Upper Peninsula Power Company
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Marquette, MI 49855
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March 16, 2026

Lisa Felice
Executive Secretary
Michigan Public Service Commission
P.O. Box 30221
Lansing, MI 48909

Re: UPPCO Service Quality, Reliability Standards, and Power Quality Annual Reports – Year 2025 **Case U-12270**

Dear Ms. Felice:

The attached report represents Upper Peninsula Power Company's ("UPPCO") Service Quality and Reliability Standards annual report for year 2023, pursuant to Service Quality and Reliability Standards for Electric Distribution Systems, R 460.731 and 460.732.

If you have any questions, please contact Chris Nelson at (906) 485-2415, or at cnelson@uppco.com.

Sincerely,



Eric Stocking
Director of Regulatory & Power Supply

Attachment

MPSC Service Quality and Reliability Standards for Electric Utilities
R460.731 Annual Report

Utility or Cooperative:	UPPCO
Year:	2025

SUMMARY TABLE R460.732(s)

	Meter Reading Factor R460.732 (a)	New Service Installation Factor R460.732(b)	Wire Down Relief Factor R460.732 (c)		Outage Restoration				CEMI4	
					All Conditions R460.732 (d)	Normal Conditions R460.732 (e)	Gray-Sky Conditions R460.732 (f)	Catastrophic Conditions R460.732 (g)	Sustained Interruptions R460.732 (h)(i)	
	Meter Reading Factor (Percentage)	*New Services Installed in 15 Business Days or Less (Percentage)*	*The percentage of the first responder guarded downed wires that are relieved by an electric utility representative within 120 minutes after notification in MSAs.*	*The percentage of the first responder guarded downed wires that are relieved by an electric utility representative within 180 minutes after notification in non-MSAs.*	*Percentage of Customers Restored in 36 Hours or Less*	*Percentage of Customers Restored in 8 Hours or Less*	*Percentage of Customers Restored in 24 Hours or Less*	*Percentage of Customers Restored in 48 Hours or Less*	*Percentage of Customers Served Experiencing 4 or More Sustained Interruptions*	*Number of Customers Experiencing 4 or More Sustained Interruptions*
Utility or cooperative performance during year	99.95%	98.69%		100.00%	99.71%	99.39%	99.98%	99.99%	14.44%	8446
MPSC Annual Performance Standard	95% or more	90% or more completed within 15 business days	90% or more within 120 minutes in MSAs	90% or more within 180 minutes in non-MSAs	90% or more customers restored in 36 hours or less	90% or more customers restored in 8 hours or less	90% or more customers restored in 24 hours or less	90% or more customers restored in 48 hours or less	6% or less before 2030; 5% or less in 2030 or later	
Did utility or cooperative comply with performance standard (Yes/No)	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	NO	

A detailed explanation of the steps the electric utility or cooperative is taking to bring its performance to an acceptable level. If more than 6% of customers experienced 4 or more sustained interruptions within the year and that year was 2029 or a prior year, or if more than 5% of customers experienced 4 or more sustained interruptions within the year and that year was 2030 or a future year, a description of all catastrophic conditions experienced during the year is also required. (Can be put on a separate page.) R 460.732 (h)(ii) and R 460.732 (h)(iii).	UPPCO conducts a regular and systematic review of all outages throughout the year. As part of this process, the utility closely analyzes the cause, location, and restoration details via outage event data. Particular attention is given to scenarios where customers experience repeat interruptions, helping to identify patterns such as equipment issues, vegetation concerns, or system configuration challenges that may contribute to recurring outages.When repeat outage patterns are identified, the utility prioritizes corrective actions. These actions may include targeted maintenance, equipment repair or replacement, vegetation management, and operational adjustments to reduce the likelihood of similar events in the future. The utility continuously works to reduce outage frequency and ensure that areas experiencing repeated interruptions receive appropriate attention and mitigation planning. In 2026 and 2027, UPPCO has projects planned to construct or replace 20+ miles of new facilities. These projects include relocations, overhead rebuilds, underground rebuilds and overhead to underground conversions that are focused on avoiding long duration outages or addressing areas that have been impacted by frequent outages. In the reporting year UPPCO experienced catastrophic conditions on 11/26/2025, 11/27/2025, 11/28/2025, 12/28/2025, 12/29/2025, and12/30/2025. The catastrophic conditions were caused by high winds, heavy snowfall, and ice in much of UPPCO service territory.

