Power Supply Procurement Plan 2020

MISAMIS OCCIDENTAL II ELECTRIC COOPERATIVE, INC. (MOELCI-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
2005	18.88	101,246	0	101,246	83,909	17,337	61%	0.00%	0.00%	17.12%
2006	18.46	101,528	0	101,528	86,378	15,150	63%	0.00%	0.00%	14.92%
2007	19.45	108,062	0	108,062	92,218	15,843	63%	0.00%	0.00%	14.66%
2008	19.37	114,835	0	114,835	99,242	15,593	68%	0.00%	0.00%	13.58%
2009	20.76	118,799	0	118,799	106,841	11,958	65%	0.00%	0.00%	10.07%
2010	21.45	118,372	0	118,372	105,232	13,141	63%	0.00%	0.00%	11.10%
2011	20.58	119,606	0	119,606	107,058	12,549	66%	0.00%	0.00%	10.49%
2012	22.55	123,173	0	123,173	109,233	13,939	62%	0.00%	0.00%	11.32%
2013	23.77	129,547	0	129,547	114,959	14,588	62%	0.00%	0.00%	11.26%
2014	23.75	131,685	0	131,685	116,136	15,549	63%	0.00%	0.00%	11.81%
2015	23.72	139,988	0	139,988	123,736	16,252	67%	0.00%	0.00%	11.61%
2016	25.99	149,804	0	149,804	131,177	18,627	66%	0.00%	0.00%	12.43%
2017	25.29	149,347	0	149,347	131,915	17,432	67%	0.00%	0.00%	11.67%
2018	25.95	156,929	0	156,929	141,200	15,729	69%	0.00%	0.00%	10.02%
2019	27.49	159,457	0	159,457	144,228	15,229	66%	0.00%	0.00%	9.55%

Peak Demand increased from 25.95 MW in 2018 to 27.49 MW in 2019 at a rate of 5.93% due to new commercial consumers and operation of OSAMCO during peak month. MWh Purchased increased based on metered quantity from 156,929 MWh in 2018 to 159,457 MWh in 2019 at a rate of 1.611% due to additional customers. Within the same period, Load Factor ranged from 66% to69%. There was an abrupt change in consumption on 2016 due to hot summer and additional commercial buildings. It was noted by the DOE evaluator that there were several historical data that are inconsistent on the previous DDP this is due to some adjustments of billing data that we have made some corrections on the historical data of 2020-2029 DDP. For RESIDENTIAL SALES of year 2015 it was corrected from 56,974.445 to 57,050.535. For COMMERCIAL SALES for the year 2014 to 2017 as inputted 24679.974, 27409.264, 29427.037, 28732.316 respectively. As Corrected 24761.797, 27594.506, 29457.4844, 28737.114 Respectively. Coop own use is also corrected for year 2014-2015 from 344.152 to 382.66 and from 382.66 to 312.219. The highest historical coincident peak is 27.49 MW at year 2019. The MWh Offtake is equal to MWh Input because we are metered at the substation. No available data of Sub-transmission and Substation Technical loss from 2005 to 2015 it was not yet segregated.



MWh Output increased from year 2018 to year 2019 at a rate of 1.611%, while MWh System Loss decreased from 10.02% to 9.55% at a rate of 6.37% within the same period.



Historically, System Loss ranged from 9.55% to 17.12%. System Loss peaked at 17.12% on year 2005 because of pilferage, metering error and other non-technical losses.



Residential customers account for the bulk of energy sales at 49.21% due to the high number of connections. In contrast, Public building and street light customers accounted for only 5.55% of energy sales due to the low number of connections.



For 2015-070RC, the total Offtake for the last historical year is lower than the quantity stipulated in the PSA. The PSA with 2015-070RC accounts for the bulk of MWh Offtake.



WESM Offtake is zero because it is not yet implemented in Mindanao Grid.

Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 12.75 MW and the maximum load is 27.49 MW for the last historical year.



