

STATE OF THE UTILITY

June 2019

OPERATIONS SUMMARY

CORPORATE SAFETY

ENVIRONMENTAL

REGULATORY

PERSONNEL

June 2019

Safety

Employees

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

Year to Date		
First Aid	Recordable	DART
1	4	3
6	7	1
1	1	0
5	10	6
0	0	0
	22	

Vehicles

	Current Month		
	Miles Driven	Recordable	Preventable
Administration	14,151	0	0
W/WW Systems	66,756	0	0
Energy Supply	974	0	0
Energy Delivery - Electric/Gas	87,630	0	0
GRUCom	10,129	0	0
Totals	179,640	0	0

Year to Date		
Miles Driven	Recordable	Preventable
140,104	0	0
705,814	9	6
38,343	0	0
927,429	8	6
79,437	0	0
1,891,127	17	

Environmental**Current Month****Calendar Year to Date**

Notices of Violation

0

0

Emissions

DH1, DH2, DHCT3, JRKCC1

CO₂ (tons)

91,206

504900

NO_x (tons)

134

792

SO₂ (tons)

56

329

DH Unit 2 (only)

PM_{FILT} (tons)

4

26

Hg (lbs)

0.50

2.86

DHRCO₂ (tons)

96,286

490934

NO_x (tons)

29

147

SO₂ (tons)

2

9

Regulatory**NERC****Current Month****FY to Date**

Notice of Violations

1

7

Self Reports/Potential Violations

1

8

Personnel

Department	Authorized FTE	Filled FTE	Vacancy	Last Month (May)
Administration	15	13	2	2
Chief Operating Officer	20	18	2	2
Customer Support Services	118.25	106	12.25	10.25
Energy Delivery	264	252	12	9
Energy Supply	145	146	-1	0
Energy Supply - District Energy	10	10	0	0
Finance	43	30	13	13
GRUCom	38	30	8	8
Information Technology	66	53	13	13
IT Governance & Compliance	5	5	0	0
Water Wastewater	168	161	7	8
Grand Total	892.25	824	68.25	65.25

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

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.

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.

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 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)

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 75th 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

4/21/2019 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

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

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.

CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

Customer Operations Metrics Summary June 2019

Active Accounts	Jun-19	YTD Gain/Loss	FY18
<i>Residential Contract Accounts</i>			
Total	91,430	450	90,980
Electric	84,712	309	84,403
Gas	33,738	298	33,440
Water	63,390	285	63,105
Wastewater	59,284	272	59,012
Telecomm	122	(7)	129

Active Accounts	Jun-19	YTD Gain/Loss	FY18
<i>Nonresidential Contract Accounts</i>			
Total	13,578	96	13,482
Electric	11,012	77	10,935
Gas	1,654	11	1,643
Water	5,889	42	5,847
Wastewater	4,681	47	4,634
Telecomm	383	17	366

New Installations	Jun-19	FY19 To Date	FY18
Electric	189	932	1512
Gas	43	386	463
Water	47	457	558
Wastewater	36	421	566
Telecomm	19	86	120

Residential Disconnects	Jun-19	FY19 To Date	FY18
Volume	969	10,767	15,305
Average Balance	\$242.05	\$243.40	\$250.07

Call Center Volume	Jun-19	FY19 To Date	FY18
Residential ASA	0:02:36	0:06:16	0:10:59
Business ASA	0:01:52	0:02:41	0:04:19
CSR Calls	15,267	108,200	142,989
CSR Callbacks	234	11,241	25,780
IVR Self Service	16,929	169,803	266,463
Total	32,196	278,003	409,452
IVR/Total	53%	61%	65%

Revenue Assurance	Jun-19	FY19 To Date	FY18
Referred to Collections	\$74,804.72	\$1,545,487.28	\$1,783,116.51
Recovered	\$50,171.26	\$611,912.38	\$786,025.11

Service Orders	Jun-19	FY19 To Date	FY18
Move Ins	9,457	65,614	116,784
Move Outs	9,617	65,403	116,307

Bills Generated	Jun-19	FY19 To Date	FY18
Paper Bills	96,143	955,873	1,276,432
eBills	16,320	159,013	200,984
Total	112,463	1,114,886	1,477,416
eBill/Total	15%	14%	14%

Average Res Bill Amounts	Jun-19	FY19 To Date	FY18
Electric (kWh)	1,050	768	812
Electric (\$)	\$153.83	\$112.31	\$118.11
Gas (Therms)	10	22	21
Gas (\$)	\$23.92	\$37.61	\$34.13
Water (kGals)	6	5	5
Water (\$)	\$37.66	\$30.63	\$30.34
Wastewater (kGals)	6	5	5
Wastewater(\$)	\$37.25	\$37.21	\$36.86

Payment Arrangements	Jun-19	FY19 To Date	FY18
Total	413	5,263	77,512

7/9/2019 EPS

ENERGY DELIVERY

System Consumption

System Reliability

Major Projects – Electric & Gas

ENERGY DELIVERY - UAB REPORT - JUNE 2019

Durations Reliability Report Between 6/01/2019 and 6/31/2019

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	RELIABILITY INDICIES	MONTHLY AVG GOAL
Monthly Average Customers Served(C)	98,698 Average Service Availability Index (ASAI)	99.9901%
Total Hours of Customer Demand	68,693,808 System Average Interruption Duration Index (SAIDI)	4.13 4.5 Mins
Total Number of Outages	90 Customer Average Interruption Duration Index (CAIDI)	113.67 55 Mins
Total Number of Customers Affected (CI)	3,589 System average Interruption Frequency Index (SAIFI)	0.04 0.08
Total Customer Minutes Interrupted (CMI)	407,976	
Total Customer "Out Minutes"	11,471 Average Length of a Service Interruption (L-Bar)	127.46 Mins

