00	0.00	0.000	0.00	26%	26%	-86.51
	Jun	118.97	70.00	0.00	0.000	0.00	59%	59%	-48.97
	Jul	111.59	70.00	0.00	0.000	0.00	63%	63%	-41.59
	Aug	109.49	70.00	0.00	0.000	0.00	64%	64%	-39.49
	Sep	108.86	70.00	0.00	0.000	0.00	64%	64%	-38.86
	Oct	110.70	70.00	0.00	0.000	0.00	63%	63%	-40.70
	Nov	106.44	70.00	0.00	0.000	0.00	66%	66%	-36.44
	Dec	103.81	70.00	0.00	0.000	0.00	67%	67%	-33.81
2021	Jan	99.29	30.00	0.00	40.000	0.00	30%	70%	-29.29
	Feb	99.90	30.00	0.00	40.000	0.00	30%	70%	-29.90
	Mar	112.46	30.00	0.00	40.000	0.00	27%	62%	-42.46
	Apr	122.64	30.00	0.00	40.000	0.00	24%	57%	-52.64
	May	125.03	30.00	0.00	40.000	0.00	24%	56%	-55.03
	Jun	127.68	30.00	0.00	40.000	0.00	23%	55%	-57.68
	Jul	119.76	30.00	0.00	40.000	0.00	25%	58%	-49.76
	Aug	117.50	30.00	0.00	40.000	0.00	26%	60%	-47.50
	Sep	116.83	30.00	0.00	40.000	0.00	26%	60%	-46.83
	Oct	118.80	30.00	0.00	40.000	0.00	25%	59%	-48.80
	Nov	114.23	30.00	0.00	40.000	0.00	26%	61%	-44.23

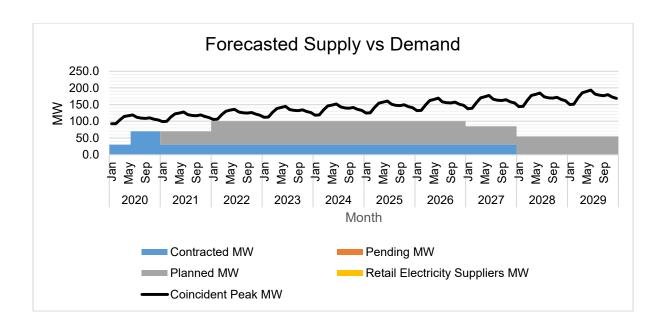
	Dec	111.41	30.00	0.00	40.000	0.00	27%	63%	-41.41
2022	Jan	105.78	30.00	0.00	70.000	0.00	28%	95%	-5.78
	Feb	106.43	30.00	0.00	70.000	0.00	28%	94%	-6.43
	Mar	119.81	30.00	0.00	70.000	0.00	25%	83%	-19.81
	Apr	130.65	30.00	0.00	70.000	0.00	23%	77%	-30.65
	May	133.20	30.00	0.00	70.000	0.00	23%	75%	-33.20
	Jun	136.02	30.00	0.00	70.000	0.00	22%	74%	-36.02
	Jul	127.58	30.00	0.00	70.000	0.00	24%	78%	-27.58
	Aug	125.18	30.00	0.00	70.000	0.00	24%	80%	-25.18
	Sep	124.46	30.00	0.00	70.000	0.00	24%	80%	-24.46
	Oct	126.57	30.00	0.00	70.000	0.00	24%	79%	-26.57
	Nov	121.69	30.00	0.00	70.000	0.00	25%	82%	-21.69
	Dec	118.69	30.00	0.00	70.000	0.00	25%	84%	-18.69
2023	Jan	112.22	30.00	0.00	70.000	0.00	27%	89%	-12.22
	Feb	112.91	30.00	0.00	70.000	0.00	27%	89%	-12.91
	Mar	127.10	30.00	0.00	70.000	0.00	24%	79%	-27.10
	Apr	138.60	30.00	0.00	70.000	0.00	22%	72%	-38.60
	May	141.31	30.00	0.00	70.000	0.00	21%	71%	-41.31
	Jun	144.30	30.00	0.00	70.000	0.00	21%	69%	-44.30
	Jul	135.35	30.00	0.00	70.000	0.00	22%	74%	-35.35
	Aug	132.79	30.00	0.00	70.000	0.00	23%	75%	-32.79
	Sep	132.04	30.00	0.00	70.000	0.00	23%	76%	-32.04
	Oct	134.27	30.00	0.00	70.000	0.00	22%	74%	-34.27
	Nov	129.10	30.00	0.00	70.000	0.00	23%	77%	-29.10
	Dec	125.91	30.00	0.00	70.000	0.00	24%	79%	-25.91
2024	Jan	118.27	30.00	0.00	70.000	0.00	25%	85%	-18.27
	Feb	119.00	30.00	0.00	70.000	0.00	25%	84%	-19.00
	Mar	133.95	30.00	0.00	70.000	0.00	22%	75%	-33.95
	Apr	146.08	30.00	0.00	70.000	0.00	21%	68%	-46.08

