

STATE OF THE UTILITY

October 2019

Item #190604

OPERATIONS SUMMARY

CORPORATE SAFETY

ENVIRONMENTAL

REGULATORY

PERSONNEL

October 2019

Safety

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

Employees

First Aid	Year to Date Recordable
1	0
	0
1	0
	0
	0
	0

	Miles Driven	Current Month Recordable	Preventable
Administration		0	0
W/WW Systems		0	0
Energy Supply		0	0
Energy Delivery - Electric/Gas		0	0
GRUCom		0	0
Totals		0	0

October mileage will be reported in November

Vehicles

Miles Driven	Year to Date Recordable
	0
	0
	0
	0
	0
	0

Environmental

	Current Month
Notices of Violation	0

Calendar Year to D
1

Emissions

DH1, DH2, DHCT3, JRKCC1

CO ₂ (tons)	96,336
NO _x (tons)	100
SO ₂ (tons)	43

932,010
1275
524

DH Unit 2 (only)

PM _{FILT} (tons)	4
Hg (lbs)	0.38

41
4.67

DHR

CO ₂ (tons)	84,770
NO _x (tons)	26
SO ₂ (tons)	2

855,536
255
15

Regulatory**NERC**

Notice of Violations

Self Reports/Potential Violations

Current Month

0

1

FY to Date

0

1

Personnel

Row Labels	AUTHORIZED_FTE	FILLED_FTE	VACANCY	Last Month (September)
Administration	15.00	14.00	1.00	0.00
Chief Operating Officer	20.00	18.00	2.00	2.00
Customer Support Services	118.25	112.00	6.25	9.75
Energy Delivery	264.00	248.00	16.00	7.00
Energy Supply	183.00	181.00	2.00	-4.00
Energy Supply - District Energy	10.00	10.00	0.00	0.00
Finance	43.00	31.00	12.00	11.00
GRUCom	38.00	32.00	6.00	7.00
Information Technology	71.00	62.00	9.00	12.00
Water Wastewater	168.00	159.90	8.10	0.00
Grand Total	930.25	867.90	62.35	44.75

Utility Advisory Board Monthly Report – FY 2020 Safety Data Summary

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

OCTOBER

No recordable injuries reported

NOVEMBER

DECEMBER

JANUARY

FEBRUARY

MARCH

APRIL

MAY

JUNE

JULY

AUGUST

SEPTEMBER

End of FY 2020

Utility Advisory Board Monthly Report – FY 2020 Vehicle Collision Summary

Vehicle Collisions (P) indicates preventable by our employee

OCTOBER

No collisions reported

NOVEMBER

DECEMBER

JANUARY

MARCH

APRIL

MAY

JUNE

JULY

AUGUST

SEPTEMBER

End of FY 2020

CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

Customer Operations Metrics Summary October 2019

Active Accounts	Oct-19	YTD Gain/Loss	FY19
<i>Residential Contract Accounts</i>			
Total	92,005	182	91,823
Electric	85,130	66	85,064
Gas	33,844	39	33,805
Water	63,623	43	63,580
Wastewater	59,506	20	59,486
Telecomm	117	0	117

New Installations	Oct-19	FY20 To Date	FY19
Electric	118	118	1393
Gas	28	28	512
Water	59	59	654
Wastewater	43	43	614
Telecomm	31	31	141

Call Center Volume	Oct-19	FY20 To Date	FY19
Residential ASA	2:22:00	2:22:00	0:07:05
Business ASA	1:51:00	1:51:00	0:16:23
CSR Calls	16,528	16,528	151,278
CSR Callbacks	398	398	19,343
IVR Self Service	19,636	19,636	227,577
Total	36,164	36,164	378,855
IVR/Total	54%	54%	60%

Bills Generated	Oct-19	FY20 To Date	FY19
Paper Bills	123,866	123,866	1,278,441
eBills	20,679	20,679	212,879
Total	144,545	144,545	1,491,320
eBill/Total	14%	14%	14%

Payment Arrangements	Oct-19	FY20 To Date	FY19
Total	860	860	9,797

Active Accounts	Oct-19	YTD Gain/Loss	FY19
<i>Nonresidential Contract Accounts</i>			
Total	13,611	15	13,596
Electric	11,032	7	11,025
Gas	1,654	(3)	1,657
Water	5,902	10	5,892
Wastewater	4,693	8	4,685
Telecomm	390	(2)	392

Residential Disconnects	Oct-19	FY20 To Date	FY19
Volume	1,007	1,007	14,076
Average Balance	\$258.95	\$258.95	\$246.88

Revenue Assurance	Oct-19	FY20 To Date	FY19
Referred to Collections	\$213,985.15	\$213,985.15	\$1,948,001.43
Recovered	\$66,305.69	\$66,305.69	\$796,259.96

Service Orders	Oct-19	FY20 To Date	FY19
Move Ins	6,394	6,394	109,537
Move Outs	6,436	6,436	109,795