Outage Duration Times

Average Hours: 2
Maximum Hours: 10
Minimum Hours: 0

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	21	1	0	22
1. Weather	7	1	0	8
2. Vegetation	30	2	0	32
3. Animals	3	1	0	4
4. Foreign Interference	0	0	0	0
5. Human Cause	3	1	0	4
6. Equipment Failure	10	9	1	20
7. All Remaining Outages	0	0	0	0
Total	74	15	1	90

ENERGY DELIVERY - UAB REPORT - JUNE 2019

Durations Reliability Report Between 01/01/2019 and 6/30/2019 *

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

CUSTOMER DATA	RELIABILITY INDICIES	FISCAL YTD GOALS
Monthly Average Customers Served(C)	98,698 Average Service Availability Index (ASAI)	99.9889%
Total Hours of Customer Demand	426,375,360 System Average Interruption Duration Index (SAIDI)	28.81 27
Total Number of Outages	409 Customer Average Interruption Duration Index (CAIDI)	70.01 55 Mins
Total Number of Customers Affected (CI)	40,609 System average Interruption Frequency Index (SAIFI)	0.41 0.48
Total Customer Minutes Interrupted (CMI)	2,843,024	
Total Customer "Out Minutes"	70,504 Average Length of a Service Interruption (L-Bar)	172.38 Mins

Outage Duration Times

Average Hours: 2
Maximum Hours: 29
Minimum Hours: 0

Cause of Outages

Cause	Overhead	Underground	Both	Total
0. Undetermined	68	12	3	83
1. Weather	31	4	11	46
2. Vegetation	132	17	3	152
3. Animals	35	5	0	40
4. Foreign Interference	0	1	1	2
5. Human Cause	16	11	5	32
6. Equipment Failure	29	49	12	90
7. All Remaining Outages	1	0	1	2
Total	312	99	36	447

* REPORTED AS CALENDAR YEAR

ENERGY DELIVERY - UAB REPORT - JUNE 2019

Electric System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Feed-In-Tariff - Residential	55 KWH	100	44 KWH	100
Feed-In-Tariff - General Service	2,427 KWH	156	2,036 KWH	155
Electric - GS - Demand - Regular	57,296,814 KWH	1,216	52,353,631 KWH	1,186
Electric - General Service Demand PV	846,113 KWH	18	728,310 KWH	16
Electric - GS - Kanapaha w Curtail Cr	1,089,600 KWH	1	1,128,000 KWH	1
Electric - GS - Demand - Large Power	8,146,200 KWH	6	8,599,960 KWH	9
Electric - GS - Murphree Curtail Credit	1,600,800 KWH	1	1,473,600 KWH	1
Electric - GS Large Demand PV	4,298,400 KWH	2	4,065,600 KWH	2
Electric - GS - Non Demand	18,157,393 KWH	9,796	15,305,375 KWH	9,206
Electric - General Service PV	151,577 KWH	63	104,375 KWH	50
Electric - Lighting - Rental	981,474 KWH	4,143 <i>n</i>	981,621 KWH	4,171 <i>n</i>
Electric - Lighting - Street - City	719,749 KWH	12 <i>n</i>	779,722 KWH	14 <i>n</i>
Electric - Lighting - Street - County	155,178 KWH	2 <i>n</i>	295,343 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	87,974,620 KWH	86,515	72,617,335 KWH	82,219
Electric - Residential PV	300,032 KWH	364	205,311 KWH	293
Total Retail Electric	181,724,974 KWH	98,238	158,644,805 KWH	93,238
<small>(n =not included in total customer count)</small>				
City of Alachua	12,989,000 KWH	27,905 KW	12,851,000 KWH	26,782 KW
City of Winter Park	- KWH	- KW	7,200,000 KWH	10,000 KW
Total (Native) Electric	194,713,974 KWH		178,695,805 KWH	

Gas System Consumption

	2019		2018	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	609,249 THM	1,371	614,722 THM	1,250
Gas - GS - Regular Service (Small)	7,027 THM	294	9,742 THM	236
Gas - GS - Interruptible - Regular Serv	16,000 THM	1	59,791 THM	1
Gas - GS - Interruptible - Large Volume	353,185 THM	7	359,035 THM	7
Gas - Residential - Regular Service	334,506 THM	34,095	349,268 THM	33,136
Total Retail Gas	1,319,967 THM	35,768	1,392,558 THM	34,630
Gas - GS - UF Cogeneration Plant	2,814,976 THM	1	3,008,768 THM	1
Gas - Residential - LP - Basic Rate	2,432 GAL	203	2,266 GAL	199

*Obtained from Monthly Billing Summary prepared by Todd Kamhoot.

