STATE OF THE UTILITY

Item #180607

OPERATIONS SUMMARY

CORPORATE SAFETY
ENVIRONMENTAL
REGULATORY
PERSONNEL

Safety			Employees			
	Cu	rrent Month			Year to Date	
	First Aid	Recordable	DART	First Aid	Recordable	DART
Administration	0	0	0	0	2	2
W/WW Systems	0	0	0	0	1	0
Energy Supply	0	0	0	0	0	0
Energy Delivery - Electric/Gas	0	1	0	0	2	1
GRUCom	0	0	0	0	0	0
Totals		1			5	
			<u>Vehicles</u>			
		Current Month			Year to Date	
	Miles Driven	Recordable	Preventable	Miles Driver		Preventab
Administration	12,319	0	0	32,50		0
W/WW Systems	68,698	0	0	162,2		1
Energy Supply	1,787	0	0	3,79	95 0	0
Energy Delivery - Electric/Gas	87,047	1	1	204,2	90 1	1
GRUCom	7,793	0	0	17,6	0 0	0
Totals	177,644	1		420,40	3	
Environmental				• • • • • •		
	Г	Current		Calendar Year to	Date	
Notices of Violation		()	0		
Emissions						
DH1, DH2, DHCT3, JRKCC1	, ,			4 ==0 0=0		
DH1, DH2, DHCT3, JRKCC1	₂ (tons)	56,		1,776,673		
DH1, DH2, DHCT3, JRKCC1	₂ (tons) _X (tons)	56, ⁻		1,776,673 1,600		
DH1, DH2, DHCT3, JRKCC1 CO NO	F		1			
DH1, DH2, DHCT3, JRKCC1 CO NO	_X (tons)	3	1	1,600		
DH1, DH2, DHCT3, JRKCC1 CO NO SO DH Unit 2 (only)	_X (tons)	3	1	1,600		
DH1, DH2, DHCT3, JRKCC1 CO NO SO DH Unit 2 (only) PM _{FIL}	χ (tons) $_2$ (tons) $_{7}$ (tons)	3	1	1,600 507.1		
DH1, DH2, DHCT3, JRKCC1 CO NO SO DH Unit 2 (only) PM _{FIL}	x (tons)	3 (1	1,600 507.1		

NERC

Self Reports/Potential Violations

Notice of Violations

0

Personnel

			Current
	Authorized Positions	Filled Positions	Vacancies
Administration	16.00	13.00	3.00
Business Services and GRUCom	3.00	3.00	-
Chief Operating Officer	20.00	18.00	2.00
Customer Support Services	118.25	108.25	10.00
Energy Delivery	264.00	241.00	23.00
Energy Supply	145.00	143.00	2.00
Energy Supply - District Energy	10.00	10.00	-
Finance	43.00	25.00	18.00
GRUCom	35.00	27.00	8.00
Information Technology	70.00	60.00	10.00
Water Wastewater	168.00	160.00	8.00
Grand Total	892.25	808.25	84.00

Utility Advisory Board Monthly Report – FY 2019 Safety Data Summary

Employee Injuries	(DART – days away, restricted duty, temporary transfer)
<u>OCTOBER</u>	
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. (DART Lost time)
10/31/2018	While putting away boxes of piping elbows, employee felt a slight pull in her lower back. Employee sought medical treatment on $11/2/18$.
NOVEMBER 11/09/2018	Employee was bitten by a dog on his left wrist while in a yard reading meters.

Utility Advisory Board Monthly Report - FY 2019 Vehicle Collision Summary

Vehicle Collisions (P) indicates preventable by our employee

<u>OCTOBER</u>

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.

