

# **Power Supply Procurement Plan 2021**

**NEGROS ORIENTAL I ELECTRIC COOPERATIVE, INC  
(NORECO-I)**

**GRID**

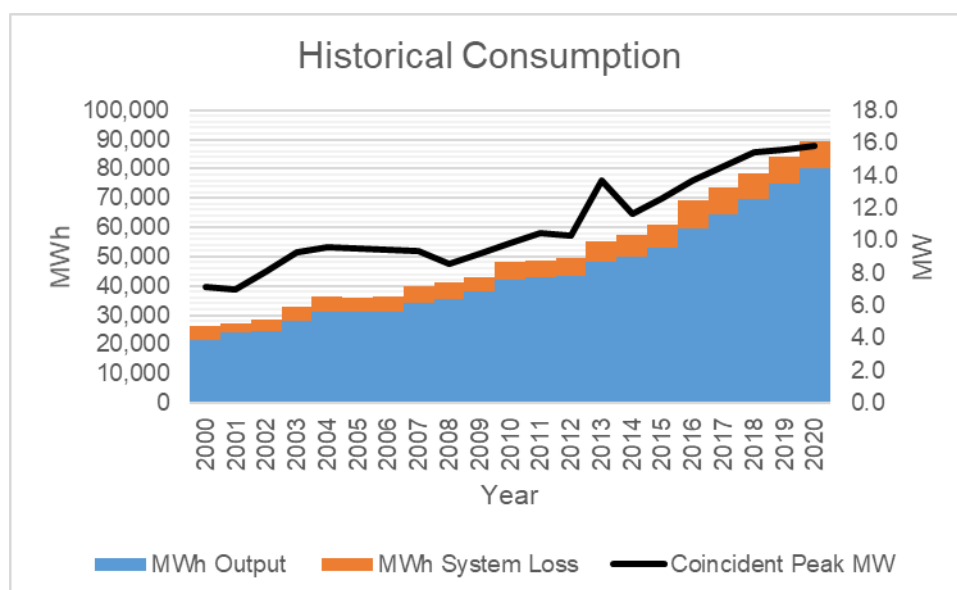
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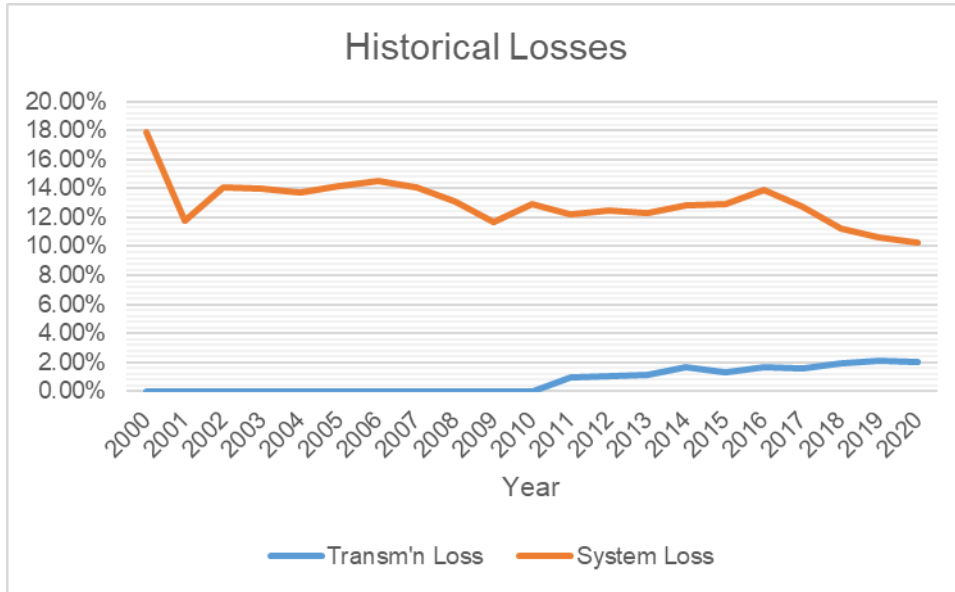
## I. Historical Consumption Data

	Coincident Peak MW	MWh Offtake	WESM	MWh Input	MWh Output	MWh System Loss	Load Factor	Transm'n Loss	System Loss
2020	7.13	26,416	0	26,416	21,688	4,728	42%	0.00%	17.90%
2001	6.96	27,189	0	27,189	23,979	3,211	45%	0.00%	11.81%
2002	8.08	28,433	0	28,433	24,421	4,012	40%	0.00%	14.11%
2003	9.25	32,762	0	32,762	28,170	4,591	40%	0.00%	14.01%
2004	9.61	36,281	0	36,281	31,297	4,984	43%	0.00%	13.74%
2005	9.52	36,043	0	36,043	30,928	5,115	43%	0.00%	14.19%
2006	9.44	36,197	0	36,197	30,951	5,245	44%	0.00%	14.49%
2007	9.36	39,665	0	39,665	34,080	5,585	48%	0.00%	14.08%
2008	8.56	41,056	0	41,056	35,669	5,388	55%	0.00%	13.12%
2009	9.16	42,981	0	42,981	37,963	5,018	54%	0.00%	11.67%
2010	9.80	48,138	0	48,138	41,933	6,205	56%	0.00%	12.89%
2011	10.49	49,285	5,132	48,803	42,845	5,958	53%	0.98%	12.21%
2012	10.32	49,995	-10,334	49,468	43,297	6,171	55%	1.05%	12.47%
2013	13.72	55,656	1,667	55,024	48,244	6,780	46%	1.14%	12.32%
2014	11.66	58,379	7,321	57,382	49,993	7,389	56%	1.71%	12.88%
2015	12.61	61,868	12,100	61,083	53,170	7,913	55%	1.27%	12.95%
2016	13.69	70,586	16,927	69,413	59,753	9,661	58%	1.66%	13.92%
2017	14.55	74,805	15,359	73,654	64,287	9,366	58%	1.54%	12.72%
2018	15.45	79,887	24,481	78,334	69,529	8,805	58%	1.94%	11.24%
2019	15.57	85,737	31,264	83,964	75,053	8,898	62%	2.07%	10.60%
2020	15.82	91,355	35,331	89,476	80,313	9,163	65%	2.06%	10.24%

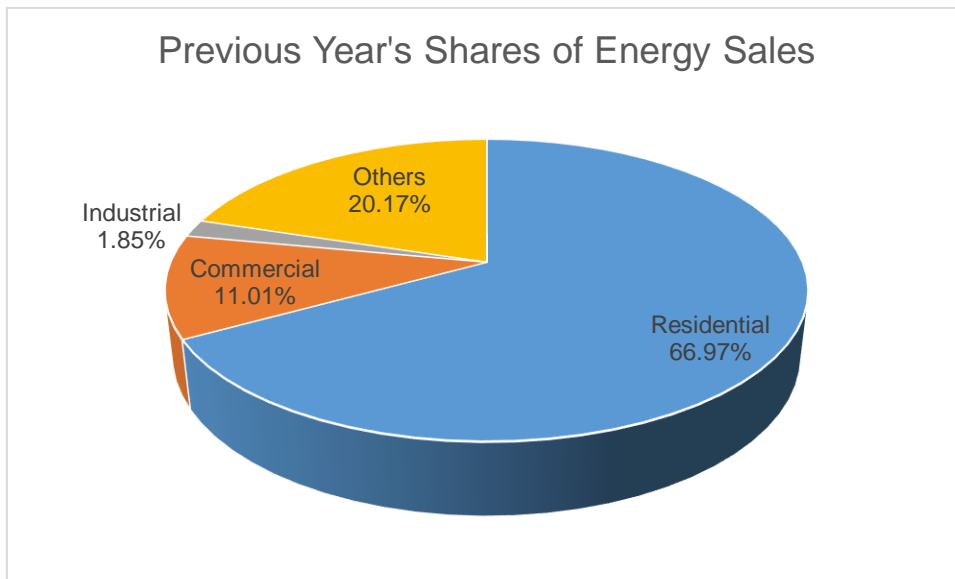
Peak Demand increased from 11.66 MW in 2014 to 15.82 MW in 2020 at an annual average growth rate of 5.26% due to increase number of consumers and consumption per customer. MWh Offtake increased from 58,379 MWh in 2011 to 91,355 MWh in 2020 at an annual average growth rate of 7.79% due to the same reasons. Within the same period, Load Factor ranged from 55% to 65%. There was an abrupt change in consumption on 2016 due to various Sitio Electrification Projects (SEP) completed and energized.



