

STATE OF THE UTILITY

ITEM #180473

OPERATIONS SUMMARY

CORPORATE SAFETY

ENVIRONMENTAL

REGULATORY

PERSONNEL

October 2018

Safety

Employees

	Current Month		
	First Aid	Recordable	DART
Administration	0	1	1
WWW Systems	0	1	0
Energy Supply	0	0	0
Energy Delivery - Electric/Gas	0	1	0
GRUCom	0	0	0
Totals		3	

	Year to Date		
	First Aid	Recordable	DART
Administration	0	1	1
WWW Systems	0	1	0
Energy Supply	0	0	0
Energy Delivery - Electric/Gas	0	1	0
GRUCom	0	0	0
Totals		3	

Vehicles

	Current Month		
	Miles Driven	Recordable	Preventable
Administration	20,245	0	0
WWW Systems	93,514	1	0
Energy Supply	2,008	0	0
Energy Delivery - Electric/Gas	117,243	0	0
GRUCom	9,809	0	0
Totals	242,819	1	

	Year to Date		
	Miles Driven	Recordable	Preventable
Administration	20,245	0	0
WWW Systems	93,514	1	0
Energy Supply	2,008	0	0
Energy Delivery - Electric/Gas	117,243	0	0
GRUCom	9,809	0	0
Totals	242,819	1	

Environmental

		Current Month
Notices of Violation		0
Emissions		
DH1, DH2, DHCT3, JRKCC1		
CO ₂ (tons)		92,521
NO _x (tons)		95
SO ₂ (tons)		33
DH Unit 2 (only)		
PM _{FILT} (tons)		4
Hg (lbs)		0.11

Calendar Year to Date

Notices of Violation	0
CO ₂ (tons)	1,018,196
NO _x (tons)	1,340
SO ₂ (tons)	494.2
PM _{FILT} (tons)	52
Hg (lbs)	3.30

Regulatory

NERC	
Notice of Violations	0
Self Reports/Potential Violations	2

Notice of Violations	0
Self Reports/Potential Violations	2

Personnel

	Authorized Positions	Filled Positions	Current Vacancies
Administration	16.00	13.00	3.00
Business Services and GRUCom	3.00	3.00	0.00
Chief Operating Officer	20.00	17.00	3.00
Customer Support Services	118.25	111.25	7.00
Energy Delivery	264.00	242.00	22.00
Energy Supply	145.00	143.00	2.00
Energy Supply - District Energy	10.00	10.00	0.00
Finance	43.00	25.00	18.00
GRUCom	35.00	26.00	9.00
Information Technology	70.00	61.00	9.00
Water Wastewater	168.00	159.00	9.00
Grand Total	892.25	810.25	82.00

Utility Advisory Board Monthly Report – FY 2019 Safety Data Summary

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

OCTOBER

10/08/2018 An employee was struck on both hands when a bathroom paper towel dispenser cover fell. Both hands were injured. (DART – restricted duty)

10/17/2018 While changing out a ball valve in a water line under pressure, the employee cut his finger on an old galvanized fitting.

10/21/2018 A line worker was injured during mutual aid assignment in the Panhandle. He suffered second degree burns on his left hand from an arc flash while he was cutting an energized 120V service line. He will receive an Employee Notice for violating safety protocol for this action. (DART lost time)

Utility Advisory Board Monthly Report – FY 2019 Vehicle Collision Summary

Vehicle Collisions (P) indicates preventable by our employee

OCTOBER

10/15/2018

While a GRU employee was driving into work, another car collided with a deer, which was then thrown into the windshield of his GRU truck.

NOVEMBER

11/01/2018

While driving in the Plant with a contractor, the employee made a left-hand turn and scraped a concrete bollard. (P)

CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

Customer Operations Metrics Summary October 2018

Active Accounts	Oct-18	YTD Gain/Loss	FY18
<i>Residential Contract Accounts</i>			
Total	91,104	124	90,980
Electric	84,524	121	84,403
Gas	33,483	43	33,440
Water	63,159	54	63,105
Wastewater	59,080	68	59,012
Telecomm	131	2	129

Active Accounts	Oct-18	YTD Gain/Loss	FY18
<i>Nonresidential Contract Accounts</i>			
Total	13,491	9	13,482
Electric	10,943	8	10,935
Gas	1,646	3	1,643
Water	5,838	(9)	5,847
Wastewater	4,638	4	4,634
Telecomm	367	1	366

New Installations	Oct-18	FY19 To Date	FY18
Electric	104	104	1512
Gas	40	40	463
Water	41	41	558
Wastewater	45	45	566
Telecomm	12	12	120

Residential Disconnects	Oct-18	FY19 To Date	FY18
Volume	1,537	1,537	15,305
Average Balance	\$260.89	\$260.89	\$250.07

Call Center Volume	Oct-18	FY19 To Date	FY18
Residential ASA	0:10:40	0:10:40	0:10:59
Business ASA	0:03:20	0:03:20	0:04:19
CSR Calls	13,077	13,077	142,989
CSR Callbacks	2,795	2,795	25,780
IVR Self Service	22,717	22,717	266,463
Total	35,794	35,794	409,452
IVR/Total	63%	63%	65%