	May	148.93	30.00	0.00	70.000	0.00	20%	67%	-48.93
	Jun	152.08	30.00	0.00	70.000	0.00	20%	66%	-52.08
	Jul	142.65	30.00	0.00	70.000	0.00	21%	70%	-42.65
	Aug	139.96	30.00	0.00	70.000	0.00	21%	71%	-39.96
	Sep	139.16	30.00	0.00	70.000	0.00	22%	72%	-39.16
	Oct	141.51	30.00	0.00	70.000	0.00	21%	71%	-41.51
	Nov	136.06	30.00	0.00	70.000	0.00	22%	73%	-36.06
	Dec	132.70	30.00	0.00	70.000	0.00	23%	75%	-32.70
2025	Jan	125.07	30.00	0.00	70.000	0.00	24%	80%	-25.07
	Feb	125.84	30.00	0.00	70.000	0.00	24%	79%	-25.84
	Mar	141.66	30.00	0.00	70.000	0.00	21%	71%	-41.66
	Apr	154.48	30.00	0.00	70.000	0.00	19%	65%	-54.48
	May	157.50	30.00	0.00	70.000	0.00	19%	63%	-57.50
	Jun	160.83	30.00	0.00	70.000	0.00	19%	62%	-60.83
	Jul	150.85	30.00	0.00	70.000	0.00	20%	66%	-50.85
	Aug	148.01	30.00	0.00	70.000	0.00	20%	68%	-48.01
	Sep	147.16	30.00	0.00	70.000	0.00	20%	68%	-47.16
	Oct	149.65	30.00	0.00	70.000	0.00	20%	67%	-49.65
	Nov	143.89	30.00	0.00	70.000	0.00	21%	69%	-43.89
	Dec	140.34	30.00	0.00	70.000	0.00	21%	71%	-40.34
2026	Jan	131.49	30.00	0.00	70.000	0.00	23%	76%	-31.49
	Feb	132.29	30.00	0.00	70.000	0.00	23%	76%	-32.29
	Mar	148.92	30.00	0.00	70.000	0.00	20%	67%	-48.92
	Apr	162.40	30.00	0.00	70.000	0.00	18%	62%	-62.40
	May	165.57	30.00	0.00	70.000	0.00	18%	60%	-65.57
	Jun	169.08	30.00	0.00	70.000	0.00	18%	59%	-69.08
	Jul	158.59	30.00	0.00	70.000	0.00	19%	63%	-58.59
	Aug	155.60	30.00	0.00	70.000	0.00	19%	64%	-55.60
	Sep	154.71	30.00	0.00	70.000	0.00	19%	65%	-54.71