Peak MW occurred on May due to high temperature during summer. Peak daily MWh occurred on May 28, 2019 due to the operation of OSAMCO during this day. As shown in the Load Curves, the available supply is higher than the Peak Demand.



The Non-coincident Peak Demand is 29.73 MW, which is around 68.265% of the total substation capacity of 45 MVA at a power factor of 96.78%. The load factor or the ratio between the Average Load of 18.20 MW and the Non-coincident Peak Demand is 61.22%. A safe estimate of the true minimum load is the fifth percentile load of 12.75 MW which is 42.89% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW		
Bañadero	20	15.595		
Tabo-o	5	3.855		
Dimalooc	10	6.051		
Basirang	10	4.228		

The substations loaded at above 70% are Bañadero Substation. This loading problem will be solved by adding new substation.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2020	Jan	24.19	36.00	0.00	0.000	149%	149%	11.81
	Feb	23.70	36.00	0.00	0.000	152%	152%	12.30
	Mar	24.43	36.00	0.00	0.000	147%	147%	11.57
	Apr	23.57	36.00	0.00	0.000	153%	153%	12.43
	May	26.30	36.00	0.00	0.000	137%	137%	9.71
	Jun	26.88	36.00	0.00	0.000	134%	134%	9.12
	Jul	25.98	36.00	0.00	0.000	139%	139%	10.03
	Aug	27.04	36.00	0.00	0.000	133%	133%	8.96
	Sep	25.92	36.00	0.00	0.000	139%	139%	10.08
	Oct	26.67	36.00	0.00	0.000	135%	135%	9.33
	Nov	27.61	36.00	0.00	0.000	130%	130%	8.39
	Dec	25.97	36.00	0.00	0.000	139%	139%	10.03
2021	Jan	24.94	35.00	1.00	0.000	140%	144%	11.06
	Feb	24.43	35.00	1.00	0.000	143%	147%	11.57
	Mar	25.19	35.00	1.00	0.000	139%	143%	10.81
	Apr	26.93	35.00	1.00	0.000	130%	134%	9.07
	May	28.11	35.00	1.00	0.000	125%	128%	7.89
	Jun	28.91	35.00	1.00	0.000	121%	125%	7.10
	Jul	26.78	35.00	1.00	0.000	131%	134%	9.22
	Aug	27.88	35.00	1.00	0.000	126%	129%	8.12
	Sep	26.72	35.00	1.00	0.000	131%	135%	9.28
	Oct	27.50	35.00	1.00	0.000	127%	131%	8.50
	Nov	28.46	35.00	1.00	0.000	123%	126%	7.54
	Dec	26.78	35.00	1.00	0.000	131%	134%	9.22

2022	Jan	25.74	35.00	1.00	0.000	136%	140%	10.26
	Feb	25.21	35.00	1.00	0.000	139%	143%	10.79
	Mar	25.99	35.00	1.00	0.000	135%	139%	10.01
	Apr	27.79	35.00	1.00	0.000	126%	130%	8.21
	May	29.01	35.00	1.00	0.000	121%	124%	7.00
	Jun	29.83	35.00	1.00	0.000	117%	121%	6.17
	Jul	27.64	35.00	1.00	0.000	127%	130%	8.37
	Aug	28.77	35.00	1.00	0.000	122%	125%	7.23
	Sep	27.57	35.00	1.00	0.000	127%	131%	8.43
	Oct	28.38	35.00	1.00	0.000	123%	127%	7.63
	Nov	29.37	35.00	1.00	0.000	119%	123%	6.63
	Dec	27.63	35.00	1.00	0.000	127%	130%	8.37
2023	Jan	26.58	35.00	1.00	0.000	132%	135%	9.42
	Feb	26.04	35.00	1.00	0.000	134%	138%	9.96
	Mar	26.84	35.00	1.00	0.000	130%	134%	9.16
	Apr	28.69	35.00	1.00	0.000	122%	125%	7.31

