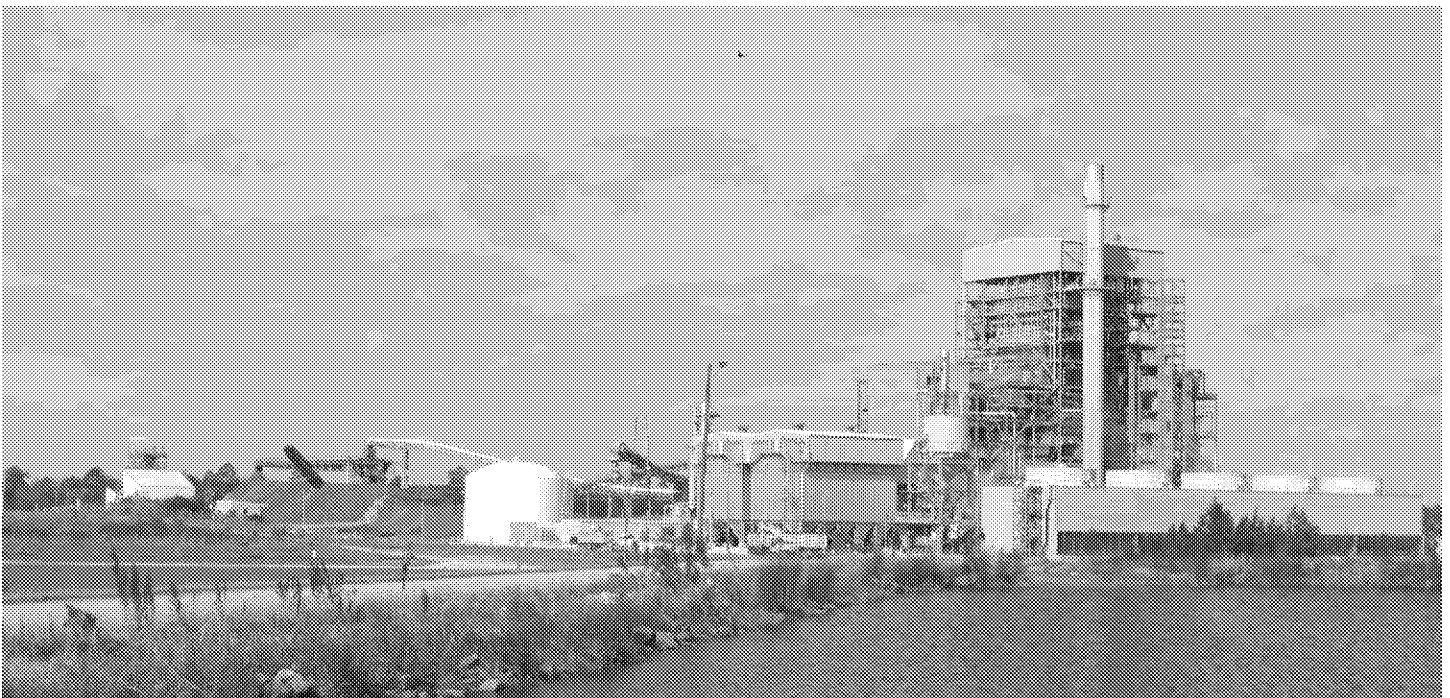


# **GAINESVILLE RENEWABLE ENERGY CENTER**

Operated by **NAES**



## **November 2016 MONTHLY PERFORMANCE REPORT**

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## 1. SUMMARY

The plant was dispatched on and ran from Nov. 13<sup>th</sup> to Nov. 20<sup>th</sup>. GREC experienced one derate when fuel issues prevented us from meeting our time to initial minimum load. GREC also experience a two-hour forced outage when the turbine control valve position feedback signal was lost causing the valve to shut and the generator to trip on reverse current. The position sensor was found to have a loose plug connection. The issue was corrected with no further problems.

There were no safety or environmental issues during October.

### **Operations:**

. GREC was called to start up and ran for one week. The unit was once again dispatched off line into Reserve Shutdown. The unit operated for 164.42 hours for the month.

## 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
<b>Operations</b>																	
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
<b>Safety</b>																	
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
<b>Maintenance: WO Summary</b>																	
Start Backlog	206	111	109	255	256	127	126	137	237	275	368	0	0	0	0	0	0
End Backlog	132	91	93	116	163	151	176	131	320	374	464	0	0	0	0	0	0
New Wos/Comp Rec WO's	18	20	32	26	125	140	127	143	59	63	48	0	0	0	0	0	0
Total Completed W.O.s	114	157	157	139	152	172	166	157	139	150	113	0	0	0	0	0	0
Received WO's	40	198	188	184	59	196	136	194	222	249	209	0	0	0	0	0	0

