

# STATE OF THE UTILITY

September 2019

Item #190504

# OPERATIONS SUMMARY

CORPORATE SAFETY

ENVIRONMENTAL

REGULATORY

PERSONNEL

September 2019

**Safety**

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

Employees

	Year to Date		
	First Aid	Recordable	DART
	3	3	3
	7	10	3
	1	2	1
	6	11	6
	0	0	0
Totals		26	

	Current Month		
	Miles Driven	Recordable	Preventable
Administration	22,745	0	0
W/WW Systems	120,893	1	1
Energy Supply	9,686	0	0
Energy Delivery - Electric/Gas	129,875	1	0
GRUCom	10,846	0	0
Totals	294,045	2	1

Vehicles

	Year to Date		
	Miles Driven	Recordable	Preventable
	193,930	0	0
	981,304	11	7
	51,650	0	0
	1,275,748	10	7
	107,442	0	0
Totals	2,610,074	21	

**Environmental**

	Current Month
Notices of Violation	0

Calendar Year to Date
1

Emissions		Current Month	Calendar Year to Date
DH1, DH2, DHCT3, JRKCC1			
	CO <sub>2</sub> (tons)	116,650	841,341
	NO <sub>x</sub> (tons)	130	1177
	SO <sub>2</sub> (tons)	49	481

DH Unit 2 (only)		Current Month	Calendar Year to Date
	PM <sub>FILT</sub> (tons)	4	37
	Hg (lbs)	0.40	3.93

DHR		Current Month	Calendar Year to Date
	CO <sub>2</sub> (tons)	90,292	770,766
	NO <sub>x</sub> (tons)	28	229
	SO <sub>2</sub> (tons)	2	14

**Regulatory**

	Current Month	FY to Date
NERC		
Notice of Violations	1	8
Self Reports/Potential Violations	1	10

## Personnel

Row Labels	AUTHORIZED_FTE	FILLED_FTE	VACANCY	Last Month (August)
Administration	15.00	15.00	0.00	1.00
Chief Operating Officer	20.00	18.00	2.00	2.00
Customer Support Services	118.25	108.50	9.75	11.25
Energy Delivery	264.00	257.00	7.00	6.00
Energy Supply	145.00	149.00	-4.00	-3.00
Energy Supply - District Energy	10.00	10.00	0.00	0.00
Finance	43.00	32.00	11.00	11.00
GRUCom	38.00	31.00	7.00	7.00
Information Technology	66.00	54.00	12.00	13.00
IT Governance & Compliance	5.00	5.00	0.00	0.00
Water Wastewater	168.00	159.00	9.00	10.00
<b>Grand Total</b>	<b>892.25</b>	<b>838.50</b>	<b>53.75</b>	<b>58.25</b>

## 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.

### DECEMBER

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

### JANUARY

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.

### FEBRUARY

2/25/2019 Employee was bitten by a dog on left leg while in yard reading meters.

### MARCH

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.

APRIL

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~~ (reevaluated – treatment was not recordable – only First Aid)

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)

5/30/2019 Employee was pulling lid from underground junction box with blue manhole hook. Lid was stuck. Felt burning in lower abdomen (DART – restricted duty)

JUNE

6/10/2019 Employee's hand was struck/injured with drill bit as it came through pole.

JULY

7/2/2019 Employee was pulling on a water jet hose and strained his lower back.

7/3/2019 Employee was walking on a trailer deck when a board broke and he sprained his left knee as he fell through.

7/22/2019 Employee fractured her left middle finger when she slipped on an incline and caught her finger in between bench and legs.

AUGUST

8/29/2019 While loading equipment after completing an outage employee strained back. (DART – restricted duty)

SEPTEMBER

9/10/2019 While removing a grease fitting with a knife, the employee cut the back of his left finger.

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**End of FY 2019**

## Utility Advisory Board Monthly Report – FY 2019 Vehicle Collision Summary

**Vehicle Collisions** (P) indicates preventable by our employee

### OCTOBER

- 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.

### NOVEMBER

- 11/01/2018 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) *(date corrected from 10/30)*
- 11/19/2018 Employee was driving a tractor trailer and as he made the turn off of Main Street onto 16<sup>th</sup> 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)

### JANUARY

- 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<sup>th</sup> 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)

APRIL

- 4/1/2019 While pulling into the wetland sampling site at KMS, an intern turned too tightly around the gate post, scraping the right side of the truck
- 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

No collisions reported

JULY

- 7/1/2019 Employee was traveling through the intersection and was struck by a car that ran the red light.
- 7/23/2019 Employees vehicle U-1895 struck another GRU vehicle (U-1916) that pulled behind him while backing into a parking space at the EOC. (P)

AUGUST

No collisions reported

SEPTEMBER

- 9/6/2019 While backing a pick-up truck with the tailgate down, the employee backed into a tree (P)
- 9/17/2019 While stopped at the red light in the northbound lane on Main Street, two cars collided in the intersection. One of the cars was flipped and landed upside-down on the driver's corner of the hood.

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**End of FY 2019**

## 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
6/6/2019	Underfrequency Load Shedding (UFLS) relay setting was incorrect for approximately one year
9/23/2019	Review and re-approval of CIP Cyber Security policy document exceeded the 15 month cycle period by 81 days

### Potential violations (Pending regulatory agency determination)

<u>Report date</u>	<u>Description</u>
6/6/2019	35 Cyber Assets were delayed in being included under GRU's Critical Infrastructure Protection (CIP) program
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.

# CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

## Customer Operations Metrics Summary September 2019

<b>Active Accounts</b>	Sep-19	YTD Gain/Loss	FY18
<i>Residential Contract Accounts</i>			
Total	91,823	843	90,980
Electric	85,064	661	84,403
Gas	33,805	365	33,440
Water	63,580	475	63,105
Wastewater	59,486	474	59,012
Telecomm	117	(12)	129

<b>Active Accounts</b>	Sep-19	YTD Gain/Loss	FY18
<i>Nonresidential Contract Accounts</i>			
Total	13,596	114	13,482
Electric	11,025	90	10,935
Gas	1,657	14	1,643
Water	5,892	45	5,847
Wastewater	4,685	51	4,634
Telecomm	392	26	366

<b>New Installations</b>	Sep-19	FY19 To Date	FY18
Electric	129	1393	1512
Gas	25	512	463
Water	43	654	558
Wastewater	34	614	566
Telecomm	9	141	120

<b>Residential Disconnects</b>	Sep-19	FY19 To Date	FY18
Volume	1,148	14,076	15,305
Average Balance	\$254.98	\$246.88	\$250.07

<b>Call Center Volume</b>	Sep-19	FY19 To Date	FY18
Residential ASA	3:21:00	0:07:05	0:10:59
Business ASA	2:31:00	0:16:23	0:04:19
CSR Calls	14,942	151,278	142,989
CSR Callbacks	421	19,343	25,780
IVR Self Service	19,837	227,577	266,463
Total	34,779	378,855	409,452
IVR/Total	57%	60%	65%

<b>Revenue Assurance</b>	Sep-19	FY19 To Date	FY18
Referred to Collections	\$176,336.17	\$1,948,001.43	\$1,783,116.51
Recovered	\$50,960.78	\$796,259.96	\$786,025.11

<b>Service Orders</b>	Sep-19	FY19 To Date	FY18
Move Ins	6,476	109,537	116,784
Move Outs	6,915	109,795	116,307

<b>Bills Generated</b>	Sep-19	FY19 To Date	FY18
Paper Bills	100,445	1,278,441	1,276,432
eBills	16,743	212,879	200,984
Total	117,188	1,491,320	1,477,416
eBill/Total	14%	14%	14%

<b>Average Res Bill Amounts</b>	Sep-19	FY19 To Date	FY18
Electric (kWh)	1,123	836	812
Electric (\$)	\$163.68	\$122.20	\$118.11
Gas (Therms)	10	19	21
Gas (\$)	\$23.23	\$32.72	\$34.13
Water (kGals)	5	6	5
Water (\$)	\$32.04	\$28.61	\$30.34
Wastewater (kGals)	5	7	5
Wastewater(\$)	\$36.95	\$34.25	\$36.86

<b>Payment Arrangements</b>	Sep-19	FY19 To Date	FY18
Total	754	9,797	77,512

10/7/2019

# ENERGY DELIVERY

System Consumption

System Reliability

Major Projects – Electric & Gas

# ENERGY DELIVERY - UAB REPORT - SEPTEMBER 2019

## Durations Reliability Report Between 9/01/2019 and 9/30/2019

Excludes Extreme Weather and Generation/Transmission Disturbances

<b>CUSTOMER DATA</b>	<b>RELIABILITY INDICIES</b>		<b>MONTHLY AVG GOAL</b>
Monthly Average Customers Served(C)	98,112	Average Service Availability Index (ASAI)	99.9859%
Total Hours of Customer Demand	68,285,952	System Average Interruption Duration Index (SAIDI)	5.88
Total Number of Outages	69	Customer Average Interruption Duration Index (CAIDI)	76.67
Total Number of Customers Affected (CI)	7,520	System average Interruption Frequency Index (SAIFI)	0.08
Total Customer Minutes Interrupted (CMI)	576,581		
Total Customer "Out Minutes"	8,493	Average Length of a Service Interruption (L-Bar)	123.09 Mins

### Cause of Outages

<b>Cause</b>	<b>Overhead</b>	<b>Underground</b>	<b>Both</b>	<b>Total</b>
0. Undetermined	0	5	0	5
1. Weather	0	0	0	0
2. Vegetation	7	1	0	8
3. Animals	9	3	0	12
4. Foreign Interference	0	0	0	0
5. Human Cause	1	0	0	1
6. Equipment Failure	0	3	0	3
7. All Remaining Outages	0	0	0	0
<b>Total</b>	<b>17</b>	<b>12</b>	<b>0</b>	<b>29</b>

# ENERGY DELIVERY - UAB REPORT - SEPTEMBER 2019

## Durations Reliability Report Between 01/01/2019 and 9/30/2019 \*

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

CUSTOMER DATA	RELIABILITY INDICIES	FISCAL YTD GOALS
Monthly Average Customers Served(C)	98,112 Average Service Availability Index (ASAI)	99.9880%
Total Hours of Customer Demand	640,475,136 System Average Interruption Duration Index (SAIDI)	47.16      40.5
Total Number of Outages	637 Customer Average Interruption Duration Index (CAIDI)	69.79      55 Mins
Total Number of Customers Affected (CI)	66,296 System average Interruption Frequency Index (SAIFI)	0.68      0.72
Total Customer Minutes Interrupted (CMI)	4,626,990	
Total Customer "Out Minutes"	8,493 Average Length of a Service Interruption (L-Bar)	13.33 Mins

### Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	41	15	2	58
1. Weather	66	11	15	92
2. Vegetation	216	26	10	252
3. Animals	53	10	0	63
4. Foreign Interference	0	1	1	2
5. Human Cause	21	12	6	39
6. Equipment Failure	43	85	19	147
7. All Remaining Outages	1	0	1	2
<b>Total</b>	<b>441</b>	<b>160</b>	<b>54</b>	<b>655</b>

