

# STATE OF THE UTILITY

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# OPERATIONS SUMMARY

CORPORATE SAFETY

ENVIRONMENTAL

REGULATORY

PERSONNEL

August 2017						
Safety			Employees			
	Current Month			Year to Date		
	First Aid	Recordable	DART	First Aid	Recordable	DART
Administration	0	0	0	0	0	0
WWW Systems	0	1	1	1	6	2
Energy Supply	0	0	0	2	1	1
Energy Delivery - Electric/Gas	1	0	0	2	10	5
GRUCom	0	0	0	0	0	0
<b>Totals</b>		1			17	
			Vehicles			
	Current Month			Year to Date		
	Miles Driven	Recordable	Preventable	Miles Driven	Recordable	Preventable
Administration	13,201	0	0	158,547	1	1
WWW Systems	88,140	1	1	851,843	8	3
Energy Supply	48,927	0	0	106,906	0	0
Energy Delivery - Electric/Gas	119,028	0	0	1,225,621	12	4
GRUCom	10,629	0	0	103,758	1	0
<b>Totals</b>	279,925	1		2,446,675	22	
Environmental						
		Current Month		Calendar Year to Date		
Notices of Violation		0		0		
Emissions						
DH1, DH2, DHCT3, JRKCC1						
	CO <sub>2</sub> (tons)	156,246		699,085		
	NO <sub>x</sub> (tons)	203		795		
	SO <sub>2</sub> (tons)	64.3		222.5		
DH Unit 2 (only)						
	PM <sub>FLT</sub> (tons)	5		20		
	Hg (lbs)	0.30		1.54		
Regulatory						
NERC		Current Month		Year to Date		
Notice of Violations		0		0		
Self Reports/Potential Violations		1		1		
Personnel						
	AUTHORIZED_FTE	FILLED_FTE	VACANCY			
GRU-Administration/ Community Relations	4.00	4.00	-			
GRU-Administration/ Elect Reliability Compliance	2.00	2.00	-			
GRU-Administration/ General Manager	9.00	8.00	1.00			
GRU-Administration/ Legal Services	1.00	1.00	-			
GRU-Customer Support Services	121.25	108.50	12.75			
GRU-Customer Support Services/ Business Services	6.00	5.00	1.00			
GRU-Customer Support Services/ Communications	5.00	5.00	-			
GRU-Energy Delivery	265.00	241.00	24.00			
GRU-Energy Supply	150.00	140.00	10.00			
GRU-Energy Supply/ District Energy	10.00	11.00	(1.00)			
GRU-Energy Supply/ Electric Environmental Permitting Compliance	4.00	4.00	-			
GRU-Finance	29.50	27.00	2.50			
GRU-GRUCom	39.00	32.00	7.00			
GRU-Information Technology	63.00	52.00	11.00			
GRU-Water/ Wastewater	169.00	156.00	13.00			
<b>Grand Total</b>	<b>877.75</b>	<b>796.50</b>	<b>81.25</b>			

# CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

# Customer Operations Metrics Summary August 2017

<b>Active Accounts</b>	Aug-17	YTD Gain/Loss	FY16
<i>Residential Contract Accounts</i>			
Total	89,986	1,121	88,865
Electric	82,606	(68)	82,674
Gas	33,061	262	32,799
Water	62,607	438	62,169
Wastewater	58,599	448	58,151
Telecomm	138	(15)	153

<b>Active Accounts</b>	Aug-17	YTD Gain/Loss	FY16
<i>Nonresidential Contract Accounts</i>			
Total	13,469	(124)	13,593
Electric	10,911	(123)	11,034
Gas	1,607	(13)	1,620
Water	5,879	26	5,853
Wastewater	4,642	38	4,604
Telecomm	348	34	314

<b>New Installations</b>	Aug-17	FY17 To Date	FY16
Electric	92	1508	1,638
Gas	55	395	589
Water	58	499	756
Wastewater	65	501	485
Telecomm	19	212	248

<b>Residential Disconnects</b>	Aug-17	FY17 To Date	FY16
Volume	1,250	13,619	14,593
Average Balance	\$258.01	\$244.90	\$247.00

<b>Call Center Volume</b>	Aug-17	FY17 To Date	FY16
Average Speed of Answer	0:07:58	0:04:30	0:07:04
CSR Calls	11,898	138,716	235,951
CSR Callbacks	5,450	16,368	15,571
IVR Self Service	28,032	234,913	318,483
Total	39,930	373,629	554,434
IVR/Total	70%	63%	56%

<b>Revenue Assurance</b>	Aug-17	FY17 To Date	FY16
Referred to Collections	\$146,916.81	\$2,031,026.51	\$1,461,488.40
Recovered	\$75,443.38	\$601,486.68	\$361,420.79

<b>Bills Generated</b>	Aug-17	FY17 To Date	FY16
Paper Bills	117,962	1,143,234	1,300,894
eBills	17,013	177,161	179,960
Total	134,975	1,320,395	1,480,854
eBill/Total	13%	13%	12%

<b>Service Orders</b>	Aug-17	FY17 To Date	FY16
Move Ins	23,951	109,261	137,265
Move Outs	22,029	110,355	132,836