### 3. PRODUCTION STATISTICS

2016																	
Production Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	QTR 1	QTR 2	QTR 3	QTR 4	YTD
<b>Other</b>																	
Ammonia Received (Gallons)	0	0	0	0	0	0	0	0	0	0	6,432	0	0	0	0	6,432	6,432
Ammonia Consumed	0	0	0	0	150	150	0	0	150	2,550	2,232	0	0	300	150	4,782	5,232
Sodium Bicarbonate Received (Tons)	0	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	0	0	3	6	5	15
Bottom Ash Generated (Tons)	0	0	0	0	9	0	0	0	9	36	45	0	0	9	9	81	99
Fly Ash Generated (Tons)	43	25	0	0	0	105	55	53	0	257	439	0	68	105	108	696	977
Filter Cake (Tons)	0	0	0	0	0	0	0	0	0	33	31	0	0	0	0	64	64
<b>Diesel Fuel</b>																	
Diesel Fuel Received	0	0	845	3,550	985	793	0	0	860	3,328	2,360	0	845	5,328	860	5,688	12,721
Diesel Fuel Burned	0	0	845	3,550	985	793	0	0	860	3,328	2,360	0	845	5,328	860	5,688	12,721
- 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
<b>Water</b>																	
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	0	2,374,900	1,302,269	1,255,333	8,903,307	13,835,809
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	9,726,387

#### 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	0.00	0	0	0.0	0	0.0	0
<b>Year to Date Total</b>	<b>69,913.75</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

##### 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	0.0	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	0	0	0	0.0	0	0.0	0
<b>Year to Date Total</b>	<b>1,266.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**Accidents:**

There were no accidents in November.

**Near Miss Reports:**

No Near Miss Reports were completed in November.

**Training:**

35 individuals completed 72 safety courses in November.

## 5. ENGINEERING & ENVIRONMENTAL

- 11/7: ACEPD Q3 Hourly CEMS Data Submitted
- 11/15: Annual ESS Site Visit
- 11/22: EIA 923 Submitted
- 11/30: Summer Ozone Allowance Deadline

## 6. OPERATIONS

GREC ran for seven days in November to meet GRU's dispatch order. Subsequently, System Control requested GREC return to Reserve Shutdown status after running for 164.42 hours. GREC experienced one Derate when fuel issues prevented us from meeting our time to initial minimum load. GREC also experience a forced outage when the TG control valve position feedback signal was lost causing the valve to shut and the generator to trip on reverse current. The position sensor was found to have a loose plug connection. The issue was corrected with no further problems.

There was 12,346.02 nMW generation during the month.

A total of [REDACTED] trucks were unloaded with [REDACTED] tons of wood received.

There was a total of 81 Safe Work Permits, 32 LOTOs, and 2 Confined Space Permit issued.

## 7. WATER CHEMISTRY

- **Cooling Tower:** Started up normal chlorine injection system at plant start-up
- **Boiler/ Make-Up Water:** A film forming amine was added to our chemistry to aid in pressure system and Turbine Preservation.
- **Well/Reclaim Water:** Both Reclaim and Well water systems were operated during the month.
- **ZDS:** System was started up again this month and ran well. ZDS was put in standby.
- **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.
- Completed grating inspections

## 9. TRAINING

- GPILearn: 35 individuals completed 72 total courses in November.
- Five contractors received NAES site safety training in November.



## 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.
- Cleaned all spray nozzles on the order control system in fuel yard.
- Checked and tightened all flanges and bolting on lube oil skid.
- Replaced CT Fans gearbox sight glasses.
- Luffing angle not reading correctly, reset angle.
- ISA compressor tripped, reset motor overloads.
- Worked on S/B # 2, #14, and #32, repaired limit switch and cleaned contacts.
- Worked freeze protection ticket.
- FGR pressure transmitter not reading, moved to another location to prevent moisture issue.
- Repaired under pile #2 zero speed switch.
- Replaced under pile #1 zero speed switch.
- Freed up vacuum blower "A" on dust collection system.
- Condensate transmitter not reading correctly, transmitter zeroed and loop checked.
- BFW pump "A" was tripping on low flow - blown down and calibrated.
- Repaired BFW pump "B" with service rep.
- IC/E tech worked on electrical inventory in warehouse with Huck.
- Scheduled work orders for November: 159 / Completed work orders: 113

## 11. ADMINISTRATION

### **Staffing:**

There were three Fuel Yard positions open as of November 30, 2016, which will not be filled immediately.

### **Temporary Staffing:**

There was no temporary labor on site in November.

### **Statistics:**

- Payroll: 76 Payroll records processed.
- Accounts Payable: 145 invoices processed\*, 87 payments processed.  
\*November invoices will continue to be processed through December, 2016.
- Procurement: 73 Requisitions reviewed, 73 Purchase Orders generated.
- Overtime: 10.91% of total hours.
- 2016 annual overtime: 8.29% of total hours.

**Spare Parts Inventory Value:** [REDACTED]

