STATE OF THE UTILITY

Operational Update

September 2020

OPERATIONS SUMMARY

CORPORATE SAFETY

COMPLIANCE

ENVIRONMENTAL

REGULATORY

PERSONNEL

September 2020

Safety

Employees

Administration
W/WW Systems
Energy Supply
Energy Delivery - Electric/Gas
GRUCom
Totals

Current Month				
Recordable	DART			
0	0			
2	0			
0	0			
0	0			
0	0			
2				

Year to Date				
First Aid	Recordable	DART		
2	0	0		
5	9	2		
2	3	1		
1	3	3		
0	0	0		
	15			

Vehicles

Administration W/WW Systems Energy Supply Energy Delivery - Electric/Gas GRUCom

Totals

	Current Month				
_	Miles Driven*	Recordable	Preventable		
	13,771	0	0		
	83,244	0	0		
I	2,392	0	0		
	119,427	0	0		
	8,726	0	0		
ı	227,560	0	0		

^{*}Mileage data is for August 2020. September mileage data will be included in October report.

Miles Driven*	Recordable	Preventable
127,877	0	0
830,331	10	7
26,638	0	0
1,163,044	10	5
88,548	0	0

20

12

Year to Date

2,236,438

		me	

	Current Month
Notices of Violation	0
Emissions	
DH1, DH2, DHCT3, JRKCC1	
CO ₂ (tons)	109,949
NO _x (tons)	109
SO ₂ (tons)	44
DH Unit 2 (only)	
PM _{FILT} (tons)	5
Hg (lbs)	0.50
DHR	
CO₂ (tons)	45,104
NO _x (tons)	15
SO ₂ (tons)	1
Regulatory	
NERC	

Cal	endar	Year	to	Date
		0		

752,990
688
230
29
2.20

596,522	
182	
11	

Notice of Violations Self Reports/Potential Violations

2
0

3	
7	

Mileage YTD through August 2020

Personnel

Row Labels	AUTHORIZED_FTE	FILLED_FTE	VACANCY	Last Month (August)
Administration	16.00	14.00	2.00	2.00
Chief Operating Officer	20.00	18.00	2.00	2.00
Customer Support Services	118.25	104.25	14.00	9.00
Energy Delivery	264.00	251.00	13.00	13.00
Energy Supply	182.00	162.00	20.00	17.00
Energy Supply - District Energy	11.00	11.00	0.00	0.00
Finance	42.00	29.00	13.00	13.00
GRUCom	38.00	29.00	9.00	9.00
Information Technology	71.00	63.00	8.00	7.00
Water Wastewater	168.00	159.00	9.00	9.00
Grand Total	930.25	840.25	90.00	81.00

Authorized and filled FTE's do not include temporary employees or interns. Filled FTE's do include staffed overfills

Utility Advisory Board Monthly Report – FY 2020 Safety Data Summary

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

OCTOBER

None reported

NOVEMBER

- 11/13/2019 While exiting his truck, employee turned on his right knee and felt a "pop". Went for treatment the next day and was given a prescription.
- 11/19/2019 Employee cut right thumb with knife. (DART)

DECEMBER

• 12/5/2019 – Employee was stung by a yellow jacket and had allergic reaction.

JANUARY

None reported

FEBRUARY

- 2/6/2020 Employee's hand got caught between two conveyor rollers. (DART)
- 2/17/2020 Employee was walking through an overgrown area while clearing a sewer line easement. He tripped on a vine and fell to the ground, straining his back. (DART)
- 2/27/2020 While replacing a water meter yoke, the back of the employee's right middle finger was cut from a piece of glass buried in the soil. (DART)

MARCH

None reported

APRIL

• 4/22/2020 – At the end of regular duties of the day, employee felt sharp pain in the back. Followed up the next day and pain was still strong. Sent for medical evaluation and diagnosed with back strain

MAY

- 5/13/2020 Employee cut his left finger when guided wire came up against his hand while removing old material. Stiches in finger. (DART)
- 5/21/2020 Employee strained lower back while putting a test set in work van. RD started 6/1/20.
 DART)

<u>JUNE</u>

• 6/16/2020 – While loosening a bolt, employee put his hand behind the bolt to loosen it. When the bolt spun, it ripped off the nail of the left index finger.

JULY

None reported

AUGUST

• 8/3/2020 – The employee's truck was struck from behind while stopped in traffic. His torso was bruised from the seatbelt and strained his right foot

- 8/17/2020 Employee was standing near a bottom ash valves having CRO cycle an air operated valve. When valve cycled solenoid vent kicked up ash that went behind safety glasses into operator's eye.
- 8/26/2020 Employee was moving a manhole lid and it fell onto his right big toe, fracturing it

SEPTEMBER

- 9/8/2020 While pulling off a bearing, a piece of the bearing struck the employee in the bridge of the safety glasses causing a laceration and a bruised eye
- 9/30/2020-While crossing a ditch employee twisted left ankle causing a strain.

