

STATE OF THE UTILITY

November 2019

Item #190903

OPERATIONS SUMMARY

CORPORATE SAFETY

ENVIRONMENTAL

REGULATORY

PERSONNEL

November 2019

Safety

	Current Month		
	First Aid	Recordable	DART
Administration	0	0	0
W/WW Systems	1	1	0
Energy Supply	0	0	0
Energy Delivery - Electric/Gas	0	1	5
GRUCom	0	0	0
Totals		2	

Employees

	Year to Date		
	First Aid	Recordable	DART
	1	0	0
	1	1	0
	1	0	0
	0	1	5
	0	0	0
		2	

	Current Month		
	Miles Driven	Recordable	Preventable
Administration	9,894	0	0
W/WW Systems	61,327	2	1
Energy Supply	0	0	0
Energy Delivery - Electric/Gas	83,058	0	0
GRUCom	8,000	0	0
Totals	162,279	2	1

Vehicles

	Year to Date		
	Miles Driven	Recordable	Preventable
	26,270	0	0
	144,596	2	1
	2,980	0	0
	198,395	0	0
	17,006	0	0
	389,247	2	1

Environmental

	Current Month
Notices of Violation	0

Calendar Year to Date
1

Emissions
DH1, DH2, DHCT3, JRKCC1

CO ₂ (tons)	89,060
NO _x (tons)	88
SO ₂ (tons)	41

1,021,070
1363
565

DH Unit 2 (only)

PM _{FILT} (tons)	4
Hg (lbs)	0.40

46
5.10

DHR

CO ₂ (tons)	2,125
NO _x (tons)	1
SO ₂ (tons)	0

851,661
255
16

Regulatory

NERC

	Current Month
Notice of Violations	1
Self Reports/Potential Violations	0

FY to Date
1
2

Personnel

Row Labels	AUTHORIZED_FTE	FILLED_FTE	VACANCY	Last Month (October)
Administration	15.00	12.00	3.00	1.00
Chief Operating Officer	20.00	18.00	2.00	2.00
Customer Support Services	118.25	112.25	6.00	6.25
Energy Delivery	264.00	251.00	13.00	16.00
Energy Supply	183.00	180.00	3.00	2.00
Energy Supply - District Energy	10.00	10.00	0.00	0.00
Finance	43.00	30.00	13.00	12.00
GRUCom	38.00	32.00	6.00	6.00
Information Technology	71.00	65.00	6.00	9.00
Water Wastewater	168.00	157.90	10.10	8.10
Grand Total	930.25	868.15	62.10	62.35

Utility Advisory Board Monthly Report – FY 2020 Safety Data Summary

Employee Injuries (DART – days away, restricted duty, temporary transfer)

OCTOBER

- None reported

NOVEMBER

- 11/13/19- While exiting his truck, employee turned on his right knee and felt a "pop". Went for treatment the next day and was given a prescription.
- 11/19/19- Employee cut right thumb with knife. (DART)

DECEMBER

JANUARY

Utility Advisory Board Monthly Report – FY 2019 Vehicle Collision Summary

Vehicle Collisions (P) indicates preventable by our employee

OCTOBER

- None reported

NOVEMBER

- 11/5/19- While stopped at the traffic sign on NW 11th Avenue at NW 6th Street, a citizen backed out of a private drive into the tires of U1705, a trailer being towed by U1891. There was no damage to our trailer and no injury.
- 11/12/19- A dump truck & trailer were stopped at a traffic sign. A bus was trying to make a turn onto the street, but could not complete the turn. The employee looked in his mirrors, and not seeing anyone, backed up to allow the bus to turn. A citizen's car was stopped directly behind the trailer, and the trailer damaged the car's front grill. (P)

DECEMBER

JANUARY

End of FY 2020

CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

Customer Operations Metrics Summary November 2019

Active Accounts	Nov-19	YTD Gain/Loss	FY19
<i>Residential Contract Accounts</i>			
Total	92,095	272	91,823
Electric	85,193	129	85,064
Gas	33,911	106	33,805
Water	63,658	78	63,580
Wastewater	59,537	51	59,486
Telecomm	113	(4)	117

Active Accounts	Nov-19	YTD Gain/Loss	FY19
<i>Nonresidential Contract Accounts</i>			
Total	13,628	32	13,596
Electric	11,051	26	11,025
Gas	1,660	3	1,657
Water	5,903	11	5,892
Wastewater	4,696	11	4,685
Telecomm	391	(1)	392

New Installations	Nov-19	FY20 To Date	FY19
Electric	140	231	1393
Gas	113	79	512
Water	0	113	654
Wastewater	0	92	614
Telecomm	51	36	141

Residential Disconnects	Nov-19	FY20 To Date	FY19
Volume	1,533	2,540	14,076
Average Balance	\$261.61	\$260.28	\$246.88

Call Center Volume	Nov-19	FY20 To Date	FY19
Residential ASA	0:02:07	0:02:15	0:06:26
Business ASA	0:02:05	0:01:58	0:02:49
CSR Calls	14,010	30,538	151,278
CSR Callbacks	268	666	19,343
IVR Self Service	17,775	37,411	227,577
Total	32,053	68,615	398,198
IVR/Total	55%	55%	57%

Revenue Assurance	Nov-19	FY20 To Date	FY19
Referred to Collections	\$169,149.55	\$383,134.70	\$1,948,001.43
Recovered	\$65,786.90	\$132,092.59	\$796,259.96

Service Orders	Nov-19	FY20 To Date	FY19
Move Ins	5,992	12,386	109,537
Move Outs	5,123	11,559	109,795

Bills Generated	Nov-19	FY20 To Date	FY19
Paper Bills	107,266	231,132	1,278,441
eBills	19,403	40,082	212,879
Total	126,669	271,214	1,491,320
eBill/Total	15%	15%	14%

