

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



November 2015 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant was in reserve shutdown for most of November, except for a one-week run. There were no environmental incidents, or injuries. The startup, run duration, and shut down all went very well. There are two Fuel Yard Operator jobs open, and we plan to leave them unfilled for now.

Operations:

The unit operated for 173.35 hours and has been available for 720 hours in the month of November. The plant was called to start-up and run to support GRU.

The boiler and main steam line have since 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. Fuel was brought on site to replace inventory used. Additional dry fuel (to be covered) and pine bark is being added to our inventory for long term storage.

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	15,051	0	165,158	137,107	79,707	15,051	397,023
Net Generation (MWh)	42,953	48,167	54,434	28,374	39,642	51,088	55,363	12,109	2,061	0	13,194	0	145,554	119,104	69,532	13,194	347,384
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	1,974	0	1,655	2,563	3,577	1,974	9,769
Avg Burn rate (Tons/nMWH)	REDACTED																
Operating hours	592	672	744	562	551	697	744	164	27	0	173	0	2,008	1,809	935	173	4,926
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	133	0	434	429	496	305	1,664
End Backlog	73	90	112	114	62	76	61	65	150	71	93	0	275	252	276	164	967
New Wos/Comp Rec WO's	170	247	186	139	154	159	171	141	43	101	40	0	603	452	355	141	1,551
Total Completed W.O.s	227	290	245	183	254	192	225	198	152	189	143	0	762	629	575	332	2,298
Received WO's	234	331	241	191	206	203	235	345	75	157	188	0	806	600	655	345	2,406

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	6,453	0	39,024	25,827	19,336	6,453	90,640
Ammonia Consumed	11,058	12,866	12,700	6,775	10,037	12,765	15,436	2,250	300	0	3,303	0	36,624	29,577	17,986	3,303	87,490
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	10	0	63	53	21	10	147
Bottom Ash Generated (Tons)	230	259	462	181	352	245	225	47	9	0	45	0	951	778	281	45	2,054
Fly Ash Generated (Tons)	981	1,043	1,102	958	520	1,077	1,173	577	80	19	80	0	3,126	2,555	1,830	99	7,610
Filter Cake (Tons)	78	73	102	47	60	107	117	32	21	0	24	0	253	215	170	24	662
Diesel Fuel																	
Diesel Fuel Received	4,410	4,006	5,087	3,488	4,822	3,595	2,854	5,924	6,451	194	4,673	0	13,503	11,904	15,229	4,866	45,503
Diesel Fuel Burned	4,410	4,006	5,087	3,488	4,822	3,595	2,854	5,924	6,451	194	4,673	0	13,503	11,905	15,229	4,866	45,503
- 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	1,891,887	427,606	6,457,612	0	33,294,487	38,079,341	22,523,212	6,885,218	100,782,258
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	1,663,384	0	46,705,101	36,534,203	21,777,063	1,663,384	106,679,751

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	6139.5	0	0	0.0	0	0.0	0
	December		0	0	0.0	0	0.0	0
Year to Date Total		80,740.50	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	84	0	0	0.0	0	0.0	0
	December	0	0	0	0.0	0	0.0	0
Year to Date Total		19,410.50	1.00	0.00	0.00	0.00	0.00	0.00

Accidents:

There were no accidents in November.

Near Miss Reports:

No Near Miss Reports were completed in November.

Training:

35 individuals completed 74 safety courses in November.

5. ENGINEERING & ENVIRONMENTAL

- 11/2: Opacity Compliance Assurance Offer Response
- 11/5: 3rd Quarter ACEPD reports submitted
- Fly Ash & Salt Cake beneficial re-use alternatives

6. OPERATIONS

A total of 13,193.8 nMW hours of electricity were generated during the month. The Average Burn rate was **REDACTED**

A total of 390 trucks were unloaded with 10,675.25 tons of wood received and **REDACTED**
REDACTED

There were a total of 72 Safe Work Permits, 32 LOTOs, and 2 Confined Space Permits issued.

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.

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:** Continue to flush the make-up water trains to prevent biological fouling.
- **Well/Reclaim Water:** Reclaim water had been used while running and well water use as been curtailed while in Reserve Shutdown.
- **ZDS:** In hot standby. Portable boiler has been returned.
- **Potable water:** Completed and submitted monthly and quarterly samples, including Bacteria.

8. FUEL HANDLING

- Fuel yard turn over of the live and dead yard has recommenced due to increasing pile temperatures.
- Auto Reclaimer out of service due to mechanical failure. Repairs expected early December.
- PMs performed on belts and machines.
- Activated Carbon is now being used on top of fuel piles for odor control.

9. TRAINING

- GPILearn: 35 individuals completed 16 total courses in November.
- No contractors received NAES site safety training in November.

10. MAINTENANCE

- Had crews work on GPI-Learns.
- Had all employees work on Code of Conduct training.
- Held daily Safety meetings with maintenance crews.
- Scheduled Atlas Copco to change out cooling fan.
- IC/E cleaning breakers / switchgear in PDC/MCC room fuel yard.
- Had meeting & hands on training with UE/ Systems.
- Had annual state elevator inspection for renewal.
- Attended all Fuel meetings.
- PA Fan Damper inspection & repair limit switch.
- Replaced all insulation on steam turbine ejectors after checking for leaks.
- IC/E reviewing turbine start up in Siemens system.
- Changed maintenance shifts for Boiler start up.
- Changed out gearbox on # 1 conveyor after rebuild.
- Took up slack in # 1 under pile, chain loose.
- Called Wolf systems to help in evaluating why the Stacker chain malfunction causing damage to system. (Shared off paddle, shared off two chain hold downs on top side and adjustment plates on each side.) Parts ordered (Repairs schedule for Dec. time frame).
- Had Brand Scaffolding take down scaffold on insulation job.
- Had scaffold built on 1 st floor pipe rack, to repair valve.
- Mechanics worked on monthly PMs.
- IC/E worked on monthly PMs.
- Installed light and pole in fuel yard at # 2 under pile.
- Replaced bad grating on 3rd floor of unit.
- Vendor in to work on the brakes on the Re-man Wagner.
- Changed gasket on air ejector system.
- Held Competent Person Scaffolding Training for site.
- SKF Summary Report, 250 asset readings total, 1 action item, and no watch items.
- Scheduled work orders: 186. Completed work orders: 143.

11. ADMINISTRATION

Staffing:

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

Temporary Staffing:

There was no temporary labor on site in November.

November Statistics:

- Payroll: 78 Payroll records processed
- Accounts Payable: 169 invoices processed*, 103 payments processed
*November invoices will continue to be processed through December 11, 2015.
- Procurement: 68 Requisitions reviewed, 66 Purchase Orders generated
- November Overtime: 10.3% of total hours
- 2015 annual overtime: 15.13% of total hours

Spare Parts Inventory Value: \$ REDACTED