

Power Supply Procurement Plan 2024

DAVAO DEL SUR ELECTRIC COOPERATIVE, INC.

At the height of DASURECO's responsibility for total electrification considers whopping challenge in attaining excellent service, yet with the collar of reliance from its consumers and firm partnership with the local government, DASURECO continues to grow and be of service to the people of Davao del Sur and Davao Occidental.

True to its mission in providing power at a least cost manner, DASURECO crafted this Power Supply Procurement Plan to cope with the growing power requirement of its franchise area with ample quantity of contingency.

Historical Consumption Data

Table 1. DASURECO's Historical Consumption from 2000-2023

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Discrepancy	Transm'n Loss	System Loss
2000	23.30	104,191	0	94,513	84,468	10,045	46%	0.00%	9.29%	10.63%
2001	24.26	114,456	0	104,674	95,203	9,471	49%	0.00%	8.55%	9.05%
2002	27.92	126,818	0	116,695	105,259	11,437	48%	0.00%	7.98%	9.80%
2003	27.61	139,704	0	139,155	126,441	12,714	58%	0.00%	0.39%	9.14%
2004	29.05	158,108	0	156,777	140,115	16,663	62%	0.00%	0.84%	10.63%
2005	28.95	155,744	0	155,744	142,083	13,661	61%	0.00%	0.00%	8.77%
2006	29.00	151,560	0	151,560	137,876	13,684	60%	0.00%	0.00%	9.03%
2007	30.00	161,161	0	161,161	147,717	13,444	61%	0.00%	0.00%	8.34%
2008	31.33	167,441	0	167,441	154,952	12,489	61%	0.00%	0.00%	7.46%
2009	34.25	184,227	0	184,227	170,845	13,382	61%	0.00%	0.00%	7.26%
2010	33.12	188,031	0	188,031	176,276	11,755	65%	0.00%	0.00%	6.25%
2011	37.87	206,138	0	206,138	190,179	15,958	62%	0.00%	0.00%	7.74%
2012	39.94	225,039	0	225,039	207,851	17,188	64%	0.00%	0.00%	7.64%
2013	39.47	225,280	0	225,280	207,747	17,532	65%	0.00%	0.00%	7.78%
2014	44.49	261,721	0	261,721	238,811	22,910	67%	0.00%	0.00%	8.75%
2015	48.61	284,429	0	284,429	259,322	25,107	67%	0.00%	0.00%	8.83%
2016	54.06	333,483	0	333,483	305,046	28,437	70%	0.00%	0.00%	8.53%
2017	59.12	348,934	0	348,934	318,689	30,245	67%	0.00%	0.00%	8.67%
2018	63.86	386,329	0	386,329	350,288	36,042	69%	0.00%	0.00%	9.33%
2019	67.87	406,777	0	406,777	373,679	33,099	68%	0.00%	0.00%	8.14%
2020	67.08	403,599	0	403,599	367,190	36,410	69%	0.00%	0.00%	9.02%
2021	73.73	431,428	0	431,428	389,889	41,538	67%	0.00%	0.00%	9.63%
2022	77.86	467,479	0	467,479	424,345	43,134	69%	0.00%	0.00%	9.23%
2023	87.38	519,216	39,672	518,164	468,898	49,266	68%	0.00%	0.20%	9.51%

Table 1 shows the Historical Consumption of **Davao del Sur Electric Cooperative (DASURECO)** from year 2000 to 2023. The coincident peak demand increased from 77.86 MW to 87.38 MW in 2023 at the highest growth rate of 12.2%. The entry of a poultry farm in Hagonoy, Davao del Sur has contributed to this significant increase. Moreover, the economic activity in the franchise area is back to pre-pandemic period.

Correspondingly, the MWh Offtake increased from 467,479 MWh in 2022 to 519,216 MWh in 2023 at a rate of 11.07%. Within the same period, Load Factor is at 68%.

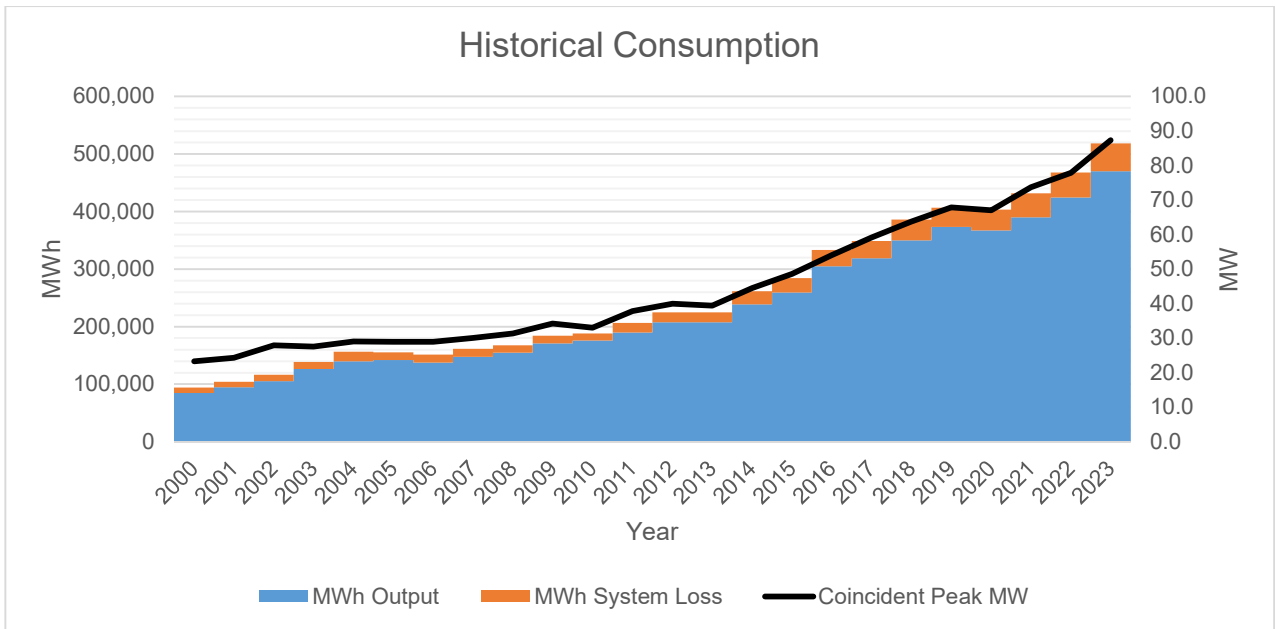


Figure 1. DASURECO's Historical Consumption from 2000-2023

From year 2022 to 2023, MWh Output increased at a rate of 10.79%. Despite the efforts of the cooperative to reduce the system loss, the MWh System Loss increased from 9.23% to 9.51% in year 2023.

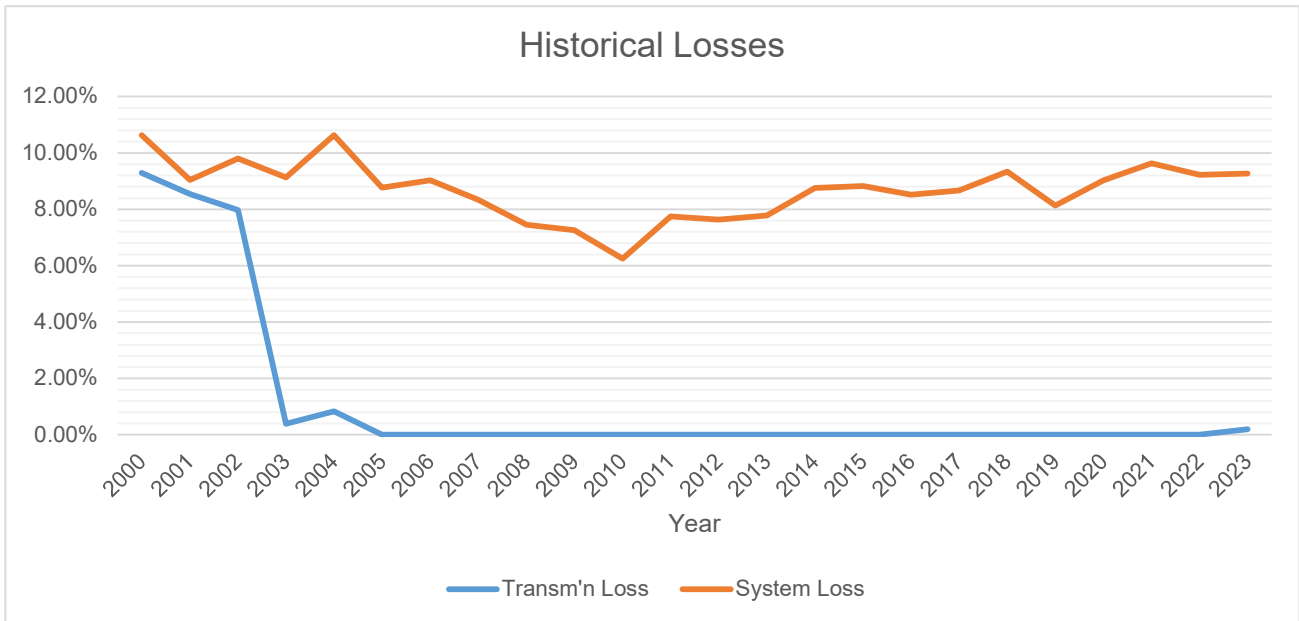


Figure 2. DASURECO's Historical Losses from 2000-2023

Figure 2 gives the historical system loss of DASURECO which ranged from 10% to 6% and peaked at 10.62% for the year 2000. In 2023, Transmission Loss is at 0.2%.