ENERGY DELIVERY - UAB REPORT - JUNE 2019

Energy Delivery - Major Projects

Major Electric Design Projects

West

- > Tower Rd Market West - Mixed-Use Development) / Grand Oaks Community
- > Urban Village - 180 unit apartment complex
- > Celebration Pointe - New Development
- > Integra 24 - 232 unit apartment complex
- > Chestnut Plantation Phase 2 - Residential Development

East

- > 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
- > Hyatt Place - Hotel City Center - Downtown mixed-use redevelopment

Major Gas Design Projects:

- > Main Installation – Oakmont Subdivision – ongoing – 10600'
- > Main Installation – Town of Tioga Phase 18 - 2023' (Completed)
- > Main Installation – Finley Woods Subdivision – 1460'
- > Main Installation – The Reefs Apartments - 530'

New Gas Services installed in June 2019: 40 New Customers

ENERGY SUPPLY

SYSTEM STATISTICS

ENERGY DISTRIBUTION

FUEL

June 2019

Source

Energy Supply - CAPACITY

Unit Capability output - MWn	
DH-2	228
DH-1	67*
Kelly CC	108
CT's	106
Grid	2 X 224
DHR	102.5

Energy Supply - Performance Parameter

Month	YTD	Budget YTD	Delta Budget
52,643	431,579	443,770	(12,191)
17,057	111,549	30,472	81,077
21,697	292,786	568,088	(275,302)
429	8,729	243	8,486
81,588	149,403	119,678	29,725
61,174	462,850	191,079	271,771

*DH1 slight derate due to gas filter restriction in Dec

Fuels Consumed

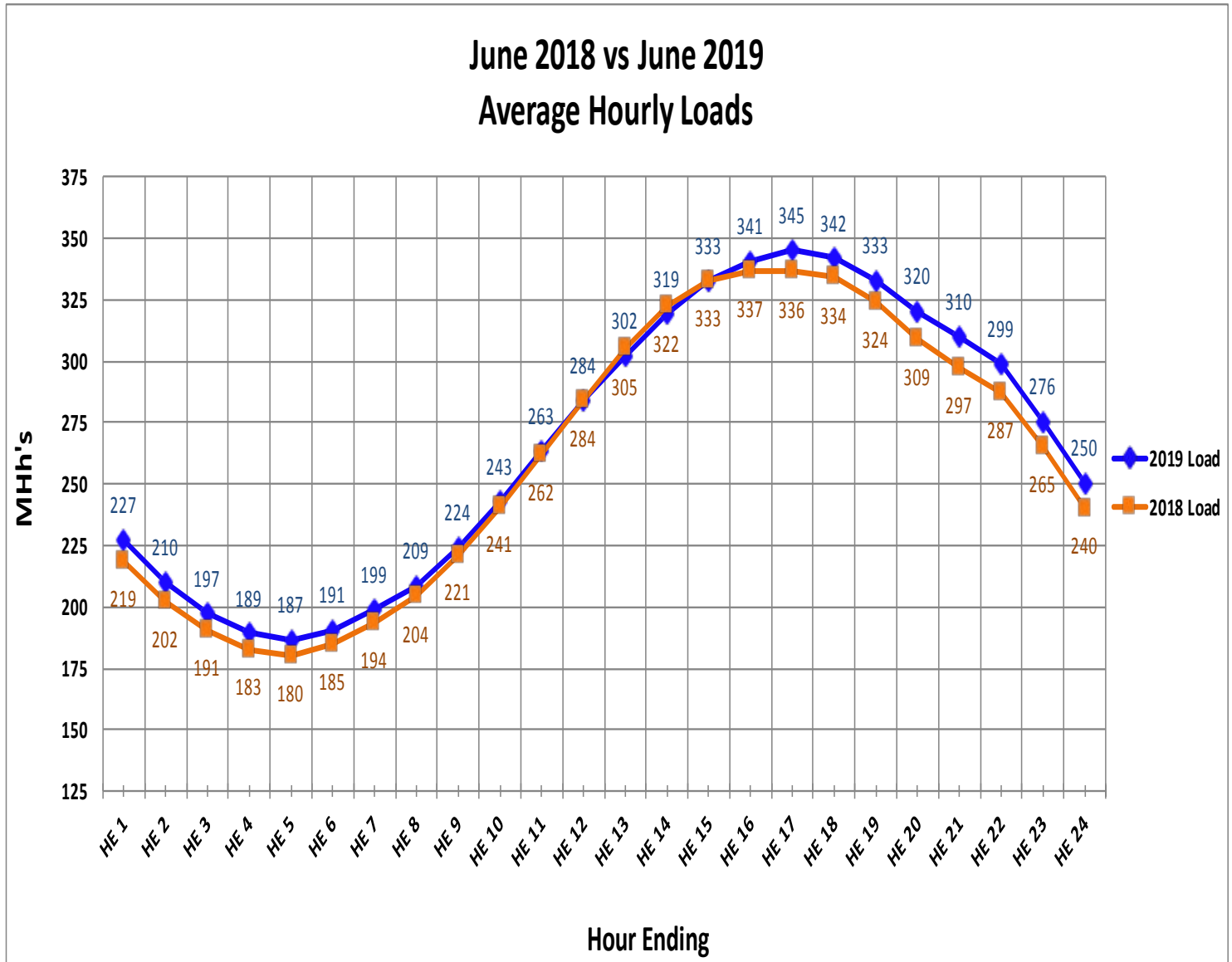
	Month	FYTD	Budget YTD	Delta Budget
Coal - Tons	19,651	167,381	242,046	(74,665)
Gas - MCF	685,318	5,514,075	5,555,547	(41,472)
Fuel oil - Gals	43,302	52,833	-	52,833
Biomass - Tons	80,028	594,515	240,744	353,771

Availability/Capacity

	Availability			Capacity		
	Month	FY 2019 YTD	FY 2018 YTD	Month	FY 2019 YTD	FY 2018 YTD
DH-2	100.00%	81.72%	96.26%	35.07%	31.20%	30.89%
DH-1	100.00%	99.40%	90.09%	33.34%	23.94%	27.88%
Kelly CC	83.36%	72.43%	75.30%	32.51%	42.85%	47.93%
DH CT-1	100.00%	99.47%	98.89%	0.42%	0.21%	0.41%
DH CT-2	100.00%	94.96%	96.00%	0.00%	0.14%	0.71%
DH CT-3	68.86%	91.71%	50.63%	0.63%	1.70%	4.93%
DHR*	99.13%	87.17%	80.41%	94.45%	78.86%	23.69%

