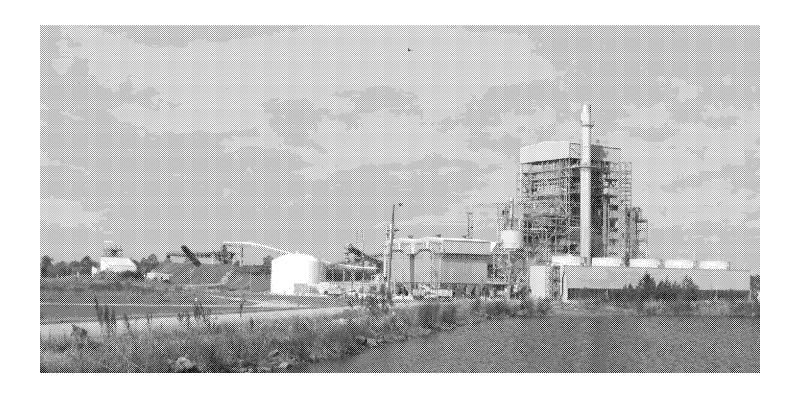
GAINESVILLE RENEWABLE ENERGY CENTER Operated by ZNAES



December 2016 MONTHLY PERFORMANCE REPORT

TABLE OF CONTENTS

1.	SUMMARY	3
	MONTHLY PERFORMANCE DATA	
	PRODUCTION STATISTICS	
	SAFETY	
	ENGINEERING & ENVIRONMENTAL	
6.	OPERATIONS	7
7.	WATER CHEMISTRY	8
8.	FUEL HANDLING	8
9.	TRAINING	8
10.	MAINTENANCE	9
11.	ADMINISTRATION	10

1. SUMMARY

The plant was on reserve shutdown status during December.

There were no safety or environmental issues during the month.

Operations:

GREC began the month dispatched to Reserve Shutdown by GRU. GREC took a maintenance outage for 4.83 hours to repair a Feed Water valve. The unit was returned to Reserve Shutdown.

2. MONTHLY PERFORMANCE DATA

								2016									
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)	0	0	2,095	0	2,044	0	0	0	1,559	21,086	14,136	0	2,095	2,044	1,559	35,222	40,920
Net Generation (MWh)	0	0	1,835	0	1,800	0	0	0	1,356	18,531	12,346	0	1,835	1,800	1,356	30,877	35,867
Solid Fuel Flow (ft3)								•			•			:			
Solid fuel Flow (Tons)																	
Natural Gas Usage MMBTU	0	0	3,059	0	1,792	0	0	0	2,729	0	2,361	0	3,059	1,792	2,729	2,361	9,941
Avg Burn rate (Tons/nMWH)																	
Operating hours	0	0	17	0	19	0	0	0	14	238	164	0	17	19	14	402	453
Number of trips	0	0	1	0	0	0	0	0	1	0	1	0	1	0	1	1	3
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	206	111	109	255	256	127	126	137	237	275	368	417	0	0	0	0	0
End Backlog	132	91	93	116	163	151	176	131	320	374	464	407	0	0	0	0	0
New Wos/Comp Rec WO's	18	20	32	26	125	140	127	143	59	63	48	34	0	0	0	0	0
Total Completed W.O.s	114	157	157	139	152	172	166	157	139	150	113	205	0	0	0	0	0
Received WO's	40	198	188	184	59	196	136	194	222	249	209	195	0	0	0	0	0

3. PRODUCTION STATISTICS

								2016									
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)	0	0	0	0	0	0	0	0	0	0	6,432	o r	o"	0 "	0	6,432	6,43
Ammonia Consumed	0	0	0	0	150	150	0	0	150	2,550	2,232	0	0	300 ້	150	4,782	5,23
Sodium Bicarbonate Received (Tons)	0	0	0	0	0	0	0	0	0	0	0	0	0	0 "	0	. 0	
Sodium Bicarbonate Consumed	0	0	0	0	3	0	0	0	6	5	0	o ໌	0	3	6	5	1
Bottom Ash Generated (Tons)	0	0	0	0	9	0	0	0	9	36	45	0	0	9	9	81	9
Fly Ash Generated (Tons)	43	25	0	0	0	105	55	53	0	257	439	53 ຶ	68 ″	105 ້	108	749	1,03
Filter Cake (Tons)	0	0	0	0	0	0	0	0	0	33	31	10 ້	o [*]	o [*]	0	74	7
Diesel Fuel																	
Diesel Fuel Received	0	0	845	3,550	985	793	0	0	860	3,328	2,360	0	845	5,328	860	5,688	12,72
Diesel Fuel Bumed	0	0	845	3,550	985	793	0	0	860	3,328	2,360	0	845	5,328	860	5,688	12,72
- Heavy Equipment	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	
Total	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	
Water													0	0	0	0	
Process Water Usage	256,162	80,763	2,037,975	16,664	1,207,276	78,329	93,203	88,328	1,073,802	5,369,952	3,533,355	146,108	2,374,900	1,302,269	1,255,333	9,049,415	13,981,91
Reclaim Water Usage	0	0	0	0	0	0	0	0	244,852	5,535,707	3,945,828	0	0	0	244,852	9,481,535	9,726,38