Average Res Bill Amounts	Nov-19	FY20 To Date	FY19
Electric (kWh)	758	832	836
Electric (\$)	\$117.49	\$127.64	\$122.20
Gas (Therms)	13	11	19
Gas (\$)	\$26.88	\$24.60	\$32.72
Water (kGals)	5	5	6
Water (\$)	\$31.33	\$32.27	\$28.61
Wastewater (kGals)	5	5	7
Wastewater(\$)	\$36.48	\$36.26	\$34.25

Payment Arrangements	Nov-19	FY20 To Date	FY19
Total	599	1,458	9,797

12/5/2019

ENERGY DELIVERY

System Consumption

System Reliability

Major Projects – Electric & Gas

ENERGY DELIVERY - UAB REPORT - NOVEMBER 2019

Durations Reliability Report Between 11/01/2019 and 11/30/2019

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	RELIABILITY INDICIES	MONTHLY AVG GOAL
Monthly Average Customers Served(C)	98,300 Average Service Availability Index (ASAI)	99.9983%
Total Hours of Customer Demand	68,416,800 System Average Interruption Duration Index (SAIDI)	0.73
Total Number of Outages	25 Customer Average Interruption Duration Index (CAIDI)	80.91
Total Number of Customers Affected (CI)	881 System average Interruption Frequency Index (SAIFI)	0.01
Total Customer Minutes Interrupted (CMI)	71,284	
Total Customer "Out Minutes"	2,117 Average Length of a Service Interruption (L-Bar)	84.68 Mins

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	1	2	0	3
1. Weather	0	0	0	0
2. Vegetation	4	0	1	5
3. Animals	4	0	1	5
4. Foreign Interference	0	0	0	0
5. Human Cause	2	0	0	2
6. Equipment Failure	0	0	10	10
7. All Remaining Outages	0	0	0	0
Total	11	2	12	25

ENERGY DELIVERY - UAB REPORT - NOVEMBER 2019

Durations Reliability Report Between 01/01/2019 and 11/30/2019*

Excludes Extreme Weather and Generation/Transmission Disturbances, Excludes TMED Days

CUSTOMER DATA	RELIABILITY INDICIES	FISCAL YTD GOALS
Monthly Average Customers Served(C)	983,000 Average Service Availability Index (ASAI)	99.9888%
Total Hours of Customer Demand	785,613,600 System Average Interruption Duration Index (SAIDI)	53.87 49.5
Total Number of Outages	702 Customer Average Interruption Duration Index (CAIDI)	65.29 55 Mins
Total Number of Customers Affected (CI)	81,104 System average Interruption Frequency Index (SAIFI)	0.83 0.88
Total Customer Minutes Interrupted (CMI)	5,295,655	
Total Customer "Out Minutes"	91,146 Average Length of a Service Interruption (L-Bar)	130.26 Mins

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	47	18	2	67
1. Weather	67	12	15	94
2. Vegetation	252	33	15	300
3. Animals	64	10	3	77
4. Foreign Interference	0	1	1	2
5. Human Cause	24	14	8	46
6. Equipment Failure	43	88	57	188
7. All Remaining Outages	2	1	6	9
Total	499	177	107	783

* REPORTED AS CALENDAR YEAR

ENERGY DELIVERY - UAB REPORT - OCTOBER

2019

Electric System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Feed-In-Tariff - Residential	63 KWH	102	62 KWH	102
Feed-In-Tariff - General Service	2,759 KWH	157	2,728 KWH	155
Electric - GS - Demand - Regular	51,139,593 KWH	1,185	49,192,337 KWH	1,232
Electric - General Service Demand PV	1,112,218 KWH	20	823,725 KWH	18
Electric - GS - Kanapaha w Curtail Cr	1,179,600 KWH	1	1,012,800 KWH	1
Electric - GS - Demand - Large Power	8,365,200 KWH	6	8,675,560 KWH	9
Electric - GS - Murphree Curtail Credit	1,567,200 KWH	1	1,545,600 KWH	1
Electric - GS Large Demand PV	4,540,800 KWH	2	4,269,600 KWH	2
Electric - GS - Non Demand	15,466,781 KWH	9,843	14,304,717 KWH	9,661
Electric - General Service PV	147,348 KWH	65	131,917 KWH	58
Electric - Lighting - Rental	961,824 KWH	4,083 <i>n</i>	976,773 KWH	4,193 <i>n</i>
Electric - Lighting - Street - City	696,013 KWH	12 <i>n</i>	761,609 KWH	14 <i>n</i>
Electric - Lighting - Street - County	131,002 KWH	2 <i>n</i>	223,875 KWH	2 <i>n</i>
Electric - Lighting - Traffic	4,542 KWH	2 <i>n</i>	4,542 KWH	2 <i>n</i>
Electric - Residential - Non TOU	62,923,919 KWH	85,839	59,694,031 KWH	85,210
Electric - Residential PV	263,628 KWH	403	192,947 KWH	317
Total Retail Electric	148,502,490 KWH	97,624	141,812,823 KWH	96,766
<small>(n =not included in total customer count)</small>				
City of Alachua	8,946,000 KWH	19,587 KW	9,604,000 KWH	20,741 KW
			7,200,000 KWH	10,000 KW
Total (Native) Electric	157,448,490 KWH		158,616,823 KWH	

Gas System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	741,104 THM	1,364	711,217 THM	1,365
Gas - GS - Regular Service (Small)	8,832 THM	310	9,956 THM	289
Gas - GS - Interrruptible - Regular Serv	36,055 THM	1	44,902 THM	1
Gas - GS - Interrruptible - Large Volume	413,082 THM	7	418,761 THM	7
Gas - Residential - Regular Service	413,849 THM	33,966	369,095 THM	33,553
Total Retail Gas	1,612,922 THM	35,648	1,553,931 THM	35,215
Gas - GS - UF Cogeneration Plant	3,017,595 THM	1	2,773,821 THM	1
Gas - Residential - LP - Basic Rate	3,084 GAL	200	2,661 GAL	200

*Obtained from Monthly Billing Summary prepared by Todd Kamhoot.