Average Res Bill Amounts	Oct-19	FY20 To Date	FY19
Electric (kWh)	906	906	836
Electric (\$)	\$138.09	\$138.09	\$122.20
Gas (Therms)	9	9	19
Gas (\$)	\$22.44	\$22.44	\$32.72
Water (kGals)	5	5	6
Water (\$)	\$33.68	\$33.68	\$28.61
Wastewater (kGals)	5	5	7
Wastewater(\$)	\$36.32	\$36.32	\$34.25

ENERGY DELIVERY

System Consumption

System Reliability

Major Projects – Electric & Gas

ENERGY DELIVERY - UAB REPORT - OCTOBER 2019

Durations Reliability Report Between 10/01/2019 and 10/31/2019

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA		RELIABILITY INDICIES	MONTHLY AVG GOAL
Monthly Average Customers Served(C)	98,251	Average Service Availability Index (ASAI)	99.9843%
Total Hours of Customer Demand	70,714,800	System Average Interruption Duration Index (SAIDI)	6.77 4.5 Mins
Total Number of Outages	64	Customer Average Interruption Duration Index (CAIDI)	46.67 55 Mins
Total Number of Customers Affected (CI)	14,248	System average Interruption Frequency Index (SAIFI)	0.15 0.08
Total Customer Minutes Interrupted (CMI)	665,024		
Total Customer "Out Minutes"	6,702	Average Length of a Service Interruption (L-Bar)	104.72 Mins

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	5	1	0	6
1. Weather	1	1	0	2
2. Vegetation	16	2	2	20
3. Animals	7	0	2	9
4. Foreign Interference	0	0	0	0
5. Human Cause	1	2	2	5
6. Equipment Failure	0	3	15	18
7. All Remaining Outages	0	1	3	4
Total	30	10	24	64

ENERGY DELIVERY - UAB REPORT - OCTOBER 2019

Durations Reliability Report Between 01/01/2019 and 10/31/2019*

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

CUSTOMER DATA		RELIABILITY INDICIES	FISCAL YTD GOALS
Monthly Average Customers Served(C)	98,215	Average Service Availability Index (ASAI)	99.9878%
Total Hours of Customer Demand	714,219,480	System Average Interruption Duration Index (SAIDI)	53.2 45
Total Number of Outages	678	Customer Average Interruption Duration Index (CAIDI)	65.12 55 Mins
Total Number of Customers Affected (CI)	80,235	System average Interruption Frequency Index (SAIFI)	0.82 0.80
Total Customer Minutes Interrupted (CMI)	5,224,956		
Total Customer "Out Minutes"	89,348	Average Length of a Service Interruption (L-Bar)	131.78 Mins

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	46	16	2	64
1. Weather	67	12	15	94
2. Vegetation	249	32	14	295
3. Animals	60	10	2	72
4. Foreign Interference	0	1	1	2
5. Human Cause	22	14	8	44
6. Equipment Failure	43	88	48	179
7. All Remaining Outages	2	1	6	9
Total	489	174	96	759

* REPORTED AS CALENDAR YEAR

ENERGY DELIVERY - UAB REPORT - OCTOBER

2019

Electric System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Feed-In-Tariff - Residential	57 KWH	101	52 KWH	101
Feed-In-Tariff - General Service	2,434 KWH	158	2,597 KWH	158
Electric - GS - Demand - Regular	54,496,999 KWH	1,195	56,311,216 KWH	1,246
Electric - General Service Demand PV	1,043,992 KWH	20	846,493 KWH	19
Electric - GS - Kanapaha w Curtail Cr	1,114,800 KWH	1	1,010,400 KWH	1
Electric - GS - Demand - Large Power	8,495,400 KWH	6	8,940,600 KWH	8
Electric - GS - Murphree Curtail Credit	1,581,600 KWH	1	1,447,200 KWH	1
Electric - GS Large Demand PV	4,634,400 KWH	2	4,490,400 KWH	2
Electric - GS - Non Demand	16,611,264 KWH	9,857	16,753,188 KWH	9,668
Electric - General Service PV	170,686 KWH	65	169,423 KWH	59
Electric - Lighting - Rental	975,613 KWH	4,535 <i>n</i>	985,566 KWH	4,213 <i>n</i>
Electric - Lighting - Street - City	702,289 KWH	12 <i>n</i>	768,081 KWH	14 <i>n</i>
Electric - Lighting - Street - County	130,927 KWH	2 <i>n</i>	237,905 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	75,958,082 KWH	86,418	82,715,217 KWH	86,047
Electric - Residential PV	303,160 KWH	399	287,043 KWH	315
Total Retail Electric	166,226,245 KWH	98,223	174,969,923 KWH	97,625
(n =not included in total customer count)				
City of Alachua	11,759,000 KWH KWH	24,289 KW	11,481,000 KWH	27,748 KW
			7,440,000 KWH	10,000 KW
Total (Native) Electric	177,985,245 KWH		193,890,923 KWH	

Gas System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	619,153 THM THM	1,357	576,233 THM	1,378
Gas - GS - Regular Service (Small)	6,696 THM THM	311	9,540 THM	284
Gas - GS - Interrruptible - Regular Serv	49,900 THM THM	1	61,409 THM	1
Gas - GS - Interrruptible - Large Volume	399,074 THM THM	7	376,699 THM	7
Gas - Residential - Regular Service	294,447 THM THM	34,010	297,113 THM	33,665
Total Retail Gas	1,369,270 THM	35,686	1,320,994 THM	35,335
Gas - GS - UF Cogeneration Plant	2,104,699 THM THM		1,931,233 THM	1
Gas - Residential - LP - Basic Rate	2,259 GAL GAL		2,122 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 - New Development
- > 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 – South Point Phase 2
- > Main Installation – UF Baseball New Stadium - Hull Rd. - 1000'
- > PHMSA and FPSC Inspections.

