

# STATE OF THE UTILITY

January 2022

Item #210907

ASA	Average Speed of Answer
ASAI	Average Service Availability Index
CAIDI	Customer Average Interruption Duration Index
CIP	Critical Infrastructure Protection
CMI	Customer Minutes Interrupted
CO2	Carbon Dioxide
CSR	Customer Service Representative
DART	Days away, Restricted duty, Temporary transfer
DH1	DeerHaven 1
DH2	DeerHaven 2
DH CT-1	DeerHaven Combustion Turbine #1 – 17.5 MW
DH CT-2	DeerHaven Combustion Turbine #2 – 17.5 MW
DHCT3 or DH CT-3	DeerHaven Combustion Turbine #3 – 71 MW
DHR	DeerHaven Renewable (Biomass Plant)
EIA	Energy Information Administration
FMPA	Florida Municipal Power Association
FTE	Full Time Employee
FY	Fiscal Year
GS	General Service
HE	Hour Ending
Hg	Mercury
IVR	Interactive Voice Response
JRKCC1	John Kelly Combined Cycle 1
Kelly CC	Kelly Combined Cycle
kGals	A thousand gallons of water
kWh	Kilowatt-hour, commonly used as a billing unit for energy delivered to consumers by electric utilities
KWRF	Kanapaha Water Reclamation Facility
L-Bar	Average Length of a Service Interruption
MATS	Mercury
MCF	1000 Cubic Ft. of Gas
MWn	Mega Watts
MSWRF	Main Street Water Reclamation Facility
MWTP	Murphree Water Treatment Plant
NERC	North American Electric Reliability Corporation
NOX	Nitrogen
OEM	Original Equipment Manufacturer
OH	Overhead
PMFILT	Porous Metal Filters
PV	Photo Voltaic (Solar Cell)
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SCR	Selectius Catalytic Reactor
SO2	Sulfur Dioxide
Therms	A unit of heat equivalent to 100,000 Btu or $1.055 \times 10^8$ joules.
THIP	Total Heat Input
TND	Traditional Neighborhood Development
TOU	Time of Use
UG	Underground
W/WW	Water WasteWater

# OPERATIONS SUMMARY

CORPORATE SAFETY

ENVIRONMENTAL

REGULATORY

PERSONNEL

January, 2022

**Safety**

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

Employees

	Year to Date		
	First Aid	Recordable	DART
	0	0	0
	1	1	0
	1	1	0
	0	0	0
	0	0	0
		2	

	Current Month		
	Miles Driven*	Recordable	Preventable
Administration	7,934	0	0
W/WW Systems	62,145	0	0
Energy Supply	547	0	0
Energy Delivery - Electric/Gas	104,618	0	0
GRUCom	6,681	0	0
<b>Totals</b>	181,925	0	0

Vehicles

	Year to Date		
	Miles Driven*	Recordable	Preventable
	24,879	1	1
	176,875	0	0
	4,730	0	0
	287,293	1	0
	22,047	0	0
	515,824	2	1

\*Mileage data is for December 2021. January mileage data will be included in February report.

Mileage FYTD through December 2021

**Environmental**

		Current Month
Notices of Violation		0
<b>Emissions</b>		
DH1, DH2, DHCT3, JRKCC1		
	CO <sub>2</sub> (tons)	93,795
	NO <sub>x</sub> (tons)	77
	SO <sub>2</sub> (tons)	29
DH Unit 2 (only)		
	PM <sub>FILT</sub> (tons)	4
	Hg (lbs)	0.35
DHR		
	CO <sub>2</sub> (tons)	0
	NO <sub>x</sub> (tons)	2
	SO <sub>2</sub> (tons)	0

**Calendar Year to Date**

0
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93,795
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77
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29
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4
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0.35
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0
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2
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0
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**Regulatory**

NERC	
Notice of Violations	0
Self Reports/Potential Violations	1

**Fiscal Year to Date**

0
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2
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## Utility Advisory Board Monthly Report – FY 2022 Safety Data Summary

**Employee Injuries** (DART – days away, restricted duty, temporary transfer)

### OCTOBER

- None reported

### NOVEMBER

- None reported

### DECEMBER

- 12/1/2021 – While changing a blade on a reciprocating saw, the employee cut the back of the right index finger. Recordable for Rx medication. No work restrictions.
- 12/21/2021 – Hurt right shoulder loading chipper into back of truck. Recordable for Rx medication. Work restrictions given by Dr. do not affect daily duties.

### JANUARY

- None reported

### FEBRUARY

### MARCH

### APRIL

### MAY

### JUNE

### JULY

### AUGUST

### SEPTEMBER

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**End of FY 2022**

## Utility Advisory Board Monthly Report – FY 2022 Vehicle Collision Summary

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

### OCTOBER

- 10/1/2021 – Employee was backing into a parking spot when a private driver cut behind him through the parking spaces. The vehicles collided doing minor damage to both vehicles right rear bumpers. There were no injuries.
- 10/27/2021 – Employee was driving west on NW 39th Avenue approaching the light at NW 91st street. The traffic was flowing normal through the light, which was green. The employee observed a vehicle in the outside lane that looked as if it was going to come over into his lane, so he instinctively looked over at the vehicle and when he looked back up, traffic had come to an abrupt complete stop. The employee braked but could not stop and struck the vehicle ahead causing damage to both vehicles. No injuries were reported. (P)

### NOVEMBER

- None reported

### DECEMBER

- None reported

### JANUARY

- None reported

### FEBRUARY

### MARCH

### APRIL

### MAY

### JUNE

### JULY

### AUGUST

### SEPTEMBER

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**End of FY 2022**

## Utility Advisory Board Monthly Report – FY 2022 NERC compliance

<b>Penalty Violations: 0</b>			
	<u>Regulation</u>	<u>Determination</u>	<u>Description</u>
<b>Non-Penalty Violations: 0</b>			
	<u>Regulation</u>	<u>Determination</u>	<u>Description</u>
<b>Potential Violations: 2</b>			
	<u>Regulation</u>	<u>Reported</u>	<u>Description / Status</u>
	VAR-002-4.1_R1 & R3	10/11/2021	6/28/2021 change in AVR control mode without prior authorization from system control [and no notification to system control within 30 minutes of AVR status change. <a href="#">CAP 20210824001</a> . SERC 2021-00644 & 2021-00645. Next mitigation milestone due 3/15/2021 ( <a href="#">LINK</a> ).
	BAL-001-2_R2	1/7/2022	9/27/21 BAAL exceedance (over-generation). Mitigation plan under development

# CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

## Customer Operations Metrics Summary January 2022

<b>Active Accounts</b>	Jan-22	YTD Gain/Loss	FY21
<i>Residential Contract Accounts</i>			
Total	95,252	155	95,097
Electric	87,802	97	87,705
Gas	34,870	138	34,732
Water	64,798	64	64,734
Wastewater	60,581	113	60,468
Telecomm	0	0	0