Revenue Assurance	Oct-18	FY19 To Date	FY18
Referred to Collections	\$191,060.45	\$191,060.45	\$1,783,116.51
Recovered	\$70,806.52	\$70,806.52	\$786,025.11

Bills Generated	Oct-18	FY19 To Date	FY18
Paper Bills	106,109	106,109	1,276,432
eBills	17,865	17,865	200,984
Total	123,974	123,974	1,477,416
eBill/Total	14%	14%	14%

Service Orders	Oct-18	FY19 To Date	FY18
Move Ins	7,146	7,146	116,784
Move Outs	6,860	6,860	116,307

Payment Arrangements	Oct-18	FY19 To Date	FY18
Total	1,018	1,018	77,512

Average Res Bill Amounts	Oct-18	FY19 To Date	FY18
Electric (kWh)	992	992	812
Electric (\$)	\$141.38	\$141.38	\$118.11
Gas (Therms)	9	9	21
Gas (\$)	\$22.26	\$22.26	\$34.13
Water (kGals)	5	5	5
Water (\$)	\$30.85	\$30.85	\$30.34
Wastewater (kGals)	5	5	5
Wastewater(\$)	\$36.40	\$36.40	\$36.86

ENERGY DELIVERY

System Consumption

System Reliability

Major Projects – Electric & Gas

ENERGY DELIVERY - UAB REPORT - OCTOBER 2018

Electric System Consumption

	2018		2017	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Feed-In-Tariff - Residential	52 KWH	101	44 KWH	105
Feed-In-Tariff - General Service	2,597 KWH	158	2,717 KWH	157
Electric - GS - Demand - Regular	56,311,216 KWH	1,246	51,429,931 KWH	1,252
Electric - General Service Demand PV	846,493 KWH	19	706,520 KWH	19
GREC Startup Supplemental and Standby			345,597	1
Electric - GS - Kanapaha w Curtail Cr	1,010,400 KWH	1	973,200 KWH	1
Electric - GS - Demand - Large Power	8,940,600 KWH	8	8,052,840 KWH	8
Electric - GS - Murphree Curtail Credit	1,447,200 KWH	1	1,399,200 KWH	1
Electric - GS Large Demand PV	4,490,400 KWH	2	4,363,200 KWH	2
Electric - GS - Non Demand	16,753,188 KWH	9,668	16,282,667 KWH	10,213
Electric - General Service PV	169,423 KWH	59	156,147 KWH	62
Electric - Lighting - Rental	985,566 KWH	4,213 <i>n</i>	1,040,745 KWH	4,503 <i>n</i>
Electric - Lighting - Street - City	768,081 KWH	14 <i>n</i>	792,075 KWH	14 <i>n</i>
Electric - Lighting - Street - County	237,905 KWH	2 <i>n</i>	299,356 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	82,715,217 KWH	86,047	77,563,241 KWH	91,856
Electric - Residential PV	287,043 KWH	315	176,345 KWH	209
Total Retail Electric (<i>n = not included in total</i>)	174,969,923 KWH	97,625	161,451,649 KWH	103,886
City of Alachua	11,481,000 KWH	27,748 KW	11,474,000 KWH	24,549 KW
City of Winter Park	7,440,000 KWH	10,000 KW	7,440,000 KWH	10,000 KW
Total (Native) Electric	193,890,923 KWH		180,365,649 KWH	

Gas System Consumption

	2018		2017	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	576,233 THM	1,378	606,491 THM	1,509
Gas - GS - Regular Service (Small)	9,540 THM	284	9,332 THM	277
Gas - GS - Interruptible - Regular Serv	61,409 THM	1	46,070 THM	1
Gas - GS - Interruptible - Large Volume	376,699 THM	7	357,793 THM	7
Gas - Residential - Regular Service	297,113 THM	33,665	307,518 THM	33,743
Total Retail Gas	1,320,994 THM	35,335	1,327,204 THM	35,537
Gas - GS - UF Cogeneration Plant	1,931,233 THM	1	1,206,262 THM	1
Gas - Residential - LP - Basic Rate	2,122 GAL	200	2,064 GAL	197
GREC Gas (PGA only)			23,890 THM	1

*Obtained from Monthly Billing Summary prepared by Todd Kamhoot.

ENERGY DELIVERY - UAB REPORT - OCTOBER 2018

Durations Reliability Report Between 10/01/2018 and 10/31/2018

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	RELIABILITY INDICIES		MONTHLY AVG GOAL
Monthly Average Customers Served(C)	97,889	Average Service Availability Index (ASAI)	99.9901%
Total Hours of Customer Demand	70,480,080	System Average Interruption Duration Index (SAIDI)	4.29 4.5 Mins
Total Number of Outages	67	Customer Average Interruption Duration Index (CAIDI)	64.8 55 Mins
Total Number of Customers Affected (CI)	6,486	System average Interruption Frequency Index (SAIFI)	0.07 0.08
Total Customer Minutes Interrupted (CMI)	420,266		
Total Customer "Out Minutes"	7,260	Average Length of a Service Interruption (L-Bar)	108.36 Mins