New Gas Services installed in October 2019: 34 New Customers

ENERGY SUPPLY

SYSTEM STATISTICS

ENERGY DISTRIBUTION

FUEL

October 2019

Source

Energy Supply - CAPACITY

Unit Capability output - MWn

DH-2	228
DH-1	78
Kelly CC	108
CT's	106
Grid	2 X 224
DHR	102.5

*DH1 slight derate due to gas filter restriction in Dec

Energy Supply - Performance Parameter

Month	YTD	Budget YTD	Delta Budget
46,919	46,919	56,460	(9,541)
1,917	1,917	-	1,917
75,231	75,231	78,156	(2,925)
-	-	-	-
(3,691)	(3,691)	11,855	(15,546)
52,582	52,582	11,629	40,953

Fuels Consumed

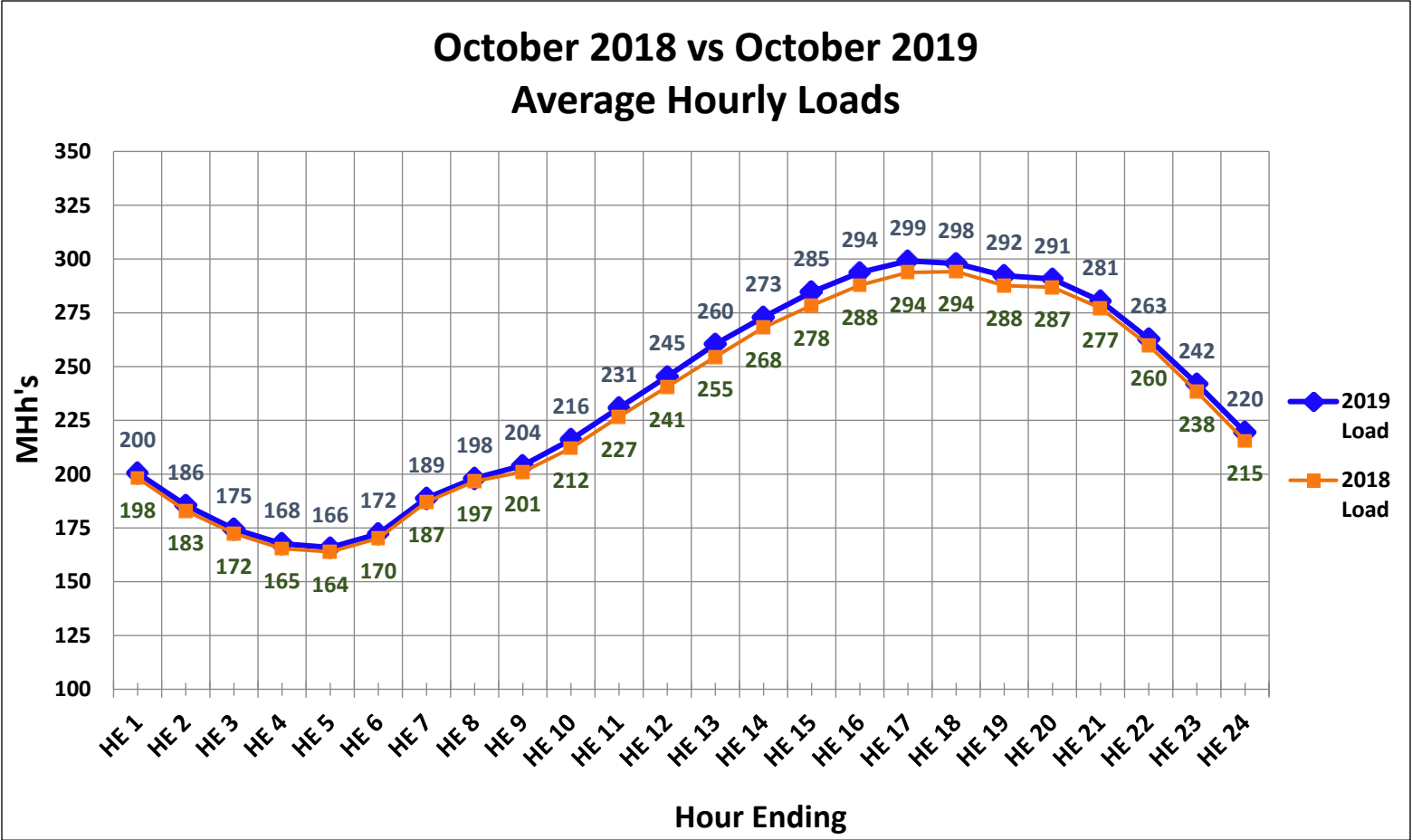
	Month	FYTD	Budget YTD	Delta Budget
Coal - Tons	16,494	16,494	30,112	(13,618)
Gas - MCF	849,219	849,219	679,841	169,378
Fuel oil - Gals		-	-	-
Biomass - Tons	69,874	69,874	14,600	55,274

