STATE OF THE UTILITY

May 2019

Item #190061

OPERATIONS SUMMARY

CORPORATE SAFETY
ENVIRONMENTAL
REGULATORY
PERSONNEL

May 2019

Safety			Employees
	Cu	rrent Month	
	First Aid	Recordable	DART
Administration	0	1	0
W/WW Systems	1	1	0
Energy Supply	0	1	0
Energy Delivery - Electric/Gas	0	1	1
GRUCom	0	0	0
Totals		4	

T	טו
Recordable	DART
4	3
7	1
1	0
8	4
0	0
20	

Vehicles

		Current Mont	:h
_	Miles Driven	Recordable	Preventable
Administration		0	0
W/WW Systems		1	0
Energy Supply		0	0
Energy Delivery - Electric/Gas		2	1
GRUCom		0	0
Totals		3	1

YTD	
Recordable	Preventable
0	0
9	6
0	0
8	6
0	0
17	12
	•

May Mileage not yet reported

Environmental	
	Current Month
Notices of Violation	0
Emissions	
DH1, DH2, DHCT3, JRKCC1	
CO ₂ (tons)	92,783
NO _X (tons)	151
SO ₂ (tons)	61
DH Unit 2 (only)	
PM _{FILT} (tons)	4
Hg (lbs)	0.60
2112	
DHR	
CO ₂ (tons)	101,772
NO _X (tons)	31.8
SO ₂ (tons)	1.8

Regulatory

NERC Notice of Violations Self Reports/Potential Violations

Current Month	FY to Date
0	6
1	7

Personnel

Row Labels	Sum of AUTHORIZED_FTE	Sum of FILLED_FTE	Sum of VACANCY	Last Month (April)
Administration	15.00	13.00	2.00	2.00
Chief Operating Officer	20.00	18.00	2.00	2.00
Customer Support Services	118.25	108.00	10.25	8.25
Energy Delivery	264.00	255.00	9.00	17.00
Energy Supply	145.00	145.00	0.00	-1.00
Energy Supply - District Energy	y 10.00	10.00	0.00	0.00
Finance	43.00	30.00	13.00	14.00
GRUCom	38.00	30.00	8.00	9.00
Information Technology	66.00	53.00	13.00	13.00
IT Governance & Compliance	5.00	5.00	0.00	0.00
Water Wastewater	168.00	160.00	8.00	10.00
Grand Total	892.25	827.00	65.25	74.25

Utility Advisory Board Monthly Report - FY 2019 NERC compliance

Penalty violations

<u>Determination date</u> <u>Description</u>

N/A No penalties to-date for FY 2019

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

<u>Determination date</u>	<u>Description</u>
12/4/2018	GRU's Area Control Error (ACE), which is a calculation of electrical interchange on the system exceeded the Balancing Authority ACE Limit (BAAL) on three occasions
12/10/2018	Electronic authentication attempts were not limited for a portion of GRU's cyber assets that were part of a Critical Infrastructure Protection (CIP) network.
2/19/2019	A portion of the scheduled maintenance was not performed for generation station batteries that supply power to protection systems.
2/19/2019	Notification of a generator Automatic Voltage Regulator (AVR) status change was not made within the required time frame
3/27/2019	An alarm or alert was not issued in response to detected unauthorized access through a physical access point into a Physical Security Perimeter within the required time frame. Note: detected unauthorized access was a false alarm.
4/23/2019	GRU did not provide notification within the required time frame for a list of BES Elements that result in relay tripping during simulated extreme events

Potential violations (Pending regulatory agency determination)

Report date Description

5/20/2019 Underfrequency Load Shedding (UFLS) relay setting was incorrect for

approximately one year

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. (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 11/2/2018.
NOVEMBER 11/09/2018	Employee was bitten by a dog on his left wrist while in a yard reading meters.
<u>DECEMBER</u> 12/06/2018	Employee slipped on some oil on the concrete floor and injured his right knee.
12/19/2018	While prying open a valve box, debris was thrown around his safety glasses and into his eyes causing irritation
<u>JANUARY</u>	
1/7/2019	While carrying materials to another department, employee struck her left hand, fracturing the hand. (late report) (DART – Lost time)
1/11/2019	Unknown debris blew into a meter reader's right eye, causing irritation.
1/27/2019	Working at the headworks to remove a stoppage exposed employee's eyes to aerosols causing eye irritation.
<u>FEBRUARY</u>	
2/25/2019	Employee was bitten by a dog on left leg while in yard reading meters.
<u>MARCH</u>	
3/1/2019	Employee chipped tooth when wrench slipped while loosening bolt.
3/10/2019	Employee sprained ankle stepping down from derrick control station into truck bed
3/18/2019	Debris was blown into employee's right eye, causing abrasion of the cornea.
3/28/2019	While working on the belt thickener, wind-blown dust/debris got into employee's eyes causing irritation.