<b>New Installations</b>	Jan-22	FY22 To Date	FY21
Electric	168	435	1833
Gas	39	142	775
Water	88	211	771
Wastewater	77	185	777
Telecomm	0	0	18

<b>Call Center Volume</b>	Jan-22	FY22 To Date	FY21
Residential ASA	0:31:11	0:18:41	0:16:46
Business ASA	0:05:40	0:04:41	0:03:42
CSR Calls	15,661	61,110	215,887
CSR Callbacks	3,939	13,959	47,189
IVR Self Service	84,914	334,779	189,977
Total	104,514	409,848	453,053
IVR/Total	81%	82%	42%

<b>Bills Generated</b>	Jan-22	FY22 To Date	FY21
Paper Bills	79,018	306,621	109,177
eBills	33,343	129,708	261,591
Total	112,361	436,329	1,353,368
eBill/Total	30%	30%	19%

<b>Payment Arrangements</b>	Jan-22	FY22 To Date	FY21
Total	657	2,557	8,419

<b>Customer Experience</b>	Jan-22	FY22 To Date	FY21
Overall CSAT	3.60	3.75	N/A
Number of Responses	186	923	N/A
Number of Surveys Sent	2,110	10,926	N/A
Response Rate	9%	8%	N/A

<b>Active Accounts</b>	Jan-22	YTD Gain/Loss	FY21
<i>Nonresidential Contract Accounts</i>			
Total	13,149	(46)	13,195
Electric	11,020	(23)	11,043
Gas	1,669	504	1,165
Water	5,899	(6)	5,905
Wastewater	4,693	15	4,678
Telecomm	0	0	0

<b>Residential Disconnects</b>	Jan-22	FY22 To Date	FY21
Volume	1,400	5,013	14,313
Average Balance	\$267.55	\$248.98	\$243.10

<b>Revenue Assurance</b>	Jan-22	FY22 To Date	FY21
Referred to Collections	\$89,492.72	\$430,375.97	\$1,972,070.41
Recovered	\$79,825.36	\$350,101.62	\$1,093,335.45

<b>Service Orders</b>	Jan-22	FY22 To Date	FY21
Move Ins	6,670	25,592	114,586
Move Outs	7,327	25,431	112,065

<b>Average Res Bill Amounts</b>	Jan-22	FY22 To Date	FY21
Electric (kWh)	728	742	819
Electric (\$)	\$130.66	\$124.14	\$119.78
Gas (Therms)	31	21	21
Gas (\$)	\$54.77	\$39.60	\$33.99
Water (kGals)	5	5	5
Water (\$)	\$32.08	\$31.61	\$30.64
Wastewater (kGals)	6	5	5
Wastewater(\$)	\$45.29	\$45.05	\$36.96

<b>Annual Relationship</b>	Jan-22	FY22 To Date	FY21
Overall CSAT	0.00	#DIV/0!	N/A
Number of Responses	0	0	N/A
Number of Surveys Sent	0	0	N/A
Response Rate			N/A

# ENERGY DELIVERY

System Consumption

System Reliability

Major Projects – Electric & Gas

# Energy Delivery - UAB Report - January 2022

## Durations Reliability Report Between 01/01/2022 and 01/31/2022

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA		RELIABILITY INDICES		MONTHLY AVG GOAL
Monthly Average Customers Served(C)	101,092	Average Service Availability Index (ASAI)	99.9895%	
Total Hours of Customer Demand	75,212,448	System Average Interruption Duration Index (SAIDI)	4.70	4.5
Total Number of Outages	40	Customer Average Interruption Duration Index (CAIDI)	91.8	60
Total Number of Customers Affected (CI)	5,180	System Average Interruption Frequency Index (SAIFI)	0.05	0.08
Total Customer Minutes Interrupted (CMI)	475,524			
Total Customer "Out Minutes"	6,310	Average Length of a Service Interruption (L-Bar)	157.75 Mins	
<b>Cause of Outages</b>				
Cause	Overhead	Underground	Both	Total
0. Undetermined	3	0	0	3
1. Weather	0	0	0	0
2. Vegetation	24	0	1	25
3. Animals	0	0	0	0
4. Foreign Interference	0	0	0	0
5. Human Cause	1	1	0	2
6. Equipment Failure	4	6	0	10
7. All Remaining Outages	0	0	0	0
<b>Total</b>	<b>32</b>	<b>7</b>	<b>1</b>	<b>40</b>

## Durations Reliability Report Between 01/01/2022 and 01/31/2022\*

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

CUSTOMER DATA		RELIABILITY INDICES		GRU YTD GOALS
Monthly Average Customers Served(C)	101,092	Average Service Availability Index (ASAI)	99.9895%	
Total Hours of Customer Demand	75,212,448	System Average Interruption Duration Index (SAIDI)	4.7	4.5
Total Number of Outages	40	Customer Average Interruption Duration Index (CAIDI)	91.8	60
Total Number of Customers Affected (CI)	5,180	System average Interruption Frequency Index (SAIFI)	0.05	0.08
Total Customer Minutes Interrupted (CMI)	475,524			
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4. Foreign Interference	0	0	0	0
5. Human Cause	1	1	0	2
6. Equipment Failure	4	6	0	10
7. All Remaining Outages	0	0	0	0
<b>Total</b>	<b>32</b>	<b>7</b>	<b>1</b>	<b>40</b>
<b>* REPORTED AS CALENDAR YEAR</b>				

	GRU	GRU	EIA - All	EIA - Public	FMFA
	CY 2021 Goal	CY 2021 Actual	CY 2020	CY 2020	CY2021
<b>SAIDI</b>	55 Mins	81.95	165.65	191.78	60.30
<b>CAIDI</b>	60 Mins	54.97	78.50	77.95	55.40
<b>SAIFI</b>	1.0 or less	1.49	2.00	2.32	1.09

Notes on EIA and FMFA Data:

1. EIA - All data is Florida only and includes co-ops, IOU's and municipals
2. FMFA data includes 25 municipals in Florida