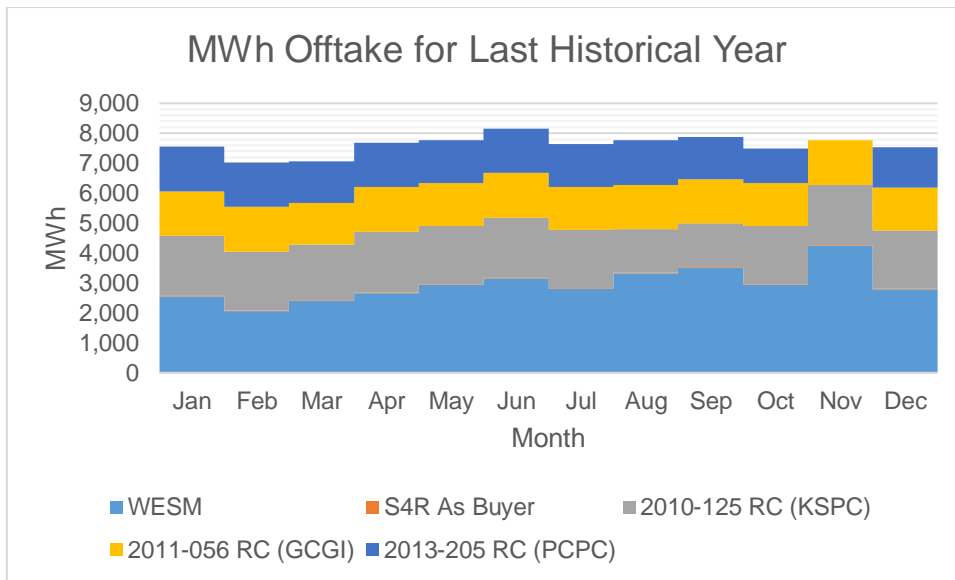
MWh Output increased from year 2014 to year 2020 at an annual average growth rate of 8.24%, while MWh System Loss increased at an annual average growth rate of 4.03% within the same period.



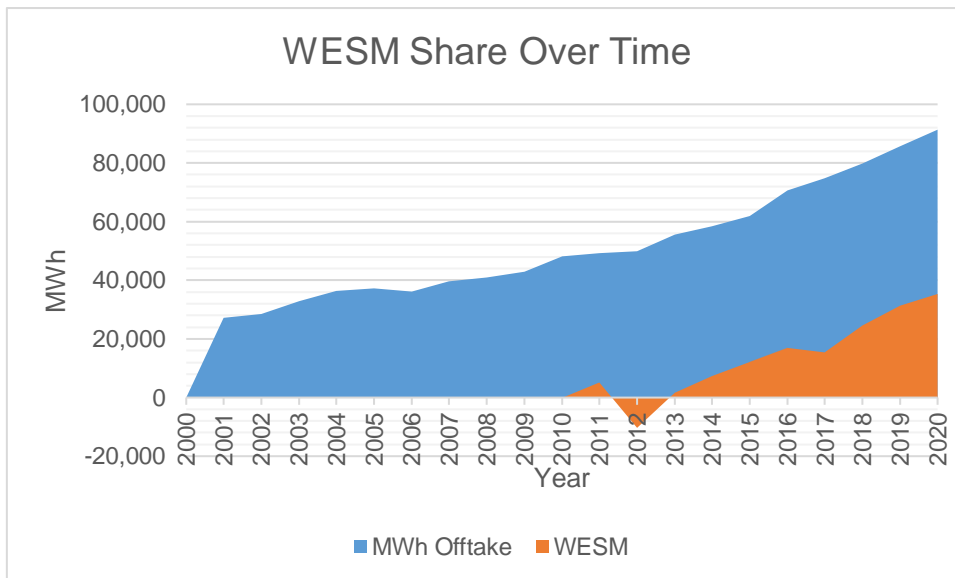
Historically, Transmission Loss ranged from 0.98% to 2.06% while System Loss ranged from 12.21% to 10.24% from 2011 to 2020. Transmission Loss peaked at 2.07% on year 2019. The Distribution System Loss had always been within the cap from year 2009 however on year 2016, it reached to 13.92% but it was then lowered the following year. It was then found out the main reason of such was non-technical, e.g. pilferages, inaccurate kWhr meters, dilapidated and unregistered meters.



The Residential customers account for the bulk of energy sales at 66.97% due to the high number of connections. In contrast, Industrial customers accounted for only 1.85% of energy sales due to the low number of connections.

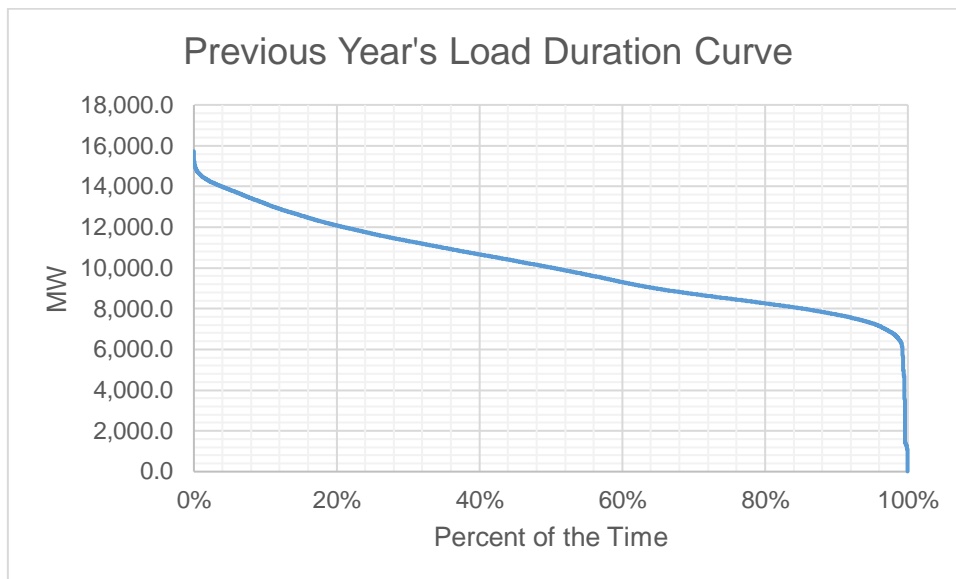


The total MWh offtake under the Wholesale Electricity Spot Market (WESM) for the last historical year accounted for the highest amongst all other PSAs.