10/30/2018 While driving in the Plant to speak to an operator, the employee made a left-hand

turn and scraped a concrete bollard with his truck. (P)

<u>NOVEMBER</u>

11/19/2018 Employee was driving a tractor trailer and as he made the turn off of Main Street

onto 16th avenue, the rear drivers tire on the trailer struck the front bumper on a

vehicle that was stopped in the south bound turn lane causing damage. (P)

CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

Customer Operations Metrics Summary November 2018

Active Accounts	Nov-18	YTD Gain/Loss	FY18
Residential Contract Accounts			
Total	91,073	93	90,980
Electric	84,482	79	84,403
Gas	33,533	93	33,440
Water	63,135	30	63,105
Wastewater	59,080	68	59,012
Telecomm	130	1	129

New Installations	Nov-18	FY19 To Date	FY18
Electric	74	178	1512
Gas	39	79	463
Water	40	81	558
Wastewater	36	81	566
Telecomm	2	14	120

Call Center Volume	Nov-18	FY19 To Date	FY18
Residential ASA	0:10:16	0:10:28	0:10:59
Business ASA	0:03:14	0:03:17	0:04:19
CSR Calls	10,642	23,719	142,989
CSR Callbacks	2,676	5,471	25,780
IVR Self Service	20,062	42,779	266,463
Total	30,704	66,498	409,452
IVR/Total	65%	64%	65%

Bills Generated	Nov-18	FY19 To Date	FY18
Paper Bills	106,412	212,521	1,276,432
eBills	17,354	35,219	200,984
Total	123,766	247,740	1,477,416
eBill/Total	14%	14%	14%

Payment Arrangements	Nov-18	FY19 To Date	FY18
Total	672	1,690	77,512

Active Accounts	Nov-18	YTD Gain/Loss	FY18
Nonresidential Contract Accounts			
Total	13,505	23	13,482
Electric	10,962	27	10,935
Gas	1,651	8	1,643
Water	5,845	(2)	5,847
Wastewater	4,642	8	4,634
Telecomm	368	2	366

Residential Disconnects	Nov-18	FY19 To Date	FY18
Volume	1,563	3,100	15,305
Average Balance	\$260.71	\$260.80	\$250.07

Revenue Assurance	Nov-18	FY19 To Date	FY18
Referred to Collections	\$175,654.72	\$407,343.47	\$1,783,116.51
Recovered	\$67,563.93	\$155,178.14	\$786,025.11

Service Orders	Nov-18	FY19 To Date	FY18
Move Ins	6,153	13,299	116,784
Move Outs	5,885	12,745	116,307

Average Res Bill Amounts	Nov-18	FY19 To Date	FY18
Electric (kWh)	722	857	812
Electric (\$)	\$105.17	\$123.27	\$118.11
Gas (Therms)	11	10	21
Gas (\$)	\$24.87	\$23.57	\$34.13
Water (kGals)	5	5	5
Water (\$)	\$31.32	\$31.09	\$30.34
Wastewater (kGals)	5	5	5
Wastewater(\$)	\$36.90	\$36.65	\$36.86

ENERGY DELIVERY

System Consumption
System Reliability
Major Projects – Electric & Gas

ENERGY DELIVERY - UAB REPORT - NOVEMBER 2018

Electric System Consumption

	2018					2	017	
	CONSUMPTION CUSTOMERS		CUSTOMERS		CONSUMPTION		CUSTOMERS	
Feed-In-Tarrif - Residential	62	KWH	102		52	KWH	104	
Feed-In-Tarrif - General Service	2,728	KWH	155		2,426	KWH	157	
Electric - GS - Demand - Regular	49,192,337	KWH	1,232		49,921,078	KWH	1,237	
Electric - General Service Demand PV	823,725	KWH	18		657,476	KWH	15	
GREC Startup Supplemental and Standby					452,351		1	
Electric - GS - Kanapaha w Curtail Cr	1,012,800	KWH	1		997,200	KWH	1	
Electric - GS - Demand - Large Power	8,675,560	KWH	9		8,036,440	KWH	8	
Electric - GS - Murphree Curtail Credit	1,545,600	KWH	1		1,444,800	KWH	1	
Electric - GS Large Demand PV	4,269,600	KWH	2		4,250,400	KWH	2	
Electric - GS - Non Demand	14,304,717	KWH	9,661		14,168,512	KWH	9,782	
Electric - General Service PV	131,917	KWH	58		100,591	KWH	53	
Electric - Lighting - Rental	976,773	KWH	4,193	n	1,011,528	KWH	4,607	n
Electric - Lighting - Street - City	761,609	KWH	14	n	792,176	KWH	14	n
Electric - Lighting - Street - County	223,875	KWH	2	n	299,356	KWH	2	n
Electric - Lighting - Traffic	4,542	KWH	2	n	4,542	KWH	2	n
Electric - Residential - Non TOU	59,694,031	KWH	85,210		56,991,966	KWH	86,049	
Electric - Residential PV	192,947	KWH	317		124,085	KWH	227	_
Total Retail Electric (n =not included in total)	141,812,823	KWH	96,766	=	137,147,377	KWH	97,637	
City of Alachua	9,604,000	KWH	20,741	KW	9,025,000	KWH	18,153	KW
City of Winter Park	7,200,000	KWH	10,000	KW	7,200,000	KWH	10,000	KW
Total (Native) Electric	158,616,823	KWH			153,372,377	KWH		