4. SAFETY

NAES Staff

	Month	Hours	First Aid	Recordable	Rec. Rate	LTA	LTA Rate	Near Miss
	January	4913.5	0	0	0.0	0	0.0	0
	February	5964.50	0	0	0.0	0	0.0	0
	March	5982.50	0	0	0.0	0	0.0	0
	April	8825.50	0	0	0.0	0	0.0	0
	May	5869.25	0	0	0.0	0	0.0	0
	June	5363.00	0	0	0.0	0	0.0	0
	July	5632.50	0	0	0.0	0	0.0	0
	August	5786.75	0	0	0.0	0	0.0	0
	September	8550.00	0	0	0.0	0	0.0	0
	October	6552.25	0	0	0.0	0	0.0	0
	November	6474.00	0	0	0.0	0	0.0	0
	December	5450.00	0	0	0.0	0	0.0	0
Year to Date Total		75,363.75	0.00	0.00	00.00	00.0	0.00	0.00

Contractors

	Month	Hours	First Aid	Recordable	Rec. Rate	LTA	LTA Rate	Near Miss
	January	90	0	0	0.0	0	0.0	0
	February	98	0	0	0.0	0	0.0	0
	March	181	0	0	0.0	0	0.0	0
	April	220	0	0	0.0	0	0.0	0
	May	78	0	0	0.0	0	0.0	0
	June	188	0	0	0.0	0	0.0	0
	July	78	0	0	0.0	0	0.0	0
	August	82	0	0	G.C.	0	0.0	0
	September	78	0	0	0.0	0	0.0	0
	October	81	0	0	0.0	0	0.0	0
	November	92	0	0	0.0	0	0.0	0
	December	100	0	0	0.0	0	0.0	0
Year to Date Total	•	1,366.00	0.00	0.00	0.00	00.0	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 217 safety courses in December.

5. ENGINEERING & ENVIRONMENTAL

• 12/21: FDEP Stormwater Inspection

12/22: EIA 923 Submitted

12/30: Annual Stormwater Evaluation

• 12/31: Annual SPCC Training

6. OPERATIONS

GREC took a maintenance outage for 4.83 hours to repair a Feed Water valve. The repairs were completed satisfactorily and the unit was returned to Reserve Shutdown.

There was no generation during the month.

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

There was a total of 71 Safe Work Permits, 22 LOTOs, and 10 Confined Space Permit issued.

7. WATER CHEMISTRY

- Cooling Tower: Started up normal chlorine injection system at plant start-up
- **Boiler/ Make-Up Water**: Water treatment systems were run periodically throughout the month to maintain reliability.
- Well/Reclaim Water: Well water system was operated during the month.
- **ZDS:** System was taken out of standby, drained and flushed.
- Potable water: Completed and submitted monthly and quarterly samples, including Bacteria.

8. FUEL HANDLING

- Received trucks of wood fuel.
- Fuel receiving and boiler feed systems ran with no issues.

9. TRAINING

- GPiLearn: 37 individuals completed 254 total courses in December.
- Eight contractors received NAES site safety training in December.

10. MAINTENANCE

- All maintenance employees worked on GPiLearn training.
- Attended weekly safety meetings.
- Attended weekly MOC meetings.
- IC/E techs worked on monthly PMs.
- Mechanics worked on monthly PMs.
- Pulled monthly oil samples for analysis.
- Worked weekly freeze protection ticket.
- Had vendor do 500 hour PM/service on the Reman Wagner.
- Checked all electrical connections on the turbine for tightness & terminations for looseness. WO-16-2263
- Repaired loose wiring on hog # 2 motor in fuel yard.
- Welded up small leak on cylinder on Reman Wagner.
- Had vendor repair & inspect the pressure seal on boiler feedwater bypass valve.
- Repaired sootblower # 2, # 14, and # 32. (All failed to start during run. All working now.)
- Repaired west BC acid pump.
- Inspected all fans on boiler, checked for any buildup or cracks on fan blades. All clean and in good condition - no cracks or buildup.
- Inspected magnetic separator, all bearings in good condition. Cleaned screen.
- Supported warehouse inventory cleanup effort.
- Repaired the sand feed screw coupling and hanger.
- Completed breaker upgrade in DCS room for all computers on emergency power supply system.
- Inspected couplings on the radial reclaimer / boom hoist.
- Scheduled work orders for December: 205. Completed work orders: 171.

11. ADMINISTRATION

Staffing:

There were 3 Fuel Yard Operator positions open as of December 30, 2016, which will not be filled immediately. In addition, we are in the process of filling 1 Maintenance Tech position and 1 Water Treatment Operator position, both of which opened in December.

Temporary Staffing:

There was no temporary labor on site in December.

Statistics:

- Payroll: 76 Payroll records processed.
- Accounts Payable: 91 invoices processed*, 91 payments processed.
 *December invoices will continue to be processed through January 16, 2016.
- Procurement: 50 Requisitions reviewed, 49 Purchase Orders generated.
- Overtime: 9.11% of total hours.
- 2016 annual overtime: 8.35% of total hours.

Spare	Parts	Inventory	Value:

Energy Station – Monthly Performance Report
CON
CON