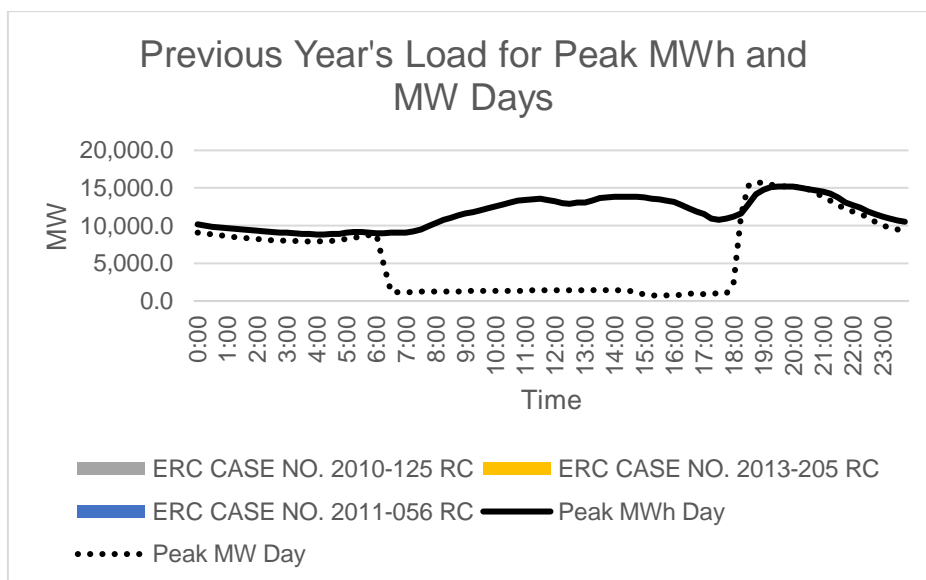


WESM Offtake increased from 15,359 MWh in 2017 to 35,331 MWh in 2020 at an annual average rate of 33% due to increase on consumers' energy consumption and non-renewal of the peaking supply contract from a Diesel Power Plant because of diesel price escalation. The share of WESM in the total Offtake ranged from 13% to 39% for the period covering 2014 - 2020. The net WESM transaction is negative on year 2012 because the DU had excess contract with NPC and such equivalent excess were sold back to WESM.

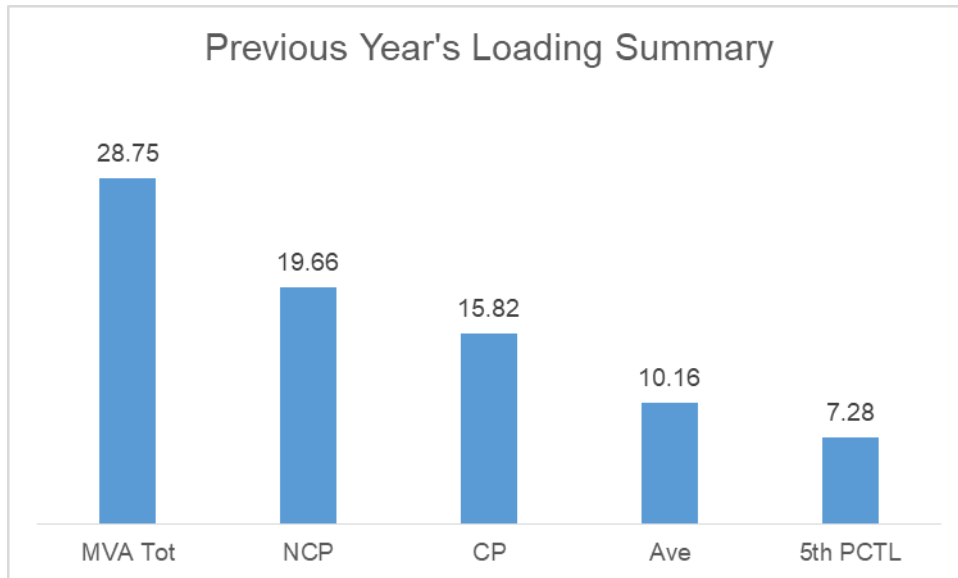
## II. Previous Year's Load Profile



Based on the Load Duration Curve, the average load is 10.155 MW and the maximum load is 15.815 MW for the last historical year.



Peak MW occurred on 18:45 due to increase in consumption of residential customers. Peak daily MWh occurred on 19:45 due to the same reason as the increase of MW caused by increase in consumption of residential customers. As shown in the Load Curves, the available supply is lower than the Peak Demand.



The Non-coincident Peak Demand is 19.66 MW, which is around 71% of the total substation capacity of 28.75 MVA at a power factor of 96.25. The load factor or the ratio between the Average Load of 10.16 MW and the Non-coincident Peak Demand is 51.65%. A safe estimate of the true minimum load is the fifth percentile load of 7.28 MW which is 37.04% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
Bindoy	5	4.079
Guihulngan	10	6.941
Bais	5	3.893
Mabinay	3.75	2.105
Vallehermoso	5	2.640

The substations loaded at above 70% are the 5MVA Bindoy Substation and 5MVA Bais Substation. These loading problem will be solved by uprating the substation. The uprating of the Bais Substation was already part of the CAPEX 2018-2020 which was already applied with the Energy Regulatory Commission (ERC). The uprating of Bindoy Substation will be discussed this year, during the preparation of the CAPEX 2021-2023.

### III. Forecasted Consumption Data

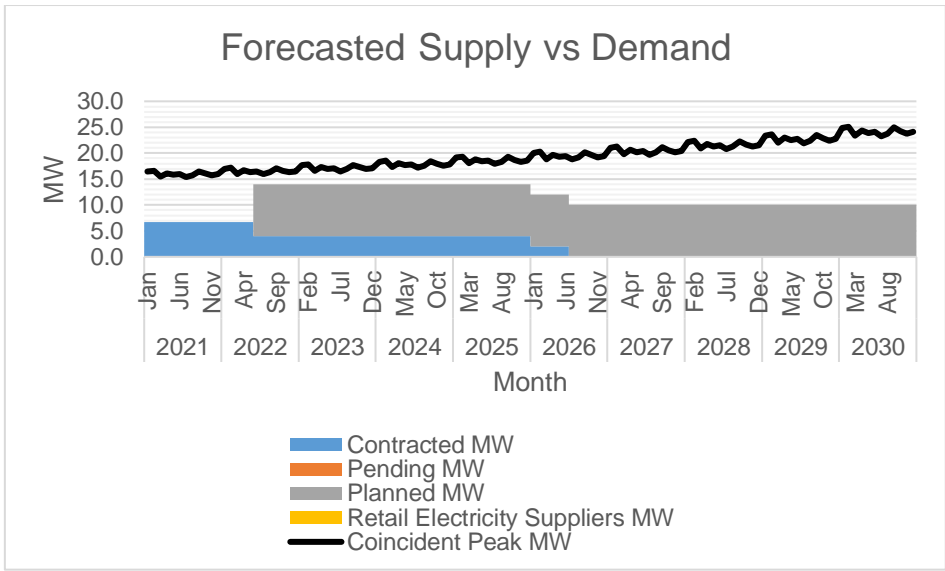
		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2021	Jan	16.44	6.70	0.00	0.000	41%	41%	-9.74
	Feb	16.61	6.70	0.00	0.000	40%	40%	-9.91
	Mar	15.46	6.70	0.00	0.000	43%	43%	-8.76
	Apr	16.12	6.70	0.00	0.000	42%	42%	-9.42
	May	15.79	6.70	0.00	0.000	42%	42%	-9.09
	Jun	15.96	6.70	0.00	0.000	42%	42%	-9.26
	Jul	15.39	6.70	0.00	0.000	44%	44%	-8.69
	Aug	15.75	6.70	0.00	0.000	43%	43%	-9.05
	Sep	16.52	6.70	0.00	0.000	41%	41%	-9.82
	Oct	16.08	6.70	0.00	0.000	42%	42%	-9.38
	Nov	15.73	6.70	0.00	0.000	43%	43%	-9.03
	Dec	15.94	6.70	0.00	0.000	42%	42%	-9.24
2022	Jan	17.02	6.70	0.00	0.000	39%	39%	-10.32
	Feb	17.19	6.70	0.00	0.000	39%	39%	-10.49
	Mar	16.00	6.70	0.00	0.000	42%	42%	-9.30
	Apr	16.69	6.70	0.00	0.000	40%	40%	-9.99
	May	16.34	6.70	0.00	0.000	41%	41%	-9.64
	Jun	16.52	4.00	0.00	10.000	24%	85%	-2.52
	Jul	15.93	4.00	0.00	10.000	25%	88%	-1.93
	Aug	16.30	4.00	0.00	10.000	25%	86%	-2.30
	Sep	17.10	4.00	0.00	10.000	23%	82%	-3.10
	Oct	16.65	4.00	0.00	10.000	24%	84%	-2.65
	Nov	16.29	4.00	0.00	10.000	25%	86%	-2.29
	Dec	16.50	4.00	0.00	10.000	24%	85%	-2.50
2023	Jan	17.66	4.00	0.00	10.000	23%	79%	-3.66
	Feb	17.84	4.00	0.00	10.000	22%	78%	-3.84
	Mar	16.60	4.00	0.00	10.000	24%	84%	-2.60
	Apr	17.31	4.00	0.00	10.000	23%	81%	-3.31
	May	16.96	4.00	0.00	10.000	24%	83%	-2.96
	Jun	17.14	4.00	0.00	10.000	23%	82%	-3.14
	Jul	16.53	4.00	0.00	10.000	24%	85%	-2.53
	Aug	16.91	4.00	0.00	10.000	24%	83%	-2.91
	Sep	17.74	4.00	0.00	10.000	23%	79%	-3.74
	Oct	17.27	4.00	0.00	10.000	23%	81%	-3.27
	Nov	16.90	4.00	0.00	10.000	24%	83%	-2.90
	Dec	17.12	4.00	0.00	10.000	23%	82%	-3.12
2024	Jan	18.37	4.00	0.00	10.000	22%	76%	-4.37
	Feb	18.56	4.00	0.00	10.000	22%	75%	-4.56
	Mar	17.27	4.00	0.00	10.000	23%	81%	-3.27
	Apr	18.01	4.00	0.00	10.000	22%	78%	-4.01
	May	17.64	4.00	0.00	10.000	23%	79%	-3.64
	Jun	17.83	4.00	0.00	10.000	22%	79%	-3.83