## Energy Delivery - UAB Report - January 2022

### Electric System Consumption

	2022		2021	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Feed-In-Tariff - Residential	105 KWH	98	71 KWH	100
Feed-In-Tariff - General Service	2,898 KWH	153	3,243 KWH	155
Electric - GS - Demand - Regular	43,517,029 KWH	1,113	43,358,553 KWH	1,155
Electric - General Service Demand PV	1,080,766 KWH	23	967,175 KWH	21
Electric - GS - Kanapaha w Curtail Cr	1,123,200 KWH	1	1,098,000 KWH	1
Electric - GS - Demand - Large Power	7,333,800 KWH	7	6,359,400 KWH	6
Electric - GS - Murphree Curtail Credit	1,334,400 KWH	1	1,315,200 KWH	1
Electric - GS Large Demand PV	3,636,000 KWH	2	3,746,400 KWH	2
Electric - GS - Non Demand	13,368,332 KWH	10,005	13,672,951 KWH	9,904
Electric - General Service PV	153,574 KWH	77	136,795 KWH	77
Electric - Lighting - Rental	861,303 KWH	3,735 <i>n</i>	942,994 KWH	3,928 <i>n</i>
Electric - Lighting - Street - City	408,752 KWH	12 <i>n</i>	500,561 KWH	12 <i>n</i>
Electric - Lighting - Street - County	126,811 KWH	2 <i>n</i>	133,864 KWH	2 <i>n</i>
Electric - Lighting - Traffic	144 KWH	1	4,542 KWH	2
Electric - Residential - Non TOU	61,959,778 KWH	88,421	71,461,772 KWH	87,684
Electric - Residential PV	419,071 KWH	716	429,136 KWH	540
<b>Total Retail Electric</b>	<b>135,325,963 KWH</b>	<b>100,618</b>	<b>144,130,657 KWH</b>	<b>99,648</b>
City of Alachua	10,793,750 KWH	15,764	10,457,285 KWH	23,177
<b>Total (Native) Electric</b>	<b>146,119,713 KWH</b>		<b>154,587,942 KWH</b>	

(n = not included in total customer count)

### Gas System Consumption

	2022		2021	
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	879,082 THM	1,341	1,031,272 THM	1,351
Gas - GS - Regular Service (Small)	150,085 THM	351	20,073 THM	328
Gas - GS - Interruptible - Regular Serv	16,000 THM	1	55,050 THM	2
Gas - GS - Interruptible - Large Volume	448,584 THM	7	572,436 THM	8
Gas - Residential - Regular Service	1,022,564 THM	35,006	1,790,393 THM	34,489
<b>Total Retail Gas</b>	<b>2,516,315 THM</b>	<b>36,706</b>	<b>3,469,224 THM</b>	<b>36,178</b>
Gas - GS - UF Cogeneration Plant	3,614,331 THM	1	3,411,707 THM	1
Gas - Residential - LP - Basic Rate	7,193 GAL	203	6,776 GAL	202

# Energy Delivery - UAB Report - January 2022

## Major Electric Design Projects

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- > Lincoln Ventures
- > Hyatt Downtown
- > Oaks Preserve (295 single-family residences)
- > Celebration Pointe – Alachua County Sport Events Center
- > VA Mental Health Hub & Outpatient Clinic – 34th St

## Major Gas Design Projects

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- > Main Installation – Copeland Park Phase 2 – 1,800'
- > Main Installation – Gainesville Airport boiler addition – 3,100'
- > Main Installation – Flint Rock Sub. – SW 122 St – 15,576'
- > Main Installation – Town of Tioga Ph. 20 – SW 131 St – 2700'
- > Main Replacement – SW 10th St. – 3,215'

Gas Services installed in January 2022: 31 new customers

ENERGY SUPPLY

SYSTEM STATISTICS

ENERGY DISTRIBUTION

FUEL

**January 2022**

**Energy Supply - CAPACITY**

**Energy Supply - Performance Parameter**

Source

**Unit Capability output - MWn**

DH-2	228
DH-1	75
Kelly CC	108
CT's	106
Grid	2 x 224
DHR	102.5

**Month YTD Budget YTD Delta Budget**

53,939	210,008	38,288	171,720
9,083	49,082	11,001	38,081
82,633	200,452	298,848	(98,396)
168	(24)	179	(203)
5,672	(39,873)	73,948	(113,821)
2,596	152,330	156,757	(4,427)

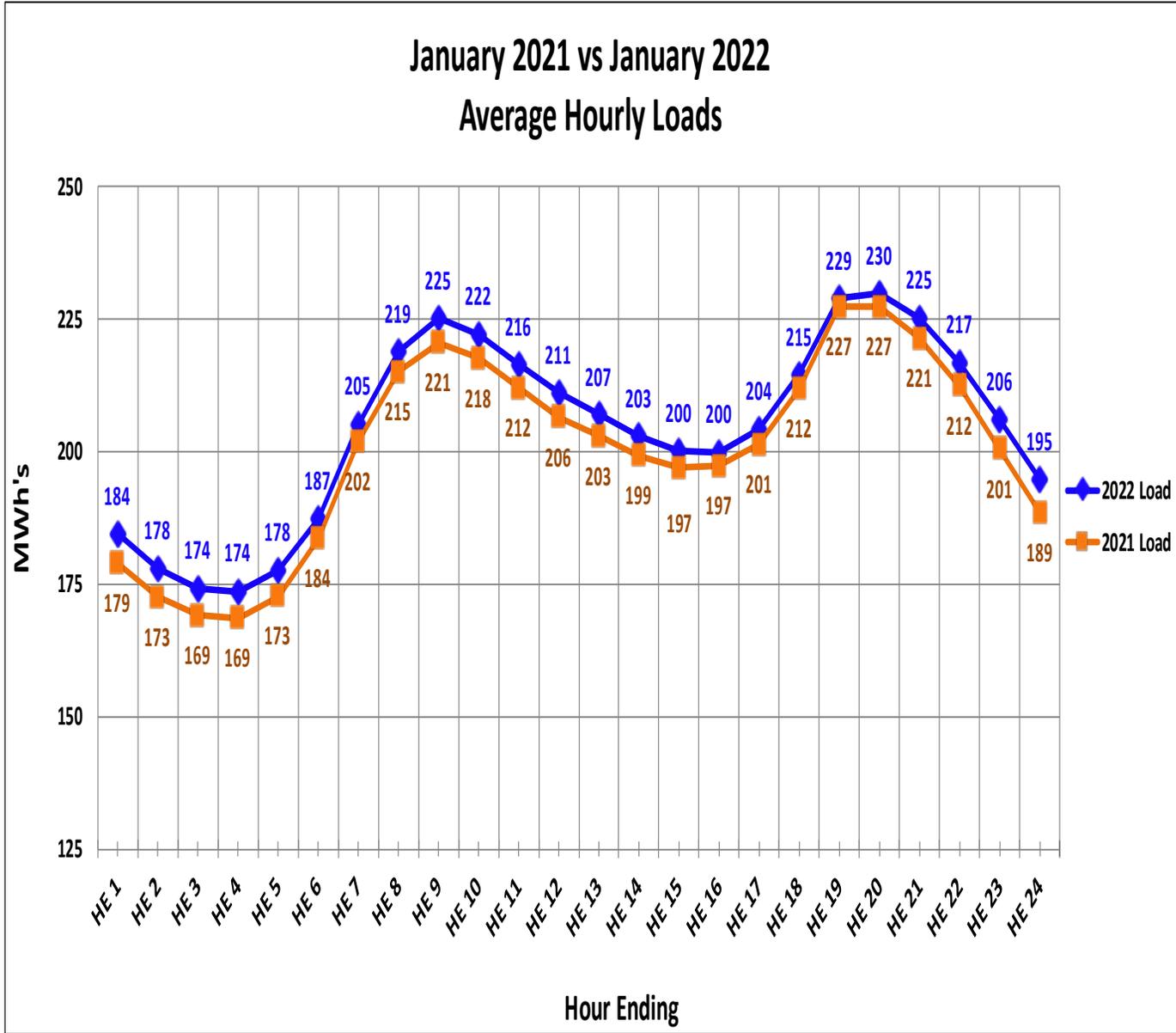
**Fuels Consumed**

	Month	FYTD	Budget YTD	Delta Budget
Coal - Tons	6,884	43,879	-	43,879
Gas - MCF	1,300,662	4,767,136	3,265,632	1,501,503
Fuel oil - Gals	37,681	344,390	-	344,390
Biomass - Tons	6,987	191,281	206,671	(15,390)