\* REPORTED AS CALENDAR YEAR

# ENERGY DELIVERY - UAB REPORT - SEPTEMBER

## 2019

### Electric System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Feed-In-Tariff - Residential	60 KWH	101	52 KWH	102
Feed-In-Tariff - General Service	2,542 KWH	156	3,041 KWH	153
Electric - GS - Demand - Regular	60,914,687 KWH	1,192	60,635,950 KWH	1,289
Electric - General Service Demand PV	1,122,228 KWH	20	958,913 KWH	20
Electric - GS - Kanapaha w Curtail Cr	1,172,400 KWH	1	1,028,400 KWH	1
Electric - GS - Demand - Large Power	8,686,200 KWH	6	9,096,160 KWH	8
Electric - GS - Murphree Curtail Credit	1,468,800 KWH	1	1,416,000 KWH	1
Electric - GS Large Demand PV	5,011,200 KWH	2	4,761,600 KWH	2
Electric - GS - Non Demand	18,865,059 KWH	9,818	19,587,165 KWH	10,155
Electric - General Service PV	187,607 KWH	63	209,575 KWH	66
Electric - Lighting - Rental	971,563 KWH	4,535 <i>n</i>	1,015,104 KWH	4,384 <i>n</i>
Electric - Lighting - Street - City	708,933 KWH	12 <i>n</i>	771,682 KWH	14 <i>n</i>
Electric - Lighting - Street - County	133,122 KWH	2 <i>n</i>	250,472 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	93,565,486 KWH	86,234	94,682,260 KWH	89,621
Electric - Residential PV	389,095 KWH	392	309,898 KWH	310
<b>Total Retail Electric</b>	<b>193,203,524 KWH</b>	<b>97,986</b>	<b>194,730,814 KWH</b>	<b>101,728</b>
<small>(n =not included in total customer count)</small>				
City of Alachua	13,042,000 KWH	26,855 KW	13,164,000 KWH	26,848 KW
City of Winter Park	- KWH	- KW	7,200,000 KWH	10,000 KW
<b>Total (Native) Electric</b>	<b>206,245,524 KWH</b>		<b>215,094,814 KWH</b>	

### Gas System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	576,294 THM	1,360	683,515 THM	1,525
Gas - GS - Regular Service (Small)	6,885 THM	309	8,835 THM	307
Gas - GS - Interrruptible - Regular Serv	16,000 THM	1	66,816 THM	1
Gas - GS - Interrruptible - Large Volume	302,042 THM	6	371,937 THM	7
Gas - Residential - Regular Service	315,376 THM	33,984	331,275 THM	34,121
<b>Total Retail Gas</b>	<b>1,216,597 THM</b>	<b>35,660</b>	<b>1,462,378 THM</b>	<b>35,961</b>
Gas - GS - UF Cogeneration Plant	2,803,528 THM	1	2,449,787 THM	1
Gas - Residential - LP - Basic Rate	2,326 GAL	201	2,483 GAL	202

\*Obtained from Monthly Billing Summary prepared by Todd Kamhoot.

# **ENERGY DELIVERY - UAB REPORT - SEPTEMBER 2019**

## **Energy Delivery - Major Projects**

### **Major Electric Design Projects**

#### **West**

- > Tower Rd Market West - Mixed-Use Development) / Grand Oaks Community
- > Butler Plaza - Multiple Commercial Projects
- > Celebration Pointe - New Development
- > Newberry TND - Commercial Development
- > FDOT 423071-4-52-01 - Archer Rd Widening (Relocation of Electric Facilities)

#### **East**

- > Harpers' Pointe - 69 Assisted Living Apartments (single story)
- > 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
- > Hyatt Place - Hotel City Center - Downtown mixed-use redevelopment

### **Major Gas Design Projects:**

- > Main Installation – Oakmont Subdivision – ongoing – 10600'
- > Main Installation – UF Vet Med. SW 16th Ave - 1000'
- > Main Installation – Grand Oaks Phase 1 - 5150'
- > Main Installation – South Point Phase 2
- > Main Installation – Hub 2 300 Block NW 13th St - 900'

New Gas Services installed in September 2019: 35 New Customers

# ENERGY SUPPLY

SYSTEM STATISTICS

ENERGY DISTRIBUTION

FUEL

September 2019

**Energy Supply - CAPACITY**

**Energy Supply - Performance Parameter**

Source

	Unit Capability output - MWn
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
	55,813	587,314	612,297	(24,983)
	17,191	163,161	31,024	132,137
	71,689	514,827	791,342	(276,515)
	817	9,940	243	9,697
	-	114,705	138,753	(24,048)
	56,590	634,297	356,904	277,393

\*DH1 slight derate due to gas filter restriction in Dec

**Fuels Consumed**

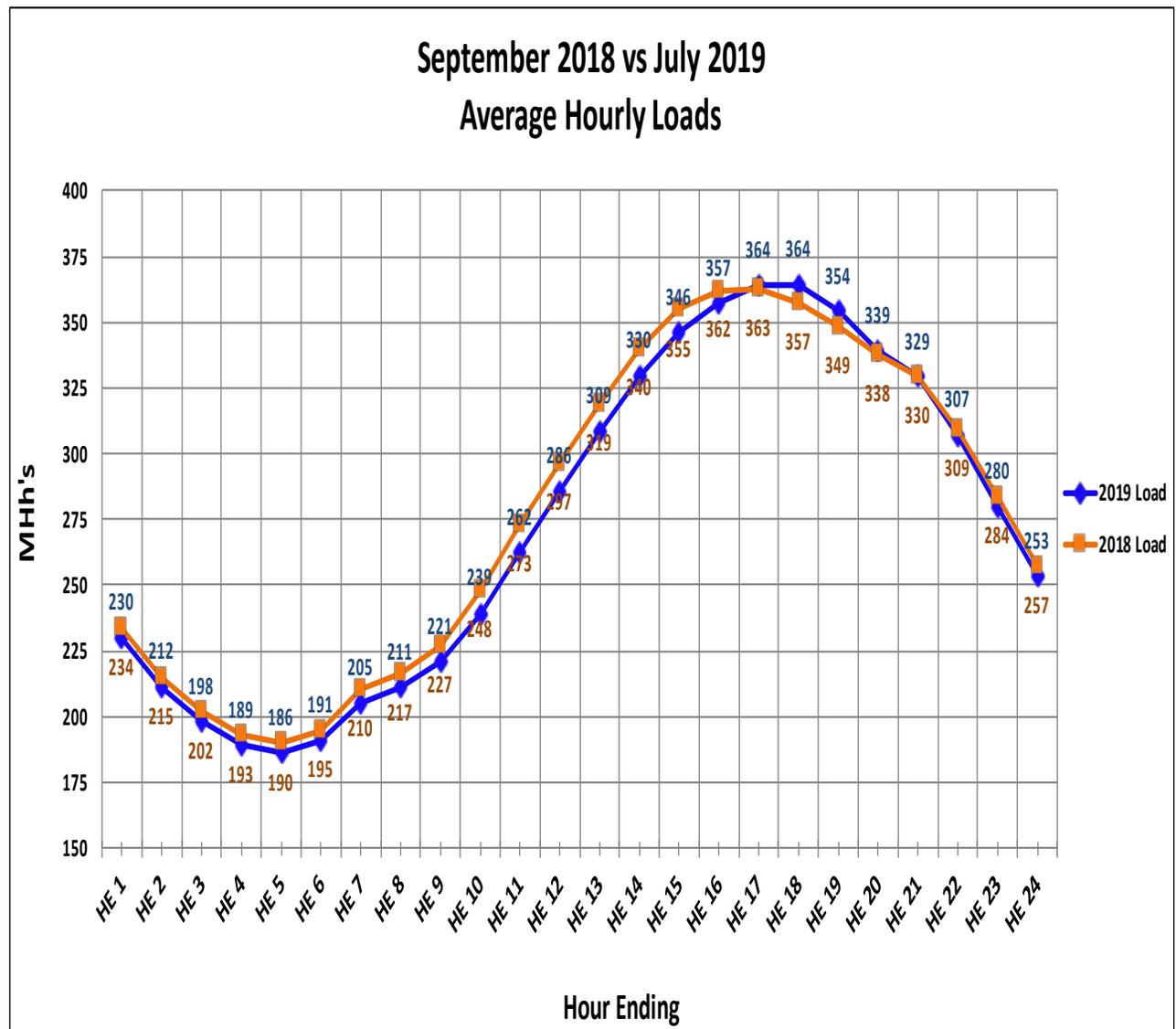
	Month	FYTD	Budget YTD	Delta Budget
Coal - Tons	20,136	224,734	339,532	(114,797)
Gas - MCF	1,032,800	8,693,129	7,547,483	1,145,646
Fuel oil - Gals	-	52,920	-	52,920
Biomass - Tons	74,015	828,209	443,912	384,297

