

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



March 2017 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant ran for 17 days in March, and continued to run very well into April. It is expected to remain online until April 19. Because of GRU's request that we delay the planned outage to allow the unit to remain on, we rescheduled the outage to May 19-25.

There were no safety or environmental issues during the month. We hired two new employees during the month.

Operations:

GREC began March dispatched to Reserve Shutdown by GRU. GREC was called to start-up and ran for 340.83 hours through the month. Start-up was uneventful and the plant has run at an average of 86 nMWhs. RATA and stack testing were successfully completed in March.

2. MONTHLY PERFORMANCE DATA

2017																	
PLANT SUMMARY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	QTR 1	QTR 2	QTR 3	QTR 4	YTD
Monthly Performance Data																	
Operations																	
Gross Generation (MWh)	30,255	12,722	39,577	0	0	0	0	0	0	0	0	0	82,555	0	0	0	82,555
Net Generation (MWh)	26,836	11,078	35,131	0	0	0	0	0	0	0	0	0	73,045	0	0	0	73,045
Solid Fuel Flow (ft3)																	
Solid fuel Flow (Tons)																	
Natural Gas Usage MMBTU	2,081	2,485	2,554	0	0	0	0	0	0	0	0	0	7,120	0	0	0	7,120
Avg Burn rate (Tons/nMWH)																	
Operating hours	313	151	341	0	0	0	0	0	0	0	0	0	805	0	0	0	805
Number of trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Safety																	
Lost Time Accidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lost Time Incident Rate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recordables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recordable Incident Rate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
First Aid Incidents	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Near Miss Incidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maintenance: WO Summary																	
Start Backlog	401	441	293	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Backlog	443	270	171	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Wos/Comp Rec WO's	61	41	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Completed W.O.s	211	212	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Received WO's	253	212	229	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3. PRODUCTION STATISTICS

2017																	
Production Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	QTR 1	QTR 2	QTR 3	QTR 4	YTD
Monthly Performance Data																	
Other																	
Ammonia Received (Gallons)	0	0	6,419	0	0	0	0	0	0	0	0	0	6,419	0	0	0	6,419
Ammonia Consumed	2,850	2,100	6,569	0	0	0	0	0	0	0	0	0	11,519	0	0	0	11,519
Sodium Bicarbonate Received (Tons)	23	0	24	0	0	0	0	0	0	0	0	0	46	0	0	0	46
Sodium Bicarbonate Consumed	8	6	16	0	0	0	0	0	0	0	0	0	30	0	0	0	30
Bottom Ash Generated (Tons)	63	27	90	0	0	0	0	0	0	0	0	0	180	0	0	0	180
Fly Ash Generated (Tons)	538	355	613	0	0	0	0	0	0	0	0	0	1,506	0	0	0	1,506
Filter Cake (Tons)	27	40	43	0	0	0	0	0	0	0	0	0	109	0	0	0	109
Diesel Fuel																	
Diesel Fuel Received	3,468	566	2,107	0	0	0	0	0	0	0	0	0	6,140	0	0	0	6,140
Diesel Fuel Burned	3,468	566	2,107	0	0	0	0	0	0	0	0	0	6,140	0	0	0	6,140
- Heavy Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- Boiler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diesel Fuel Ending Inventory	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water																	
Process Water Usage	5,818,387	2,620,883	9,119,877	0	0	0	0	0	0	0	0	0	17,559,147	0	0	0	17,559,147
Reclaim Water Usage	7,449,990	4,055,106	9,644,118	0	0	0	0	0	0	0	0	0	21,149,214	0	0	0	21,149,214

4. SAFETY

NAES Staff

	Month	Hours	First Aid	Recordable	Rec. Rate	LTA	LTA Rate	Near Miss
	January	5356.2	1	0	0.0	0	0.0	0
	February	5902.25	0	0	0.0	0	0.0	0
	March	8948.5	0	0	0.0	0	0.0	0
	April		0	0	0.0	0	0.0	0
	May		0	0	0.0	0	0.0	0
	June		0	0	0.0	0	0.0	0
	July		0	0	0.0	0	0.0	0
	August		0	0	0.0	0	0.0	0
	September		0	0	0.0	0	0.0	0
	October		0	0	0.0	0	0.0	0
	November		0	0	0.0	0	0.0	0
	December		0	0	0.0	0	0.0	0
Year to Date Total		20,206.95	1.00	0.00	0.00	0.00	0.00	0.00