CUSTOMER CREDITS PROVIDED DURING THE YEAR

Item	Sector	Number of credits provided	Total Customer Credits ($) (1)
Customer Credits Provided for Failure to Restore Service within 96 Hours of the Start of Sustained Interruption during Catastrophic Conditions R460.732(i)	*Residential*		
	Commercial		
	Industrial		
Customer Credits Provided for Failure to Restore Service within 48 Hours of the Start of Sustained Interruption during Gray Sky Conditions R460.732(j)	*Residential*		
	Commercial		
	Industrial		
Customer Credits Provided for Failure to Restore Service within 16 Hours of the Start of Sustained Interruption during Normal Conditions R460.732(k)	*Residential*		
	Commercial		
	Industrial		
Customer Credits Provided to Individual Customers Who Experienced 6 or more Sustained Interruptions. R460.732(l)	*Residential*	1406	56328.29
	Commercial	159	294.87
	Industrial		

WORST PERFORMING CIRCUITS DURING THE YEAR

1. For each electric utility with 1,000,000 or more customers, a list of its 10 worst performing circuits for the prior year in terms of SAIDI and SAIFI. For each listed circuit, provide the following information below. R460.732(m) and R 460.732 (o). Please see the definition of "circuit" below in (8).

2. For each electric utility or cooperative with less than 1,000,000 customers, a list of the worst performing 1% of circuits for the prior year in terms of SAIDI and SAIFI. For each listed circuit, provide the following information below. R460.732(n) and R 460.732 (o). Please see the definition of "circuit" below in (8).

Worst performing circuit(s) by SAIDI excluding major event days (MEDs) (7), (8), (11)

	Circuit 1	Circuit 2	Circuit 3	Circuit 4	Circuit 5	Circuit 6	Circuit 7	Circuit 8	Circuit 9	Circuit 10
Circuit Name	**KEWEENAW**									
Circuit Number	**927**									
Location of Circuit - zip codes (2)	49805, 49901, 49913, 49918, 49942, 49950									
Circuit Length (miles)	144.8269358									
SAIDI excluding MEDs	33.913849									
SAIFI excluding MEDs	0.140601									
SAIDI all conditions	56.08959									
SAIFI all conditions	0.163479									
Number of Customers Served	1,234									
Substation Name	KEWEENAW									
Last Circuit Trim (year) (3)	2025									
List of Outages and Causes (can be put on a separate page) (4)	See Separate Page									
Corrective action to improve performance (can be put on a separate page)	See Separate Page									

Worst performing circuit(s) by SAIFI excluding MEDs (7), (8), (11)

	Circuit 1	Circuit 2	Circuit 3	Circuit 4	Circuit 5	Circuit 6	Circuit 7	Circuit 8	Circuit 9	Circuit 10
Circuit Name	**KEWEENAW**									
Circuit Number	**927**									
Location of Circuit - zip codes (2)	49805, 49901, 49913, 49918, 49942, 49950									
Circuit Length (miles)	144.8269358									
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Corrective action to improve performance (can be put on a separate page)	See Separate Page									

	CEMI0	CEMI1	CEMI2	CEMI3	CEMI4	CEMI5	CEMI6	CEMI7	CEMI8	CEMI9	CEMI10
CEMI Reporting for Indices CEMI0 through CEMI10+ R460.732(p) (5)	58488	39375	25868	15143	8446	5073	3072	2134	1840	1428	984

CELID

CELID Reporting R460.732(q) (6)	**CELID8hours**	9886
	CELID24hours	2293
	CELID48hours	8

At this time, UPPCO's OMS does not report unique customer outages; therefore, some customers may be counted more than once in the CELID data.

MOMENTARY INTERRUPTIONS

Number of Non-Residential Customers Experiencing Momentary Interruptions R460.732(r)	See UPPCO NOTE 1.