<b>Payment Arrangements</b>	Aug-17	FY17 To Date	FY16
Total	9,546	87,115	97,287

<b>Average Res Bill Amounts</b>	Aug-17	FY17 To Date	FY16
Electric (kWh)	905	770	840
Electric (\$)	\$113.55	\$113.15	\$126.96
Gas (Therms)	8	17	18
Gas (\$)	\$20.43	\$29.32	\$29.61
Water (kGals)	4	5	4
Water (\$)	\$27.78	\$31.59	\$27.47
Wastewater (kGals)	4	5	6
Wastewater(\$)	\$33.67	\$37.98	\$41.13

# ENERGY DELIVERY

ELECTRIC T&D  
SYSTEM RELIABILITY  
GAS

# ENERGY SUPPLY

SYSTEM STATISTICS

ENERGY DISTRIBUTION

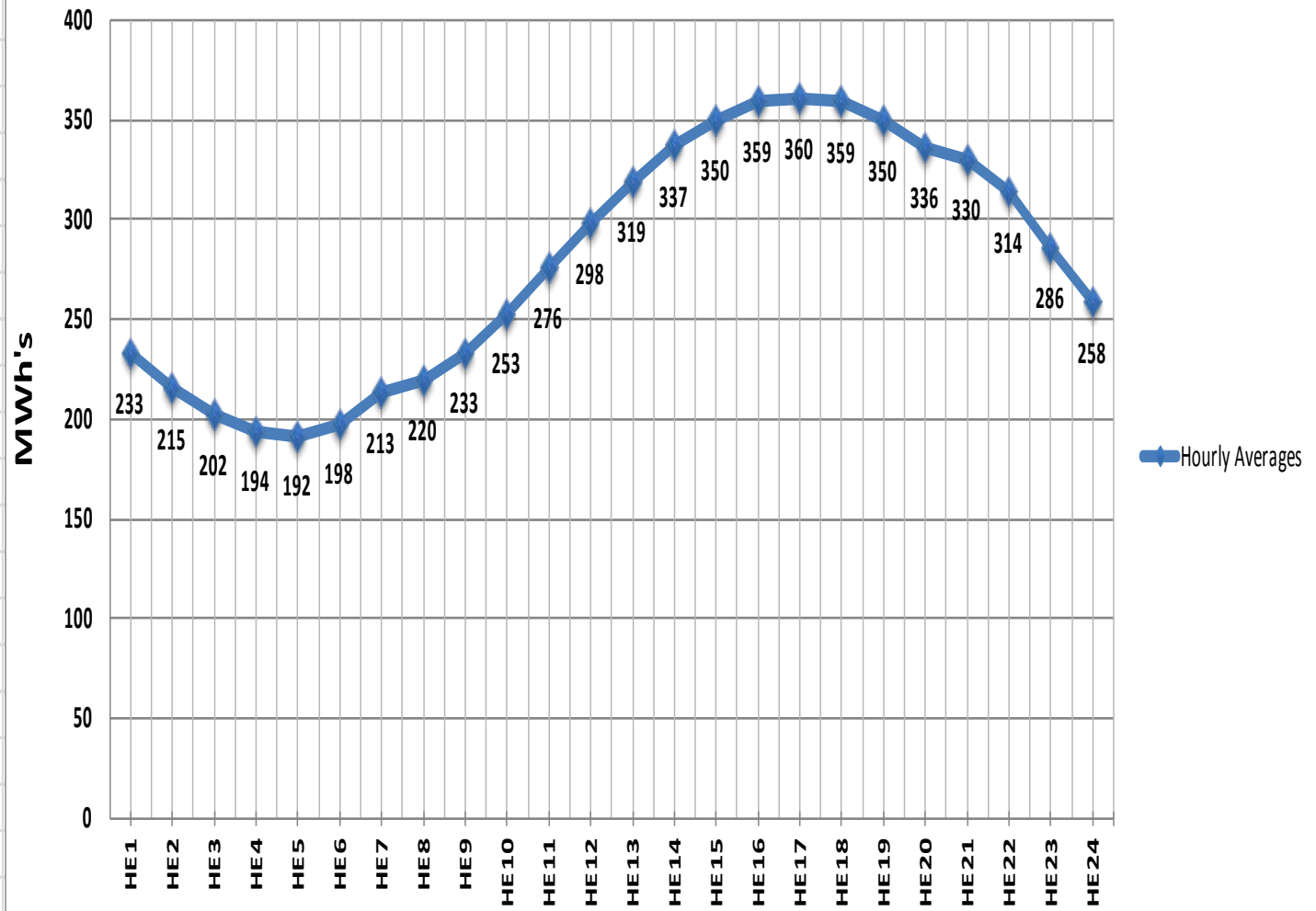
FUEL

Energy Supply - August 2017					
System Statistics					
		Unit Capability output - MWn			
	DH-2	228			
	DH-1	75			
	Kelly CC	108			
	CT's	106			
	Grid	2 X 224			
	GREC	102.5			
Energy Supply - MWHrs Delivered					
		Month	YTD	Budget YTD	Delta Budget
Source					
	DH-2	83,432	296,730	715,828	(419,098)
	DH-1	18,339	205,775	77,906	127,869
	Kelly CC	77,585	691,445	808,621	(117,176)
	CT's	203	7,228	670	6,558
	Grid	27,683	383,486	157,451	226,035
	GREC	-	202,747	37,012	165,735
Average Energy Distribution Curve					
Curve 1 is the hourly distribution of load averages over the month					
Curve 2 is peak load per day					



