

GRAND RAPIDS
PUBLIC UTILITIES

Service is Our Nature

500 SE Fourth Street • Grand Rapids, Minnesota 55744

ELECTRIC DEPARTMENT MONTHLY REPORT May 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

- We had six outages during the month.

Projects Performed Last Month

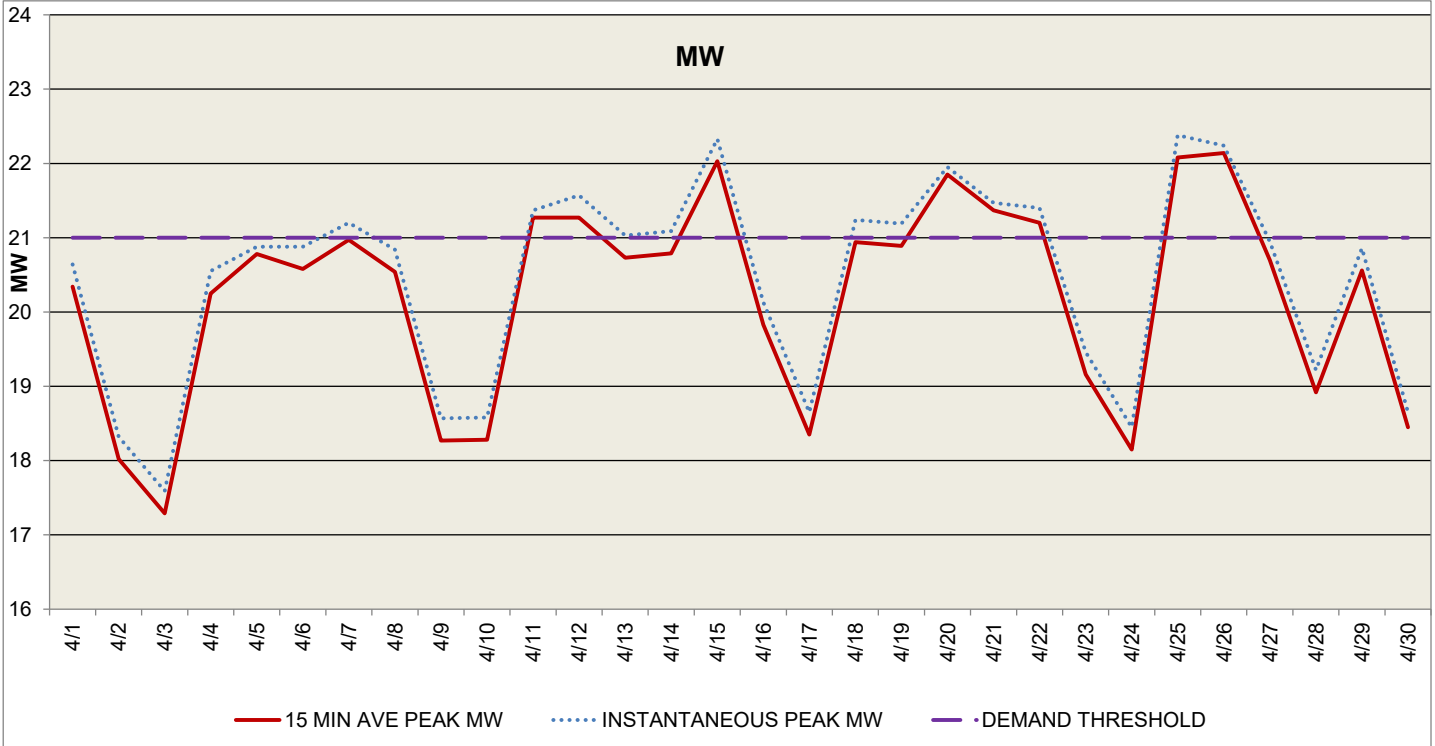
- Service center LED light conversion
- Solar plus battery commissioning
- Policy/procedure work

Projects Scheduled for This Month

- Repair bad underground cables from winter
- Solar plus Battery Storage project
 - System energized from GRPU grid 4/6
 - Testing and commissioning of solar and battery systems April-May
 - Preliminary anti-islanding test mid-April, final anti-islanding test May 5th
 - Battery capacity test – May 5th
 - System commissioning late April along with final anti-islanding test
- New services/construction 2022 – Best Western, Caribou coffee, Cenex station, County Courts and Jail project, LaPrairie campground, Maturi addition/old Kmart, MDI second service, New car wash, Wagner site development including lift stations, Woodland Bank