Gas System Consumption

	201	8	2017	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	711,217 THM	Л 1,365	725,010 THM	1,395
Gas - GS - Regular Service (Small)	9,956 THN	Л 289	11,458 THM	257
Gas - GS - Interrruptible - Regular Serv	44,902 THN	И 1	20,224 THM	1
Gas - GS - Interrruptible - Large Volume	418,761 THM	Л 7	421,385 THM	7
Gas - Residential - Regular Service	369,095 THN	Л 33,553	442,796 THM	34,008
Total Retail Gas	1,553,931 THM	A 35,215	1,620,873 THM	35,668
Gas - GS - UF Cogeneration Plant	2,773,821 THM	Л 1	3,517,164 THM	1
Gas - Residential - LP - Basic Rate	2,661 GAL	200	3,167 GAL	196
GREC Gas (PGA only)			13,400 THM	1

^{*}Obtained from Monthly Billing Summary prepared by Todd Kamhoot.

ENERGY DELIVERY - UAB REPORT - NOVEMBER 2018

Durations Reliability Report Between 11/01/2018 and 11/30/2018

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	RELIABILITY INDICIES		MONTHLY AVG GOAL
Monthly Average Customers Served(C)	97,963 Average Service Availability Index (ASAI)	99.9955%	
Total Hours of Customer Demand	68,182,248 System Average Interruption Duration Index (SAIDI)	1.86	4.5 Mins
Total Number of Outages	48 Customer Average Interruption Duration Index (CAIDI)	42.9	55 Mins
Total Number of Customers Affected (CI)	4,247 System average Interruption Frequency Index (SAIFI)	0.04	0.08
Total Customer Minutes Interrupted (CMI)	182,181		
Total Customer "Out Minutes"	6,155 Average Length of a Service Interruption (L-Bar)	128.23 N	lins

Outage Duration Times

Average Hours: 2 Maximum Hours: 11 Minimum Hours: 0

Cause of Outages

Cause	Overhead	Underground	Undetermined	Total
1. Weather	6	1	0	7
2. Vegetation	12	2	1	15
3. Animals	5	1	0	6
4. Foreign Interference	0	0	0	0
5. Human Cause	4	1	0	5
6. Undetermined	4	1	0	5
7. Equipment Failure	1	6	3	10
8. All Remaining Outages	0	0	0	0
Total	32	12	4	48

* Durations Reliability Report Between 01/01/2018 and 11/30/2018

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	RELIABILITY INDICIES		FISCAL YTD GOALS
Monthly Average Customers Served(C)	97,963 Average Service Availability Index (ASAI)	99.9888%	
Total Hours of Customer Demand	782,920,296 System Average Interruption Duration Index (SAIDI)	53.76	54 Mins
Total Number of Outages	815 Customer Average Interruption Duration Index (CAIDI)	47.6	55 Mins
Total Number of Customers Affected (CI)	110,634 System average Interruption Frequency Index (SAIFI)	1.13	1.00
Total Customer Minutes Interrupted (CMI)	5,266,667		
Total Customer "Out Minutes"	117,416 Average Length of a Service Interruption (L-Bar)	144.07	Mins