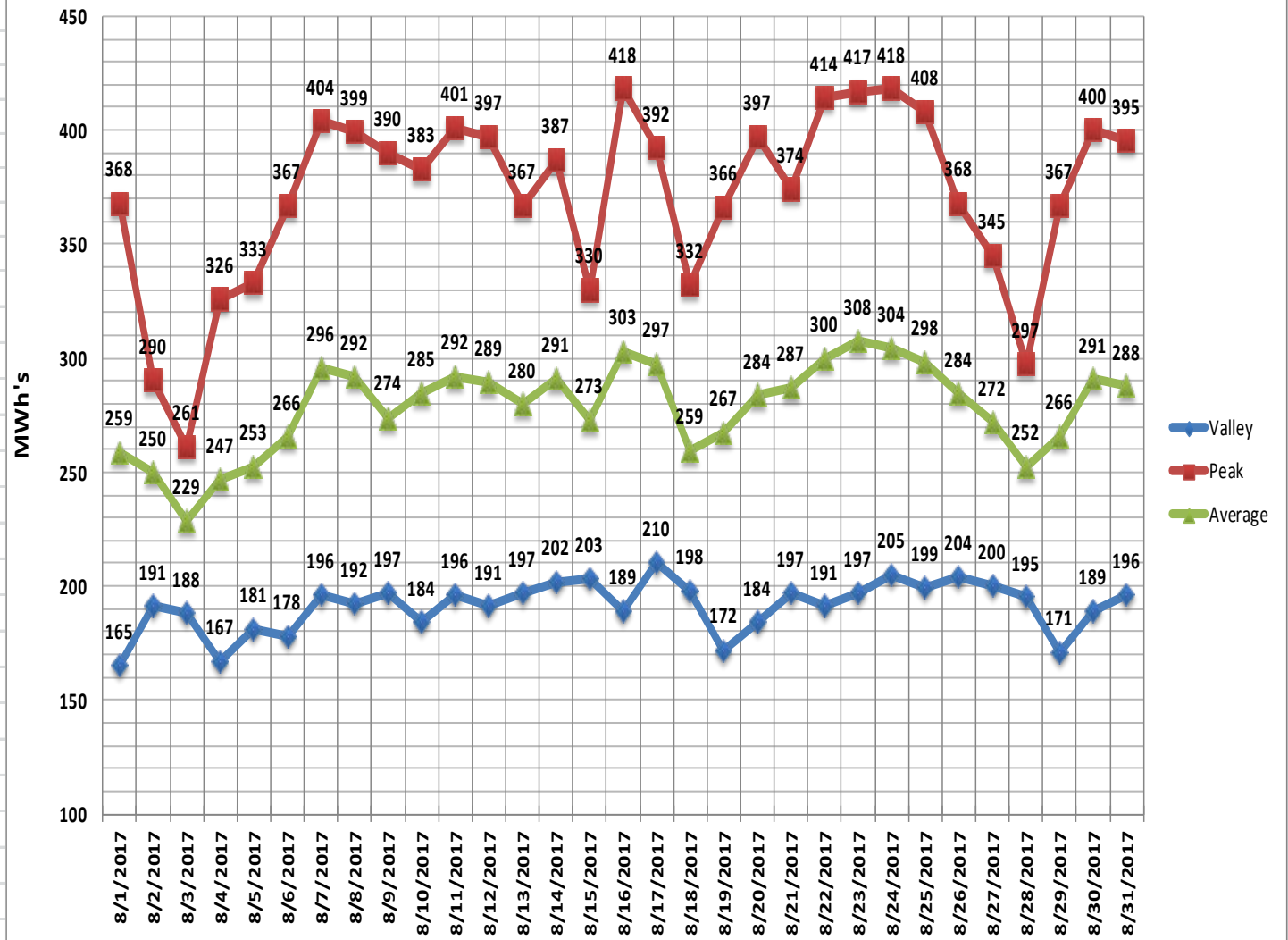
Hour Ending	Ave. Load
HE1	233
HE2	215
HE3	202
HE4	194
HE5	192
HE6	198
HE7	213
HE8	220
HE9	233
HE10	253
HE11	276
HE12	298
HE13	319
HE14	337
HE15	350
HE16	359
HE17	360
HE18	359
HE19	350
HE20	336
HE21	330
HE22	314
HE23	286
HE24	258

