

# STATE OF THE UTILITY

## SHARED DATA (ED, ES, WWW)

Safety

Environmental

Regulatory

Personnel

February 2017							
<b>Safety</b>		<b>Employees</b>					
	<b>Current Month</b>				<b>Year to Date</b>		
	<b>Near Miss</b>	<b>Recordable</b>	<b>Lost Days</b>		<b>Near Miss</b>	<b>Recordable</b>	<b>Lost Days</b>
Water Treatment/Distribution	1	1	0		2	3	0
WW Collections/ Reclamation	0	0	0		0	1	0
Energy Supply	2	1	0		5	1	0
Energy Delivery - Electric	0	0	0		0	1	0
Energy Delivery - Gas	0	0	0		0	1	0
	<b>Vehicles</b>						
	<b>Current Month</b>				<b>Year to Date</b>		
	<b>Miles Driven</b>	<b>Recordable</b>	<b>Preventable</b>		<b>Miles Driven</b>	<b>Recordable</b>	<b>Preventable</b>
Water Treatment/Distribution	30,960	0	0		136,545	1	0
WW Collections/ Reclamation	34,418	0	0		177,468	1	0
Energy Supply	3,511	0	0		9,772	0	0
Energy Delivery - Electric	43,954	0	0		231,618	1	0
Energy Delivery - Gas	15,077	0	0		85,585	0	0
<b>Environmental</b>		<b>Current Month</b>		<b>Calendar Year to Date</b>			
Notices of Violation		0		0			
Emissions							
DH1, DH2, DHCT3, JRKCC1							
CO <sub>2</sub> (tons)		44,282		86,064			
NO <sub>x</sub> (tons)		20		45			
SO <sub>2</sub> (tons)		0.3		0.4			
DH Unit 2 (only)							
PM <sub>FILT</sub> (tons)		0		0			
Hg (lbs)		0.00		0.00			
<b>Regulatory</b>		<b>Current Month</b>		<b>Year to Date</b>			
NERC							
Notice of Violations		0		0			
Self Reports/Potential Violations		0		0			
<b>Personnel</b>							
		<b>FTE</b>	<b>Incumbents</b>	<b>Vacant</b>			
Water & Wastewater	MAPS	27.00	26.00	1.00			
	CWA	142.00	129.00	13.00			
Energy Supply (includes District Energy)	MAPS	38.00	35.00	3.00			
	CWA	122.00	120.00	2.00			
Energy Delivery (Electric & Gas)	MAPS	49.00	39.00	10.00			
	CWA	217.00	198.80	18.20			
	Total	595.00	547.80	47.20			

STATE OF THE UTILITY

CUSTOMER OPERATIONS

Operations Data

# Customer Operations Metrics Summary February 2017

Active Accounts	Feb-17	YTD Gain/Loss	FY16
<i>Residential Contract Accounts</i>			
Total	89,323	458	88,865
Electric	83,031	357	82,674
Gas	33,065	266	32,799
Water	62,426	257	62,169
Wastewater	58,415	264	58,151
Telecomm	144	(9)	153

New Installations	Feb-17	FY17 To Date	FY16
Electric	52	423	1,638
Gas	37	199	589
Water	33	190	756
Wastewater	26	176	485
Telecomm	29	98	248

Call Center Volume	Feb-17	FY17 To Date	FY16
Average Speed of Answer	0:03:37	0:05:21	0:07:04
CSR Calls	13,913	69,462	251,522
IVR Self Service	17,446	105,121	318,483
Total	31,359	174,583	570,005
IVR/Total	56%	60%	56%

Bills Generated	Feb-17	FY17 To Date	FY16
Paper Bills	97,348	511,396	1,300,894
eBills	14,661	83,752	179,960
Total	112,009	595,148	1,480,854
eBill/Total	13%	14%	12%

Payment Arrangements	Feb-17	FY17 To Date	FY16
Total	7,179	39,999	97,287

Active Accounts	Feb-17	YTD Gain/Loss	FY16
<i>Nonresidential Contract Accounts</i>			
Total	13,645	52	13,593
Electric	11,090	56	11,034
Gas	1,646	26	1,620
Water	5,847	(6)	5,853
Wastewater	4,603	(1)	4,604
Telecomm	331	17	314

Residential Disconnects	Feb-17	FY17 To Date	FY16
Volume	1,045	6,206	14,593
Average Balance	\$235.95	\$249.10	\$247.00

Revenue Assurance	Feb-17	FY17 To Date	FY16
Referred to Collections	\$432,801.85	\$1,326,453.26	\$1,461,488.40
Recovered	\$47,138.31	\$209,567.99	\$361,420.79

Service Orders	Feb-17	FY17 To Date	FY16
Move Ins	6,870	34,925	137,265
Move Outs	6,703	34,556	132,836