End of FY 2020

Utility Advisory Board Monthly Report - FY 2019 Vehicle Collision Summary

Vehicle Collisions (P) indicates preventable by our employee

OCTOBER

None reported

NOVEMBER

- 11/5/2019 While stopped at the traffic sign on NW 11th Avenue at NW 6th Street, a citizen backed out of a private drive into the tires of U1705, a trailer being towed by U1891. There was no damage to our trailer and no injury.
- 11/12/2019 A dump truck & trailer were stopped at a traffic sign. A bus was trying to make a turn onto the street, but could not complete the turn. The employee looked in his mirrors, and not seeing anyone, backed up to allow the bus to turn. A citizen's car was stopped directly behind the trailer, and the trailer damaged the car's front grill. (P)

DECEMBER

None reported

JANUARY

None reported

FEBRUARY

• 2/5/2020 – While driving a service truck with a trailer westbound on East University Ave, a citizen tried to change lanes and collided with the left front corner of the truck. The person did not stay at the scene. Law Enforcement took and report and will follow up.

MARCH

3/27/2020 – An employee driving truck U1961 scraped the back bumper of an unoccupied parked vehicle causing rear bumper damage to the private vehicle. Employee was making a left hand turn into a parking lot near work site and stated that vehicle exiting parking lot was not stopping, so in an effort to allow more space inadvertently made contact with the private vehicle on the opposite side of the approaching vehicle. There was no injury or damage to the GRU vehicle. (P)

APRIL

- 4/10/2020 Private vehicle backed out in front of GRU vehicle, scuffing GRU vehicle's front left bumper and doing minor damage on private vehicles left rear quarter panel.
- 4/21/2020 Employee pulled off to the edge of a narrow lane to allow a delivery vehicle to pass and did not notice a short wall that was contacted on the passenger's side of the vehicle. (P)
- 4/22/2020 Employee pulled off to the edge of a narrow lane to allow a landscape truck and trailer to pass, and the trailer contacted our rear bumper on the left side as it passed by causing damage to the bumper only.
- 4/22/2020 Stopped at the intersection on his way into work. After allowing a car to go by, he started to pull out, but a large P/U came around the curve at high speed, the employee could not get out into the lane fast enough, so he backed out of the way, colliding with a car behind him. no injuries. (P)
- 4/30/2020 After pulling out of a construction site, the driver of a GRU service truck stopped to talk to another operator. He started to back up not knowing a USPS delivery truck had pulled up behind him. Our truck made contact with the USPS front bumper before stopping. There was no damage to either vehicle and no injury. (P)

MAY

- 5/16/2020 While repairing a water leak, a citizen asked the employee to move his vehicle. As he was backing up, he scraped a line of paint off the rear right bin door against a metal sign that extended over the curb. (P)
- 5/26/2020 Employee turned to sharp and ran up on a raised median and struck a fire hydrant with the passenger side of her truck causing minor damage to hydrant and truck. (P)

<u>JUNE</u>

- 6/22/2020 Employee sitting at red light and let his foot slip off break causing truck to roll forward. The cone rack on the front of the truck struck the back lift gate causing minor damage. (P)
- 6/24/2020 Employee was stopped in traffic and was rear ended by a car. No damage to city vehicle, lot of damage to front end of other vehicle.

JULY

- 7/28/2020 Employee was stopped at red light and was rear ended by another car. Damage to both vehicles.
- 7/30/2020 When approaching the north EOC gate driving a dump truck, the gate the gate did not open. He backed up to get a better angle on the sensor, but another GRU employee in a pick-up truck had pulled up behind him. When the two trucks made contact, there was minor damage to the grill and front edge of the hood. (P)

AUGUST

- 8/3/2020 Employee was stopped in traffic and was rear ended by another truck, pushing our truck into the car in front. Damage to all three vehicles, and injury to our employee.
- 8/11/2020 Employee was stopped for a pedestrian crossing the road when he was rear ended by a private driver.
- 8/24/2020 While leaving the site, a contractor arrived to deliver materials. The employee was backing up to advise the security guard to allow the delivery. He was monitoring his ride side next to the other truck and scraped against the bollard on the truck's left side. (P)
- 8/29/2020 While making a right turn on red onto Waldo Road, a GRU service truck collided with a car traveling through the intersection. (P)

SEPTEMBER

None reported

End of FY 2020

Utility Advisory Board Monthly Report – FY 2020 NERC compliance

Penalty violations

<u>Determination date</u> <u>Description</u>

N/A No penalties to-date for FY 2020

Non-Penalty violations (Compliance Exceptions or Find-Fix-Track)

<u>Determination date</u> <u>Description</u>

11/14/2019 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

9/29/2020 [Audit finding from Regional auditor]. System Operating Limit exceeds Facility

Rating for Line 14.

