

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



May 2017 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

May was another very successful month for GREC, with the end of a 65-day flawless run, a safe planned outage, and a successful capacity test. There were no safety or environmental incidents.

Operations:

GREC was on line for the 448 hours in the month of May. GREC ran for the first eighteen days of the month then shutdown for our planned maintenance outage. GRU started GREC up shortly after the outage to perform a 12-hour Dependable Capacity test. The test was completed successfully and we were then returned to Reserve Shutdown.

2. MONTHLY PERFORMANCE DATA

2017																	
PLANT SUMMARY																	
Monthly Performance Data	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	QTR 1	QTR 2	QTR 3	QTR 4	YTD
Operations																	
Gross Generation (MWh)	30,255	12,722	39,577	71,532	42,301	0	0	0	0	0	0	0	82,555	113,833	0	0	196,388
Net Generation (MWh)	26,836	11,078	35,131	63,909	37,847	0	0	0	0	0	0	0	73,045	101,756	0	0	174,802
Solid Fuel Flow (ft3)																	
Solid fuel Flow (Tons)																	
Natural Gas Usage MMBTU	2,081	2,485	2,554	0	1,697	0	0	0	0	0	0	0	7,120	1,697	0	0	8,817
Avg Burn rate (Tons/nMWH)																	
Operating hours	313	151	341	720	448	0	0	0	0	0	0	0	805	1,168	0	0	1,973
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	341	220	0	0	0	0	0	0	0	0	0	0	0	0
End Backlog	443	270	171	221	115	0	0	0	0	0	0	0	0	0	0	0	0
New Wos/Comp Rec WO's	61	41	47	63	139	0	0	0	0	0	0	0	0	0	0	0	0
Total Completed W.O.s	211	212	169	183	244	0	0	0	0	0	0	0	0	0	0	0	0
Received WO's	253	212	229	102	188	0	0	0	0	0	0	0	0	0	0	0	0

3. PRODUCTION STATISTICS

2017																	
Production Statistics																	
Monthly Performance Data	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	QTR 1	QTR 2	QTR 3	QTR 4	YTD
Other																	
Ammonia Received (Gallons)	0	0	6,419	12,869	6,445	0	0	0	0	0	0	0	6,419	19,315	0	0	25,733
Ammonia Consumed	2,850	2,100	6,569	11,669	8,095	0	0	0	0	0	0	0	11,519	19,765	0	0	31,283
Sodium Bicarbonate Received (Tons)	23	0	24	24	0	0	0	0	0	0	0	0	46	24	0	0	70
Sodium Bicarbonate Consumed	8	6	16	28	17	0	0	0	0	0	0	0	30	45	0	0	75
Bottom Ash Generated (Tons)	63	27	90	180	416	0	0	0	0	0	0	0	180	596	0	0	776
Fly Ash Generated (Tons)	538	355	613	1,056	1,027	0	0	0	0	0	0	0	1,506	2,082	0	0	3,589
Filter Cake (Tons)	27	40	43	66	86	0	0	0	0	0	0	0	109	152	0	0	262
Diesel Fuel																	
Diesel Fuel Received	3,468	566	2,107	3,067	3,321	0	0	0	0	0	0	0	6,140	6,388	0	0	12,528
Diesel Fuel Burned	3,468	566	2,107	3,067	3,321	0	0	0	0	0	0	0	6,140	6,388	0	0	12,528
- 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
													0	0	0	0	
Water																	
Process Water Usage	5,818,387	2,620,883	9,119,877	18,981,962	11,887,997	0	0	0	0	0	0	0	17,559,147	30,869,959	0	0	48,429,106
Reclaim Water Usage	7,449,990	4,055,106	9,644,118	15,948,957	10,712,918	0	0	0	0	0	0	0	21,149,214	26,661,875	0	0	47,811,089

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	6596.25	0	0	0.0	0	0.0	0
	May	6896.25	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		33,699.45	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	44	0	0	0.0	0	0.0	0
	May	1962	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		2,484.00	0.00	0.00	0.00	0.00	0.00	0.00

Accidents:

No accidents were reported in May.