**Availability/Capacity**

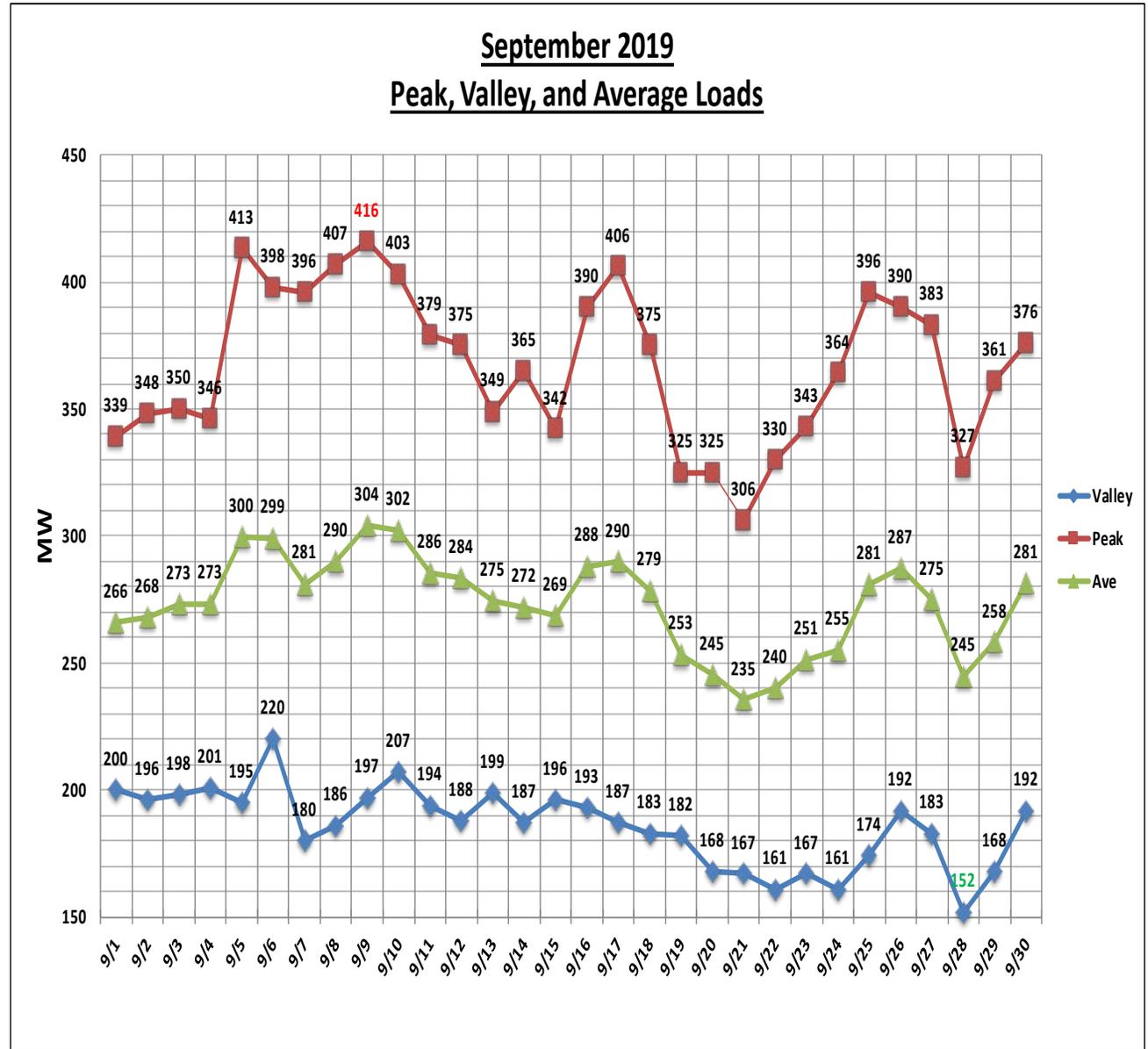
	Availability			Capacity		
	Month	FY 2019 YTD	FY 2018 YTD	Month	FY 2019 YTD	FY 2018 YTD
DH-2	99.83%	84.11%	96.26%	36.98%	27.93%	38.79%
DH-1	100.00%	99.54%	90.09%	33.62%	26.30%	25.59%
Kelly CC	100.00%	79.50%	75.30%	91.23%	53.83%	45.77%
DH CT-1	91.11%	98.73%	98.89%	0.00%	0.17%	0.31%
DH CT-2	100.00%	96.15%	96.00%	0.00%	0.12%	0.51%
DH CT-3	99.51%	92.04%	50.63%	1.43%	7.80%	0.89%
DHR*	99.76%	90.17%	80.41%	81.79%	72.67%	79.93%

