

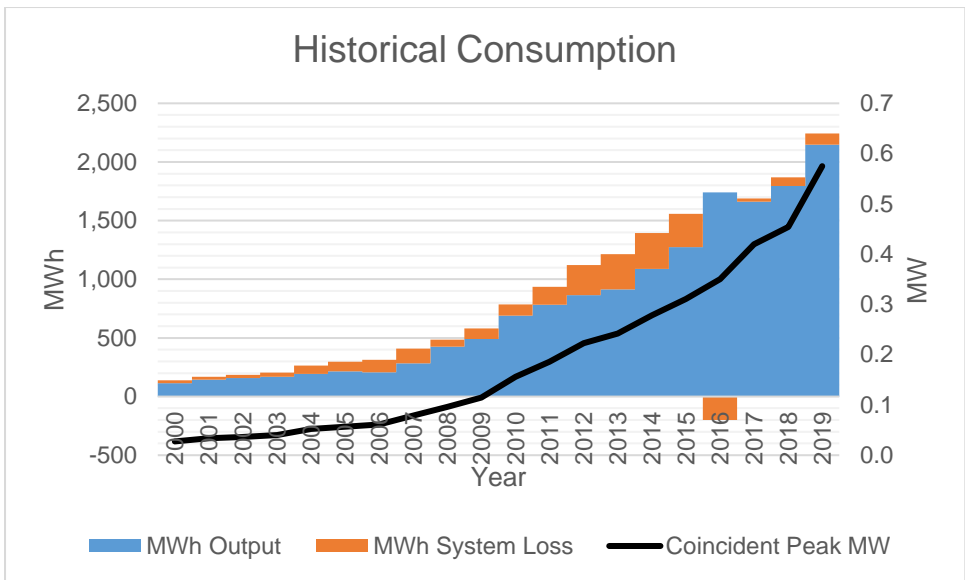
# **Power Supply Procurement Plan 2020**

**CALUYA ISLAND**

## 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	0.03	138	0	138	114	25	58%	0.00%	0.00%	17.72%
2001	0.03	169	0	169	143	26	58%	0.00%	0.00%	15.20%
2002	0.04	185	0	185	157	28	58%	0.00%	0.00%	15.23%
2003	0.04	203	0	203	170	33	58%	0.00%	0.00%	16.26%
2004	0.05	265	0	265	192	72	58%	0.00%	0.00%	27.35%
2005	0.06	296	0	296	214	82	60%	0.00%	0.00%	27.74%
2006	0.06	314	0	314	208	106	59%	0.00%	0.00%	33.82%
2007	0.08	410	0	410	284	125	59%	0.00%	0.00%	30.57%
2008	0.10	485	0	485	426	59	58%	0.00%	0.00%	12.16%
2009	0.11	581	0	581	492	89	58%	0.00%	0.00%	15.27%
2010	0.16	786	0	786	691	95	57%	0.00%	0.00%	12.13%
2011	0.19	935	0	935	783	152	57%	0.00%	0.00%	16.27%
2012	0.22	1,121	0	1,121	865	256	57%	0.00%	0.00%	22.87%
2013	0.24	1,215	0	1,215	913	301	57%	0.00%	0.00%	24.80%
2014	0.28	1,395	0	1,395	1,089	306	57%	0.00%	0.00%	21.94%
2015	0.31	1,559	0	1,559	1,275	284	57%	0.00%	0.00%	18.19%
2016	0.35	1,541	0	1,541	1,741	-200	50%	0.00%	0.00%	-12.96%
2017	0.42	1,690	0	1,690	1,663	27	46%	0.00%	0.00%	1.62%
2018	0.45	1,869	0	1,869	1,794	74	47%	0.00%	0.00%	3.98%
2019	0.58	2,243	0	2,243	2,149	95	45%	0.00%	0.00%	4.23%

Peak Demand increased from 0.03 MW in 2000 to 0.58 MW in 2019 at a rate of 17.48% due to increase on consumer's connection. MWh Offtake increased from 138 MWh in 2000 to 2243 MWh in 2019 at a rate of 16.15% due to increase in new connections and increase in demand as time goes by. Within the same period, Load Factor ranged from 58% to 45%. There was an abrupt change in consumption due to changes in demand in the area.

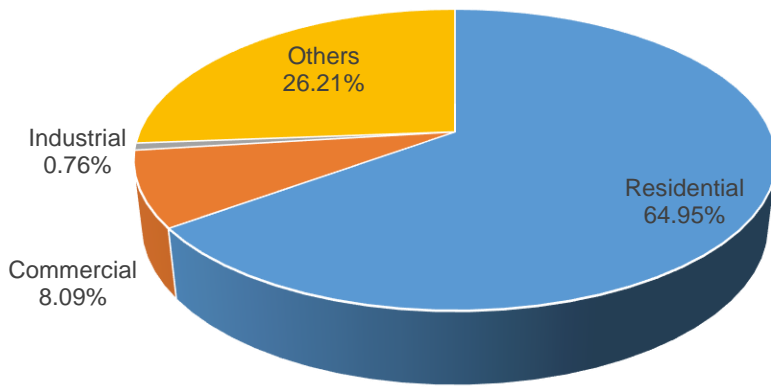


MWh Output increased from year 2000 to year 2019 at a rate of 17.53%, while MWh System Loss increased at a rate of 14.35% within the same period.



