

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



August 2015 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant ran well until August 7th, when we experienced a boiler trip during a thunderstorm. The plant was ready for resynchronization within an hour, but GRU did not allow it, and placed the unit on reserve shutdown. There were no safety or environmental incidents. There are two Fuel Yard Operator jobs open, and we plan to leave them unfilled for now.

Operations:

The unit operated for 164 hours and was available for 671.88 hours in the month of August. GREC experienced one forced outage in August and was placed on Reserve Shutdown for the majority of the month. GREC performed a Maintenance Outage while the unit was down from the Reserve Shutdown in order to take advantage of the cold iron condition.

The boiler was placed in a dry lay-up as a means of preservation to prevent corrosion. We continued to maintain a cold standby status. We began to windrow the fuel and set up a rotation schedule.

2. MONTHLY PERFORMANCE DATA

2015																	
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)	49,418	55,357	60,383	32,781	45,671	58,655	63,484	13,881	0	0	0	0	165,158	137,107	77,365	0	379,630
Net Generation (MWh)	42,953	48,167	54,434	28,374	39,642	51,088	55,363	12,109	0	0	0	0	145,554	119,104	67,471	0	332,129
Solid Fuel Flow (ft3)	REDACTED																
Solid fuel Flow (Tons)	REDACTED																
Natural Gas Usage MMBTU	1,655	0	0	0	1,994	569	0	1,555	0	0	0	0	1,655	2,563	1,555	0	5,773
Avg Burn rate (Tons/nMWH)	REDACTED																
Operating hours	592	672	744	562	551	697	744	164	0	0	0	0	2,008	1,809	908	0	4,726
Number of trips	5	0	0	3	0	2	0	1	0	0	0	0	5	5	1	0	11
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	130	133	171	158	162	109	115	109	0	0	0	0	434	429	224	0	1,087
End Backlog	73	90	112	114	62	76	61	77	0	0	0	0	275	252	138	0	665
New Wos/Comp Rec WO's	170	247	186	139	154	159	171	125	0	0	0	0	603	452	296	0	1,351
Total Completed W.O.s	227	290	245	183	254	192	225	157	0	0	0	0	762	629	382	0	1,773
Received WO's	234	331	241	191	206	203	235	188	0	0	0	0	806	600	423	0	1,829

3. PRODUCTION STATISTICS

2015																	
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)	13,008	13,016	13,000	6,475	6,437	12,915	19,336	0	0	0	0	0	39,024	25,827	19,336	0	84,187
Ammonia Consumed	11,058	12,866	12,700	6,775	10,037	12,765	15,436	2,250	0	0	0	0	36,624	29,577	17,686	0	83,887
Sodium Bicarbonate Received (Tons)	24	0	24	23	24	0	47	0	0	0	0	0	48	47	47	0	142
Sodium Bicarbonate Consumed	20	25	17	17	9	27	20	0	0	0	0	0	63	53	20	0	136
Bottom Ash Generated (Tons)	230	259	462	181	352	245	225	45	0	0	0	0	951	778	270	0	1,998
Fly Ash Generated (Tons)	981	1,043	1,102	958	520	1,077	1,173	577	0	0	0	0	3,126	2,555	1,750	0	7,431
Filter Cake (Tons)	78	73	102	47	60	107	117	32	0	0	0	0	253	215	150	0	618
Diesel Fuel																	
Diesel Fuel Received	4,410	4,006	5,087	3,488	4,822	3,595	2,854	5,924	0	0	0	0	13,503	11,904	8,778	0	34,185
Diesel Fuel Burned	4,410	4,006	5,087	3,488	4,822	3,595	2,854	5,924	0	0	0	0	13,503	11,905	8,778	0	34,186
- 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													0	0	0	0	
Process Water Usage	10,479,714	10,113,783	12,700,990	8,701,923	14,153,347	15,224,071	16,485,037	4,146,288	0	0	0	0	33,294,487	38,079,341	20,631,325	0	92,005,153
Reclaim Water Usage	13,106,824	15,488,745	18,109,532	9,403,562	11,906,570	18,044,411	17,745,056	4,032,007	0	0	0	0	46,705,101	36,534,203	21,777,063	0	105,016,367

4. SAFETY

NAES Staff

	Month	Hours	First Aid	Recordable	Rec. Rate	LTA	LTA Rate	Near Miss
2014	January	6772.75	0	0	0.0	0	0.0	0
	February	6915.50	0	0	0.0	0	0.0	0
	March	6543.25	0	0	0.0	0	0.0	0
	April	6653.25	0	0	0.0	0	0.0	0
	May	12832.75	0	0	0.0	0	0.0	0
	June	6477	0	0	0.0	0	0.0	0
	July	6368.5	0	0	0.0	0	0.0	0
	August	6763.75	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		59,326.75	0.00	0.00	0.00	0.00	0.00	0.00

