

GRAND RAPIDS
PUBLIC UTILITIES

Service is Our Nature

500 SE Fourth Street • Grand Rapids, Minnesota 55744

ELECTRIC DEPARTMENT MONTHLY REPORT January 2022 Commission Meeting

Safety

- There were no OSHA recordable accidents last month.

Demand Threshold and Power Usage for past month

- The attached graph shows the system load with demand threshold for the past month.

Reliability Last Month

- The attached eReliability report shows that we had 4 outages during the month.

Projects Performed Last Month

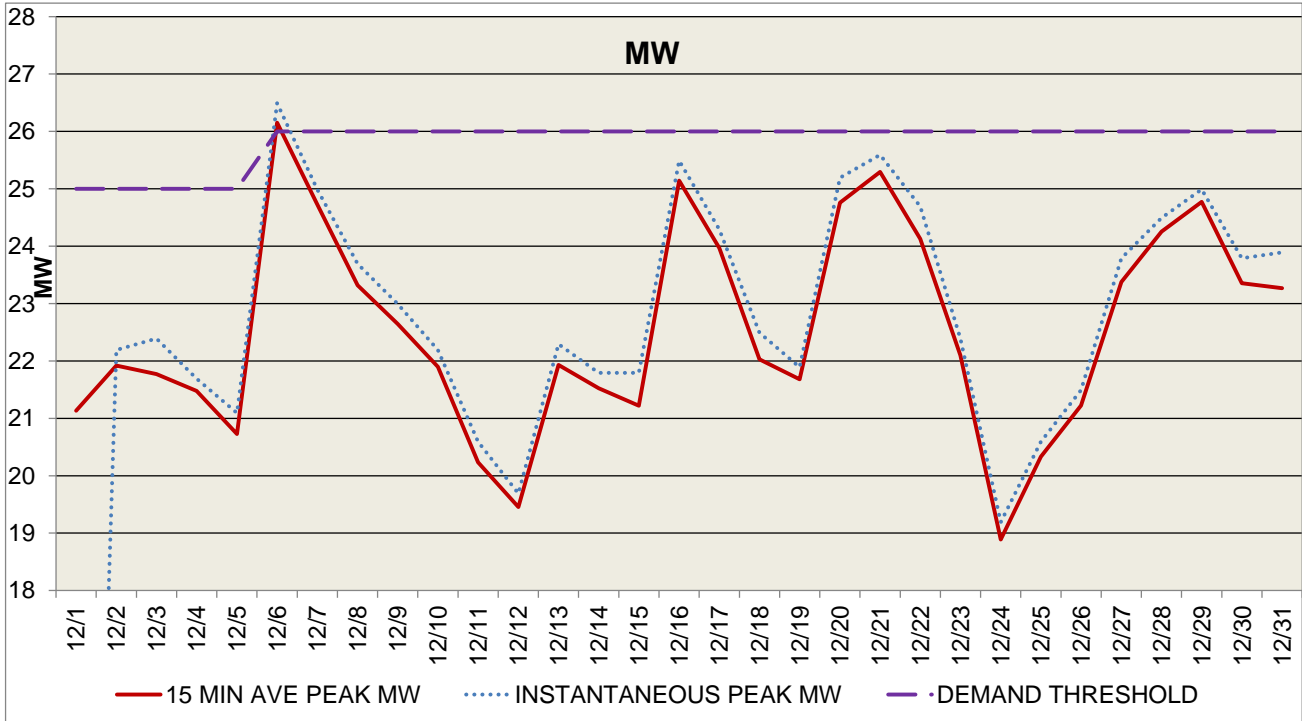
- Tripsaver recloser installation
- Policy/procedure work
- AMI Gateway conversion from 3G to 4G network

Projects Scheduled for This Month

- 2022 security light change-out, conversion to LED
- 2022 project preparation
- Solar plus Battery Storage project
 - Working through equipment delivery and certification delays
 - Battery delivery tentatively planned for end of January
 - Waiting on battery UL certification – expected February 1st
 - First test energy and anti-islanding test – February 1st
 - Solar and battery testing – beginning of February
 - System commissioning – mid February