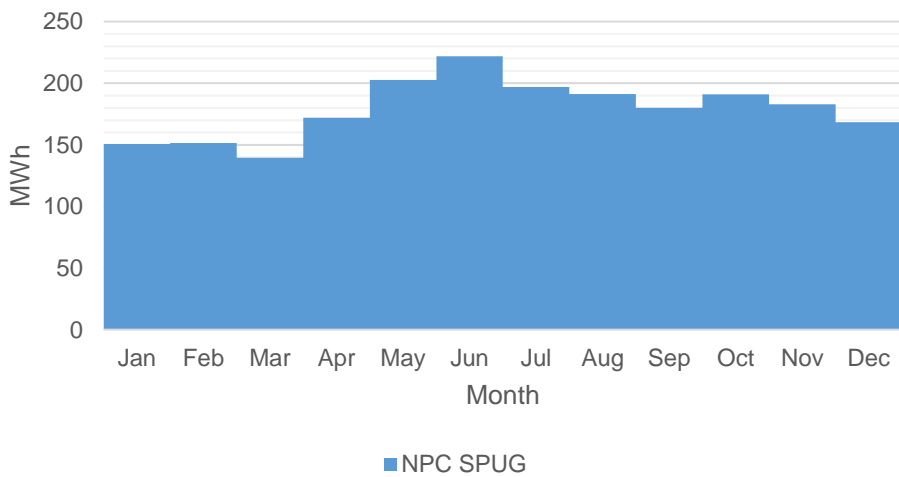
Historically, Transmission Loss ranged from 0% to 0% while System Loss ranged from -12.96% to 33.82%. Transmission Loss remains at zero because of \_\_\_\_\_. System Loss peaked at 33.82% on year 2006 because of \_\_\_\_\_.

### Previous Year's Shares of Energy Sales

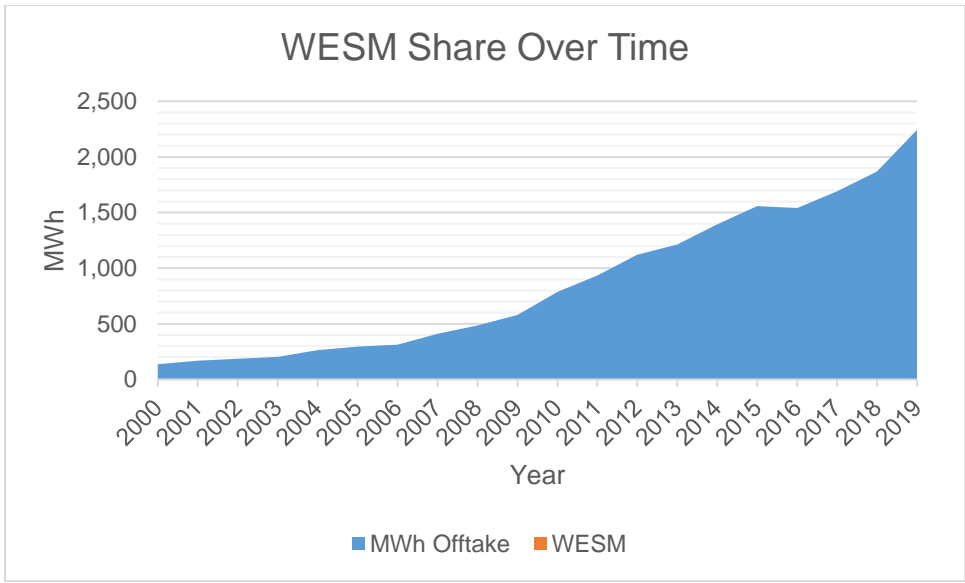


Residential customers account for the bulk of energy sales at 64.95% due to the high number of connections. In contrast, industrial customers accounted for only 0.76% of energy sales due to the low number of connections.

### MWh Offtake for Last Historical Year

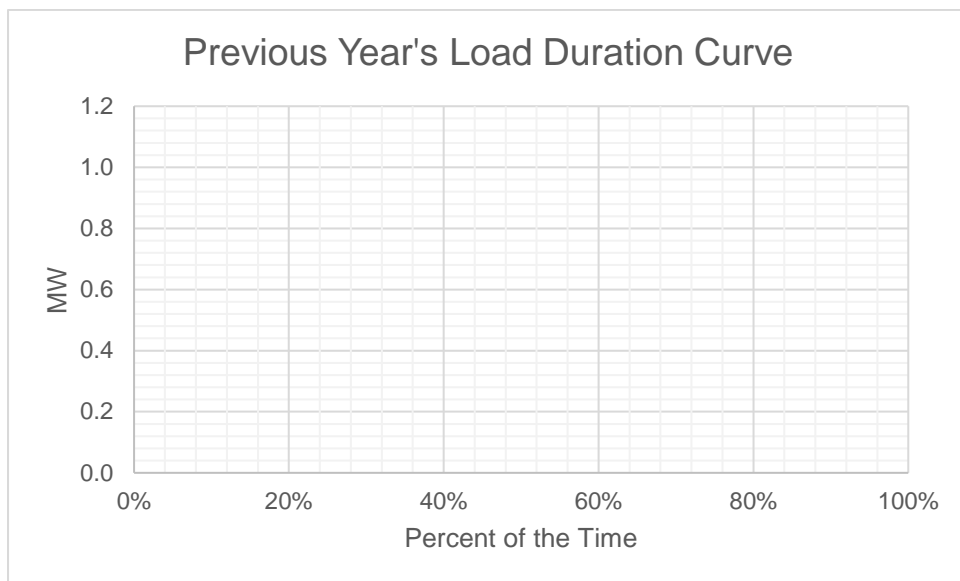


For \_\_\_\_, the total Offtake for the last historical year is [higher/lower] than the quantity stipulated in the PSA. The PSA with \_\_\_\_ accounts for the bulk of MWh Offtake.