**August 2017**  
**Average Hourly Load Curve**



Date	Valley	Peak	Ave
8/1/2017	165	368	259
8/2/2017	191	290	250
8/3/2017	188	261	229
8/4/2017	167	326	247
8/5/2017	181	333	253
8/6/2017	178	367	266
8/7/2017	196	404	296
8/8/2017	192	399	292
8/9/2017	197	390	274
8/10/2017	184	383	285
8/11/2017	196	401	292
8/12/2017	191	397	289
8/13/2017	197	367	280
8/14/2017	202	387	291
8/15/2017	203	330	273
8/16/2017	189	418	303
8/17/2017	210	392	297
8/18/2017	198	332	259
8/19/2017	172	366	267
8/20/2017	184	397	284
8/21/2017	197	374	287
8/22/2017	191	414	300
8/23/2017	197	417	308
8/24/2017	205	418	304
8/25/2017	199	408	298
8/26/2017	204	368	284
8/27/2017	200	345	272
8/28/2017	195	297	252
8/29/2017	171	367	266
8/30/2017	189	400	291
8/31/2017	196	395	288

### August 2017 Daily Peak, Valley, and Average Loads



# ENVIRONMENTAL PERMITTING

## Emissions Data

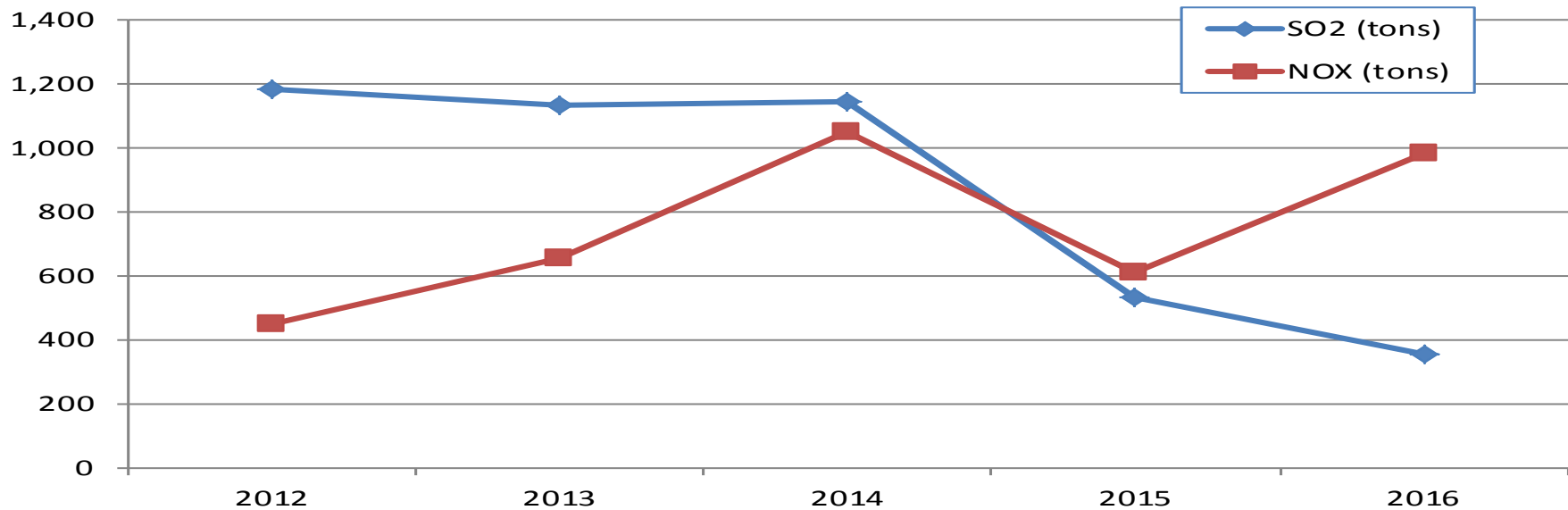
### Yearly Emissions - 5 Years

	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	984	2.92	29	1,216,690

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

### Yearly Emissions - 5 Years

#### SO<sub>2</sub> and NO<sub>x</sub> (tons)

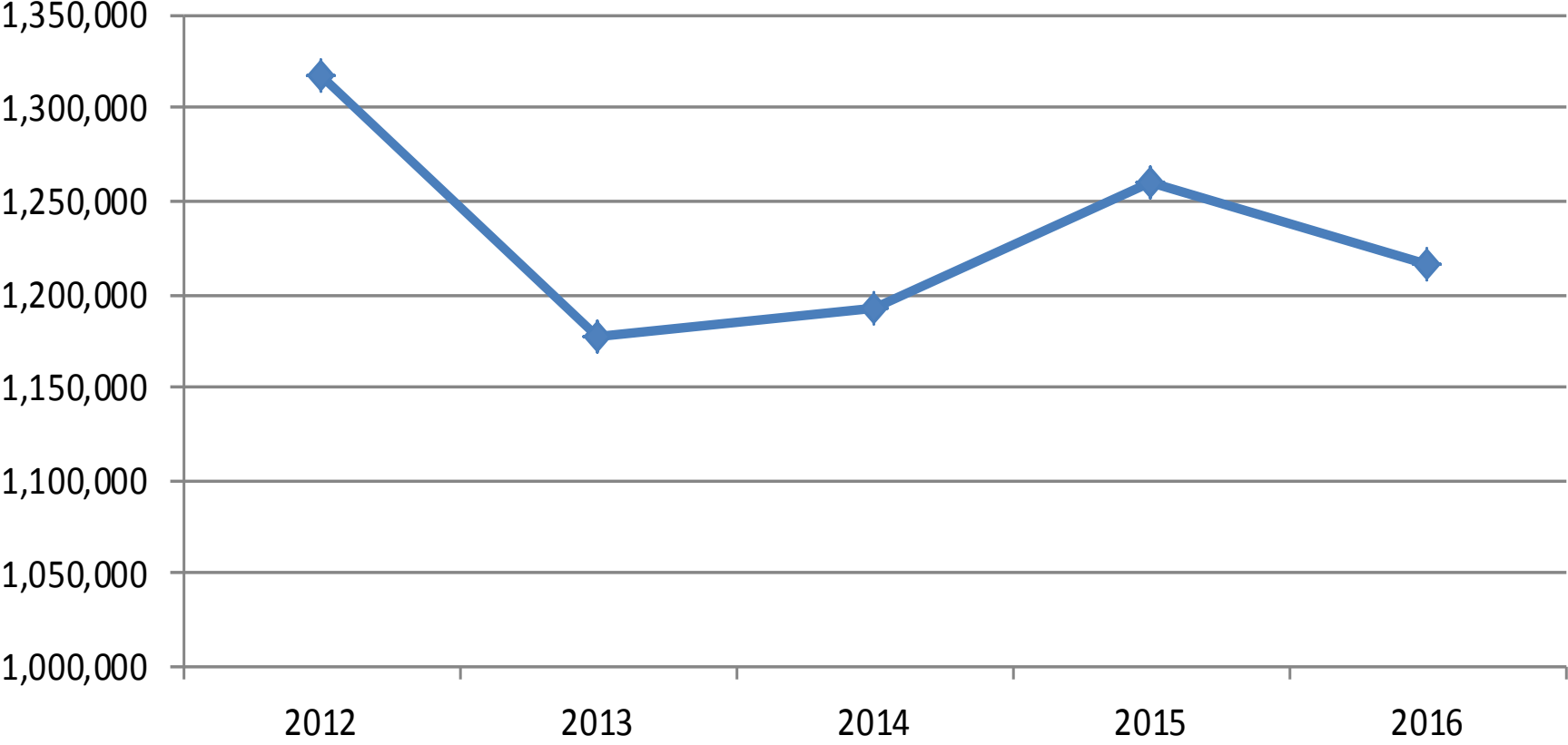


SO<sub>2</sub> was lower in 2015 and 2016 due to higher removal rate settings to assure compliance with the MATS Rule.