Outage Duration Times

Average Hours: 1
Maximum Hours: 7
Minimum Hours: 0

Cause of Outages

Cause	Overhead	Underground	Undetermined	Total
1. Weather	2	0	0	2
2. Vegetation	16	0	0	16
3. Animals	6	0	0	6
4. Foreign Interference	0	0	0	0
5. Human Cause	4	3	0	7
6. Undetermined	11	5	1	17
7. Equipment Failure	4	10	5	19
8. All Remaining Outages	0	0	0	0
Total	43	18	6	67

* Durations Reliability Report Between 01/01/2018 and 10/31/2018

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	RELIABILITY INDICIES		FISCAL YTD GOALS
Monthly Average Customers Served(C)	97,889	Average Service Availability Index (ASAI)	99.9881%
Total Hours of Customer Demand	711,848,808	System Average Interruption Duration Index (SAIDI)	51.94 54 Mins
Total Number of Outages	768	Customer Average Interruption Duration Index (CAIDI)	47.79 55 Mins
Total Number of Customers Affected (CI)	106,388	System average Interruption Frequency Index (SAIFI)	1.09 1.00
Total Customer Minutes Interrupted (CMI)	5,084,571		
Total Customer "Out Minutes"	111,346	Average Length of a Service Interruption (L-Bar)	144.98 Mins

Outage Duration Times

Average Hours: 2
Maximum Hours: 17
Minimum Hours: 0

Cause of Outages

Cause	Overhead	Underground	Undetermined	Total
1. Weather	87	21	12	120
2. Vegetation	225	18	10	253
3. Animals	44	6	6	56
4. Foreign Interference	0	0	0	0
5. Human Cause	22	26	4	52
6. Undetermined	37	18	2	57
7. Equipment Failure	58	128	43	229
8. All Remaining Outages	0	0	0	0
Total	473	217	77	767

ENERGY DELIVERY - UAB REPORT - OCTOBER 2018

Energy Delivery - Major Projects

Major Electric Design Projects

West

- > Butler Plaza Town Center
- > Celebration Point (Ongoing Retail Development)
- > Alachua County SW 20th Avenue (OH to UG conversion)

East

- > SE 4th ST Roadway Project (OH to UG conversion)
- > CRA South Main Street (OH to UG conversion)
- > CRA Heartwood Subdivision

Major Gas Design Projects:

- > Main Replacement – NE 5th St. – Bare Steel Replacement - fill in work
- > Main Installation - Hartwood Sub - SE 8th Avenue
- > Main Installation – Celebration Oaks / The Commons – Archer Rd at SW 43rd St.
- > Main Installation – Plantation Oaks Senior Living – US Hwy 27 – 2500'
- > PSC Inspection - no violations found - 3rd year in a row

New Gas Services installed in October 2018: 43 New Customers

ENERGY SUPPLY

SYSTEM STATISTICS

ENERGY DISTRIBUTION

FUEL

October 2018

Source

Energy Supply - CAPACITY

Energy Supply - Performance Parameter

Source	Unit Capability output - MWn	Energy Supply - Performance Parameter			
		Month	YTD	Budget YTD	Delta Budget
DH-2	228	32,165	32,165	16,912	15,253
DH-1	75	17,520	17,520	9,023	8,497
Kelly CC	108	68,540	68,540	76,008	(7,468)
CT's	106	422	422	75	347
Grid	2 X 224	4,550	4,550	17,988	(13,438)
DHR	102.5	52,278	52,278	41,614	10,664