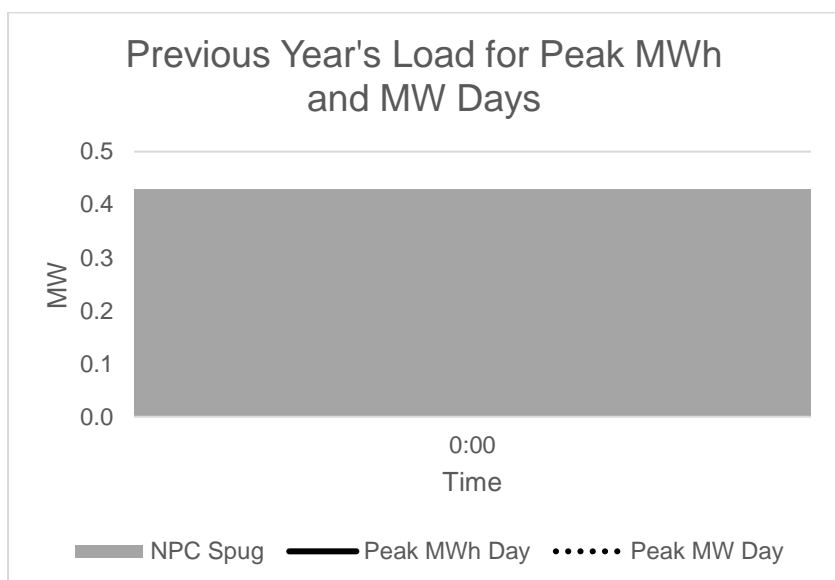


WESM Offtake is zero because Caluya Island is not connected to the main grid.

# Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is \_\_\_\_ MW and the maximum load is \_\_\_\_ MW for the last historical year.



Peak MW occurred on \_\_\_\_ due to \_\_\_\_\_. Peak daily MWh occurred on \_\_\_\_ due to \_\_\_\_\_. As shown in the Load Curves, the available supply is [higher/lower] than the Peak Demand.

## Previous Year's Loading Summary

0.00	0.00	0.00	0.00	0.00
MVA Tot	NCP	CP	Ave	5th PCTL

The Non-coincident Peak Demand is \_\_\_ MW, which is around \_\_\_% of the total substation capacity of \_\_\_ MVA at a power factor of \_\_\_. The load factor or the ratio between the Average Load of \_\_\_ MW and the Non-coincident Peak Demand is \_\_\_% of. A safe estimate of the true minimum load is the fifth percentile load of \_\_\_ MW which is \_\_\_% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
		0.000

The substations loaded at above 70% are \_\_\_. This loading problem will be solved by \_\_\_.

## 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	0.43	0.43	0.00	0.00		100%	100%	0.00
	Feb	0.43	0.43	0.00	0.00		100%	100%	0.00
	Mar	0.44	0.44	0.00	0.00		100%	100%	0.00
	Apr	0.49	0.49	0.00	0.00		100%	100%	0.00
	May	0.60	0.60	0.00	0.00		100%	100%	0.00
	Jun	0.63	0.63	0.00	0.00		100%	100%	0.00
	Jul	0.58	0.58	0.00	0.00		100%	100%	0.00
	Aug	0.54	0.54	0.00	0.00		100%	100%	0.00
	Sep	0.51	0.51	0.00	0.00		100%	100%	0.00
	Oct	0.56	0.56	0.00	0.00		100%	100%	0.00
	Nov	0.52	0.52	0.00	0.00		100%	100%	0.00
	Dec	0.50	0.50	0.00	0.00		100%	100%	0.00
2021	Jan	0.46	0.46	0.00	0.00		100%	100%	0.00
	Feb	0.47	0.47	0.00	0.00		100%	100%	0.00
	Mar	0.48	0.48	0.00	0.00		100%	100%	0.00
	Apr	0.53	0.53	0.00	0.00		100%	100%	0.00
	May	0.65	0.65	0.00	0.00		100%	100%	0.00
	Jun	0.68	0.68	0.00	0.00		100%	100%	0.00
	Jul	0.63	0.63	0.00	0.00		100%	100%	0.00
	Aug	0.59	0.59	0.00	0.00		100%	100%	0.00
	Sep	0.55	0.55	0.00	0.00		100%	100%	0.00
	Oct	0.61	0.61	0.00	0.00		100%	100%	0.00
	Nov	0.56	0.56	0.00	0.00		100%	100%	0.00
	Dec	0.54	0.54	0.00	0.00		100%	100%	0.00
2022	Jan	0.50	0.50	0.00	0.00		100%	100%	0.00
	Feb	0.50	0.50	0.00	0.00		100%	100%	0.00
	Mar	0.51	0.51	0.00	0.00		100%	100%	0.00
	Apr	0.57	0.57	0.00	0.00		100%	100%	0.00