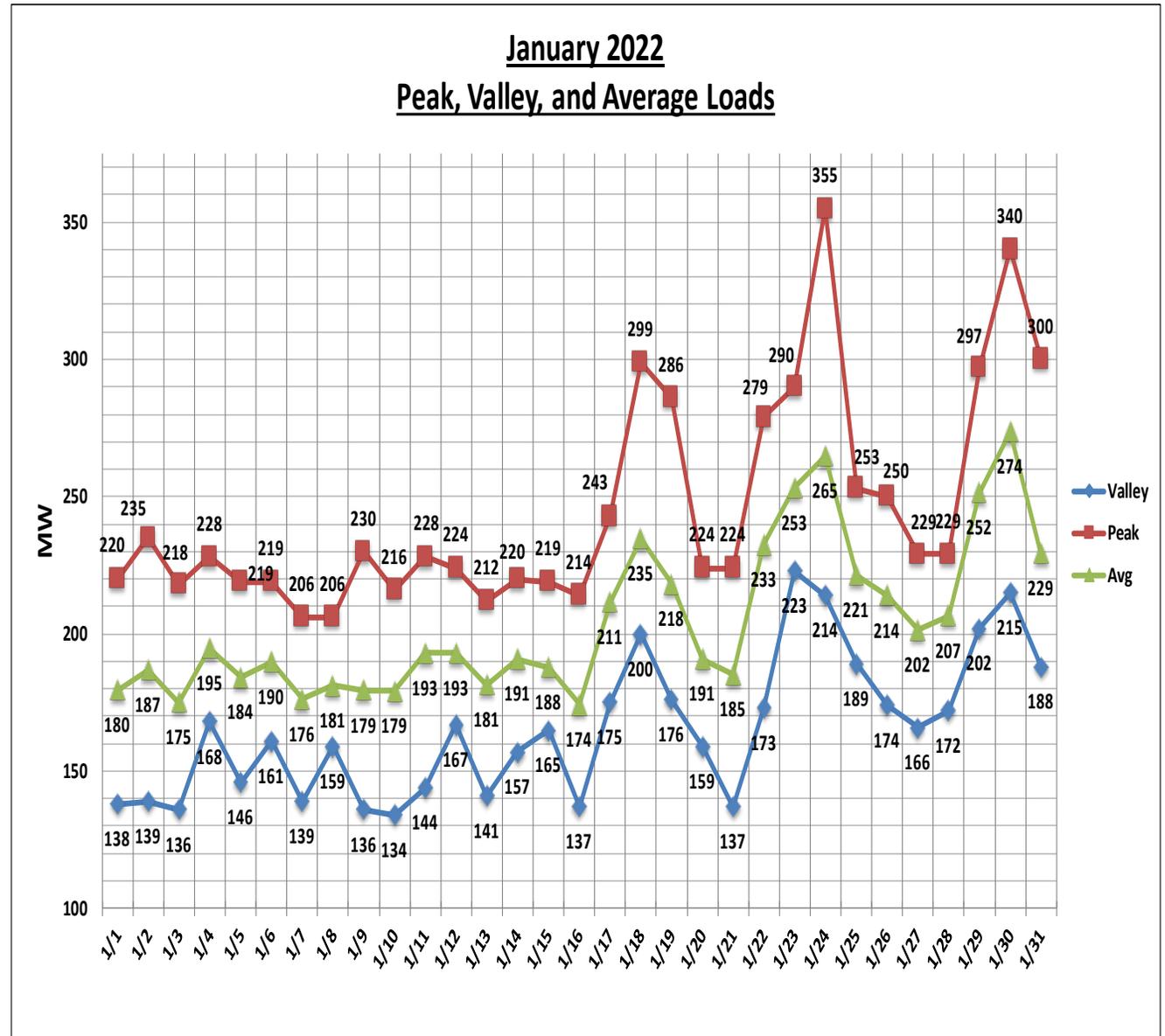
**Availability/Capacity**

	Availability			Capacity		
	Month	FY 2023 YTD	FY 2022 YTD	Month	FY 2023 YTD	FY 2022 YTD
DH-2	100.00%	97.10%	87.01%	34.03%	34.05%	30.69%
DH-1	100.00%	98.13%	98.80%	17.06%	23.64%	40.19%
Kelly CC	100.00%	96.47%	52.97%	101.31%	63.55%	43.42%
DH CT-1	33.79%	79.95%	96.22%	0.47%	0.12%	0.25%
DH CT-2	100.00%	98.23%	94.96%	1.89%	0.59%	0.21%
DH CT-3	100.00%	88.25%	99.89%	0.33%	0.08%	2.06%
DHR	18.60%	64.28%	68.62%	79.91%	59.09%	46.38%