Fuels Consumed

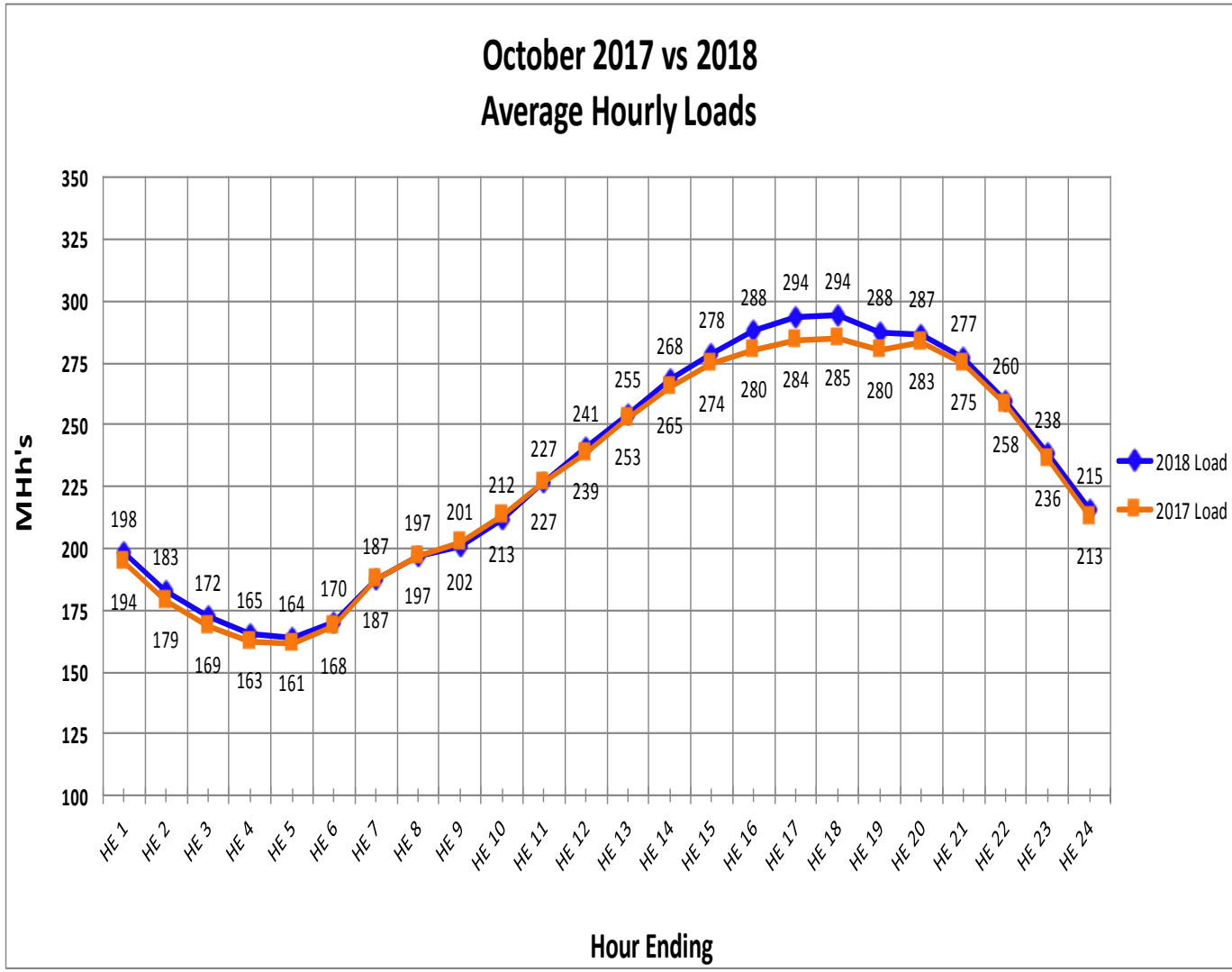
	Month	FYTD	Budget YTD	Delta Budget
Coal - Tons	13,694	13,694	9,157	4,537
Gas - MCF	941,264	941,264	800,531	140,733
Fuel oil - Gals	-	-	-	-
Biomass - Tons	69,685	69,685	52,270	17,414

Availability/Capacity

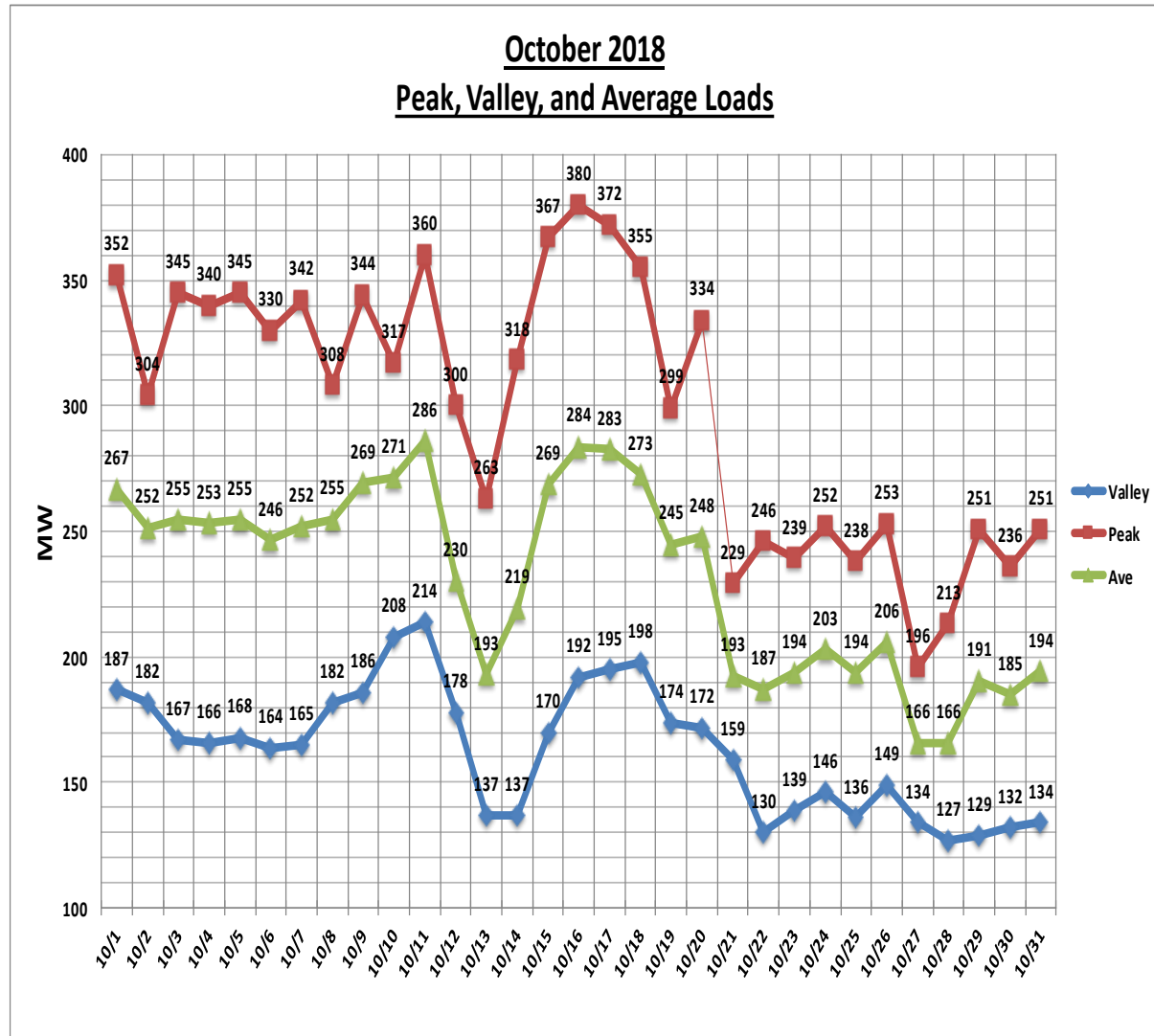
	Availability			Capacity		
	Month	FY 2019 YTD	FY 2018 YTD	Month	FY 2019 YTD	FY 2018 YTD
DH-2	51.67%	51.67%	96.25%	21.24%	21.24%	38.79%
DH-1	100.00%	100.00%	90.09%	33.10%	33.10%	25.59%
Kelly CC	99.41%	99.41%	72.86%	84.30%	84.30%	45.77%
DH CT-1	100.00%	100.00%	98.89%	0.47%	0.47%	0.31%
DH CT-2	98.05%	98.05%	96.00%	0.11%	0.11%	0.51%
DH CT-3	82.00%	82.00%	50.63%	0.57%	0.57%	0.89%
DHR*	95.13%	95.13%	80.45%	88.44%	88.44%	79.93%