GRAND RAPIDS PUBLIC UTILITIES COMMISSION				
APRIL 2022 LOAD MANAGEMENT SYSTEM REPORT				
Apr-22	INST PK MW	15 MIN AVE PK MW	MW DEMAND THRESHOLD	CONTROLLED DAYS
Minimum	17.59	17.29	21.00	
Maximum	22.38	22.14	21.00	
Average	20.46	20.20	21.00	
Total				7

Savings due to active load management system for month of April 2022 estimated at \$2160



GRAND RAPIDS PUBLIC UTILITIES COMMISSION
DAILY POWER USAGE

Apr-22	INST PK MW	15 MIN AVE PK MW	MW DEMAND THRESHOLD	CONTROLLED DAYS
4/1	20.64	20.34	21.00	-0.7
4/2	18.32	18.02	21.00	-3.0
4/3	17.59	17.29	21.00	-3.7
4/4	20.55	20.25	21.00	-0.8
4/5	20.88	20.78	21.00	-0.2
4/6	20.88	20.58	21.00	-0.4
4/7	21.20	20.97	21.00	0.0
4/8	20.84	20.54	21.00	-0.5
4/9	18.57	18.27	21.00	-2.7
4/10	18.58	18.28	21.00	-2.7
4/11	21.37	21.27	21.00	0.3
4/12	21.57	21.27	21.00	0.3
4/13	21.03	20.73	21.00	-0.3
4/14	21.09	20.79	21.00	-0.2
4/15	22.33	22.03	21.00	1.0
4/16	20.13	19.83	21.00	-1.2
4/17	18.65	18.35	21.00	-2.7
4/18	21.24	20.94	21.00	-0.1
4/19	21.19	20.89	21.00	-0.1
4/20	21.95	21.85	21.00	0.9
4/21	21.47	21.37	21.00	0.4
4/22	21.40	21.20	21.00	0.2
4/23	19.46	19.16	21.00	-1.8
4/24	18.45	18.15	21.00	-2.9
4/25	22.38	22.08	21.00	1.1
4/26	22.24	22.14	21.00	1.1
4/27	20.95	20.70	21.00	-0.3
4/28	19.22	18.92	21.00	-2.1
4/29	20.86	20.56	21.00	-0.4
4/30	18.65	18.45	21.00	-2.6
Minimum	17.59	17.29	21.00	
Maximum	22.38	22.14	21.00	
Average	20.46	20.20	21.00	
Total				7
		Peak Demand Day		Controlled Day

Monthly Report - Grand Rapids Public Utilities Commission

Grand Rapids Public Utilities Commission

Year 2022	Minimum duration 	Substation -----
Month 04 - April	Maximum duration 	Circuit -----
Annual Report? <input type="radio"/> Yes <input checked="" type="radio"/> No	Top-level Cause -----	Remove Major Events? -----

IEEE 1366 Statistics

Metric	Apr 2022	Apr 2021
SAIDI	16.99	0.54
SAIFI	0.0945	0.00826
CAIDI	179.798	65.354
ASAI	99.9593%	99.9987%
Momentary Interruptions	0	0
Sustained Interruptions	6	3

Circuit Ranking - Worst Performing

Ranked by Outage Count

Circuit	Substation	Number of Outages
Feeder 320	Main Substation	5
ES05	East Substation	1

