

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



April 2017 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant ran very well, and has been on line since 3/15. It is expected to remain online until May 9. Our planned outage is still scheduled for May 19-25.

There were no safety or environmental issues during the month.

Operations:

GREC was on line for the entire month of April. GREC experienced 1 Derate to 70 nMWhs for 56 minutes due to fuel feed issues.

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	71,532	0	0	0	0	0	0	0	0	82,555	71,532	0	0	154,087
Net Generation (MWh)	26,836	11,078	35,131	63,909	0	0	0	0	0	0	0	0	73,045	63,909	0	0	136,955
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	720	0	0	0	0	0	0	0	0	805	720	0	0	1,525
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	0	0	0	0	0	0	0	0	0	0	0	0	0
End Backlog	443	270	171	221	0	0	0	0	0	0	0	0	0	0	0	0	0
New Wos/Comp Rec WO's	61	41	47	63	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Completed W.O.s	211	212	169	183	0	0	0	0	0	0	0	0	0	0	0	0	0
Received WO's	253	212	229	102	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	12,869	0	0	0	0	0	0	0	0	6,419	12,869	0	0	19,288
Ammonia Consumed	2,850	2,100	6,569	11,669	0	0	0	0	0	0	0	0	11,519	11,669	0	0	23,188
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	0	0	0	0	0	0	0	0	30	28	0	0	58
Bottom Ash Generated (Tons)	63	27	90	180	0	0	0	0	0	0	0	0	180	180	0	0	360
Fly Ash Generated (Tons)	538	355	613	1,056	0	0	0	0	0	0	0	0	1,506	1,056	0	0	2,562
Filter Cake (Tons)	27	40	43	66	0	0	0	0	0	0	0	0	109	66	0	0	176
Diesel Fuel																	
Diesel Fuel Received	3,468	566	2,107	3,067	0	0	0	0	0	0	0	0	6,140	3,067	0	0	9,207
Diesel Fuel Burned	3,468	566	2,107	3,067	0	0	0	0	0	0	0	0	6,140	3,067	0	0	9,207
- 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	18,981,962	0	0	0	0	0	0	0	0	17,559,147	18,981,962	0	0	36,541,109
Reclaim Water Usage	7,449,990	4,055,106	9,644,118	15,948,957	0	0	0	0	0	0	0	0	21,149,214	15,948,957	0	0	37,098,171

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		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		26,803.20	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	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		522.00	0.00	0.00	0.00	0.00	0.00	0.00

Accidents:

A Fuel Yard Operator backed into hog house fire PIV and bollards with the Wagner chip dozer. No one was injured. Damage was valued at \$2,500.00.

Near Miss Reports:

No Near Miss Reports were completed in April.

Training:

37 individuals completed 219 safety courses in April.

5. ENGINEERING & ENVIRONMENTAL

- 4/19: EIA 923 Submitted
- 4/28: FDEP EER Submitted; EPA EDR Submitted on 5/1

Pending:

- Final RATA & Compliance Reports
- NOX Ozone Season Begins May 1st
- ACEPD 1st Quarter Emissions Detail May 5th

6. OPERATIONS

GREC ran for 720 hours through the month. There were 63,909.49 nMWhs generated during the month of April. GREC experienced one Derate to 70 nMWhs for 56 minutes when a metering bin went empty. We found an issue with the control logic for the affected side and will address when shutdown.

A total of [REDACTED] 6 trucks were unloaded with [REDACTED] tons of wood received.

There was a total of 85 Safe Work Permits, 39 LOTOs, and 6 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. Reclaim water was taken out of service by Alachua for two days due to water quality issues.
- **ZDS:** Performing Crystallizer Flash Tank boil-outs due to buildup on tank walls.
- **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: 37 individuals completed 229 total courses in April.
- Three contractors received NAES site safety training in April.

10. MAINTENANCE

- Attended weekly safety meetings.
- All maintenance employees worked on GPiLearn lessons.
- IC/E techs worked on monthly PMs.
- Mechanics worked on monthly PMs.
- Replaced drive gearbox and coupling on disc screen drive # 1 Fuel yard.
- Worked ticket to unplug the sodium bicarb injection valves and feeder.
- Adjusted chain on bay # 2 hopper spike roll, fuel yard.
- Repaired cover plate on north MCC ac-unit.
- Changed electric motor on sodium biocarbonate system.
- Met with Atlas Copco Representative to discuss issues with one of our instrument air compressors.
- Cummins service tech performed semi inspection on standby generator.
- Ring power in to repair the small skid steer.
- Repaired and removed a large piece of metal from disc screen # 2.
- Replaced copper lines to bag puffer valves, ash silo.
- Cleaned all nozzles on pugmill chute.
- Repaired HP-1 drain valve - faulty limit switch.
- Cooling tower blowdown sensor cleaned and replaced.
- Replaced both mercury switches on # 8 belt, fuel yard.
- Inspected and repaired SWP inboard oil seal.
- Vendor investigated the issues with "A" instrument air compressor.
- SKF took vibration readings on all running equipment.
- IC/E repaired Boiler feed pump high temp alarm.
- IC/E repaired Bay # 3 hydraulic pump issue.
- IC/E adjusted zero speed switch on # 8 belt.
- IC/E adjusted and repaired the indicator level on ash silo.
- Scheduled work orders for April – 443. Completed work orders – 183.

11. ADMINISTRATION

Staffing:

There were three Fuel Yard Operator positions open as of April 30, which will not be filled immediately.

Temporary Staffing:

There was no temporary labor on site in April.

Statistics:

- Payroll: 76 Payroll records processed.
- Accounts Payable: 155 invoices processed*, 85 payments processed.
*April invoices will continue to be processed through May 15.
- Procurement: 113 Requisitions reviewed, 113 Purchase Orders generated.
- Overtime: 11.95% of total hours.
- 2017 annual overtime: 13.19% of total hours.

Spare Parts Inventory Value: \$ ██████████