Availability/Capacity

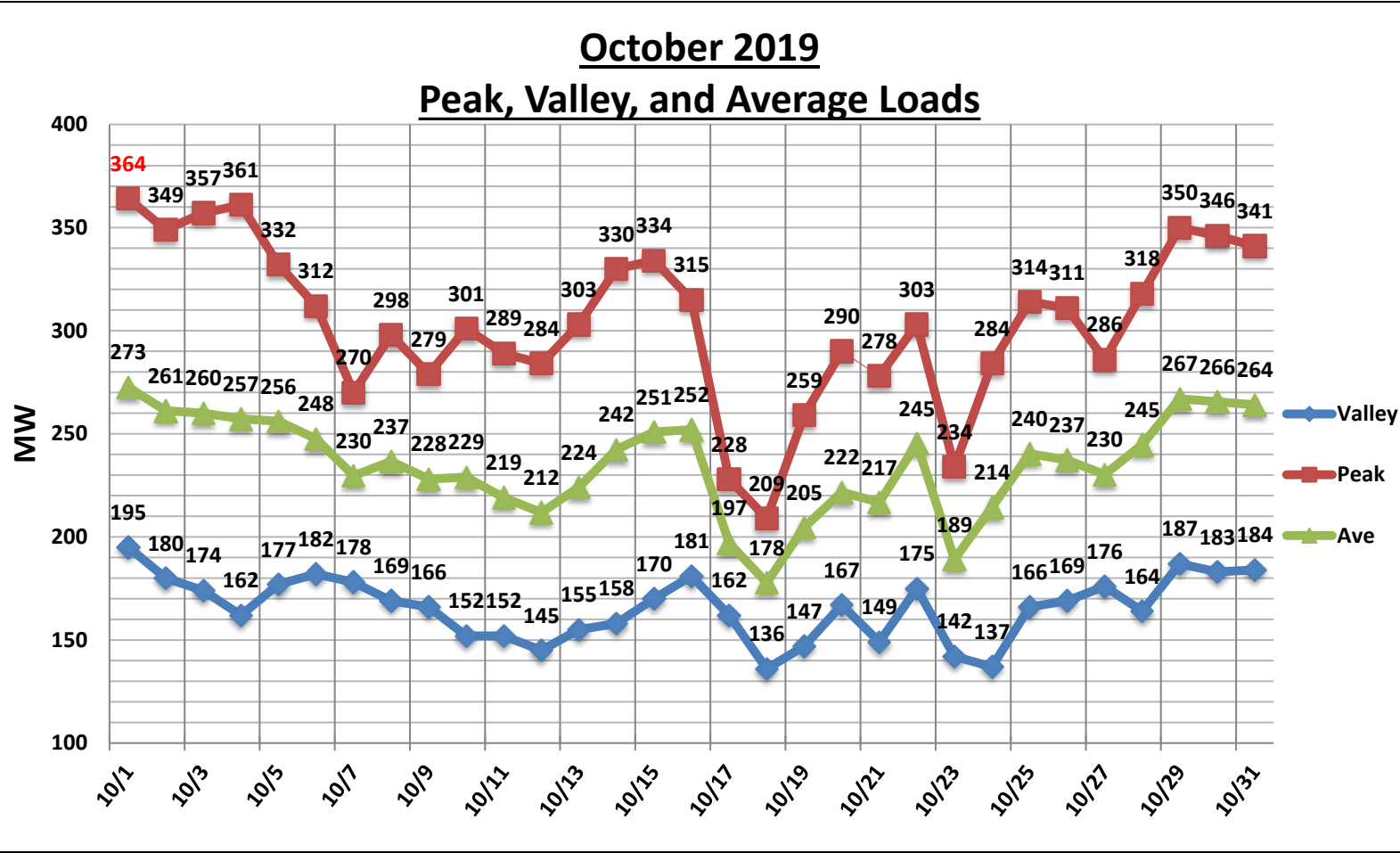
	Availability			Capacity		
	Month	FY 2020 YTD	FY 2019 YTD	Month	FY 2020 YTD	FY 2019 YTD
DH-2	100.00%	100.00%	82.73%	27.66%	27.66%	31.40%
DH-1	11.28%	11.28%	99.51%	3.30%	3.30%	25.55%
Kelly CC	100.00%	100.00%	77.44%	93.63%	93.63%	51.87%
DH CT-1	87.50%	87.50%	99.50%	0.00%	0.00%	0.18%
DH CT-2	100.00%	100.00%	95.50%	0.00%	0.00%	0.12%
DH CT-3	100.00%	100.00%	84.50%	0.00%	0.00%	1.44%
DHR*	100.00%	100.00%	89.34%	68.95%	68.95%	71.92%