ENERGY DELIVERY - UAB REPORT - OCTOBER 2019

Energy Delivery - Major Projects

Major Electric Design Projects

West

- > Tower Rd Market West - Mixed-Use Development) / Grand Oaks Community
- > SW 8th Avenue - OH to UG Conversion
- > Celebration Pointe - Commercial Development (multiple simultaneous jobs)
- > Butler Plaza - Commercial Development
- > South Pointe - Residential Development

East

- > Hub on Campus II (NW 13th St.) - 7 story mixed-use development
- > Campus Advantage Apartments - 5 story student apartments
- > Hyatt Place - Hotel City Center - Downtown Re-Development (Hotel plus Retail Space)
- > 908 Group – 6 story Midtown high rise (Retail & 620 Apartments), repl. The Swamp Restaurant & Univ. PO
- > Ardent Gainesville (SW 13th St.) – 8 story Retail, Parking, & Residential (66 units, 182 beds)

Major Gas Design Projects:

- > Main Installation – Oakmont Subdivision – ongoing – 10600'
- > Main Installation – Grand Oaks Phase 1 - 5150'
- > Main Installation - Dialysis Clinic - 1440 Waldo Rd - 850'
- > Main Installation – Highpoint Crossing - US 441 Alachua
- > Main Replacment - One College Park - NW 2nd Ave - 700'