DHR tracking is from Nov. 7th, 2017 forward

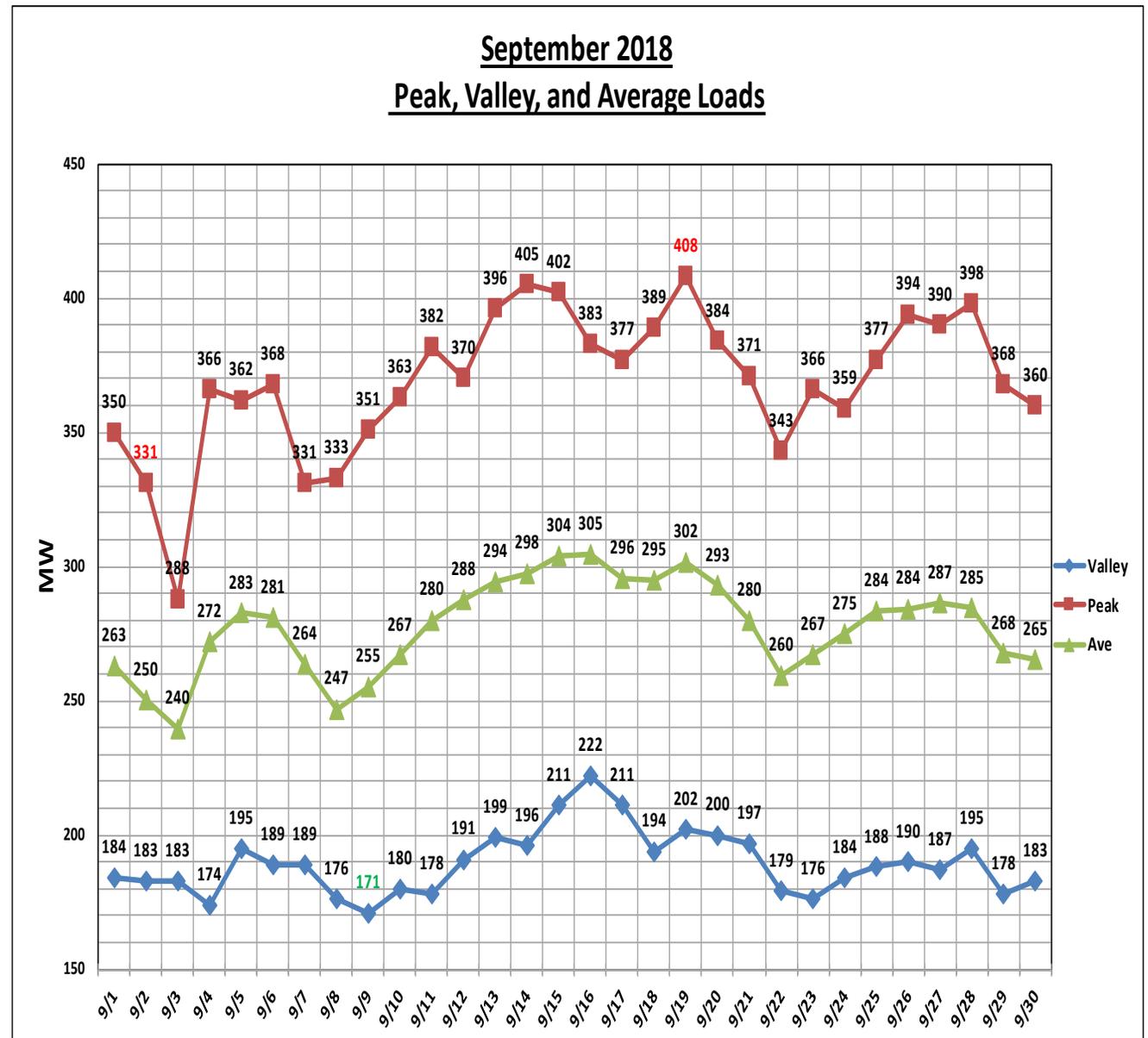
September Average Hourly Loads		
Hour Ending	2018 Load	2019 Load
HE 1	234	230
HE 2	215	212
HE 3	202	198
HE 4	193	189
HE 5	190	186
HE 6	195	191
HE 7	210	205
HE 8	217	211
HE 9	227	221
HE 10	248	239
HE 11	273	262
HE 12	297	286
HE 13	319	309
HE 14	340	330
HE 15	355	346
HE 16	362	357
HE 17	363	364
HE 18	357	364
HE 19	349	354
HE 20	338	339
HE 21	330	329
HE 22	307	307
HE 23	284	280
HE 24	257	253



Date	Valley	Peak	Ave
9/1/2019	200	339	266
9/2/2019	196	348	268
9/3/2019	198	350	273
9/4/2019	201	346	273
9/5/2019	195	413	300
9/6/2019	220	398	299
9/7/2019	180	396	281
9/8/2019	186	407	290
9/9/2019	197	416	304
9/10/2019	207	403	302
9/11/2019	194	379	286
9/12/2019	188	375	284
9/13/2019	199	349	275
9/14/2019	187	365	272
9/15/2019	196	342	269
9/16/2019	193	390	288
9/17/2019	187	406	290
9/18/2019	183	375	279
9/19/2019	182	325	253
9/20/2019	168	325	245
9/21/2019	167	306	235
9/22/2019	161	330	240
9/23/2019	167	343	251
9/24/2019	161	364	255
9/25/2019	174	396	281
9/26/2019	192	390	287
9/27/2019	183	383	275
9/28/2019	152	327	245
9/29/2019	168	361	258
9/30/2019	192	376	281