Average Res Bill Amounts	Feb-17	FY17 To Date	FY16
Electric (kWh)	650	705	840
Electric (\$)	\$98.60	\$106.09	\$126.96
Gas (Therms)	30	21	18
Gas (\$)	\$44.08	\$33.80	\$29.61
Water (kGals)	5	5	4
Water (\$)	\$28.84	\$30.90	\$27.47
Wastewater (kGals)	5	5	6
Wastewater(\$)	\$41.00	\$38.80	\$41.13

STATE OF THE UTILITY

ENERGY DELIVERY

Operations Data & Projects

## ENERGY DELIVERY - UAB REPORT - FEBRUARY 2017

### Durations Reliability Report Between 2/01/2017 and 2/28/2017

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA		RELIABILITY INDICIES		MONTHLY AVG GOAL
Monthly Average Customers Served(C)	94229	Average Service Availability Index (ASAI)	99.9944 %	
Total Hours of Customer Demand	61,060,392	System Average Interruption Duration Index (SAIDI)	2.17 Mins	4.5 Mins
Total Number of Outages	42	Customer Average Interruption Duration Index (CAIDI)	41.02 Mins	55 Mins
Total Number of Customers Affected (CI)	4977	System average Interruption Frequency Index (SAIFI)	0.05	.08
Total Customer Minutes Interrupted (CMI)	204173			
Total Customer "Out Minutes"	5901	Average Length of a Service Interruption (L-Bar)	140.50 Mins	
Tot Cust Momentary Interruption Events (CME)	11,194			

[Guide for Power Distribution Reliability Indices](#)

#### Outage Duration Times

Average Hours	2
Maximum Hours	8
Minimum Hours	0

#### Cause of Outages

Cause	Overhead	Underground	Undetermined	Total
1. Weather	2	6	0	8
1. Vegetation	9	4	0	13
1. Animals	0	2	0	2
1. Foreign Interference	0	0	0	0
1. Human Cause	3	3	0	6
1. Undetermined	0	0	0	0
1. Equipment Failure	5	8	0	13
1. All Remaining Outages	0	0	0	0
Total	19	23	0	42

# **ENERGY DELIVERY - UAB REPORT - FEBRUARY 2017**

## **Energy Delivery - Major Design Projects - Electric**

### **Major Electric Design Projects underway:**

- > Butler Plaza Town Center
- > Blues Creek Unit 7 – 16 residential units
- > Relocate Switchgear [at Holiday Inn] for roadway re-construction SW 43/32nd Street
- > The Windsor of Gainesville NW 83 St & 39th Ave – (Nursing Home)
- > Fairfield Inn & Suites 3700 SSW 37th Blvd.

### **Major Electric Design Projects expected to start within 30 days:**

- > Drury Inn & Suites – 4000 SW 40 Blvd (Hotel)
- > Butler Plaza Town Center Lights
- > Blues Creek Unit 5 PH 2&3 (Residential S/D, 50 lots)
- > Westchester PH 4B – 77 Single Family Lots
- > 43rd/53rd - Retail Development - Old System Control Building
- > SW 4th Ave OH to UG Conversion
- > One College Park (apartments)
- > CRA - NW 1st Ave (OH to UG conversion)
- > Ingenuity (office building)

## **ENERGY DELIVERY - UAB REPORT - FEBRUARY 2017**

### **Energy Delivery - Major Construction Projects - Gas**

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

- > Provide NW 43rd St and NW 53rd Ave Retail Development project folder to T&D Gas construction for construction.
- > Prepare construction plans and estimates for Fire Stations # 1(500 Blk S. Main St) and #9 (approx. 1,000 feet of gas main on NW 34th St), Aloft Hotel, Staybridge Hotel and Gloria's Way S/D and Suburban Heights gas relocation.
- > Design for replacement of 3215 feet of bare steel gas main at 400-800 blocks SW 10th St
- > Extension of 4" gas main on SW 8th Avenue from 137th St to SW 143rd St, about 3,300 feet

#### **Gas Main Installed in January 2017**

1. Installing main on SW 8th Ave from 122-131st as trench is available. This is a joint trench project.
2. NW 3rd St. Project. A rebuild of black plastic and bare steel. Replacing approximately 1.5 miles of main and associated services. This is a Distribution Integrity Management project. They complete approximately 1500 feet per week due to it being in an urban area with a good deal of utilities in the ROW. We had to pull of this project temporarily to work on new customer extensions.
3. Grand Preserve Substation and Apts. – 7800' of main. This project is nearing completion.
4. Finley Woods Main Ext. – 10320' main – This project is nearing completion.
5. We have been working on and off in the Butler Town Center and Celebration Point as construction is on-going in both of these projects.
6. One College Park. 4" main replacement as part of CRA project: 2000'
7. Westchester Phase 4" gas main extension: 2500' – new project.

Number of new Services installed in February: 32

Maintenance Activities – Two man crew – Beginning Cathodic Protection and Emergency Valve surveys.

Note 1: Gathering Data for Annual Distribution and Transmission reports for PHMSA.