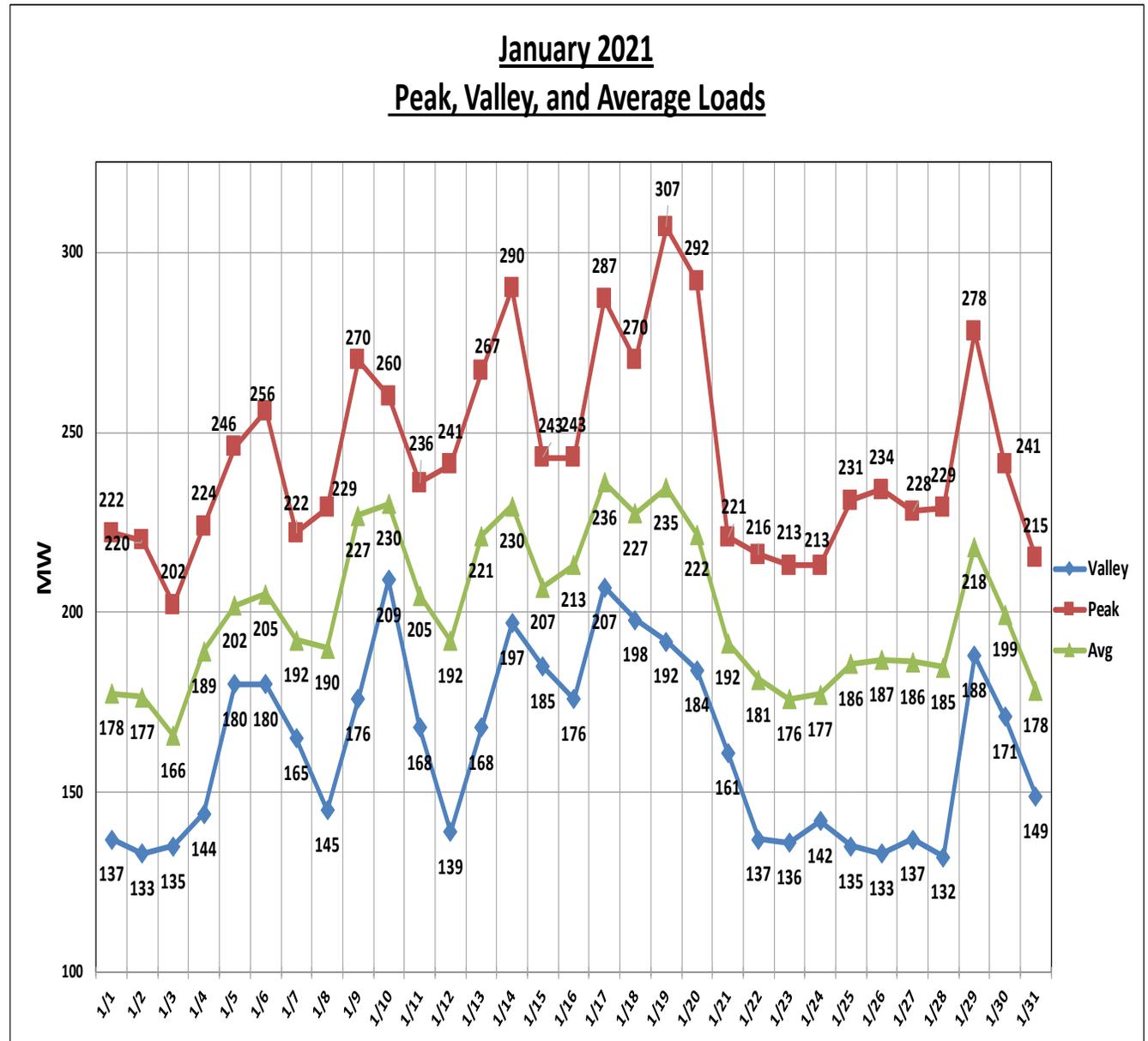
January Average Hourly Loads		
Hour Ending	2021 Load	2022 Load
HE 1	179	184
HE 2	173	178
HE 3	169	174
HE 4	169	174
HE 5	173	178
HE 6	184	187
HE 7	202	205
HE 8	215	219
HE 9	221	225
HE 10	218	222
HE 11	212	216
HE 12	206	211
HE 13	203	207
HE 14	199	203
HE 15	197	200
HE 16	197	200
HE 17	201	204
HE 18	212	215
HE 19	227	229
HE 20	227	230
HE 21	221	225
HE 22	212	217
HE 23	201	206
HE 24	189	195



Date	Valley	Peak	Avg
1/1/2022	138	220	180
1/2/2022	139	235	187
1/3/2022	136	218	175
1/4/2022	168	228	195
1/5/2022	146	219	184
1/6/2022	161	219	190
1/7/2022	139	206	176
1/8/2022	159	206	181
1/9/2022	136	230	179
1/10/2022	134	216	179
1/11/2022	144	228	193
1/12/2022	167	224	193
1/13/2022	141	212	181
1/14/2022	157	220	191
1/15/2022	165	219	188
1/16/2022	137	214	174
1/17/2022	175	243	211
1/18/2022	200	299	235
1/19/2022	176	286	218
1/20/2022	159	224	191
1/21/2022	137	224	185
1/22/2022	173	279	233
1/23/2022	223	290	253
1/24/2022	214	355	265
1/25/2022	189	253	221
1/26/2022	174	250	214
1/27/2022	166	229	202
1/28/2022	172	229	207
1/29/2022	202	297	252
1/30/2022	215	340	274
1/31/2022	188	300	229



Date	Valley	Peak	Avg
1/1/2021	137	222	178
1/2/2021	133	220	177
1/3/2021	135	202	166
1/4/2021	144	246	189
1/5/2021	180	256	202
1/6/2021	180	222	205
1/7/2021	165	229	192
1/8/2021	145	222	190
1/9/2021	176	270	227
1/10/2021	209	260	230
1/11/2021	168	236	205
1/12/2021	139	241	192
1/13/2021	168	241	221
1/14/2021	197	290	230
1/15/2021	185	243	207
1/16/2021	176	243	213
1/17/2021	207	287	236
1/18/2021	198	270	227
1/19/2021	192	307	235
1/20/2021	184	292	222
1/21/2021	161	221	192
1/22/2021	137	216	181
1/23/2021	136	213	176
1/24/2021	142	213	177
1/25/2021	135	231	186
1/26/2021	133	234	187
1/27/2021	137	228	186
1/28/2021	132	229	185
1/29/2021	188	278	218
1/30/2021	171	241	199
1/31/2021	149	215	178



**City Commission - FY22 - 1QTR Coal Sourcing Report**

Month Coal Delivered	Coal Supplier(s)	Mine	Tons	Deep	MTR	Surface (No MTR)
Oct-21	1	Creech	12,378.85	70%		30%
Nov-21	1	Creech	11,916.33	70%		30%
Dec-21						
<b>Total</b>			<b>24,295.18</b>	<b>70.00%</b>		<b>30.00%</b>

**Notes:**

1. Coal Supplier 1

Spot transaction Confirmation, Coal Commodity Purchase Agreement effective September 2, 2021 for a total of three (3) spot trains for delivery between October through December 2021. Due to a schedule conflict the December train will roll-over to load in January 2022.

**Gainesville Regional Utilities  
Solar PPA Status Report  
Report Period: January 2022**

**GRU Scope:**

<b>Milestone</b>	<b>Expected Completion Date</b>	<b>Status</b>	<b>Notes</b>
Grid Interconnection Studies	2/2021	Complete	Complete
Grid Interconnection Agreement	7/15/2021	Pending	Finalizing document. Extended due to higher team priorities.
Easement for Seller Interconnection Facilities at Parker Rd Substation	9/2021	Pending	
GRU Interconnection Facilities Planning and Construction	10/2021	Pending	Commenced project planning
GRU Interconnection Facilities Completion	8/2022	Pending	
Operating Procedures	11/2021	Pending	
Scheduled Commercial Operation	12/31/2022	Pending	

COVID-19 Pandemic Impact – While there remains a potential for impacts that may adversely affect GRU’s ability to fulfil its obligations under this agreement, none have occurred to-date. GRU will continue to monitor the situation and use commercially reasonable efforts to meet it’s contractual obligations.