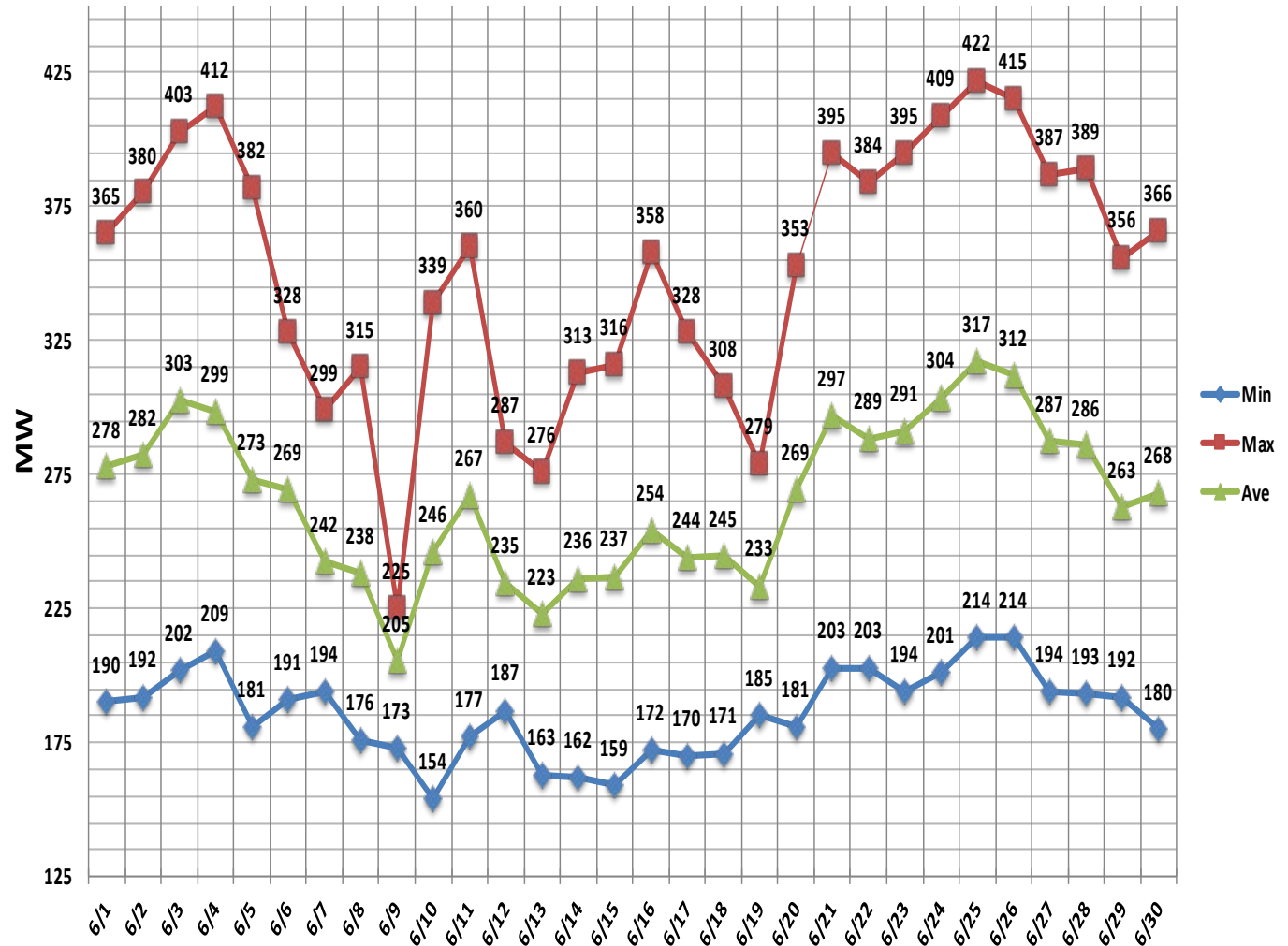
DHR tracking is from Nov. 7th, 2017 forward

June Average Hourly Loads		
Hour Ending	2018 Load	2019 Load
HE 1	219	227
HE 2	202	210
HE 3	191	197
HE 4	183	189
HE 5	180	187
HE 6	185	191
HE 7	194	199
HE 8	204	209
HE 9	221	224
HE 10	241	243
HE 11	262	263
HE 12	284	284
HE 13	305	302
HE 14	322	319
HE 15	333	333
HE 16	337	341
HE 17	336	345
HE 18	334	342
HE 19	324	333
HE 20	309	320
HE 21	297	310
HE 22	287	299
HE 23	265	276
HE 24	240	250