DHR tracking is from Nov. 7th, 2017 forward

October Average Hourly Loads		
Hour Ending	2017 Load	2018 Load
HE 1	194	198
HE 2	179	183
HE 3	169	172
HE 4	163	165
HE 5	161	164
HE 6	168	170
HE 7	187	187
HE 8	197	197
HE 9	202	201
HE 10	213	212
HE 11	227	227
HE 12	239	241
HE 13	253	255
HE 14	265	268
HE 15	274	278
HE 16	280	288
HE 17	284	294
HE 18	285	294
HE 19	280	288
HE 20	283	287
HE 21	275	277
HE 22	258	260
HE 23	236	238
HE 24	213	215



Date	Valley	Peak	Ave
10/1/2018	187	352	267
10/2/2018	182	304	252
10/3/2018	167	345	253
10/4/2018	166	340	255
10/5/2018	168	345	246
10/6/2018	164	330	255
10/7/2018	165	342	246
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



Major Energy Supply Projects/Milestones

1. Deerhaven Unit #2 (DH2) Planned Outage began on 10/16/2018 and is originally scheduled for completion on 12/3/2018.
 - a. During Boiler inspection identified a Main Steam Piping apparent metallurgical abnormality where piping leaves Steam Drum to Main Steam stop valve. This is 22.5 inch outside diameter steam piping, with original 3 inch wall thickness made of P-22 material. The P-22 piping is low alloy steel with 2.25% chromium and 1% molybdenum. Working with our Boiler Contractor (Babcock and Wilcox) and Boiler Original Equipment Manufacturer (Riley) to determine assessment methodology for apparent swelling.
 - b. Remainder of outage work scope is on track.
2. South Energy Center (SEC):
 - a. Conducted the 10,000 hour inspection on Wartsila Engine on 10/26/2018 with no significant findings. However, when engine was removed from service for this inspection on 10/25/2018 there was a leak detected in the Heat Recovery Steam Generator (equivalent to boiler) that required a tube weld repair. This repair was completed and fully tested on 10/26/2018.
 - b. On 10/29/2018 the Solar Engine was secured and placed in standby status. Normally the SEC would be operating both the Solar Engine and Wartsila engine continuously when not in outage, in this case in coordination with our customer (UF Health) we secured the solar engine as a cost saving measures with no impact services we provide. Estimated cost savings to customer is anticipated to be a minimum of \$300,000.00 annually.
3. Deerhaven Renewable (DHR) fire damaged dozer inspection by GFR was completed on 10/22/2018, and no direct link was found to why the fire suppression system did not operate as designed. Fleet has removed the front end of the dozer (Bucket), and dozer has been shipped to Sun Machinery for restoration and repair. In interim on 10/18/2018 DHR received a rental Wagner Dozer to allow for adequate dozer services to facilitate continued operation. Rental Dozer will remain until repaired dozer returned to service.