Contractors

	Month	Hours	First Aid	Recordable	Rec. Rate	LTA	LTA Rate	Near Miss
2014	January	2645	0	0	0.0	0	0.0	0
	February	511	0	0	0.0	0	0.0	0
	March	655	0	0	0.0	0	0.0	0
	April	6040	1	0	0.0	0	0.0	0
	May	7143	0	0	0.0	0	0.0	0
	June	658	0	0	0.0	0	0.0	0
	July	311	0	0	0.0	0	0.0	0
	August	700	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		18,662.50	1.00	0.00	0.00	0.00	0.00	0.00

Accidents:

There were no injuries reported in August.

Near Miss Reports:

No Near Miss Reports were completed in August.

Training:

38 individuals completed 76 safety courses in August.

5. ENGINEERING & ENVIRONMENTAL

- 8/4: ACEPD 2nd Quarter Emissions Detail Submitted
- 8/18: Title V Permitted Approved
- 8/31: Startup Opacity Exceedance reported to FDEP

Pending

- CEMS DAHS Permit Configuration Updates effective 0000 August 1st
- SPCC/SWPPP Annual Review & Training 9/18
- Fly Ash & Salt Cake beneficial re-use alternatives

6. OPERATIONS

A total of 12,108 nMW hours of electricity were generated during the month. The monthly Average Burn Rate was **REDACTED**

A total of 1,159 trucks were unloaded with 32,278.11 tons of wood received and **REDACTED**. There were 128 Safe Work, 67 LOTO, and 13 Confined Space permits written.

A temporary boiler was rented in order to keep the ZDS on line.

7. WATER CHEMISTRY

- **Cooling Tower:** Running the circ water pumps as necessary to maintain chemistry and to aid in basin level control by evaporation.
- **Boiler/ Make-Up Water:** Currently we are flushing the make-up water trains to prevent biological fouling. We are considering laying up the systems with sodium bisulfite as a method of “pickling.”
- **Well/Reclaim Water:** Reclaim water has been secured and well water use has been severely curtailed while in Reserve Shutdown.
- **ZDS:** We continue to run the ZDS using a portable steam boiler in order to reduce the conductivity in the cooling tower, and help maintain cooling tower basin level.
- **Potable water:** Completed and submitted monthly and quarterly samples, including Bacteria.

8. FUEL HANDLING

- Began windrowing the dead yard using the chip dozers to minimize fire hazard and control odor. An excavator and bulldozer have been rented for the live yard pile due to its height.
- PMs performed on belts and machines.

9. TRAINING

- GPiLearn: 38 individuals completed 185 total courses in August.
- Forty contractors received NAES site safety training in August.

10. MAINTENANCE

- Had crews work on GPiLearn training.
- Reviewed SMP-09, all crews.
- Held daily safety meetings with maintenance crews.
- Reminded all to do their Compliance survey.
- IC/E worked scheduled PMs.
- Mechanics worked scheduled PMs.
- Worked tickets on re-man Wagner and skid steer.
- Monthly vibrations readings taken.
- Repaired plenum on belt press - Maintenance Techs & IC/E.
- Inspected all wear backs on ash system - Maintenance Techs.
- Had vendor repair the outbound scale for BRM.
- Repaired and replaced gearbox on # 13 conveyor.
- IC/E & Mechanic installed regulator on unit for nitrogen purge.
- Had Mechanic weld nuts on valve list for nut runner ticket.
- Prep feed water heater and placed tooling for job.
- SPX repaired # 2 FWH.
- Mechanics repaired both silo chutes during small outage.
- Mechanics repaired # 9 Tail pulley chute.
- South oil water separator motor changed out.
- Changed out electric fire pump relief valve.
- Monthly/ Quarterly fire inspections completed.
- Held safety stand down with SPX & Titan before starting FWH outage.
- SPX did an outstanding job on # 2 FWH. 13 tubes plugged.
- SKF Summary report: 130 total readings, 3 action items, and 0 watch items.
- Scheduled work orders for Aug – 185. Completed work orders - 198.

11. ADMINISTRATION

Staffing:

There were two Fuel Yard positions open as of August 31, 2015, which will not be filled immediately.

Temporary Staffing:

There was no temporary labor on site in August.

August Statistics:

- Payroll: 81 Payroll records processed
- Accounts Payable: 163 invoices processed*, 100 payments processed
*August invoices will continue to be processed through September 15, 2015.
- Procurement: 92 Requisitions reviewed, 90 Purchase Orders generated
- August Overtime: 12.5% of total hours
- 2015 annual overtime: 17.76% of total hours

Spare Parts Inventory Value: \$**REDACTED**