## ENERGY DELIVERY - UAB REPORT - FEBRUARY 2017

### Electric System Consumption

<b>ELECTRIC SYSTEM</b>	<b>CONSUMPTION</b>	<b>CUSTOMERS</b>
Feed-In-Tariff	2,678 KWH	260
Electric - GS - Demand - Regular	42,310,003 KWH	1,198
Electric - General Service Demand PV	699,029 KWH	18
GREC Startup Supplemental and Standby	514,576 KWH	1
Electric - GS - Kanapaha w Curtail Cr	963,600 KWH	1
Electric - GS - Demand - Large Power	6,153,360 KWH	8
Electric - GS - Murphree Curtail Credit	1,384,800 KWH	1
Electric - GS Large Demand PV	3,508,800 KWH	2
Electric - GS - Non Demand	12,608,230 KWH	9,667
Electric - General Service PV	57,820 KWH	50
Electric - Lighting - Rental	1,002,171 KWH	4,361 <i>n</i>
Electric - Lighting - Street - City	1,339,102 KWH	13 <i>n</i>
Electric - Lighting - Street - County	299,281 KWH	2 <i>n</i>
Electric - Lighting - Traffic	4,542 KWH	2 <i>n</i>
Electric - Residential - Non TOU	53,099,907 KWH	84,271
Electric - Residential PV	108,811 KWH	194
Total Retail Electric ( <i>n</i> =not included in total)	124,056,710 KWH	95,671
City of Alachua	8,350,000 KWH	18,449 KW
City of Winter Park	6,720,000 KWH	10,000 KW
Total (Native) Electric	139,126,710 KWH	

## ENERGY DELIVERY - UAB REPORT - FEBRUARY 2017

### Gas System Consumption

#### **GAS SYSTEM**

Gas - GS - Regular Service (Firm)	850,126 THM	1,472
Gas - GS - Regular Service (Small)	15,990 THM	186
Gas - GS - Interruptible - Regular Serv	38,830 THM	1
Gas - GS - Interruptible - Large Volume	393,934 THM	6
Gas - Residential - Regular Service	978,553 THM	33,201
Total Retail Gas	2,277,433 THM	34,866
Gas - GS - UF Cogeneration Plant	3,337,769 THM	1
Gas - Residential - LP - Basic Rate	5,585 GAL	197
GREC Gas (PGA Only)	21,030 THM	1

STATE OF THE UTILITY

ENERGY SUPPLY

Operations Data & Projects

# ENERGY SUPPLY OPERATIONAL DATA

## Energy Supply

### System Statistics

	Unit Capability output - MWn
DH-2	235
DH-1	75
Kelly CC	108
CT's	106
Grid	2 X 224
GREC	102.5

### Energy Supply - MWHrs Delivered

Source	Month	YTD	Budget YTD	Delta Budget
DH-2	-	-	281,760	(281,760)
DH-1	13,662	93,529	2,145	91,384
Kelly CC	68,822	342,087	173,874	168,213
CT's	1,053	3,320	46	3,274
Grid	35,000	231,867	32,390	199,477
GREC	10,646	66,771	242,825	(176,054)

