Power Supply Procurement Plan 2020



Occidental Mindoro Electric Cooperative

Historical Consumption Data

	Coincident Peak MW	MWh Offtake	MWh Input	MWh Output	MWh System Loss	Load Factor	System Loss
2000	6.30	34,285	34,285	28,167	6,118	62%	17.84%
2001	7.15	36,476	36,476	30,856	5,620	58%	15.41%
2002	7.80	37,746	37,746	31,479	6,267	55%	16.60%
2003	8.46	38,005	38,005	31,750	6,255	51%	16.46%
2004	9.03	43,279	43,279	36,139	7,140	55%	16.50%
2005	9.56	47,190	47,190	38,527	8,663	56%	18.36%
2006	9.89	50,002	50,002	40,062	9,940	58%	19.88%
2007	10.43	52,114	52,114	43,092	9,022	57%	17.31%
2008	10.73	55,024	55,024	46,190	8,834	59%	16.06%
2009	11.97	60,264	60,264	50,716	9,547	57%	15.84%
2010	13.04	68,454	68,454	58,176	10,278	60%	15.01%
2011	13.43	67,427	67,427	57,079	10,348	57%	15.35%
2012	13.90	69,295	69,295	58,556	10,739	57%	15.50%
2013	15.50	76,017	76,017	64,102	11,915	56%	15.67%
2014	16.35	81,779	81,779	70,059	11,720	57%	14.33%
2015	17.34	89,269	89,269	75,899	13,371	59%	14.98%
2016	19.48	101,424	101,424	85,858	15,565	59%	15.35%
2017	20.38	110,144	110,144	93,264	16,880	62%	15.33%
2018	22.76	119,803	119,803	102,377	17,426	60%	14.55%
2019	24.16	132,352	132,352	114,458	17,894	63%	13.52%

Peak Demand increased from 22.76 MW in 2018 to 24.16 MW in 2019 at a rate of 6% due to increasing number of connections to the distribution system. Within the same period, Load Factor ranged from 60% to 63%. There was an abrupt change in consumption in 2019 due to increase of economic activity in the franchise area.



MWh Output increased from year 2018 to year 2019 at a rate of 12%, while MWh System Loss decreased at a rate of 1% within the same period.



Historically, System Loss ranged from 19.88% to 13.52%. System Loss peaked at 19.88% on year 2006. The system loss curve is somehow reflective of non-technical system loss as determined from the distribution system loss segregation in 2006 where the technical system loss was computed ranging from 7% to 8% during the historical year 2001 to 2005.



Residential customers account for the bulk of energy sales at 55.34% due to the high number of connections. In contrast, Public Building and Street Lights (Others) customers accounted for only 9.45% of energy sales due to the low number of connections.

Previous Year's Load Profile



Based on the Load Duration Curve, the minimum load is 1.14 MW and the maximum load is 24.16 MW for the last historical year.



Peak MW occurred on 2nd of May due to summer season. Peak daily MWh occurred on 3rd of June. As shown in the Load Curves, the available supply is little bit lower than the Peak Demand.



The Non-coincident Peak Demand is 35.65 MW, which is around 65% of the total substation capacity of 55 MVA at a power factor of 97%. The load factor or the ratio between the Average Load of 16 MW and the Non-coincident Peak Demand is 45%. A safe estimate of the true minimum load is the fifth percentile load of 10.48 MW which is 29% of the Non-coincident Peak Demand.