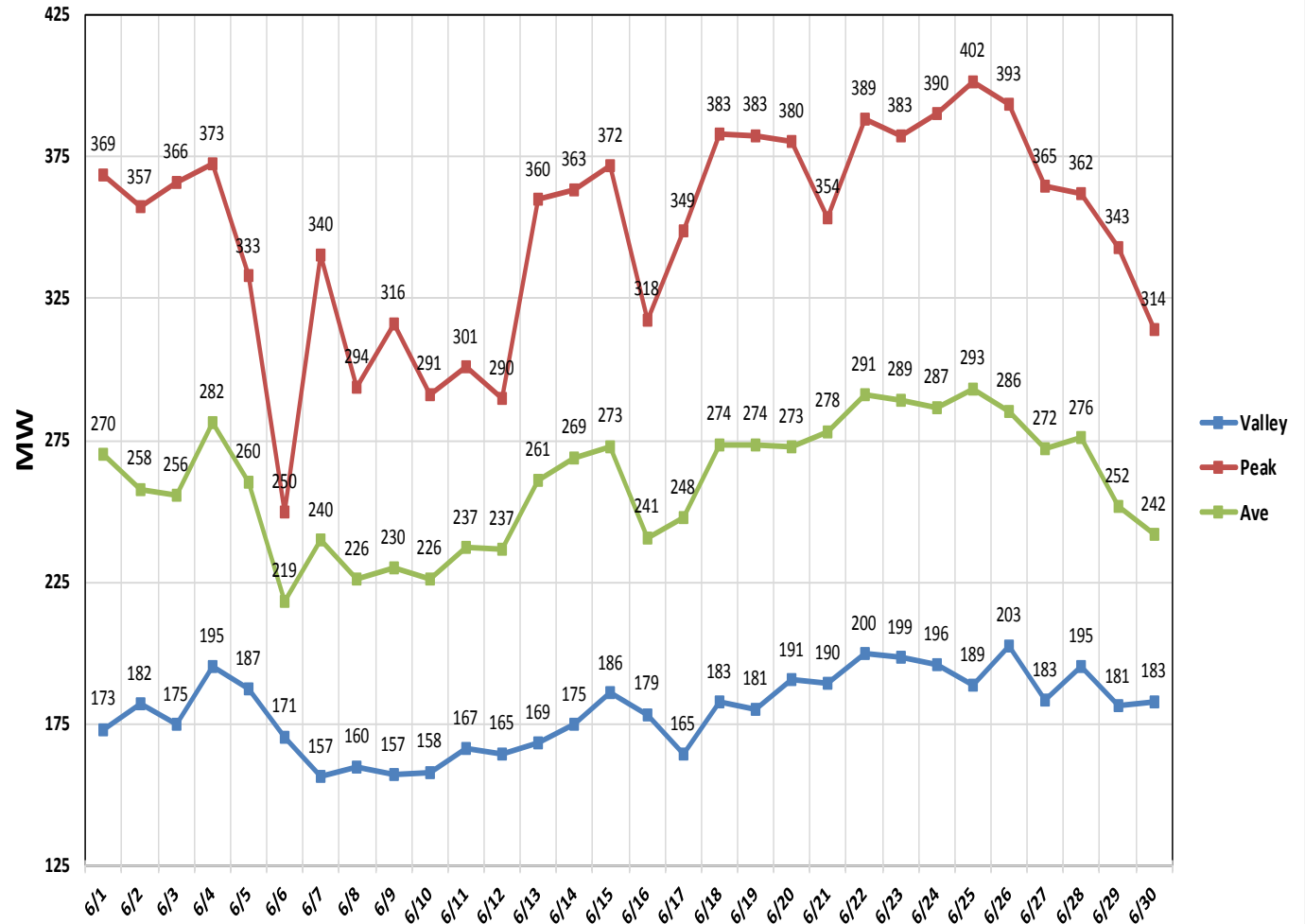
Date	Valley	Peak	Ave
6/1/2019	190	365	278
6/2/2019	192	380	282
6/3/2019	202	403	303
6/4/2019	209	412	299
6/5/2019	181	382	273
6/6/2019	191	328	269
6/7/2019	194	299	242
6/8/2019	176	315	238
6/9/2019	173	225	205
6/10/2019	154	339	246
6/11/2019	177	360	267
6/12/2019	187	287	235
6/13/2019	163	276	223
6/14/2019	162	313	236
6/15/2019	159	316	237
6/16/2019	172	358	254
6/17/2019	170	328	244
6/18/2019	171	308	245
6/19/2019	185	279	233
6/20/2019	181	353	269
6/21/2019	203	395	297
6/22/2019	203	384	289
6/23/2019	194	395	291
6/24/2019	201	409	304
6/25/2019	214	422	317
6/26/2019	214	415	312
6/27/2019	194	387	287
6/28/2019	193	389	286
6/29/2019	192	356	263
6/30/2019	180	366	268

June 2019
Peak, Valley, and Average Loads



Date	Valley	Peak	Ave
6/1/2018	173	369	270
6/2/2018	182	357	258
6/3/2018	175	366	256
6/4/2018	195	373	282
6/5/2018	187	333	260
6/6/2018	171	250	219
6/7/2018	157	340	240
6/8/2018	160	294	226
6/9/2018	157	316	230
6/10/2018	158	291	226
6/11/2018	167	301	237
6/12/2018	165	290	237
6/13/2018	169	360	261
6/14/2018	175	363	269
6/15/2018	186	372	273
6/16/2018	179	318	241
6/17/2018	165	349	248
6/18/2018	183	383	274
6/19/2018	181	383	274
6/20/2018	191	380	273
6/21/2018	190	354	278
6/22/2018	200	389	291
6/23/2018	199	383	289
6/24/2018	196	390	287
6/25/2018	189	402	293
6/26/2018	203	393	286
6/27/2018	183	365	272
6/28/2018	195	362	276
6/29/2018	181	343	252
6/30/2018	183	314	242

June 2018 Peak, Valley, and Average Loads



ENERGY SUPPLY
Major Projects & Milestones
as of July 8, 2019

1. Kelly (JRK):
 - a. As reported previously Kelly CT4 had been in forced outage since 4/17/2019 due to spurious load runbacks of the unit due to apparent unit flameout issues. The cause of the actual runback is due to excessive turbine exhaust temperature spreads, so machine run load back significantly to protect machine when it sees these exhaust conditions. Working with GE Engineering we inspected the complete combustion path, including borescope of all access ports. None of the normal troubleshooting measures GE proposed were successful in identifying a single root cause. Working with GE we had to adjust the actual coefficients in computer program to increase secondary fuel flow over primary fuel flow. In other words increase fuel enrichment. This was able to help resolve our current issue and we performed full operational test on 6/23/2019, and subsequently released both CT4, and Combined Cycle (JCC1), to full load on 6/23/2019 following this successful test.
 - b. Unit #8 East Condensate pump returned from vendor following repairs, and has been fully tested and restored to operation. So now all 3 pumps are available for redundancy.