Date	Valley	Peak	Ave
9/1/2018	184	350	263
9/2/2018	183	331	250
9/3/2018	183	288	240
9/4/2018	174	366	272
9/5/2018	195	362	283
9/6/2018	189	368	281
9/7/2018	189	331	264
9/8/2018	176	333	247
9/9/2018	171	351	255
9/10/2018	180	363	267
9/11/2018	178	382	280
9/12/2018	191	370	288
9/13/2018	199	396	294
9/14/2018	196	405	298
9/15/2018	211	402	304
9/16/2018	222	383	305
9/17/2018	211	377	296
9/18/2018	194	389	295
9/19/2018	202	408	302
9/20/2018	200	384	293
9/21/2018	197	371	280
9/22/2018	179	343	260
9/23/2018	176	366	267
9/24/2018	184	359	275
9/25/2018	188	377	284
9/26/2018	190	394	284
9/27/2018	187	390	287
9/28/2018	195	398	285
9/29/2018	178	368	268
9/30/2018	183	360	265



Major Energy Supply Projects/Milestones Updates  
As of October 4, 2019

1. Deerhaven (DH):
  - a. Unit #1: due to Natural Gas line restrictions the unit full load is dated from 80 to 71.5 MW gross. This issue with the restricted flow will be fully addressed during the next planned outage set to begin 10/3/2019.
  - b. Unit #1 will be in planned outage 10/3 through 10/29/2019. This will be a balance of plant outage with no significant scope item driving the critical path.
  - c. Combustion Turbine #1 (CT1) borescope inspection completed satisfactorily on 10/3/2019.
2. Deerhaven Renewable(DHR):
  - a. Preparing for fall November 2<sup>nd</sup> through December 2<sup>nd</sup>, 2019 planned outage. Critical path will be boiler and turbine work.
3. South Energy Center (SEC):
  - a. Steam Chiller is still down and we are coordinating turbine repairs. The Turbine repairs are being completed at Dresser Rand the Original Equipment Manufacturer (OEM), with estimated shipping date week of 10/14/2019. This out of service chiller currently has no direct impact to hospital service we provide.
  - b. 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. DHR Staff will transition from NAES to GRU Employees effective beginning of day 10/7/2019.
    - i. In parallel we have be conducting employee orientations to fully support the employees and the provided transition date.
  - b. The Solar Intent to Negotiate (ITN) received 5 responses on July 25, 2019. The process review team has narrowed the list to 3 vendors to start to negotiate with.
  - c. We provide tour of the DHR to 24 members of the Sierra Club on 9/25/2019.

# ENVIRONMENTAL PERMITTING

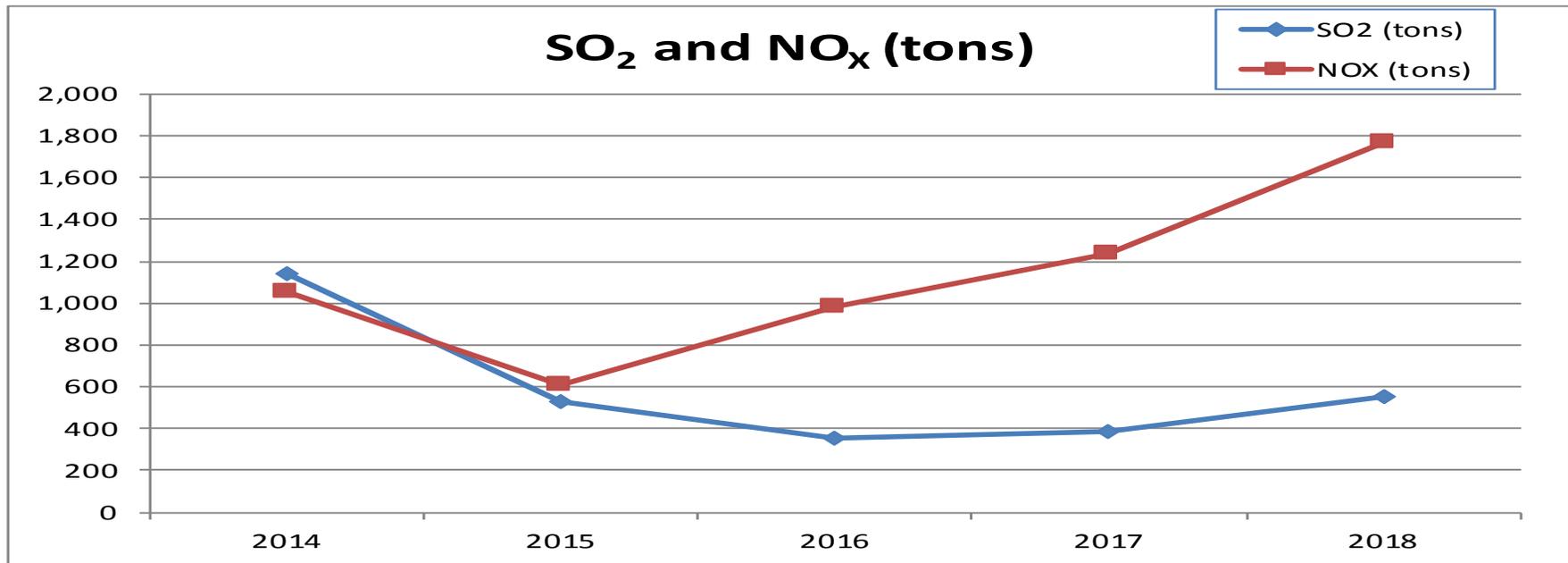
## EMISSIONS DATA

## Yearly Emissions

	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (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-Sept.)	495	1,406	3.93	37	1,612,107

