

MPSC Comparative Rates

Rate comparison data from the Michigan Public Service Commission dated August 1, 2015

Electric Utility by Type	Dollars		CENTS PER KILO WATT HOUR - - ALL CHARGES							
	Monthly Charge	Minimum Charge	Residential			Small Commercial		Large Commercial w/ 3-Phase		
			kW Demand			5	25	100	100	100
			kWh	250	500	1,000	1,000	5,000	21,600	28,800
Investor Owned Utilities										
Alpena Power	\$5.00	\$5.00	14.97	13.77	13.18	13.48	12.62	12.97	11.69	10.80
Consumers Energy	\$7.00	\$7.00	16.62	15.03	15.63	15.93	14.27	15.52	14.15	13.33
DTE Electric	\$6.00	\$6.43	18.00	16.52	16.52	13.59	12.61	12.31	12.09	10.81
Indiana Mich Power/AEP <i>(combined)</i>	\$7.25	\$7.25	13.00	11.27	10.40	11.12	10.66	10.02	9.33	8.92
Northern State	\$8.75	\$8.75	14.76	13.01	12.14	12.64	11.56	12.46	11.30	10.60
Upper Peninsula Power	\$12.00	\$12.00	25.43	23.03	21.83	19.27	17.64	16.61	14.99	14.02
Upper Peninsula Power Iron River	\$12.00	\$12.00	24.05	21.65	20.45	19.27	17.64	16.61	14.99	14.02
Wisconsin Electric	\$9.79	\$10.05	17.91	15.90	14.90	16.64	14.72	14.42	14.37	12.36
Wisconsin Public Services	\$12.00	\$12.00	14.07	11.67	10.47	12.43	10.17	9.89	9.80	9.75
Cooperatives										
Cloverland	\$9.00	\$9.00	15.71	13.91	13.01	13.19	12.12	13.30	12.03	11.37
Cloverland (Edison Sault Legacy)	\$7.00	\$7.00	12.56	11.13	10.43	11.66	10.80	10.64	9.03	8.82
Midwest Energy	\$18.00	\$18.00	19.37	15.58	13.68	18.67	16.70	11.49	10.54	9.43
Thumb	\$12.00	\$12.00	16.39	13.80	12.50	12.27	10.80	12.94	11.50	10.63
Averages										
Average Investor Owned	\$8.87	\$8.94	17.65	15.76	15.06	14.93	13.54	13.40	12.52	11.62
Average Cooperatives	\$11.50	\$11.50	16.00	13.60	12.40	13.95	12.60	12.09	10.78	10.06
Average All Companies	\$9.68	\$9.73	17.14	15.10	14.24	14.63	13.25	13.00	11.99	11.14
Paw Paw Cents per Kilo Watt Hour	\$10.00	\$10.00	13.00	12.54	11.67	12.25	11.00	10.90	10.20	9.67

Note: The Monthly Charge is added into the cost per kilo watt hour. As more kWh are used the rate per kWh drops. Some of the utilities above have a kW Demand charge for commercial non-3-phase customers. Paw Paw does not have a demand charge for these Small Commercial customers. Paw Paw does have a demand charge for some commercial 3-phase customers using an average of 20,000 kWh per month. Paw Paw's Demand Charge is \$5 per kW Demand. IMP/AEP charge Paw Paw around \$15 per kW Demand.

Paw Paw Compared to the Highs, Lows & Averages Above	Dollars		CENTS PER KILO WATT HOUR - - ALL CHARGES							
	Monthly Charge	Mini- mum Charge	Residential			Small Commercial		Large Commercial w/ 3-Phase		
			kW Demand			5	25	100	100	100
			kWh	250	500	1,000	1,000	5,000	21,600	28,800
High of all 13 of the above companies	\$18.00	\$18.00	25.43	23.03	21.83	19.27	17.64	16.61	14.99	14.02
How Much Paw Paw is + or - the Individual High	-\$8.00	-\$8.00	-12.43	-10.49	-10.16	-7.02	-6.64	-5.71	-4.79	-4.35
Low of all 13 of the above companies	\$5.00	\$5.00	13.00	11.13	10.40	11.12	10.17	9.89	9.33	8.92
How Much Paw Paw is + or - the Individual Low	\$5.00	\$5.00	0.00	1.41	1.27	1.13	0.83	1.01	0.87	0.75
Average of all 9 Investor Owned Companies	\$8.87	\$8.94	17.65	15.76	15.06	14.93	13.54	13.40	12.52	11.62
How Much Paw Paw is + or - the Average Investor Owned Company	\$1.13	\$1.06	-4.65	-3.22	-3.39	-2.68	-2.54	-2.50	-2.32	-1.95
Average of all 4 Cooperative's Rates	\$11.50	\$11.50	16.00	13.60	12.40	13.95	12.60	12.09	10.78	10.06
How Much Paw Paw is + or - the Average cooperative's Rates	-\$1.50	-\$1.50	-3.00	-1.06	-0.73	-1.70	-1.60	-1.19	-0.58	-0.39
Average All 13 Companies	\$9.68	\$9.73	17.14	15.10	14.24	14.63	13.25	13.00	11.99	11.14
How Much Paw Paw is + or - the Average of all 13 Companies	\$0.32	\$0.27	-4.14	-2.56	-2.57	-2.38	-2.25	-2.10	-1.79	-1.47