<u>APRIL</u>	
4/9/2019	Employee fell off a pipe trailer and fractured his left wrist when he tried to catch his fall with his hand. (DART – Lost time)
MAY	
5/1/2019	While reorganizing material, employee dropped a heavy box on her L middle finger, splitting the nail
5/7/2019	Employee was struck in the nose by metal splinter during alignment of hydraulic press
5/23/2019	While returning from an overnight call-out, employee was stung in the hand by an unknown insect
5/23/2019	Employee was lifting a press die and strained his lower back. (DART – restricted duty)
JUNE	

End of FY 2019

Utility Advisory Board Monthly Report – FY 2019 Vehicle Collision Summary

Vehicle Collisions	(P) indicates preventable by our employee
<u>OCTOBER</u>	
10/02/2018	Backing out of a long wooded drive vehicle caught on a downed tree branch that was lying beside the drive damaging the front bumper and air dam (P)
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)
NOVEMBER	
11/2019/2018	Employee was driving a tractor trailer and as he made the turn off of Main Street onto 16 th 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)
DECEMBER	
12/20/2018	While pulling into a drive-through lane, the intern scraped the driver's side of the pick-up bed on a bollard. (P)
12/20/2018	Pulling onto road employee drove over a culvert, damaging the lower front bumper and air dam (P)
<u>JANUARY</u>	
1/8/2019	While driving into work, a deer ran out of the woods. While the driver saw the deer and braked, the deer still ran into the side of the truck.
1/10/2019	While moving into the right-turn lane, a dump truck came off a ridge in the pavement and left the right side of the roadway and into the ditch. Once the truck stopped, it rolled over onto its right side causing damage to the truck. (P)
1/15/2019	While pulling a pick-up truck next to a fire hydrant to deflect the water stream from flow testing, an intern scraped the side of the truck on the hydrant nozzle, causing minor body damage (P)
1/23/2019	While stopped in traffic on SW 75 th Street, the GRU vehicle was rear-ended.
MARCH	
3/29/2019	Employee was backing a GRU vehicle into a parking space when a private vehicle cut behind, scraping the GRU bumper as it passed by. (P)

<u>APRIL</u>	
4/21/2019	Employee was headed N. on 225 and a private vehicle ahead was turning right. GRU vehicle impacted the rear bumper of the private vehicle as it was turning. (P)
4/28/2019	While responding to Lift Station 123, employee took a right-hand turn too tightly and damaged the right rear wheel on a stormwater invert. (P)
MAY	
5/18/2019	While stopped at the red light at the I-75 NB exit at the NW 39th Ave exit, a GRU service truck was rear-ended.
5/20/2019	Person came out of a porta-potti quickly, colliding with the side of truck.
5/21/2019	Employee back into a parked car while parking to repair a streetlight. (P)
JUNE	

End of FY 2019

CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

Customer Operations Metrics Summary May 2019

Active Accounts	May-19	YTD Gain/Loss	FY18
Residential Contract Accounts			
Total	91,355	375	90,980
Electric	84,667	264	84,403
Gas	33,735	295	33,440
Water	63,386	281	63,105
Wastewater	59,277	265	59,012
Telecomm	124	(5)	129

New Installations	May-19	FY19 To Date	FY18
Electric	101	743	1512
Gas	54	343	463
Water	67	410	558
Wastewater	69	385	566
Telecomm	10	67	120

Call Center Volume	May-19	FY19 To Date	FY18
Residential ASA	0:02:30	0:06:47	0:10:59
Business ASA	0:02:07	0:02:48	0:04:19
CSR Calls	16,352	103,940	142,989
CSR Callbacks	183	10,561	25,780
IVR Self Service	14,273	152,874	266,463
Total	30,625	256,814	409,452
IVR/Total	47%	60%	65%

Bills Generated	May-19	FY19 To Date	FY18
Paper Bills	107,678	859,730	1,276,432
eBills	18,258	142,693	200,984
Total	125,936	1,002,423	1,477,416
eBill/Total	14%	14%	14%