9/29/2020 Failure to verify at least once each calendar quarter that individuals with active

electronic access or unescorted physical access have authorization records

Potential violations (Pending regulatory agency determination)

Report date <u>Description</u>

6/6/2019 (FY2019) 35 Cyber Assets were delayed in being included under GRU's Critical

Infrastructure Protection (CIP) program

10/4/2019 Two relay settings not adjusted in accordance with PRC-023-4 for 18 months

3/3/2020 Failure to issue door alarms for 5 days due to email system configuration error

4/16/2020 Failure to update baseline documents within 30 days of a change to a cyber asset

8/18/2020 Substation control house door left unsecure for 9 hours

CUSTOMER SUPPORT SERVICES

Customer Operations

New Services

Revenue Assurance

Customer Operations Metrics Summary September 2020

Active Accounts	Sep-20	YTD Gain/Loss	FY19
Residential Contract Accounts			
Total	93,865	2,042	91,823
Electric	86,731	1,667	85,064
Gas	34,205	400	33,805
Water	64,229	649	63,580
Wastewater	60,034	548	59,486
Telecomm	87	(30)	117

New Installations	Sep-20	FY20 To Date	FY19
Electric	0	2126	1393
Gas	0	516	512
Water	0	683	654
Wastewater	0	604	614
Telecomm	0	128	141

Call Center Volume	Sep-20	FY20 To Date	FY19
Residential ASA	0:08:32	0:03:41	0:06:26
Business ASA	0:01:58	0:02:27	0:02:49
CSR Calls	19,564	188,834	151,278
CSR Callbacks	2,453	12,488	19,343
IVR Self Service	21,084	201,731	227,577
Total	43,101	403,053	398,198
IVR/Total	49%	50%	57%

Bills Generated	Sep-20	FY20 To Date	FY19
Paper Bills	110,583	1,301,286	1,278,441
eBills	20,514	237,475	212,879
Total	131,097	1,538,761	1,491,320
eBill/Total	16%	15%	14%

Payment Arrangements	Sep-20	FY20 To Date	FY19
Total	1,881	7,129	9,797

Active Accounts	Sep-20	YTD Gain/Loss	FY19
Nonresidential Contract Accounts			
Total	13,620	24	13,596
Electric	11,032	7	11,025
Gas	1,666	9	1,657
Water	5,911	19	5,892
Wastewater	4,672	(13)	4,685
Telecomm	403	11	392

Residential Disconnects	Sep-20	FY20 To Date	FY19
Volume	771	7,791	14,076
Average Balance	\$336.89	\$175.34	\$246.88

Revenue Assurance	Sep-20	FY20 To Date	FY19
Referred to Collections	\$207,526.94	\$1,495,829.79	\$1,948,001.43
Recovered	\$70,439.46	\$804,667.00	\$796,259.96

Service Orders	Sep-20	FY20 To Date	FY19
Move Ins	7,586	106,868	109,537
Move Outs	8,970	106,929	109,795

Average Res Bill Amounts	Sep-20	FY20 To Date	FY19
Electric (kWh)	1,067	830	836
Electric (\$)	\$153.39	\$124.21	\$122.20
Gas (Therms)	10	18	19
Gas (\$)	\$22.20	\$32.65	\$32.72
Water (kGals)	5	5	6
Water (\$)	\$30.35	\$31.49	\$28.61
Wastewater (kGals)	5	5	7
Wastewater(\$)	\$36.87	\$37.67	\$34.25

10/5/2020

ENERGY DELIVERY

System Consumption
System Reliability
Major Projects – Electric & Gas

Durations Reliability Report Between 09/01/2020 and 09/30/2020

Excludes Extreme Weather and Generation/Transmission Disturbances

CUSTOMER DATA	STOMER DATA RELIABILITY INDICES		MONTHLY AVG GOAL
Monthly Average Customers Served(C)	99,938 Average Service Availability Index (ASAI)	99.9819%	
Total Hours of Customer Demand	69,556,848 System Average Interruption Duration Index (SAIDI)	7.57	4.5
Total Number of Outages	81 Customer Average Interruption Duration Index (CAIDI)	45.25	55
Total Number of Customers Affected (CI)	16,719 0.17	0.17	0.08
Total Customer Minutes Interrupted (CMI)	756,497		
Total Customer "Out Minutes"	9,333 Average Length of a Service Interruption (L-Bar)	115.22	Mins

		Cause of Outages		
Cause	Overhead	Underground	Both	Total
0. Undetermined	6	0	1	7
1. Weather	5	0	0	5
2. Vegetation	32	1	2	35
3. Animals	5	1	0	6
4. Foreign Interference	0	0	0	0
5. Human Cause	5	1	0	6
6. Equipment Failure	6	7	4	17
7. All Remaining Outages	0	0	3	3
Total	59	10	10	79

Durations Reliability Report Between 01/01/2020 and 09/30/2020*

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

CUSTOMED DATA	DELIABILITY INDICES			
CUSTOMER DATA	RELIABILITY INDICES			
Monthly Average Customers Served(C)	99,938 Average Service Availability Index (ASAI)	99.9878%		
Total Hours of Customer Demand	654,793,776 System Average Interruption Duration Index (SAIDI)	47.8	40.5	
Total Number of Outages	580 Customer Average Interruption Duration Index (CAIDI)	58.95	55	
Total Number of Customers Affected (CI)	81,039 System average Interruption Frequency Index (SAIFI)	0.81	0.72	
Total Customer Minutes Interrupted (CMI)	4,777,396	_		
Total Customer "Out Minutes"	83,576 Average Length of a Service Interruption (L-Bar)	144.1	Mins	