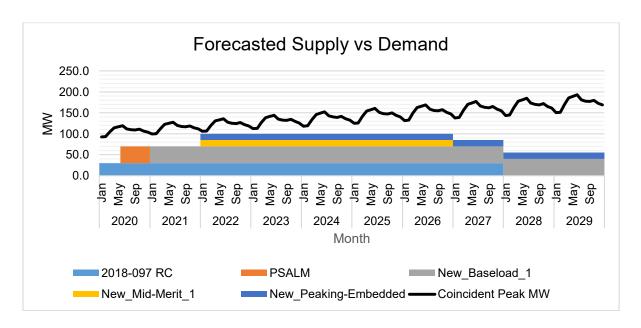
	Oct	157.33	30.00	0.00	70.000	0.00	19%	64%	-57.33
	Nov	151.27	30.00	0.00	70.000	0.00	20%	66%	-51.27
	Dec	147.53	30.00	0.00	70.000	0.00	20%	68%	-47.53
2027	Jan	137.83	30.00	0.00	55.000	0.00	22%	62%	-52.83
	Feb	138.68	30.00	0.00	55.000	0.00	22%	61%	-53.68
	Mar	156.11	30.00	0.00	55.000	0.00	19%	54%	-71.11
	Apr	170.24	30.00	0.00	55.000	0.00	18%	50%	-85.24
	May	173.56	30.00	0.00	55.000	0.00	17%	49%	-88.56
	Jun	177.23	30.00	0.00	55.000	0.00	17%	48%	-92.23
	Jul	166.24	30.00	0.00	55.000	0.00	18%	51%	-81.24
	Aug	163.10	30.00	0.00	55.000	0.00	18%	52%	-78.10
	Sep	162.17	30.00	0.00	55.000	0.00	18%	52%	-77.17
	Oct	164.91	30.00	0.00	55.000	0.00	18%	52%	-79.91
	Nov	158.56	30.00	0.00	55.000	0.00	19%	54%	-73.56
	Dec	154.65	30.00	0.00	55.000	0.00	19%	55%	-69.65
2028	Jan	143.70	0.00	0.00	55.000	0.00	0%	38%	-88.70
	Feb	144.59	0.00	0.00	55.000	0.00	0%	38%	-89.59
	Mar	162.76	0.00	0.00	55.000	0.00	0%	34%	-107.76
	Apr	177.49	0.00	0.00	55.000	0.00	0%	31%	-122.49
	May	180.96	0.00	0.00	55.000	0.00	0%	30%	-125.96
	Jun	184.79	0.00	0.00	55.000	0.00	0%	30%	-129.79
	Jul	173.32	0.00	0.00	55.000	0.00	0%	32%	-118.32
	Aug	170.05	0.00	0.00	55.000	0.00	0%	32%	-115.05
	Sep	169.08	0.00	0.00	55.000	0.00	0%	33%	-114.08
	Oct	171.94	0.00	0.00	55.000	0.00	0%	32%	-116.94
	Nov	165.32	0.00	0.00	55.000	0.00	0%	33%	-110.32
	Dec	161.24	0.00	0.00	55.000	0.00	0%	34%	-106.24
2029	Jan	150.28	0.00	0.00	55.000	0.00	0%	37%	-95.28
	Feb	151.21	0.00	0.00	55.000	0.00	0%	36%	-96.21

Mar	170.21	0.00	0.00	55.000	0.00	0%	32%	-115.21
Apr	185.62	0.00	0.00	55.000	0.00	0%	30%	-130.62
May	189.25	0.00	0.00	55.000	0.00	0%	29%	-134.25
Jun	193.25	0.00	0.00	55.000	0.00	0%	28%	-138.25
Jul	181.26	0.00	0.00	55.000	0.00	0%	30%	-126.26
Aug	177.84	0.00	0.00	55.000	0.00	0%	31%	-122.84
Sep	176.82	0.00	0.00	55.000	0.00	0%	31%	-121.82
Oct	179.82	0.00	0.00	55.000	0.00	0%	31%	-124.82
Nov	172.89	0.00	0.00	55.000	0.00	0%	32%	-117.89
Dec	168.62	0.00	0.00	55.000	0.00	0%	33%	-113.62

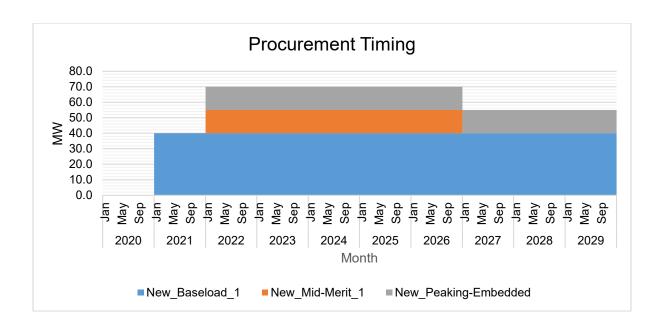
The Peak Demand was forecasted using the 2019 historical data and was assumed to occur on the month of June due to expected hot weather caused by the summer season. Monthly Peak Demand is at its lowest on the month of January due to cold weather (see *Annex "F"* for details). In general, Peak Demand is expected to grow at a rate of 7.80% annually for the last 5 years (see *Annex "D"* for details).