Metering Point	Substation MVA	Substation Peak MW
OMCPC	25	13.980
Magbay	10	8.200
Tayamaan	10	5.900
Eco-Park	5	2.990
Pag-asa	5	4.579

The substation loaded at above 70% is the NPC-Magbay Substation. This loading problem will be solved by constructing an additional 15 MVA substation in the vicinity of OMECO Main Office Compound.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2020	Jan	23.76	24.00	0.00	0.000		101%
	Feb	21.86	24.00	0.00	0.000		110%
	Mar	22.92	24.00	0.00	0.000		105%
	Apr	25.67	24.00	0.00	0.000		94%
	May	27.01	24.00	0.00	0.000		89%
	Jun	25.67	24.00	0.00	0.000		93%
	Jul	22.22	24.00	0.00	0.000		108%
	Aug	21.80	24.00	0.00	0.000		110%
	Sep	21.22	24.00	0.00	0.000		113%
	Oct	23.62	24.00	0.00	0.000		102%
	Nov	24.47	24.00	0.00	0.000		98%
	Dec	23.85	24.00	0.00	0.000		101%
2021	Jan	25.47	4.00	0.00	25.000		16%
	Feb	23.43	4.00	0.00	25.000		17%
	Mar	24.57	4.00	0.00	25.000		16%
	Apr	27.51	4.00	0.00	25.000		15%
	May	28.96	4.00	0.00	25.000		14%
	Jun	27.52	4.00	0.00	25.000		15%
	Jul	23.82	0.00	0.00	30.000		0%
	Aug	23.37	0.00	0.00	30.000		0%
	Sep	22.75	0.00	0.00	30.000		0%
	Oct	25.32	0.00	0.00	30.000		0%
	Nov	26.23	0.00	0.00	30.000		0%
	Dec	25.57	0.00	0.00	30.000		0%
2022	Jan	27.22	0.00	0.00	31.000		0%
	Feb	25.04	0.00	0.00	31.000		0%
	Mar	26.25	0.00	0.00	31.000		0%
	Apr	29.40	0.00	0.00	31.000		0%
	May	30.94	0.00	0.00	31.000		0%
	Jun	29.41	0.00	0.00	31.000		0%
	Jui	25.45	0.00	0.00	31.000		0%
	Aug	24.97	0.00	0.00	31.000		0%
	Oct	24.30	0.00	0.00	31.000		0%
	Nov	27.00	0.00	0.00	31.000		0%
	Dec	20.05	0.00	0.00	31.000		0%
2023	lan	27.52	0.00	0.00	34,000		0%
2025	Feb	26.55	0.00	0.00	34,000		0%
	Mar	27.96	0.00	0.00	34 000		0%
	Anr	31 32	0.00	0.00	34 000		0%
	May	32.96	0.00	0.00	34 000		0%
	Jup	31.32	0.00	0.00	34,000		0%
	Jul	27.11	0.00	0.00	34.000		0%
	Aug	26.60	0.00	0.00	34.000		0%

		Coincident Peak MW	Contracted MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Sep	25.89	0.00	0.00	34.000		0%
	Oct	28.82	0.00	0.00	34.000		0%
	Νον	29.86	0.00	0.00	34.000		0%
	Dec	29.10	0.00	0.00	34.000		0%
2024	Jan	30.80	0.00	0.00	35.000		0%
	Feb	28.33	0.00	0.00	35.000		0%
	Mar	29.71	0.00	0.00	35.000		0%
	Apr	33.27	0.00	0.00	35.000		0%
	May	35.01	0.00	0.00	35.000		0%
	Jun	33.28	0.00	0.00	35.000		0%
	Jul	28.81	0.00	0.00	35.000		0%
	Aug	28.26	0.00	0.00	35.000		0%
	Sep	27.50	0.00	0.00	35.000		0%
	Oct	30.62	0.00	0.00	35.000		0%
	Νον	31.72	0.00	0.00	35.000		0%
	Dec	30.92	0.00	0.00	35.000		0%
2025	Jan	32.64	0.00	0.00	37.000		0%
	Feb	30.03	0.00	0.00	37.000		0%
	Mar	31.49	0.00	0.00	37.000		0%
	Apr	35.26	0.00	0.00	37.000		0%
	May	37.11	0.00	0.00	37.000		0%
	Jun	35.27	0.00	0.00	37.000		0%
	Jul	30.53	0.00	0.00	37.000		0%
	Aug	29.95	0.00	0.00	37.000		0%
	Sep	29.15	0.00	0.00	37.000		0%
	Oct	32.45	0.00	0.00	37.000		0%
	Νον	33.62	0.00	0.00	37.000		0%
	Dec	32.77	0.00	0.00	37.000		0%
2026	Jan	34.52	0.00	0.00	39.000		0%
	Feb	31.76	0.00	0.00	39.000		0%
	Mar	33.30	0.00	0.00	39.000		0%
	Apr	37.29	0.00	0.00	39.000		0%
	May	39.24	0.00	0.00	39.000		0%
	Jun	37.30	0.00	0.00	39.000		0%
	Jul	32.28	0.00	0.00	39.000		0%
	Aug	31.67	0.00	0.00	39.000		0%
	Sep	30.83	0.00	0.00	39.000		0%
	New	34.32	0.00	0.00	39.000		0%
		35.55	0.00	0.00	39.000		0%
2027	Dec	34.00	0.00	0.00	39.000		0%
2027	Jan	20.43	0.00	0.00	46.000		0%
	red	33.52 25.14	0.00	0.00	46.000		00/-
	Apr	20.26	0.00	0.00	40.000		0%
	Apr	٥٢.۶٥ ۸۱ ۸۵	0.00	0.00	40.000		0%
	luc	41.42 20.27	0.00	0.00	40.000		0%
	Jun	57.51	0.00	0.00	40.000		0%0