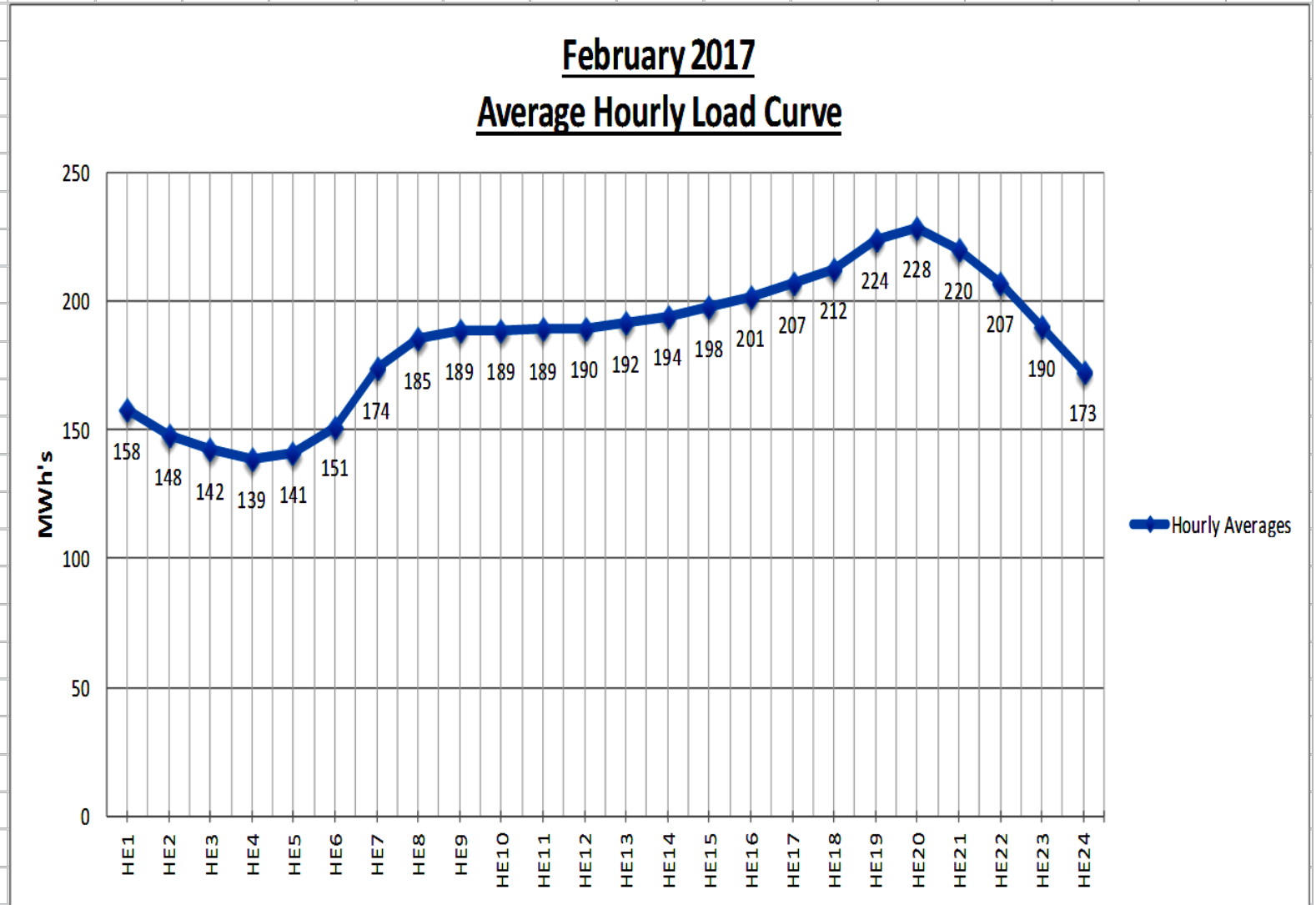
### Average Energy Distribution Curve (insert)

Curve 1 is the hourly distribution of load averages over the month (Page 13)  
Curve 2 is peak load per day (Page 14)