**Origis Energy Scope:**

1. The Alachua County Commission denied the Special Use Permit for the Sand Bluff Solar Facility on July 7, 2021.
2. Origis is reviewing their planned course of action which will be communicated to GRU at a future date.
3. Origis is asserting a day for day delay in milestones for excusable delay due to special use permit denial by Alachua County Commission.

4. A contract amendment is on the agenda for the February 10, 2022 UAB meeting and February 17, 2022 Commission meetings which will extend contract deadlines for the project to continue on a new site.

*Prepared 2/3/2022*

Date: As of February 4, 2022: Major Energy Supply Projects/Milestones Updates:

1. Deerhaven Generating Station (DH):
  - a. Deerhaven Unit #2(DH2):
    - i. The dual fuel project testing has been able to achieve 244 MW gross so far. To conduct full load testing we will need to wait until our gas provider (Florida Gas Transmission) completes infrastructure upgrades they need, and this is expected to be complete in July 2022.
  - b. We had a coal train (approx. 12,000 tons) delivered 2/2/2022. Fuels and still working on the possibility on one more train before summer. Inventory on site as of 2/4/2022 is approximately 41,000 tons.
2. Deerhaven Unit #1 (DH1):
  - a. We are planning the unit lifetime assessment in fall of 2022, with goal of being able to safely, and reliably, extend life of unit beyond December of 2022.
3. Deerhaven CT1:
  - a. The unit generator breaker failed to close in properly on 1/19/2022, and unit was placed in forced outage. Subsequent vendor inspection of breaker identified several of the closing mechanism pieces were worn. Parts were put on order with a lengthy lead time. So in parallel we procured a spare breaker. This new refurbished breaker was received, installed and tested on 2/3/2022, and CT1 restored to service. The original breaker will be repaired and stored as a spare.
4. Deerhaven Renewable (DHR):
  - a. We completed planned outage 1/4/2022 through 1/28/2022. Outage originally scheduled to go through 1/31/2022 but we had to cut this outage duration short to support an unprecedented cold front of weather. Critical path item for this outage was the installation of a new Variable Frequency Drive (VFD) for boiler Induction (ID) Fan.
  - b. When coming out of outage early we encountered several reliability issues:
    - i. The ID Fan VFD was prematurely indicating high motor thermal load (amps). This cause of this premature indication was due to incorrect settings inputted by OEM (Siemens). The actual motor amps are well withing specifications, but the setting input show much higher readings. Working with Siemens to fully resolve this to support DHR full load operations going forward. As of 2/4/2022 DHR is derated to 85 MW until this issue is resolved.
    - ii. Following a trip related to a fuel delivery interruption the early afternoon on 1/30/2022, we discovered that the generator synching was slightly out of phase when unit was tied on evening of 1/29/2022. The cause of this synching concern was determined to be slow response by Generation Breaker when provided a close command. The specification is required to be below 100 msec, and Energy Delivery (ED) verified that we were seeing around 119 msec. As synching out of phase can be a very serious incident, a decision was made to delay restoring DHR until this breaker timing issue could be resolved. With the unprecedented cold weather forecast overnight expected the night of 1/30/2022(Sunday) ED arranged for a crew to work this late into night, and with their efforts were able to restore this timing to under 97 msec. Following this resolution DHR was

restored successfully to service to support another anticipated high load on morning on 1/31/2022.

5. South Energy Center (SEC):

- a. Wartsila engine 38000 hour planned inspection was completed successfully January 4-6, 2022.

# ENVIRONMENTAL PERMITTING

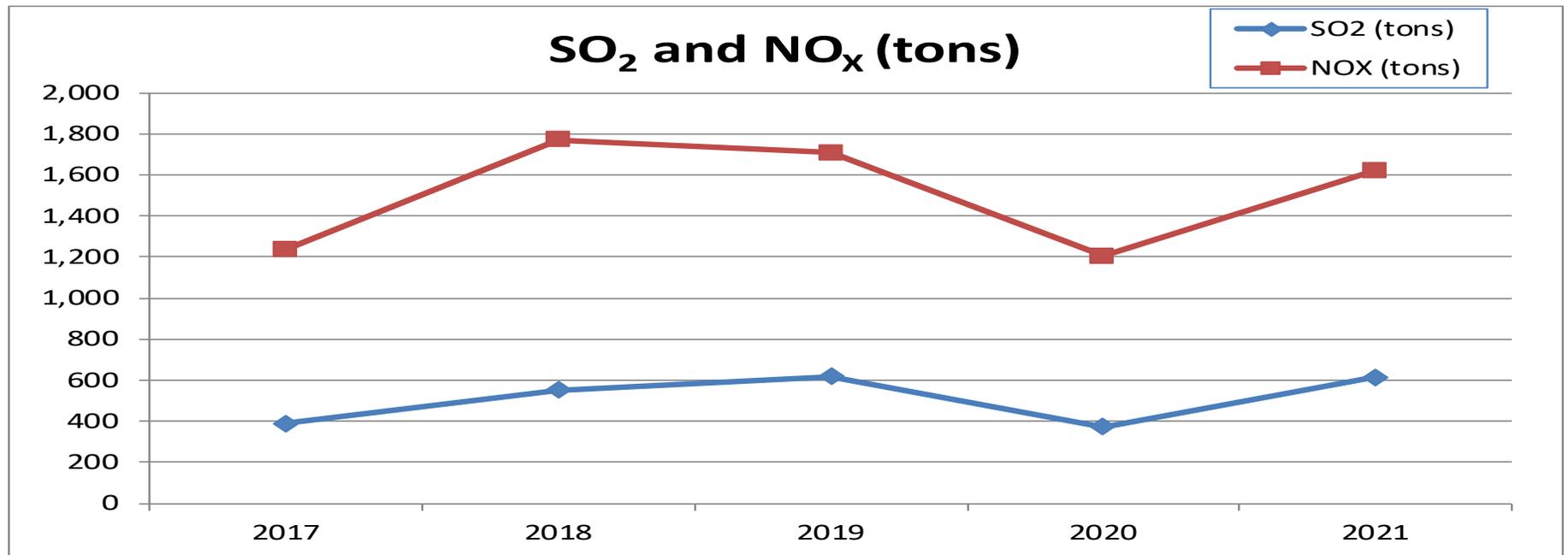
## EMISSIONS DATA

## Yearly Emissions

	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)
2017	389	1,239	2.40	52	1,037,711
2018	551	1,770	3.80	55	2,096,289
2019	618	1,707	5.30	49	2,020,310
2020	372	1,203	3.14	56	1,462,622
2021	614	1,623	3.74	64	1,989,821
2022 (thru Jan.)	29	79	0.35	4.1	93,795