New Gas Services installed in November 2019: 32 New Customers

ENERGY SUPPLY

SYSTEM STATISTICS

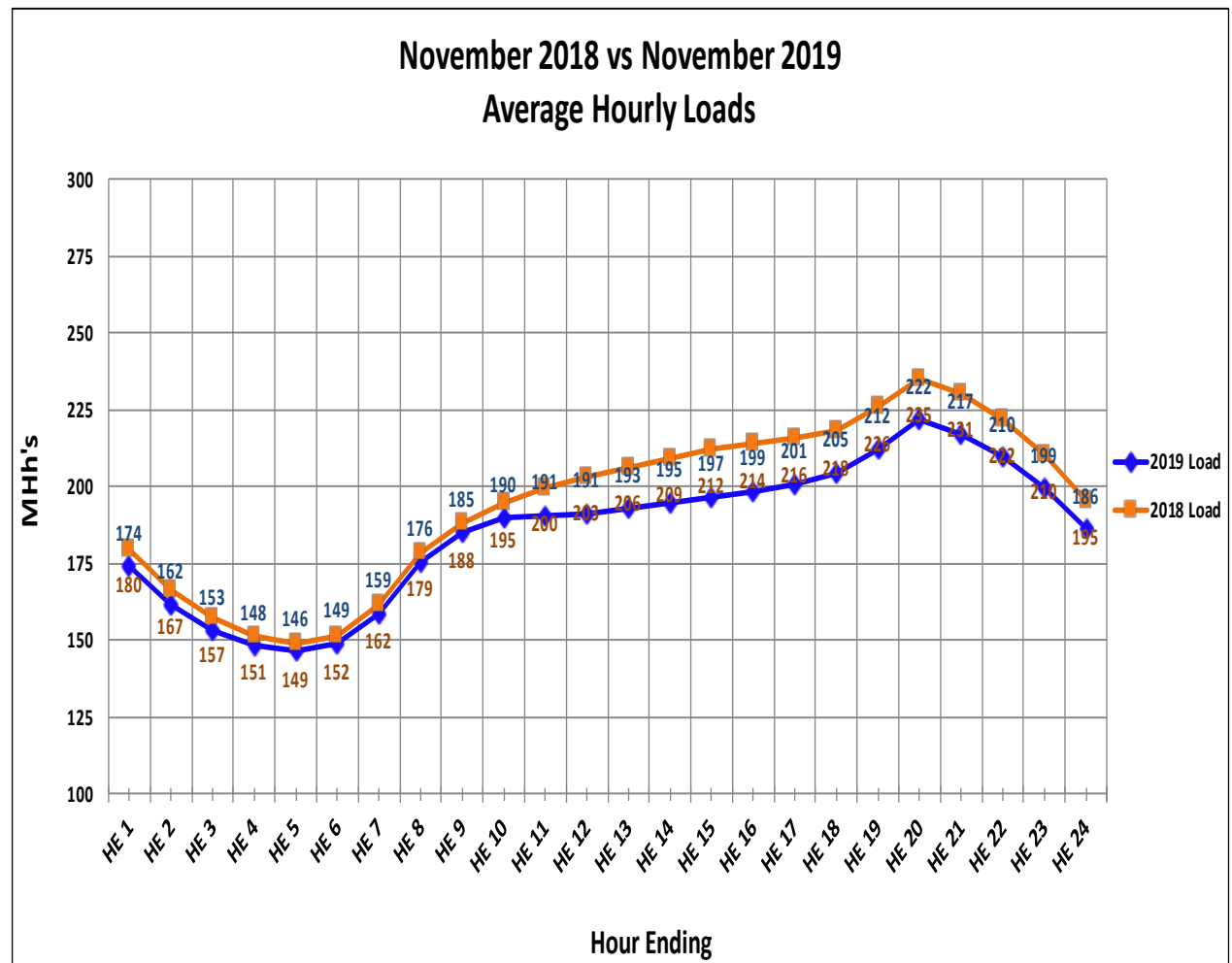
ENERGY DISTRIBUTION

FUEL

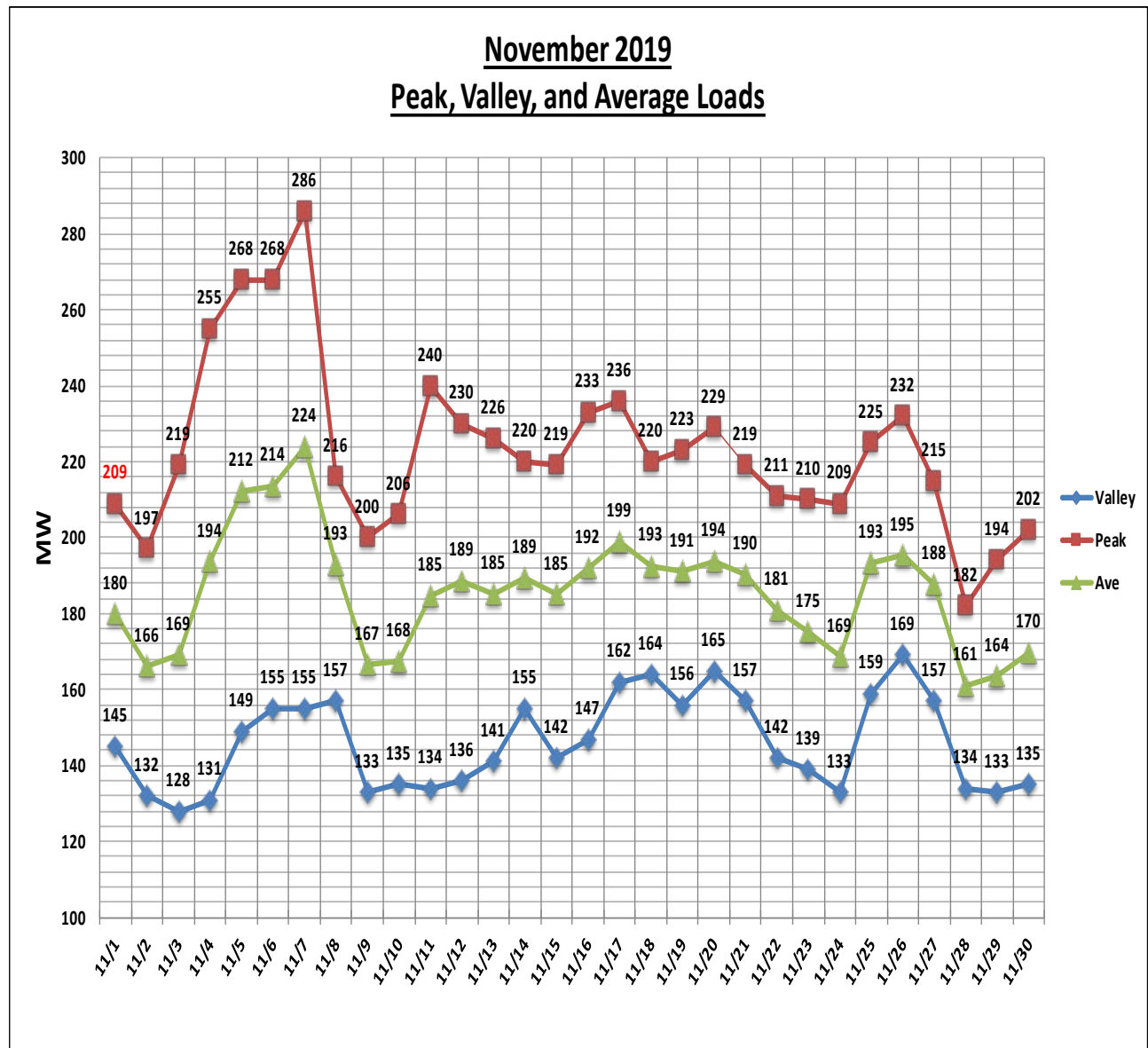
Date: As of December 4th, 2019: Major Energy Supply Projects/Milestones Updates:

1. Deerhaven Generating Station (DH):
 - a. For Deerhaven Unit #2 (DH2) we have completed our trials of adding Carbon XT to coal to address mercury. The Environmental team is submitting report to get long term permit permission to allow this additive for mercury control of coal.
 - b. For DH2 we are finagling our due diligence to study the conversion of DH2 to either dual fuel or just natural gas. Expect to have this study done in early calendar year 2020 for presentation of options.
2. Kelly Generating Station (JRK):
 - a. We have a planned borescope outage of CT4 scheduled 12/13 through 12/20/2019. This planned outage will coincide with same outage Florida Gas Transmission (FGT) has for the UF/Duke Cogen Plant Maintenance.
3. Deerhaven Renewable(DHR):
 - a. DHR completed their successful planned outage on 12/2/2019, and the unit has been restored to full service.
 - i. The only major finding during the outage was severe cracking identified in the water processing Vapor Compressor casing. This appears to be related to Chloride Stress cracking of the 316 SS material. We found a replacement vapor compressor casing, and are having this coated prior to installation to prevent reoccurrence.
4. South Energy Center (SEC):
 - a. Phase 2 Cooling Tower Fans have been experiencing excessive vibration and premature motor bearing failures. In working with the OEM (Grey Associates) the issue appears to be by design of the water piping above the fans. We are coordinating with the OEM to conduct detailed vibration analysis. We have new motors on order from Baltimore Aircoil Company (BAC), and working on scheduling with WW- Gay to move fan overhead piping and install these new motors. In parallel we are working with the SEC Engineering Group (Burns & McDonnell) to recover this cost.
5. Other:
 - a. We have submitted 2 proposals for wholesale power or transmission:
 - i. The first proposal was to Seminole Electric to continue as their transmission service provider that expires in December 2019, as well as an all in power provider of ~23 MW peak. They accepted our transmission proposal, and did not accept our all in offer.
 - ii. The second proposal was to the City of Mount Dora as their electric all in provider. This was submitted 11/26/2019 and we have not heard back on this proposal yet.
 - b. The Solar Intent to Negotiate (ITN) is still in the negotiation process with 3 vendors, with update expected to be presented to UAB/CCOM in January 2020.