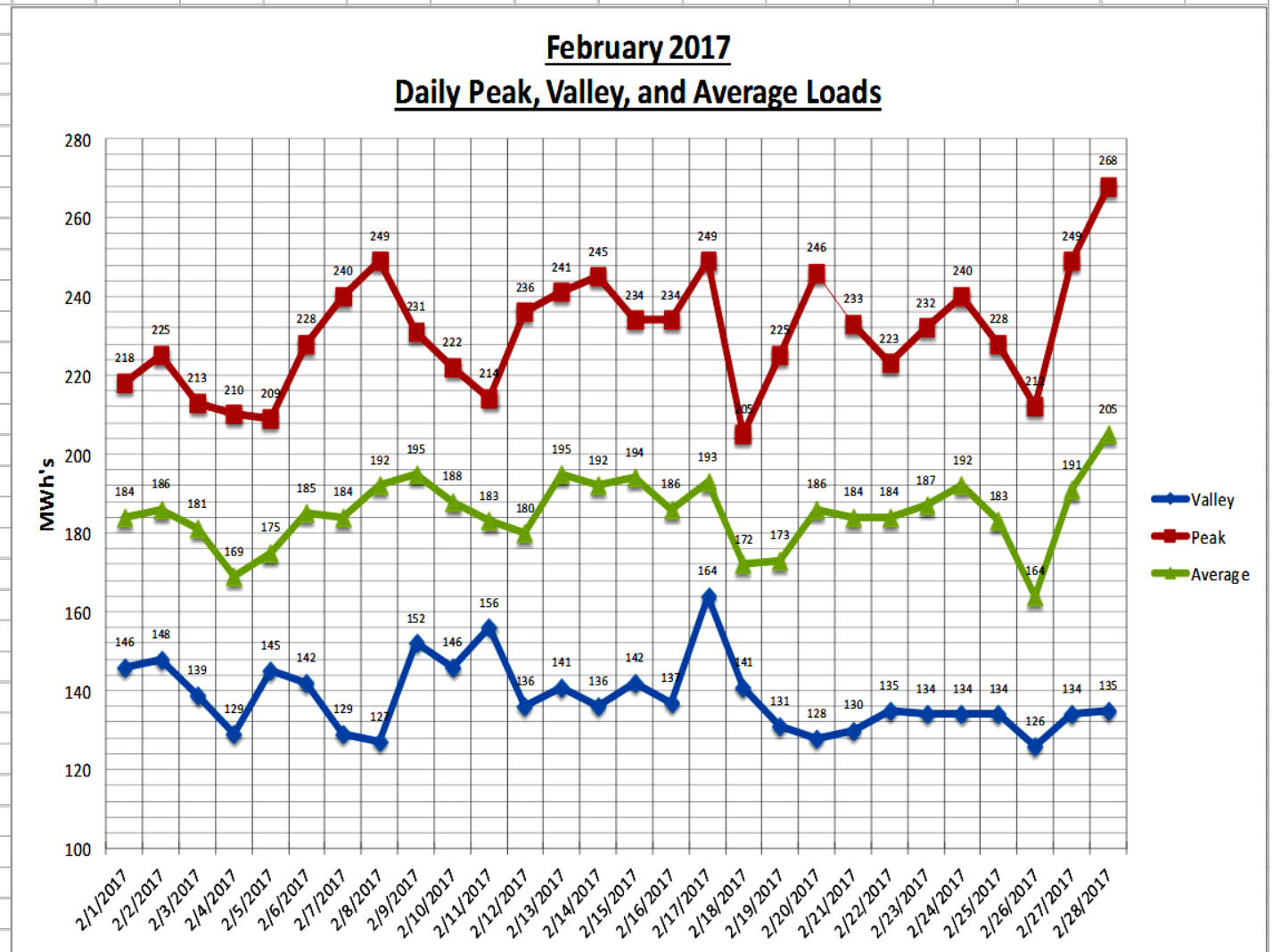
### Fuel Consumed

	Month	YTD	Budget YTD	Delta Budget
Coal - Tons	-	-	99,943	(99,943)
Gas-MCF	741,223	3,993,750	3,665,529	328,221
Fuel oil - Gal	-	2,705	-	2,705

Hour Ending	Ave. Load
HE1	158
HE2	148
HE3	142
HE4	139
HE5	141
HE6	151
HE7	174
HE8	185
HE9	189
HE10	189
HE11	189
HE12	190
HE13	192
HE14	194
HE15	198
HE16	201
HE17	207
HE18	212
HE19	224
HE20	228
HE21	220
HE22	207
HE23	190
HE24	173



Date	Valley	Peak	Ave
2/1/2017	146	218	184
2/2/2017	148	225	186
2/3/2017	139	213	181
2/4/2017	129	210	169
2/5/2017	145	209	175
2/6/2017	142	228	185
2/7/2017	129	240	184
2/8/2017	127	249	192
2/9/2017	152	231	195
2/10/2017	146	222	188
2/11/2017	156	214	183
2/12/2017	136	236	180
2/13/2017	141	241	195
2/14/2017	136	245	192
2/15/2017	142	234	194
2/16/2017	137	234	186
2/17/2017	164	249	193
2/18/2017	141	205	172
2/19/2017	131	225	173
2/20/2017	128	246	186
2/21/2017	130	233	184
2/22/2017	135	223	184
2/23/2017	134	232	187
2/24/2017	134	240	192
2/25/2017	134	228	183
2/26/2017	126	212	164
2/27/2017	134	249	191
2/28/2017	135	268	205
3/1/2017			
3/2/2017			
3/3/2017			



# ENERGY SUPPLY MAJOR PROJECTS

1. Deerhaven Unit #2 has been in Forced Outage since on 9/29/2016 following the failure of the Circulating Dry Scrubber (CDS). Current status:
  - a. Lower cone section has been completely replaced
  - b. Baghouse has been coated
  - c. Fabrication of shell sections is in progress, and all the required material from fabrication will be on site by 3/10/2017.
  - d. Construction of shell is well under way and 3 of 6 sections are completely assembled and insulated. The new shell design includes a 1/16 inch thick C-276 liner, as well as vertical stiffeners along the entire length of the shell
  - e. Coating of outlet duct will be week of 3/13/2017
  - f. If all goes as planned and scheduled the CDS construction will be complete on 3/31/2017. The fully integrated schedule supports release of the Deerhaven Unit #2 for fire in the boiler on 4/3/2017, and on line for full load potentially on 4/7/2017. This is a month ahead of the original planed date, due to a great deal of effort by the entire project team to optimize fabrication, construction, and the commissioning/testing plans.
2. South Energy Center (Phase #1) the planned outage to change out the Solar Turbine starts March 11<sup>th</sup>, and should be complete by March 19<sup>th</sup>. This is a complete exchange of current turbine with a refurbished turbine.