		Coincident Peak MW	Contracted MW	Planned MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
	Jul	34.07	0.00	0.00	46.000		0%
	Aug	33.43	0.00	0.00	46.000		0%
	Sep	32.54	0.00	0.00	46.000		0%
	Oct	36.22	0.00	0.00	46.000		0%
	Νον	37.52	0.00	0.00	46.000		0%
	Dec	36.58	0.00	0.00	46.000		0%
2028	Jan	38.38	0.00	0.00	46.000		0%
	Feb	35.31	0.00	0.00	46.000		0%
	Mar	37.02	0.00	0.00	46.000		0%
	Apr	41.46	0.00	0.00	46.000		0%
	May	43.63	0.00	0.00	46.000		0%
	Jun	41.47	0.00	0.00	46.000		0%
	Jul	35.90	0.00	0.00	46.000		0%
	Aug	35.22	0.00	0.00	46.000		0%
	Sep	34.28	0.00	0.00	46.000		0%
	Oct	38.16	0.00	0.00	46.000		0%
	Νον	39.53	0.00	0.00	46.000		0%
	Dec	38.53	0.00	0.00	46.000		0%
2029	Jan	40.37	0.00	0.00	46.000		0%
	Feb	37.13	0.00	0.00	46.000		0%
	Mar	38.94	0.00	0.00	46.000		0%
	Apr	43.61	0.00	0.00	46.000		0%
	May	45.89	0.00	0.00	46.000		0%
	Jun	43.62	0.00	0.00	46.000		0%
	Jul	37.75	0.00	0.00	46.000		0%
	Aug	37.04	0.00	0.00	46.000		0%
	Sep	36.05	0.00	0.00	46.000		0%
	Oct	40.13	0.00	0.00	46.000		0%
	Νον	41.57	0.00	0.00	46.000		0%
	Dec	40.53	0.00	0.00	46.000		0%

The Peak Demand was forecasted using linear model and OMECO's 5-Year Normalized Historical Energy Data including the Energy Not Served during power outages, and was assumed to occur on the month of May due to summer season. Monthly Peak Demand is at its lowest on the month of September due to rainy season and decreased industrial activities. In general, Peak Demand is expected to grow at a rate of 7% annually.



The available supply is generally below the Peak Demand. However, the conduct of Competitive Selection Process for the New Power Provider is ongoing.



Of the available supply, the largest is 24 MW from the existing NPP and NPC-SPUG.



The Emergency Power Supply (25MW) is planned to be available on January 1, 2021. While the Short-term Power Supply will be available on June 26, 2021. The Long-term Power Supply has no definite plan due to Batangas-Mindoro Interconnection Project consideration.