Payment Arrangements	May-19	FY19 To Date	FY18
Total	568	4,850	77,512

Active Accounts	May-19	YTD Gain/Loss	FY18
Nonresidential Contract Accounts			
Total	13,579	97	13,482
Electric	11,002	67	10,935
Gas	1,660	17	1,643
Water	5,894	47	5,847
Wastewater	4,677	43	4,634
Telecomm	382	16	366

Residential Disconnects	May-19	FY19 To Date	FY18
Volume	1,309	9,798	15,305
Average Balance	\$221.45	\$243.57	\$250.07

Revenue Assurance	May-19	FY19 To Date	FY18
Referred to Collections	\$108,640.43	\$1,470,682.56	\$1,783,116.51
Recovered	\$69,654.46	\$561,741.12	\$786,025.11

Service Orders	May-19	FY19 To Date	FY18
Move Ins	9,294	56,157	116,784
Move Outs	9,120	55,786	116,307

Average Res Bill Amounts	May-19	FY19 To Date	FY18
Electric (kWh)	767	733	812
Electric (\$)	\$113.95	\$107.11	\$118.11
Gas (Therms)	13	24	21
Gas (\$)	\$26.63	\$39.33	\$34.13
Water (kGals)	5	5	5
Water (\$)	\$31.58	\$29.75	\$30.34
Wastewater (kGals)	5	5	5
Wastewater(\$)	\$36.56	\$37.20	\$36.86

6/5/2019 EPS

ENERGY DELIVERY

System Consumption
System Reliability
Major Projects – Electric & Gas

Durations Reliability Report Between 5/01/2019 and 5/31/2019

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	RELIABILITY INDICIES		MONTHLY AVG GOAL
Monthly Average Customers Served(C)	98,508 Average Service Availability Index (ASAI)	99.9877%	
Total Hours of Customer Demand	70,925,760 System Average Interruption Duration Index (SAIDI)	5.31	4.5 Mins
Total Number of Outages	77 Customer Average Interruption Duration Index (CAIDI)	79.72	55 Mins
Total Number of Customers Affected (CI)	6,556 System average Interruption Frequency Index (SAIFI)	0.07	0.08
Total Customer Minutes Interrupted (CMI)	522,624		
Total Customer "Out Minutes"	9,715 Average Length of a Service Interruption (L-Bar)	126.17	Mins

Outage Duration Times

Average Hours: 2 Maximum Hours: 13 Minimum Hours: 0

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	11	3	1	15
1. Weather	7	0	1	8
2. Vegetation	13	4	2	19
3. Animals	7	2	0	9
l. Foreign Interference	0	0	0	0
5. Human Cause	1	2	0	3
6. Equipment Failure	5	13	5	23
7. All Remaining Outages	0	0	0	0
Total	44	24	9	77

Durations Reliability Report Between 01/01/2019 and 5/31/2019 *

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

CUSTOMER DATA	RELIABILITY INDICIES		FISCAL YTD GOALS	
Monthly Average Customers Served(C)	98,508 Average Service Availability Index (ASAI)	99.9894%	_	
Total Hours of Customer Demand	354,628,800 System Average Interruption Duration Index (SAIDI)	22.97	22.5	
Total Number of Outages	317 Customer Average Interruption Duration Index (CAIDI)	61.76	55 Mins	
Total Number of Customers Affected (CI)	36,645 System average Interruption Frequency Index (SAIFI)	0.37	0.40	
Total Customer Minutes Interrupted (CMI)	2,263,016			
Total Customer "Out Minutes"	58,498 Average Length of a Service Interruption (L-Bar)	184.54	Mins	

Outage Duration Times

Average Hours: 3 Maximum Hours: 29 Minimum Hours: 0

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	48	11	3	62
1. Weather	24	3	11	38
2. Vegetation	102	15	3	120
3. Animals	32	4	0	36
4. Foreign Interference	0	1	1	2
5. Human Cause	13	10	5	28
6. Equipment Failure	19	40	11	70
7. All Remaining Outages	1	0	1	2
Total	239	84	35	358