STATE OF THE UTILITY

Environmental Permitting

&

Compliance

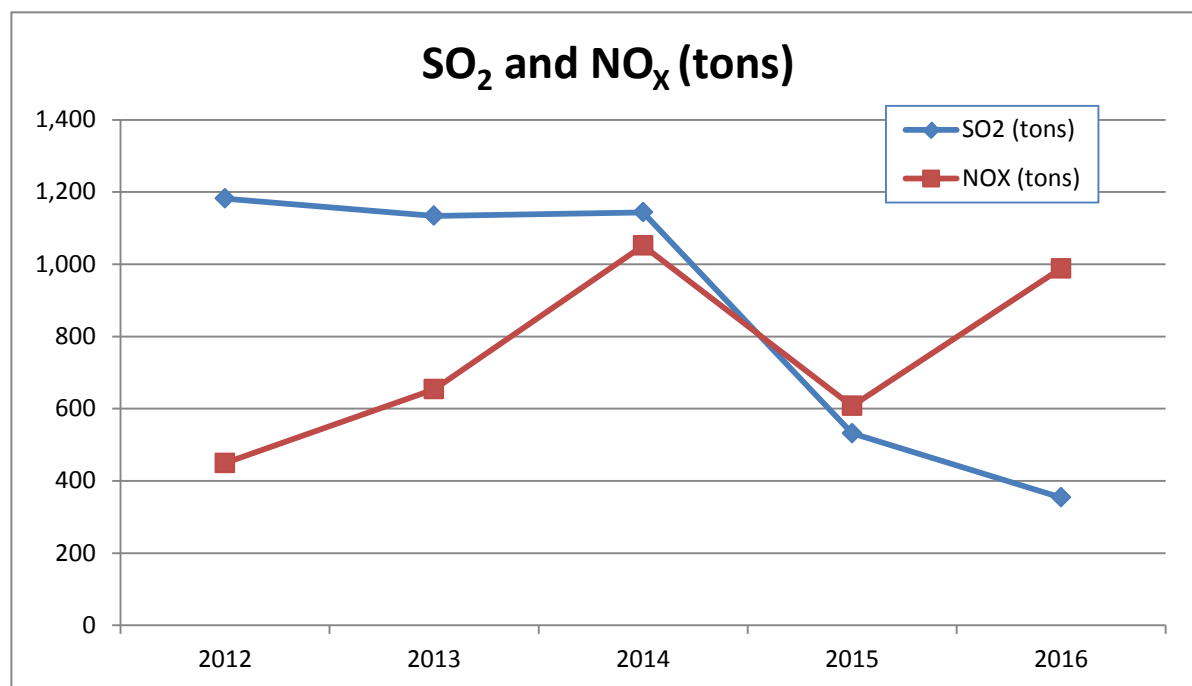


## ENVIRONMENTAL PERMITTING & COMPLIANCE

### Yearly Emissions

	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)
2012	1,182	450	8.95	125	1,317,603
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	988	2.92	29	1,217,939

2016 Mercury and particulate values are for Unit 2 only. The other units' values are not available yet.

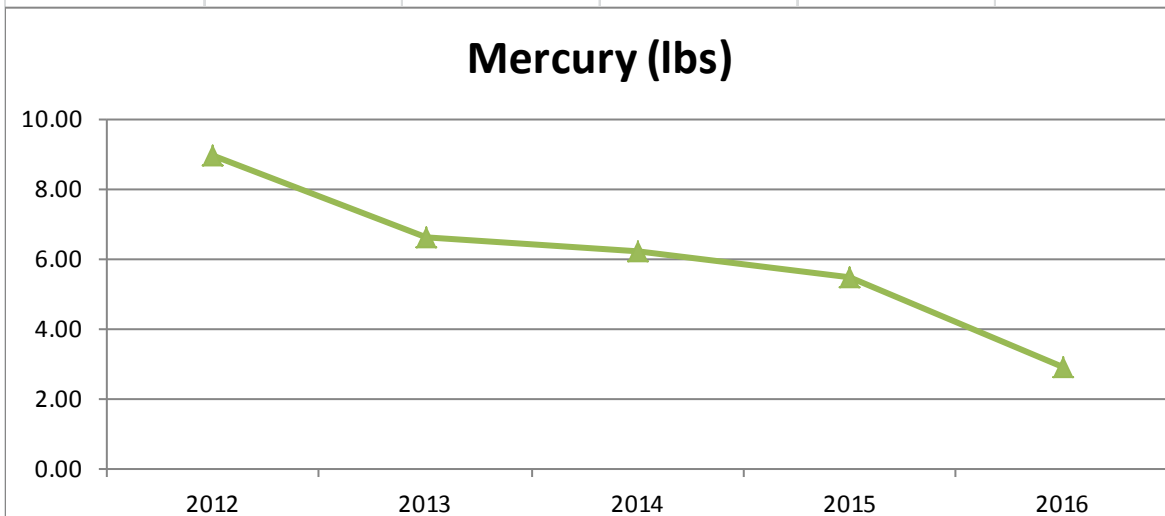
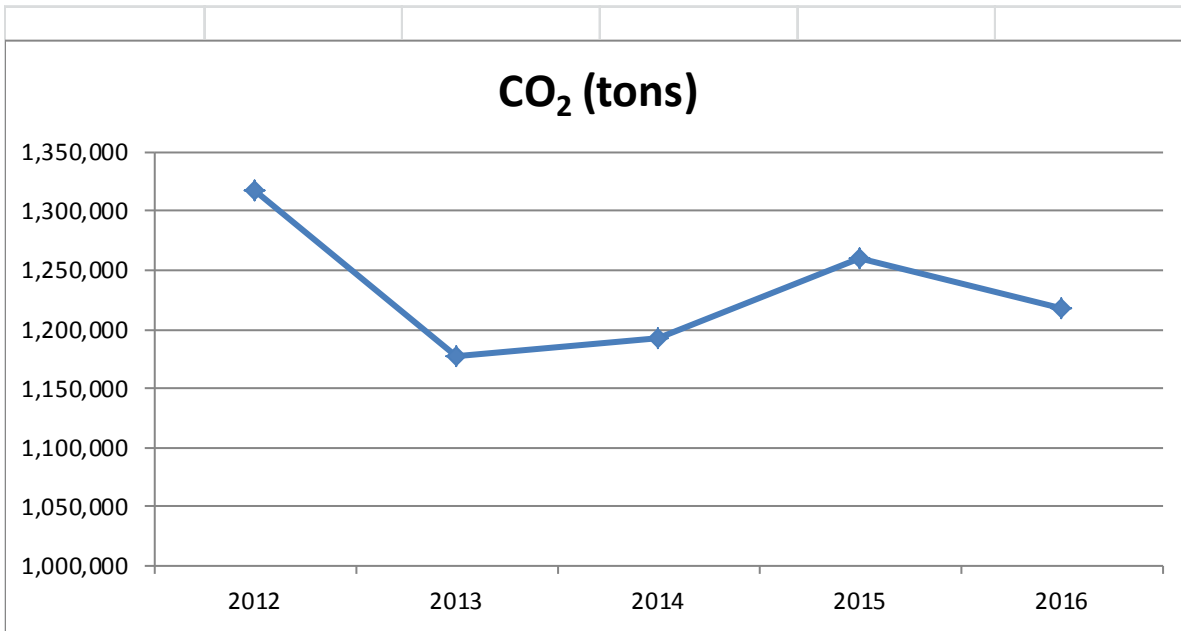