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

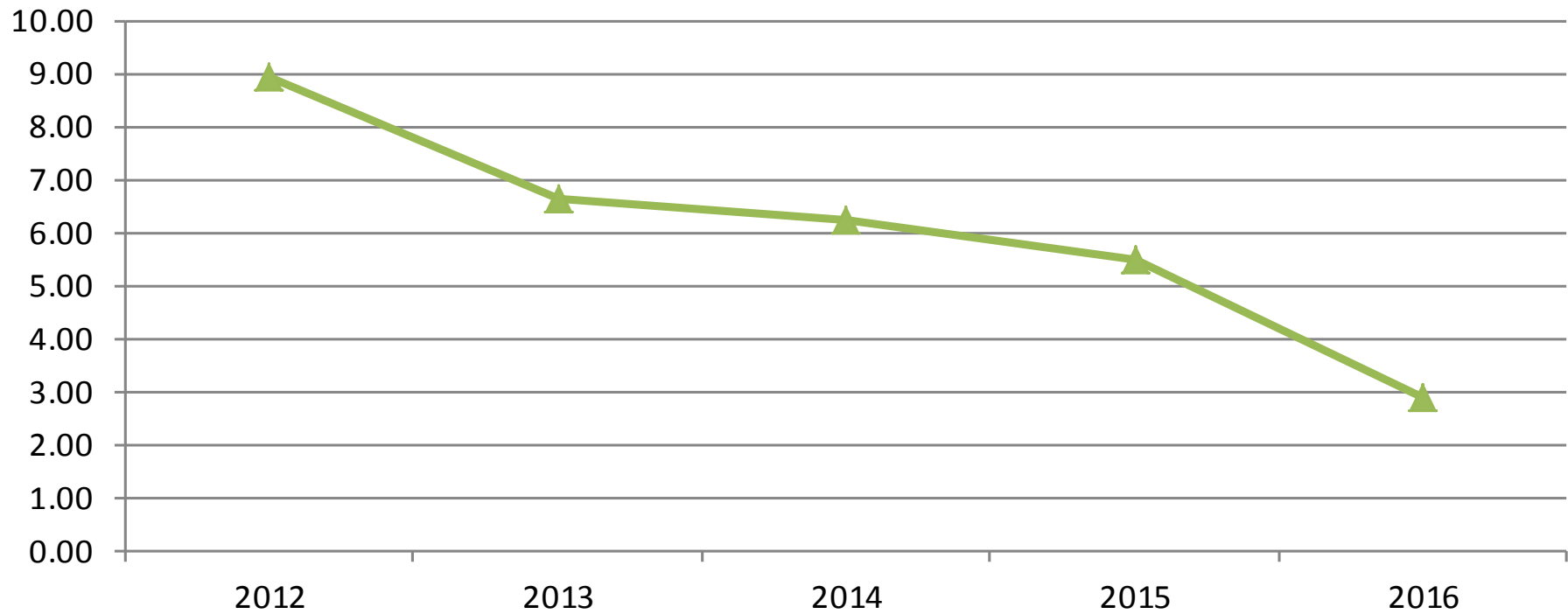
# Yearly Emissions - 5 Years

## CO<sub>2</sub> (tons)



## Yearly Emissions - 5 Years

### Mercury (lbs)

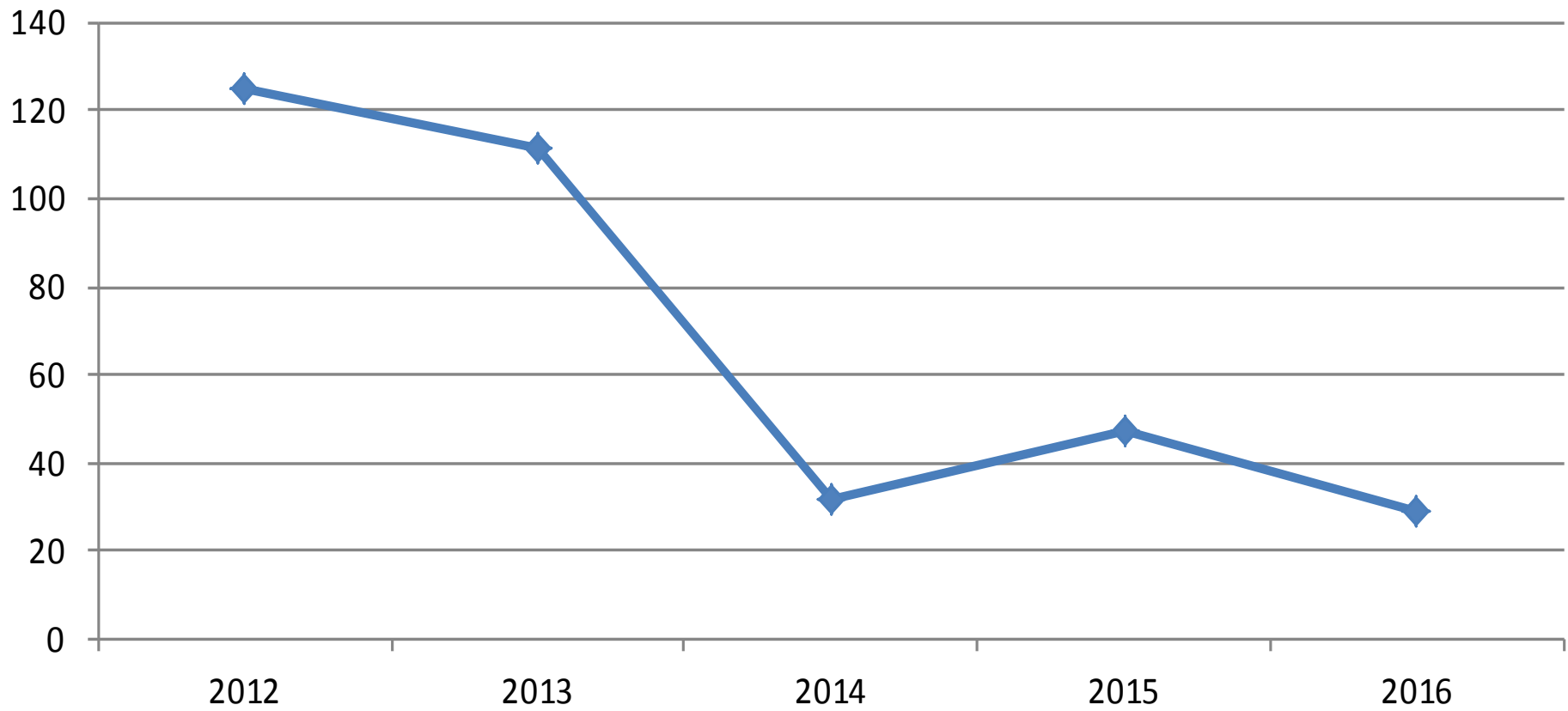


**2016 Mercury values are for Unit 2 only. The other units' values are not available yet.**

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

## Yearly Emissions - 5 Years

### PM (tons)



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

**Mass Emissions - 5 Year Comparison**

		<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>
August. 2013		75.5	70.3			142,070	1,647,017	156,179
August. 2014		101.2	88.2			127,721	1,428,174	139,745
August. 2015		79.0	42.7	0.5	9.0	149,431	1,720,729	181,484
August. 2016		48.1	95.3	0.3	5.1	140,522	1,738,254	180,442
August. 2017		64.3	202.8	0.3	5.1	156,246	1,919,408	194,632
August. 2013		<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	0.0	0.3			351.9	5,925.0	426.0
	DH2	75.2	62.5			105,012.8	1,023,517.0	105,497.0
	DHCT3	0.1	0.2			503.1	8,392.0	651.0
	JRKCC1	0.2	7.3			36,202.6	609,183.0	49,605.0
	<b>TOTAL</b>	<b>75.5</b>	<b>70.3</b>	<b>0.000</b>	<b>0.00</b>	<b>142,070.4</b>	<b>1,647,017.0</b>	<b>156,179.0</b>
August. 2014		<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	2.6	5.7			4,481.0	73,553.0	6,990.0
	DH2	98.5	74.7			101,770.5	993,350.0	92,351.0
	DHCT3	0.0	0.3			1,389.9	23,388.0	1,788.0
	JRKCC1	0.1	7.5			20,079.6	337,883.0	38,616.0