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	May	29.95	35.00	1.00	0.000	117%	120%	6.05
	Jun	30.80	35.00	1.00	0.000	114%	117%	5.20
	Jul	28.54	35.00	1.00	0.000	123%	126%	7.46
	Aug	29.71	35.00	1.00	0.000	118%	121%	6.29
	Sep	28.48	35.00	1.00	0.000	123%	126%	7.53
	Oct	29.30	35.00	1.00	0.000	119%	123%	6.70
	Nov	30.33	35.00	1.00	0.000	115%	119%	5.67
	Dec	28.54	35.00	1.00	0.000	123%	126%	7.46
2024	Jan	27.47	35.00	0.00	0.940	127%	131%	8.47
	Feb	26.91	35.00	0.00	1.080	130%	134%	9.17
	Mar	27.74	35.00	0.00	1.310	126%	131%	8.58
	Apr	29.65	35.00	0.00	1.310	118%	122%	6.66
	May	30.95	35.00	0.00	1.160	113%	117%	5.21
	Jun	31.83	25.00	0.00	6.880	79%	100%	0.05
	Jul	29.49	25.00	0.00	6.890	85%	108%	2.40
	Aug	30.70	25.00	0.00	6.960	81%	104%	1.26
	Sep	29.43	25.00	0.00	6.880	85%	108%	2.46
	Oct	30.28	25.00	0.00	6.960	83%	106%	1.68
	Nov	31.34	25.00	0.00	6.880	80%	102%	0.54
	Dec	29.49	25.00	0.00	6.810	85%	108%	2.32
2025	Jan	28.40	25.00	0.00	7.730	88%	115%	4.33
	Feb	27.82	25.00	0.00	7.910	90%	118%	5.09
	Mar	28.68	25.00	0.00	8.170	87%	116%	4.49
	Apr	30.66	25.00	0.00	8.170	82%	108%	2.51
	May	32.00	25.00	0.00	8.000	78%	103%	1.00
	Jun	32.91	25.00	0.00	7.910	76%	100%	0.00
	Jul	30.49	25.00	0.00	7.910	82%	108%	2.42
	Aug	31.74	25.00	0.00	8.000	79%	104%	1.26
	Sep	30.42	25.00	0.00	7.910	82%	108%	2.49
	Oct	31.31	25.00	0.00	8.000	80%	105%	1.69
	Nov	32.41	25.00	0.00	7.910	77%	102%	0.50
	Dec	30.49	25.00	0.00	7.820	82%	108%	2.33
2026	Jan	29.38	25.00	0.00	8.920	85%	115%	4.54
	Feb	28.78	25.00	0.00	9.140	87%	119%	5.36
	Mar	29.66	25.00	0.00	9.480	84%	116%	4.82
	Apr	31.71	25.00	0.00	9.480	79%	109%	2.77
	May	33.11	25.00	0.00	9.260	76%	103%	1.16
	Jun	34.04	25.00	0.00	9.140	73%	100%	0.10
	Jui	31.54	25.00	0.00	9.140	79%	108%	2.60
	Aug	32.84	25.00	0.00	9.260	76%	104%	1.42
	Sep	31.47	25.00	0.00	9.140	79%	108%	2.07
	Neu	32.39	25.00	0.00	9.200	750/	100%	Ι.Ծ/
		33.52	25.00 25.00	0.00	9.140	70% 70%	102%	0.62
2027	Jon	31.54	25.00	0.00	9.030	1370 000/	100%	2.49 1 55
2021	Feb	29.78	25.00	0.00	10.210	84%	118%	5.43

