Operations Report Operational Summary Report Jul-16

Safety **Current Month** Year to Date Recordable **Lost Time** Recordable Lost Time **Energy Supply Energy Delivery** 2 2 22 3 Water **Water Reclamation Gas Distribution** 0 0 1 **Environmental Current Month Year to Date Notice of Violations Emissions - Tons** CO2 Nox Sox **PM10** Hg Regulatory **Current Month** Year to Date **NERC Notice of Violations** 0 0 1 (LEMS Logging Issue) **Self Reports** 1 Customers Month **Delta YTD Electric** Residential 71707 1566 Commercial 4820 57 Residential Gas 32339 827 Commercial 1007 15 Water Residential 57541 1628 Commercial 3307 35 Sewer Residential 53894 1636 Commercial 2876 58

227491

5822

Total

Jul-16

Personnel

		FTE	Open Positions
Energy Supply	MAPS		
	CWA		
Energy Delivery	MAPS	39	10
	CWA	162	13
Water	MAPS		
	CWA		
Water Reclamation	MAPS		
	CWA		
Gas Distribution	MAPS	4	0
	CWA	36	3

Total

GRU Distribution Reliability Report

Today's Date: 08/09/2016

Report Date Range: from 10/01/2015 to 08/09/2016

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA

RELIABILITY INDICIES

Monthly Average Customers Served(C)	89055	Average Service Availability Index (ASAI)	99.9861%
Total Hours of Customer Demand	671,118,480	System Average Interruption Duration Index (SAIDI)	63.02 Mins
Total Number of Outages	676	Customer Average Interruption Duration Index (CAIDI)	84.25 Mins
Total Number of Customers Affected (CI)	66,611	System average Interruption Frequency Index (SAIFI)	0.75
Total Customer Minutes Interrupted (CMI)	5,611,868	Momentary average Interruption Event (MAIFIe)	1.30
Total Customer "Out Minutes"	102,134	Average Length of a Service Interruption (L-Bar)	151 Mins
Tot Cust Momentary Interruption Events (CME)	115,587		

Guide for Power Distribution Reliability Indicies

Outage Duration Times		Circuit Breaker O	Recloser Operations		
Average Hours	2.5	RCL Sequences	82	RCL Sequences	64
Maximum Hours	26.9	Trips	126	Trips	83
Minimum Hours	0.1	Lockouts	29	Lockouts	13

Cause of Outages				
Cause	Overhead	Underground	Undetermined	Total
1. Weather	60	9	5	74
2. Vegetation	211	15	13	239
3. Animals	64	7	1	72
4. Foreign Interference	0	1	0	1
5. Human Cause	30	11	3	44
6. Undetermined	51	9	1	61
7. Equipment Failure	44	123	18	185
8. All Remaining Outages	0	0	0	0
Total	460	175	41	676

Iviai	700	272	7.4	0,0
0. Planes d Ontare	02	112	2	100
9. Planned Outage	83	113	2	198
10. Partial Outage	NA	NA	NA	NA

Engineering:

East ED-Electric:

- > Sixteen (16) projects are in T&D's queue for construction (452 estimated hrs total).
- > Currently working on eleven (11) electrical preliminary designs.
- > Thirty seven (37) projects of different complexities. Nine (9) projects are in plan review.
- > Five (5) New Revenue projects in construction (916 hours remaining).

West ED-Electric:

- > Three (3) projects in T&D's que for construction (130 estimated hrs total).
- > New Project Meetings: Terrace Health Rehab. Expansion, N. Fl. Women's Center.
- > Bass Pro Boat Storage Project Released demo of old OH primary line to T&D.
- > Eight (8) New Revenue projects in construction (1,735 hours remaining).

Gas Distribution System Statistics

Energy Delivery - Natural Gas System

Service Area	115 sq. miles
Distribution Mains	780.3 miles
Delivery Points	5
NG - Bare Steel	4.15
NG - Cast Iron	0
NG - Coated Steel	186.73
NG - Polyethylene	576.9
NG - Black Plastic	2.3
NG - Steel Tubing	2.99
Total Distribution Main	778.09

Note: Gas Distribution Main Length in Miles

Gas Delivered - MCF Propane Delivered - Gals

Month	YTD	Budget
1,361,084 therms	16,481,788 therms	21,450,766 therms
2,200 gallons	33,808 gallons	52,000 gallons projected

Service calls What Type?

Capital/Maintenance Project Status:

- Ø Installing gas main in Mill Hammock Subdivision, NW 60th PL.
- Ø Provided gas section input for plan reviews of the following projects: Resource Recovery Park, Crofton S/D, Inception at Innovation Square, SIMED Parking, Town of Tioga Ph 18, and The Standard revised final.
- Ø Main ext on SW 62nd. Ave. System support project and new customer work, waiting on County as they are changing the alignment of a curve in the road.
- Ø Leak survey, Corrosion readings for CP levels reviews. Ongoing inactive Service Retirements.
- Ø Lugano Subdivision Phase 1 Main installation. 4500' gas main extension, currently under construction.