	GRU	GRU	EIA - All	EIA - Public	FMPA
	CY 20 Goal	CY 2019 Actual	CY 2018	CY 2018	CY 2019
SAIDI	54 Mins	56.72	143.37	63.12	74.51
CAIDI	55 Mins	66.8	75.86	78.98	60.89
SAIFI	0.96	0.85	1.82	0.85	1.230

Notes on EIA and FMPA Data:

- 1. EIA All data is Florida only and includes co-ops, IOU's and municipals
- 2. FMPA data includes 23 municipals in Florida
- 3. Breakdown:

Number of Utilities Submitting Data in FL

All	Соор	IOU	Public Power
37	13	5	19

		Cause of Outages		
Cause	Overhead	Underground	Both	Total
0. Undetermined	42	2	4	48
1. Weather	30	0	3	33
2. Vegetation	211	4	9	224
3. Animals	29	2	2	33
4. Foreign Interference	0	0	0	0
5. Human Cause	32	14	2	48
6. Equipment Failure	69	94	24	187
7. All Remaining Outages	0	0	3	3
Total	413	116	47	576
* REPORTED AS CALENDAR YEAR				

Durations Reliability Report Between 09/01/2020 and 09/30/2020

	, ,		•	
	2020		201	19
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Feed-In-Tarrif - Residential	75 KWH	101	60 KWH	101
Feed-In-Tarrif - General Service	2,625 KWH	158	2,542 KWH	156
Electric - GS - Demand - Regular	55,450384 KWH	1,184	60,914,687 KWH	1,192
Electric - General Service Demand PV	863,455 KWH	22	1,122,228 KWH	20
Electric - GS - Kanapaha w Curtail Cr	1,152,000 KWH	1	1,172,400 KWH	1
Electric - GS - Demand - Large Power	8,757,600 KWH	6	8,686,200 KWH	6
Electric - GS - Murphree Curtail Credit	1,480,800 KWH	1	1,468,800 KWH	1
Electric - GS Large Demand PV	5,109,600 KWH	2	5,011,200 KWH	2
Electric - GS - Non Demand	17,110,400 KWH	9,904	18,865,059 KWH	9,818
Electric - General Service PV	187,145 KWH	72	187,607 KWH	63
Electric - Lighting - Rental	922,243 KWH	3,945 n	971,563 KWH	4,535 n
Electric - Lighting - Street - City	559,329 KWH	12 n	708,933 KWH	12 n
Electric - Lighting - Street - County	132,165 KWH	2 n	133,122 KWH	2 n
Electric - Lighting - Traffic	4,542 KWH	2	4,542 KWH	2 n
Electric - Residential - Non TOU	90,736,804 KWH	88,214	93,565,486 KWH	86,234
Electric - Residential PV	478,071 KWH	489	389,095 KWH	392
Total Retail Electric	182,947,238 KWH	100,156	193,203,524 KWH	97,986
(n =not included in total customer count)				
City of Alachua	12,603,650 KWH KWH	27,698 KW	13,042,000 KWH	26,855 KV
Total (Native) Electric	195,550,888 KWH		206,245,524 KWH	
	Gas System Consu	mption		
	2020		2019	ı
	CONSUMPTION	CUSTOMERS	CONSUMPTION	CUSTOMERS
Gas - GS - Regular Service (Firm)	563,385 THM	1,349	576,294 THM	1,360
Gas - GS - Regular Service (Small)	5,530 THM	324	6,885 THM	309
Gas - GS - Interrruptible - Regular Serv	25,506 THM	1	16,000 THM	1
Gas - GS - Interrruptible - Large Volume	362,999 THM	7	302,042 THM	6
Gas - Residential - Regular Service	319,940 THM	34,413	315,376 THM	33,984
Total Retail Gas	1,277,360_THM	36,094	1,216,597 THM	35,660
Gas - GS - UF Cogeneration Plant	2,907,253 THM	1	2,803,528 THM	1

2,530 GAL

202

2,326 GAL

201

Gas - Residential - LP - Basic Rate

^{*}Obtained from Monthly Billing Summary prepared by Todd Kamhoot.