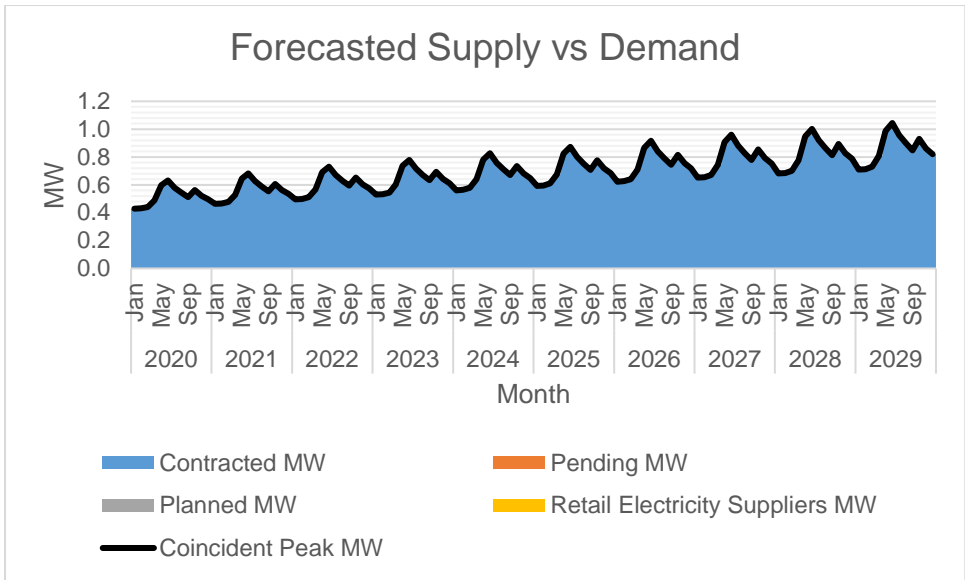


	May	0.69	0.69	0.00	0.00		100%	100%	0.00
	Jun	0.73	0.73	0.00	0.00		100%	100%	0.00
	Jul	0.67	0.67	0.00	0.00		100%	100%	0.00
	Aug	0.63	0.63	0.00	0.00		100%	100%	0.00
	Sep	0.59	0.59	0.00	0.00		100%	100%	0.00
	Oct	0.65	0.65	0.00	0.00		100%	100%	0.00
	Nov	0.60	0.60	0.00	0.00		100%	100%	0.00
	Dec	0.57	0.57	0.00	0.00		100%	100%	0.00
2023	Jan	0.53	0.53	0.00	0.00		100%	100%	0.00
	Feb	0.53	0.53	0.00	0.00		100%	100%	0.00
	Mar	0.55	0.55	0.00	0.00		100%	100%	0.00
	Apr	0.60	0.60	0.00	0.00		100%	100%	0.00
	May	0.74	0.74	0.00	0.00		100%	100%	0.00
	Jun	0.78	0.78	0.00	0.00		100%	100%	0.00
	Jul	0.72	0.72	0.00	0.00		100%	100%	0.00
	Aug	0.67	0.67	0.00	0.00		100%	100%	0.00
	Sep	0.63	0.63	0.00	0.00		100%	100%	0.00
	Oct	0.69	0.69	0.00	0.00		100%	100%	0.00
	Nov	0.64	0.64	0.00	0.00		100%	100%	0.00
	Dec	0.61	0.61	0.00	0.00		100%	100%	0.00
2024	Jan	0.56	0.56	0.00	0.00		100%	100%	0.00
	Feb	0.56	0.56	0.00	0.00		100%	100%	0.00
	Mar	0.58	0.58	0.00	0.00		100%	100%	0.00
	Apr	0.64	0.64	0.00	0.00		100%	100%	0.00
	May	0.78	0.78	0.00	0.00		100%	100%	0.00
	Jun	0.83	0.83	0.00	0.00		100%	100%	0.00
	Jul	0.76	0.76	0.00	0.00		100%	100%	0.00
	Aug	0.71	0.71	0.00	0.00		100%	100%	0.00
	Sep	0.67	0.67	0.00	0.00		100%	100%	0.00
	Oct	0.74	0.74	0.00	0.00		100%	100%	0.00
	Nov	0.68	0.68	0.00	0.00		100%	100%	0.00
	Dec	0.65	0.65	0.00	0.00		100%	100%	0.00
2025	Jan	0.59	0.59	0.00	0.00		100%	100%	0.00

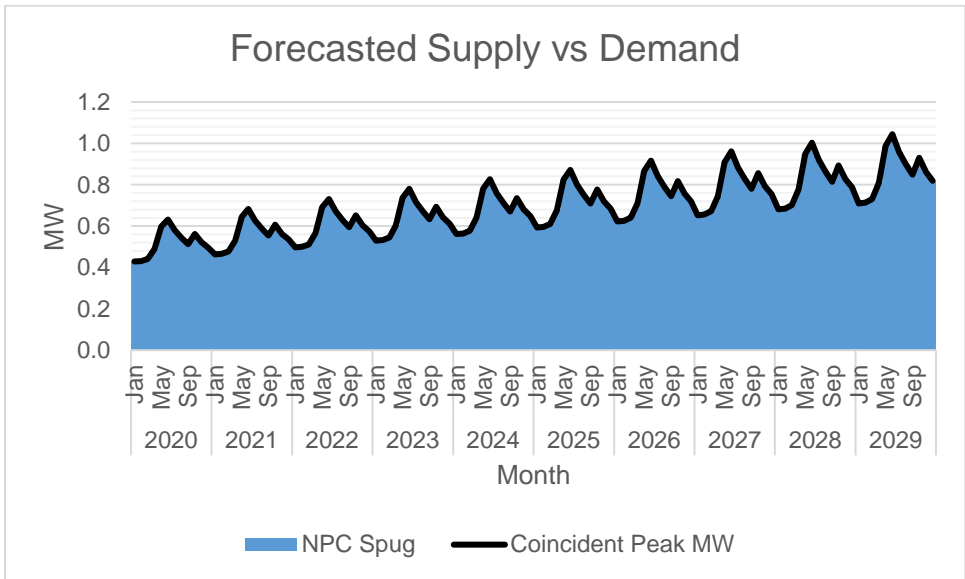
	Feb	0.60	0.60	0.00	0.00		100%	100%	0.00
	Mar	0.61	0.61	0.00	0.00		100%	100%	0.00
	Apr	0.68	0.68	0.00	0.00		100%	100%	0.00
	May	0.83	0.83	0.00	0.00		100%	100%	0.00
	Jun	0.87	0.87	0.00	0.00		100%	100%	0.00
	Jul	0.80	0.80	0.00	0.00		100%	100%	0.00
	Aug	0.75	0.75	0.00	0.00		100%	100%	0.00
	Sep	0.71	0.71	0.00	0.00		100%	100%	0.00
	Oct	0.78	0.78	0.00	0.00		100%	100%	0.00
	Nov	0.72	0.72	0.00	0.00		100%	100%	0.00
	Dec	0.68	0.68	0.00	0.00		100%	100%	0.00
2026	Jan	0.62	0.62	0.00	0.00		100%	100%	0.00
	Feb	0.63	0.63	0.00	0.00		100%	100%	0.00
	Mar	0.64	0.64	0.00	0.00		100%	100%	0.00
	Apr	0.71	0.71	0.00	0.00		100%	100%	0.00
	May	0.87	0.87	0.00	0.00		100%	100%	0.00
	Jun	0.92	0.92	0.00	0.00		100%	100%	0.00
	Jul	0.84	0.84	0.00	0.00		100%	100%	0.00
	Aug	0.79	0.79	0.00	0.00		100%	100%	0.00
	Sep	0.74	0.74	0.00	0.00		100%	100%	0.00
	Oct	0.82	0.82	0.00	0.00		100%	100%	0.00
	Nov	0.76	0.76	0.00	0.00		100%	100%	0.00
	Dec	0.72	0.72	0.00	0.00		100%	100%	0.00
2027	Jan	0.65	0.65	0.00	0.00		100%	100%	0.00
	Feb	0.66	0.66	0.00	0.00		100%	100%	0.00
	Mar	0.67	0.67	0.00	0.00		100%	100%	0.00
	Apr	0.74	0.74	0.00	0.00		100%	100%	0.00
	May	0.91	0.91	0.00	0.00		100%	100%	0.00
	Jun	0.96	0.96	0.00	0.00		100%	100%	0.00
	Jul	0.88	0.88	0.00	0.00		100%	100%	0.00
	Aug	0.83	0.83	0.00	0.00		100%	100%	0.00
	Sep	0.78	0.78	0.00	0.00		100%	100%	0.00
	Oct	0.86	0.86	0.00	0.00		100%	100%	0.00