November Average Hourly Loads		
Hour Ending	2018 Load	2019 Load
HE 1	180	174
HE 2	167	162
HE 3	157	153
HE 4	151	148
HE 5	149	146
HE 6	152	149
HE 7	162	159
HE 8	179	176
HE 9	188	185
HE 10	195	190
HE 11	200	191
HE 12	203	191
HE 13	206	193
HE 14	209	195
HE 15	212	197
HE 16	214	199
HE 17	216	201
HE 18	218	205
HE 19	226	212
HE 20	235	222
HE 21	231	217
HE 22	210	199
HE 23	199	186
HE 24	186	174

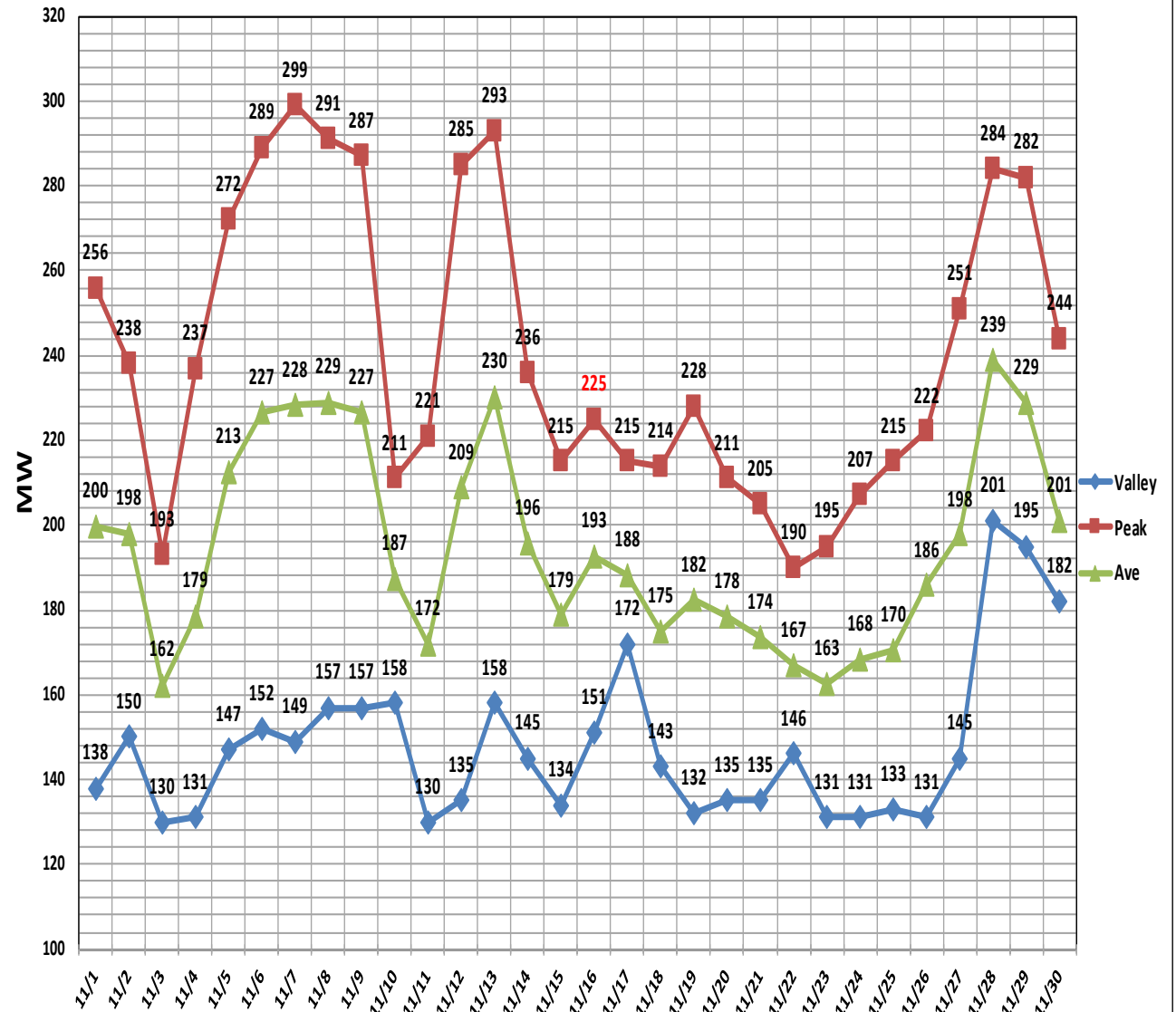


Date	Valley	Peak	Ave
11/1/2019	145	209	180
11/2/2019	132	197	166
11/3/2019	128	219	169
11/4/2019	131	255	194
11/5/2019	149	268	212
11/6/2019	155	268	214
11/7/2019	155	286	224
11/8/2019	157	216	193
11/9/2019	133	200	167
11/10/2019	135	206	168
11/11/2019	134	240	185
11/12/2019	136	230	189
11/13/2019	141	226	185
11/14/2019	155	220	189
11/15/2019	142	219	185
11/16/2019	147	233	192
11/17/2019	162	220	193
11/18/2019	164	223	191
11/19/2019	164	219	194
11/20/2019	165	219	190
11/21/2019	157	211	181
11/22/2019	142	210	175
11/23/2019	139	209	169
11/24/2019	133	225	159
11/25/2019	159	232	169
11/26/2019	169	215	157
11/27/2019	134	182	161
11/28/2019	133	194	164
11/29/2019	133	202	170
11/30/2019	135		