Durations Reliability Report Between 09/01/2020 and 09/30/2020

Major Electric Design Projects

West

- > Celebration Pointe (Commercial & Residential Development)
- > Tower Road Mixed Use Development (Market's West)/Grand Oaks (Phase 2) 2 projects in the same area
- > 8th Ave OH to UG Conversion (Ph. 3) / SW 20th Ave OH to UG conversion, 2 different projects in area
- > Farnsworth Transmission Line Improvements
- > Kenwood Subdivision Underground Facility Improvements

East

- > Murphree Water Plant (OH to UG Conversion and rebuilt)
- > Hub on Campus I (8 story mixed-use development)
- > One College Park (apartments)
- > Harper's Pointe Apartment Complex
- > UF Data Center 6.5 MW Total Load

Major Gas Design Projects:

- > Main Installation Main Installation Town of Tioga Ph 19 1570'
- > Main Installation Oakmont Subdivision ongoing 10600'
- > Main Installation NW 12th St. Bare steel 1960'
- > Main Installation Laureate Village SW 143rd St. 5900'
- > Main Installation SE Hawthorne Rd. 1200'

ENERGY SUPPLY

SYSTEM STATISTICS ENERGY DISTRIBUTION FUEL

September 2020

Energy Supply - CAPACITY

Energy Supply - Performance Parameter

Source

Unit Capability output - MWn

	Onit Capability output - wwn		
DH-2	228		
DH-1	58		
Kelly CC	108		
CT's	106		
Grid	2 x 224		
DHR	102.5		

Month	YTD	Budget YTD	Delta Budget
43,414	374,686	540,763	(166,077)
26,467	187,254	21,621	165,633
75,212	741,960	912,120	(170,160)
502	2,634	551	2,083
10,700	81,787	143,594	(61,807)
25,643	418,322	334,707	83,615

Fuels Consumed

Coal - Tons Gas - MCF Fuel oil - Gals Biomass - Tons

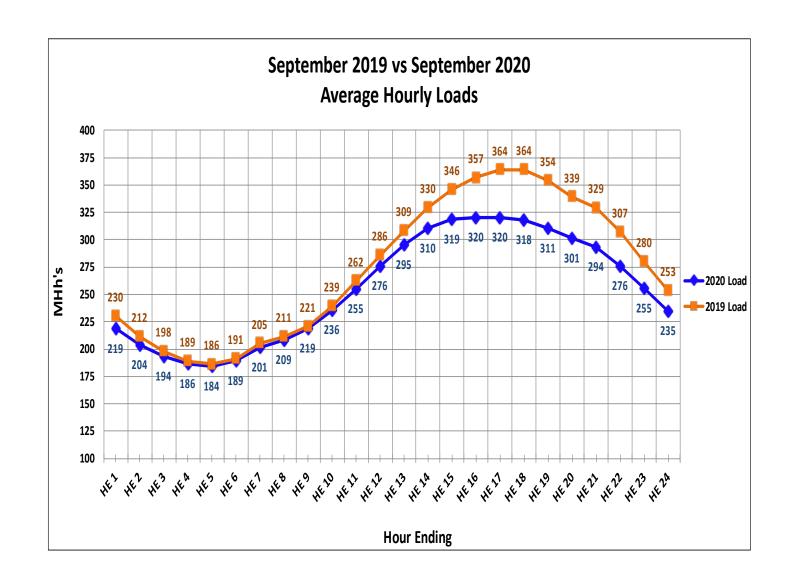
Month	FYTD	Budget YTD	Delta Budget
12,737	119,156	289,479	(179,323)
1,233,300	11,891,253	8,225,703	3,665,550
-	1,327	-	1,327
34,872	601,947	421,012	180,935

Availability/Capacity

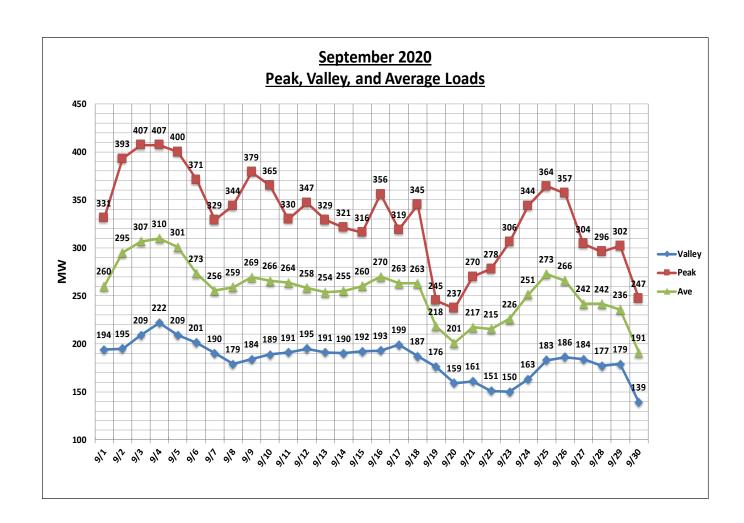
DH-2 DH-1 Kelly CC DH CT-1 DH CT-2 DH CT-3 DHR

Availability				Capacity	
Month	FY 2020 YTD	FY 2019 YTD	Month	FY 2020 YTD	FY 2019 YTD
100.00%	79.84%	82.73%	29.28%	13.44%	31.40%
100.00%	91.96%	99.51%	50.34%	33.48%	25.55%
100.00%	94.14%	79.48%	95.66%	85.89%	51.87%
100.00%	97.40%	99.50%	0.00%	0.24%	0.18%
100.00%	96.83%	95.50%	0.00%	0.23%	0.12%
99.42%	99.59%	84.50%	0.86%	1.82%	1.44%
67.43%	89.14%	90.17%	36.81%	51.77%	71.92%