GRAND RAPIDS PUBLIC UTILITIES COMMISSION				
DECEMBER 2021 LOAD MANAGEMENT SYSTEM REPORT				
Dec-21	INST PK MW	15 MIN AVE PK MW	MW DEMAND THRESHOLD	CONTROLLED DAYS
Minimum	18.95	18.89	25.00	
Maximum	26.49	26.15	26.00	
Average	22.20	22.54	25.84	
Total				1

Savings due to active load management system for month of December 2021 estimated at \$22,920



GRAND RAPIDS PUBLIC UTILITIES COMMISSION
DAILY POWER USAGE

Dec-21	INST PK MW	15 MIN AVE PK MW	MW DEMAND THRESHOLD	CONTROLLED DAYS
12/1	0.20	21.13	25.00	-3.9
12/2	22.19	21.92	25.00	-3.1
12/3	22.39	21.77	25.00	-3.2
12/4	21.69	21.48	25.00	-3.5
12/5	21.09	20.73	25.00	-4.3
12/6	26.49	26.15	26.00	0.2
12/7	24.99	24.73	26.00	-1.3
12/8	23.69	23.32	26.00	-2.7
12/9	22.99	22.64	26.00	-3.4
12/10	22.19	21.90	26.00	-4.1
12/11	20.59	20.23	26.00	-5.8
12/12	19.69	19.45	26.00	-6.5
12/13	22.29	21.93	26.00	-4.1
12/14	21.79	21.53	26.00	-4.5
12/15	21.79	21.22	26.00	-4.8
12/16	25.49	25.14	26.00	-0.9
12/17	24.29	23.97	26.00	-2.0
12/18	22.49	22.03	26.00	-4.0
12/19	21.89	21.68	26.00	-4.3
12/20	25.19	24.76	26.00	-1.2
12/21	25.59	25.29	26.00	-0.7
12/22	24.69	24.13	26.00	-1.9
12/23	22.39	22.10	26.00	-3.9
12/24	19.19	18.89	26.00	-7.1
12/25	20.59	20.33	26.00	-5.7
12/26	21.49	21.22	26.00	-4.8
12/27	23.79	23.38	26.00	-2.6
12/28	24.49	24.25	26.00	-1.7
12/29	24.99	24.77	26.00	-1.2
12/30	23.79	23.36	26.00	-2.6
12/31	23.89	23.27	26.00	-2.7
Minimum	0.20	18.89	25.00	
Maximum	26.49	26.15	26.00	
Average	22.20	22.54	25.84	
Total				1
		Peak Demand Day		Controlled Day

Monthly Report - Grand Rapids Public Utilities Commission

Grand Rapids Public Utilities Commission

Year 2021	Minimum duration 	Substation -----
Month 12 - December	Maximum duration 	Circuit -----
Annual Report? <input type="radio"/> Yes <input checked="" type="radio"/> No	Top-level Cause -----	Remove Major Events? -----

IEEE 1366 Statistics

Metric	Dec 2021	Dec 2020
SAIDI	6.68	0.109
SAIFI	0.0597	0.000133
CAIDI	111.879	822
ASAI	99.9845%	99.9997%
Momentary Interruptions	0	0
Sustained Interruptions	4	1

Circuit Ranking - Worst Performing

Ranked by Outage Count

Circuit	Substation	Number of Outages
Feeder 320	Main Substation	2
Feeder 328	Main Substation	1
FEEDER 329	TIOGA SUBSTATION	1