	<b>TOTAL</b>	<b>101.2</b>	<b>88.2</b>	<b>0.000</b>	<b>0.00</b>	<b>127,721.0</b>	<b>1,428,174.0</b>	<b>139,745.0</b>
August. 2015		<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	13.9			13,316.3	224,073.0	21,009.0
	DH2	78.8	24.1	0.52	9.03	112,122.6	1,092,938.0	112,425.0
	DHCT3	0.0	0.0			194.2	3,267.0	258.0
	JRKCC1	0.1	4.7			23,798.0	400,451.0	47,792.0
	<b>TOTAL</b>	<b>79.0</b>	<b>42.7</b>	<b>0.520</b>	<b>9.03</b>	<b>149,431.1</b>	<b>1,720,729.0</b>	<b>181,484.0</b>
August. 2016		<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	15.8			14,796.6	249,002.0	20,900.0
	DH2	47.8	71.6	0.31	5.12	88,472.0	862,388.0	82,058.0
	DHCT3	0.0	0.0			0.0	0.0	0.0
	JRKCC1	0.2	7.9			37,253.3	626,864.0	77,484.0
	<b>TOTAL</b>	<b>48.1</b>	<b>95.3</b>	<b>0.305</b>	<b>5.12</b>	<b>140,521.9</b>	<b>1,738,254.0</b>	<b>180,442.0</b>
August. 2017		<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	1.0	16.5			15,346.0	258,062.0	20,468.0
	DH2	63.1	179.1	0.315	5.133	100,319.0	978,482.0	96,875.0
	DHCT3	0.0	0.1			188.0	3,164.0	213.0
	JRKCC1	0.2	7.1			40,393.0	679,700.0	77,076.0
	<b>TOTAL</b>	<b>64.3</b>	<b>202.8</b>	<b>0.315</b>	<b>5.1</b>	<b>156,246.0</b>	<b>1,919,408.0</b>	<b>194,632.0</b>



**Mass Emissions Rate - 5 Years per MWh**

		SO <sub>2</sub> lbs per MW-hr net	NO <sub>x</sub> lbs per MW-hr net	Hg lbs per MW-hr net	PM lbs per MW-hr net	CO <sub>2</sub> tons per MW-hr net	HTIP (MMBtu)	GEN (Net MW-hours)
August. 2013								
	DH1	0.00000	1.40845			0.82606	5,925.0	426.0
	DH2	1.42563	1.18487			0.99541	1,023,517.0	105,497.0