Previous Year's Shares of Energy Sales

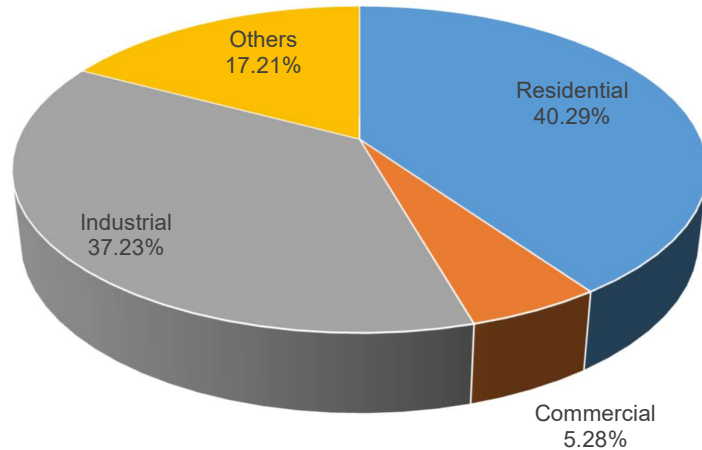


Figure 3. DASURECO's Shares of Energy Sales in 2023

Shown in **Figure 3** that residential customers account for the bulk of energy sales at 40.29% due to the high number of customer connections. The share of Industrial energy sales has increased from 34.62% in 2022 to 37.23% in 2023. On the other hand, commercial customers accounted for only 5.28% of energy sales due to the low number of connections.

MWh Offtake for Last Historical Year

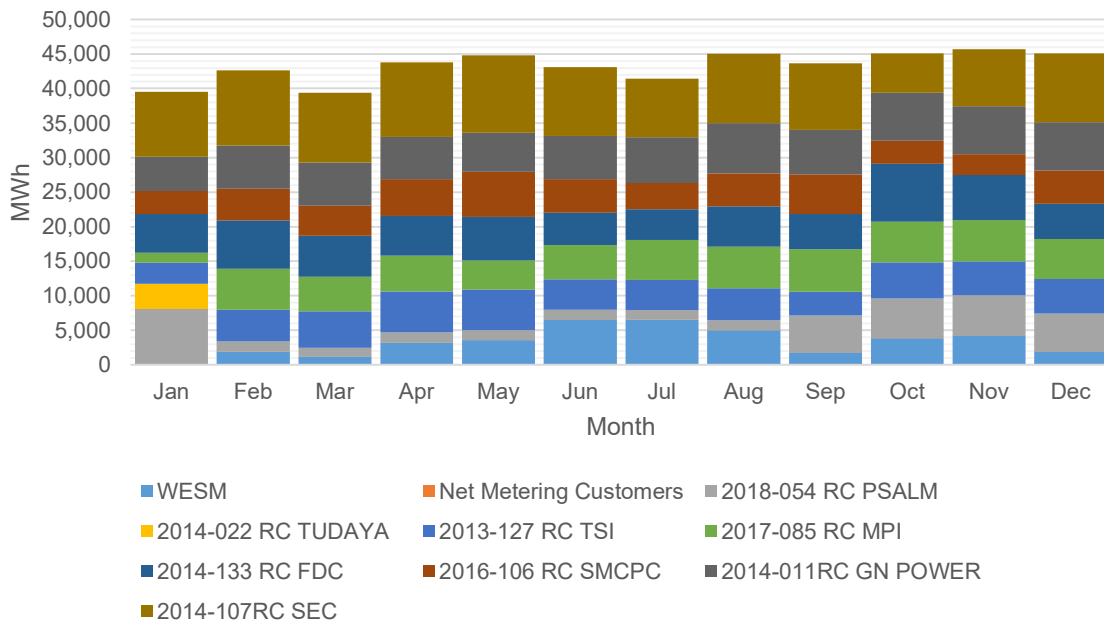
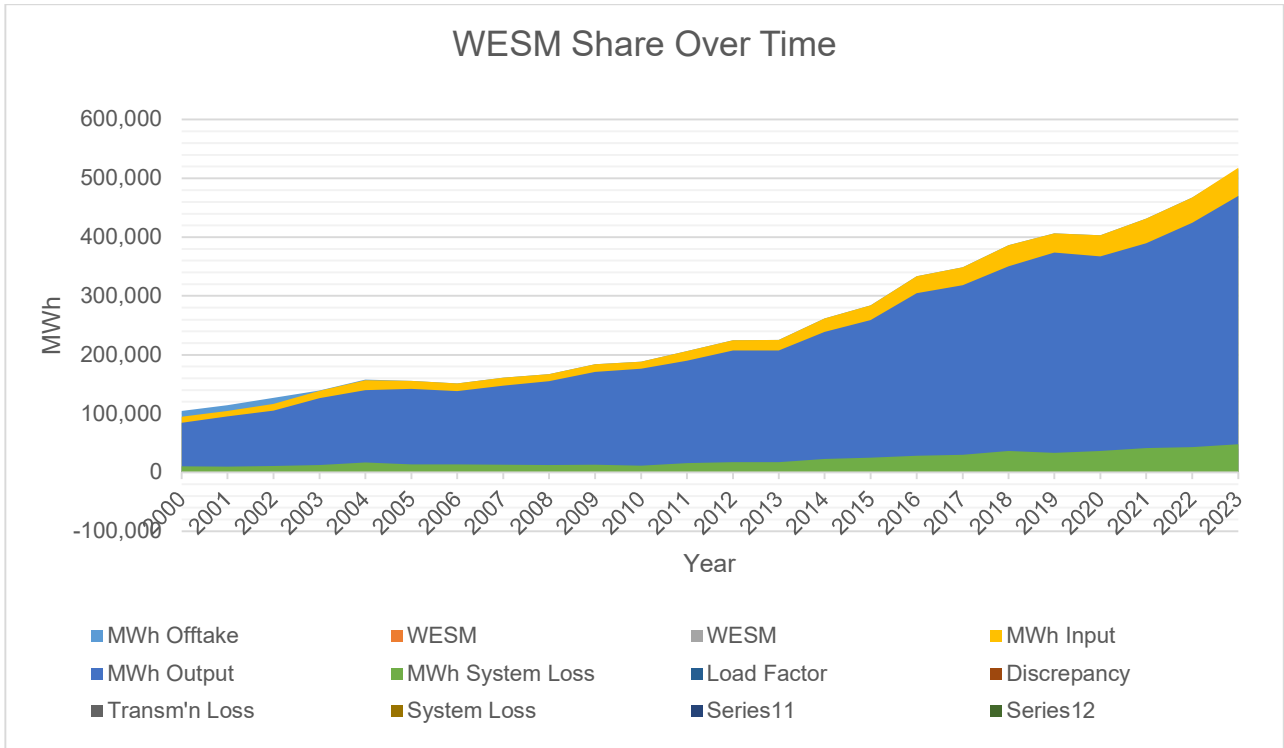


Figure 4. MWh Offtake for Year 2023

In **Figure 4**, it is shown that for 2023, the total Offtake for the last historical year is lower than the quantity stipulated in the Power Supply Agreement (PSA). The PSA with Sarangani Energy Corporation (SEC) accounts for the bulk of MWh Offtake at 22% with 15MW contracted capacity.



In 26 January 2023, the commercial operation of Wholesale Electricity Spot Market (WESM) has commenced. Offtake from WESM is at 7.64%.

Previous Year's Load Profile

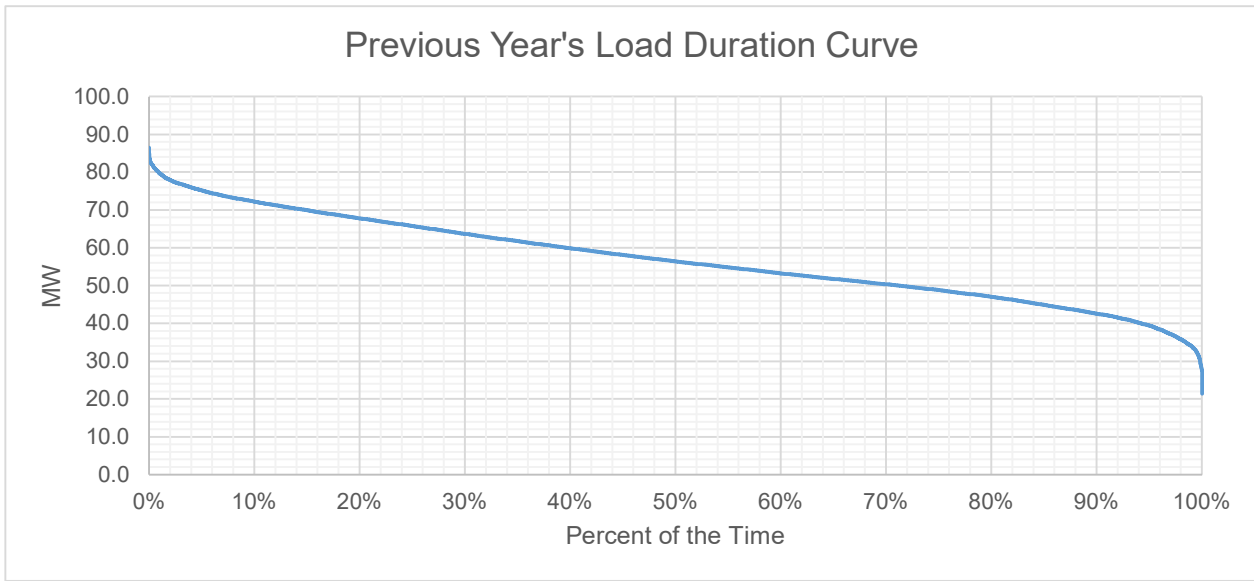


Figure 5. DASURECO's Load Duration Curve in 2023

Based on the Load Duration Curve in **Figure 5**, the minimum load for DASURECO is 39.41MW and the maximum load is 87.38MW for the last historical year.

