

GRAND RAPIDS
PUBLIC UTILITIES

Service is Our Nature

500 SE Fourth Street • Grand Rapids, Minnesota 55744

ELECTRIC DEPARTMENT MONTHLY REPORT June 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 eight outages during the month.

Projects Performed Last Month

- County Road 63 – Hwy 2 Trail project – temporary stop light poles, cabinet move
- Grand Rapids Marine – switched to GRPU electric system from Lake Country Power
- May 30th, 31st storms – mostly trees on lines, approximately 250 customers affected

Projects Scheduled for This Month

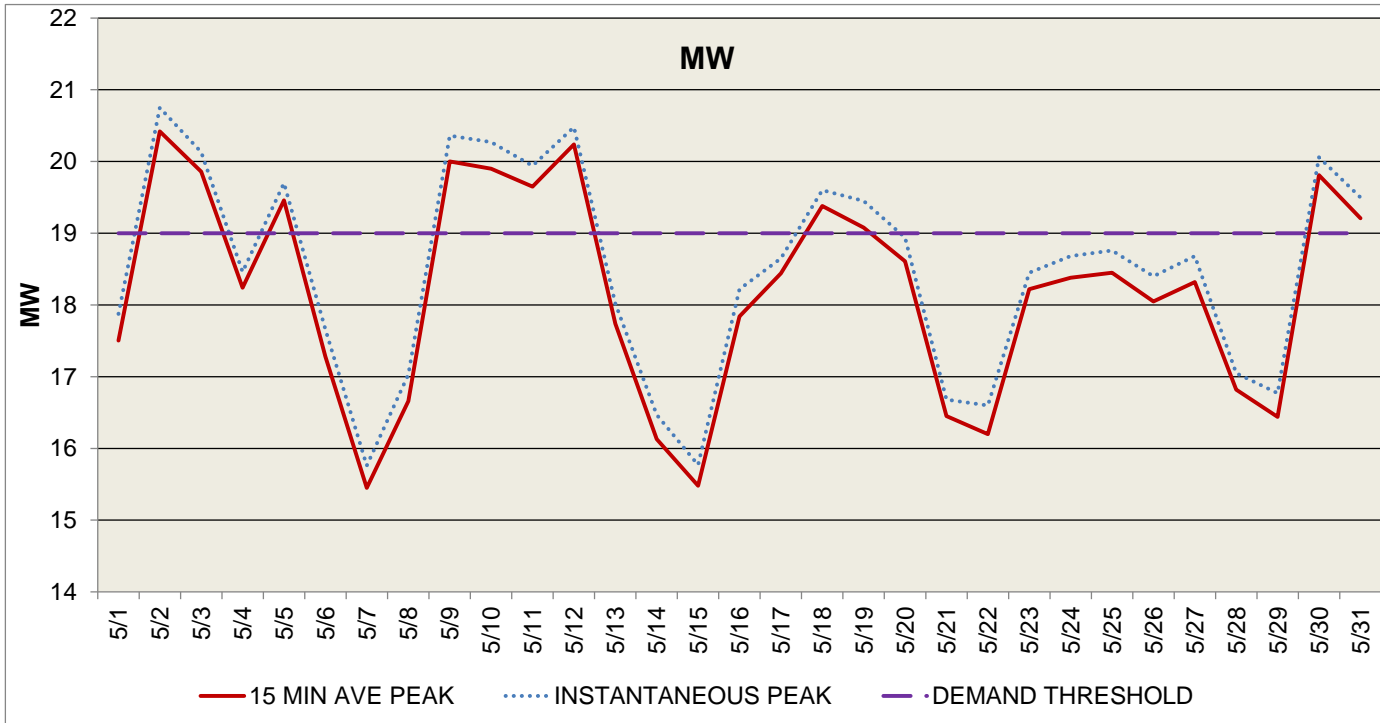
- mPower Outage Management system implementation
- Solar plus Battery Storage project
 - System energized from GRPU grid 4/6
 - Testing and commissioning of solar complete and operational
 - Replacement and reconfiguration of fire detection system late May, early June
 - Final operational battery test planned for early June
 - Permission to operate planned for June
- 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
- City/County projects – County Road 63/Highway 2 trail project, SW 21st Street, Airport Road/River Road round about

Electric Department Budget and Reallocation

- As per the new Budget and Financial Policy adopted in the May meeting, the General Manager and Business Services Manager have discussed reallocation of the 2022 Electric Department capital budget. As I discussed prior we are experiencing supply chain issues especially with procurement of transformers and need to focus on cable replacement projects.
- We plan to move ahead with a capital project slotted for 2024 in 2022 while remaining within the 2022 capital budget amount. Projects will be to replace older cross-linked poly cable which has a history of failure in preparation for the conversion of areas from 7200 volts to 13,200 volts, along with other areas with the same type of cable.