Currently, there is under-contracting by 11% based from expected peak demand on May 2020. The highest target contracting level is 32% which is expected to occur on September 2021.



Currently, there is under-contracting by 3.01 MW on May 2020. The highest surplus is 13.46 MW which is expected to occur on the month of September 2027. The lowest deficit is 0.47 MW which is expected to occur on the month of November 2020.

		MWh Offtake	MWh Output	MWh System Loss	System Loss
2020	Jan	11,007	9,737	1,270	11.54%
	Feb	11,321	10,015	1,307	11.54%
	Mar	11,101	9,820	1,281	11.54%
	Apr	13,040	11,535	1,505	11.54%
	May	14,108	12,480	1,628	11.54%
	Jun	12,815	11,336	1,479	11.54%
	Jul	10,924	9,663	1,261	11.54%
	Aug	11,445	10,124	1,321	11.54%
	Sep	11,417	10,100	1,318	11.54%
	Oct	12,675	11,212	1,463	11.54%
	Νον	13,262	11,731	1,531	11.54%
	Dec	12,426	10,992	1,434	11.54%
2021	Jan	11,800	10,428	1,371	11.62%
	Feb	12,136	10,726	1,411	11.62%
	Mar	11,900	10,517	1,383	11.62%
	Apr	13,978	12,354	1,625	11.62%
	May	15,124	13,366	1,758	11.62%
	Jun	13,738	12,141	1,597	11.62%
	Jul	11,711	10,350	1,361	11.62%
	Aug	12,269	10,843	1,426	11.62%
	Sep	12,240	10,817	1,423	11.62%
	Oct	13,587	12,008	1,579	11.62%
	Νον	14,217	12,564	1,652	11.62%
	Dec	13,321	11,773	1,548	11.62%
2022	Jan	12,607	11,133	1,474	11.69%
	Feb	12,967	11,450	1,516	11.69%

	Mar	12,715	11,228	1,487	11.69%
	Apr	14,935	13,188	1,747	11.69%
	May	16,159	14,269	1,890	11.69%
	Jun	14,678	12,961	1,717	11.69%
	Jul	12,512	11,049	1,463	11.69%
	Aug	13,108	11,575	1,533	11.69%
	Sep	13,077	11,548	1,529	11.69%
	Oct	14,517	12,819	1,698	11.69%
	Νον	15,190	13,413	1,776	11.69%
	Dec	14,232	12,568	1,664	11.69%
2023	Jan	13,430	11,851	1,579	11.76%
	Feb	13,813	12,189	1,624	11.76%
	Mar	13,544	11,952	1,593	11.76%
	Apr	15,909	14,039	1,871	11.76%
	May	17,214	15,189	2,024	11.76%
	Jun	15,635	13,797	1,839	11.76%
	Jul	13,329	11,761	1,567	11.76%
	Aug	13,964	12,322	1,642	11.76%
	Sep	13,930	12,292	1,638	11.76%
	Oct	15,464	13,646	1,818	11.76%
	Νον	16,181	14,278	1,903	11.76%
	Dec	15,161	13,378	1,783	11.76%
2024	Jan	14,268	12,582	1,686	11.82%
	Feb	14,675	12,941	1,734	11.82%
	Mar	14,389	12,689	1,700	11.82%
	Apr	16,902	14,905	1,997	11.82%
	May	18,288	16,127	2,161	11.82%
	Jun	16,611	14,648	1,963	11.82%
	Jul	14,161	12,487	1,673	11.82%
	Aug	14,835	13,082	1,753	11.82%
	Sep	14,800	13,051	1,749	11.82%
	Oct	16,429	14,488	1,941	11.82%
	Νον	17,190	15,159	2,031	11.82%
	Dec	16,107	14,204	1,903	11.82%
2025	Jan	15,122	13,327	1,795	11.87%
	Feb	15,553	13,707	1,846	11.87%
	Mar	15,251	13,440	1,810	11.87%
	Apr	17,914	15,787	2,126	11.87%
	May	19,382	17,082	2,301	11.87%
	Jun	17,605	15,515	2,090	11.87%
	Jul	15,008	13,226	1,781	11.87%
	Aug	15,723	13,856	1,866	11.87%
	Sep	15,685	13,823	1,862	11.87%
	Oct	17,412	15,346	2,067	11.87%
	Νον	18,219	16,057	2,163	11.87%
	Dec	17,071	15,045	2,026	11.87%
2026	Jan	15,992	14,086	1,906	11.92%
	Feb	16,448	14,488	1,960	11.92%
	Mar	16,128	14,206	1,922	11.92%