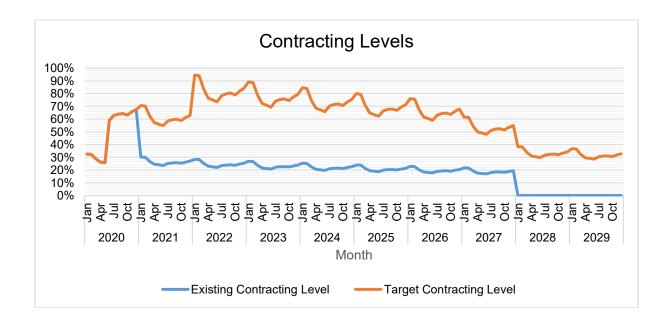
The available supply is generally below the Peak Demand. This is because other supply is still under the bidding process.



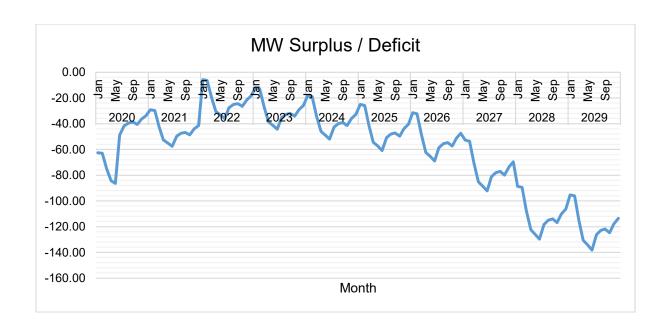
Of the available supply, the largest for the year 2020 is 40 MW from Power Sector Assets and Liabilities Management (PSALM). This is followed by 30 MW from BGI.



The first wave of supply procurement will be for 40 MW baseload planned to be available by the month of January 2021. This will be followed by 15 MW Mid-merit and 15 MW Embedded-peaking both planned to be available by the month of January 2022.



Currently, there is under-contacted by an average of 36.25% for year 2020. The highest target contracting level is 94.53% which is expected to occur on January 2022. The lowest target contracting level is 25.75% which occurred on May 2020 (see *Annexes "G1"* and *"G2"* for details).



Currently, there is under-contacted by an average of 39.98 MW. The highest deficit is 138.25 MW which is expected to occur on the month of June 2029. The lowest deficit is 5.78 MW which is expected to occur on the month of January 2022 (see *Annexes "G1"* and *"G2"* for details).

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2020	Jan	49,606	43,367	4,996	2.51%	10.33%
	Feb	49,462	43,242	4,981	2.51%	10.33%
	Mar	50,751	44,368	5,111	2.51%	10.33%
	Apr	65,675	57,415	6,614	2.51%	10.33%
	May	58,607	51,237	5,902	2.51%	10.33%
	Jun	65,861	57,578	6,633	2.51%	10.33%
	Jul	58,004	50,709	5,841	2.51%	10.33%
	Aug	57,093	49,913	5,750	2.51%	10.33%
	Sep	55,858	48,833	5,625	2.51%	10.33%
	Oct	59,803	52,282	6,023	2.51%	10.33%
	Nov	60,356	52,765	6,078	2.51%	10.33%
	Dec	56,378	49,288	5,678	2.51%	10.33%
2021	Jan	53,060	46,609	5,121	2.51%	9.90%
	Feb	52,913	46,480	5,107	2.51%	9.90%
	Mar	54,309	47,707	5,242	2.51%	9.90%
	Apr	70,344	61,792	6,789	2.51%	9.90%
	May	62,778	55,146	6,059	2.51%	9.90%
	Jun	70,551	61,974	6,809	2.51%	9.90%
	Jul	62,090	54,542	5,993	2.51%	9.90%