DHR tracking is from Nov. 7th, 2017 forward

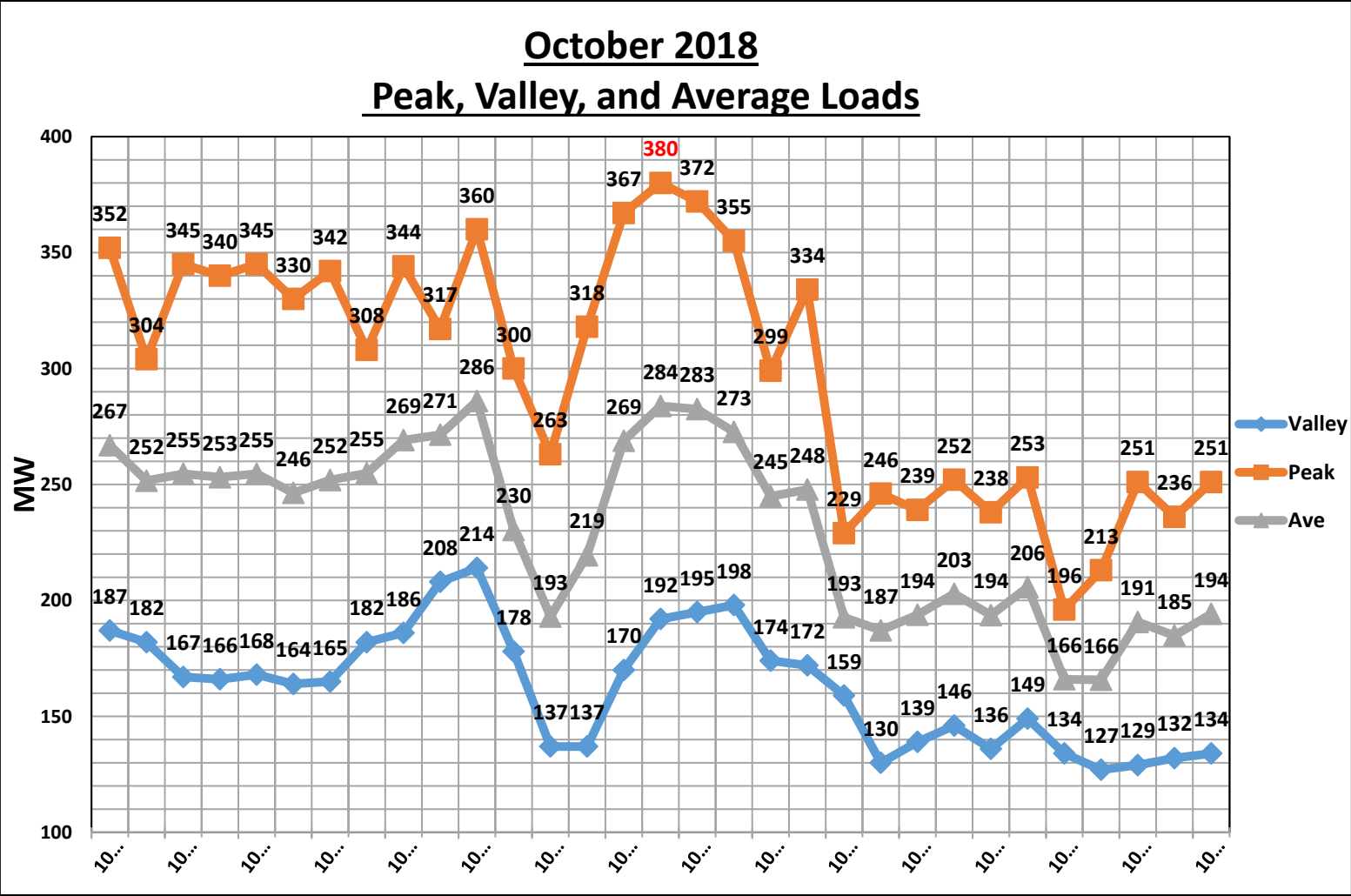
October Average Hourly Loads		
Hour Ending	2018 Load	2019 Load
HE 1	198	200
HE 2	183	186
HE 3	172	175
HE 4	165	168
HE 5	164	166
HE 6	170	172
HE 7	187	189
HE 8	197	198
HE 9	201	204
HE 10	212	216
HE 11	227	231
HE 12	241	245
HE 13	255	260
HE 14	268	273
HE 15	278	285
HE 16	288	294
HE 17	294	299
HE 18	294	298
HE 19	288	292
HE 20	287	291
HE 21	277	281
HE 22	260	263
HE 23	238	242
HE 24	215	220



Date	Valley	Peak	Ave
10/1/2019	195	364	273
10/2/2019	180	349	261
10/3/2019	174	357	260
10/4/2019	162	361	257
10/5/2019	177	332	256
10/6/2019	182	312	248
10/7/2019	178	270	230
10/8/2019	169	298	237
10/9/2019	166	279	228
10/10/2019	152	301	229
10/11/2019	152	289	219
10/12/2019	145	284	212
10/13/2019	155	303	224
10/14/2019	158	330	242
10/15/2019	170	334	251
10/16/2019	181	315	252
10/17/2019	162	228	197
10/18/2019	136	209	178
10/19/2019	147	259	205
10/20/2019	167	290	222
10/21/2019	149	278	217
10/22/2019	175	303	245
10/23/2019	142	234	189
10/24/2019	137	284	214
10/25/2019	166	314	240
10/26/2019	169	311	237
10/27/2019	176	286	230
10/28/2019	164	318	245
10/29/2019	187	350	267
10/30/2019	183	346	266
10/31/2019	184	341	264