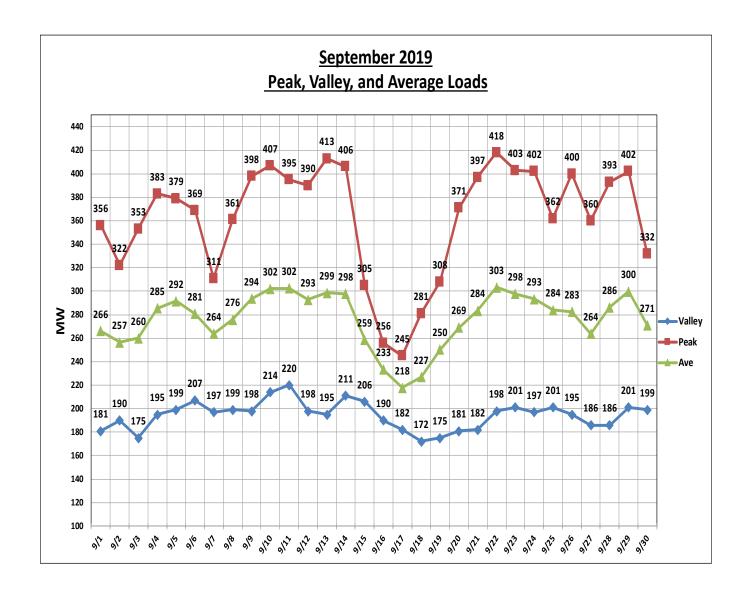
Septem	September Average Hourly Loads				
Hour Ending	2019 Load	2020 Load			
HE 1	230	219			
HE 2	212	204			
HE 3	198	194			
HE 4	189	186			
HE 5	186	184			
HE 6	191	189			
HE 7	205	201			
HE 8	211	209			
HE 9	221	219			
HE 10	239	236			
HE 11	262	255			
HE 12	286	276			
HE 13	309	295			
HE 14	330	310			
HE 15	346	319			
HE 16	357	320			
HE 17	364	320			
HE 18	364	318			
HE 19	354	311			
HE 20	339	301			
HE 21	329	294			
HE 22	307	276			
HE 23	280	255			
HE 24	253	235			



Date	Valley	Peak	Ave
9/1/2020	194	331	260
9/2/2020	195	393	295
9/3/2020	209	407	307
9/4/2020	222	407	310
9/5/2020	209	400	301
9/6/2020	201	371	273
9/7/2020	190	329	256
9/8/2020	179	344	259
9/9/2020	184	379	269
9/10/2020	189	365	266
9/11/2020	191	330	264
9/12/2020	195	347	258
9/13/2020	191	329	254
9/14/2020	190	321	255
9/15/2020	192	316	260
9/16/2020	193	356	270
9/17/2020	199	319	263
9/18/2020	187	345	263
9/19/2020	176	245	218
9/20/2020	159	237	201
9/21/2020	161	270	217
9/22/2020	151	278	215
9/23/2020	150	306	226
9/24/2020	163	344	251
9/25/2020	183	364	273
9/26/2020	186	357	266
9/27/2020	184	304	242
9/28/2020	177	296	242
9/29/2020	179	302	236
9/30/2020	139	247	191
			-



Date	Valley	Peak	Ave
9/1/2019	181	356	266
9/2/2019	190	322	257
9/3/2019	175	353	260
9/4/2019	195	383	285
9/5/2019	199	379	292
9/6/2019	207	369	281
9/7/2019	197	311	264
9/8/2019	199	361	276
9/9/2019	198	398	294
9/10/2019	214	407	302
9/11/2019	220	395	302
9/12/2019	198	390	293
9/13/2019	195	413	299
9/14/2019	211	406	298
9/15/2019	206	305	259
9/16/2019	190	256	233
9/17/2019	182	245	218
9/18/2019	172	281	227
9/19/2019	175	308	250
9/20/2019	181	371	269
9/21/2019	182	397	284
9/22/2019	198	418	303
9/23/2019	201	403	298
9/24/2019	197	402	293
9/25/2019	201	362	284
9/26/2019	195	400	283
9/27/2019	186	360	264
9/28/2019	186	393	286
9/29/2019	201	402	300
9/30/2019	199	332	271



Date: As of October 1, 2020: Major Energy Supply Projects/Milestones Updates:

1. Deerhaven Generating Station (DH):

- a. Deerhaven Unit #2 (DH2) # 1 High Pressure Feedwater Heater is still out of service due to external leak. The external leak was verified to be due to internal tube leak and due to inability to fully isolate the heater we are deferring a heater borescope to determine extent of repairs required until planed outage in December of 2020. With heater is currently bypassed with no restrictions on the plant load, but this does have minor impact on efficiency.
- b. DH2 has an EHC (oil) fluid leak on the governor valve cylinder. The plant personnel and MMG were able to reduce leakage by reducing return pressure. We have a replacement cylinder ready to go but work will be deferred to next planned outage in December of 2020.
- Deerhaven Unit #1 (DH1) we are currently working with OEM (Siemens) on a reduced scope for Turbine and Generator life time assessment. Both this scope of work and DH1 Major Outage would not occur until January 2022 based on other unit planned outages.