	DHCT3	0.30722	0.61444			0.77281	8,392.0	651.0
	JRKCC1	0.00806	0.29433			0.72982	609,183.0	49,605.0
August. 2014								
	DH1	0.74392	1.63090			0.64106	73,553.0	6,990.0
	DH2	2.13317	1.61774			1.10200	993,350.0	92,351.0
	DHCT3	0.00000	0.33557			0.77735	23,388.0	1,788.0
	JRKCC1	0.00518	0.38844			0.51998	337,883.0	38,616.0
August. 2015								
	DH1	0.00952	1.32324			0.63384	224,073.0	21,009.0
	DH2	1.40182	0.42873			0.99731	1,092,938.0	112,425.0
	DHCT3	0.00000	0.00000			0.75271	3,267.0	258.0
	JRKCC1	0.00418	0.19669			0.49795	400,451.0	47,792.0
August. 2016								
	DH1	0.00957	1.51196			0.70797	249,002.0	20,900.0
	DH2	1.16503	1.74511	0.000004	0.125	1.07816	862,388.0	82,058.0
	DHCT3	0.00000	0.00000			0.00000	0.0	0.0
	JRKCC1	0.00516	0.20391			0.48079	626,864.0	77,484.0
August. 2017								
	DH1	0.09771	1.61227			0.74976	258,062.0	20,468.0
	DH2	1.30271	3.69755	0.000003	0.106	1.03555	978,482.0	96,875.0
	DHCT3	0.00000	0.93897			0.88263	3,164.0	213.0
	JRKCC1	0.00519	0.18423			0.52407	679,700.0	77,076.0

## 2016 Emissions

	<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>NO<sub>x</sub> Rate (lb/mmBtu)</b>	<b>HTIP (mmBtu)</b>	<b>MW-hours</b>
DH1	2.7	161.4	NA	NA	139,749.8	0.1340	2,349,851.0	202,123.0
DH2	349.5	737.6	2.917	29.3	683,555.8	0.2320	6,664,325.0	675,645.0
DHCT3	0.0	1.2	NA	NA	4,737.4	0.0420	79,720.0	6,062.0
JRKCC1	2.0	83.8	NA	NA	388,646.5	0.0260	6,539,729.0	796,347.0
<b>TOTAL</b>	<b>354.2</b>	<b>984.0</b>	<b>2.917</b>	<b>29.3</b>	<b>1,216,689.5</b>	<b>0.434</b>	<b>15,633,625.0</b>	<b>1,680,177.0</b>