	Nov	0.79	0.79	0.00	0.00		100%	100%	0.00
	Dec	0.75	0.75	0.00	0.00		100%	100%	0.00
2028	Jan	0.68	0.68	0.00	0.00		100%	100%	0.00
	Feb	0.68	0.68	0.00	0.00		100%	100%	0.00
	Mar	0.70	0.70	0.00	0.00		100%	100%	0.00
	Apr	0.78	0.78	0.00	0.00		100%	100%	0.00
	May	0.95	0.95	0.00	0.00		100%	100%	0.00
	Jun	1.00	1.00	0.00	0.00		100%	100%	0.00
	Jul	0.92	0.92	0.00	0.00		100%	100%	0.00
	Aug	0.86	0.86	0.00	0.00		100%	100%	0.00
	Sep	0.81	0.81	0.00	0.00		100%	100%	0.00
	Oct	0.89	0.89	0.00	0.00		100%	100%	0.00
	Nov	0.83	0.83	0.00	0.00		100%	100%	0.00
	Dec	0.79	0.79	0.00	0.00		100%	100%	0.00
2029	Jan	0.71	0.71	0.00	0.00		100%	100%	0.00
	Feb	0.71	0.71	0.00	0.00		100%	100%	0.00
	Mar	0.73	0.73	0.00	0.00		100%	100%	0.00
	Apr	0.81	0.81	0.00	0.00		100%	100%	0.00
	May	0.99	0.99	0.00	0.00		100%	100%	0.00
	Jun	1.04	1.04	0.00	0.00		100%	100%	0.00
	Jul	0.96	0.96	0.00	0.00		100%	100%	0.00
	Aug	0.90	0.90	0.00	0.00		100%	100%	0.00
	Sep	0.85	0.85	0.00	0.00		100%	100%	0.00
	Oct	0.93	0.93	0.00	0.00		100%	100%	0.00
	Nov	0.86	0.86	0.00	0.00		100%	100%	0.00
	Dec	0.82	0.82	0.00	0.00		100%	100%	0.00

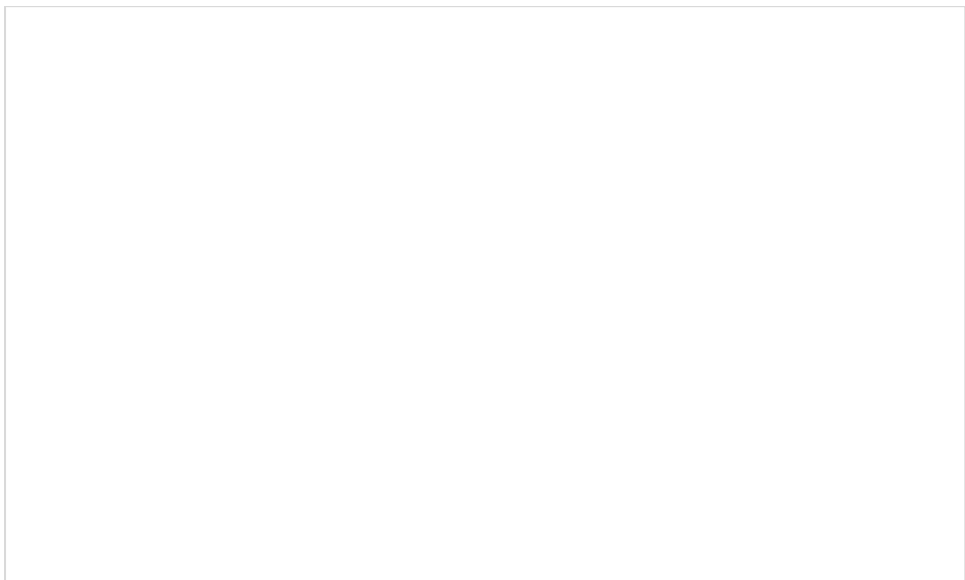
The Peak Demand was forecasted using 7-year historical data and was assumed to occur on the month of June due to celebration of municipal festival during the last week of May or first week of June. Monthly Peak Demand is at its lowest on the month of January due to decrease in consumption. In general, Peak Demand is expected to grow at a rate of 5.74% annually.



The available supply is generally equal the Peak Demand. This is because \_\_\_\_.