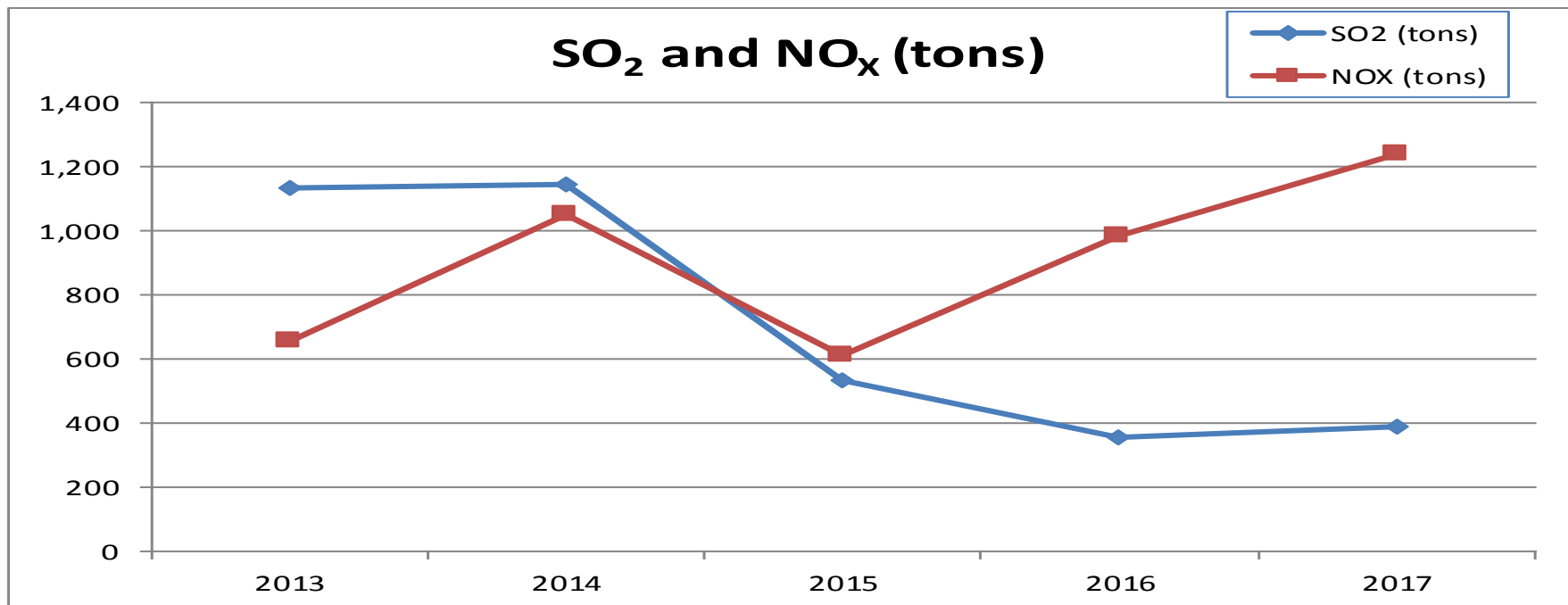
ENVIRONMENTAL PERMITTING

EMISSIONS DATA

Yearly Emissions

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)
2013	1,134	653	6.64	112	1,177,703
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 YTD	507	1,569	3.30	52	1,720,533