^{*} REPORTED AS CALENDAR YEAR

Electric System Consumption

	2019		2018					
	CONSUMPTIO	N	CUSTOMERS		CONSUMP	ΓΙΟΝ	CUSTOMERS	
Feed-In-Tarrif - Residential	53	KWH	101		45	KWH	101	
Feed-In-Tarrif - General Service	1985	KWH	156		2,777	KWH	157	
Electric - GS - Demand - Regular	48118827	KWH	1,208		54,713,984	KWH	1,251	
Electric - General Service Demand PV	737131	KWH	19		1,139,907	KWH	17	
Electric - GS - Kanapaha w Curtail Cr	1,005,600	KWH	1		1,062,000	KWH	1	
Electric - GS - Demand - Large Power	7,440,880	KWH	7		9,554,520	KWH	9	
Electric - GS - Murphree Curtail Credit	1,372,800	KWH	1		1,444,800	KWH	1	
Electric - GS Large Demand PV	3,679,200	KWH	2		3,499,200	KWH	2	
Electric - GS - Non Demand	14,892,228	KWH	9,799		13,541,460	KWH	9,697	
Electric - General Service PV	88,682	KWH	63		74,404	KWH	57	
Electric - Lighting - Rental	979,815	KWH	4,230	n	1,104,299	KWH	4,616	n
Electric - Lighting - Street - City	724,500	KWH	12	n	780,925	KWH	14	n
Electric - Lighting - Street - County	163,165	KWH	2	n	296,289	KWH	2	n
Electric - Lighting - Traffic	4,542	KWH	2	n	4,542	KWH	2	n
Electric - Residential - Non TOU	63,983,651	KWH	86,089		57,280,663	KWH	85,819	
Electric - Residential PV	149,387	KWH	358	_	96,819	KWH	283	_
Total Retail Electric (n =not included in total	143,342,446	KWH	97,804	_	144,596,634	KWH	97,395	_
City of Alachua	12,570,000	KWH	27,064	KW	11,351,000	KWH	23,189	KW
City of Winter Park	-	KWH	-	KW	7,440,000	KWH	10,000	KW
Total (Native) Electric	155,912,446	KWH			163,387,634	KWH		

Gas System Consumption

	2019		2018	3
_	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	706,409 THM	1,392	765,140 THM	1,407
Gas - GS - Regular Service (Small)	7,772 THM	1 285	10,920 THM	256
Gas - GS - Interrruptible - Regular Serv	17,070 THM	1 1	21,811 THM	1
Gas - GS - Interrruptible - Large Volume	343,850 THM	1 6	399,459 THM	7
Gas - Residential - Regular Service	407,136 THM	1 33,967	422,890 THM	33,721
Total Retail Gas	1,482,237 THM	35,651	1,620,220 THM	35,392
Gas - GS - UF Cogeneration Plant	2,357,617 THM	1	3,479,357 THM	1
Gas - Residential - LP - Basic Rate	2,952 GAL	202	2,873 GAL	198

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

Energy Delivery - Major Projects

Major Electric Design Projects

West

- > Tower Rd Market West Mixed-Use Development) / Grand Oaks Community
- > SW 8th Ave / SW 20th Ave OH to UG Conversion
- > Celebration Pointe New Development
- > Campus Circle Residential Development
- > Chestnut Plantation Phase 2 Residential Development

East

- > CRA South Main Street OH to UG Conversion
- > Murphree Water Plant OH to UG Conversion and Rebuild
- > Hub on Campus I 8 story mixed-use development
- > Hub on Campus II 7 story mixed-use development
- > Campus Advantage Apartments 5 story student apartments

Major Gas Design Projects:

- > Main Installation 13800 Block SW 8th Avenue 2900'
- > Main Replacement Duck Pond Mains & Services 3100' Bare Steel Finished
- > Main Installation Oakmont Subdivision ongoing 10600'
- > Main Installation Town of Tioga Phase 18 2023'
- > Main Replacement NW 3rd Street North of Univ. Ave 5700' Finished

New Gas Services installed in May 2019: 35 New Customers

ENERGY SUPPLY

SYSTEM STATISTICS ENERGY DISTRIBUTION FUEL

MAY 2019

Source

Energy Supply - CAPACITY

Energy Supply - Performance Parameter

Unit Capability output - MWn

	ome capability output mitti
DH-2	228
DH-1	67*
Kelly CC	108
CT's	106
Grid	2 X 224
DHR	102.5

Month	YTD	Budget YTD	Delta Budget
65,750	378,936	394,039	(15,103)
17,550	94,492	30,472	64,020
1,732	271,089	494,921	(223,832)
3,411	8,300	243	8,057
29,822	67,815	110,014	(42,199)
67,783	401,676	139,237	262,439