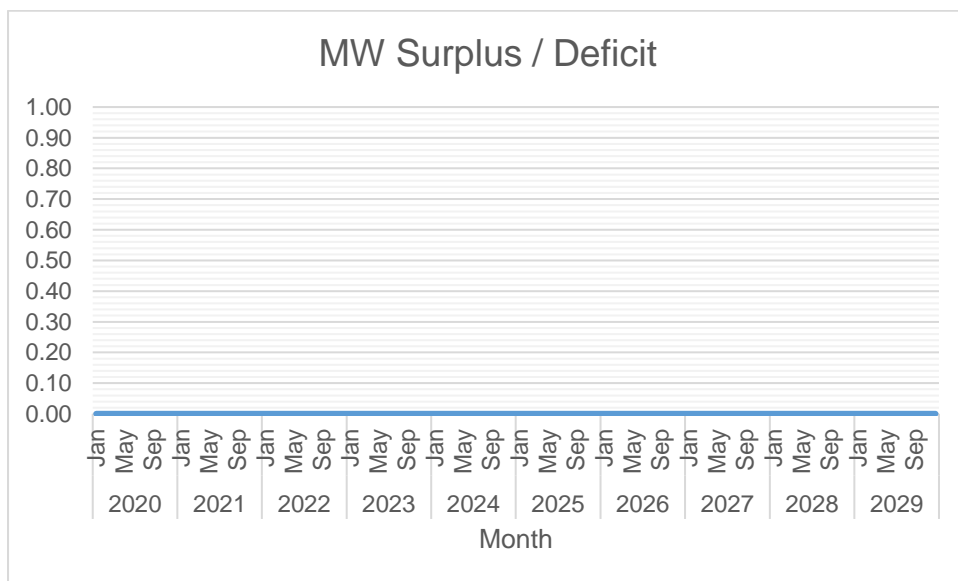
Of the available supply, the largest is 1.04 MW from June 2029. This is followed by 1.00 MW from June 2028.



The first wave of supply procurement will be for \_\_\_ MW planned to be available by the month of \_\_\_. This will be followed by \_\_\_.



Currently, there is [under-contacting/over-contacting] by \_\_\_%. The highest target contracting level is \_\_\_% which is expected to occur on \_\_\_. The lowest target contracting level is \_\_\_% which is expected to occur on \_\_\_.



Currently, there is [under-contacting/over-contacting] by \_\_\_ MW. The highest [surplus/deficit] is \_\_\_ MW which is expected to occur on the month of \_\_\_. The lowest [surplus/deficit] is \_\_\_ MW which is expected to occur on the month of \_\_\_.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2020	Jan	189	160	28	0.00%	15.02%
	Feb	190	161	28	0.00%	15.02%
	Mar	175	149	26	0.00%	15.02%
	Apr	215	183	32	0.00%	15.02%
	May	254	216	38	0.00%	15.02%
	Jun	278	236	42	0.00%	15.02%
	Jul	246	209	37	0.00%	15.02%

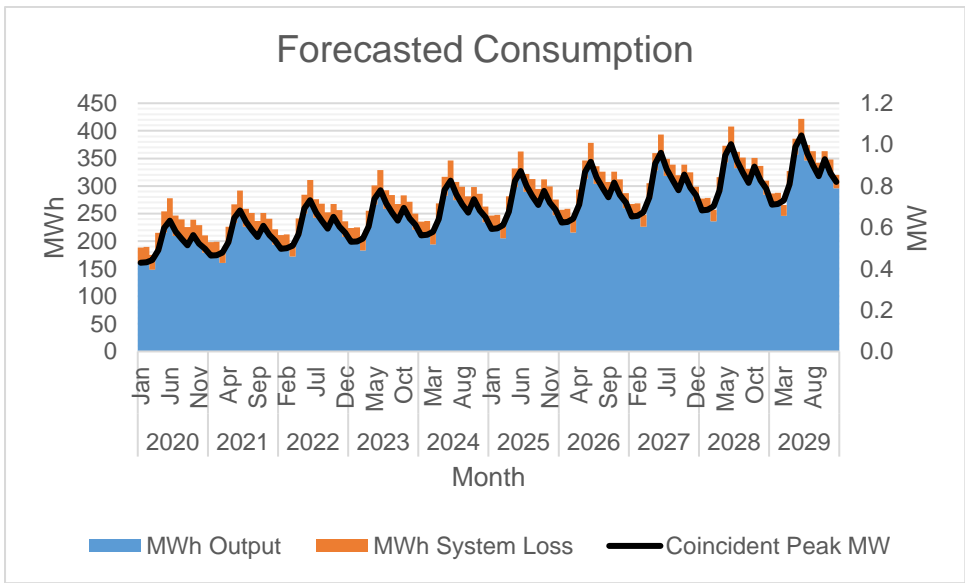
	Aug	239	203	36	0.00%	15.02%
	Sep	225	192	34	0.00%	15.02%
	Oct	239	203	36	0.00%	15.02%
	Nov	229	195	34	0.00%	15.02%
	Dec	211	179	32	0.00%	15.02%
2021	Jan	198	173	25	0.00%	12.59%
	Feb	199	174	25	0.00%	12.59%
	Mar	184	160	23	0.00%	12.59%
	Apr	226	198	28	0.00%	12.59%
	May	267	233	34	0.00%	12.59%
	Jun	292	255	37	0.00%	12.59%
	Jul	259	226	33	0.00%	12.59%
	Aug	251	220	32	0.00%	12.59%
	Sep	237	207	30	0.00%	12.59%
	Oct	251	219	32	0.00%	12.59%
	Nov	241	210	30	0.00%	12.59%
	Dec	221	193	28	0.00%	12.59%
2022	Jan	211	186	26	0.00%	12.09%
	Feb	212	187	26	0.00%	12.09%
	Mar	196	172	24	0.00%	12.09%
	Apr	241	212	29	0.00%	12.09%
	May	284	250	34	0.00%	12.09%
	Jun	311	273	38	0.00%	12.09%
	Jul	276	243	33	0.00%	12.09%
	Aug	268	235	32	0.00%	12.09%
	Sep	252	222	31	0.00%	12.09%
	Oct	268	235	32	0.00%	12.09%
	Nov	256	225	31	0.00%	12.09%
	Dec	236	207	29	0.00%	12.09%
2023	Jan	224	198	26	0.00%	11.49%
	Feb	225	199	26	0.00%	11.49%
	Mar	207	183	24	0.00%	11.49%
	Apr	255	226	29	0.00%	11.49%
	May	301	266	35	0.00%	11.49%
	Jun	329	291	38	0.00%	11.49%
	Jul	292	259	34	0.00%	11.49%
	Aug	284	251	33	0.00%	11.49%
	Sep	267	237	31	0.00%	11.49%
	Oct	283	251	33	0.00%	11.49%
	Nov	271	240	31	0.00%	11.49%
	Dec	250	221	29	0.00%	11.49%
2024	Jan	235	210	25	0.00%	10.84%
	Feb	236	211	26	0.00%	10.84%
	Mar	218	194	24	0.00%	10.84%
	Apr	268	239	29	0.00%	10.84%
	May	317	282	34	0.00%	10.84%
	Jun	346	309	38	0.00%	10.84%
	Jul	307	274	33	0.00%	10.84%
	Aug	298	266	32	0.00%	10.84%