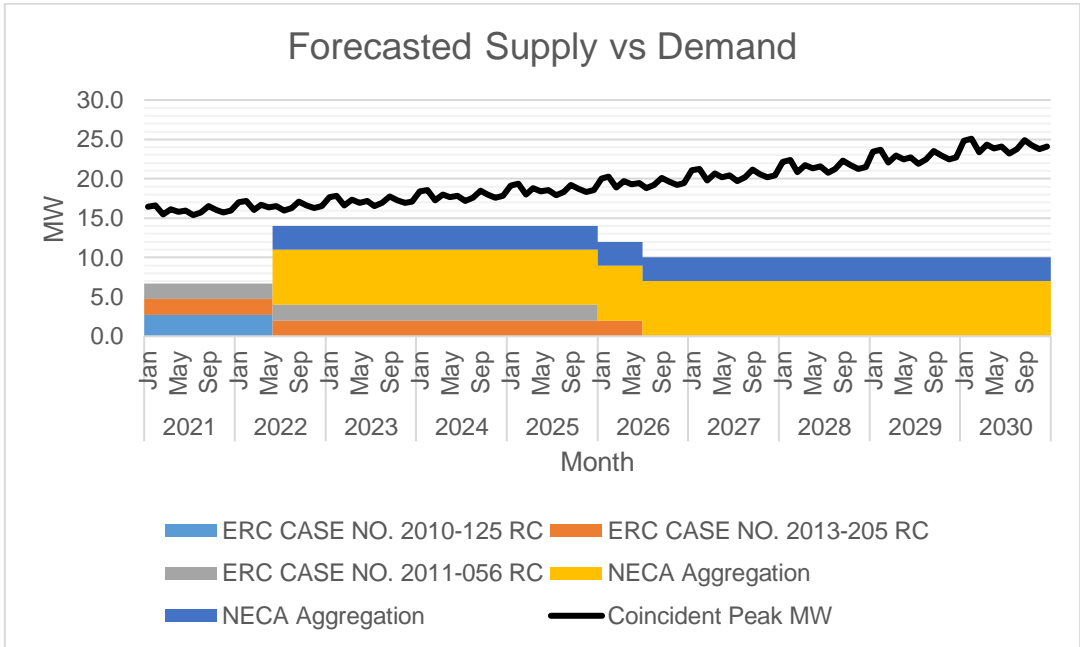
	Jul	17.19	4.00	0.00	10.000	23%	81%	-3.19
	Aug	17.60	4.00	0.00	10.000	23%	80%	-3.60
	Sep	18.45	4.00	0.00	10.000	22%	76%	-4.45
	Oct	17.97	4.00	0.00	10.000	22%	78%	-3.97
	Nov	17.58	4.00	0.00	10.000	23%	80%	-3.58
	Dec	17.81	4.00	0.00	10.000	22%	79%	-3.81
2025	Jan	19.16	4.00	0.00	10.000	21%	73%	-5.16
	Feb	19.36	4.00	0.00	10.000	21%	72%	-5.36
	Mar	18.02	4.00	0.00	10.000	22%	78%	-4.02
	Apr	18.79	4.00	0.00	10.000	21%	75%	-4.79
	May	18.40	4.00	0.00	10.000	22%	76%	-4.40
	Jun	18.60	4.00	0.00	10.000	22%	75%	-4.60
	Jul	17.94	4.00	0.00	10.000	22%	78%	-3.94
	Aug	18.36	4.00	0.00	10.000	22%	76%	-4.36
	Sep	19.25	4.00	0.00	10.000	21%	73%	-5.25
	Oct	18.75	4.00	0.00	10.000	21%	75%	-4.75
	Nov	18.34	4.00	0.00	10.000	22%	76%	-4.34
	Dec	18.58	4.00	0.00	10.000	22%	75%	-4.58
2026	Jan	20.06	2.00	0.00	10.000	10%	60%	-8.06
	Feb	20.26	2.00	0.00	10.000	10%	59%	-8.26
	Mar	18.86	2.00	0.00	10.000	11%	64%	-6.86
	Apr	19.67	2.00	0.00	10.000	10%	61%	-7.67
	May	19.26	2.00	0.00	10.000	10%	62%	-7.26
	Jun	19.47	2.00	0.00	10.000	10%	62%	-7.47
	Jul	18.77	0.00	0.00	10.000	0%	53%	-8.77
	Aug	19.21	0.00	0.00	10.000	0%	52%	-9.21
	Sep	20.15	0.00	0.00	10.000	0%	50%	-10.15
	Oct	19.62	0.00	0.00	10.000	0%	51%	-9.62
	Nov	19.20	0.00	0.00	10.000	0%	52%	-9.20
	Dec	19.44	0.00	0.00	10.000	0%	51%	-9.44
2027	Jan	21.06	0.00	0.00	10.000	0%	47%	-11.06
	Feb	21.28	0.00	0.00	10.000	0%	47%	-11.28
	Mar	19.80	0.00	0.00	10.000	0%	50%	-9.80
	Apr	20.65	0.00	0.00	10.000	0%	48%	-10.65
	May	20.22	0.00	0.00	10.000	0%	49%	-10.22
	Jun	20.44	0.00	0.00	10.000	0%	49%	-10.44
	Jul	19.71	0.00	0.00	10.000	0%	51%	-9.71
	Aug	20.17	0.00	0.00	10.000	0%	50%	-10.17
	Sep	21.16	0.00	0.00	10.000	0%	47%	-11.16
	Oct	20.60	0.00	0.00	10.000	0%	49%	-10.60
	Nov	20.15	0.00	0.00	10.000	0%	50%	-10.15
	Dec	20.41	0.00	0.00	10.000	0%	49%	-10.41
2028	Jan	22.18	0.00	0.00	10.000	0%	45%	-12.18
	Feb	22.41	0.00	0.00	10.000	0%	45%	-12.41
	Mar	20.86	0.00	0.00	10.000	0%	48%	-10.86
	Apr	21.75	0.00	0.00	10.000	0%	46%	-11.75
	May	21.30	0.00	0.00	10.000	0%	47%	-11.30

