

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



December 2015 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant was in reserve shutdown for all of December. There were no environmental incidents, or injuries. There are three Fuel Yard Operator jobs open, and we plan to leave them unfilled for now.

Operations:

The unit did not operate and was available for 744 hours in the month of December. The plant remained in Reserve Shutdown as directed by 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. We continue to receive dry fuel (to be covered) and pine bark which is being added to our inventory for long term storage.

2. MONTHLY PERFORMANCE DATA

2015																	
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)	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	160	434	429	496	465	1,824
End Backlog	73	90	112	114	62	76	61	65	150	71	93	72	275	252	276	236	1,039
New Wos/Comp Rec WO's	170	247	186	139	154	159	171	141	43	101	40	96	603	452	355	237	1,647
Total Completed W.O.s	227	290	245	183	254	192	225	198	152	189	143	184	762	629	575	516	2,482
Received WO's	234	331	241	191	206	203	235	345	75	157	188	247	806	600	655	592	2,653

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	114	3,126	2,555	1,830	213	7,724
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	5302.5	0	0	0.0	0	0.0	0
Year to Date Total		86,043.00	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	84	0	0	0.0	0	0.0	0
	December	146	0	0	0.0	0	0.0	0
Year to Date Total		19,556.00	1.00	0.00	0.00	0.00	0.00	0.00

Accidents:

There were no accidents in December.

Near Miss Reports:

No Near Miss Reports were completed in December.

Training:

37 individuals completed 83 safety courses in December.

5. ENGINEERING & ENVIRONMENTAL

- Annual ESS Site Inspection and Audit 15th – 17th
- Fly Ash & Salt Cake beneficial re-use alternatives

6. OPERATIONS

No electricity was generated during the month.

A total of 49 trucks were unloaded with 1161.85 tons of wood received.

There were a total of 60 Safe Work Permits, 21 LOTOs, and 7 Confined Space Permits issued.

The Boiler, DA / Feedwater tank, and Main Steam have remained in a modified long term storage condition. 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 and well water use as been curtailed while in Reserve Shutdown.
- **ZDS:** Has been shut down and the BC was mechanically cleaned.
- **Potable water:** Completed and submitted monthly and quarterly samples, including Bacteria.

8. FUEL HANDLING

- Continue to receive dry wood (to be tarped) and pine bark for long term storage.
- Auto Reclaimer out of service due to mechanical failure. Repairs completed.
- PMs performed on belts and machines.
- Activated Carbon is now being used on top of fuel piles for odor control.

9. TRAINING

- GPiLearn: 37 individuals completed 94 total courses in December.
- 15 contractors received NAES site safety training in December.

10. MAINTENANCE

- Had crews work on GPI-Learn training.
- Held daily safety meetings with maintenance crews.
- Attended weekly fuel meetings.
- Changed belt idlers on conveyor # 5.
- Changed oil in two gear boxes on conveyors # 13 & # 5.
- IC/E cleaned breakers / switchgear in PDC/MCC room fuel yard.
- IC/E down loaded switchgear information to IC/E computer.
- Weekly heat trace freeze protection checks performed by IC/E.
- Mechanics worked on monthly PMs.
- IC/E worked on monthly PMs.
- Repaired chain links and guide bars on stacker reclaimer. Added visual chain stretch tension indicator.
- Performed a thorough inspection of the Holtec Air Ejector system (all 4 holders).
- Changed slewing motor and set break, checked rotation.
- Insurance rolling stock inspected by Hartford.
- Sulfuric acid containment re-coating performed by REMA-TIP-TOP.
- Met with power plant services turbine services sale rep.
- Mechanics worked on truck tippers pins and bearing change out.
- Obtained measurements for order control project. Walked area with vendor.
- IC/E worked on grounding for oil storage building.
- Installed ISA piping to leak off system for turbine layup.
- Installed new actuators on filter press.
- IC/E worked heat trace on drain lines.
- IC/E replaced diaphragm and stroked valve on SHP-FBV-1138-30. No leaks.
- Mechanics removed piping spool for crystallizer cleaning.
- Mechanics worked with vendor on south oily water separator, removed salt sludge and chaining screen.
- SKF summary report - readings pumps when available.
- Scheduled work orders for December – 247. Completed work orders - 96.

11. ADMINISTRATION

Staffing:

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

Temporary Staffing:

There was no temporary labor on site in December.

November Statistics:

- Payroll: 78 Payroll records processed
- Accounts Payable: 143 invoices processed*, 87 payments processed
*December invoices will continue to be processed through January 15, 2016.
- Procurement: 90 Requisitions reviewed, 71 Purchase Orders generated
- December Overtime: 8.62% of total hours
- 2015 annual overtime: 14.72% of total hours

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