

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



October 2015 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant was in reserve shutdown all of October. There were no environmental incidents, but we did have one first aid injury. There are two Fuel Yard Operator jobs open, and we plan to leave them unfilled for now.

Operations:

The unit did not operate and has been available for 744 hours in the month of October. The plant started the month in short term wet lay-up.

The boiler and main steam line have been placed in a dry lay-up with a nitrogen cap as a means of preservation to prevent corrosion. The DA/ Feedwater tank continue to be in a wet lay-up with a nitrogen cap.

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	172	0	0	434	429	496	172	1,531
End Backlog	73	90	112	114	62	76	61	65	150	71	0	0	275	252	276	71	874
New Wos/Comp Rec WO's	170	247	186	139	154	159	171	141	43	101	0	0	603	452	355	101	1,511
Total Completed W.O.s	227	290	245	183	254	192	225	198	152	189	0	0	762	629	575	189	2,155
Received WO's	234	331	241	191	206	203	235	345	75	157	0	0	806	600	655	157	2,218

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	19	0	0	3,126	2,555	1,830	19	7,530
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	194	0	0	13,503	11,904	15,229	194	40,830
Diesel Fuel Burned	4,410	4,006	5,087	3,488	4,822	3,595	2,854	5,924	6,451	194	0	0	13,503	11,905	15,229	194	40,831
- 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	427,606	0	0	33,294,487	38,079,341	22,523,212	427,606	94,324,646
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
	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	9463	1	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		74,601.00	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	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	356	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		19,326.50	1.00	0.00	0.00	0.00	0.00	0.00

Accidents:

There was one first aid incident in October when a mechanic suffered a minor electrical shock.

Near Miss Reports:

No Near Miss Reports were completed in October.

Training:

37 individuals completed 127 safety courses in October.

5. ENGINEERING & ENVIRONMENTAL

- 10/28: Opacity Compliance Assurance Offer received
- 3rd Quarter Emissions Reports Submitted, ACEPD reports due 11/6
- CEMS DAHS Configuration completed
- Fly Ash & Salt Cake beneficial re-use alternatives

6. OPERATIONS

There was no electricity generated during the month. We are operating large fans weekly to exercise fans and to monitor for conditions that may lead to an opacity excursion.

Lay-up conditions changed from short-term to long-term with the DA/Feedwater tank remaining in wet lay-up with nitrogen cap. Feedwater tank chemistry continues to be monitored weekly.

Fuel yard fuel turn-over recommenced due to pile temperatures.

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.
- **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 recommenced due to increasing pile temperatures.
- 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: 37 individuals completed 163 total courses in October.
- No contractors received NAES site safety training in October.

10. MAINTENANCE

- Had crews work on GPi-Learn training.
- Held daily safety meetings with maintenance crews.
- IC/E worked freeze protection tickets on instrumentation until complete.
- Mechanics worked on freeze protection tickets until complete.
- Had vendor vacuum out the south oily water separator and ash in the return air heater side of boiler.
- Called vendor to repair the East side hoist, wiring pulled from main power box.
- Had conference call with Siemens about root cause analysis of power oscillation.
- Met with Dane Hurt of Siemens about short term/long layup. Provided password for historical data to the Siemens system.
- IC/E techs and mechanics worked monthly PMs.
- IC/E repaired all lights on conveyor # 6.
- Scheduled Atlas Copco to check all air dryers on compressors.
- Repaired the pilot safety valve on condenser heater tank.
- Repaired mechanical breaker for the ID Fan in north PDC with Square D Tech.
- Placed heater in the SCR to keep it 120 degrees.
- IC/E replaced I-High on boiler East side.
- Mechanics worked on truck hopper bays # 1 and 2 replacing wear liner.
- Met with SKF Service Provider to discuss training opportunities.
- Had meeting about concerns for 2016 NERC issues.
- Held conference call with TGM about vibration issues with turbine during start up.
- Had Mechanics walk unit and use the Ultra Probe 9000, tagging leaks on unit.
- IC/E techs assisted Atlas Copco on all compress units with moisture issues.
- IC/E techs worked tickets from leak detection list. All small leaks, 2 regulators bad.
- Worked with vendor on mechanical seal quote for brine circulation pump, ZDS system.
- Ran an analysis on A & B Condensate pumps, no indication of problems.
- Opened the Condenser for internal inspection. No issues.
- IC/E techs calibrated CEMS-02 analyzer drift.
- IC/E techs supported GRU on line feeding aux power.
- IC/E techs cleaned breakers / switchgear in PDC/MCC rooms, stacker reclaimer & fuel yard.
- IC/E tech attended NFPA-70E training in Tampa, FL.
- SKF Summary report, readings pumps when available.
- Scheduled work orders for October – 329. Completed work orders - 189.

11. ADMINISTRATION

Staffing:

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

Temporary Staffing:

There was no temporary labor on site in October.

October Statistics:

- Payroll: 117 Payroll records processed
- Accounts Payable: 160 invoices processed*, 128 payments processed
*October invoices will continue to be processed through November 15, 2015.
- Procurement: 102 Requisitions reviewed, 100 Purchase Orders generated
- October Overtime: 8.12% of total hours
- 2015 annual overtime: 15.54% of total hours

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