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Mar	30.70	25.00	0.00	10.570	81%	116%	4.87
	Apr	32.82	25.00	0.00	10.570	76%	108%	2.75
	May	34.26	25.00	0.00	10.320	73%	103%	1.06
	Jun	35.23	25.00	0.00	10.230	71%	100%	0.00
	Jul	32.64	25.00	0.00	10.200	77%	108%	2.56
	Aug	33.98	25.00	0.00	10.320	74%	104%	1.34
	Sep	32.57	25.00	0.00	10.200	77%	108%	2.63
	Oct	33.52	25.00	0.00	10.320	75%	105%	1.81
	Nov	34.69	25.00	0.00	10.200	72%	101%	0.51
	Dec	32.64	25.00	0.00	10.070	77%	107%	2.43
2028	Jan	31.47	25.00	0.00	11.160	79%	115%	4.69
	Feb	30.83	25.00	0.00	11.470	81%	118%	5.64
	Mar	31.78	25.00	0.00	11.910	79%	116%	5.13
	Apr	33.97	25.00	0.00	11.920	74%	109%	2.95
	May	35.46	25.00	0.00	11.610	70%	103%	1.15
	Jun	36.47	25.00	0.00	11.469	69%	100%	0.00
	Jul	33.79	25.00	0.00	11.460	74%	108%	2.67
	Aug	35.18	25.00	0.00	11.610	71%	104%	1.44
	Sep	33.71	25.00	0.00	11.460	74%	108%	2.75
	Oct	34.69	25.00	0.00	11.610	72%	106%	1.92
	Nov	35.91	25.00	0.00	11.460	70%	102%	0.55
	Dec	33.79	25.00	0.00	11.310	74%	107%	2.52
2029	Jan	32.58	25.00	0.00	12.400	77%	115%	4.82
	Feb	31.92	25.00	0.00	12.750	78%	118%	5.83
	Mar	32.90	25.00	0.00	13.270	76%	116%	5.37
	Apr	35.18	25.00	0.00	13.270	71%	109%	3.09
	May	36.72	25.00	0.00	12.920	68%	103%	1.20
	Jun	37.76	25.00	0.00	12.761	66%	100%	0.00
	Jul	34.99	25.00	0.00	12.750	71%	108%	2.76
	Aug	36.42	25.00	0.00	12.920	69%	104%	1.50
	Sep	34.91	25.00	0.00	12.750	72%	108%	2.84
	Oct	35.92	25.00	0.00	12.920	70%	106%	2.00
	Nov	37.18	25.00	0.00	12.750	67%	102%	0.57
	Dec	34.98	25.00	0.00	12.570	71%	107%	2.59

The Peak Demand was forecasted using Regression analysis and was assumed to occur on the billing month of June due to high demand during summer time. Monthly Peak Demand is at its lowest on the month of February due to some changes of school calendar. In general, Peak Demand is expected to grow at a rate of 3.34% annually. PSALM 1 MW contract was considered as "Pending" due to the delay on securing of (COE) Certificate Of Exempt to conduct CSP from DOE. The status of the renewal was PSALM already issued a certificate of available capacity dated January 28, 2021. RPS compliance of EC is already included in planned CSP starting year 2024. The minimum Monthly Capacity of RPS is 1 MW depending on what technology that can immediately supply the RPS compliance of the DU. On May 2024 our peaking supply contract will expire and we planned to have a Peaking power supply of 5.8 MW on top of Contracted 25MW from FDC and planned capacity of RPS requirement. It is recommended that portion of the Peaking requirements of EC will be RE

Eligible so that the EC could be compliant in RPS at the same time it will address the peaking demand of the Electric Cooperative.



The available supply is generally above the Peak Demand. This is because of the FDC 25MW Contracted capacity. By year 2024 the Contracted level is lower than the Peak demand due to the contract expiration of KEGI.



Of the available supply, the largest is 25 MW from FDC. This is followed by 10 MW from KEGI.



The first wave of supply procurement will be for 1 MW minimum planned Supply for RPS requirements to be available by the billing month of January 2024. This will be followed by 5.8MW on May 2024 for peaking requirements. The demand to be contract should be based on the annual demand requirements.