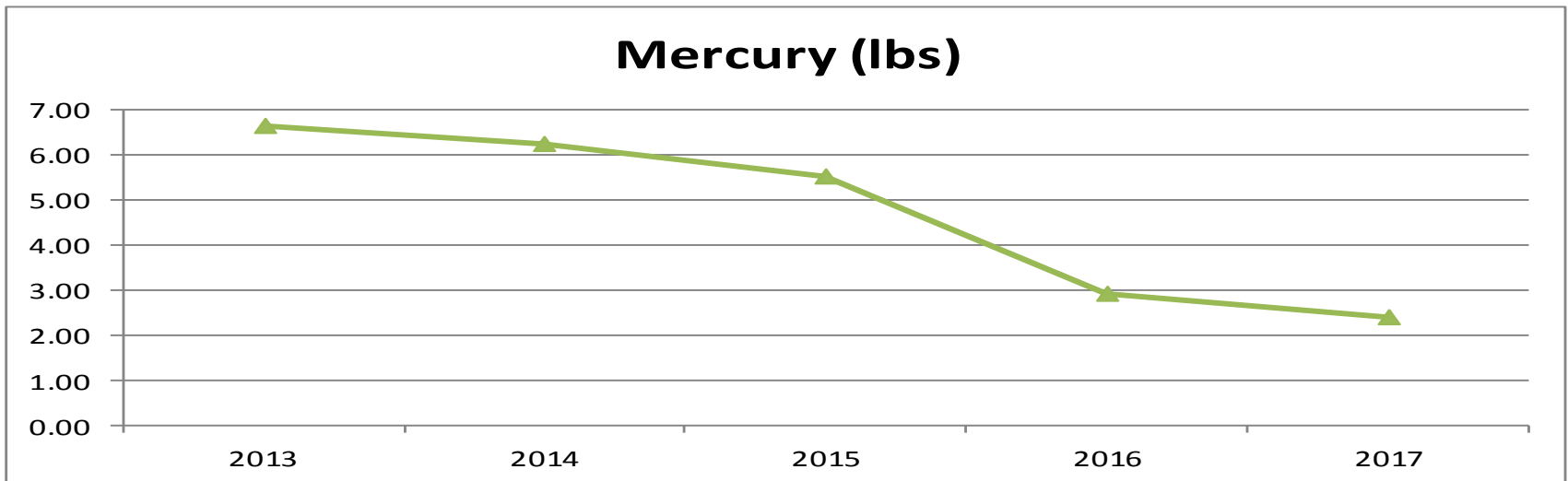
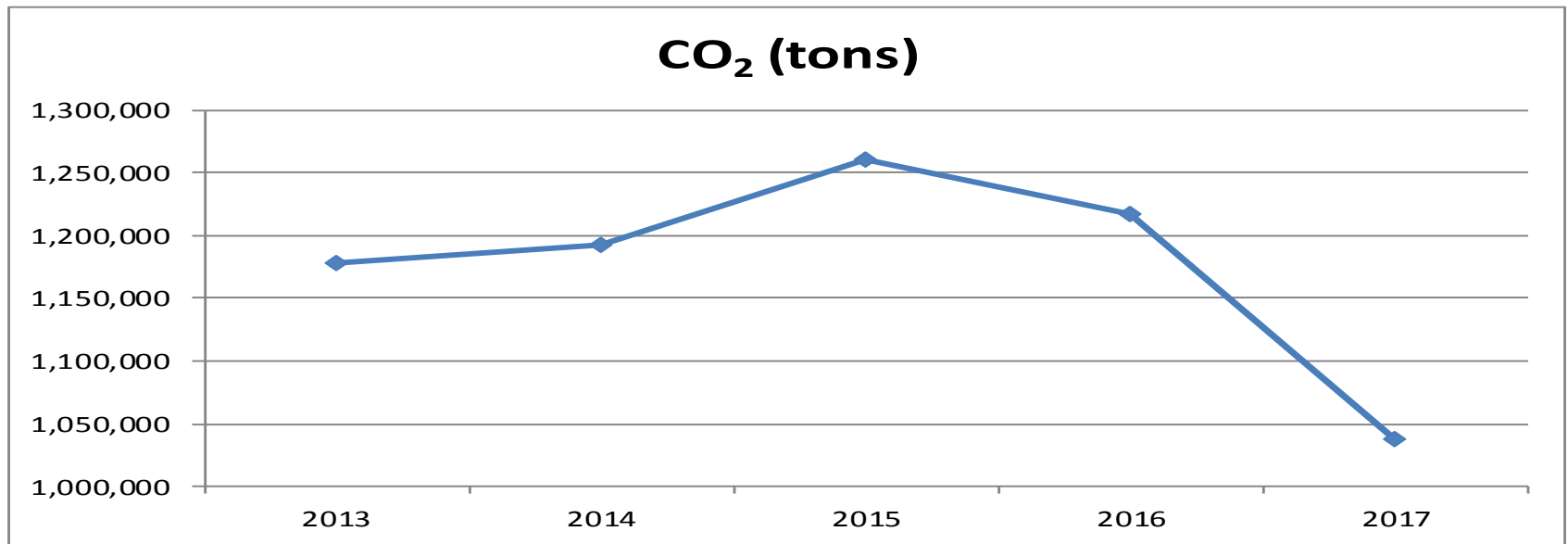
2017 Mercury values are for unit 2 only. CO₂ tonnage for 2018 YTD includes tonnage from DHR, which is considered carbon neutral or next zero for CO₂ production. YTD data is through end of October for all units except DHR, which is through end of September.