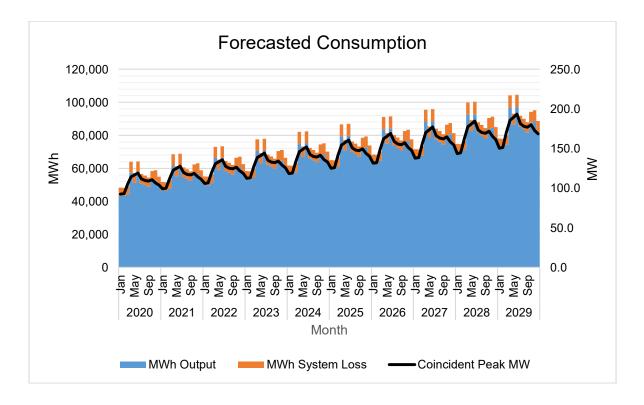
	ı	1		1	1	1
	Aug	61,084	53,658	5,896	2.51%	9.90%
	Sep	59,746	52,483	5,766	2.51%	9.90%
	Oct	63,985	56,206	6,176	2.51%	9.90%
	Nov	64,587	56,735	6,234	2.51%	9.90%
	Dec	60,300	52,969	5,820	2.51%	9.90%
2022	Jan	56,498	49,867	5,216	2.51%	9.47%
	Feb	56,346	49,732	5,202	2.51%	9.47%
	Mar	57,851	51,060	5,341	2.51%	9.47%
	Apr	74,998	66,195	6,924	2.51%	9.47%
	May	66,933	59,076	6,179	2.51%	9.47%
	Jun	75,226	66,396	6,945	2.51%	9.47%
	Jul	66,160	58,394	6,108	2.51%	9.47%
	Aug	65,057	57,421	6,006	2.51%	9.47%
	Sep	63,615	56,148	5,873	2.51%	9.47%
	Oct	68,149	60,150	6,292	2.51%	9.47%
	Nov	68,799	60,723	6,352	2.51%	9.47%
	Dec	64,201	56,665	5,927	2.51%	9.47%
2023	Jan	59,908	53,127	5,280	2.51%	9.04%
	Feb	59,749	52,986	5,266	2.51%	9.04%
	Mar	61,361	54,416	5,408	2.51%	9.04%
	Apr	79,617	70,605	7,017	2.51%	9.04%
	May	71,056	63,014	6,262	2.51%	9.04%
	Jun	79,866	70,826	7,039	2.51%	9.04%
	Jul	70,198	62,252	6,187	2.51%	9.04%
	Aug	68,997	61,188	6,081	2.51%	9.04%
	Sep	67,451	59,816	5,945	2.51%	9.04%
	Oct	72,280	64,099	6,370	2.51%	9.04%
	Nov	72,976	64,716	6,431	2.51%	9.04%
	Dec	68,069	60,365	5,999	2.51%	9.04%
2024	Jan	63,285	56,388	5,312	2.51%	8.61%
	Feb	63,120	56,240	5,298	2.51%	8.61%
	Mar	64,838	57,771	5,442	2.51%	8.61%
	Apr	84,193	75,016	7,067	2.51%	8.61%
	May	75,141	66,951	6,307	2.51%	8.61%
	Jun	84,462	75,257	7,090	2.51%	8.61%
	Jul	74,198	66,111	6,228	2.51%	8.61%
	Aug	72,900	64,954	6,119	2.51%	8.61%
	Sep	71,250	63,484	5,981	2.51%	8.61%
	Oct	76,371	68,047	6,411	2.51%	8.61%
	Nov	77,113	68,708	6,473	2.51%	8.61%
	Dec	71,899	64,062	6,035	2.51%	8.61%
2025	Jan	66,719	59,635	5,412	2.51%	8.32%
	Feb	66,545	59,480	5,398	2.51%	8.32%
	Mar	68,370	61,112	5,546	2.51%	8.32%
	Apr	88,845	79,413	7,206	2.51%	8.32%
	May	79,292	70,874	6,431	2.51%	8.32%