Outage Duration Times

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

Cause of Outages

Cause	Overhead	Underground	Undetermined	Total
1. Weather	93	22	12	127
2. Vegetation	236	20	11	267
3. Animals	49	7	6	62
4. Foreign Interference	0	0	0	0
5. Human Cause	26	27	4	57
6. Undetermined	41	19	1	61
7. Equipment Failure	59	134	47	240
8. All Remaining Outages	0	0	0	0
Total	504	229	81	814

ENERGY DELIVERY - UAB REPORT - NOVEMBER 2018

Energy Delivery - Major Projects

Major Electric Design Projects

West

- > North Florida Regional Medical Ctr (Relocation of Electric Facilities)
- > Celebration Point (New Development)
- > SW 8th Ave / SW 20th Avenue (OH to UG conversion)

<u>East</u>

- > COG SE 4th St (OH to UG conversion)
- > CRA South Main Street (OH to UG conversion)
- > Murphree Water Plant (Total Electric Rebuilt)

Major Gas Design Projects:

- > Main Installation Lugano Subdivision 2360'
- > Main Installation Heartwood Sub SE 8th Avenue 1470'
- > Main Relocation SW 40th Blvd Move main for road work reimbursable
- > Main Installation The Vue Archer Rd at SW 43rd St 2600'
- > Main Replacement NE 6th Ave and NE 7th Ave 3100'

New Gas Services installed in November 2018: 37 New Customers

ENERGY SUPPLY

SYSTEM STATISTICS ENERGY DISTRIBUTION FUEL

November 2018

Source

Energy Supply - CAPACITY

Unit Canability output - MWn

	Unit Capability output - NWn
DH-2	228
DH-1	75
Kelly CC	108
CT's	106
Grid	2 X 224
DHR	102.5

Energy Supply - Performance Parameter

Month	YTD	Budget YTD	Delta Budget
-	32,165	16,912	15,253
17,104	34,624	13,346	21,278
73,663	142,203	148,712	(6,509)
3,623	4,045	138	3,907
5,701	10,251	32,779	(22,528)
56,472	108,750	87,974	20,776

Fuels Consumed

Coal - Tons Gas - MCF Fuel oil - Gals Biomass - Tons

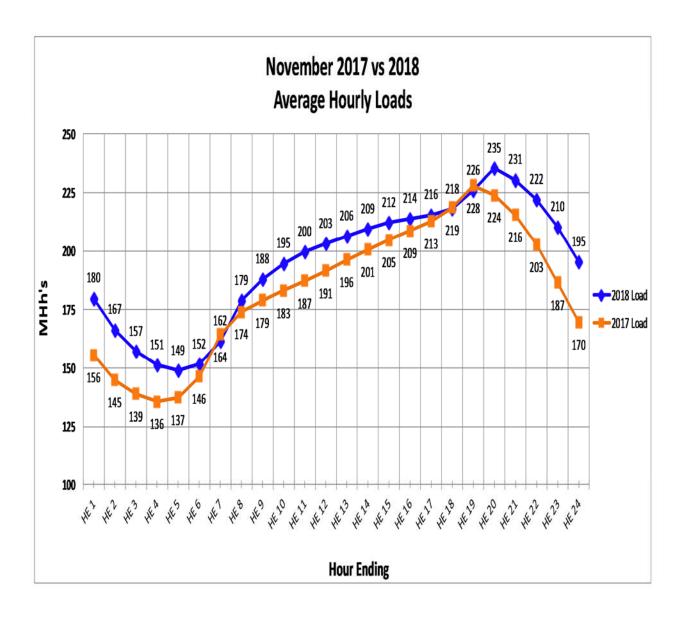
Month	FYTD	Budget YTD	Delta Budget
-	13,694	9,157	4,537
878,892	1,820,157	1,510,802	309,355
-	-	-	-
73,626	143.311	111.894	31.417