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

**DHR CO<sub>2</sub> is not included in the YTD since DHR is carbon neutral.**

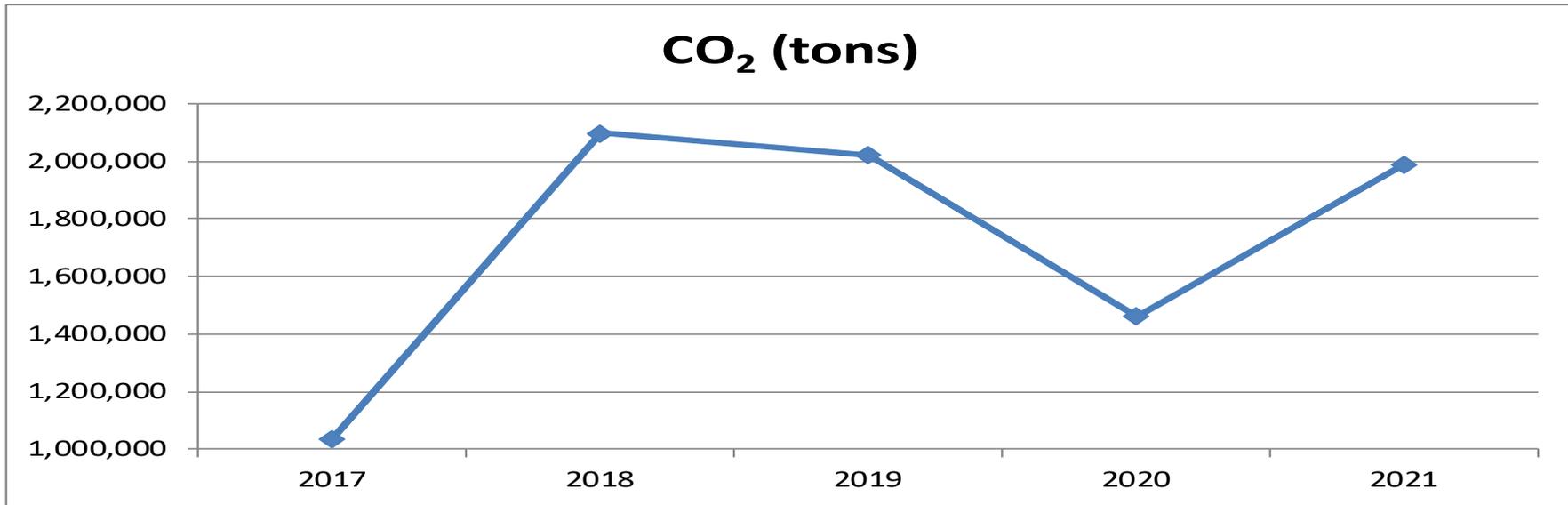


**SO<sub>2</sub> was lower in 2017 due to higher removal rate settings to assure compliance with the MATS Rule.**

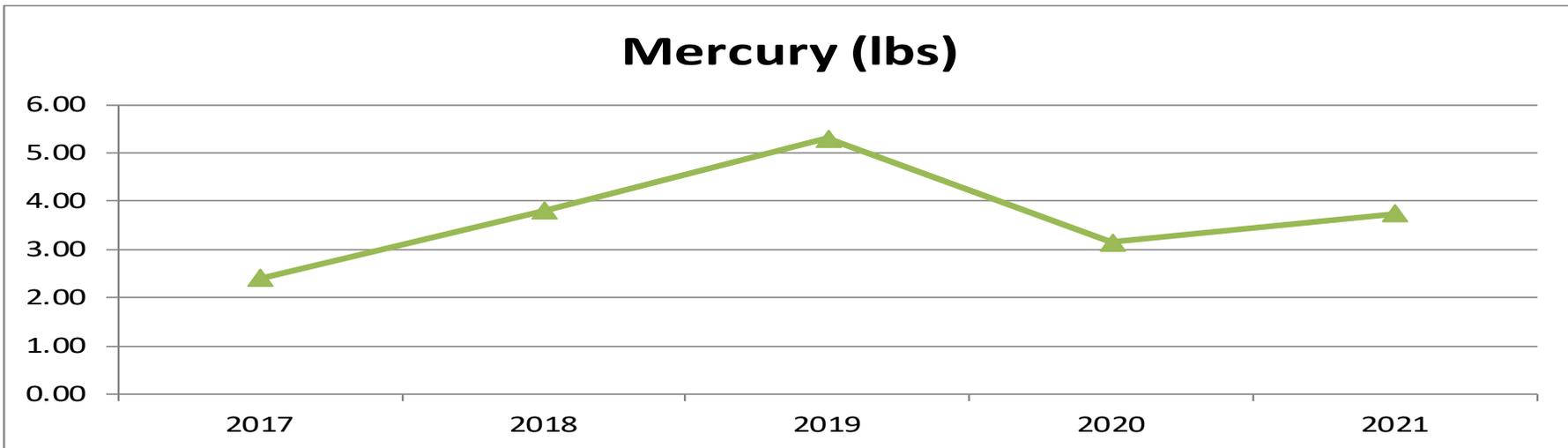
**NO<sub>x</sub> was higher starting in 2017 since the Cross State Rule was no longer in effect for Florida.**