				1		
	Jun	89,135	79,672	7,230	2.51%	8.32%
	Jul	78,265	69,956	6,348	2.51%	8.32%
	Aug	76,867	68,706	6,235	2.51%	8.32%
	Sep	75,112	67,137	6,092	2.51%	8.32%
	Oct	80,531	71,981	6,532	2.51%	8.32%
	Nov	81,318	72,684	6,596	2.51%	8.32%
	Dec	75,791	67,745	6,148	2.51%	8.32%
2026	Jan	70,116	62,871	5,489	2.51%	8.03%
	Feb	69,934	62,707	5,475	2.51%	8.03%
	Mar	71,865	64,438	5,626	2.51%	8.03%
	Apr	93,449	83,792	7,316	2.51%	8.03%
	May	83,400	74,781	6,529	2.51%	8.03%
	Jun	93,760	84,070	7,340	2.51%	8.03%
	Jul	82,291	73,787	6,442	2.51%	8.03%
	Aug	80,793	72,443	6,325	2.51%	8.03%
	Sep	78,933	70,776	6,179	2.51%	8.03%
	Oct	84,648	75,900	6,627	2.51%	8.03%
	Nov	85,479	76,645	6,692	2.51%	8.03%
	Dec	79,642	71,412	6,235	2.51%	8.03%
2027	Jan	73,477	66,092	5,544	2.51%	7.74%
	Feb	73,286	65,920	5,530	2.51%	7.74%
	Mar	75,320	67,750	5,683	2.51%	7.74%
	Apr	98,002	88,152	7,395	2.51%	7.74%
	May	87,461	78,670	6,599	2.51%	7.74%
	Jun	98,332	88,449	7,420	2.51%	7.74%
	Jul	86,273	77,601	6,510	2.51%	7.74%
	Aug	84,676	76,165	6,389	2.51%	7.74%
	Sep	82,712	74,399	6,241	2.51%	7.74%
	Oct	88,719	79,802	6,694	2.51%	7.74%
	Nov	89,593	80,588	6,760	2.51%	7.74%
	Dec	83,450	75,062	6,297	2.51%	7.74%
2028	Jan	76,799	69,297	5,578	2.51%	7.45%
	Feb	76,599	69,116	5,563	2.51%	7.45%
	Mar	78,735	71,043	5,718	2.51%	7.45%
	Apr	102,501	92,489	7,445	2.51%	7.45%
	May	91,473	82,537	6,644	2.51%	7.45%
	Jun	102,850	92,803	7,470	2.51%	7.45%
	Jul	90,209	81,397	6,552	2.51%	7.45%
	Aug	88,514	79,868	6,429	2.51%	7.45%
	Sep	86,448	78,003	6,279	2.51%	7.45%
	Oct	92,744	83,684	6,736	2.51%	7.45%
	Nov	93,660	84,511	6,802	2.51%	7.45%
	Dec	87,212	78,693	6,334	2.51%	7.45%
2029	Jan	80,079	72,483	5,590	2.51%	7.16%
	Feb	79,870	72,294	5,575	2.51%	7.16%
	Mar	82,105	74,317	5,731	2.51%	7.16%

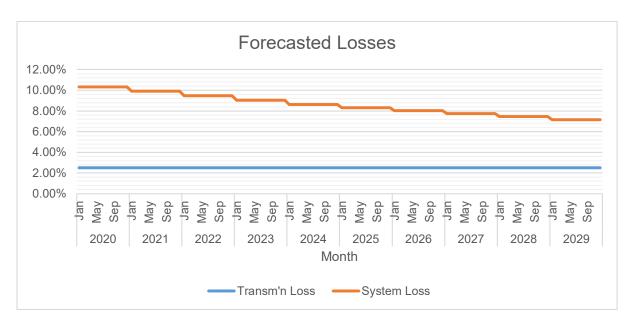
Apr	106,943	96,798	7,465	2.51%	7.16%
May	95,433	86,380	6,661	2.51%	7.16%
Jun	107,311	97,131	7,490	2.51%	7.16%
Jul	94,097	85,171	6,568	2.51%	7.16%
Aug	92,305	83,549	6,443	2.51%	7.16%
Sep	90,137	81,587	6,292	2.51%	7.16%
Oct	96,718	87,543	6,751	2.51%	7.16%
Nov	97,675	88,410	6,818	2.51%	7.16%
Dec	90,927	82,302	6,347	2.51%	7.16%

The MWh Offtake was forecasted by projecting first the MWh sales per customer type then add the projected MWh system loss (see *Annex "H"* for details). The MW Demand was projected using an assumed load factor of 64.13% annually which is the load factor last 2019. (*See Annex F for the details*).

System Loss was calculated through a Load Flow Study conducted on 2019 by System Planning of PELCO II using Synergi software. Based on the same study, the Distribution System cannot adequately convey electricity to customers.