	Apr	18,944	16,686	2,258	11.92%
	May	20,497	18,054	2,443	11.92%
	Jun	18,618	16,399	2,219	11.92%
	Jul	15,871	13,980	1,891	11.92%
	Aug	16,627	14,646	1,982	11.92%
	Sep	16,587	14,611	1,977	11.92%
	Oct	18,414	16,219	2,194	11.92%
	Νον	19,267	16,971	2,296	11.92%
	Dec	18,053	15,901	2,151	11.92%
2027	Jan	16,878	14,859	2,019	11.96%
	Feb	17,359	15,283	2,076	11.96%
	Mar	17,021	14,986	2,036	11.96%
	Apr	19,994	17,602	2,391	11.96%
	May	21,633	19,045	2,587	11.96%
	Jun	19,649	17,299	2,350	11.96%
	Jul	16,751	14,747	2,004	11.96%
	Aug	17,548	15,449	2,099	11.96%
	Sep	17,507	15,413	2,094	11.96%
	Oct	19,434	17,110	2,325	11.96%
	Νον	20,335	17,903	2,432	11.96%
	Dec	19,053	16,774	2,279	11.96%
2028	Jan	17,781	15,647	2,134	12.00%
	Feb	18,288	16,093	2,195	12.00%
	Mar	17,932	15,780	2,152	12.00%
	Apr	21,063	18,536	2,528	12.00%
	May	22,790	20,055	2,735	12.00%
	Jun	20,700	18,216	2,484	12.00%
	Jul	17,647	15,529	2,118	12.00%
	Aug	18,487	16,268	2,219	12.00%
	Sep	18,443	16,230	2,213	12.00%
	Oct	20,474	18,017	2,457	12.00%
	Νον	21,422	18,852	2,571	12.00%
	Dec	20,072	17,664	2,409	12.00%
2029	Jan	18,700	16,456	2,244	12.00%
	Feb	19,234	16,926	2,308	12.00%
	Mar	18,860	16,596	2,263	12.00%
	Apr	22,153	19,495	2,658	12.00%
	May	23,969	21,093	2,876	12.00%
	Jun	21,771	19,159	2,613	12.00%
	Jul	18,559	16,332	2,227	12.00%
	Aug	19,443	17,110	2,333	12.00%
	Sep	19,397	17,069	2,328	12.00%
	Oct	21,533	18,949	2,584	12.00%
	Νον	22,531	19,827	2,704	12.00%
	Dec	21,111	18,577	2,533	12.00%

MWh Offtake was forecasted using normalization of forecast data based on historical purchased energy with the foregone energy at the time of outages is added back to the records of energy served during the hour. The assumed load factor is 61.51%.

System Loss was calculated through a Load Flow Study conducted using Distribution System Analysis Software (DSAS).



MWh Output is expected to grow at a rate of 6% annually.



System Loss is expected to range from 11.54% to 12.00%.

Power Supply

Case No.	Туре	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
EPI/OMCPC	Base	Other	20.00	161,184	4/19/2017	12/31/2020
NPC-SPUG	Base	National Power Corporation	4.00	14,484	1/1/2020	6/30/2021

OMECO had extended its Power Supply Agreement with NPC until June 30, 2020.