**2018 and later data include DHR. 2017 did not include DHR.**

## Yearly Emissions

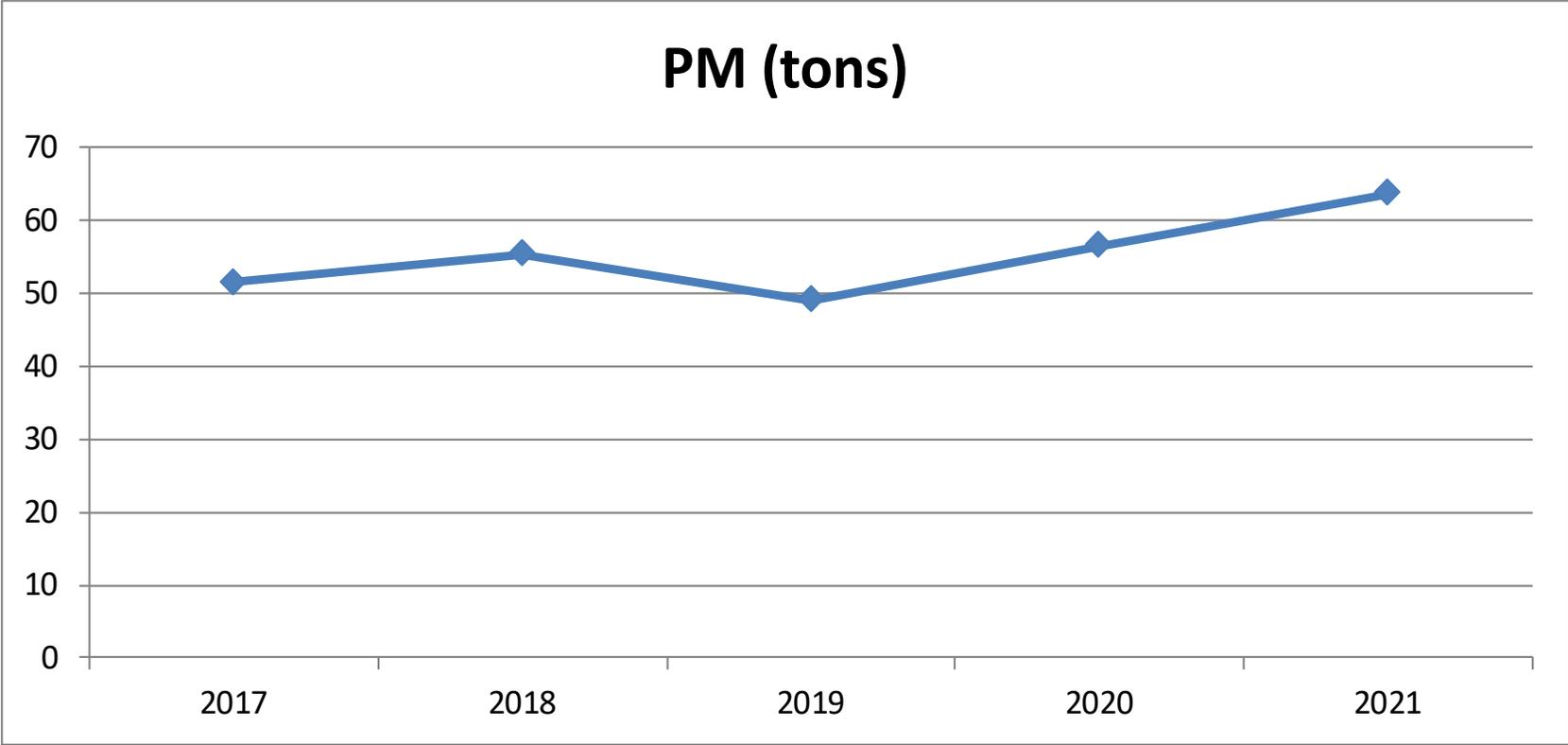


**2018 and later data include DHR. The previous years did not include DHR.**



**Mercury was lower in 2017 due to a higher removal rate setting to assure compliance with the MATS with the MATS Rule.**

# Yearly Emissions



YTD - 2022 - January

	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	SO <sub>2</sub> Rate (lb/MMBtu)	NO <sub>x</sub> Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
DH1	1.0	9.9			7,665.0			128,791.0	10,074.0
DH2	28.1	56.4	0.35	4.1	43,433.3			623,112.0	63,193.0
DHCT3	0.0	0.1			196.1			3,298.0	221.0
JRKCC1	0.2	10.4			42,500.4			715,165.5	83,395.0
DHR	0.1	2.4						61,183.7	3,973.0
<b>TOTAL</b>	<b>29.4</b>	<b>79.2</b>	<b>0.35</b>	<b>4.1</b>	<b>93,794.8</b>			<b>1,531,550.2</b>	<b>160,856.0</b>

TOTALS without DHR

	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	SO <sub>2</sub> Rate (lb/MMBtu)	NO <sub>x</sub> Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
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DHCT3	0.0	0.1			196.1			3,298.0	221.0
JRKCC1	0.2	10.4			42,500.4			715,165.5	83,395.0
Total Without DHR	29.3	76.8	0.350	4.1	93,794.8			1,470,366.5	156,883.0

2022 - January

	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	SO <sub>2</sub> Rate (lb/MMBtu)	NO <sub>x</sub> Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
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DHR	0.1	2.4						61,183.7	3,973.0
<b>TOTAL</b>	<b>29.4</b>	<b>79.2</b>	<b>0.35</b>	<b>4.1</b>	<b>93,794.8</b>			<b>1,531,550.2</b>	<b>160,856.0</b>

Totals without DHR

	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	Mercury (lbs)	PM (tons)	CO <sub>2</sub> (tons)	SO <sub>2</sub> Rate (lb/MMBtu)	NO <sub>x</sub> Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
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Without DHR	29.3	76.8	0.35	4.1	93,794.8			1,470,366.5	156,883.0

# WATER/WASTEWATER

PRODUCTION

MAINTENANCE

# Water/Wastewater December 2021 Dashboard

Production						
Murphree Water Treatment Plant						
		December 21	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	21.3	23	30	77%	█
	Peak Daily Flow	26.2	25.7	54	48%	█
Main Street Water Reclamation Facility						
		December 21	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	5.58	6.00	7.5	80%	█
Kanapaha Water Reclamation Facility						
		December 21	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	12.8	12.8	14.9	86%	█
Water Reclamation Facilities (Combined)						
		December 21	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	18.4	18.8	22.4	84%	█
Maintenance						
Wastewater Collections						
		Dec 2021 (Miles)	FYTD	Monthly Goal (miles)		
	Miles of gravity mains cleaned	9.56	20.17	5.0		
	Miles of gravity mains TV inspected	7.65	17.96	5.0		
Water Distribution						
		Dec 2021	FYTD	Monthly Goal		
	Number of Water Services Replaced	55	230	75		
SSO Monthly Summary						
		Dec 2021	YTD	GOAL (annual)		
	Sanitary Sewer Overflows	1	3	<22		

## Major Projects and Other Updates

**Recharge Wetland:** Issued a Request for Statement of Qualifications to firms to design and construct the wetland project. There were four responders and three responders completed presentations. Selection and ranking of firms will be completed in February.

**MSWRF Progressive Design Build** - Grant applications submitted, completion of planning phase. Final scope has been determined (reduced) to meet budgetary requirements. Beginning detailed design.

# Water/Wastewater January 2022 Dashboard

Production						
Murphree Water Treatment Plant						
		January 22	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	21.9	22	30	75%	
	Peak Daily Flow	26.2	25.7	54	48%	
Main Street Water Reclamation Facility						
		January 22	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	5.48	5.88	7.5	78%	
Kanapaha Water Reclamation Facility						
		January 22	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	11.7	12.5	14.9	84%	
Water Reclamation Facilities (Combined)						
		January 22	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	17.2	18.4	22.4	82%	
Maintenance						
Wastewater Collections						
		<b>Jan 2022 (Miles)</b>	<b>FYTD</b>	<b>Monthly Goal (miles)</b>		
	Miles of gravity mains cleaned	3.91	24.08	5.0		
	Miles of gravity mains TV inspected	5.39	23.35	5.0		
Water Distribution						
		<b>Jan 2022</b>	<b>FYTD</b>	<b>Monthly Goal</b>		
	Number of Water Services Replaced	46	276	75		
SSO Monthly Summary						
		<b>Jan 2022</b>	<b>YTD</b>	<b>GOAL (annual)</b>		
	Sanitary Sewer Overflows	3	7	<22		

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