Availability/Capacity

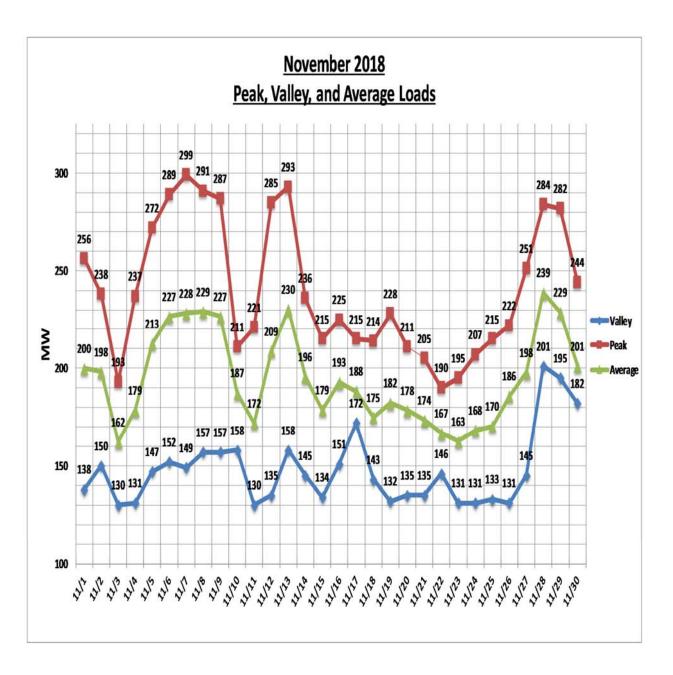
	Availability			Capacity		
	Month	FY 2019 YTD	FY 2018 YTD	Month	FY 2019 YTD	FY 2018 YTD
DH-2	0.00%	26.24%	96.26%	0.00%	10.62%	30.89%
DH-1	100.00%	100.00%	90.09%	33.24%	33.17%	27.88%
Kelly CC	100.00%	99.70%	75.30%	91.30%	81.21%	109.08%
DH CT-1	100.00%	100.00%	98.89%	0.05%	0.26%	0.41%
DH CT-2	100.00%	99.01%	96.00%	0.00%	0.05%	0.71%
DH CT-3	100.00%	90.86%	50.63%	6.63%	3.60%	4.93%
DHR*	100.00%	99.17%	80.41%	77.71%	83.07%	23.69%

DHR tracking is from Nov. 7th, 2017 forward

November Average Hourly Loads				
Hour Ending	2017 Load	2018 Load		
HE1	156	180		
HE 2	145	167		
HE 3	139	157		
HE 4	136	151		
HE 5	137	149		
HE 6	146	152		
HE 7	164	162		
HE 8	174	179		
HE 9	179	188		
HE 10	183	195		
HE 11	187	200		
HE 12	191	203		
HE 13	196	206		
HE 14	201	209		
HE 15	205	212		
HE 16	209	214		
HE 17	213	216		
HE 18	219	218		
HE 19	228	226		
HE 20	224	235		
HE 21	216	231		
HE 22	203	222		
HE 23	187	210		
HE 24	170	195		



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	215	188
11/18/2018	143	214	175
11/19/2018	132	228	182
11/20/2018	135	211	178
11/21/2018	135	205	174
11/22/2018	146	190	167
11/23/2018	131	195	163
11/24/2018	131	207	168
11/25/2018	133	215	170
11/26/2018	131	222	186
11/27/2018	145	251	198
11/28/2018	201	284	239
11/29/2018	195	282	229
11/30/2018	182	244	201
12/1/2018	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, but was moved out a week due to delays in discovery work, as well as delays by contractor in completing the Aux Cooling Tower Refurbishment. Current schedule outage completion date is 12/10/2018.
 - a. Critical path is the Aux Cooling Tower distribution fill and south wall refurbishment. The tower has 2 cells and North Cell is already released to allow for unit startup. The South Cell is projected to be compete 12/8/2018. All other outage work is on track for our revised outage schedule.
 - b. As an update to discovery reported previously: The Main Steam Piping metallurgy issue was further investigated comprehensively by Applied Technical Services (ATS). Their thorough evaluation through numerous non-destructive testing techniques/methodologies identified no abnormal metallurgical issues with the piping, thus allowing for continued operation until next planned outage.in 18 months. This will allow adequate time to acquire the right replacement piping and plan the work.