System-wide SAIDI, SAIFI, and CAIDI (9)

Year	All conditions						Excludes MEDs (11)					
	SAIDI		SAIFI		CAIDI		SAIDI		SAIFI		CAIDI	
	Annual	5 year average	Annual	5 year average	Annual	5 year average	Annual	5 year average	Annual	5 year average	Annual	5 year average

2021	249	394	1.38	1.76	181	206	149	175	1.16	1.41	128	125
2022	554	390	2.22	1.79	249	201	205	181	1.48	1.46	138	124
2023	412	446	1.37	1.84	301	237	141	182	0.98	1.43	144	129
2024	391	367	1.56	1.67	250	221	187	177	1.25	1.33	149	135
2025	411	403	1.76	1.66	233	243	190	174	1.29	1.23	147	141

Power Quality information (10)

Power quality information shall contain data on: **a) all power quality investigations conducted in the past year for industrial customers who have requested a power quality investigation as a result of an event originating from utility equipment; and** **b) power quality investigations conducted in the past year into any power quality event. For purposes of this form, a power quality event is defined as an event that affected customers on a single circuit or substation; resulted in damage to customer appliances, equipment, or wiring; and occurred within a 24-hour period. (Can be put on a separate page or pages.)**	UPPCO did not investigate any power quality events meeting the definition during the reporting period

UPPCO NOTE 1: UPPCO applied for and received a waiver for this reporting requirement in Case U-21420.

DEFINITIONS AND NOTES

(1)	"Total customer credits" means the dollar amount of customer credits provided on customer bills during the year.
(2)	"Location of Circuit - zip codes" refers to the zip codes where spans of the circuit are located.
(3)	"Last circuit trim (year)" is the last year there was trimming on the circuit as part of a normal tree trim cycle (not reactive trimming)
(4)	"List of outages and causes" - please discuss outages that meet the definition of a "major interruption" as defined by R 460.3102(j)
(5)	For CEMI0 through CEMI10+ reporting, please provide percentages. Reporting should be all conditions.
(6)	For CELID reporting, please provide percentages. Reporting should be all conditions and follow the definition of CELID Single Interruption Duration per IEEE 1366-2022 section 4.2.8. Do not double count multiple outages of that fall within the same time bracket. For example, a customer experiencing two nine-hour outages should only be reported once in CELID8hrs. Longer outages may qualify for inclusion in multiple CELID metrics. For example, a customer experiencing a 30-hour outage may be reported in CELID8hrs and CELID24hrs.
(7)	For the worst performing circuits sections, SAIDI and SAIFI should be calculated on a system basis. Worst performing circuits operated by utilities and cooperatives with less 1,000,000 customers should not be compared to worst performing circuits that are operated by utilities with 1,000,000 or more customers.
(8)	For the worst performing circuits sections, a circuit is defined as a substation feeder or line exit from a substation serving at least 10 metered customers.
(9)	The system-wide SAIDI, SAIFI, and CAIDI data is requested pursuant to MCL 460.55 and the July 7, 2023 order in Case No. U-12270.
(10)	Power quality information is being requested pursuant to the July 7, 2023 order in Case No. U-12270.
(11)	Major event day, or MED, is defined according to IEEE 1366-2022.
*	A customer shall be defined as a "metered electric service."
**	Interruptions that occur as a result of outages on customer-owned facilities, or loss of supply from another utility, should not be included in IEEE reliability index calculations.

Worst performing circuit(s) by SAIDI excluding major event days (MEDs):

Circuit Name **Keweenaw**
Circuit Number **927**

List of Outages and Causes for Outages that meet the definition of a "major interruption" as defined by R 460.3102(j)

Event H251126000142 occured due to Tree outside ROW_Snow/Ice, Event H25112600072 occurred due to Weather_Wind, Event H25112600313 occured due to Tree outside ROW_Snow/Ice. All three events occurred on 11/26/2025 (MED) during a catastophic event caused by high winds, snow, and ice in much of UPPCO service territory.

Corrective action to improve performance

KWN 927 circuit consists of 145 line miles, including 91 miles of primary overhead line routed through the heavily wooded Keweenaw Peninsula. Trimming is a critical component of KWN927 performance. Currently, Keweenaw 927 is being trimmed across 5 line clearance project areas maintaining a 6 year cycle. The most recent trimming maintenance was completed in 2025, with additional maintenance scheduled for 2026. While UPPCO's current maintenance cycle has proven effective at reducing on ROW vegetation outages, circuit 927 still poses challenges from off right of way tree failures. Immediate actions aimed at improving 927s performance include hot spot trimming in areas of high density off right of way priority trees.