Currently, there is surplus contracted capacity by 31%. The highest target contracting level is 147% which is expected to occur on February 2020. The lowest target contracting level is 103% which is expected to occur on May 2024.



Currently, there is Surplus Supply by12.3 MW. The highest surplus is 12.3 MW which is expected to occur on the month of February 2020. The lowest surplus is 1 MW which is expected to occur on the month of May 2024.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2020	Jan	13,528	12,223	1,305	0.00%	9.65%
	Feb	13,122	11,951	1,171	0.00%	8.92%
	Mar	11,656	10,546	1,110	0.00%	9.52%
	Apr	12,748	11,208	1,540	0.00%	12.08%
	May	13,454	11,931	1,523	0.00%	11.32%
	Jun	14,048	12,709	1,339	0.00%	9.53%
	Jul	13,736	12,602	1,134	0.00%	8.26%
	Aug	13,439	12,226	1,214	0.00%	9.03%
	Sep	14,049	12,606	1,443	0.00%	10.27%
	Oct	13,938	12,688	1,251	0.00%	8.97%
	Nov	14,511	13,284	1,226	0.00%	8.45%
	Dec	13,868	12,609	1,258	0.00%	9.08%
2021	Jan	13,985	12,632	1,353	0.00%	9.68%
	Feb	13,557	12,343	1,214	0.00%	8.95%
	Mar	12,051	10,900	1,151	0.00%	9.55%
	Apr	14,076	12,791	1,285	0.00%	9.13%
	May	15,088	13,257	1,831	0.00%	12.14%
	Jun	15,176	13,691	1,485	0.00%	9.78%
	Jul	14,201	13,025	1,176	0.00%	8.28%
	Aug	13,898	12,639	1,258	0.00%	9.05%
	Sep	14,528	13,032	1,496	0.00%	10.30%
	Oct	14,416	13,120	1,296	0.00%	8.99%
	Nov	15,002	13,731	1,271	0.00%	8.47%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Dec	14,340	13,035	1,305	0.00%	9.10%
2022	Jan	14,472	13,058	1,414	0.00%	9.77%
	Feb	14,021	12,753	1,268	0.00%	9.05%
	Mar	12,470	11,268	1,202	0.00%	9.64%
	Apr	14,570	13,228	1,342	0.00%	9.21%
	May	15,621	13,708	1,913	0.00%	12.24%
	Jun	15,711	14,160	1,551	0.00%	9.87%
	Jul	14,695	13,466	1,229	0.00%	8.36%
	Aug	14,384	13,070	1,315	0.00%	9.14%
	Sep	15,038	13,475	1,563	0.00%	10.39%
	Oct	14,923	13,569	1,354	0.00%	9.08%
	Nov	15,524	14,196	1,328	0.00%	8.56%
	Dec	14,841	13,478	1,363	0.00%	9.18%
2023	Jan	14,955	13,480	1,474	0.00%	9.86%
	Feb	14,481	13,158	1,323	0.00%	9.13%
	Mar	12,889	11,635	1,254	0.00%	9.73%
	Apr	15,063	13,663	1,400	0.00%	9.29%
	May	16,152	14,157	1,995	0.00%	12.35%
	Jun	16,244	14,626	1,617	0.00%	9.96%
	Jul	15,185	13,904	1,281	0.00%	8.44%
	Aug	14,870	13,499	1,371	0.00%	9.22%
	Sep	15,547	13,917	1,630.1670	0.00%	10.49%
	Oct	15,429	14,016	1,412	0.00%	9.15%
	Nov	16,042	14,657	1,385	0.00%	8.63%
	Dec	15,341	13,919	1,421	0.00%	9.27%
2024	Jan	15,449	13,912	1,537	0.00%	9.95%
	Feb	14,952	13,573	1,379	0.00%	9.22%
	Mar	13,317	12,010	1,307	0.00%	9.82%
	Apr	15,567	14,107	1,459	0.00%	9.37%
	May	16,695	14,616	2,079	0.00%	12.45%
	Jun	16,789	15,103	1,686	0.00%	10.04%
	Jul	15,687	14,352	1,336	0.00%	8.51%
	Aug	15,367	13,938	1,429	0.00%	9.30%
	Sep	16,068	14,369	1,699	0.00%	10.58%
	Oct	15,947	14,474	1,472	0.00%	9.23%
	Nov	16,573	15,129	1,444	0.00%	8.71%
	Dec	15,852	14,371	1,482	0.00%	9.35%
2025	Jan	15,950	14,350	1,601	0.00%	10.03%
	Feb	15,429	13,993	1,436	0.00%	9.31%
	Mar	13,752	12,391	1,361	0.00%	9.90%
	Apr	16,078	14,558	1,520	0.00%	9.45%
	May	17,247	15,082	2,166	0.00%	12.56%
	Jun	17,342	14,905	1,756	0.00%	10.13%
	Jul	10,190	14,805	1,391	0.00%	0.09%
	Aug	15,8/2	14,303	1,400	0.00%	9.38%
	Oct	16 473	14 020	1,770	0.00%	9 31%
	001	10,773	1-7,000	1,000	0.0070	0.0170