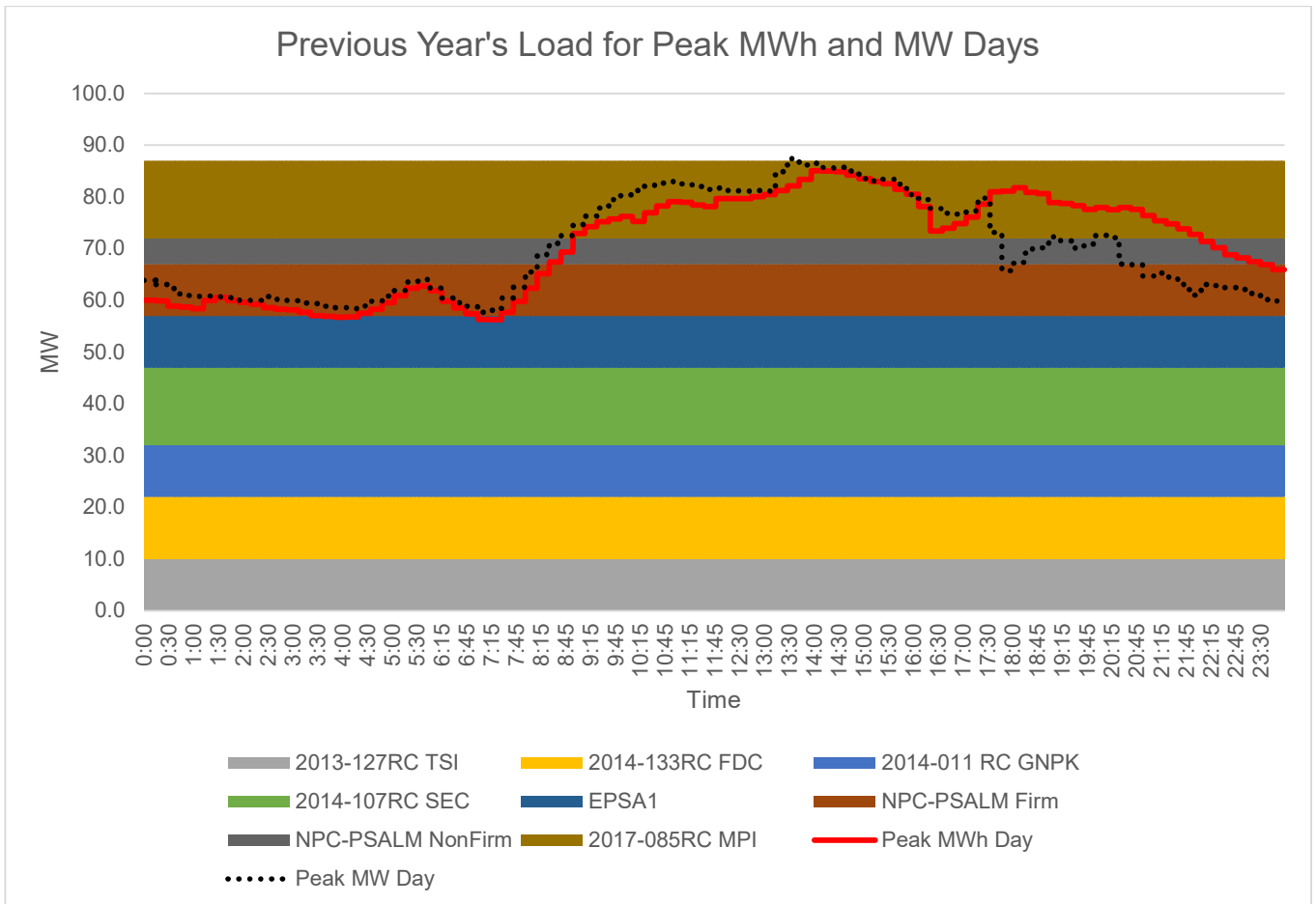


Figure 6. DASURECO's Load for Peak MWh and MW Days in 2023

Figure 6 explains that the peak MW and peak daily MWh of DASURECO occurred on 25 October 2023 due to operation of a poultry farm in Hagonoy, Davao del Sur which is about 4MW. As shown in the Load Curves, the contracted supply is lower than the Peak Demand. During this period, the deficit was sourced in the electricity market.

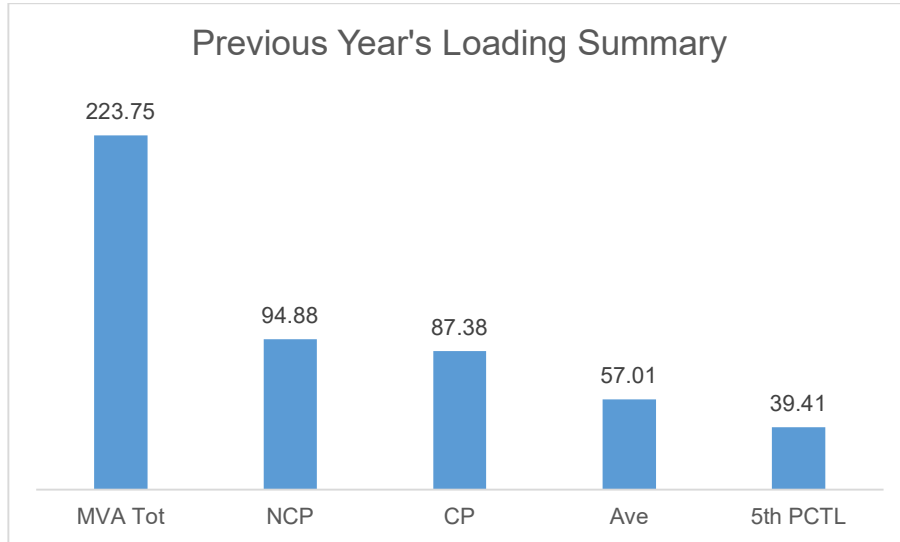


Figure 7. DASURECO's Loading Summary in 2023

In **Figure 7**, the Non-coincident Peak Demand is 94.88MW, which is around 42% of the total maximum substation capacity of 223.75 MVA, at a power factor of 98%. The load factor or the ratio between the Average Load of 57.01 MW and the Coincident Peak Demand is 65%. A safe estimate of the true minimum load is the fifth percentile load of 39.41 MW which is 41% of the Non-coincident Peak Demand.

Table 2. DASURECO's Substation Profile as of December 2023

Metering Point	Substation MVA	Substation Peak MW
M1 PALIGUE	12.5	8.602
M1 MALALAG	6.25	4.591
M2 ZONE II	25	8.644
M2 ASTORGA	12.5	5.278
M2 SMC	60	14.088
M3 MABAMA	12.5	9.354
M3 DOLO	25	5.066
M4 COGON	25	17.850
M4 STA. ANA	25	14.413
M5 CULAMAN	20	6.990

Table 2 shows that the MABAMA, MALALAG, PALIGUE, and COGON Substations are loaded at above 70%. In May 2023, the New 20MVA DOLO Substation was energized solving the capacity problem of MABAMA Substation. The procurement of the 20MVA Poblacion Digos Substation and uprating of the 5MVA Malalag Substation to 20MVA has started in 2023. However, failure occurred due to absence of participating bidders. The cost of the project was based on the NEA Price Index.

Forecasted Consumption Data

Table 3. DASURECO's Forecasted Consumption Data for 2024 to 2033

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	82.59	37.00	50.00	0.000		45%	105%	4.41
	Feb	83.81	37.00	50.00	0.000		44%	104%	3.19
	Mar	84.14	37.00	50.00	0.000		44%	103%	2.86
	Apr	87.96	37.00	50.00	0.000		42%	99%	-0.96
	May	87.14	37.00	50.00	0.000		42%	100%	-0.14
	Jun	85.12	37.00	50.00	0.000		43%	102%	1.88
	Jul	82.41	37.00	50.00	0.000		45%	106%	4.59
	Aug	88.02	37.00	50.00	0.000		42%	99%	-1.02
	Sep	87.71	37.00	50.00	0.000		42%	99%	-0.71
	Oct	92.45	37.00	50.00	0.000		40%	94%	-5.45
	Nov	90.53	37.00	50.00	0.000		41%	96%	-3.53
	Dec	89.02	37.00	40.00	10.000		42%	98%	-2.02
2025	Jan	86.57	42.00	40.00	10.000		49%	106%	5.43
	Feb	87.84	42.00	40.00	10.000		48%	105%	4.16
	Mar	88.19	42.00	40.00	10.000		48%	104%	3.81
	Apr	92.19	42.00	40.00	10.000		46%	100%	-0.19
	May	91.34	42.00	40.00	10.000		46%	101%	0.66
	Jun	89.22	42.00	40.00	10.000		47%	103%	2.78
	Jul	86.38	42.00	40.00	10.000		49%	107%	5.62
	Aug	92.25	42.00	40.00	10.000		46%	100%	-0.25
	Sep	91.93	42.00	40.00	10.000		46%	100%	0.07
	Oct	96.90	42.00	40.00	15.000		43%	100%	0.10
	Nov	94.89	42.00	40.00	15.000		44%	102%	2.11
	Dec	93.30	42.00	40.00	15.000		45%	104%	3.70
2026	Jan	90.49	22.00	40.00	35.000		24%	107%	6.51