	Jun	21.53	0.00	0.00	10.000	0%	46%	-11.53
	Jul	20.76	0.00	0.00	10.000	0%	48%	-10.76
	Aug	21.25	0.00	0.00	10.000	0%	47%	-11.25
	Sep	22.28	0.00	0.00	10.000	0%	45%	-12.28
	Oct	21.70	0.00	0.00	10.000	0%	46%	-11.70
	Nov	21.23	0.00	0.00	10.000	0%	47%	-11.23
	Dec	21.50	0.00	0.00	10.000	0%	47%	-11.50
2029	Jan	23.43	0.00	0.00	10.000	0%	43%	-13.43
	Feb	23.68	0.00	0.00	10.000	0%	42%	-13.68
	Mar	22.04	0.00	0.00	10.000	0%	45%	-12.04
	Apr	22.98	0.00	0.00	10.000	0%	44%	-12.98
	May	22.50	0.00	0.00	10.000	0%	44%	-12.50
	Jun	22.75	0.00	0.00	10.000	0%	44%	-12.75
	Jul	21.93	0.00	0.00	10.000	0%	46%	-11.93
	Aug	22.45	0.00	0.00	10.000	0%	45%	-12.45
	Sep	23.54	0.00	0.00	10.000	0%	42%	-13.54
	Oct	22.92	0.00	0.00	10.000	0%	44%	-12.92
	Nov	22.43	0.00	0.00	10.000	0%	45%	-12.43
	Dec	22.72	0.00	0.00	10.000	0%	44%	-12.72
2030	Jan	24.83	0.00	0.00	10.000	0%	40%	-14.83
	Feb	25.08	0.00	0.00	10.000	0%	40%	-15.08
	Mar	23.35	0.00	0.00	10.000	0%	43%	-13.35
	Apr	24.34	0.00	0.00	10.000	0%	41%	-14.34
	May	23.84	0.00	0.00	10.000	0%	42%	-13.84
	Jun	24.10	0.00	0.00	10.000	0%	41%	-14.10
	Jul	23.24	0.00	0.00	10.000	0%	43%	-13.24
	Aug	23.78	0.00	0.00	10.000	0%	42%	-13.78
	Sep	24.94	0.00	0.00	10.000	0%	40%	-14.94
	Oct	24.29	0.00	0.00	10.000	0%	41%	-14.29
	Nov	23.76	0.00	0.00	10.000	0%	42%	-13.76
	Dec	24.07	0.00	0.00	10.000	0%	42%	-14.07

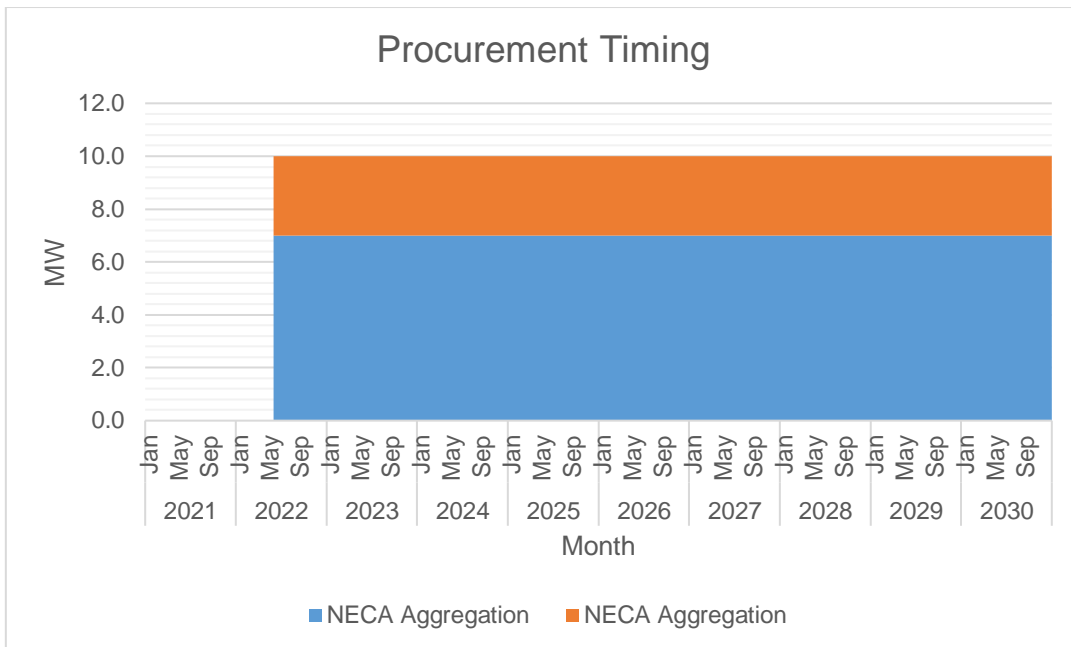
The Peak Demand was forecasted using a  $a + bt^3 + c \log t$  forecasting model and was assumed to occur on the month of February into which the peak of the last historical year was recorded. Monthly Peak Demand is at its lowest on the month of July and the same was assumed based on last historical year. In general, Peak Demand is expected to grow at a rate of 4% to 7% annually.



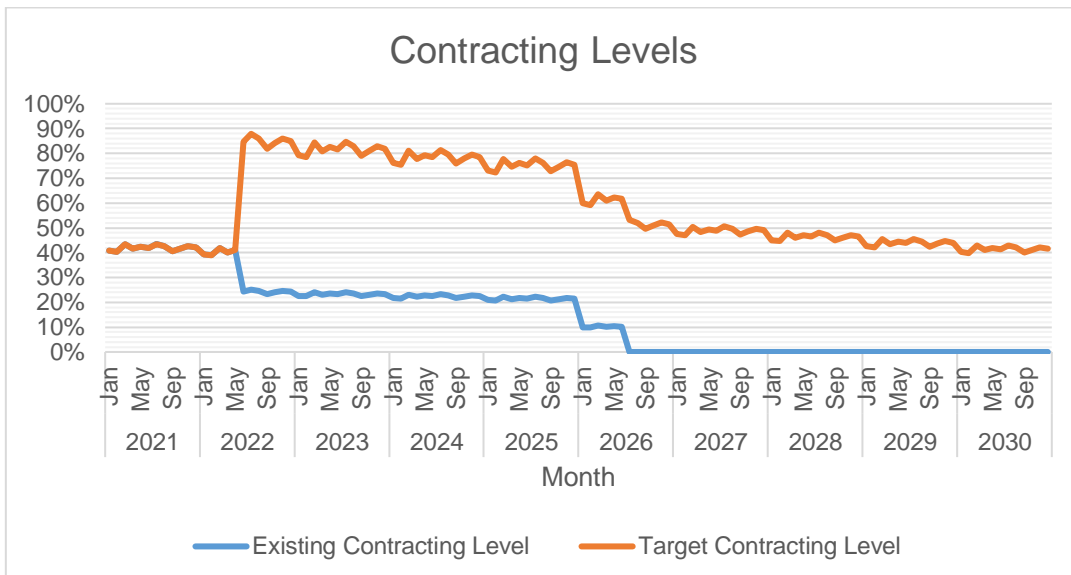
The available/contracted supply is generally below the Peak Demand. This is because the management prefer to source the uncontracted power from WESM where the average prices are lower than other power suppliers.