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Nov	17,110	15,607	1,504	0.00%	8.79%
	Dec	16,372	14,829	1,543	0.00%	9.43%
2026	Jan	16,461	14,795	1,666	0.00%	10.12%
	Feb	15,916	14,421	1,495	0.00%	9.39%
	Mar	14,196	12,779	1,417	0.00%	9.98%
	Apr	16,599	15,017	1,582	0.00%	9.53%
	May	17,810	15,556	2,254	0.00%	12.66%
	Jun	17,905	16,078	1,828	0.00%	10.21%
	Jul	16,715	15,267	1,448	0.00%	8.66%
	Aug	16,386	14,837	1,549	0.00%	9.45%
	Sep	17,137	15,295	1,842	0.00%	10.75%
	Oct	17,009	15,413	1,596	0.00%	9.38%
	Nov	17,658	16,093	1,565	0.00%	8.86%
	Dec	16,901	15,295	1,606	0.00%	9.50%
2027	Jan	16,980	15,247	1,733	0.00%	10.21%
	Feb	16,412	14,857	1,555	0.00%	9.47%
	Mar	14,648	13,174	1,474	0.00%	10.06%
	Apr	17,129	15,483	1,646	0.00%	9.61%
	May	18,382	16,037	2,345	0.00%	12.76%
	Jun	18,478	16,577	1,901	0.00%	10.29%
	Jul	17,243	15,737	1,506	0.00%	8.73%
	Aug	16,910	15,299	1,611	0.00%	9.53%
	Sep	17,686	15,770	1,916	0.00%	10.83%
	Oct	17,555	15,895	1,660	0.00%	9.46%
	Nov	18,216	16,588	1,628	0.00%	8.94%
	Dec	17,440	15,769	1,671	0.00%	9.58%
2028	Jan	17,508	15,706	1,801	0.00%	10.29%
	Feb	16,915	15,299	1,616	0.00%	9.55%
	Mar	15,107	13,575	1,532	0.00%	10.14%
	Apr	17,666	15,956	1,710	0.00%	9.68%
	May	18,963	16,526	2,437	0.00%	12.85%
	Jun	19,060	17,083	1,976	0.00%	10.37%
	Jul	17,779	16,213	1,565	0.00%	8.81%
	Aug	17,442	15,767	1,675	0.00%	9.60%
	Sep	18,244	16,252	1,992	0.00%	10.92%
	Oct	18,109	16,383	1,726	0.00%	9.53%
	Nov	18,781	17,089	1,692	0.00%	9.01%
	Dec	17,987	16,250	1,737	0.00%	9.66%
2029	Jan	18,042	16,171	1,871	0.00%	10.37%
	Feb	17,426	15,748	1,679	0.00%	9.63%
	Mar	15,573	13,982	1,591	0.00%	10.22%
	Apr	18,211	16,434	1,//7	0.00%	9.76%
	May	19,552	17,021	2,532	0.00%	12.95%
	Jun	19,649	17,596	2,053	0.00%	10.45%
	Jul	18,322	16,696	1,626	0.00%	8.88%
	Aug	10,901	10,241	1,740	0.00%	9.00%
	Sep	10,009	10,740	∠,009	0.00%	11.00%