**Mercury and Particulate values are for Unit 2 only.**

**DHR data included starting in 2018.**

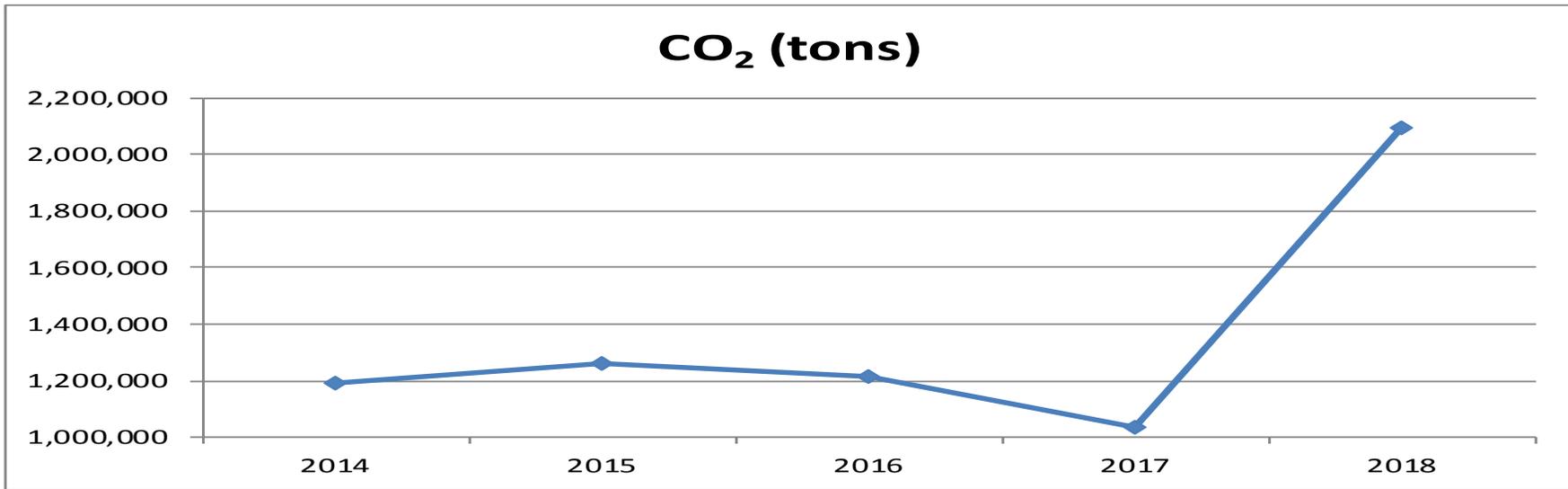


**SO<sub>2</sub> was lower in 2015, 2016, and 2017 due to higher removal rate settings to assure compliance with the MATS Rule.**

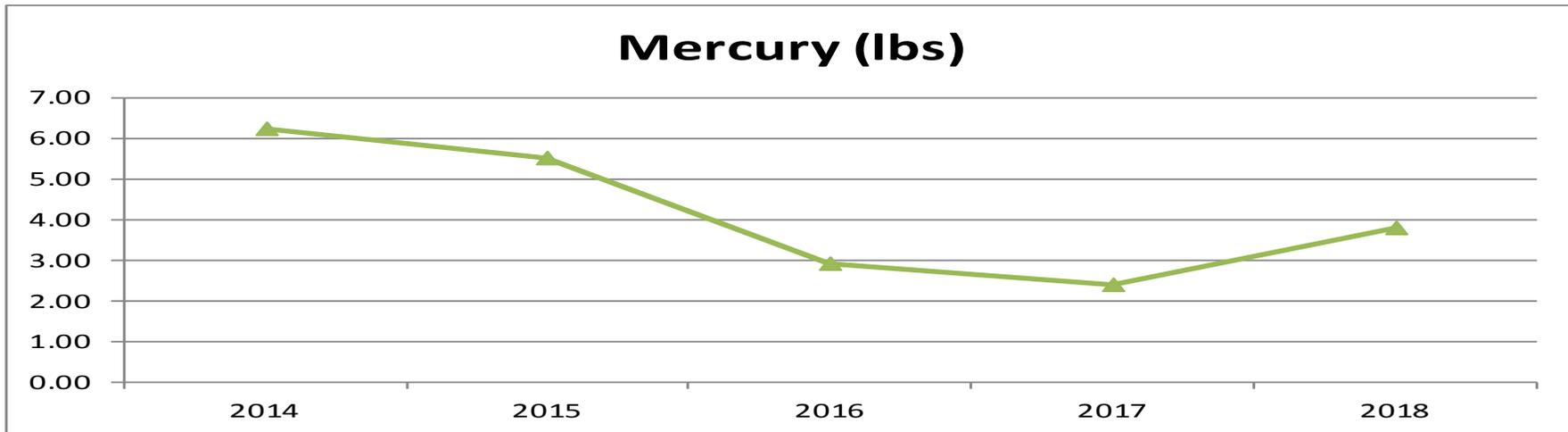
**NO<sub>x</sub> was higher in 2016 since it was more cost effective to use allowances than increase SCR removal rate. NO<sub>x</sub> was higher in 2017 and 2018 since the Cross State Rule was no longer in effect for Florida.**