	Feb	91.83	22.00	40.00	35.000		24%	106%	5.17
	Mar	92.19	22.00	40.00	35.000		24%	105%	4.81
	Apr	96.37	22.00	40.00	35.000		23%	101%	0.63
	May	95.48	22.00	40.00	35.000		23%	102%	1.52
	Jun	93.27	22.00	40.00	35.000		24%	104%	3.73
	Jul	90.30	22.00	40.00	35.000		24%	107%	6.70
	Aug	96.44	22.00	40.00	35.000		23%	101%	0.56
	Sep	96.10	22.00	40.00	35.000		23%	101%	0.90
	Oct	101.29	22.00	40.00	35.000		22%	96%	-4.29
	Nov	99.20	22.00	40.00	35.000		22%	98%	-2.20
	Dec	97.53	22.00	40.00	35.000		23%	99%	-0.53
2027	Jan	94.54	22.00	40.00	35.000		23%	103%	2.46
	Feb	95.94	22.00	40.00	35.000		23%	101%	1.06
	Mar	96.32	22.00	40.00	35.000		23%	101%	0.68
	Apr	100.69	22.00	40.00	35.000		22%	96%	-3.69
	May	99.76	22.00	40.00	35.000		22%	97%	-2.76
	Jun	97.44	22.00	40.00	35.000		23%	100%	-0.44
	Jul	94.34	22.00	40.00	35.000		23%	103%	2.66
	Aug	100.76	22.00	40.00	35.000		22%	96%	-3.76
	Sep	100.40	22.00	40.00	35.000		22%	97%	-3.40
	Oct	105.83	22.00	40.00	45.000		21%	101%	1.17
	Nov	103.64	22.00	40.00	45.000		21%	103%	3.36
	Dec	101.90	22.00	40.00	45.000		22%	105%	5.10
2028	Jan	98.40	22.00	40.00	45.000		22%	109%	8.60
	Feb	99.85	22.00	40.00	45.000		22%	107%	7.15
	Mar	100.25	22.00	40.00	45.000		22%	107%	6.75
	Apr	104.79	22.00	40.00	45.000		21%	102%	2.21
	May	103.83	22.00	40.00	45.000		21%	103%	3.17
	Jun	101.42	22.00	40.00	45.000		22%	106%	5.58
	Jul	98.19	22.00	40.00	45.000		22%	109%	8.81
	Aug	104.87	22.00	40.00	45.000		21%	102%	2.13
	Sep	104.50	22.00	40.00	45.000		21%	102%	2.50
	Oct	110.15	22.00	40.00	50.000		20%	102%	1.85
	Nov	107.87	22.00	40.00	50.000		20%	104%	4.13
	Dec	106.06	22.00	40.00	50.000		21%	106%	5.94

2029	Jan	102.36	22.00	40.00	50.000		21%	109%	9.64
	Feb	103.87	22.00	40.00	50.000		21%	108%	8.13
	Mar	104.28	22.00	40.00	50.000		21%	107%	7.72
	Apr	109.01	22.00	40.00	50.000		20%	103%	2.99
	May	108.00	22.00	40.00	50.000		20%	104%	4.00
	Jun	105.50	22.00	40.00	50.000		21%	106%	6.50
	Jul	102.14	22.00	40.00	50.000		22%	110%	9.86
	Aug	109.09	22.00	40.00	50.000		20%	103%	2.91
	Sep	108.70	22.00	40.00	50.000		20%	103%	3.30
	Oct	114.58	22.00	40.00	50.000		19%	98%	-2.58
	Nov	112.20	22.00	40.00	50.000		20%	100%	-0.20
	Dec	110.33	22.00	40.00	50.000		20%	102%	1.67
2030	Jan	106.24	22.00	40.00	50.000		21%	105%	5.76
	Feb	107.81	22.00	40.00	50.000		20%	104%	4.19
	Mar	108.24	22.00	40.00	50.000		20%	103%	3.76
	Apr	113.15	22.00	40.00	50.000		19%	99%	-1.15
	May	112.10	22.00	40.00	50.000		20%	100%	-0.10
	Jun	109.50	22.00	40.00	50.000		20%	102%	2.50
	Jul	106.02	22.00	40.00	50.000		21%	106%	5.98
	Aug	113.23	22.00	40.00	50.000		19%	99%	-1.23
	Sep	112.83	22.00	40.00	50.000		19%	99%	-0.83
	Oct	118.93	22.00	40.00	50.000		18%	94%	-6.93
	Nov	116.46	22.00	40.00	50.000		19%	96%	-4.46
	Dec	114.51	22.00	40.00	50.000		19%	98%	-2.51
2031	Jan	110.21	22.00	40.00	50.000		20%	102%	1.79
	Feb	111.83	22.00	40.00	50.000		20%	100%	0.17
	Mar	112.28	22.00	40.00	50.000		20%	100%	-0.28
	Apr	117.37	22.00	40.00	50.000		19%	95%	-5.37
	May	116.28	22.00	40.00	50.000		19%	96%	-4.28
	Jun	113.59	22.00	40.00	50.000		19%	99%	-1.59
	Jul	109.97	22.00	40.00	50.000		20%	102%	2.03
	Aug	117.45	22.00	40.00	60.000		19%	104%	4.55
	Sep	117.03	22.00	40.00	60.000		19%	104%	4.97
	Oct	123.36	22.00	40.00	60.000		18%	99%	-1.36
	Nov	120.81	22.00	40.00	60.000		18%	101%	1.19

	Dec	118.78	22.00	40.00	60.000		19%	103%	3.22
2032	Jan	114.27	22.00	40.00	60.000		19%	107%	7.73
	Feb	115.95	22.00	40.00	60.000		19%	105%	6.05
	Mar	116.41	22.00	40.00	60.000		19%	105%	5.59
	Apr	121.69	22.00	40.00	60.000		18%	100%	0.31
	May	120.57	22.00	40.00	60.000		18%	101%	1.43
	Jun	117.77	22.00	40.00	60.000		19%	104%	4.23
	Jul	114.02	22.00	40.00	60.000		19%	107%	7.98
	Aug	121.78	22.00	40.00	60.000		18%	100%	0.22
	Sep	121.35	22.00	40.00	60.000		18%	101%	0.65
	Oct	127.90	22.00	40.00	60.000		17%	95%	-5.90
	Nov	125.26	22.00	40.00	60.000		18%	97%	-3.26
	Dec	123.16	22.00	40.00	60.000		18%	99%	-1.16
2033	Jan	118.22	22.00	40.00	60.000		19%	103%	3.78
	Feb	119.97	22.00	40.00	60.000		18%	102%	2.03
	Mar	120.44	22.00	40.00	60.000		18%	101%	1.56
	Apr	125.90	22.00	40.00	60.000		17%	97%	-3.90
	May	124.74	22.00	40.00	60.000		18%	98%	-2.74
	Jun	121.85	22.00	40.00	60.000		18%	100%	0.15
	Jul	117.97	22.00	40.00	60.000		19%	103%	4.03
	Aug	125.99	22.00	40.00	60.000		17%	97%	-3.99
	Sep	125.55	22.00	40.00	60.000		18%	97%	-3.55
	Oct	132.33	22.00	40.00	60.000		17%	92%	-10.33
	Nov	129.59	22.00	40.00	60.000		17%	94%	-7.59
	Dec	127.42	22.00	40.00	60.000		17%	96%	-5.42

Table 3 is DASURECO's Forecasted consumption for 2024-2033. The Peak Demand was forecasted using Cubic Logarithmic with Smoothing. Outlier data brought by the series of major earthquakes in 2019, pandemic, and entry of spot load were filtered. As reflected in **Table 3**, it is forecasted to occur in the month of October due to industrial consumers' high consumption in preparation for the holiday season. Monthly Peak Demand is at its lowest in the months of June, July, and August due to heavy amount of rain. In general, Peak Demand is expected to grow at a rate of 5% annually.

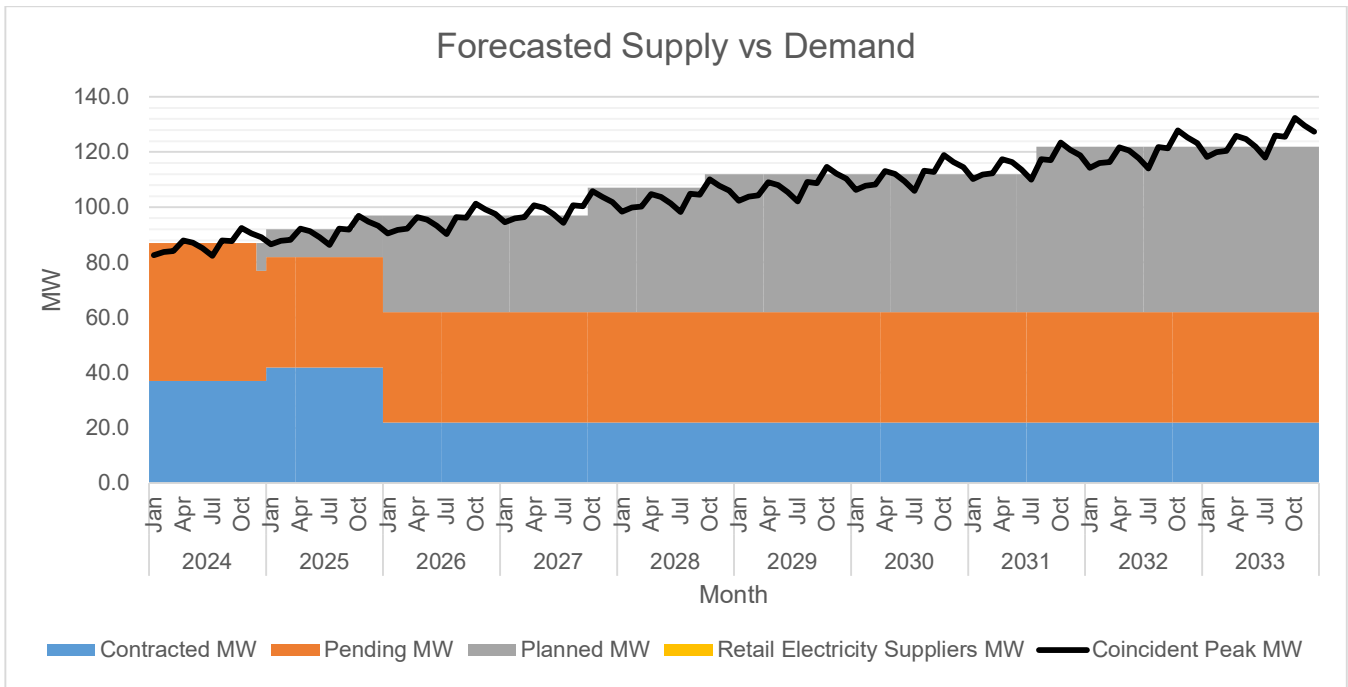


Figure 8. Forecasted Supply and Demand from 2024-2033

Figure 8 shows that the available supply is generally above the Peak Demand. With WESM now in operation in Mindanao, sudden spikes in the demand will be sourced in the market. The average contracting level is at 102%, considering the RCOA is to be implemented in Mindanao soon.