Fuels Consumed

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

Month	FYTD	Budget YTD	Delta Budget
24,383	147,731	212,517	(64,787)
527,946	4,828,757	4,904,939	(76,182)
-	9,531	-	9,531
83,800	514,487	176,356	338,130

Availability/Capacity

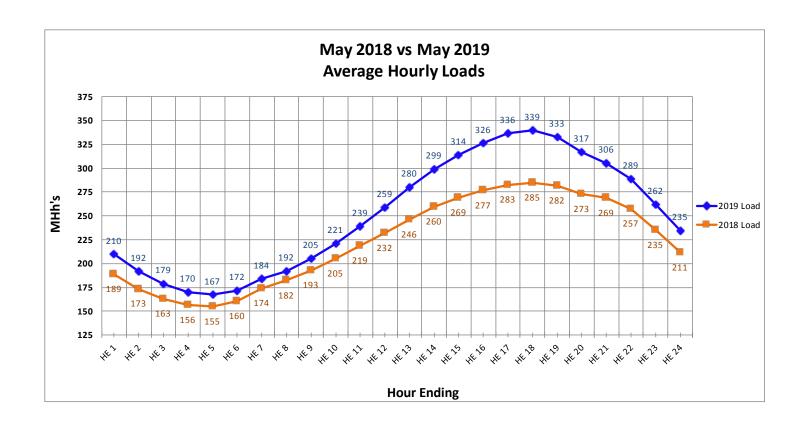
DH-2
DH-1
Kelly CC
DH CT-1
DH CT-2
DH CT-3
DHR*

	Availability	Capacity			
Month	FY 2019 YTD	FY 2018 YTD	Month	FY 2019 YTD	FY 2018 YTD
100.00%	77.41%	96.26%	41.46%	30.55%	30.89%
100.00%	99.32%	90.09%	33.40%	22.65%	27.88%
25.34%	71.07%	75.30%	3.17%	44.15%	47.93%
100.00%	99.41%	98.89%	0.06%	0.18%	0.41%
100.00%	94.33%	96.00%	0.06%	0.16%	0.71%
83.58%	94.56%	50.63%	6.01%	1.84%	4.93%
100.00%	85.68%	80.41%	100.00%	76.91%	23.69%

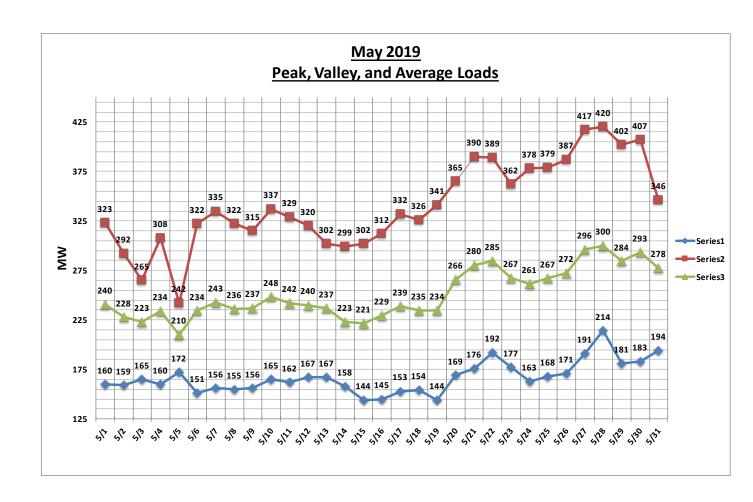
DHR tracking is from Nov. 7th, 2017 forward