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
	Oct	18,670	16,878	1,792	0.00%	9.60%
	Nov	19,355	17,597	1,758	0.00%	9.08%
	Dec	18,541	16,737	1,804	0.00%	9.73%

MWh Offtake was forecasted using Regression model. The assumed load factor is 59.6%. System Loss was calculated through a Load Flow Study conducted on March 2020 by using DSL Segregator 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 3.15% annually.



Transmission Loss is expected to increase on the next following year due to primary metering of substation. While System Loss is expected to range from 8.26% to 12.95%.

Power Supply

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
2015-070RC	Base	FDC Misamis Power Corporation	10.00	87,600	12/26/2017	12/25/2042
2014-078RC	Peaking	King Energy Generation, Inc.	4	24500	5/26/2014	5/25/2024
PSALM	Intermediate	Power Sector Assets and Liabilities Management Corporation	1.00	7,008	12/26/2019	12/25/2020

The PSA with FDC Misamis Power Corporation filed with ERC under Case No. 2015-070RC was procured through direct negotiation. It was selected to provide for base requirements due to low variable cost. Historically, the utilization of the PSA is more or less 80%. Outages of the plant led to unserved energy of around 1789.8933MWh in the past year. The actual billed overall monthly charge under the PSA is **6.87P/KWh** average for the past year.

The PSA with King Energy Generation, Inc. filed with ERC under Case No. 2014-078RC was procured through direct negotiation. It was selected to provide for intermediate/peaking requirements due to low CRF and high variable cost. The actual billed overall monthly charge under the PSA average for the whole year is **55.99 P/kWh**. The high rate was due to lesser kWh dispatched from the power plant.

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
PSALM	Intermediate	Power Sector Assets and Liabilities Management Corporation	1.00	7,008	12/26/2020	12/25/2023

The CSEE with PSALM, Inc. will expires on December 26, 2020. MOELCI-II is planned to renew the contract with PSALM through direct negotiation for the year 2021 to 2023 and subject for COE from DOE since PSALM is exempted from any participation in the Competitive Selection Process (CSP).

	New (Peaking)	New (RPS)
Туре	Peaking	Intermediate
Minimum MW	4.00	1.00
Minimum MWh/yr	750	7,874
PSA Start	5/26/2024	12/26/2023
PSA End	5/26/2029	12/26/2023
Publication	5/26/2021	5/26/2021
Pre-bid	6/16/2021	6/16/2021
Opening	8/15/2021	8/15/2021
Awarding	9/14/2021	9/14/2021
PSA Signing	10/14/2021	10/14/2021
Joint Filing	10/23/2021	10/23/2021



For the procurement of minimum 1 MW of supply for RPS which is planned to be available on December 26, 2023, the first publication or launch of CSP will be on May 24, 2021. Joint filing is planned on October 31, 2021 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 3.34% annually. Said customer class is expected to account for 49.09% of the total consumption. It was noted by the DOE evaluator that there were several historical data that are inconsistent inputted for the year 2016 visa-vis 2019-2028 DDP (15a.1). For Residential Customers as inputted 62,525 as corrected actual data 62,541. For Commercial Customers as inputted 2507 as corrected actual data 2493. This is due to some adjustments of billing data that we have made some corrections on the historical data of 2020-2029 DDP