2. Deerhaven Renewable (DHR):

a. Starting in late August we started to see problems with the boiler fluidized bed, with conglomerations forming due to long period of low load conditions. This problem with bed stability even resulted in a unit trip on 9/15/2020. Based on boiler bed instability and need to take one generating unit offline due to overall reduced loads allowed us to take DHR offline on 9/18/2020. As their original planned outage was scheduled for 10/17 through 11/17/2020 we have started their outage early, and working on schedule to see if this can be completed early based on contractor availability.

3. Kelly Generating Station (JRK):

a. Unit #8 Steam Turbine and Generator replacement. Even with some delays due to COVID19 impacts all the fabrication and coordination for new turbine and generator is still progressing as planned, with outage planned to start in late January or 2021.

4. South Energy Center (SEC):

a. The Wartsila RICE Engine 2600 hour planned outage was conducted 9/22/2020. This was originally schedule for the week of 9/14/2020 but due to numerous expected storms that week we delayed this outage accordingly.

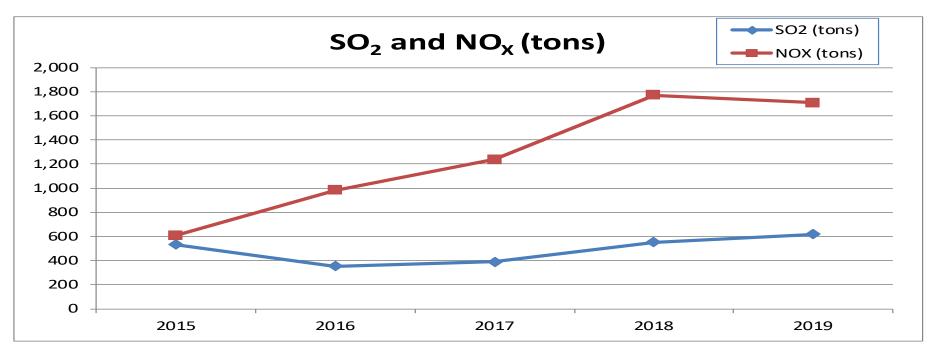
ENVIRONMENTAL PERMITTING

EMISSIONS DATA

Yearly Emissions

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)
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	618	1,707	5.30	49	2,020,310
2020 (Sept.)	241	870	2.17	29	1,349,512

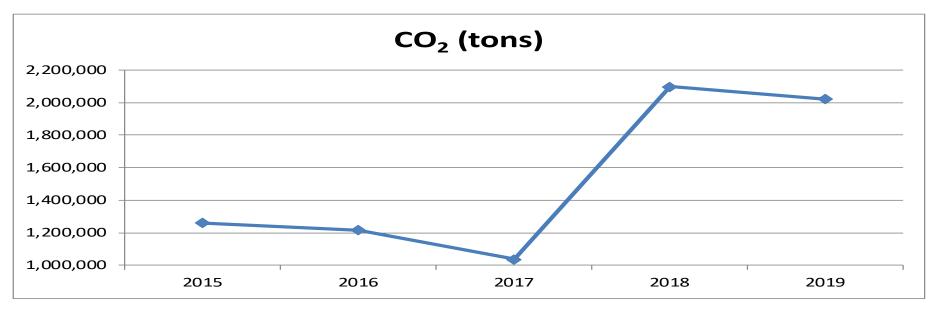
2017, 2018, 2019 and 2020 Mercury and Particulate values are for Unit 2 only.



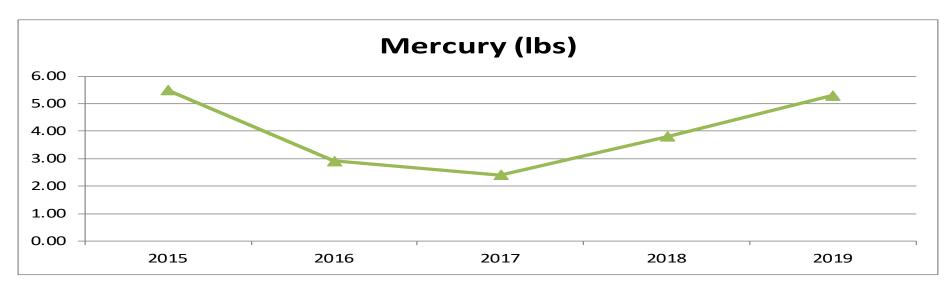
SO₂ was lower in 2015, 2016, and 2017 due to higher removal rate settings to assure compliance with the MATS Rule.

 NO_X was higher in 2016 since it was more cost effective to use allowances than increase SCR removal 2018 and later data include DHR. The previous years did not include DHR.