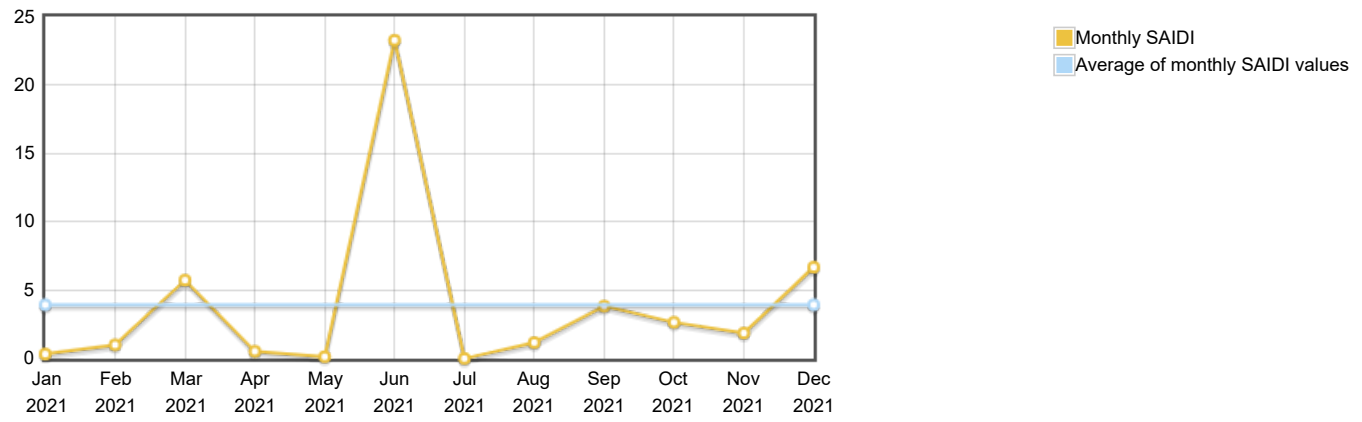
Ranked by Customer Interruptions

Circuit	Substation	Customer Interruptions
FEEDER 329	TIOGA SUBSTATION	378
Feeder 328	Main Substation	68
Feeder 320	Main Substation	2

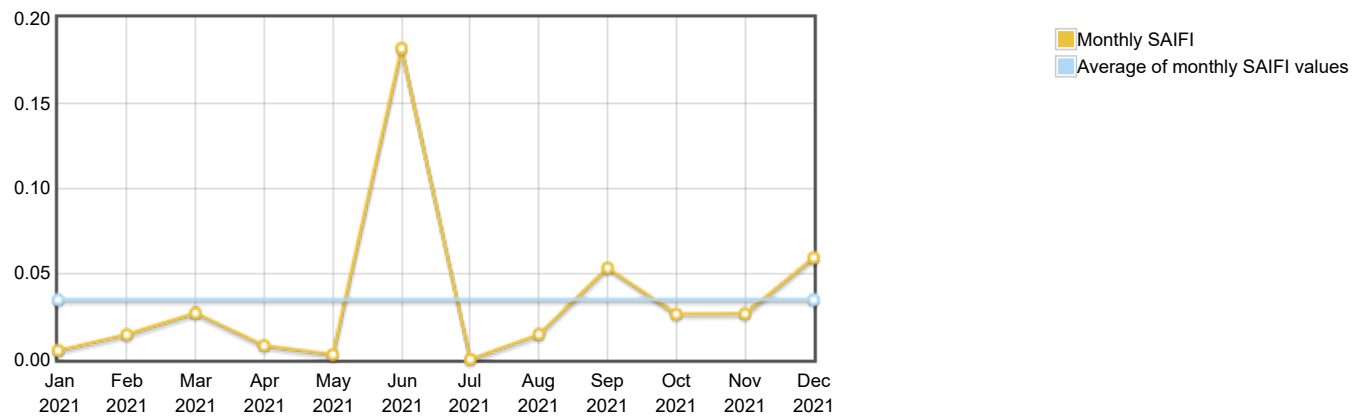
Ranked by Customer Minutes of Duration

Circuit	Substation	Customer Minutes of Duration
FEEDER 329	TIOGA SUBSTATION	34,020
Feeder 328	Main Substation	15,980
Feeder 320	Main Substation	122

Historical Monthly SAIDI Chart



Historical Monthly SAIFI Chart



Causes Ranked by Count



Cause	Count
Electrical Failure	2
Tree	1
Overloaded	1

Causes Ranked by Duration



Cause	Duration
Tree	34,020
Overloaded	15,980
Electrical Failure	122

Top 4 Outages for the Month

Address	Customers Interrupted	Duration	Customer Minutes of Interruption	Cause	Start Date
ISLE VIEW RD WO# 184341	378	90	34,020	Tree	12/16/2021
DAVIS RD WO# 184340	68	235	15,980	Overloaded circuit	12/07/2021
1611 SE 7th AVE WO# 184690	1	62	62	Bad underground	12/29/2021
20316 CRY SP LP WO# 184689	1	60	60	Bad connection	12/28/2021

Total Customers Affected for the Month: **448**

Average Customers Affected per Outage: **112**