Near Miss Reports:

No near miss reports were completed in May.

Training:

36 individuals completed 173 safety courses in May.

5. ENGINEERING & ENVIRONMENTAL

- 5/1: NOX Ozone Season Begins; Q1 EDR Submitted
- 5/5: ACEPD 1st Quarter Emissions Detail
- 5/19: EIA 923S Annual Report Submitted
- 5/22: EPA CDX Compliance Test Results Submitted
- 5/23: EPA CDX RATA Results Submitted
- 5/30: EIA 923 Submitted

6. OPERATIONS

GREC ran for 448.47 hours through the month. There were 37,846 nMWhs generated during the month of May. GREC successfully performed a Planned Maintenance Outage and a 12-hour Dependable Capacity test.

A total of [REDACTED] 3 trucks were unloaded with [REDACTED] 9 tons of wood received.

There was a total of 207 Safe Work Permits, 56 LOTOs, and 211 Confined Space Permit issued.

7. WATER CHEMISTRY

- **Cooling Tower:** All chemistry in normal parameters.
- **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:** During the outage, the system was cooled down and drained. The BC was hydroblasted and the Crystallizer Flash Tank lower portion coating was repaired.
- **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.
- Water misting has been added to conveyor 1 to aid with dust control.
- New sampling doors have been added to all three bays to more safely draw wood samples.

9. TRAINING

- GPiLearn: 36 individuals completed 206 total courses in May.
- 33 contractors received NAES site safety training in May.

10. MAINTENANCE

- Attended weekly safety meetings.
- All maintenance employees worked on GPiLearn lessons.
- All employees did their fitness for duty training.
- IC/E techs worked on monthly PMs.
- Mechanics worked on monthly PMs.
- IC/E repaired lighting on Reman Wagner.
- Mechanics replaced training roller on # 9 belt.
- IC/E repaired electrical on North oily water separator.
- IC/E traced trouble with the hydraulic fan motor issue on the Reman Wagner.
- Mechanics replaced the hose on sodium bicarbonate line.
- Mechanics repaired the skirting on belt # 7, fuel yard.
- IC/E repaired the eye wash station on the ammonia system.
- IC/E and Mechanic investigated issue with bay #1 backstop pit bridge opening.
- Replaced bad injection pump on odor control system.
- Mechanics took link out of spike roller on bay # 1.
- Walked all scaffolding needs with vendor preparing for outage.
- Reviewed outage schedule with planner. Walked all jobs out.
- Mechanics replaced one each return roller and toughing roller on belt # 5.
- Mechanics replaced 2 each top inclines on reclaimer.
- Mechanics ripped plywood for bottom of boiler furnace.
- Mechanics replaced bucket blade on new Wagner.
- Staged plywood under the boiler to cover floor drains, and staged boiler flooring on 1st floor.
- Mechanic checked for leaks on top of fly ash system.
- Had Mechanics build 2 sand fill doors for outage.
- Replaced bi-carb line south side with new hose.
- Mechanics repaired toe railing on bay #3 tipper, fuel yard.
- Replaced motor on soot blower # 21.
- IC/E replaced transmitter on fly ash system to vacuum blower.
- Mechanic repaired chain guard bay # 2 spike roller.
- IC/E worked ticket on ZDS system. Distillate tank level transmitter was reading erratically.
- Unit off line for annual maintenance outage.
- Scheduled work orders for May – 593. Completed work orders – 244.

11. ADMINISTRATION

Staffing:

There were three Fuel Yard Operator positions open as of May 31, which will not be filled immediately.

Temporary Staffing:

There was no temporary labor on site in May.

Statistics:

- Payroll: 76 Payroll records processed.
- Accounts Payable: 181 invoices processed*, 107 payments processed.
*May invoices will continue to be processed through June 15.
- Procurement: 127 Requisitions reviewed, 127 Purchase Orders generated.
- Overtime: 16.42% of total hours.
- 2017 annual overtime: 13.85% of total hours.

Spare Parts Inventory Value: \$ [REDACTED]