Corrective Improvements

- UPPCO will evaluate how trimming work is prioritized, shifting from a polygon based system to a feeder based system in 2027.
- UPPCO has reconfigured sources for sections of KWN 927 in 2025. 305 customers that were previously served by KWN 927 were redistributed to OSC 715, while KWN 927 now supplies 931 customers. This reduced single points of failure that could cause outages for all customers and reduced restoration time of events.
- UPPCO working to identify options and estimate costs for looped source configurations of KWN 927.
- UPPCO has scoped, planned, budgeted, and designed an OH to UG conversion on a critical circuit tie to minimize exposure to weather events and reduce restoration time.
- UPPCO is evaluating automated circuit-tie reclosing protection scheme, allowing safe power restoration automatically to unaffected customers.
- Fault indicators were updated with new units to assist crews' ability to quickly locate faults and restore power.
- Programmatic review of substation reclosers, field reclosers, and fusing has led to improved coordination and reduced restoration times.
- UPPCO is evaluating phase replacement and extension projects on KWN 927 to balance loading. Evenly distributed load will result in more reliable protection and performance for the circuit.

Worst performing circuit(s) by SAIFI excluding major event days (MEDs):

Circuit Name **Keweenaw**
Circuit Number **927**

List of Outages and Causes for Outages that meet the definition of a "major interruption" as defined by R 460.3102(j)

Event H251126000142 occured due to Tree outside ROW_Snow/Ice, Event H25112600072 occurred due to Weather_Wind, Event H25112600313 occured due to Tree outside ROW_Snow/Ice. All three events occurred on 11/26/2025 (MED) during a catastophic event caused by high winds, snow, and ice in much of UPPCO service territory.

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Corrective Improvements

- UPPCO to evaluate how trimming work is prioritized, shifting from a polygon based system to a feeder based system in 2027.
- UPPCO has reconfigured sources for sections of KWN 927 in 2025. 305 customers that were previously served by KWN 927 were redistributed to OSC 715, while KWN 927 now supplies 931 customers. This reduced single points of failure that could cause outages for all customers and reduced restoration time of events.
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- UPPCO is evaluating phase replacement and extension projects on KWN 927 to balance loading. Evenly distributed load will result in more reliable protection and performance for the circuit.

Reliability Performance and Power Quality Resolution Process
Upper Peninsula Power Company – MPSC Annual Report 2025

Power Quality Report

Power Quality Inquiry Process

Upper Peninsula Power Company ("UPPCO") has an existing process in place to investigate power quality issues or inquires presented by their customers. A power quality investigation commences when a customer contacts their assigned account representative. Once contacted regarding a power quality issue, the account representative will enlist the assistance of the appropriate personnel within the Distribution Operations and Engineering to conduct an investigation. A typical power quality investigation could include the following steps:

1.) A meeting with the customer to:
   - better understand their issues or questions.
   - collect dates and times associated with the customer's power quality issues.
   - review any electrical data the customer may possess.
2.) Setting a power quality meter at the customer's service point to collect additional data regarding the performance of the delivery system.
3.) An investigation into utility system events that may correlate with the dates and times provided by the customer.
4.) Comparing the gathered data to regulatory and industry standards/guidelines.
5.) A follow-up meeting with the customer to review the data analysis and event investigation.

After meeting with the customer, the next course of action is dependent upon the results of the investigation. Actions may include but are not limited to:

1.) The repair or replacement of utility equipment causing a persistent problem.
2.) Working with a neighboring customer to modify operating procedures or equipment that is a source of the inquiring customer's power quality problems.
3.) The modification of the inquiring customer's operating procedures or equipment to ensure that their equipment can function effectively.

Power Quality Monitoring

At the present time the UPPCO electrical system is not equipped with permanently-affixed power quality monitors. UPPCO does have a fleet of portable power quality monitoring devices that can be installed when customer issues arise to assist in investigations.

2025 Power Quality Inquiries Summary

The investigation of power quality problems or inquiries begins with a contact by the inquiring customer to the respective UPPCO Account Representative. A survey of the UPPCO Account Representatives found that UPPCO received the following power quality inquiries from its primary metered or sub-transmission class customers in 2025:

NONE