

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



September 2015 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant was in reserve shutdown all of September, with the exception of an unannounced capacity test called for on a Saturday morning, Sept. 19th. The test went very well. 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 26.76 hours and has been available for 720 hours in the month of September. GREC was directed to start-up for a Declared Capacity test Saturday September 19th. The plant was started and brought to full load for 12 hours. GREC was then directed to return to Reserve Shutdown.

The boiler had been placed in a dry lay-up with a nitrogen cap as a means of preservation to prevent corrosion. After the DC test the boiler was placed in wet lay-up with a nitrogen cap. We continue to maintain a cold standby status. The initial fuel turn-over has been completed.

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	2,341	0	0	0	165,158	137,107	79,707	0	381,972
Net Generation (MWh)	42,953	48,167	54,434	28,374	39,642	51,088	55,363	12,109	2,061	0	0	0	145,554	119,104	69,532	0	334,190
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	2,022	0	0	0	1,655	2,563	3,577	0	7,795
Avg Burn rate (Tons/nMWH)	REDACTED																
Operating hours	592	672	744	562	551	697	744	164	27	0	0	0	2,008	1,809	935	0	4,752
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	122	259	0	0	0	434	429	496	0	1,359
End Backlog	73	90	112	114	62	76	61	65	150	0	0	0	275	252	276	0	803
New Wos/Comp Rec WO's	170	247	186	139	154	159	171	141	43	0	0	0	603	452	355	0	1,410
Total Completed W.O.s	227	290	245	183	254	192	225	198	152	0	0	0	762	629	575	0	1,966
Received WO's	234	331	241	191	206	203	235	345	75	0	0	0	806	600	655	0	2,061

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	300	0	0	0	36,624	29,577	17,986	0	84,187
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	1	0	0	0	63	53	21	0	137
Bottom Ash Generated (Tons)	230	259	462	181	352	245	225	47	9	0	0	0	951	778	281	0	2,009
Fly Ash Generated (Tons)	981	1,043	1,102	958	520	1,077	1,173	577	80	0	0	0	3,126	2,555	1,830	0	7,511
Filter Cake (Tons)	78	73	102	47	60	107	117	32	21	0	0	0	253	215	170	0	638
Diesel Fuel																	
Diesel Fuel Received	4,410	4,006	5,087	3,488	4,822	3,595	2,854	5,924	6,451	0	0	0	13,503	11,904	15,229	0	40,637
Diesel Fuel Burned	4,410	4,006	5,087	3,488	4,822	3,595	2,854	5,924	6,451	0	0	0	13,503	11,905	15,229	0	40,637
- 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	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	1,891,887	0	0	0	33,294,487	38,079,341	22,523,212	0	93,897,040
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	5811.25	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		65,138.00	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	308	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		18,970.50	1.00	0.00	0.00	0.00	0.00	0.00

Accidents:

There were no injuries reported in September.

Near Miss Reports:

No Near Miss Reports were completed in September.

Training:

38 individuals completed 95 safety courses in September.

5. ENGINEERING & ENVIRONMENTAL

- FDEP Inspections – 16th, 23rd & 24th
- Odor Control Applications – Powder Activated Carbon, Bio-Char & Atomization System
- Startup Opacity Exceedance Evaluation Pending
- Annual Compliance & RATA targeted October 19th – 23rd
- CEMS DAHS Permit Configuration Updates effective 0000 August 1st
- Fly Ash & Salt Cake beneficial re-use alternatives

6. OPERATIONS

A total of 2,060.74 nMW hours of electricity were generated during the month. The monthly Average Burn Rate was **REDACTED**

A total of 1 truck was unloaded with 29.25 tons of wood received and **REDACTED** **REDACTED** There were 125 Safe Work, 47 LOTO, and 43 Confined Space permits written.

7. WATER CHEMISTRY

- **Cooling Tower:** Running the circ water pumps a 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 as been 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

- Fuel yard windrowing the live and dead yard has been completed.
- A cap of Bio Char and activated carbon has been spread on the fuel pile to help control odor caused by decomposition.
- A temporary vapor system has been set up in the fuel yard to test a new odor control agent.
- PMs performed on belts and machines.

9. TRAINING

- GPILearn: 38 individuals completed 124 total courses in September.
- No contractors received NAES site safety training in September.

10. MAINTENANCE

- Had crews work on GPiLearn training.
- Held daily safety meetings with maintenance crews.
- Reviewed NAES Safety Alert-Electrical Safe Practices with all crews.
- Worked tickets on Re-man Wagner and D-6.
- IC/E worked freeze protection tickets on instrumentation until complete.
- Mechanics worked on freeze protection tickets until complete.
- IC/E techs hooked up Nitrogen line to DA tank for layup blanket.
- IC/E inspected all bag detectors on each bag house, historically no broken bags for the last 6 months. Need to adjust sensitivity next run.
- IC/E performed troubleshooting on ZDS-FIT-1652-30
- Mechanics repaired acid pump valve leaks at ZDS.
- Mechanics inspected all 3 bays for wear inside bay hoppers.
- Started up unit over weekend of 9/19/2015 for capacity testing, maintenance crews were scheduled.
- Inspected and cleaned fuel yard oily water separator.
- Walked duct doors down for schedule inspection after unit went down for layup.
- Vendor to do more freeze protection pads for us.
- Had Mechanics pull both A & B strainer baskets on both condensate pumps.
- Reviewed all comments from Siemens report with Planner and IC/E Tech.
- Planner made tickets from Siemens report.
- Mechanics replaced gasket on BFW strainer after checking.
- Maintenance supported NCM Order Control in system set up.
- Reviewed and checked out the Steam Jet Ejector system. Ops/Maint.
- SKF Service Manager in for quarterly meeting and review.
- SKF summary report - no readings while unit down.
- Scheduled work orders for Sept. - 182 / Completed work orders - 152.

11. ADMINISTRATION

Staffing:

There were two Fuel Yard positions open as of September 30, 2015, which will not be filled immediately.

Temporary Staffing:

There was no temporary labor on site in September.

September Statistics:

- Payroll: 78 Payroll records processed
- Accounts Payable: 146 invoices processed*, 113 payments processed
*September invoices will continue to be processed through October 15, 2015.
- Procurement: 70 Requisitions reviewed, 69 Purchase Orders generated
- August Overtime: 6.75% of total hours
- 2015 annual overtime: 16.43% of total hours

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