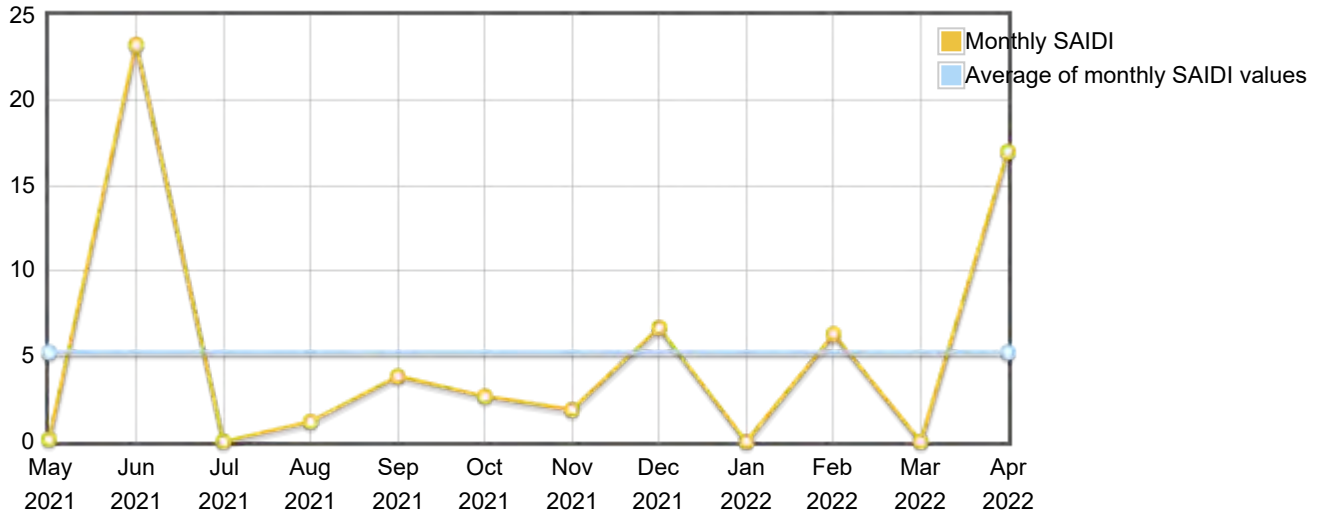
Ranked by Customer Interruptions

Circuit	Substation	Customer Interruptions
Feeder 320	Main Substation	700
ES05	East Substation	9

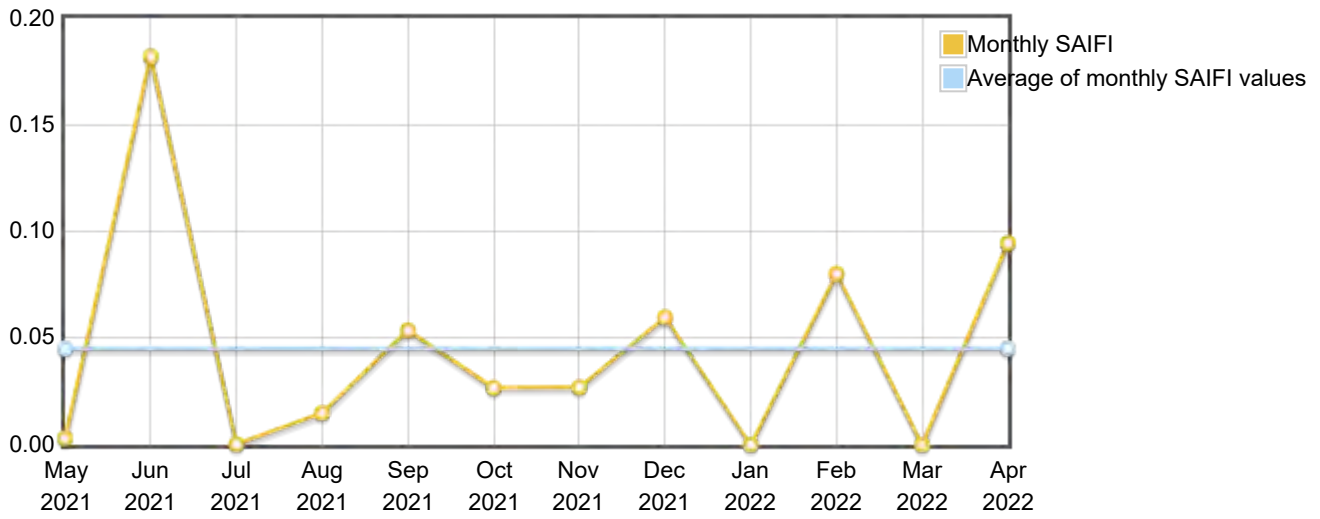
Ranked by Customer Minutes of Duration

Circuit	Substation	Customer Minutes of Duration
Feeder 320	Main Substation	124,777
ES05	East Substation	2,700

Historical Monthly SAIDI Chart



Historical Monthly SAIFI Chart



Causes Ranked by Count



Cause	Count
Tree	5
Squirrel	1

Causes Ranked by Duration



Cause	Duration
Tree	118,265
Squirrel	9,212

Top 6 Outages for the Month

Address	Customers Interrupted	Duration	Customer Minutes of Interruption	Cause	Start Date
APPLEBEES "A" PHASE SOUTH WO# 188454	243	223	54,189	Tree, heavy snow	04/06/2022
DONOVAN SWITCH NORTH WO# 188454	265	119	31,535	Tree, heavy snow	04/06/2022
MISHAWAKA RD WO# 188454	77	324	24,948	Tree, heavy snow	04/06/2022
FRASER DR SW WO# 188503	94	98	9,212	Squirrel	04/09/2022
WOODLAND DR WO# 188454	21	233	4,893	Tree, heavy snow	04/06/2022
VOGES AVE WO# 188454	9	300	2,700	Tree, heavy snow	04/06/2022

Total Customers Affected for the Month:	709
Average Customers Affected per Outage:	118.166667