2. South Energy Center (SEC):
 - a. Steam Chiller is still down and we are coordinating turbine repairs. This currently has no impact to hospital service we provide, but is part of contingency so this is being prioritized.
 - b. We replaced failed steam traps in the underground piping to the hospital that was resulting in steam coming up from 2 of the 4 manways. We coordinated and conducted a short (6 hour) steam outage with hospital to fully repair these steam trap issues.
 - c. Working on a 12,000 hour outage for Wartsila Engine in late August. This is an extensive 19 day outage, and we are working on resources and timeline to see where we may be able to reduce time unavailable. Hospital is fully aware of this required planned outage to maintain overall unit reliability.

3. Other:
 - a. GRU saw our largest peak load since 2011 of 429 MW net on 7/2/2019. The peak load in 2011 was 440 MW net.
 - b. Our Solar PPA ITN responses are due 7/23/2019.
 - c. Energy Supply is coordinating to provide both the UAB and CCOM presentations on our current fuel hedging policy, per the recent request of CCOM.

ENVIRONMENTAL PERMITTING

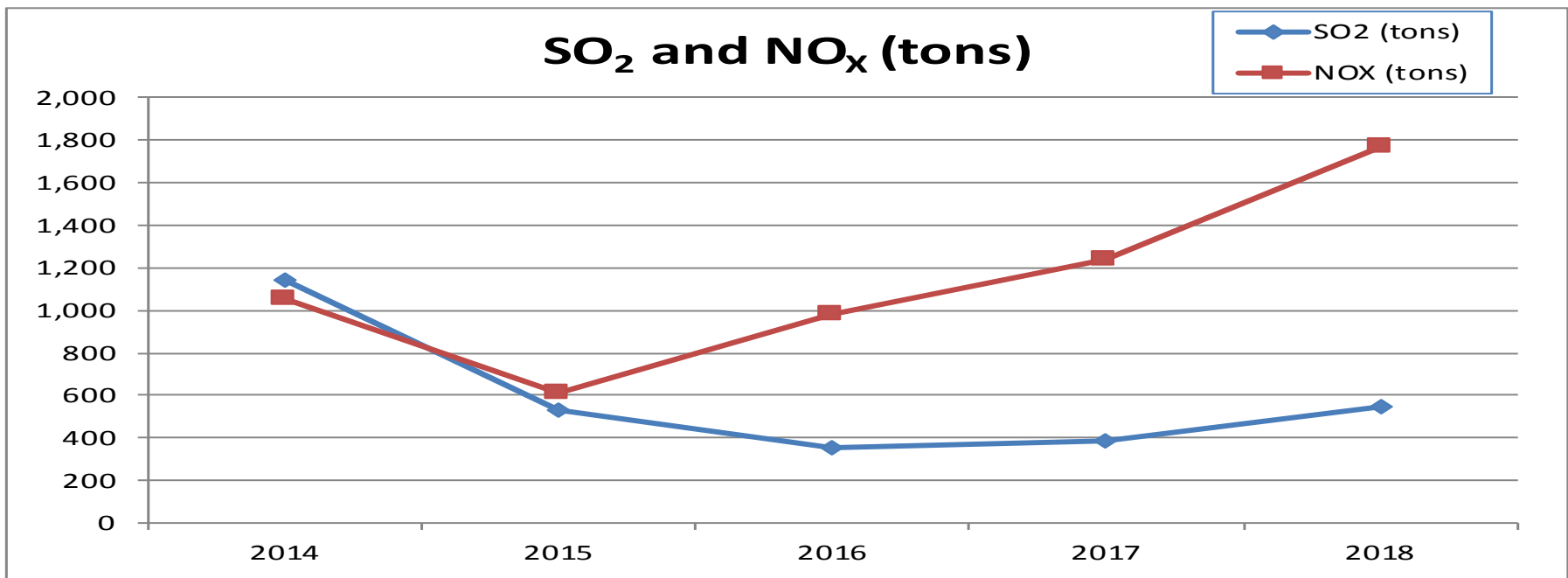
Emissions Data

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-June)	338	939	2.86	26	995,834

Mercury and Particulate values are for Unit 2 only.

DHR data included starting in 2018.