2. Deerhaven Renewable (DHR);

- a. The previously damaged Wagner Dozer is under repair by Sun Machinery with expected return date of late February.
- b. Boiler has a small cold side tube leak that will require a Short Duration Outage (SDO) to fully evaluate and repair once Deerhaven Unit #2 is fully restored. This tube leak is not impacting safety or reliability of the unit, and has shown no deterioration since in initially discovered 11/10/2018.

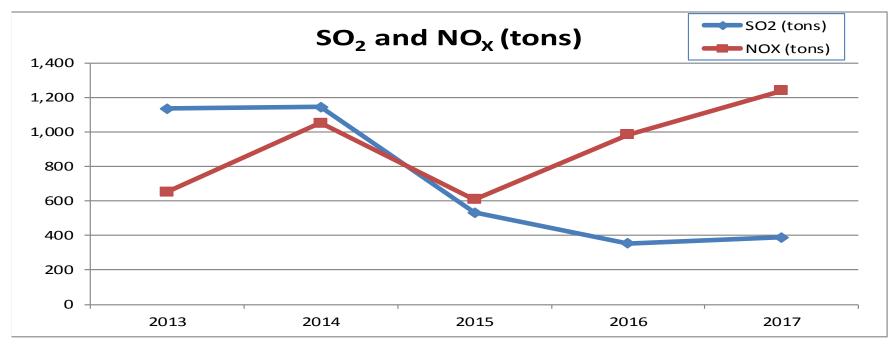
ENVIRONMENTAL PERMITTING

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	1,600	3.30	52	1,776,673

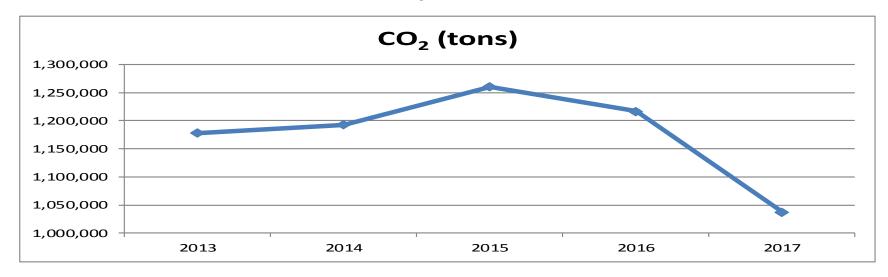
2017 and 2018 Mercury values are for Unit 2 only.

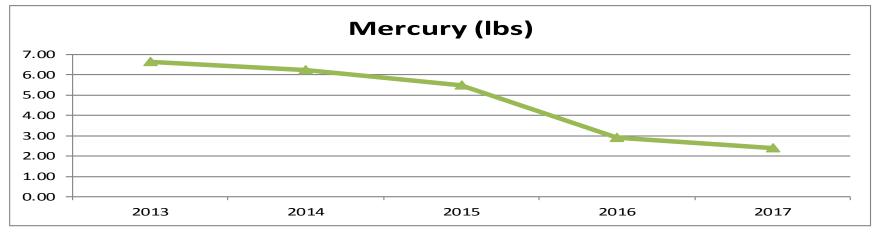


SO₂ was lower in 2015, 2016, and 2017 due to higher removal rate settings to assure compliance with the MATS Rule.

 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.