**DHR data included starting in 2018.**

### Yearly Emissions

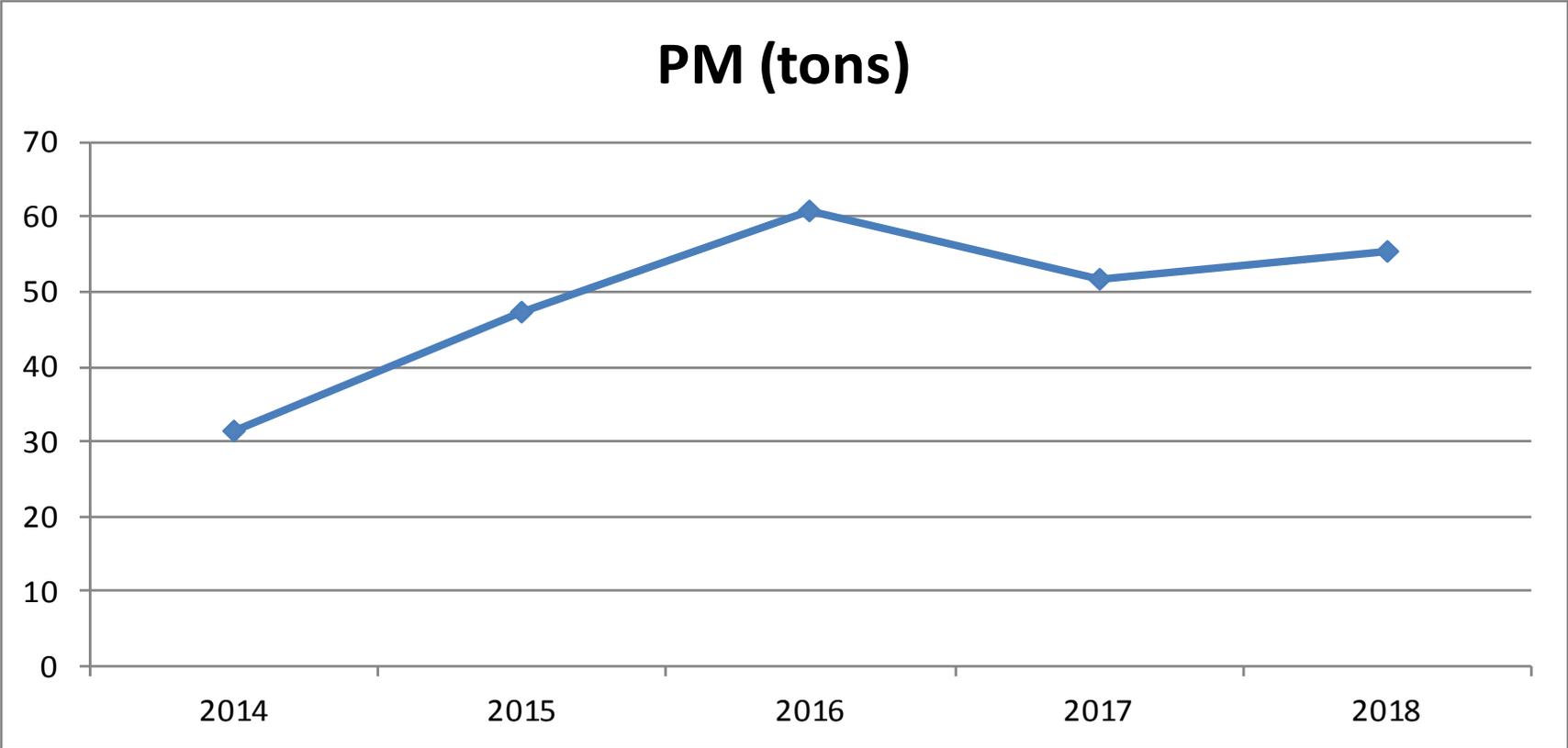


**DHR data included starting in 2018.**



**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.-Sept.)**

	<b>SO<sub>2</sub> (tons)</b>	<b>NO<sub>x</sub> (tons)</b>	<b>Mercury (lbs)</b>	<b>PM (tons)</b>	<b>CO<sub>2</sub> (tons)</b>	<b>HTIP (MMBtu)</b>	<b>GEN (MW-hours)</b>
DH1	5.6	125.8			95,796.1	1,609,406.0	131,121.0
DH2	474.3	1,009.5	3.93	37.3	578,174.4	5,635,619.0	610,606.0
DHCT3	0.0	1.2			5,289.4	88,847.0	6,318.0
JRKCC1	0.8	40.3			162,081.4	2,727,335.5	308,738.0
DHR	13.9	229.0			770,766.0	7,388,047.7	556,704.3
<b>TOTAL</b>	<b>494.6</b>	<b>1,405.8</b>	<b>3.930</b>	<b>37.3</b>	<b>1,612,107.3</b>	<b>17,449,255.2</b>	<b>1,613,487.3</b>

**2019 - September**

	<b>SO<sub>2</sub> (tons)</b>	<b>NO<sub>x</sub> (tons)</b>	<b>Mercury (lbs)</b>	<b>PM (tons)</b>	<b>CO<sub>2</sub> (tons)</b>	<b>HTIP (MMBtu)</b>	<b>GEN (MW-hours)</b>
DH1	0.1	18.3			14,447.8	243,123.0	19,157.0
DH2	49.1	103.3	0.4	4.3	63,776.7	621,604.0	66,410.0
DHCT3	0.0	0.1			724.6	12,192.0	859.0
JRKCC1	0.2	8.1			37,701.2	634,384.5	72,429.0
DHR	1.6	28.4			90,292.1	865,253.2	64,781.7
<b>TOTAL</b>	<b>51.0</b>	<b>158.2</b>	<b>0.406</b>	<b>4.3</b>	<b>206,942.4</b>	<b>2,376,556.7</b>	<b>223,636.7</b>

# WATER/WASTEWATER

PRODUCTION

MAINTENANCE

# Water/Wastewater September Dashboard

## Production

### Murphree Water Treatment Plant

		September 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	25.8	23.1	30	77%	
	Peak Daily Flow	29.1	26.5	54	49%	

### Main Street Water Reclamation Facility

		September 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	7.1	6.5	7.5	87%	

### Kanapaha Water Reclamation Facility

		September 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	12.7	12.2	14.9	82%	

### Water Reclamation Facilities (Combined)

		September 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	19.8	18.7	22.4	84%	

## Maintenance

### Wastewater Collections

		Sept 2019 (Miles)	FYTD	Monthly Goal (miles)	
	Miles of gravity mains cleaned	2.8	80	5.0	
	Miles of gravity mains TV inspected	4.3	64	5.0	

### Water Distribution

		Sept 2019	FYTD	Monthly Goal	
	Number of Water Services Replaced	94	1,058	75	

## SSO Monthly Summary

		September	YTD	GOAL	
	Sanitary Sewer Overflows	1	19	<16	

## Major Projects and Other Updates

- 1) MWTP Electric System Upgrade - Completed new circuit undergrounding. Preparing for startup and cutover to new equipment, item by item.
- 2) MSWRF - Aeration Basin and Headworks project planning and design are underway. East Clarifier rehabilitation complete and operational.
- 3) Gravity Sewer Lining - lined or replaced over 8 miles of gravity sewer in FY19
- 4) KWRF - headwork repairs complete and back in service