Date	Valley	Peak	Ave
11/1/2018	138	256	200
11/2/2018	150	238	198
11/3/2018	130	193	162
11/4/2018	131	237	179
11/5/2018	147	272	213
11/6/2018	152	289	227
11/7/2018	149	299	228
11/8/2018	157	291	229
11/9/2018	157	287	227
11/10/2018	158	211	187
11/11/2018	130	221	172
11/12/2018	135	285	209
11/13/2018	158	293	230
11/14/2018	145	236	196
11/15/2018	134	215	179
11/16/2018	151	225	193
11/17/2018	172	214	188
11/18/2018	143	211	175
11/19/2018	132	205	182
11/20/2018	135	190	178
11/21/2018	135	195	167
11/22/2018	146	207	163
11/23/2018	131	215	168
11/24/2018	131	222	170
11/25/2018	133	215	186
11/26/2018	131	222	198
11/27/2018	145	251	239
11/28/2018	201	284	201
11/29/2018	195	282	229
11/30/2018	182	244	201

November 2018 Peak, Valley, and Average Loads



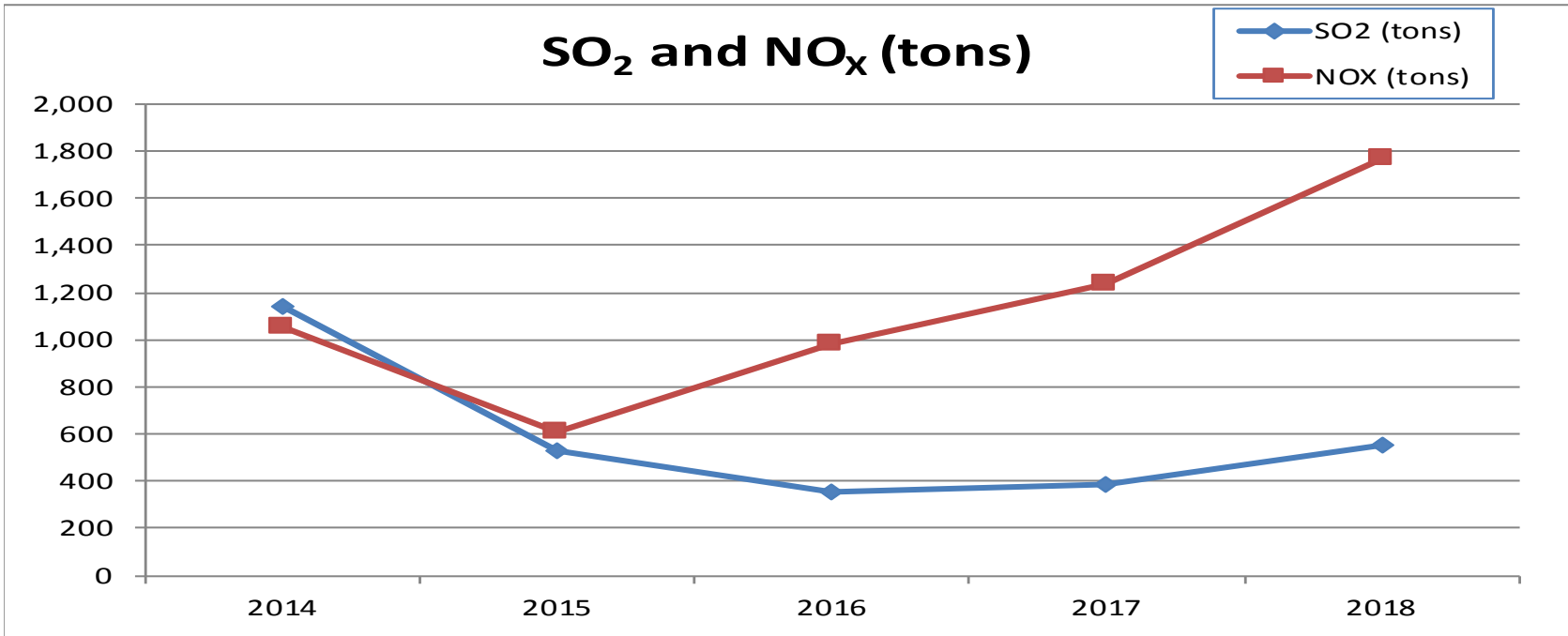
ENVIRONMENTAL PERMITTING

EMISSIONS DATA

Yearly Emissions

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)
2014	1,144	1,052	6.23	32	1,192,647
2015	532	608	5.49	47	1,260,423
2016	354	984	2.92	61	1,216,690
2017	389	1,239	2.40	52	1,037,711
2018	551	1,770	3.80	55	2,096,289
2019 (Jan-Nov.)	580	1,619	5.05	46	1,872,731