Date	Valley	Peak	Ave
10/1/2018	187	352	267
10/2/2018	182	304	252
10/3/2018	167	345	255
10/4/2018	166	340	253
10/5/2018	168	345	255
10/6/2018	164	330	246
10/7/2018	165	342	252
10/8/2018	182	308	255
10/9/2018	186	344	269
10/10/2018	208	317	271
10/11/2018	214	360	286
10/12/2018	178	300	230
10/13/2018	137	263	193
10/14/2018	137	318	219
10/15/2018	170	367	269
10/16/2018	192	380	284
10/17/2018	195	372	283
10/18/2018	198	355	273
10/19/2018	174	299	245
10/20/2018	172	334	248
10/21/2018	159	229	193
10/22/2018	130	246	187
10/23/2018	139	239	194
10/24/2018	146	252	203
10/25/2018	136	238	194
10/26/2018	149	253	206
10/27/2018	134	196	166
10/28/2018	127	213	166
10/29/2018	129	251	191
10/30/2018	132	236	185
10/31/2018	134	251	194



Date: As of November 6th, 2019: Major Energy Supply Projects/Milestones Updates:

1. Deerhaven (DH):
 - a. Unit #1 completed planned outage on 10/31/2019, and there was a 2 day extension to outage due to boiler tube leak discovered by boiler hydrostatic test post outage. The subsequent post outage full load test resulted in 81 MW gross, which verifies natural gas flow restrictions were corrected during outage.
 - i. During outage while Energy Deliver T&D was testing the unit Startup Transformer (T-63), one of the phase bushing indicated failure. Bushing for this transformer are not readily in stock, and this is currently on order with expected arrival date of 11/8/2019, and is being planned for installation and testing 11/12 through 11/15/2019. Once repaired and tested satisfactorily T-63 will be restored to service. This issue does not impact Unit #1 significantly, as this unit can be (and was) started up on the Run Transformer (T-61).
2. Deerhaven Renewable(DHR):
 - a. Planned outage began on 11/2/2019, and will run through 12/4/2019. The Critical Path is the Turbine Control Valve actuator upgrade.
3. South Energy Center (SEC):
 - a. Steam Chiller has been restored to service.
 - b. Wartsilla completed 18,000 hour outage 11/4 through 11/5/2019, including a satisfactory SCR inspection.
 - c. Solar turbine failed to start on 11/4/2019 due to failed bleed heat control valve. New valve is on order and expected to be replaced, and unit fully tested, late 11/6/2019.
 - d. 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 both the OEM, and Burns & McDonnell to move the piping for each of the 4 remaining fans, and replace the fans and motors. This is currently having no impact to hospital services we provide.
4. Other:
 - a. The generation Solar Intent to Negotiate (ITN) team is still in the negotiation process with the 3 vendors selected.