Contractors

	Month	Hours	First Aid	Recordable	Rec. Rate	LTA	LTA Rate	Near Miss
	January	172	0	0	0.0	0	0.0	0
	February	191	0	0	0.0	0	0.0	0
	March	115	0	0	0.0	0	0.0	0
	April	0	0	0	0.0	0	0.0	0
	May	0	0	0	0.0	0	0.0	0
	June	0	0	0	0.0	0	0.0	0
	July	0	0	0	0.0	0	0.0	0
	August	0	0	0	0.0	0	0.0	0
	September	0	0	0	0.0	0	0.0	0
	October	0	0	0	0.0	0	0.0	0
	November	0	0	0	0.0	0	0.0	0
	December	0	0	0	0.0	0	0.0	0
Year to Date Total		478.00	0.00	0.00	0.00	0.00	0.00	0.00

Accidents:

There were no accidents in March.

Near Miss Reports:

No Near Miss Reports were completed in March.

Training:

36 individuals completed 137 safety courses in March.

5. ENGINEERING & ENVIRONMENTAL

- 3/6: ACEPD Hazardous Inspection
- 3/20: RATA & Annual Compliance Testing Completed 3/24
- 3/21: FDEP Air Compliance Inspection
- 3/30: GreenHouseGas (GHG) Submitted
- 3/31: FDEP Annual Operating Report (AOR) & Fee Submitted

6. OPERATIONS

GREC was called to start-up and ran for 340.83 hours through the month. There were 35,130 nMWhs generated during the month of March.

A total of [REDACTED] trucks were unloaded with [REDACTED] tons of wood received.

There was a total of 92 Safe Work Permits, 27 LOTOs, and 5 Confined Space Permit issued.

7. WATER CHEMISTRY

- **Cooling Tower:** Started up normal chlorine injection system at plant start-up
- **Boiler/ Make-Up Water:** Water treatment systems have run well and boiler chemistry all well within normal operating parameters.
- **Well/Reclaim Water:** Well water and reclaim systems were operated during the month.
- **ZDS:** System was put into service when plant started up.
- **Potable water:** Completed and submitted monthly and quarterly samples, including Bacteria. Completed and submitted the Florida DEP Monthly Operation Report for PWS.

8. FUEL HANDLING

- Received [REDACTED] trucks of wood fuel.
- Fuel receiving and boiler feed systems ran with no issues.
- The remanufactured chip dozer experienced a failure of the turbocharger. A new turbo was installed and no engine damage was found.

9. TRAINING

- GPILearn: 36 individuals completed 204 total courses in March.
- Six contractors received NAES site safety training in March.

10. MAINTENANCE

- Attended weekly safety meetings.
- Attended weekly MOC meetings.
- All maintenance employees worked on GPiLearn lessons.
- IC/E techs worked on monthly PMs.
- Mechanics worked on monthly PMs.
- NASS inspected the GSU transferor, warranty.
- Industrial Silo Services cleaned the ash silo.
- Supported startup of unit.
- IC/E worked on level transmitter on east fuel silo.
- Completed handrails on Secondary Fan bearing pedestal.
- Mechanics worked PM on #1 dust collector.
- Repaired lube lines on auto reclaim auto lube system.
- IC/E worked ticket to replace bad bearing temp probe.
- Supported fuel yard in getting truck off bay # 2 tipper.
- Mechanic worked ticket to repair hypo pump.
- IC/E worked ticket to swap motor leads on bottom ash hopper.
- Vendor checked out reman Wagner.
- Mechanic built shop table for operations.
- Replaced chain on Bin # 1 spike roll.
- Built drawer for fuel sampling on Bay # 3.
- Mechanics unplugged the rotary feeder on dust silo # 1.
- Mechanics unplugged the sight glass on the sulfuric acid tank.
- Changed door gasket on ash silo.
- Inspected the air-lock valves and equalizer valve on ash silo. Inspected hose – good condition.
- Trained belts #8 & # 13 for fuel yard.
- Replaced tail skirting on # 7 belt and sealed access door.
- Changed transmitter on boiler feed pump “A”.
- Scheduled work orders for March – 353. Completed work orders – 169.

11. ADMINISTRATION

Staffing:

Two new Fuel Yard Operators started on March 6. The remaining 3 Fuel Yard Operator positions will not be filled immediately.

Temporary Staffing:

There was no temporary labor on site in March.

Statistics:

- Payroll: 104 Payroll records processed.
- Accounts Payable: 143 invoices processed*, 106 payments processed.
*March invoices will continue to be processed through April 15.
- Procurement: 112 Requisitions reviewed, 112 Purchase Orders generated.
- Overtime: 11.78% of total hours.
- 2017 annual overtime: 13.6% of total hours.

Spare Parts Inventory Value: \$ [REDACTED]