SO<sub>2</sub> was lower in 2015 and 2016 due to higher removal rate settings to assure compliance with the MATS Rule.

NO<sub>x</sub> was higher in 2016 since it was more cost effective to use allowances than increase SCR removal rate.

## ENVIRONMENTAL PERMITTING & COMPLIANCE

### Yearly Emissions

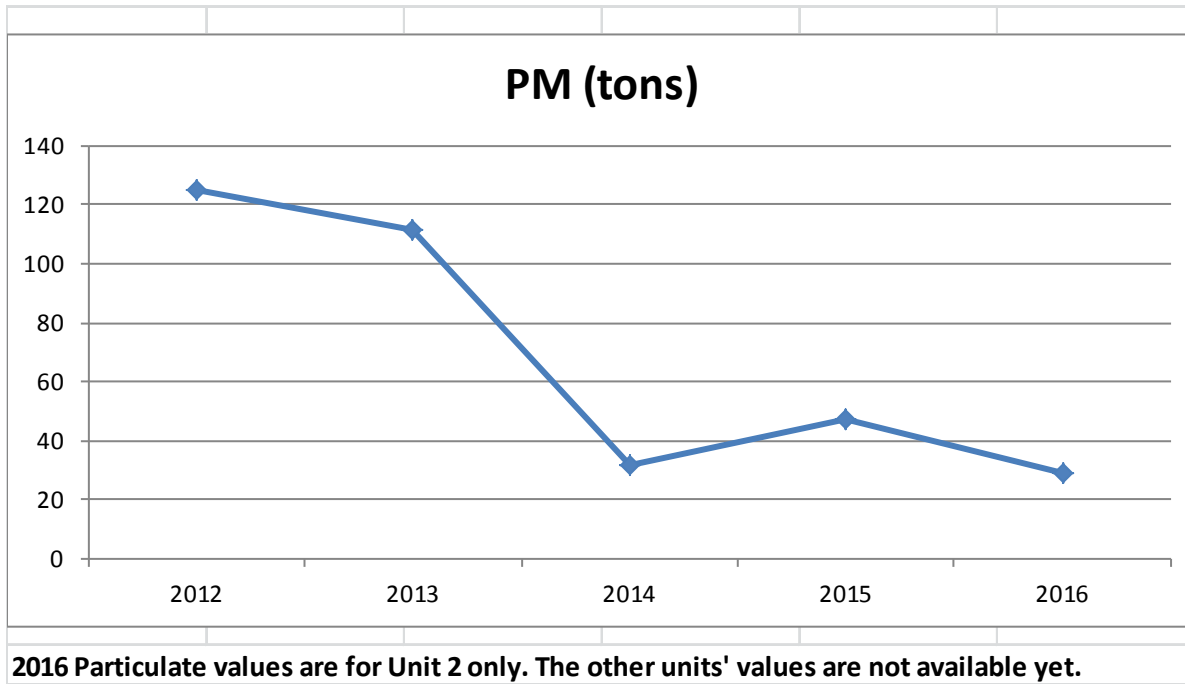


**2016 Mercury values are for Unit 2 only. The other units' values are not available yet.**

**Mercury was lower in 2015 and 2016 due to higher removal rate settings to assure compliance with the MATS Rule.**

## ENVIRONMENTAL PERMITTING & COMPLIANCE

### Yearly Emissions



# **YEARLY EMISSIONS - 5 YEAR COMPARISON**

YEARLY EMISSIONS - 5 YEAR COMPARISON								
Mass Emissions								
		SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	HTIP (MMBtu)	GEN (MW-hours)
Feb. 2013		31.0	33.6			66,154	867,547	83,142
Feb. 2014		76.1	63.6			72,230	806,578	82,883
Feb. 2015		40.0	53.0			91,088	939,026	104,383
Feb. 2016		27.9	111.9	0.1	2.9	98,204	1,212,233	141,425
Feb. 2017		0.3	20.4	0.0	0.0	44,282	745,096	84,786
		SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	HTIP (MMBtu)	GEN (MW-hours)
Feb. 2013	DH1	0.0	10.0			7,919.4	133,246.0	11,494.0
	DH2	30.8	18.2			35,002.3	343,411.0	40,168.0
	DHCT3	0.1	0.3			565.5	9,465.0	719.0
	JRKCC1	0.1	5.1			22,666.7	381,425.0	30,761.0
	<b>TOTAL</b>	31.0	33.6	0.000	0.00	66,153.9	867,547.0	83,142.0
		SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	HTIP (MMBtu)	GEN (MW-hours)
Feb. 2014	DH1	0.0	0.9			664.0	11,172.0	897.0
	DH2	75.4	59.7			57,857.2	565,157.0	55,010.0
	DHCT3	0.2	0.1			501.9	8,327.0	626.0
	JRKCC1	0.5	2.9			13,207.0	221,922.0	26,350.0
	<b>TOTAL</b>	76.1	63.6	0.000	0.00	72,230.1	806,578.0	82,883.0
		SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	HTIP (MMBtu)	GEN (MW-hours)
Feb. 2015	DH1	5.0	5.2			3,366.6	53,074.0	4,845.0
	DH2	35.0	46.6			83,481.5	814,610.0	91,515.0
	DHCT3	0.0	0.4			761.2	12,809.0	919.0
	JRKCC1	0.0	0.8			3,478.8	58,533.0	7,104.0
	<b>TOTAL</b>	40.0	53.0	0.000	0.00	91,088.1	939,026.0	104,383.0
		SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	HTIP (MMBtu)	GEN (MW-hours)
Feb. 2016	DH1	0.0	0.6			553.2	9,306.0	791.0
	DH2	27.7	103.9	0.14	2.92	62,173.3	605,968.0	68,200.0