ENVIRONMENTAL PERMITTING

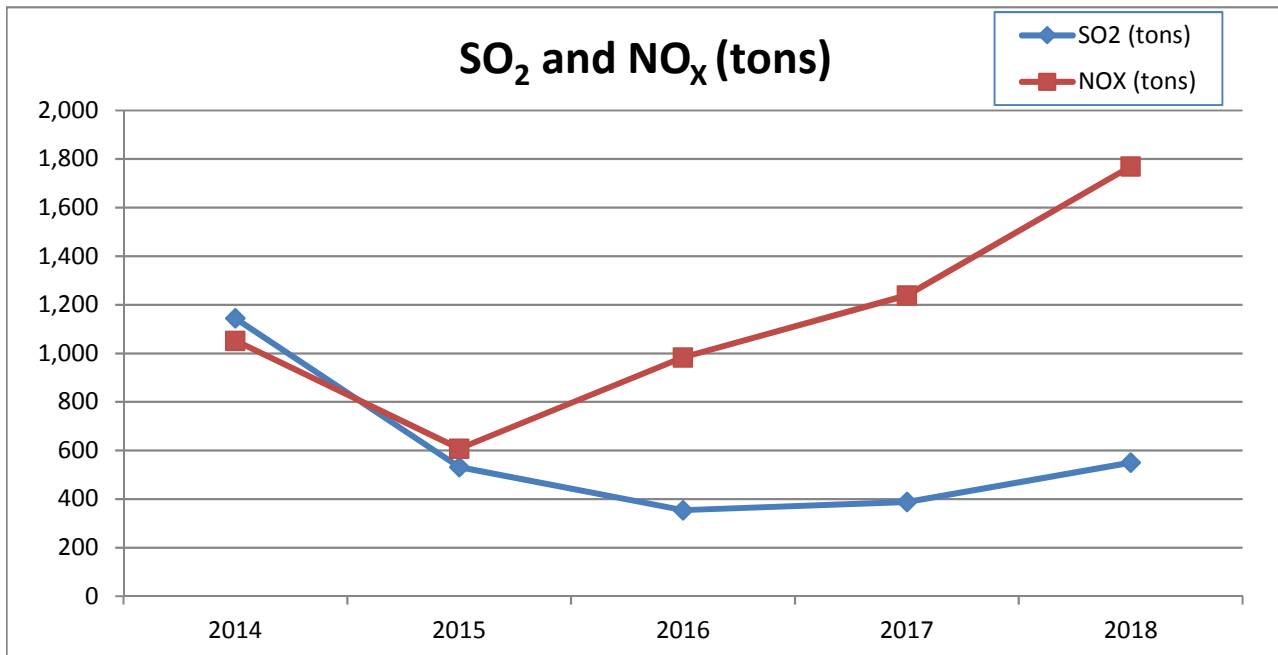
EMISSIONS DATA

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-Oct.)	539	1,530	4.67	41	1,787,546

Mercury and Particulate values are for Unit 2 only.

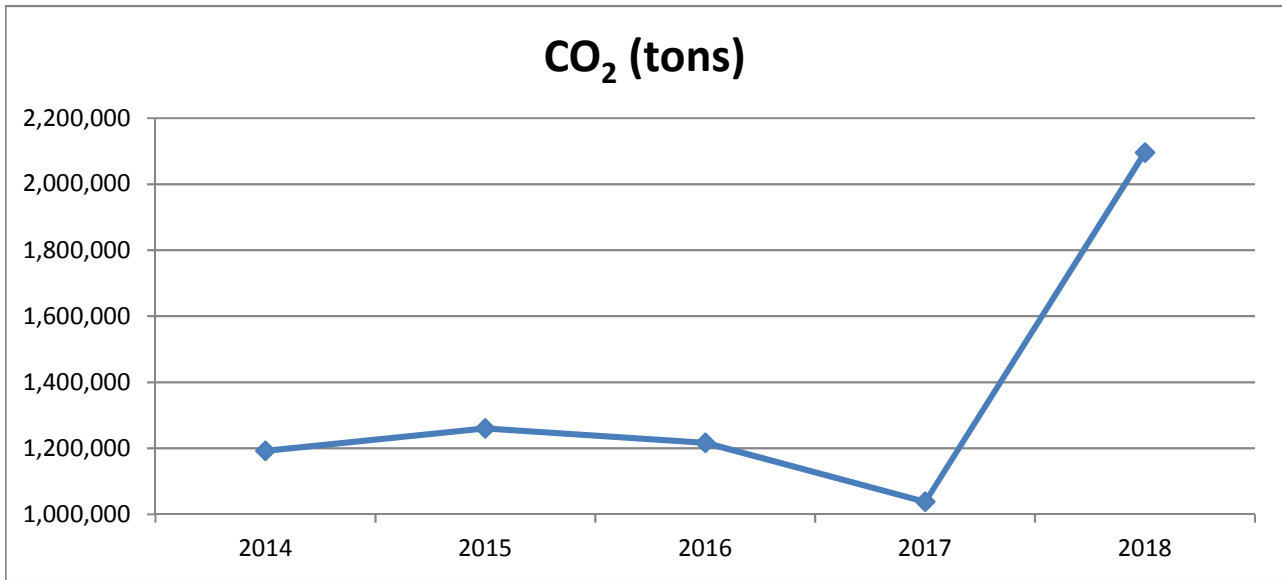
DHR data included starting in 2018.



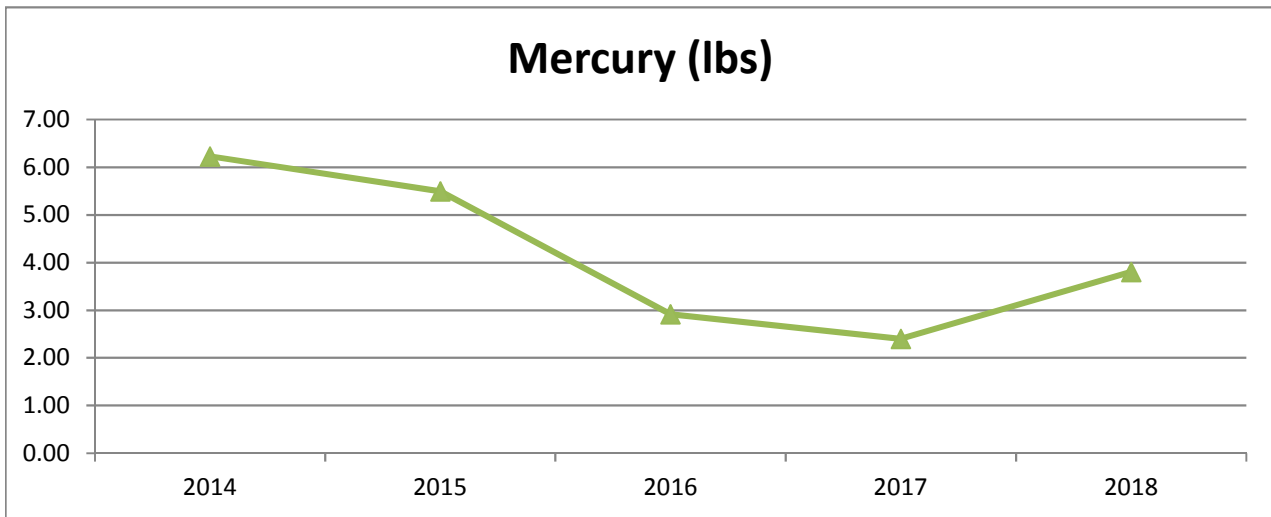
SO₂ was lower in 2015, 2016, and 2017 due to higher removal rate settings to assure compliance with the MATS Rule.