Paw Paw Ranking with All 13 Companies	Dollars		CENTS PER KILO WATT HOUR - - ALL CHARGES							
	Monthly Charge	Mini- mum Charge	Residential			Small Commercial		Large Commercial w/ 3-Phase		
			kW Demand			5	25	100	100	100
			kWh	250	500	1,000	1,000	5,000	21,600	28,800
How Paw Paw Ranks with all 13 Companies	6th highest	7th highest	Tied for lowest	4th lowest	4th lowest	3rd lowest	5th lowest	4th lowest	4th lowest	4th lowest
<i>Number with Higher Rate Than Paw Paw</i>	5	6	12	10	10	11	9	10	10	11
<i>Number with a Lower Rate Than Paw Paw</i>	8	7	0	3	3	2	4	3	3	2

MPSC Comparative Rates	Typical Bill for Residential Customers
Rate comparison dated August 1, 2015	Data from the Michigan Public Service Commission

Electric Utility by Type	Monthly Charge	Minimum Charge	RESIDENTIAL bill with all charges			
			kWh	250	500	1,000
Investor Owned						
Alpena Power	\$5.00	\$5.00		\$37.42	\$68.86	\$131.75
Consumers Energy	\$7.00	\$7.00		\$41.55	\$75.13	\$156.29
DTE Electric	\$6.00	\$6.43		\$45.00	\$82.60	\$165.29
IMP/AEP	\$7.25	\$7.25		\$32.50	\$56.35	\$104.05
Northern State	\$8.75	\$8.75		\$36.91	\$65.06	\$121.37
Upper Peninsula Power	\$12.00	\$12.00		\$63.58	\$115.17	\$218.33
Upper Peninsula Power Iron River	\$12.00	\$12.00		\$60.13	\$108.26	\$204.51
Wisconsin Electric	\$9.79	\$10.05		\$44.78	\$79.51	\$148.97
Wisconsin Public Services	\$12.00	\$12.00		\$35.17	\$58.35	\$104.69
Cooperatives						
Cloverland	\$9.00	\$9.00		\$39.27	\$69.54	\$130.08
Cloverland (Edison Sault Legacy)	\$7.00	\$7.00		\$31.31	\$55.63	\$104.25
Midwest Energy	\$18.00	\$18.00		\$48.43	\$77.68	\$136.80
Thumb	\$12.00	\$12.00		\$40.98	\$68.99	\$125.00
Averages						
Average of all 9 Investor Owned Companies	\$8.87	\$8.94		\$44.12	\$78.81	\$150.58
Average of all 4 Cooperatives	\$11.50	\$11.50		\$40.00	\$67.96	\$124.03
Average of All 13 Companies	9.68	\$9.73		\$42.85	\$75.47	\$142.41
Paw Paw	\$10.00	\$10.00		\$32.50	\$62.70	\$116.70 *

These 3 Categories Includes Monthly Service Charge with per kWh Rates *

These numbers are based on the MPSC's calculations of the cents per kilo watt hour. Please see that chart. *

Paw Paw Compared to the Highs, Lows & Averages of the Above Companies	Monthly Charge	Minimum Charge	RESIDENTIAL			
			kW Demand			
			kWh	250	500	1,000
Highest charge of all 13 of the above companies	\$18.00	\$18.00	\$63.58	\$115.17	\$218.33	
How Much Paw Paw is + or - the Individual High	-\$8.00	-\$8.00	-\$31.08	-\$52.47	-\$101.63	
Low of all above companies	\$5.00	\$5.00	\$31.31	\$55.63	\$104.05	
How much Paw Paw is + or - the Individual Low	\$5.00	\$5.00	\$1.19	\$7.07	\$12.65	
Average of all 9 Investor Owned Companies	\$8.87	\$8.94	\$44.12	\$78.81	\$150.58	
How Much Paw Paw is + or - the Average Investor Owned Company	\$1.13	\$1.06	-\$11.62	-\$16.11	-\$33.88	
Average of all 4 Cooperatives	\$11.50	\$11.50	\$40.00	\$67.96	\$124.03	
How Much Paw Paw is + or - the Average Cooperative	-\$1.50	-\$1.50	-\$7.50	-\$5.26	-\$7.33	
Average All Companies	\$9.68	\$9.73	\$42.85	\$75.47	\$142.41	
How Much Paw Paw is + or - the Average of all Companies	\$0.32	\$0.27	-\$10.35	-\$12.77	-\$25.71	