	DHCT3	0.0	0.0			0.0	0.0	0.0
	JRKCC1	0.2	7.4			35,477.0	596,959.0	72,434.0
	<b>TOTAL</b>	27.9	111.9	0.140	2.92	98,203.5	1,212,233.0	141,425.0
		SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	HTIP (MMBtu)	GEN (MW-hours)
Feb. 2017	DH1	0.1	12.9			11,274.8	189,711.0	15,263.0
	DH2	0.0	0.0	0.000	0.000	0.0	0.0	0.0
	DHCT3	0.0	0.2			933.4	15,707.0	1,073.0
	JRKCC1	0.2	7.3			32,073.3	539,678.0	68,450.0
	<b>TOTAL</b>	0.3	20.4	0.000	0.0	44,281.5	745,096.0	84,786.0

STATE OF THE UTILITY

WATER/WASTEWATER

Operations Data & Projects

# Water/Wastewater Monthly Dashboard

Production						
Murphree Water Treatment Plant						
		February 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	22.1	22.7	30	76%	
	Peak Daily Flow	24.2	27.2	54	-	
Main Street Water Reclamation Facility						
		February 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)		Status
	Average Daily Flow	5.3	5.7	7.5		
Knapaha Water Reclamation Facility						
		February 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)		Status
	Average Daily Flow	10.8	10.7	14.9		
Water Reclamation Facilities (Combined)						
		February 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	16.1	16.4	22.4	73%	
Maintenance						
Wastewater Collections						
		Feb. 2017 (Miles)		FYTD	Monthly Goal (miles)	
	Miles of gravity mains cleaned	6.2	33.2	7.5		
	Miles of gravity mains TV inspected	7.8	35.2	7.5		
Water Distribution & Wastewater Collections						
		Feb. 2017		FYTD		
	Work orders, service orders completed	1350	6216			
Major Water/Wastewater Projects						

Electrical System Upgrade at MWTP - Preparing the Notice to Proceed for General Contractor  
 Manhole Lining  
 Gravity Sewer Lining  
 Galvanized Steel Pipe Replacements  
 Lift Station 93 Rehabilitation - Complete

## Water/Wastewater By the Numbers

Water/Wastewater Systems serves 189,000 people by operating and maintaining the following:

- 1 water treatment plant serving the community
- 1141 miles of water distribution mains
- 24,260 water valves
- 5,800 fire hydrants
- 2 water reclamation facilities (wastewater treatment plants)
- 770 miles of wastewater collection mains
- 168 lift stations pumping wastewater
- 28 reclaimed water mains
- 15,228 manholes