GRAND RAPIDS PUBLIC UTILITIES COMMISSION				
MAY 2022 LOAD MANAGEMENT SYSTEM REPORT				
May-22	INST PK MW	15 MIN AVE PK MW	MW DEMAND THRESHOLD	CONTROLLED DAYS
Minimum	15.76	15.45	19.00	
Maximum	20.75	20.42	19.00	
Average	18.49	18.18	19.00	
Total				2

Savings due to active load management system for month of May 2022 estimated at \$1080



GRAND RAPIDS PUBLIC UTILITIES COMMISSION
DAILY POWER USAGE

May-12	INST PK MW	15 MIN AVE PK MW	MW DEMAND THRESHOLD	CONTROLLED DAYS
5/1	17.87	17.50	19.00	-1.5
5/2	20.75	20.42	19.00	1.4
5/3	20.13	19.86	19.00	0.9
5/4	18.46	18.24	19.00	-0.8
5/5	19.70	19.46	19.00	0.5
5/6	17.66	17.28	19.00	-1.7
5/7	15.76	15.45	19.00	-3.6
5/8	17.03	16.66	19.00	-2.3
5/9	20.36	20.00	19.00	1.0
5/10	20.27	19.90	19.00	0.9
5/11	19.94	19.65	19.00	0.6
5/12	20.48	20.24	19.00	1.2
5/13	18.02	17.74	19.00	-1.3
5/14	16.47	16.13	19.00	-2.9
5/15	15.77	15.48	19.00	-3.5
5/16	18.22	17.84	19.00	-1.2
5/17	18.65	18.44	19.00	-0.6
5/18	19.60	19.38	19.00	0.4
5/19	19.45	19.08	19.00	0.1
5/20	18.94	18.61	19.00	-0.4
5/21	16.68	16.45	19.00	-2.6
5/22	16.60	16.20	19.00	-2.8
5/23	18.45	18.22	19.00	-0.8
5/24	18.68	18.38	19.00	-0.6
5/25	18.76	18.45	19.00	-0.6
5/26	18.40	18.05	19.00	-0.9
5/27	18.68	18.32	19.00	-0.7
5/28	17.05	16.82	19.00	-2.2
5/29	16.77	16.44	19.00	-2.6
5/30	20.06	19.81	19.00	0.8
5/31	19.50	19.21	19.00	0.2
Minimum	21.69	21.43	26.00	
Maximum	20.75	20.42	19.00	
Average	18.49	18.18	19.00	
Total				11
		Peak Demand Day		Controlled Day

Monthly Report - Grand Rapids Public Utilities Commission

Grand Rapids Public Utilities Commission

Year 2022	Minimum duration 	Substation -----
Month 05 - May	Maximum duration 	Circuit -----
Annual Report? <input type="radio"/> Yes <input checked="" type="radio"/> No	Top-level Cause -----	Remove Major Events? -----

IEEE 1366 Statistics

Metric	May 2022	May 2021
SAIDI	10.281	0.145
SAIFI	0.0347	0.00307
CAIDI	296.711	47.608
ASAI	99.9761%	99.9996%
Momentary Interruptions	0	0
Sustained Interruptions	8	5

Circuit Ranking - Worst Performing

Ranked by Outage Count

Circuit	Substation	Number of Outages
Feeder 320	Main Substation	3
CL21	Crystal Lake Substation	1
FL15	Forest Lake Substation	1

Ranked by Customer Interruptions

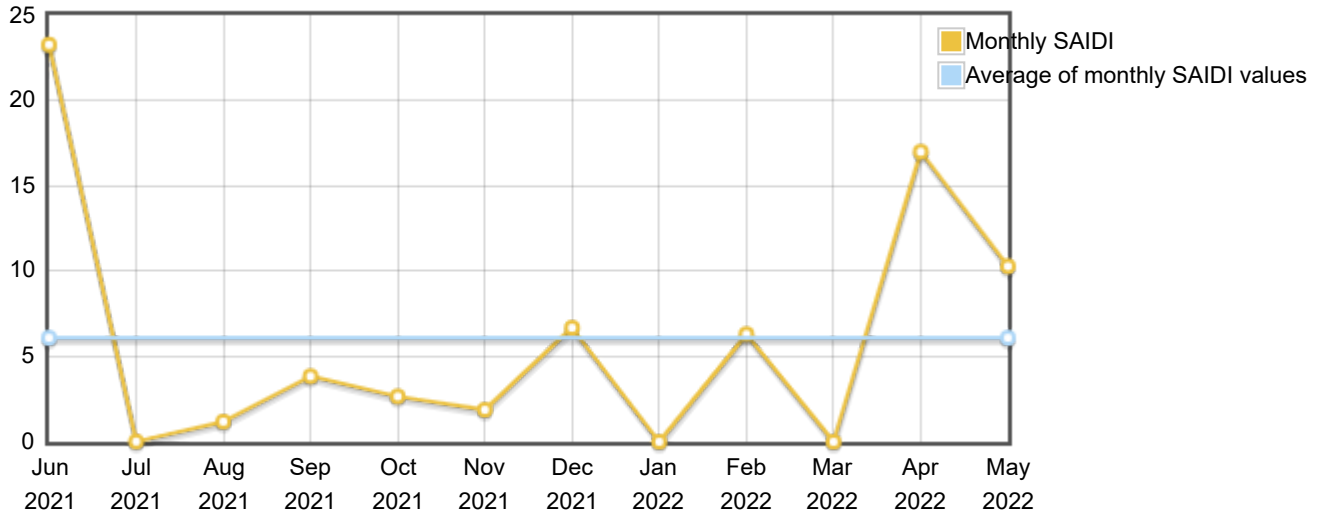
Circuit	Substation	Customer Interruptions
Feeder 320	Main Substation	131
FL15	Forest Lake Substation	111
Feeder 327	Main Substation	10