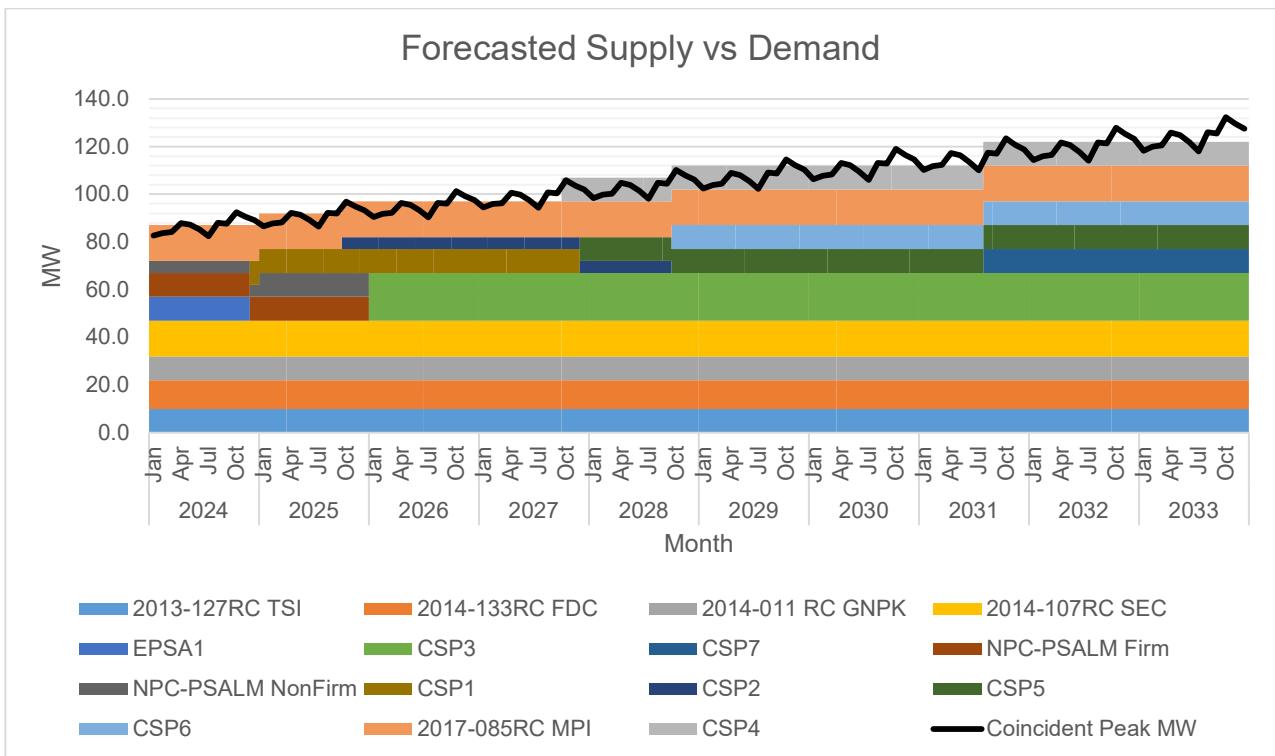


Figure 9. Forecasted Supply per Contract and Demand from 2024-2033

Figure 9 discloses that of the available supply, the largest is 15 MW from Mapalad Partners Inc. (MPI) and Sarangani Energy Corporation. This is followed by 12MW from FDC Misamis Corporation.

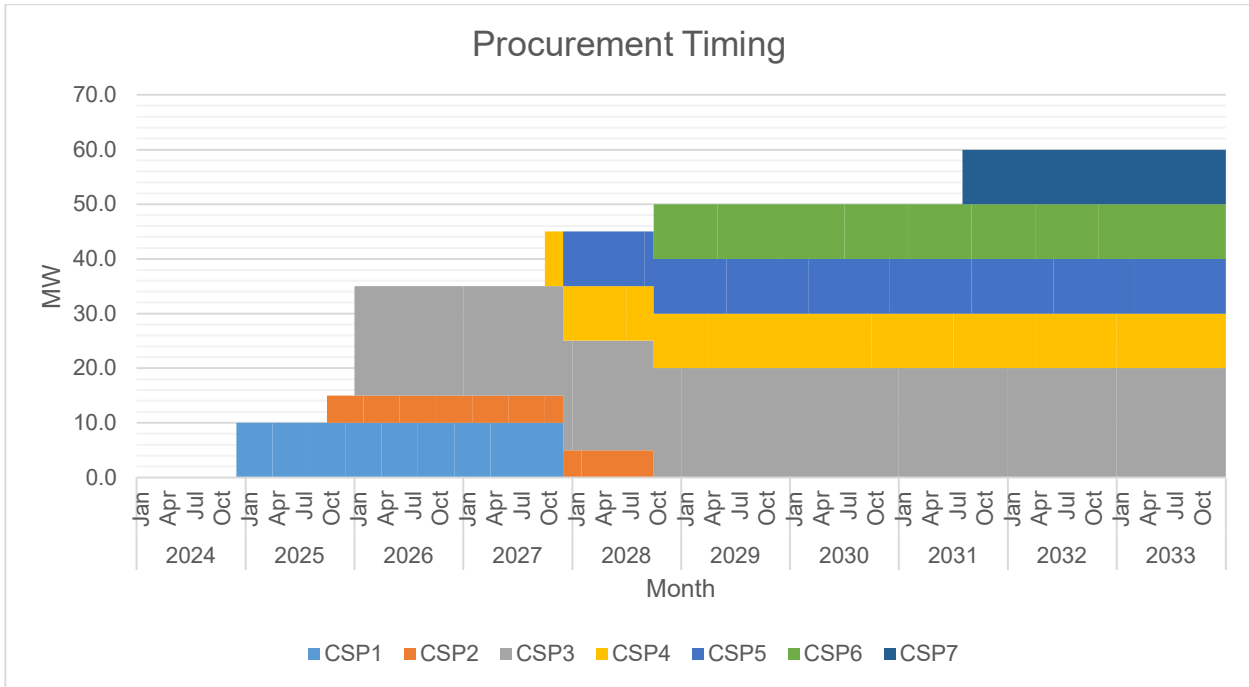


Figure 10. DASURECO's Procurement Timing for 2024-2033

The first wave of supply procurement will be for 15 MW Intermediate type planned to be available in December 2024 and 20 MW Base type planned to be available by the month of January 2026.

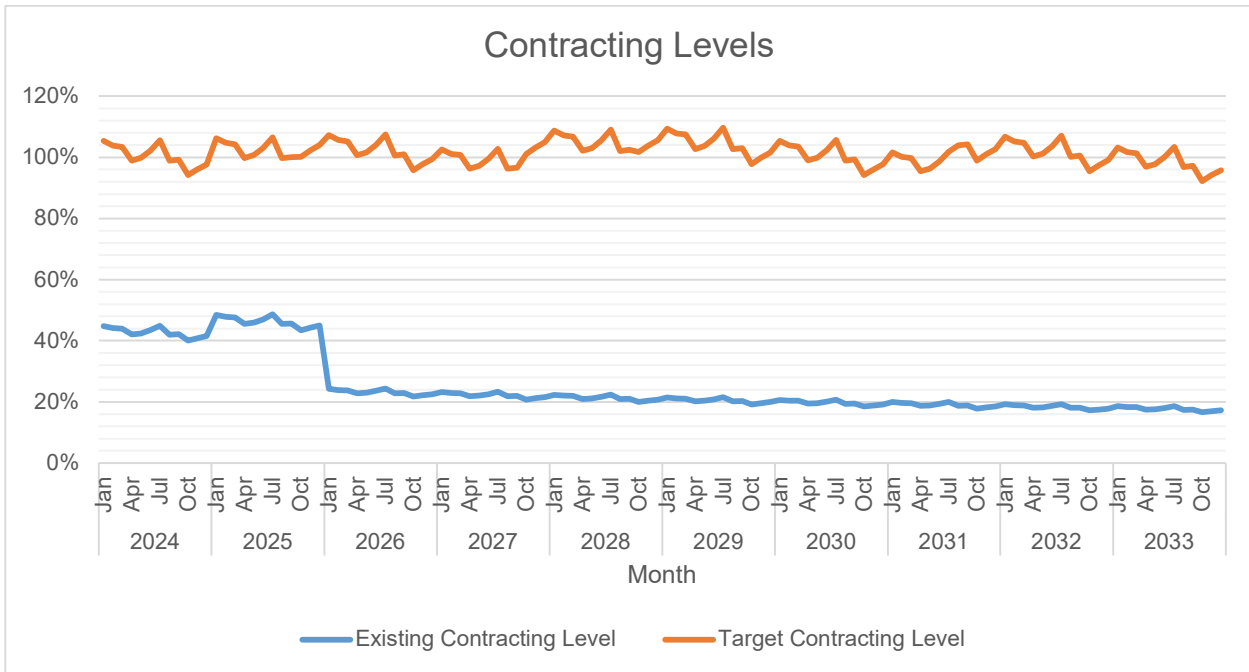


Figure 11. DASURECO's Contracting Level from 2024-2033

For the first half of 2024, the contracting level is at average 102%. On the 2nd half, DASURECO will be needing a new supply to cope with the growing demand and expiration of a contract. On the average, the contracting level of DASURECO for the planning period 2024-2033 is at 102%.