^{*}DH1 slight derate due to gas filter restriction in Dec

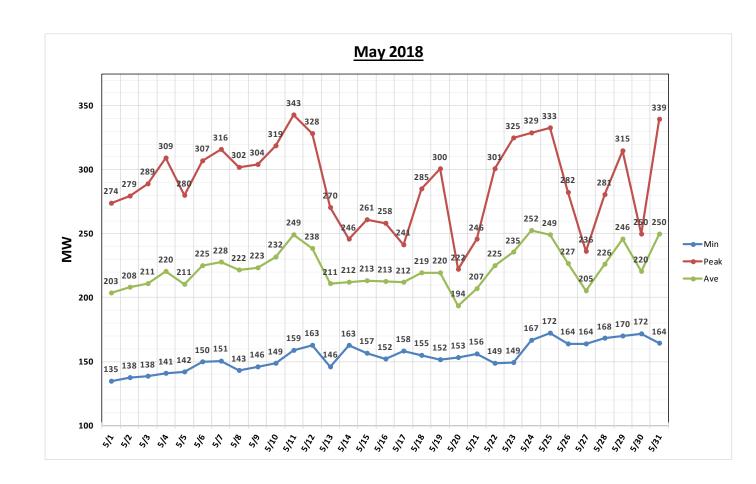
May Average Hourly Loads						
Hour Ending	2018 Load	2019 Load				
HE 1	189	210				
HE 2	173	192				
HE 3	163	179				
HE 4	156	170				
HE 5	155	167				
HE 6	160	172				
HE 7	174	184				
HE 8	182	192				
HE 9	193	205				
HE 10	205	221				
HE 11	219	239				
HE 12	232	259				
HE 13	246	280				
HE 14	260	299				
HE 15	269	314				
HE 16	277	326				
HE 17	283	336				
HE 18	285	339				
HE 19	282	333				
HE 20	273	317				
HE 21	269	306				
HE 22	257	289				
HE 23	235	262				
HE 24	211	235				



Date	Valley	Peak	Ave
5/1/2019	160	323	240
5/2/2019	159	292	228
5/3/2019	165	265	223
5/4/2019	160	308	234
5/5/2019	172	242	210
5/6/2019	151	322	234
5/7/2019	156	335	243
5/8/2019	155	322	236
5/9/2019	156	315	237
5/10/2019	165	337	248
5/11/2019	162	329	242
5/12/2019	167	320	240
5/13/2019	167	302	237
5/14/2019	158	299	223
5/15/2019	144	302	221
5/16/2019	145	312	229
5/17/2019	153	332	239
5/18/2019	154	326	235
5/19/2019	144	341	234
5/20/2019	169	365	266
5/21/2019	176	390	280
5/22/2019	192	389	285
5/23/2019	177	362	267
5/24/2019	163	378	261
5/25/2019	168	379	267
5/26/2019	171	387	272
5/27/2019	191	417	296
5/28/2019	214	420	300
5/29/2019	181	402	284
5/30/2019	183	407	293
5/31/2019	194	346	278



Date	Valley	Peak	Ave
5/1/2018	135	274	203
5/2/2018	138	279	208
5/3/2018	138	289	211
5/4/2018	141	309	220
5/5/2018	142	280	211
5/6/2018	150	307	225
5/7/2018	151	316	228
5/8/2018	143	302	222
5/9/2018	146	304	223
5/10/2018	149	319	232
5/11/2018	159	343	249
5/12/2018	163	328	238
5/13/2018	146	270	211
5/14/2018	163	246	212
5/15/2018	157	261	213
5/16/2018	152	258	213
5/17/2018	158	241	212
5/18/2018	155	285	219
5/19/2018	152	300	220
5/20/2018	153	222	194
5/21/2018	156	246	207
5/22/2018	149	301	225
5/23/2018	149	325	235
5/24/2018	167	329	252
5/25/2018	172	333	249
5/26/2018	164	282	227
5/27/2018	164	236	205
5/28/2018	168	281	226
5/29/2018	170	315	246
5/30/2018	172	250	220
5/31/2018	164	339	250



Major Energy Supply Projects/Milestones/Updates

As of June 6th, 2019

1. Deerhaven (DH)

a. Deerhaven CT3 experienced a fail to ratchet event on 5/26/2019 after unit ran for some time to support load. Testing of the torque converter verified a failure of the clutch that was just replaced back in October 2018. We worked with the Torque Coveter Original Equipment Manufacturer (OEM) of GE, and the Clutch OEM of Voith, to replace the clutch over the last week. Testing on unit for restoration began yesterday and we are continuing today to hopefully restore CT3 to full service. Note: for load purposes we have to fully restore CT3 to be able to go back to troubleshooting Kelly CT4 issues.