	Sep	281	251	30	0.00%	10.84%
	Oct	298	266	32	0.00%	10.84%
	Nov	286	255	31	0.00%	10.84%
	Dec	263	234	28	0.00%	10.84%
2025	Jan	246	221	25	0.00%	10.16%
	Feb	248	223	25	0.00%	10.16%
	Mar	228	205	23	0.00%	10.16%
	Apr	281	253	29	0.00%	10.16%
	May	332	298	34	0.00%	10.16%
	Jun	363	326	37	0.00%	10.16%
	Jul	322	289	33	0.00%	10.16%
	Aug	313	281	32	0.00%	10.16%
	Sep	295	265	30	0.00%	10.16%
	Oct	312	281	32	0.00%	10.16%
	Nov	299	269	30	0.00%	10.16%
	Dec	275	247	28	0.00%	10.16%
2026	Jan	257	233	24	0.00%	9.47%
	Feb	258	234	24	0.00%	9.47%
	Mar	238	216	23	0.00%	9.47%
	Apr	293	266	28	0.00%	9.47%
	May	346	313	33	0.00%	9.47%
	Jun	378	343	36	0.00%	9.47%
	Jul	336	304	32	0.00%	9.47%
	Aug	326	295	31	0.00%	9.47%
	Sep	307	278	29	0.00%	9.47%
	Oct	326	295	31	0.00%	9.47%
	Nov	312	283	30	0.00%	9.47%
	Dec	287	260	27	0.00%	9.47%
2027	Jan	267	244	23	0.00%	8.78%
	Feb	269	245	24	0.00%	8.78%
	Mar	248	226	22	0.00%	8.78%
	Apr	305	278	27	0.00%	8.78%
	May	360	328	32	0.00%	8.78%
	Jun	393	359	35	0.00%	8.78%
	Jul	349	319	31	0.00%	8.78%
	Aug	339	309	30	0.00%	8.78%
	Sep	319	291	28	0.00%	8.78%
	Oct	339	309	30	0.00%	8.78%
	Nov	325	296	29	0.00%	8.78%
	Dec	299	272	26	0.00%	8.78%
2028	Jan	277	255	22	0.00%	8.11%
	Feb	278	256	23	0.00%	8.11%
	Mar	257	236	21	0.00%	8.11%
	Apr	316	291	26	0.00%	8.11%
	May	373	343	30	0.00%	8.11%
	Jun	408	375	33	0.00%	8.11%
	Jul	362	333	29	0.00%	8.11%
	Aug	351	323	28	0.00%	8.11%
	Sep	331	304	27	0.00%	8.11%

	Oct	351	323	28	0.00%	8.11%
	Nov	336	309	27	0.00%	8.11%
	Dec	309	284	25	0.00%	8.11%
2029	Jan	286	265	21	0.00%	7.46%
	Feb	288	266	21	0.00%	7.46%
	Mar	265	246	20	0.00%	7.46%
	Apr	327	302	24	0.00%	7.46%
	May	385	357	29	0.00%	7.46%
	Jun	422	390	31	0.00%	7.46%
	Jul	374	346	28	0.00%	7.46%
	Aug	363	336	27	0.00%	7.46%
	Sep	342	317	26	0.00%	7.46%
	Oct	363	336	27	0.00%	7.46%
	Nov	348	322	26	0.00%	7.46%
	Dec	320	296	24	0.00%	7.46%

MWh Offtake was forecasted using 7-year historical data. The assumed load factor is \_\_\_\_%.

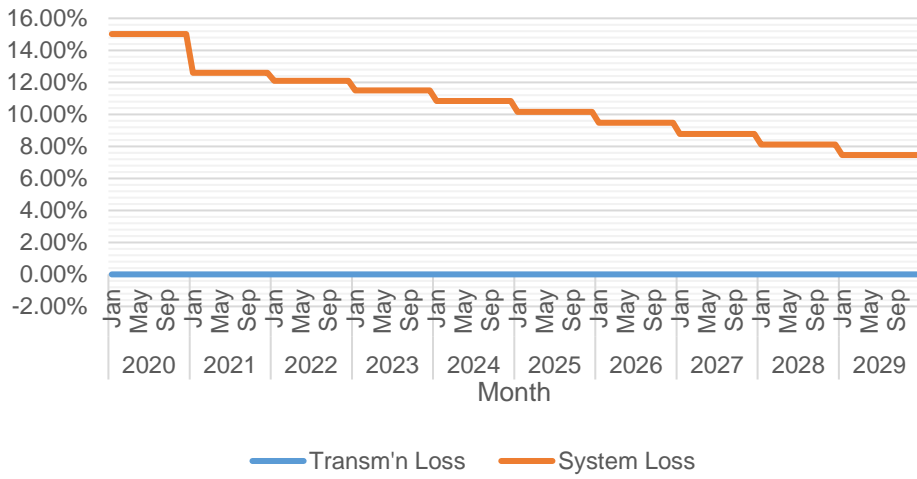
System Loss was calculated through a Load Flow Study conducted on \_\_\_\_ by \_\_\_\_ using \_\_\_\_ software. Based on the same study, the Distribution System can adequately convey electricity to customers.