MWh Output was expected to grow at a rate of 5.44% annually for the next five (5) years (see *Annex "I"* for details).



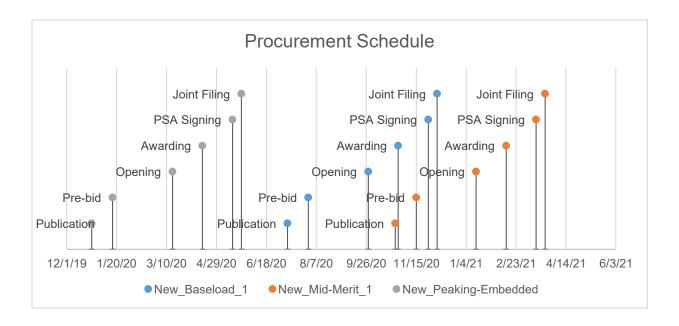
Transmission Loss is assumed to be at 2.51% while Distribution System Loss is expected to reach 10.33% by 2020 and target to be reduce to 7.16% by year 2029 (see *Annex "I"* for details).

Power Supply

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2018-097 RC	Base	Bac-Man Geothermal, Inc.	30.00	262,800	09/26/2019	12/25/2027
PSALM	Base	Power Sector Assets and Liabilities Management Corporation	40.00	123,264	05/26/2020	12/25/2020

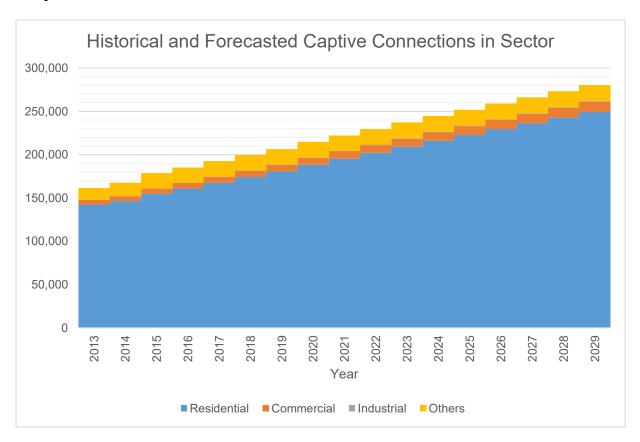
The PSA with Bacman Geothermal, Inc. (BGI) filed with ERC under Case No. 2018-097 RC was procured through CSP pursuant to government regulations. It was selected to provide for baseload requirements. The PSA with PSALM is intended to fill out the supply gap following the expiration of the 30 MW PSC with SMEC per ERC Case No. 2015-029 RC effective December 26, 2019.

	New_Baseload_1	New_Mid-Merit_1	New_Peaking- Embedded
Туре	Base	Intermediate	Peaking
Minimum MW	40.00	15.00	15.00
Minimum MWh/yr	350,400	78,840	19,710
PSA Start	12/26/2020	12/26/2021	12/26/2022
PSA End	12/25/2030	12/25/2026	12/25/2037
Publication	7/9/2020	10/25/2021	12/26/2019
Pre-bid	8/11/2020	11/15/2021	2/5/2020
Opening	9/17/2020	1/14/2022	7/24/2020
Awarding	9/27/2020	2/13/2022	9/27/2020
PSA Signing	7/12/2021	3/15/2022	6/10/2021
Joint Filing	10/15/2021	3/24/2022	11/24/2021



For the procurement of 40 MW of supply which is planned to be available on January 2021, the first publication or launch of CSP will be on July 2020. Joint filing is planned on December, 2020, or 150 days later, in accordance with DOE's 2018 CSP Policy.

Captive Customer Connections



The number of residential connections is expected to grow at a rate of 2.80% annually. Said customer class is expected to account for 69.61% of the total consumption.

The number of commercial connections is expected to grow at a rate of 3.50% annually. Said customer class is expected to account for 21.15% of the total consumption.

The number of industrial connections is expected to grow at a rate of 7.53% annually. Said customer class is expected to account for 4.20% of the total consumption.

The number of other connections which consist of irrigation, public buildings and street light is expected to grow at a rate of 0.32% annually. Said customer class is expected to account for 5.04% of the total consumption.

(See Annex "I" for details).