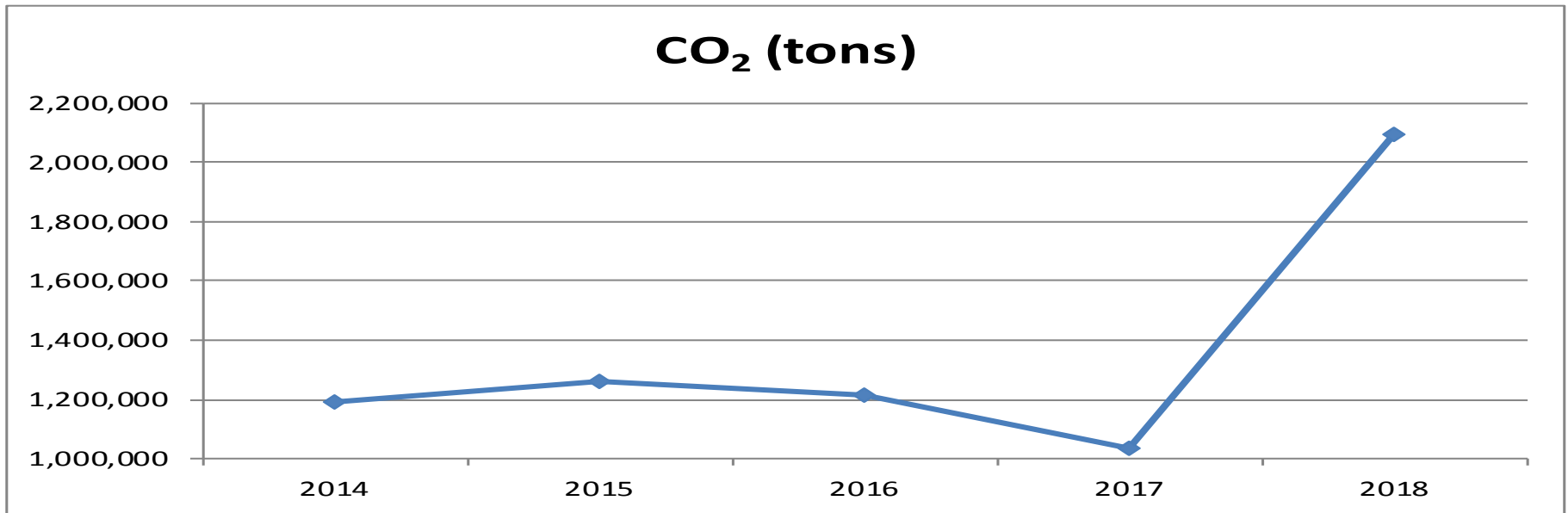


SO₂ lower in 2015, 2016, 2017 due to higher removal rate settings to comply w/the MATS Rule.

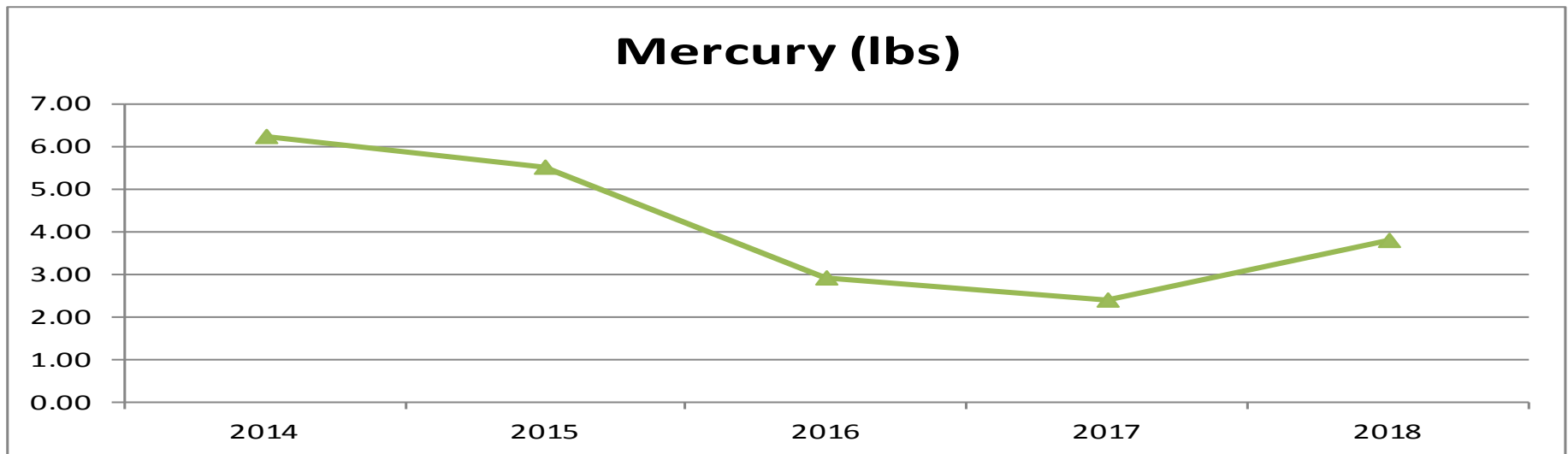
NO_x higher in 2016 as it was more cost effective to use allowances than increase SCR removal rate. NO_x was higher in 2017 & 2018 as the Cross State Rule was no longer in effect for Florida.

DHR data included starting in 2018.