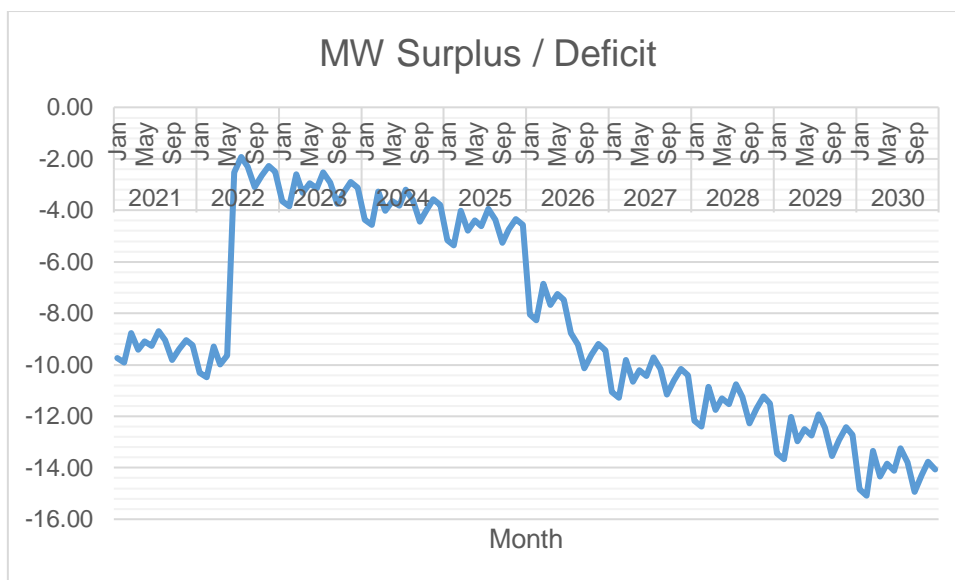
Of the available contracted power suppliers, the largest is 2.70MW from ERC Case No. 2010-125 RC. This is followed by the two (2) suppliers, ERC Case No. 2013-205 RC and ERC Case No. 125 RC, both contracted with 2.0MW. Aside from to those already contracted power supplies, the Management is currently engaging with Negros Electric Cooperative Association (NECA) Power Aggregation, where NORECO-I committed a 3MW peaking requirement for three (3) hours and 7MW for the base load requirement. Also, a plan of going into Joint Venture with private investors for the development of embedded hydro power plant is objectively deliberated by the Board of Directors and Management.



The first wave of supply procurement will be for 3MW peaking requirement and 7MW base load requirement planned to be available between the months of year 2022.



Currently, there is under-contacting by about 60%. The highest target contracting level is 88% which is expected to occur on July 2022. The lowest target contracting level is 39% which is expected to occur in the first quarter of 2022.



Currently, there is under-contracting by 9 MW to 10 MW. The highest deficit is around 15 MW which is expected to occur on the month of February 2030. The lowest deficit is around 2 MW which is expected to occur on the month of July 2022.

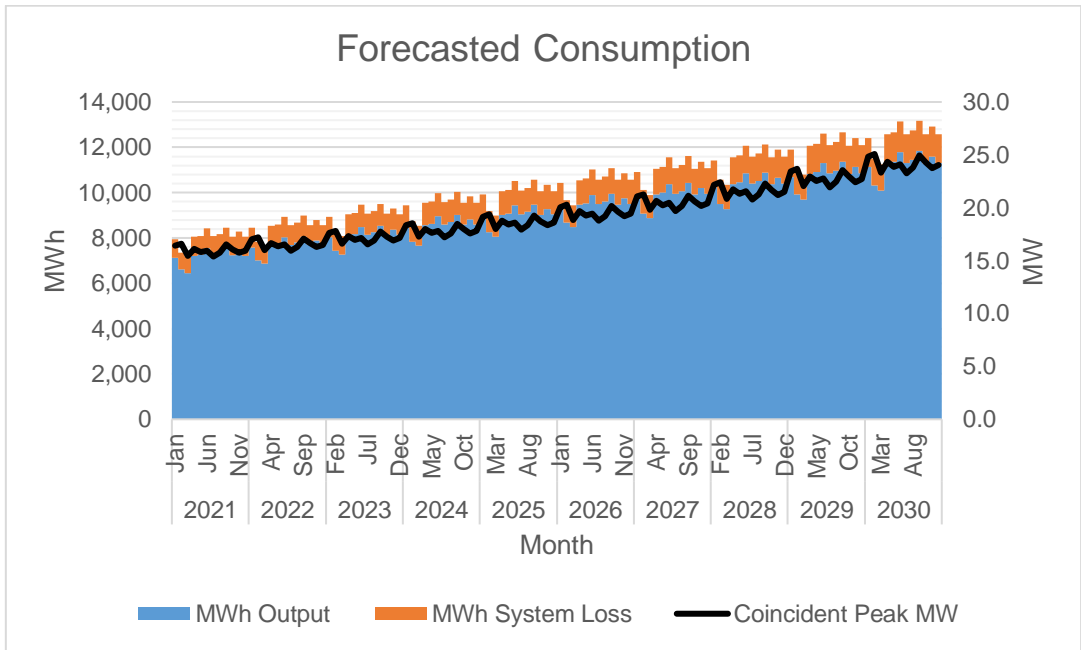
		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2021	Jan	8,114	7,132	815	2.06%	10.25%
	Feb	7,512	6,603	754	2.06%	10.25%
	Mar	7,344	6,456	737	2.06%	10.25%
	Apr	8,212	7,219	824	2.06%	10.25%
	May	8,264	7,264	830	2.06%	10.25%
	Jun	8,593	7,553	863	2.06%	10.25%
	Jul	8,246	7,248	828	2.06%	10.25%
	Aug	8,352	7,341	838	2.06%	10.25%
	Sep	8,641	7,596	867	2.06%	10.25%
	Oct	8,232	7,236	826	2.06%	10.25%
	Nov	8,453	7,431	849	2.06%	10.25%
	Dec	8,218	7,223	825	2.06%	10.25%
2022	Jan	8,619	7,576	865	2.06%	10.25%
	Feb	7,982	7,016	801	2.06%	10.25%
	Mar	7,803	6,859	783	2.06%	10.25%
	Apr	8,725	7,669	876	2.06%	10.25%
	May	8,781	7,718	881	2.06%	10.25%
	Jun	9,127	8,023	916	2.06%	10.25%
	Jul	8,757	7,698	879	2.06%	10.25%
	Aug	8,869	7,796	890	2.06%	10.25%
	Sep	9,176	8,066	921	2.06%	10.25%
	Oct	8,742	7,684	878	2.06%	10.25%
	Nov	8,979	7,893	901	2.06%	10.25%
	Dec	8,732	7,676	877	2.06%	10.25%
2023	Jan	9,124	8,020	916	2.06%	10.25%
	Feb	8,453	7,430	849	2.06%	10.25%