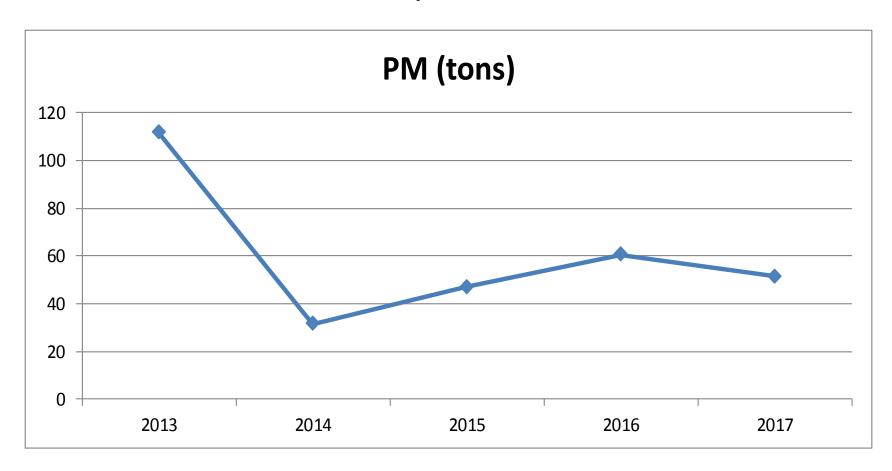
Yearly Emissions





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

Yearly Emissions



2018 (January-November)

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	SO ₂ Rate (lb/MMBtu)	NO _x Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
DH1	16.6	170.8			134,455.4			2,256,555.0	188,589.0
DH2	476.5	1,134.7	3.3	51.8	648,473.0			6,323,952.0	678,636.0
DHCT3	0.0	2.4			7,522.4			126,557.0	9,078.0
JRKCC1	1.4	63.3			283,885.3			4,776,934.0	559,249.0
DHR	12.6	229.2			702,337.0			6,729,181.0	526,435.0
TOTAL	507.1	1,600.4	3.300	51.8	1,776,673.1			20,213,179.0	1,961,987.0

Note: DHR data is thru September

2018 - November

	SO ₂ (tons)	NO _X (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	SO ₂ Rate (lb/MMBtu)	NO _X Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
DH1	0.1	21.5			14,565.0			245,099.0	19,010.0
DH2	0.0	0.0	0.0	0.0	0.0			0.0	0.0
DHCT3	0.0	0.8			3,155.2			59,098.0	3,667.0
JRKCC1	0.2	8.9			38,420.8			646,499.0	74,308.0
TOTAL	0.3	31.2	0.000	0.0	56,141.0			950,696.0	96,985.0

WATER/WASTEWATER

PRODUCTION MAINTENANCE

Water/Wastewater November Dashboard

Production							
urphree Water Treatment		i roduction					
	Nov 2018	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status		
Average Daily Flow	22.1	23.4	30	78%			
Peak Daily Flow	24.6	27.3	54	-			
ain Street Water Reclama	tion Facility						
			Permitted				
	Nov 2018	FY to Date (mgd)	Capacity (mgd)		Status		
Average Daily Flow	5.5	5.5	7.5				
anapaha Water Reclamation	on Facility						
	Nov 2018	FY to Date (mgd)	Permitted Capacity (mgd)		Status		
Average Daily Flow	11.4	11.4	14.9				
ater Reclamation Facilitie	es (Combined)						
	Nov. 0040	FV to Data (mod)	Permitted	0/ of Donoithod Course it.	Otatus		
	Nov 2018	FY to Date (mgd)	Capacity (mgd)	% of Permitted Capacity	Status		
Average Daily Flow	16.9	16.9	22.4	76%			
0 11 4	N	Maintenance					
astewater Collections		Nov 2018 (Miles)	FYTD	Monthly Goal (miles)			
Miles of gravity mains cl	leaned	5.6	12.6	7.5			
Miles of gravity mains T	V inspected	5.5	11.4	5.0			
ater Distribution							
		Nov 2018	FYTD	Monthly Goal			
Number of Water Service	ces Replaced	60	148	75			
	SSO N	Ionthly Sum					
		November	YTD	GOAL			
Sanitary Sewer Overflow	ws	0	3	<16			

Major W/WW Projects and Other Updates

MWTP Electric System Upgrade - Structure nearly complete for the new electrical building; working on building envelope.

MSWRF - Aeration Basin and Headworks project planning and design are underway. Filter rehab project half complete. East Clarifier rehab to begin Jan 2019.

Gravity Sewer Lining - Planning lining projects with goal to line at least 10 miles of gravity sewer in FY19.

KWRF - New Ops Building at substantial completion; headworks rehab underway; carousel piping and VFDs replacements.