Kelly (JRK):

a. As reported previously Kelly CT4 had to be removed from service 4/7/2019 following spurious load runbacks of the unit from load of (70MW to 7MW. The cause of the actual runback is due to excessive turbine exhaust temperature spreads, so machine runback to protect machine when is sees these exhaust conditions. Working with GE Engineering we have been following their technical guidance in this issue resolution. In the Natural Gas flow path we identified foreign paste like material in the lines and fuel nozzles, as well as the internals of a strainer missing. Unit was disassembled for inspection and cleaning, fuel nozzles were replaced with refurbished nozzles. Unit was operationally tested on 5/25/2019 and we still had another runback after 5 hours of steady operation. The next steps in troubleshooting had to be delayed due to CT3 failure at Deerhaven. Once we get Ct3 back reliably we have a troubleshooting plan form GE for CT4 that we will follow, with the first step in replacing the compressor bleed valves that may be contributing to the differential temperature spread. Worth noting after CT3 failed to ratchet we have had to run CT4 a reduce load of up 50 MW numerous times to meet bulk electric systems voltage control and load. So although CT4 is not fully released we are using this generation asset as a last run up to 50 MW until CT3 fully restored.

3. South Energy Center (SEC):

- a. Steam Chiller is down and waiting for parts to restore to service, and parts are expected week of 6/13/2019. This had no impact to hospital service.
- b. We have a failed steam trap in the underground piping to the hospital that is contributing to steam coming out of one of the manways. We are working with UF Health to develop a schedule and plan to have a steam outage to repair this trap.

ENVIRONMENTAL PERMITTING

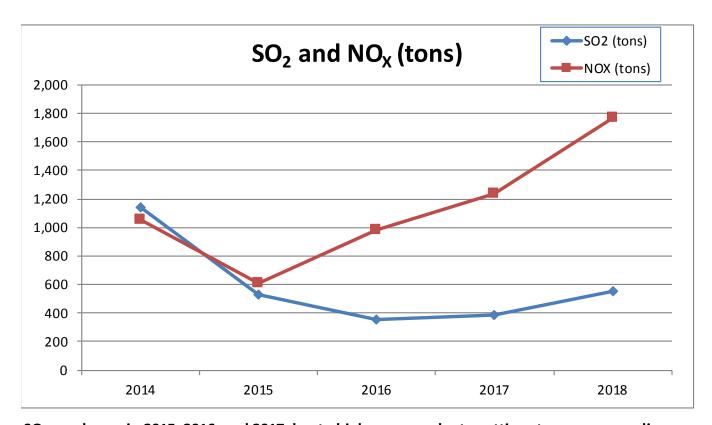
EMISSIONS DATA

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-May)	280	778	2.34	22	808,342

Mercury and Particulate values are for Unit 2 only.

DHR data included starting in 2018.

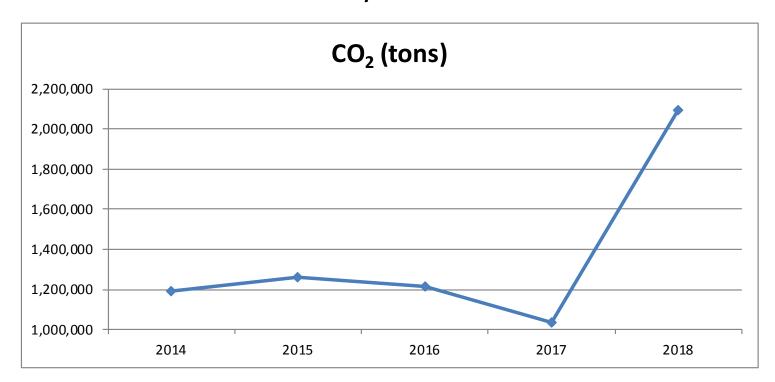


 SO_2 was lower in 2015, 2016, and 2017 due to higher removal rate settings to assure compliance with the MATS Rule.

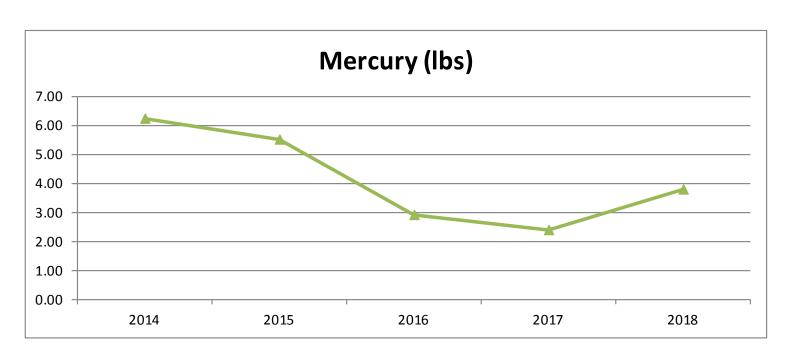
 NO_X was higher in 2016 since it was more cost effective to use allowances than increase SCR removal rate. NO_X was higher in 2017 and 2018 since the Cross State Rule was no longer in effect for Florida.