In February 2014, OMECO and Emerging Power, Inc. (EPI) entered into Power Supply Agreement (PSA) for a 20MW power supply from geothermal power plants that EPI will build and with a backup supply from a 20MW bunker diesel power plant. The PSA was approved with modification by the ERC. EPI, subsequently, assigned the PSA with OMECO on March 17, 2015 to Mindoro Geothermal Power Corporation (MGPC) the 20MW power supply from the geothermal plant and on February 4, 2015 to Occidental Mindoro Consolidated Power Corporation (OMCPC) the 20 MW back-up power from bunker diesel power plant. OMCPC constructed a 21.7MW bunker diesel power plant and commenced commercial operation on April 19, 2017. EPI and its assignee MGPC, however, is unable to build the geothermal plant. Thus, the OMECO Board passed a Resolution on March 10, 2019 to terminate the PSA with EPI duly-assigned to its Affiliates/Project Companies, MGPC and OMCPC. *The Notice of Seller Default* was sent on March 13, 2019.

The ERC issued an Order on June 28, 2019 authorizing the Backup/Standby Bunker-fired Diesel Power Plant of OMCPC to supply and collect UC-ME subsidy payments from NPC for the period 1 July 2019 to 20 December 2019 as a Transition Period. The Commission likewise directed OMECO to immediately proceed with the CSP to ensure security of supply in Occidental Mindoro.

In January 21, 2020, the ERC issued an Order Extending the Transition Period until June 30, 2020 or until OMECO is able to procure the necessary power supply whether for its short-term or long-term demand and secure continuous supply, whichever comes first. Relative thereto:

- i. The Commission hereby AUTHORIZES OMCPC to collect UC-ME subsidy payments from NPC from 21 December 2019 to 30 June 2020 in the amount not exceeding the applicable rate of PhP9.9780/kWh net of OMECO's Subsidized Approved Generation Rate (SAGR).
- ii. OMECO's member-consumers shall remain to be charged only up to the SAGR approved by the Commission.
- iii. The difference between OMCPC's actual generation rate and the applicable rate of PhP9.9780/kWh shall be solely should red by OMECO.

Since the country was hit by Coronavirus Disease (COVID-19) that prompted the government to implement lockdown throughout Luzon and other parts of the country. The uncertainties brought by the coronavirus crisis further delay the CSP of OMECO in view of the limited transition period of the ERC-approved OMCPC power supply to OMECO (i.e., expiring in the June 30, 2020), OMECO was advised by TRANSCO, the new CSP Advisor, to revise the OMECO Power Supply Procurement Plan and the CSP design to consider a one-year Emergency Power Supply Procurement in accordance with the policies of DOE and rules and regulations of the ERC.

Therefore, this updated OMECO Power Supply Procurement Plan provides the context and information for *an Emergency Power Supply Procurement* to be negotiated by OMECO CSP TPBAC with OMCPC, the existing and lone power supplier of OMECO outside of NPC-SPUG with installed and operational power plant in Occidental Mindoro.

	Emergency Power Supply	Short-Term Power Supply
Туре	Base/Peaking	Base/Peaking
Minimum MW	25.00	30.00
Minimum MWh/yr		
PSA Start	7/1/2020	6/26/2021
PSA End	6/25/2021	12/25/2026
Publication	3/31/2020	9/8/2019
Pre-bid	4/21/2020	2/15/2021
Opening	6/20/2020	4/16/2021
Awarding	7/20/2020	5/4/2021
PSA Signing	8/19/2020	5/24/2021
Joint Filing	8/28/2020	6/24/2021



For the procurement of 25 MW Emergency Power Supply, only the 20MW were available beginning January 1, 2021, while the remaining 5MW are still in process of filing of the application before the ERC.

OMECO is currently conducting its Competitive Selection Process for its Short-Term Power Supply requirement which is targeted to be completed before the end of first semester of this year 2021 and the power supply will be available before the end of 3rd quarter of this year also.



Captive Customer Connections

The number of Residential connections is expected to grow at a rate of 4% annually. Said customer class is expected to account for 48.65% of the total consumption.