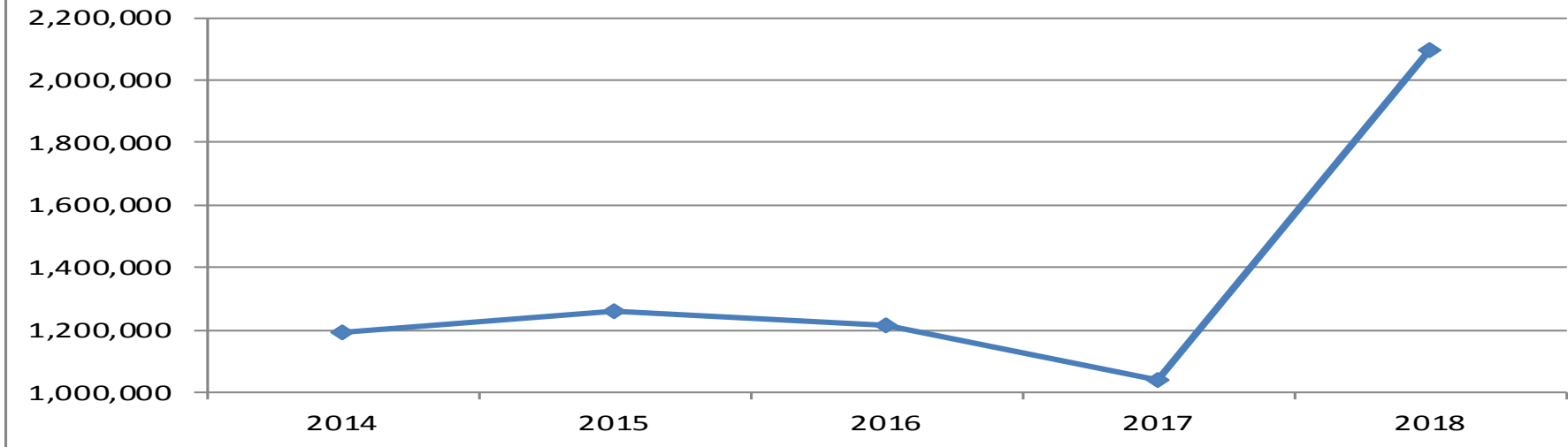
Mercury and Particulate values are for Unit 2 only. DHR data included starting in 2018.



SO₂ lower in 2015, 2016, & 2017 due to higher removal rate settings to comply with MATS Rule. NO_x was higher in 2016 as it was more cost effective to use allowances than increase SCR. DHR data included starting in 2018.

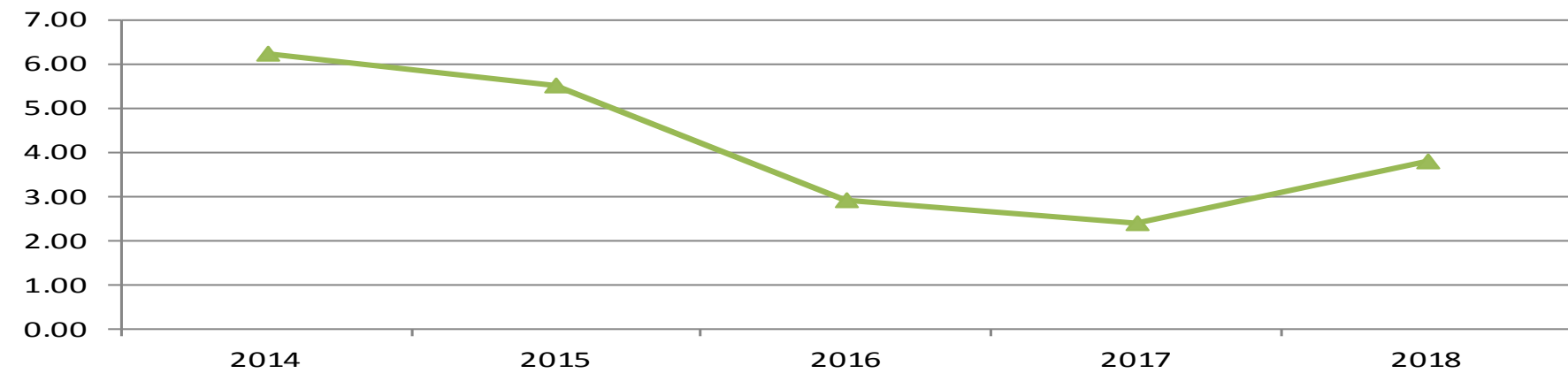
Yearly Emissions

CO₂ (tons)



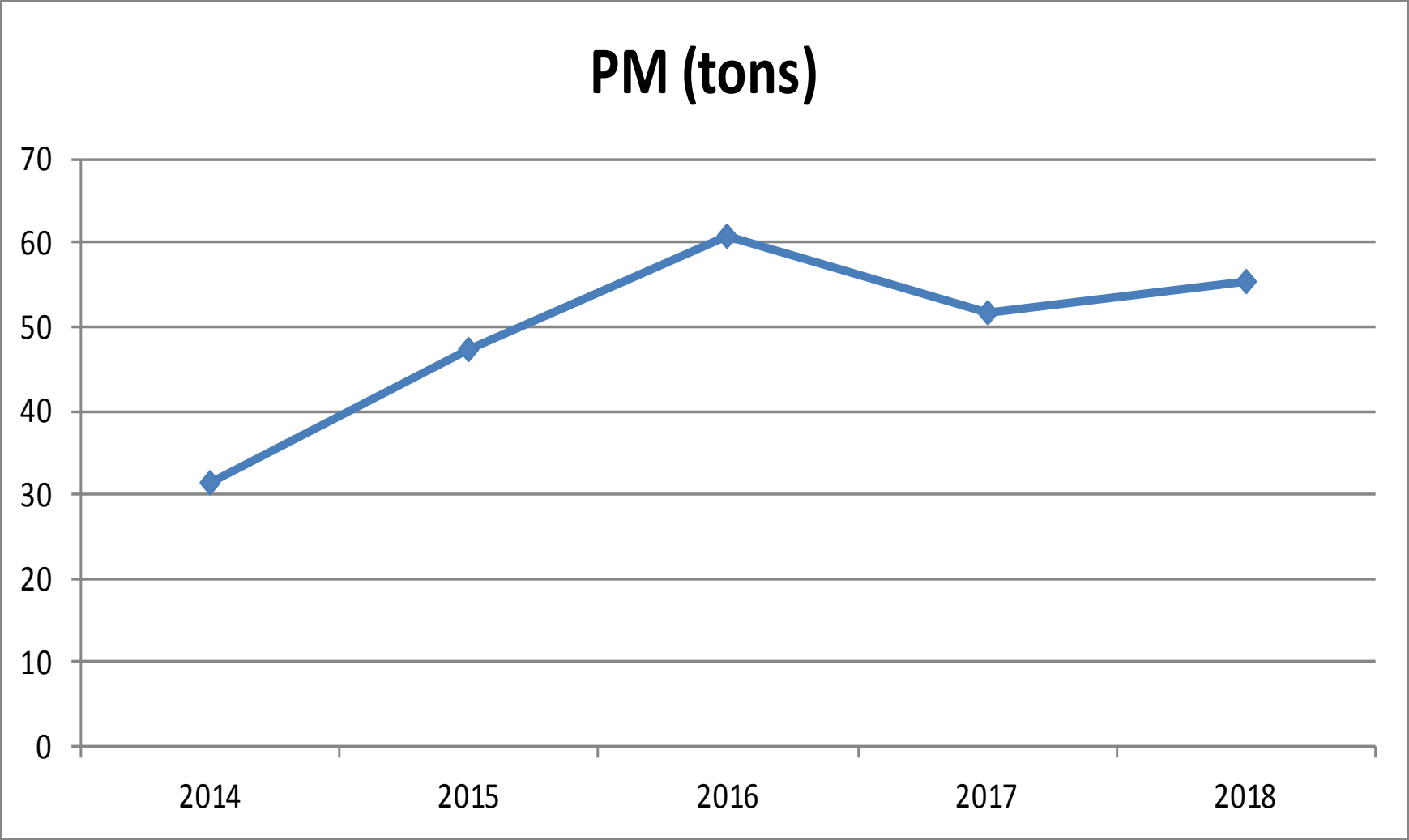
DHR data included starting in 2018.