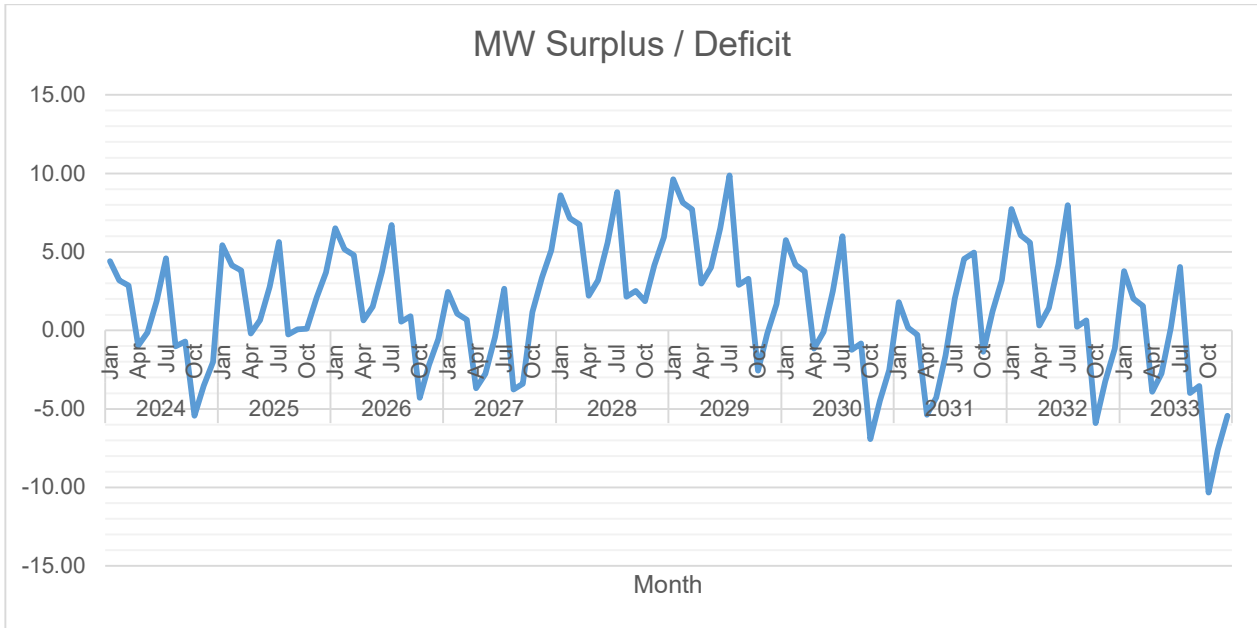


Figure 12. DASURECO's MW Surplus / Deficit

Based on the forecasted Coincident Peak Demand, there is months when supply is lower than the peak demand. On months were supply contract falls short of the demand, the cooperative will source power in the electricity market.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	42,985	38,491	4,102	0.91%	9.63%
	Feb	46,553	41,434	4,504	1.32%	9.80%
	Mar	42,785	38,197	3,956	1.48%	9.38%
	Apr	48,222	42,760	5,209	0.52%	10.86%
	May	48,806	43,700	4,855	0.51%	10.00%
	Jun	46,366	42,098	3,831	0.94%	8.34%
	Jul	45,807	40,378	5,275	0.34%	11.55%
	Aug	48,376	44,071	4,267	0.08%	8.83%
	Sep	47,870	42,865	4,671	0.70%	9.83%
	Oct	49,788	44,775	4,737	0.55%	9.57%
	Nov	49,868	44,624	4,776	0.94%	9.67%
	Dec	49,869	44,935	4,817	0.23%	9.68%
2025	Jan	44,969	40,335	4,340	0.65%	9.71%
	Feb	48,247	43,397	4,765	0.17%	9.89%
	Mar	44,367	40,029	4,186	0.34%	9.47%
	Apr	50,565	44,795	5,512	0.51%	10.96%
	May	51,246	45,786	5,137	0.63%	10.09%
	Jun	48,566	44,105	4,054	0.84%	8.42%
	Jul	48,247	42,310	5,581	0.74%	11.65%
	Aug	51,076	46,165	4,515	0.78%	8.91%
	Sep	50,070	44,909	4,942	0.44%	9.91%
	Oct	52,840	46,914	5,012	1.73%	9.65%
	Nov	52,100	46,747	5,054	0.58%	9.76%
	Dec	52,481	47,077	5,097	0.59%	9.77%

2026	Jan	47,189	42,259	4,589	0.72%	9.80%
	Feb	50,519	45,451	5,039	0.06%	9.98%
	Mar	46,887	41,939	4,426	1.12%	9.55%
	Apr	53,225	46,922	5,828	0.89%	11.05%
	May	53,518	47,964	5,431	0.23%	10.17%
	Jun	51,126	46,202	4,286	1.25%	8.49%
	Jul	50,519	44,325	5,901	0.58%	11.75%
	Aug	54,136	48,354	4,774	1.86%	8.99%
	Sep	53,130	47,044	5,225	1.62%	10.00%
	Oct	55,304	49,148	5,300	1.55%	9.73%
	Nov	55,128	48,966	5,344	1.49%	9.84%
	Dec	55,521	49,314	5,389	1.47%	9.85%
2027	Jan	49,129	44,252	4,847	0.06%	9.87%
	Feb	53,519	47,585	5,322	1.14%	10.06%
	Mar	49,127	43,917	4,675	1.09%	9.62%
	Apr	56,125	49,128	6,156	1.50%	11.13%
	May	56,518	50,222	5,737	0.99%	10.25%
	Jun	53,126	48,378	4,527	0.42%	8.56%
	Jul	53,519	46,414	6,233	1.63%	11.84%
	Aug	56,136	50,627	5,043	0.83%	9.06%
	Sep	55,130	49,258	5,519	0.64%	10.08%
	Oct	57,364	51,463	5,598	0.53%	9.81%
	Nov	57,348	51,268	5,644	0.76%	9.92%
	Dec	57,861	51,634	5,693	0.92%	9.93%
2028	Jan	51,769	46,305	5,113	0.68%	9.94%
	Feb	55,779	49,788	5,614	0.67%	10.13%
	Mar	51,107	45,955	4,931	0.43%	9.69%
	Apr	58,385	51,404	6,494	0.84%	11.22%
	May	58,778	52,550	6,052	0.30%	10.33%
	Jun	56,386	50,621	4,776	1.76%	8.62%
	Jul	55,779	48,565	6,575	1.15%	11.92%
	Aug	58,396	52,972	5,319	0.18%	9.13%
	Sep	57,390	51,542	5,822	0.05%	10.15%
	Oct	60,180	53,850	5,905	0.71%	9.88%
	Nov	59,620	53,644	5,954	0.04%	9.99%
	Dec	60,057	54,026	6,005	0.04%	10.00%
2029	Jan	54,621	48,410	5,386	1.51%	10.01%
	Feb	58,011	52,051	5,914	0.08%	10.20%
	Mar	53,619	48,044	5,194	0.71%	9.76%
	Apr	60,617	53,739	6,840	0.06%	11.29%
	May	61,390	54,939	6,375	0.12%	10.40%
	Jun	58,118	52,923	5,031	0.28%	8.68%
	Jul	58,011	50,772	6,926	0.54%	12.00%
	Aug	61,628	55,381	5,603	1.04%	9.19%
	Sep	60,202	53,886	6,133	0.30%	10.22%
	Oct	62,660	56,298	6,220	0.23%	9.95%
	Nov	62,620	56,082	6,272	0.43%	10.06%
	Dec	62,877	56,482	6,326	0.11%	10.07%
2030	Jan	56,621	50,561	5,665	0.70%	10.08%
	Feb	60,731	54,366	6,221	0.24%	10.27%
	Mar	56,219	50,179	5,464	1.03%	9.82%

	Apr	63,861	56,126	7,195	0.84%	11.36%
	May	64,374	57,380	6,705	0.45%	10.46%
	Jun	60,618	55,277	5,291	0.08%	8.74%
	Jul	60,411	53,026	7,285	0.17%	12.08%
	Aug	63,928	57,844	5,894	0.30%	9.25%
	Sep	62,922	56,282	6,451	0.30%	10.28%
	Oct	65,660	58,800	6,542	0.48%	10.01%
	Nov	65,484	58,575	6,597	0.48%	10.12%
	Dec	65,877	58,992	6,654	0.35%	10.14%
2031	Jan	59,321	52,752	5,949	1.04%	10.14%
	Feb	63,375	56,727	6,533	0.18%	10.33%
	Mar	58,619	52,353	5,738	0.90%	9.88%
	Apr	66,481	58,559	7,556	0.55%	11.43%
	May	67,374	59,868	7,042	0.69%	10.52%
	Jun	63,618	57,675	5,557	0.61%	8.79%
	Jul	63,011	55,322	7,651	0.06%	12.15%
	Aug	67,068	60,355	6,190	0.78%	9.30%
	Sep	66,062	58,723	6,775	0.85%	10.34%
	Oct	68,516	61,349	6,871	0.43%	10.07%
	Nov	68,160	61,116	6,928	0.17%	10.18%
	Dec	68,593	61,550	6,988	0.08%	10.20%
2032	Jan	62,061	54,977	6,238	1.36%	10.19%
	Feb	66,211	59,126	6,850	0.35%	10.38%
	Mar	61,059	54,561	6,017	0.79%	9.93%
	Apr	69,057	61,032	7,923	0.15%	11.49%
	May	70,210	62,396	7,384	0.61%	10.58%
	Jun	66,058	60,113	5,827	0.18%	8.84%
	Jul	66,211	57,655	8,022	0.81%	12.21%
	Aug	70,068	62,907	6,490	0.96%	9.35%
	Sep	68,662	61,205	7,104	0.51%	10.40%
	Oct	71,380	63,939	7,205	0.33%	10.13%
	Nov	71,060	63,698	7,264	0.14%	10.24%
	Dec	71,577	64,149	7,327	0.14%	10.25%
2033	Jan	64,061	57,233	6,531	0.46%	10.24%
	Feb	69,211	61,561	7,172	0.69%	10.43%
	Mar	63,759	56,800	6,299	1.04%	9.98%
	Apr	72,057	63,540	8,295	0.31%	11.55%
	May	73,074	64,959	7,730	0.53%	10.63%
	Jun	69,058	62,585	6,100	0.54%	8.88%
	Jul	68,711	60,019	8,399	0.43%	12.28%
	Aug	72,932	65,496	6,795	0.88%	9.40%
	Sep	71,926	63,722	7,438	1.07%	10.45%
	Oct	74,380	66,565	7,543	0.36%	10.18%
	Nov	74,060	66,317	7,606	0.19%	10.29%
	Dec	75,077	66,784	7,671	0.83%	10.30%

Table 4. MWh Offtake for 2024-2033

Table 4 reveals that the MWh Offtake was initially forecasted using Cubic Logarithmic Trend. The assumed load factor is 70%.