Ranked by Customer Minutes of Duration

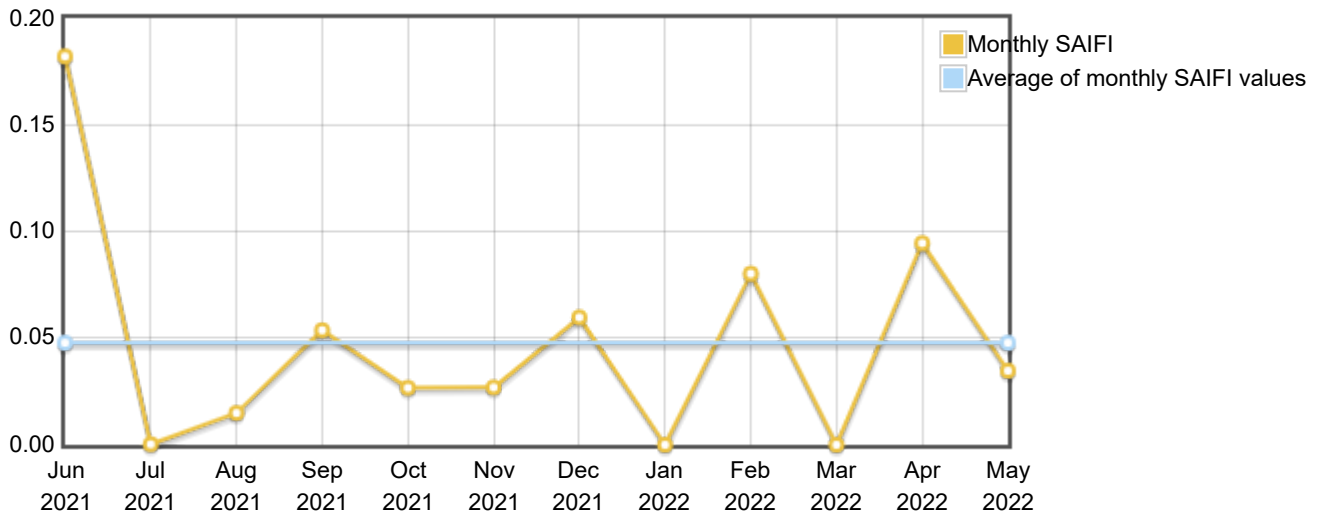
Circuit	Substation	Customer Minutes of Duration
Feeder 320	Main Substation	66,360

Circuit	Substation	Customer Minutes of Duration
FL15	Forest Lake Substation	6,660
Feeder 328	Main Substation	2,565

Historical Monthly SAIDI Chart



Historical Monthly SAIFI Chart

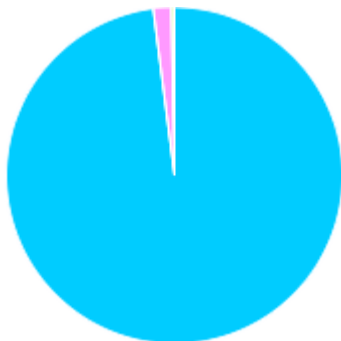


Causes Ranked by Count



Cause	Count
Storm	4
Tree	2
Squirrel	1

Causes Ranked by Duration



Cause	Duration
Storm	75,525
Tree	1,320
Lightning	240

Top 8 Outages for the Month

Address	Customers Interrupted	Duration	Customer Minutes of Interruption	Cause	Start Date
KRUMRIE SWITCH NORTH WO# 189854	103	510	52,530	Storm	05/30/2022
STONY POINT RD WO# 189854	27	510	13,770	Storm	05/30/2022
FOREST LAKE FL-15 WO# 189854	111	60	6,660	Storm	05/30/2022
MORNES RD WO# 189854	5	513	2,565	Storm	05/30/2022
1110 NE 7th ST WO# 189325	10	120	1,200	Tree	05/12/2022
1102 FAIRGROUNDS RD WO# 189325	2	120	240	Lightning	05/12/2022
722 NW 5th ST WO# 189325	1	120	120	Tree	05/12/2022
1401 FRASER DR WO# 189174	1	60	60	Squirrel	05/08/2022

Total Customers Affected for the Month:	260
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Average Customers Affected per Outage:	32.5
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