Yearly Emissions

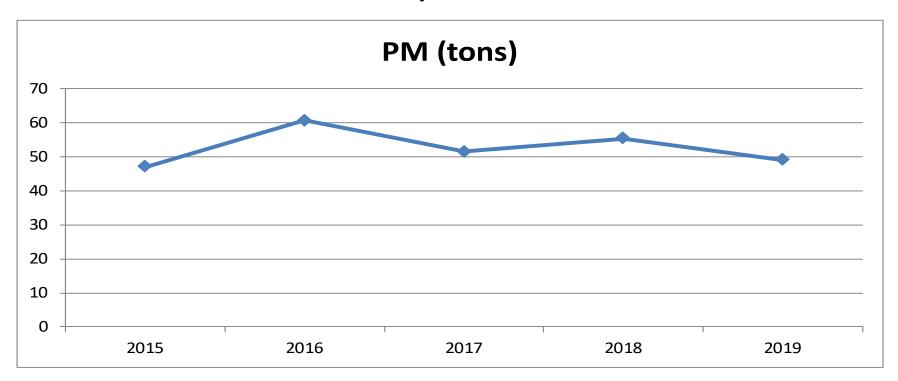


2018 and later data include DHR. The previous years did not include DHR.



Mercury was lower in 2016 and 2017 due to higher removal rate settings to assure compliance with with the MATS Rule.

Yearly Emissions



YTD - 2020 September

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	SO ₂ Rate (lb/MMBtu)	NO _X Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
DH1	0.8	190.4			153,767.7			2,587,482.0	219,988.0
DH2	227.5	431.4	2.17	28.7	274,554.7			3,187,050.0	294,854.0
DHCT3	0.0	0.5			1,972.8			33,191.0	2,316.0
JRKCC1	1.6	65.7			322,694.8			5,430,302.4	644,763.0
DHR	11.2	182.1			596,522.0			5,718,336.6	399,353.8
TOTAL	241.1	870.1	2.167	28.7	1,349,512.0			16,956,362.0	1,561,274.8

229.9 688.0 2.2 28.7 752,990.0 11,238,025.4 1,161,921.0

2020 - September

	SO ₂ (tons)	NO _x (tons)	Mercury (lbs)	PM (tons)	CO ₂ (tons)	SO ₂ Rate (lb/MMBtu)	NO _x Rate (lb/MMBtu)	HTIP (MMBtu)	GEN (MW-hours)
DH1	0.1	24.2			20,618.3			346,951.0	28,809.0
DH2	43.8	77.6	0.50	5.2	49,306.4			578,443.0	52,617.0
DHCT3	0.0	0.1			442.8			7,449.0	509.0
JRKCC1	0.2	7.5			39,581.1			666,010.6	75,818.0
DHR	0.9	14.5			45,103.5			432,455.2	30,208.9
TOTAL	45.0	123.9	0.5	5.2	155,052.1			2,031,308.8	187,961.9

44.1 109.4 0.5 5.2 109,948.6 1,598,853.6 157,753.0

WATER/WASTEWATER

PRODUCTION MAINTENANCE

Water/Wastewater Sept 2020 Dashboard

			Production			
Murph	ree Water Treatment					
				5 ''' 1		
		Sept 2020	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	22.2	22.8	30	76%	
	Peak Daily Flow	24.6	26.0	54	48%	
Main S	Street Water Reclama	tion Facility				
				Permitted		
		Sept 2020	FY to Date (mgd)	Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	7.60	5.99	7.5	80%	
Kanap	oaha Water Reclamati	on Facility				
		Sept 2020	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	13.4	11.6	14.9	78%	
Water	Reclamation Facilitie	es (Combined)				
		Sept 2020	FY to Date (mgd)	Permitted Capacity (mgd)	% of Permitted Capacity	Status
	Average Daily Flow	21.0	17.6	22.4	79%	
		N	/laintenance			
Waste	water Collections					
			Sept 2020 (Miles)	FYTD	Monthly Goal (miles)	
	Miles of gravity mains cle	eaned	11.73	74.60	5.0	
	Miles of gravity mains T	V inspected	8.34	86.45	5.0	
Water	Distribution					
			Sept 2020	FYTD	Monthly Goal	
	Number of Water Service	es Replaced	55	903	75	
		SSO N	onthly Sum			
			Sept	YTD	GOAL (annual)	
				1		

Major Projects and Other Updates

MWTP Electric System Upgrade - The MWTP is now operating on the new electrical system. The old equipment has been demolished and removed. The project is substantial complete.

MSWRF Phase I Project -Planning phase of project has begun.

KWRF 42-inch Pipe Construction Update - installation continues. Pressure testing with dye to identify any leaks.

Duck Pond Water Main Rehabilitation - Directional drilling and open trench water main construction underway. Estimated date of completion Nov 2020. Existing utilities along construction path make work challenging.

Gravity Sewer Lining - Completed nearly 10 miles of lining. Focus on early-out area in LS7 basin **Eastside Force Main** - Construction has begun by GRU crews. Contractor to start in October.

Water Distribution - repairing leaks more rapidly and maintaining leaks holding to under 25 on a monthly average.

Meter Replacement Program - completed changeout of over 6,300 meters surpassing the annual goal.