System Loss was calculated through a Load Flow Study conducted in October 2023 by using Synergi software. Based on the same study, the Distribution System can adequately convey electricity to customers.

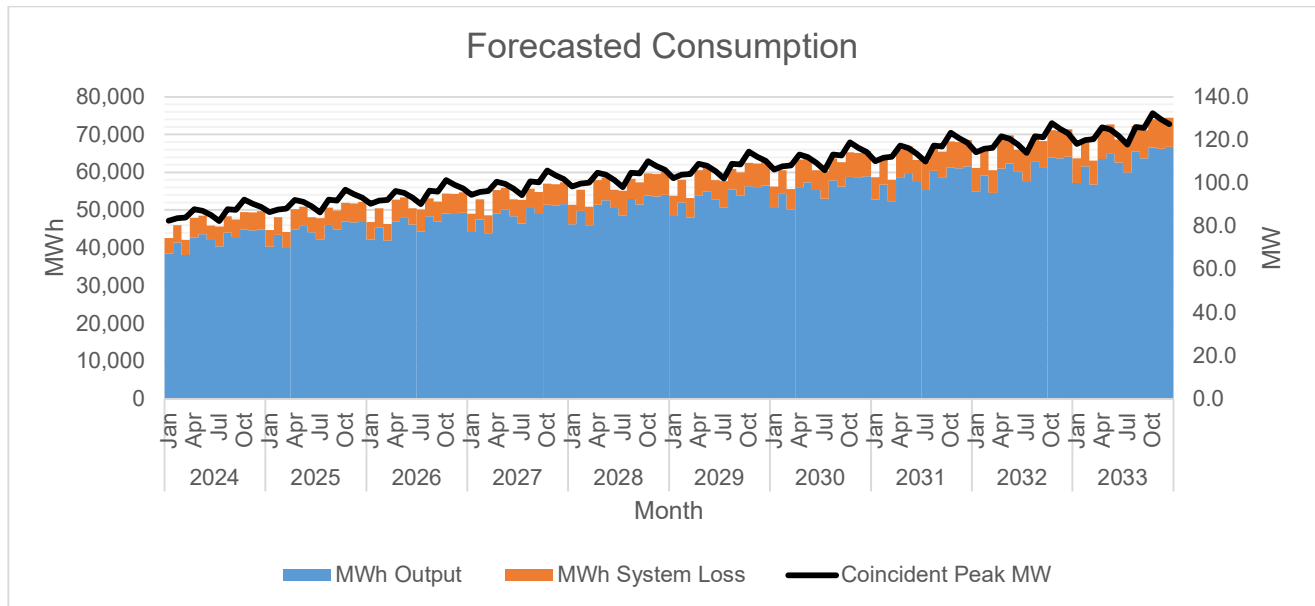


Figure 14. DASURECO’s Forecasted Consumption for 2024-2033

Figure 14 is the forecasted consumption of DASURECO for 2024-2033. MWh Output is expected to grow at a rate of 5% annually.

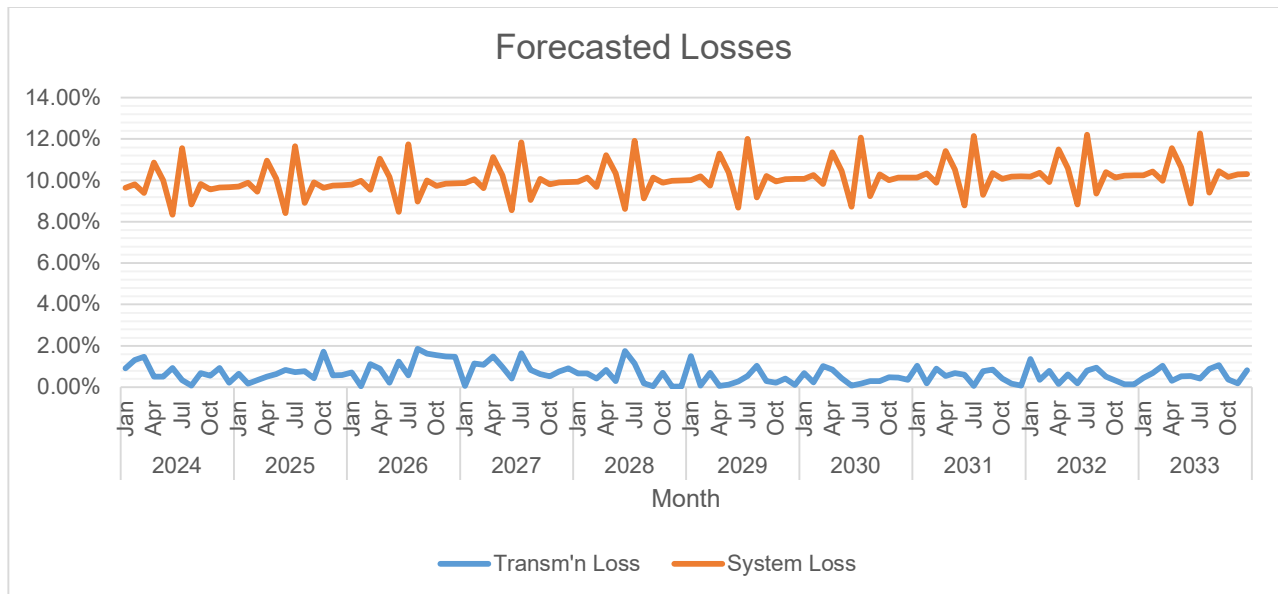


Figure 15. DASURECO’s Forecasted Losses for 2024-2033

Gleaning upon **Figure 15**, DASURECO’s Transmission Loss is expected to range from 0% to 2% while System Loss is expected to range from 8% to 12%. It is forecasted that DASURECO will exceed in the allowed cap of 10.25% if projects for the system loss reduction are not implemented.

Based on the Segregated System Loss, the primary and secondary distribution line losses are among the highest in the cooperative's technical loss composition. Since DASURECO's numbers of consumers are growing gradually, its distribution lines are also expanding and some of these lines are having inadequate size conductors. With this, the cooperative will have to rehabilitate its dilapidated distribution lines, uprate the conductor size and reconfigure its secondary network to minimize the system loss.

The Cooperative should also have a program that could minimize, if not eliminate, unbilled consumption of energy and pilferages in the system. Examples are the equipment to be able to measure kWh delivered from the distribution transformer versus the total kWh used by the connected consumers, kWh meter clustering, and replacement of defective kWh meters.

DASURECO has been consistent in the filing of its Capital Expenditure Plan, where projects that address the increasing system loss are presented for the approval of the Regulatory Commission and for the cooperative's subsequent implementation.

Power Supply

Table 6. Power Supply Agreements- Contracted

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	Maximum MW	Maximum MWh/yr	PSA Start	PSA End
NPC-PSALM Firm	Intermediate	Power Sector Assets and Liabilities Management Corporation	4.00	70,080	10.00	70,080	12/26/2023	12/26/2025
NPC-PSALM NonFirm	Intermediate	Power Sector Assets and Liabilities Management Corporation	0.00	0	5.00	43,800	12/26/2023	12/26/2025
2013-127RC TSI	Base	Therma South, Inc.	4.00	35,040	10.00	87,600	9/18/2015	9/18/2040
2014-133RC FDC	Base	FDC Misamis Power Corporation	4.80	42,048	12.00	105,120	10/14/2016	10/14/2041

Table 6 shows the contracted power supply agreements. The PSA with Power Sector Assets and Liabilities Management Corporation (PSALM) was renewed as firm and non-firm contract for two (2) years. Being the cheapest power supplier in Mindanao, this helps DASURECO bring down its generation rate.

The PSA with Therma South inc. (TSI) filed with ERC under Case No. 2013-127RC was procured through bilateral agreement. It was selected to provide for base requirements due to growing demand. Historically, the utilization of the PSA is 65%. The actual billed overall monthly charge under the PSA ranged from 8 P/kWh to 10 P/KWh in the same period.

The PSA with FDC Misamis Corporation. (FDC) filed with ERC under Case No. 2014-133RC was procured through bilateral agreement. It was selected to provide for base requirements due to growing demand. Historically, the utilization of the PSA is 67%. The actual billed overall monthly charge under the PSA ranged from 7 P/kWh to 12 P/KWh in the same period.