Paw Paw Ranking with All 13 Companies	Monthly Charge	Minimum Charge	Residential			
			kW Demand			
			kWh	250	500	1,000
How Paw Paw Ranks with the 13 Companies	6th highest	7th highest	2nd lowest (tied)	4th lowest	4th lowest	
<i>Number with a Higher Rate than Paw Paw</i>	5	6	11	10	10	
<i>Number with a Lower Rate than Paw Paw</i>	8	7	1	3	3	

20 Michigan Small Publicly Owned Utilities * (2012 Data - This Compares Paw Paw's 2016 with 2012 comparative rate data.	Total Revenue (000)	Total Sales (MWh)	Total Consumers (meters)	Average Cost: Effective Cost in Cents per kWh to customers (revenue divided by	Rank	Rank
					A f t e r	B e f o r e
					Most to Least expensive	
Village of Clinton	2,936.	22,851	1,485	12.848453	1	1
Village of Union City	2,032.	16,221	1,434	12.526971	2	2
City of Hart Hydro	5,074.	43,237	1,324	11.735319	3	3
City of Stephenson	701.3	6,050	466	11.591736	4	4
City of St Louis	4,370.	39,279	1,954	11.125538	5	5
Newberry Water & Light	2,003.	18,129	1,461	11.048596	6	6
City of Dowagiac	6,961.4	65,556	3,052	10.619013	7	7
City of Charlevoix	6,404.	60,591	4,408	10.569226	8	8
City of Lowell	7,132.5	68,498	2,656	10.412713	9	9
City of Portland	3,821.	37,029	2,517	10.318939	10	10
City of South Haven	13,816	137,316	9,052	10.061391	11	11
Paw Paw's 2016 Rate after 'Smoothing'	2,849	39,460	1,643	9.747900	12	na
City of Niles	12,793	133,222	7,470	9.602768	13	12
City of Harbor Springs	3,524.	36,899	3,432	9.550394	14	13
Village of Daggett	124.6	1,357	126	9.182019	15	14
City of Eaton Rapid	8,441.	97,288	2,755	8.676301	16	15
City of Wakefield	1,058.	12,355	1,210	8.563335	17	16
City of Croswell	3,189.	37,905	1,306	8.413138	18	17
City of Sebewaing	3,458.4	41,337	1,157	8.366355	19	18
Village of Chelsea	8,456.	105,707	2,835	7.999470	20	19
Paw Paw before 'Smoothing'	2,849.	39,460	1,643	7.219970	na	20
AVERAGES	4,957.2	51,014.4	2,587.2	10.147979	**	

READING THIS CHART: This chart again compares MPSC data in a different way. The MPSC looks at total sales and total revenues to determine the average per kilo watt cost across all customer categories. This method includes the different monthly service charges as well. This is the method the MPSC used to determine that Paw Paw had the lowest rates in Michigan.

For this comparison, the 'smoothing rate' of 2.5479 cents per kWh was added to the MPSC calculated rate. While not a true comparison, it does provide a comparison.

Averages do not count Paw Paw twice. The average includes the 2016 rate. **

Paw Paw had the lowest effective rate before adding our 'smoothing' rate. Since adding the 'smoothing' rate, Paw Paw now ranks 12th of the 20 small electric utilities. 11 have higher rates and 8 have lower rates.

Even with the 'smoothing' rate added, Paw Paw rate is 4/10th of a cent less than the average per kWh rate.

* Includes South Haven and Niles with Paw Paw which are technically a 'Large' Public Owned Utility, because they are in Paw Paw's Area.

Comparison of Michigan Electric Provider Rates <i>(2012 Data - This Compares Paw Paw's 2016 with 2012 comparative data put out by the Michigan Public Service Commission)</i>	Total Revenue (000)	Total Sales (MWh)	Total Consumers (meters)	Average Cost: Effective Cost in Cents per kWh to customers (revenue divided by MWh sales)	How much LOWER Paw Paw's new rate is in comparison to other types of electric companies.
23 Large Public Utilities *	703,445	6,936,945	268,282	10.1406	0.392659
20 Small Public Utilities *	4,957	51,014	2,587	10.1480	0.400079
41 Public Owned Utilities	676,836	6,666,407	251,760	10.1529	0.405037
8 Investor Owned Utilities	9,581,913	#####	4,155,721	11.4715	1.723642
9 Co-Operative Utilities	477,499	#####	313,950	12.1381	2.390207
Paw Paw before 'Smoothing'	2,849.	39,460	1,643	7.219970	
Paw Paw after 'Smoothing'	2,849.	39,460	1,643	9.747900	
* Niles and South Haven are included in both the 23 Large and the 20 Small Public Utilities. They are only included once in the group of 41 Public Utilities.					

BOTTOM LINE: Paw Paw's effective Electric rate in this comparison is lower than the average of each group.