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

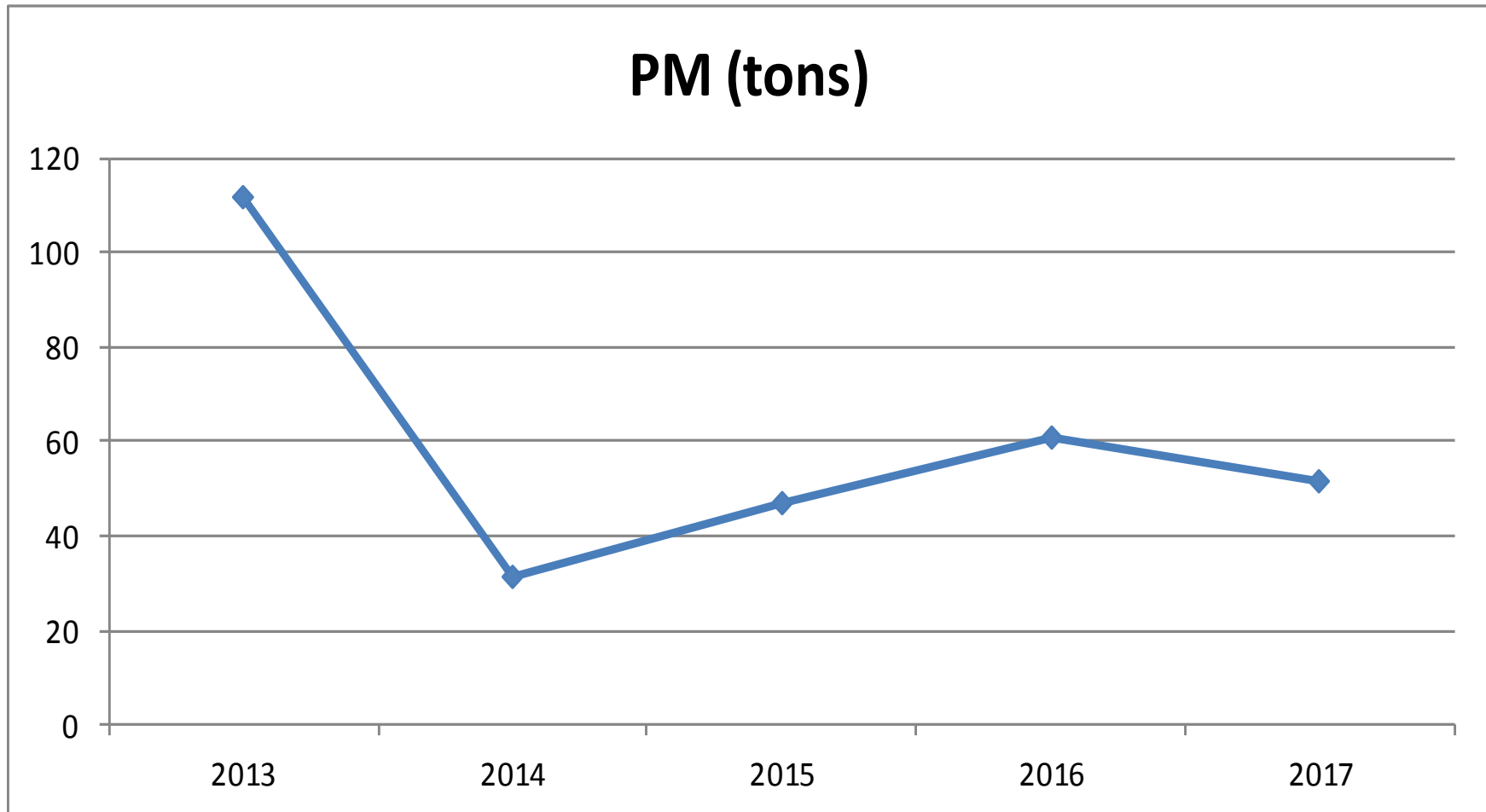
NO_x was higher in 2016 since it was more cost effective to use allowances than increase SCR removal rate. NO_x was higher in 2017 since the Cross State Rule was no longer in effect for Florida.

Yearly Emissions



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

Yearly Emissions



Calendar Year 2018 (January-October)

	SO₂ (tons)	NO_x (tons)	Mercury (lbs)	PM (tons)	CO₂ (tons)	SO₂ Rate (lb/MMBtu)	NO_x Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
DH1	16.5	149.3			119,890.4			2,011,456.0	169,579.0
DH2	476.5	1,134.7	3.3	51.8	648,473.0			6,323,952.0	678,636.0
DHCT3	0.0	1.5			4,367.3			73,480.0	5,411.0
JRKCC1	1.2	54.4			245,465.3			4,130,436.0	484,941.0
DHR	12.6	229.2			702,337.0			6,729,181.0	526,435.0
TOTAL	506.8	1,569.1	3.300	51.8	1,720,533.0			19,268,505.0	1,865,002.0

Note: DHR data does not include October

WATER/WASTEWATER

PRODUCTION

MAINTENANCE

Water/Wastewater October Dashboard

Production						
Murphree Water Treatment Plant						
		Oct 2018	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	24.8	24.8	30	83%	
	Peak Daily Flow	27.3	27.3	54	-	
Main Street Water Reclamation Facility						
		Oct 2018	FY to Date (mgd)	Permitted Capacity (mgd)		Status
	Average Daily Flow	5.5	5.5	7.5		
Kanapaha Water Reclamation Facility						
		Oct 2018	FY to Date (mgd)	Permitted Capacity (mgd)		Status
	Average Daily Flow	11.4	11.4	14.9		
Water Reclamation Facilities (Combined)						
		Oct 2018	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	16.9	16.9	22.4	76%	
Maintenance						
Wastewater Collections						
		Oct 2018 (Miles)	FYTD	Monthly Goal (miles)		
	Miles of gravity mains cleaned	7.0	7.0	7.5		
	Miles of gravity mains TV inspected	5.9	5.9	5.0		
Water Distribution						
		Oct 2018	FYTD	Monthly Goal		
	Number of Water Services Replaced	88	88	75		
SSO Monthly Summary						
		October	YTD	GOAL		
	Sanitary Sewer Overflows	3	3	<16		

Major Projects and Other Updates – Water/Wastewater

- 1) MWTP Electric System Upgrade - Structure nearly complete for the new electrical building.
- 2) Main Street Sewer Crossing - Gravity sewer improvements are installed and being tested.
- 3) MSWRF Aeration Basin and Headworks - Project planning and design are underway.
- 4) Water Service Replacements - Replaced over 880 services last year with a goal to replace more in FY19.
- 5) Gravity Sewer Lining - Planning lining projects with goal to line at least 10 miles of gravity sewer in FY19.