## 2016 Emissions per Net MWh

	<b>SO<sub>2</sub> lbs/MW-hr</b>	<b>NO<sub>x</sub> lbs/MW-hr</b>	<b>Mercury (lbs)</b>	<b>PM (lbs)</b>	<b>CO<sub>2</sub> tons per MW-hr</b>
DH1	0.02672	1.59705	NA	NA	0.69141
DH2	1.03457	2.18340	0.00000432	0.08682	1.01171
DHCT3	0.00000	0.39591	0.000		0.78149
JRKCC1	0.00502	0.21046	0.000	NA	0.488

**2017 (Jan-August)**

	<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>SO<sub>2</sub> Rate (lb/MMBtu)</b>	<b>NO<sub>x</sub> Rate (lb/MMBtu)</b>	<b>HTIP (MMBtu)</b>	<b>GEN (MW-hours)</b>
DH1	8.4	128.0			116,675.2			1,959,737.0	166,227.0
DH2	212.9	618.5	1.5	20.43	350,719.9			3,425,714.0	346,593.0
DHCT3	0.0	1.2			5,046.7			84,904.0	6,206.0
JRKCC1	1.2	47.2			226,643.4			3,813,738.0	463,287.0
<b>TOTAL</b>	<b>222.5</b>	<b>794.9</b>	<b>1.543</b>	<b>20.4</b>	<b>699,085.2</b>			<b>9,284,093.0</b>	<b>982,313.0</b>

Note: DH1 SO2 value is lower than previous listed in April, May and June due to receiving the actual analytical sulfur value and recalculating using this new value verses substituted data.

**2017 (Jan-August) Emissions per MWh**

	<b>SO<sub>2</sub> lbs/MW-hr</b>	<b>NO<sub>x</sub> lbs/MW-hr</b>	<b>Mercury (lbs)</b>	<b>PM (lbs)</b>	<b>CO<sub>2</sub> tons/MW-hr</b>	<b>SO<sub>2</sub> Rate (lb/MMBtu)</b>	<b>NO<sub>x</sub> Rate (lb/MMBtu)</b>	<b>HTIP (MMBtu)</b>	<b>GEN (MW-hours)</b>
DH1	0.10107	1.54006			0.70190			1,959,737.0	166,227.0
DH2	1.22853	3.56903	0.00000	0.11786	1.01191			3,425,714.0	346,593.0
DHCT3	0.00000	0.38672			0.81320			84,904.0	6,206.0
JRKCC1	0.00518	0.20376			0.48921			3,813,738.0	463,287.0

NOTE- Mercury and PM data is not available yet for DH1, CT3 and CC1.



# LEGAL FEES

YEAR-to-DATE

## August 2017 YTD

<b>VENDOR</b>	<b>Specialty</b>	<b>FY17 Year-to-Date</b>
HOPPING GREEN & SAMS	Environment	\$ 39,351.53
ORRICK HERRINGTON	Former Bond Counsel	\$ 17,641.40
HOLLAND & KNIGHT	Current Bond Counsel	\$ 20,450.00
BRYANT MILLER OLIVE	Current Disclosure Counsel	\$ 23,323.30
BROAD & CASSEL	Former Disclosure Counsel	\$ 283.00
WINSTON & STRAWN	GREC	\$ 2,594,056.82
BALLER HERBST LAW GROUP	Telecommunications	\$ 5,600.00
JOHN & HENGERER		\$ 2,388.75
		\$ 2,703,094.80

# WATER/WASTEWATER

Production

Maintenance

Projects

# Water/Wastewater Monthly Dashboard

## Production

### Murphree Water Treatment Plant

		August 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	22.9	23.3	30	78%	
	Peak Daily Flow	25.6	32.2	54	-	

### Main Street Water Reclamation Facility

		August 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)		Status
	Average Daily Flow	9.8	6.5	7.5		

### Kanapaha Water Reclamation Facility

		August 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)		Status
	Average Daily Flow	13.7	11.3	14.9		

### Water Reclamation Facilities (Combined)

		August 2017 (mgd)	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	23.5	17.8	22.4	79%	

## Maintenance

### Wastewater Collections

		August 2017 (Miles)	FYTD	Monthly Goal (miles)	
	Miles of gravity mains cleaned	9.1	60.7	7.5	
	Miles of gravity mains TV inspected	3.8	59.7	7.5	

### Water Distribution & Wastewater Collections

		August 2017	FYTD		
	Work orders, service orders completed	1714	15,357		

## SSO Monthly Summary

		August	YTD	GOAL	
	Sanitary Sewer Overflows	3	27	<16	

## Major Water/Wastewater Projects

	Electrical System Upgrade at MWTP - Site work is underway				
	Manhole Lining - Over 600 manholes lined this year				
	Gravity Sewer Lining - Over 12 miles of gravity main lining this year				
	Tower Oaks water service replacement project approximately >50% complete				