NO_x was higher in 2016 since it was more cost effective to use allowances than increase SCR removal rate. NO_x was higher in 2017 and 2018 since the Cross State Rule was no longer in effect for Florida.

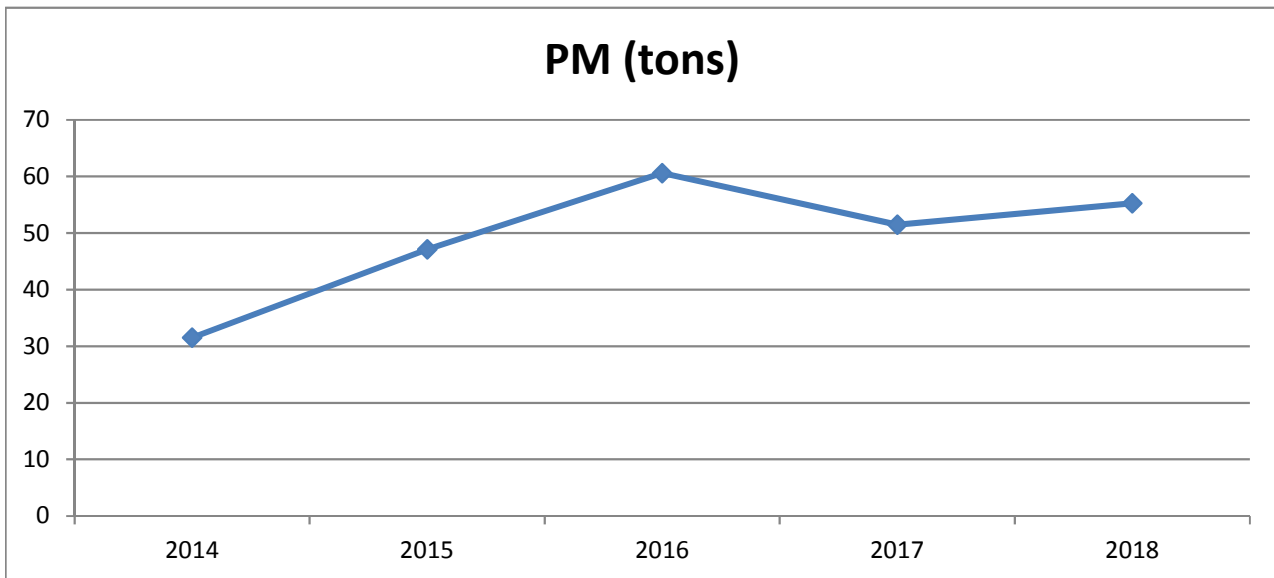
DHR data included starting in 2018.



DHR data included starting in 2018.



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



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

<u>Determination date</u>	<u>Description</u>
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Potential violations (Pending regulatory agency determination)

<u>Report date</u>	<u>Description</u>
10/4/2019	2 relay setting elements were not set in accordance with the NERC standard for loadability

Outstanding issues leftover from FY2019 (not included in FY2020 UAB Operations Report)

6/6/2019	35 Cyber Assets were delayed in being included under GRU's Critical Infrastructure Protection (CIP) program
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9/26/2019	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.
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WATER/WASTEWATER

PRODUCTION

MAINTENANCE

Water/Wastewater October 2019 Dashboard

Production						
Murphree Water Treatment Plant						
		October 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	28.7	23.5	30	78%	
	Peak Daily Flow	28.7	26.7	54	49%	
Main Street Water Reclamation Facility						
		October 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	4.2	4.2	7.5	56%	
Knapaha Water Reclamation Facility						
		October 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	11.7	11.7	14.9	79%	
Water Reclamation Facilities (Combined)						
		October 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	15.9	15.9	22.4	71%	
Maintenance						
Wastewater Collections						
		Oct 2019 (Miles)	FYTD	Monthly Goal (miles)		
	Miles of gravity mains cleaned	2.9	3	5.0		
	Miles of gravity mains TV inspected	4.1	4	5.0		
Water Distribution						
		Oct 2019	FYTD	Monthly Goal		
	Number of Water Services Replaced	64	1,770	75		
SSO Monthly Summary						
		October	YTD	GOAL		
	Sanitary Sewer Overflows	1	20	<16		

Major Projects and Other Updates

MWTP Electric System Upgrade - Completed new circuit undergrounding. Preparing for startup and cutover to new equipment, item by item.

MSWRF - Aeration Basin and Headworks project planning and design are underway. East Clarifier rehabilitation complete and operational.

Gravity Sewer Lining - lined or replaced over 8 miles of gravity sewer in FY19

KWRF - headwork repairs complete and back in service