	Mar	8,263	7,263	829	2.06%	10.25%
	Apr	9,237	8,120	927	2.06%	10.25%
	May	9,298	8,173	933	2.06%	10.25%
	Jun	9,662	8,493	970	2.06%	10.25%
	Jul	9,269	8,147	930	2.06%	10.25%
	Aug	9,386	8,250	942	2.06%	10.25%
	Sep	9,711	8,536	975	2.06%	10.25%
	Oct	9,253	8,133	929	2.06%	10.25%
	Nov	9,505	8,355	954	2.06%	10.25%
	Dec	9,247	8,128	928	2.06%	10.25%
2024	Jan	9,629	8,464	967	2.06%	10.25%
	Feb	8,923	7,844	896	2.06%	10.25%
	Mar	8,722	7,667	876	2.06%	10.25%
	Apr	9,750	8,571	979	2.06%	10.25%
	May	9,815	8,628	985	2.06%	10.25%
	Jun	10,196	8,963	1,024	2.06%	10.25%
	Jul	9,780	8,597	982	2.06%	10.25%
	Aug	9,903	8,705	994	2.06%	10.25%
	Sep	10,246	9,006	1,029	2.06%	10.25%
	Oct	9,763	8,582	980	2.06%	10.25%
	Nov	10,031	8,817	1,007	2.06%	10.25%
	Dec	9,762	8,581	980	2.06%	10.25%
2025	Jan	10,134	8,908	1,017	2.06%	10.25%
	Feb	9,394	8,257	943	2.06%	10.25%
	Mar	9,182	8,071	922	2.06%	10.25%
	Apr	10,263	9,021	1,030	2.06%	10.25%
	May	10,333	9,083	1,037	2.06%	10.25%
	Jun	10,731	9,433	1,077	2.06%	10.25%
	Jul	10,292	9,047	1,033	2.06%	10.25%
	Aug	10,421	9,160	1,046	2.06%	10.25%
	Sep	10,781	9,477	1,082	2.06%	10.25%
	Oct	10,274	9,031	1,031	2.06%	10.25%
	Nov	10,557	9,279	1,060	2.06%	10.25%
	Dec	10,277	9,033	1,032	2.06%	10.25%
2026	Jan	10,640	9,352	1,068	2.06%	10.25%
	Feb	9,865	8,671	990	2.06%	10.25%
	Mar	9,641	8,475	968	2.06%	10.25%
	Apr	10,776	9,472	1,082	2.06%	10.25%
	May	10,850	9,538	1,089	2.06%	10.25%
	Jun	11,266	9,903	1,131	2.06%	10.25%
	Jul	10,804	9,496	1,085	2.06%	10.25%
	Aug	10,938	9,615	1,098	2.06%	10.25%
	Sep	11,317	9,947	1,136	2.06%	10.25%
	Oct	10,785	9,480	1,083	2.06%	10.25%
	Nov	11,083	9,742	1,113	2.06%	10.25%
	Dec	10,792	9,486	1,083	2.06%	10.25%
2027	Jan	11,145	9,797	1,119	2.06%	10.25%

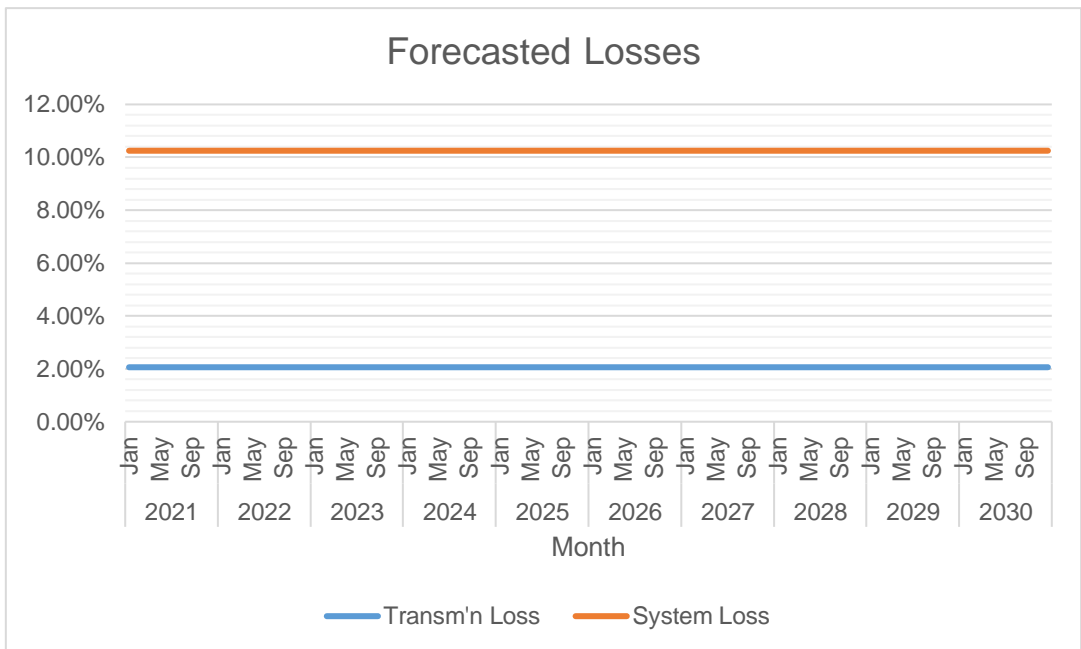
	Feb	10,336	9,085	1,038	2.06%	10.25%
	Mar	10,101	8,879	1,014	2.06%	10.25%
	Apr	11,289	9,923	1,133	2.06%	10.25%
	May	11,368	9,993	1,141	2.06%	10.25%
	Jun	11,801	10,373	1,185	2.06%	10.25%
	Jul	11,315	9,946	1,136	2.06%	10.25%
	Aug	11,456	10,070	1,150	2.06%	10.25%
	Sep	11,852	10,418	1,190	2.06%	10.25%
	Oct	11,296	9,929	1,134	2.06%	10.25%
	Nov	11,609	10,204	1,165	2.06%	10.25%
	Dec	11,307	9,939	1,135	2.06%	10.25%
2028	Jan	11,651	10,241	1,170	2.06%	10.25%
	Feb	10,806	9,499	1,085	2.06%	10.25%
	Mar	10,561	9,283	1,060	2.06%	10.25%
	Apr	11,802	10,374	1,185	2.06%	10.25%
	May	11,886	10,448	1,193	2.06%	10.25%
	Jun	12,336	10,844	1,238	2.06%	10.25%
	Jul	11,827	10,396	1,187	2.06%	10.25%
	Aug	11,973	10,525	1,202	2.06%	10.25%
	Sep	12,387	10,889	1,244	2.06%	10.25%
	Oct	11,806	10,378	1,185	2.06%	10.25%
	Nov	12,135	10,667	1,218	2.06%	10.25%
	Dec	11,822	10,392	1,187	2.06%	10.25%
2029	Jan	12,156	10,686	1,220	2.06%	10.25%
	Feb	11,277	9,913	1,132	2.06%	10.25%
	Mar	11,021	9,687	1,106	2.06%	10.25%
	Apr	12,315	10,825	1,236	2.06%	10.25%
	May	12,404	10,903	1,245	2.06%	10.25%
	Jun	12,872	11,314	1,292	2.06%	10.25%
	Jul	12,339	10,846	1,239	2.06%	10.25%
	Aug	12,491	10,980	1,254	2.06%	10.25%
	Sep	12,923	11,359	1,297	2.06%	10.25%
	Oct	12,317	10,827	1,237	2.06%	10.25%
	Nov	12,661	11,129	1,271	2.06%	10.25%
	Dec	12,337	10,845	1,239	2.06%	10.25%
2030	Jan	12,662	11,130	1,271	2.06%	10.25%
	Feb	11,748	10,327	1,179	2.06%	10.25%
	Mar	11,481	10,092	1,153	2.06%	10.25%
	Apr	12,828	11,276	1,288	2.06%	10.25%
	May	12,922	11,359	1,297	2.06%	10.25%
	Jun	13,407	11,785	1,346	2.06%	10.25%
	Jul	12,851	11,296	1,290	2.06%	10.25%
	Aug	13,009	11,435	1,306	2.06%	10.25%
	Sep	13,459	11,830	1,351	2.06%	10.25%
	Oct	12,829	11,276	1,288	2.06%	10.25%
	Nov	13,187	11,592	1,324	2.06%	10.25%
	Dec	12,853	11,298	1,290	2.06%	10.25%

MWh Offtake was forecasted using a  $a + bt + ct^2$  model. The management also incorporated spot loads or committed loads on top of the forecasted data and this resulted an increase of about 42% in the Industrial Consumer Class.