MWh Output was expected to grow at a rate of \_\_\_\_ annually.



### Forecasted Losses



Transmission Loss is expected to remain at zero while System Loss is expected to range from 15.02% to 7.46%.

## Power Supply

Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
NPC Spug	Base	National Power Corporation	1.20	1,300	12/26/2017	12/25/2020

The PSA with \_\_\_\_ filed with ERC under Case No. \_\_\_\_ was procured through \_\_\_\_\_. It was selected to provide for base requirements due to \_\_\_\_\_. Historically, the utilization of the PSA is \_\_\_\_%. Outages of the plant led to unserved energy of around \_\_\_\_ MWh in the past year. The actual billed overall monthly charge under the PSA ranged from \_\_\_\_ P/kWh to \_\_\_\_ P/KWh in the same period.

[Repeat as needed]

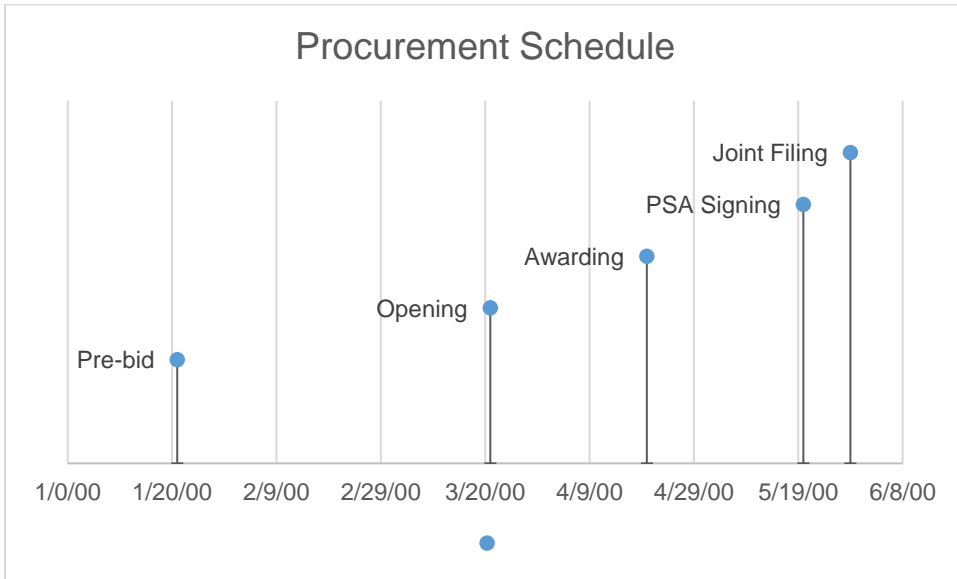
Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
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The PSA with \_\_\_\_ filed with ERC under Case No. \_\_\_\_ was procured through \_\_\_\_\_. It was selected to provide for [base/intermediate/peaking] requirements due to \_\_\_\_\_. Historically, the utilization of the PSA is \_\_\_\_%. Outages of the plant led to unserved energy of around \_\_\_\_ MWh in the past year. The actual billed overall monthly charge under the PSA ranged from \_\_\_\_ P/kWh to \_\_\_\_ P/KWh in the same period.

[Repeat as needed]

Type
Minimum MW
Minimum MWh/yr
PSA Start
PSA End
Publication

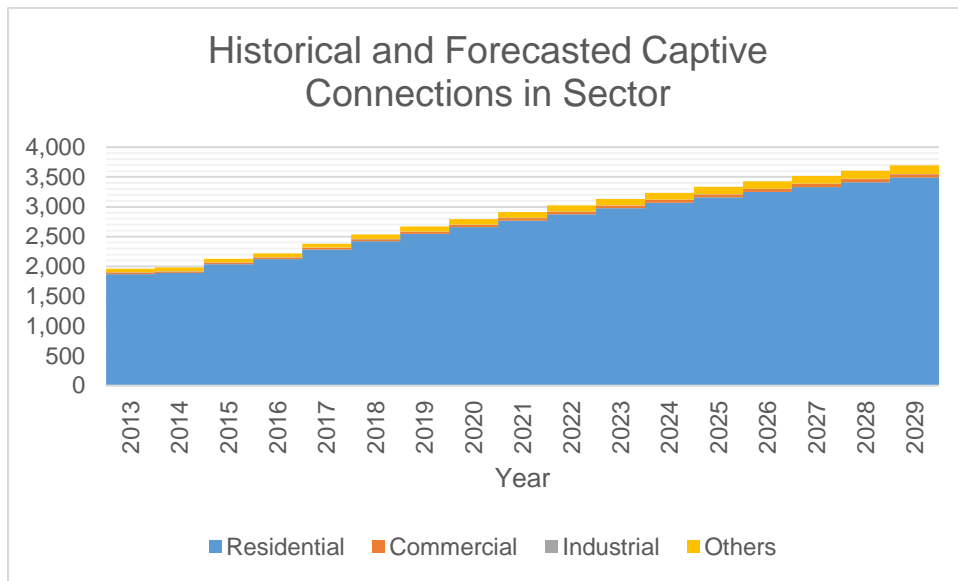
Pre-bid	21
Opening	81
Awarding	111
PSA Signing	141
Joint Filing	150



For the procurement of 1.2 MW of supply which is planned to be available on \_\_\_\_, the first publication or launch of CSP will be on \_\_\_\_. Joint filing is planned on \_\_\_\_, or 150 days later, in accordance with DOE's 2018 CSP Policy.

[Repeat as needed]

# Captive Customer Connections



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