DHR data included starting in 2018.

Yearly Emissions

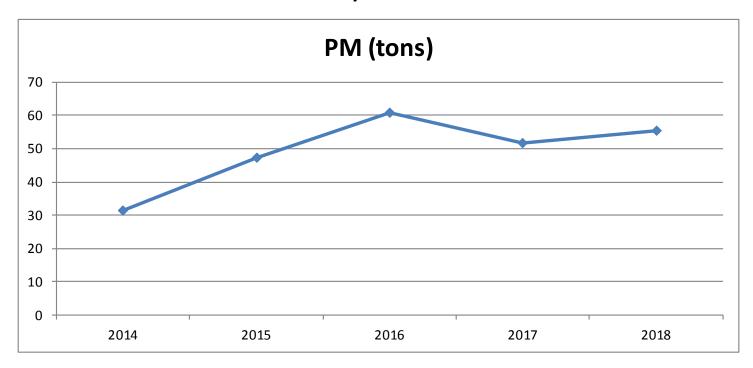


DHR data included starting in 2018.



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.-May.)

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	HTIP (MMBtu)	GEN (MW-hours)
DH1	0.2	55.7			40,106.3	674,888.0	54,254.0
DH2	272.9	591.8	2.34	22.0	335,804.7	3,273,349.0	360,995.0
DHCT3	0.0	1.1			3,850.0	64,771.0	4,429.0
JRKCC1	0.2	9.0			33,933.3	570,981.0	62,773.0
DHR	7.1	120.2			394,648.1	3,782,969.0	290,816.1
TOTAL	280.4	777.8	2.339	22.0	808,342.4	8,366,958.0	773,267.1

2019 - May

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	HTIP (MMBtu)	GEN (MW-hours)
DH1	0.1	20.8			14,880.9	250,397.0	19,772.0
DH2	60.4	129.5	0.6	4.3	73,379.2	715,202.0	76,908.0
DHCT3	0.0	0.7			3,028.5	50,955.0	3,473.0
JRKCC1	0.0	0.4			1,494.6	25,146.0	1,729.0
DHR	1.8	31.8			101,771.6	975,469.3	76,402.2
TOTAL	62.3	183.2	0.565	4.3	194,554.8	2,017,169.3	178,284.2

WATER/WASTEWATER

PRODUCTION MAINTENANCE

Water/Wastewater May Dashboard

		Production			
lurphree Water Treatme					
	May 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
Average Daily Flow	25.5	22.6	30	75%	
Peak Daily Flow	31.1	25.2	54	-	
Main Street Water Recla	mation Facility				
Average Daily Flow	May 2019 5.2	FY to Date (mgd)	Permitted Capacity (mgd) 7.5		Status
Kanapaha Water Reclam	lation Facility				
	May 2019	FY to Date (mgd)	Permitted Capacity (mgd)		Status
Average Daily Flow	10.7	11.8	14.9		li e
Vater Reclamation Facil	ities (Combined)				
	May 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
Average Daily Flow	15.9	18.1	22.4	81%	
·	M	laintenance			
Vastewater Collections					
		May 2019 (Miles)	FYTD	Monthly Goal (miles)	
Miles of gravity mains	cleaned	7.3	49	5.0	
Miles of gravity mains	TV inspected	5.1	42	5.0	
Vater Distribution		M 0040	EVED	Mandhla Oaal	
		May 2019	FYTD	Monthly Goal	
Number of Water Serv	rices Replaced	93	645	75	
	SSO M	lonthly Sum			
		May	YTD	GOAL	
Sanitary Sewer Overflo	ows	0	15	<16	
		the state of the s			

Water/Wastewater

Major Projects and Other Updates

- 1. MWTP Electric System Upgrade
 - a. Structure nearly complete for the new electrical building
 - b. Guard Shack complete

2. MSWRF

- a. Aeration Basin and Headworks project planning and design are underway
- b. East Clarifier demolition & rehab nearing completion
- 3. Gravity Sewer Lining
 - a. Priorities being implemented with a goal to line at least 10 miles of gravity sewer in FY19
- 4. KWRF
 - a. All carousels are back online