The System Loss of the Distribution Utility was forecasted/assumed using the CAP as determined by the Energy Regulatory Commission. The Management shall make sure that they are going to meet the System Loss Cap.



MWh Output was expected to grow at a rate of 5% annually.



The management through the Technical Working Group who made the preparation of the DDP and PSPP, projected a transmission loss of 2.06% based on the average transmission loss of the last historical year. System loss is projected to be 10.25% based on the SL cap as determined by the Energy Regulatory Commission (ERC).



## IV. Power Supply

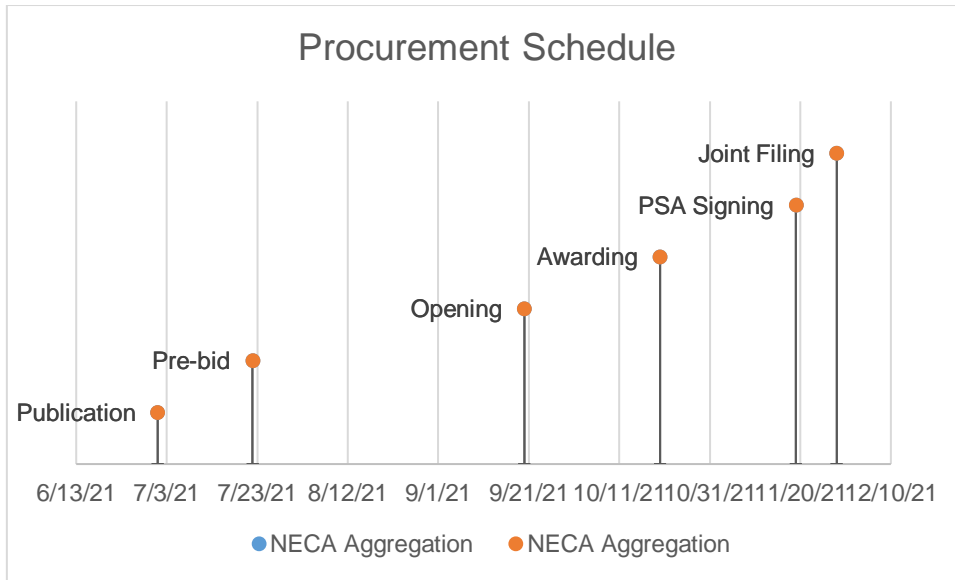
Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
ERC CASE NO. 2010-125 RC	Base	KEPCO SPC Power Corporation	2.70	23,652	5/31/2011	5/31/2022
ERC CASE NO. 2013-205 RC	Base	Palm Concepcion Power Corporation	2.00	17,520	6/26/2016	6/25/2026
ERC CASE NO. 2011-056 RC	Base	Green Core Geothermal, Inc.	2.00	17,520	12/26/2010	12/25/2025

On February 2018, a power contract for the peaking requirement of NORECO-I had ended. The management then decided to source its peaking requirement from WESM. All the remaining contract as shown on the table above are for the base load requirement. The above stated suppliers are of good standing to providing power to the DU base on the power supply agreement. The actual billed overall monthly charge of the contracted power suppliers for the year 2020 are as follows:

Case No.	GenCo	Rate inclusive of VAT and other fees, php/KWh
ERC CASE NO. 2010-125 RC	KEPCO SPC Power Corporation	5.7951 to 6.4754
ERC CASE NO. 2013-205 RC	Palm Concepcion Power Corporation	5.6948 to 6.3146
ERC CASE NO. 2011-056 RC	Green Core Geothermal, Inc.	5.5953 to 5.7552

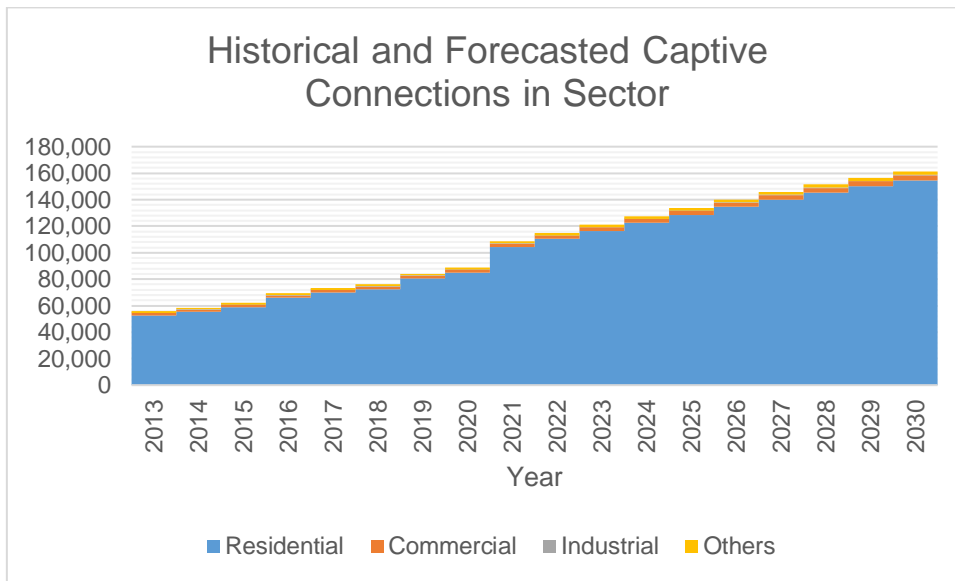
The table below shows the schedules relative to the plan for engagement with NECA.

	NECA Aggregation	NECA Aggregation
Type	Base	Peaking
Minimum MW	7.00	3.00
Minimum MWh/yr	61,320	3,285
PSA Start	5/26/2022	5/26/2022
PSA End	6/25/2032	6/25/2032
Publication	7/1/2021	7/1/2021
Pre-bid	7/22/2021	7/22/2021
Opening	9/20/2021	9/20/2021
Awarding	10/20/2021	10/20/2021
PSA Signing	11/19/2021	11/19/2021
Joint Filing	11/28/2021	11/28/2021



For the procurement of 7 MW base requirement and 3 MW peaking requirement which is planned to be available in June 2022, the first publication or launch of CSP will be in July 2021. Joint filing is planned on November 28, 2021, or 150 days later, in accordance with DOE’s 2018 CSP Policy.

### V. Captive Customer Connections



The number of connections, composed mainly of residential customers is projected to increase by 23% from year 2020 to year 2021. The Management will exert more efforts to increase the number of connections to comply with the mandate of National Electrification Administration (NEA) on general electrification. Strategies were being developed to attain a 96% energization to be compliant with NEA Key Performance Standards (KPS).

The number of Residential connections is expected to grow at an annual average rate of 4.46% after year 2021. Said customer class is expected to account for about 60% of the total consumption.