Mercury (lbs)



Mercury was lower in 2016 and 2017 due to higher removal rate settings to assure compliance with the MATS Rule.

Yearly Emissions



2019 YTD (Jan.-Nov.)

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	HTIP (MMBtu)	GEN (MW-hours)
DH1	5.6	125.8			95,796.1	1,609,406.0	133,180.0
DH2	557.6	1,176.6	5.05	45.6	683,305.3	7,064,327.0	720,749.0
DHCT3	0.0	1.2			5,289.5	88,849.0	6,318.0
JRKCC1	1.3	59.5			236,679.5	3,982,603.0	457,724.0
DHR	15.5	255.4			851,660.6	8,220,949.7	618,770.0
TOTAL	580.0	1,618.5	5.052	45.6	1,872,731.0	20,966,134.7	1,936,741.0

2019 - November

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	HTIP (MMBtu)	GEN (MW-hours)
DH1	0.0	0.0			0.0	0.0	0.0
DH2	40.4	78.0	0.4	4.4	49,660.4	563,578.0	53,041.0
DHCT3	0.0	0.0			0.1	2.0	0.0
JRKCC1	0.2	10.2			39,399.9	662,983.0	76,557.0
DHR	0.0	0.7			2,124.7	20,369.0	1,444.4
TOTAL	40.6	88.9	0.382	4.4	91,185.1	1,246,932.0	131,042.4

* CT3 only ran 4 minutes

NERC COMPLIANCE

PENALTY VIOLATIONS

NON-PENALTY VIOLATIONS

POTENTIAL VIOLATIONS

Utility Advisory Board Monthly Report – FY 2020 NERC compliance

Penalty violations

<u>Determination date</u>	<u>Description</u>
N/A	No penalties to-date for FY 2020

Non-Penalty violations (Compliance Exceptions or Find-Fix-Track)

<u>Determination date</u>	<u>Description</u>
11/14/2019	14 Cyber Assets were not properly configured to send event logs to the central logging server, which is required to generate alerts for specific log types

Potential violations (Pending regulatory agency determination)

<u>Report date</u>	<u>Description</u>
6/6/2019 (FY2019)	35 Cyber Assets were delayed in being included under GRU's Critical Infrastructure Protection (CIP) program
10/4/2019	Two relay settings not adjusted in accordance with PRC-023-4 for 18 months

WATER/WASTEWATER

PRODUCTION

MAINTENANCE

Water/Wastewater November 2019 Dashboard

Production						
Murphree Water Treatment Plant						
		November 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	22.0	23.4	30	78%	
	Peak Daily Flow	24.3	26.5	54	49%	
Main Street Water Reclamation Facility						
		November 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	5.5	5.7	7.5	76%	
Kanapaha Water Reclamation Facility						
		November 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	11.2	11.4	14.9	77%	
Water Reclamation Facilities (Combined)						
		November 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	16.7	17.1	22.4	76%	
Maintenance						
Wastewater Collections						
		Nov 2019 (Miles)	FYTD	Monthly Goal (miles)		
	Miles of gravity mains cleaned	5.5	8.38	5.0		
	Miles of gravity mains TV inspected	4.5	8.55	5.0		
Water Distribution						
		Nov 2019	FYTD	Monthly Goal		
	Number of Water Services Replaced	52	116	75		
SSO Monthly Summary						
		November	YTD	GOAL (annual)		
	Sanitary Sewer Overflows	2	2	<22		

Major Projects and Other Updates

MWTP Electric System Upgrade - Startup and cutover to new equipment by component has begun and will continue through March/April.

MSWRF - Aeration Basin and Headworks project planning and design are underway. Progressive Design Build contract is being finalized.

Gravity Sewer Lining - Planning lining work for FY20 with the goal of lining 10 miles.

KWRF - headwork repairs complete and back in service

Water Distribution - repairing leaks more rapidly by maintaining leaks holding to under 25 on a monthly average.