Yearly Emissions

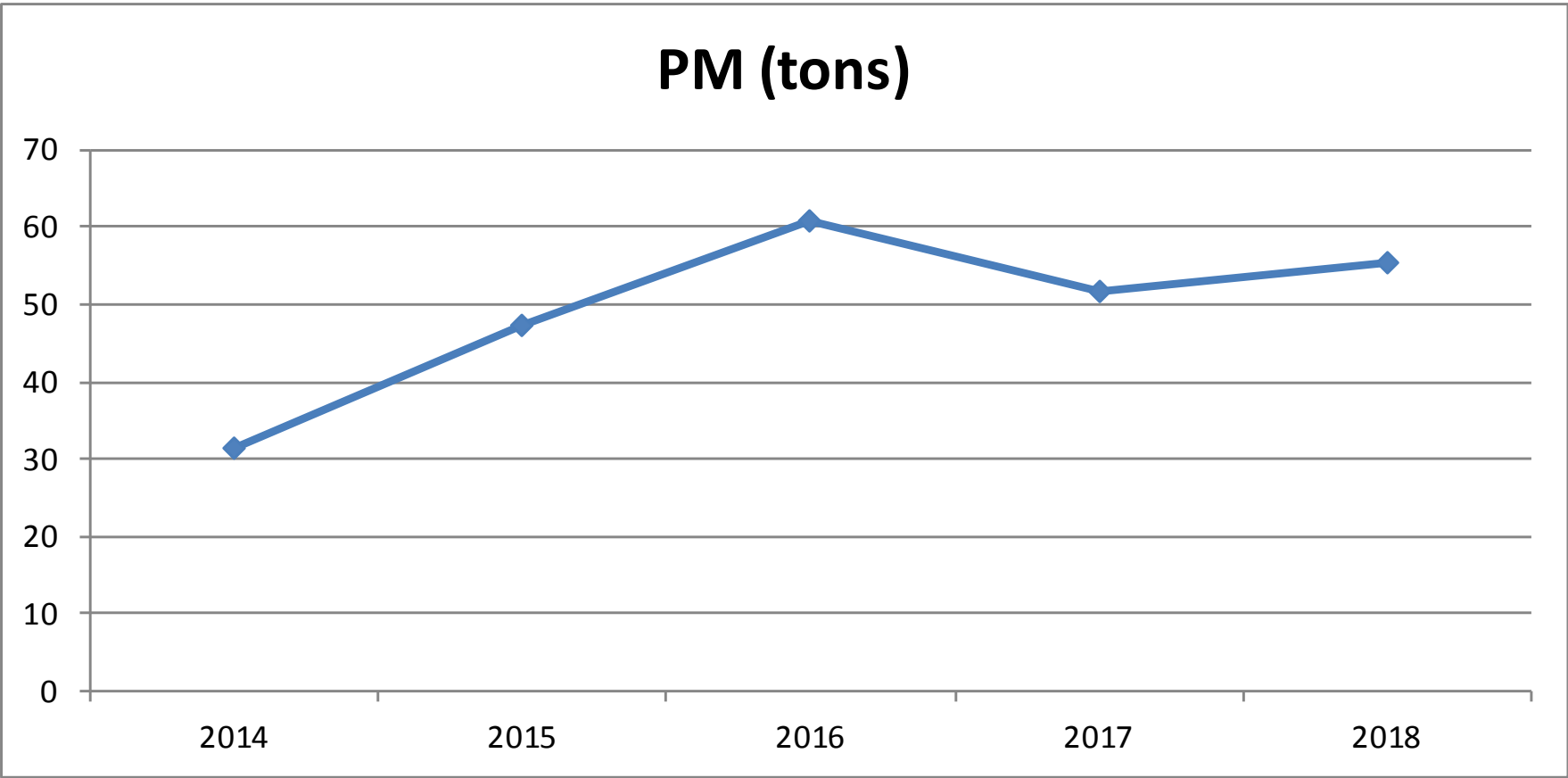


DHR data included starting in 2018.



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.-June.)

	SO₂ (tons)	NO_x (tons)	Mercury (lbs)	PM (tons)	CO₂ (tons)	HTIP (MMBtu)	GEN (MW-hours)
DH1	5.4	75.9			54,780.6	918,733.0	73,452.0
DH2	323.8	701.8	2.86	25.8	398,136.1	3,882,031.0	423,920.0
DHCT3	0.0	1.2			4,208.2	70,794.0	4,831.0
JRKCC1	0.2	12.7			47,775.2	803,903.0	84,630.0
DHR	8.8	147.3			490,933.7	4,705,741.1	360,182.4
TOTAL	338.2	938.9	2.861	25.8	995,833.8	10,381,202.1	947,015.4

2019 - June

	SO₂ (tons)	NO_x (tons)	Mercury (lbs)	PM (tons)	CO₂ (tons)	HTIP (MMBtu)	GEN (MW-hours)
DH1	5.2	20.2			14,674.3	243,845.0	19,198.0
DH2	50.9	109.9	0.5	3.8	62,331.4	608,000.0	62,965.0
DHCT3	0.0	0.1			358.2	6,024.0	402.0
JRKCC1	0.1	3.8			13,841.9	232,922.0	21,857.0
DHR	1.7	29.2			96,285.6	922,772.1	69,366.3
TOTAL	57.9	163.2	0.522	3.8	187,491.4	2,013,563.1	173,788.3

WATER/WASTEWATER

Production

Maintenance

Projects

Water/Wastewater June Dashboard

Production						
Murphree Water Treatment Plant						
		June 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	23.9	22.6	30	75%	
	Peak Daily Flow	29.0	26.3	54	49%	
Main Street Water Reclamation Facility						
		June 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	6.1	6.2	7.5	83%	
Kanapaha Water Reclamation Facility						
		June 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	12.2	11.9	14.9	80%	
Water Reclamation Facilities (Combined)						
		June 2019	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	18.3	18.1	22.4	81%	
Maintenance						
Wastewater Collections						
		June 2019 (Miles)	FYTD	Monthly Goal (miles)		
	Miles of gravity mains cleaned	8.8	61	5.0		
	Miles of gravity mains TV inspected	4.3	47	5.0		
Water Distribution						
		June 2019	FYTD	Monthly Goal		
	Number of Water Services Replaced	68	723	75		
SSO Monthly Summary						
		June	YTD	GOAL		
	Sanitary Sewer Overflows	1	16	<16		

WATER/WASTEWATER

Major Projects and Other Updates

- 1) MWTP Electric System Upgrade - Structure nearly complete for the new electrical building, Guard Shack complete
- 2) MSWRF - Aeration Basin and Headworks project planning and design are underway. East Clarifier demolition & rehab nearing completion
- 3) Gravity Sewer Lining - Priorities being implemented with a goal to line at least 10 miles of gravity sewer in FY19
- 4) KWRF - headwork repairs complete and placing online