Table 7. Power Supply Agreements- Pending

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	Maximum MW	Maximum MWh/yr	PSA Start	PSA End
2014-011 RC GNPK	Base	GN Power Kauswagan Ltd.	4.00	35,040	10.00	87,600	7/26/2019	7/25/2039
2014-107RC SEC	Base	Sarangani Energy Corporation	6.00	52,560	15.00	131,400	9/26/2019	9/25/2044
2017-085RC MPI	Peaking	Mapalad Partners, Inc.	0.00	0	15.00	131,400	12/6/2017	12/6/2027
EPSA1	Base	San Miguel Consolidated Power Corporation	0.00	35,040	10.00	87,600	11/26/2023	11/25/2024

The PSA with GN Power Kauswagan Ltd. (GNPK) filed with ERC under Case No. 2014-011RC was procured through aggregation of Mindanao electric cooperatives. It was selected to provide for base requirements due to growing demand. Historically, the utilization of the PSA is 84%, which

started delivering power in the last quarter of 2019. The actual billed overall monthly charge under the PSA ranged from 6 P/kWh to 9 P/KWh in the same period.

The PSA with Sarangani Energy Corporation (SEC) filed with ERC under Case No. 2014-107RC was procured through bilateral agreement. It was selected to provide for base requirements due to growing demand. Historically, the utilization of the PSA is 87%, which started delivering power in the last quarter of 2019. The actual billed overall monthly charge under the PSA ranged from 7 P/kWh to 10 P/KWh in the same period.

The PSA with San Miguel Consolidated Power Corporation (SMCPC) filed with ERC under Case No. 2016-106RC was procured through bilateral agreement. It was selected to provide for base requirements due to growing demand. Historically, the utilization of the PSA is 70%. The actual billed overall monthly charge under the PSA ranged from 8 P/kWh to 11 P/KWh in the same period. This contract was mutually terminated due to financial implications to both parties of an Order from the Energy Regulatory Commission.

The PSA with Mapalad Partners Inc. (MPI) filed with ERC under Case No. 2017-085RC was procured through competitive selection process. It was selected to provide for peaking requirements due to growing demand. For 2023, the salient feature of Replacement Power under this PSA was utilized to help bring down the cost of electricity. This is a Build-Operate-Transfer contract in which by 2027, DASURECO will be owning the facility. By December 2027, DASURECO will own and manage the generation facility and will continue to be part of its supply portfolio. Accordingly, DASURECO will have to comply with the regulatory compliances brought by the transfer of ownership.

DASURECO entered into an Emergency Power Supply Agreement of 10MW due to a contract that was mutually terminated. This contract was entered into to keep DASURECO away from huge quantity of exposure to volatile prices in the electricity market. This agreement will be expiring in 25 November 2024.

	CSP1	CSP2	CSP3	CSP4	CSP5	CSP6	CSP7
Type	Intermediate	Intermediate	Base	Peaking	Intermediate	Intermediate	Base
Minimum MW	0.00	0.00	8.00	0.00	0.00	0.00	4.00
Minimum MWh/yr	36,792	18,396	70,080	10,512	36,792	36,792	35,040
PSA Start	11/26/2024	9/26/2025	12/26/2025	9/26/2027	11/26/2027	9/26/2028	7/26/2031
PSA End	11/25/2027	9/25/2028	12/25/2036	9/25/2034	11/25/2034	9/25/2035	7/25/2041
Publication	4/1/2024	2/1/2025	5/1/2026	2/1/2027	4/1/2027	2/1/2028	12/1/2030
Pre-bid	4/22/2024	2/22/2025	5/22/2026	2/22/2027	4/22/2027	2/22/2028	12/22/2030
Opening	6/21/2024	4/23/2025	7/21/2026	4/23/2027	6/21/2027	4/22/2028	2/20/2031
Awarding	7/21/2024	5/23/2025	8/20/2026	5/23/2027	7/21/2027	5/22/2028	3/22/2031
PSA Signing	8/20/2024	6/22/2025	9/19/2026	6/22/2027	8/20/2027	6/21/2028	4/21/2031
Joint Filing	8/29/2024	7/1/2025	9/28/2026	7/1/2027	8/29/2027	6/30/2028	4/30/2031

Table 8 CSP Schedule

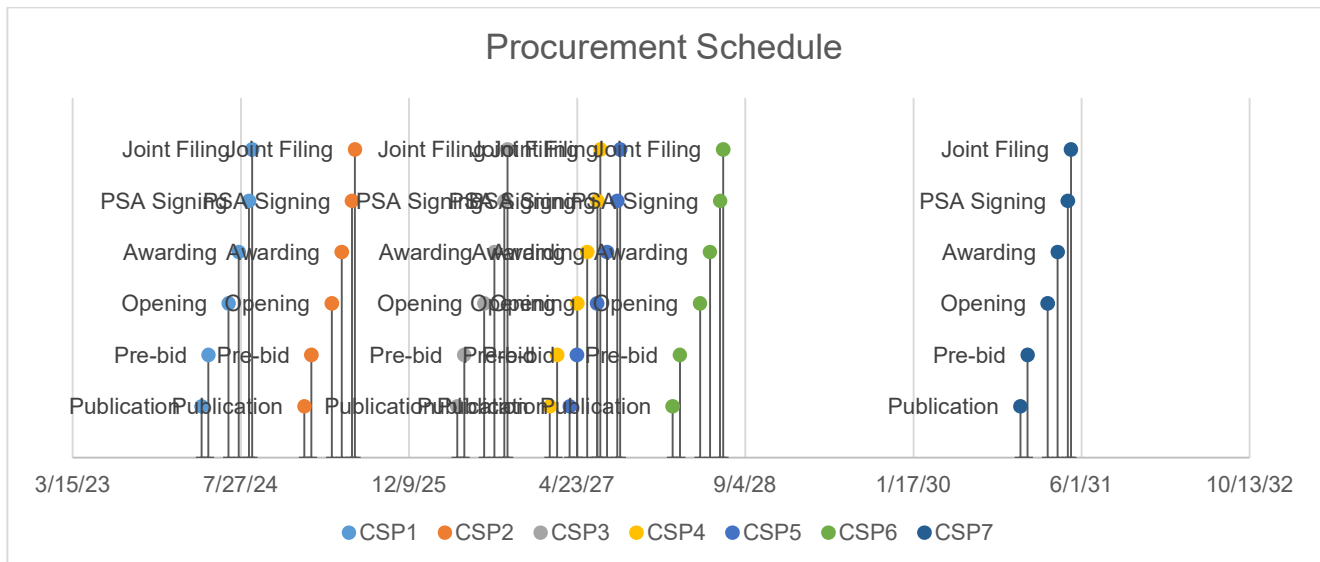


Figure 16. Procurement Schedule.

Figure 16 shows the intended procurement schedule of DASURECO from 2024-2033. For the procurement of 15 MW Intermediate supply of which, 10MW is planned to be available in November 2024, the first publication or launch of CSP will be on April 1, 2024. Another 5MW Intermediate supply is scheduled for first publication on February 1, 2025 and is planned to start delivery of power by October 2025. Joint filing is planned 150 days later, in accordance with DOE’s 2018 CSP Policy. DASURECO Plans to procure renewable energy supply in compliance with the Renewable Portfolio Standards.

For the procurement of 20 MW Base supply which is planned to be available in January 2027, the first publication or launch of CSP will be on May 1, 2026. This type of supply will not be sourced from an eligible RE Plant.

CSP1, CSP2, CSP4, CSP5, and CSP 6 are intermediate and peaking type of supply with no Minimum Energy Offtake.

Captive Customer Connections

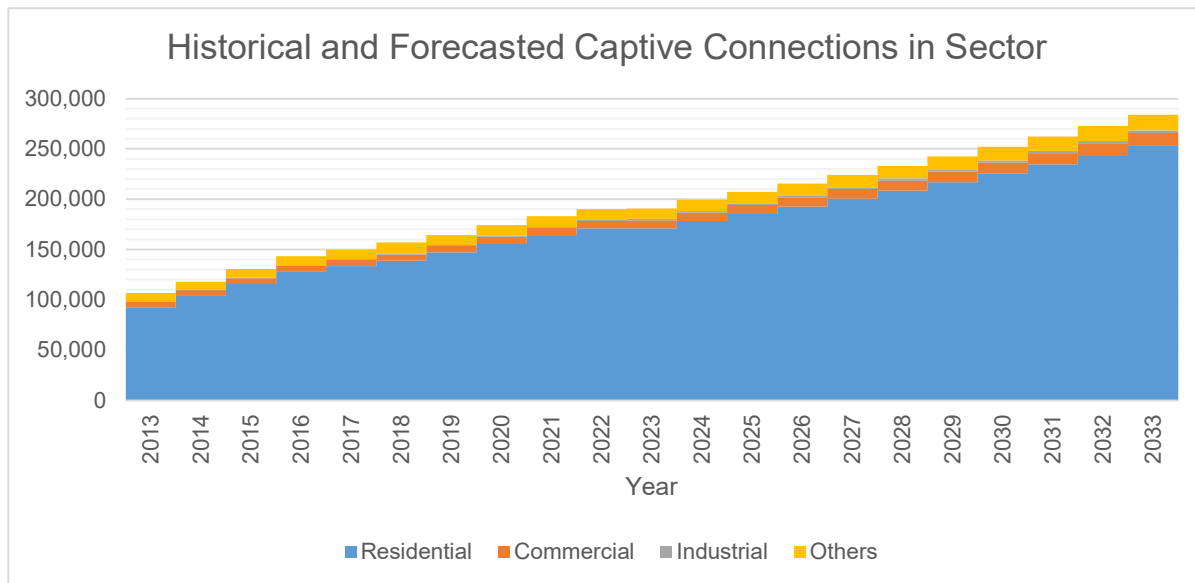


Figure 17. DASURECO'S Historical and Forecasted Captive Connection in Sector from 2013-2033

Figure 17 indicates that the number of residential connections is expected to grow at a rate of 4% annually. Said customer class is expected to account for 37% of the total energy consumption and 89% of the total connections by 2033.

On one hand, the number of industrial connections is expected to grow at a rate of 5% annually. Said customer class is expected to account for 42% of the total energy consumption and 1% of the total connections by 2033.