

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



August 2016 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant was on reserve shutdown all of August. There were no safety or environmental incidents.

Operations:

GREC remained in Reserve Shutdown for the month of August. The unit has been available for 744 hours this month.

The boiler and main steam lines remain in a dry lay-up with a nitrogen cap. The DA/ Feedwater tank continue to be in a wet lay-up with a nitrogen cap and the turbine/condenser is being supplied with a dehumidified air purge. We continue to receive dry fuel.

2. MONTHLY PERFORMANCE DATA

| 2016 | | | | | | | | | | | | | | | | | |
|---------------------------------|----------|-----|-------|-----|-------|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|
| 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) | 0 | 0 | 2,095 | 0 | 2,044 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,095 | 2,044 | 0 | 0 | 4,139 |
| Net Generation (MWh) | 0 | 0 | 1,835 | 0 | 1,800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,835 | 1,800 | 0 | 0 | 3,634 |
| Solid Fuel Flow (ft3) | REDACTED | | | | | | | | | | | | | | | | |
| Solid fuel Flow (Tons) | REDACTED | | | | | | | | | | | | | | | | |
| Natural Gas Usage MMBTU | 0 | 0 | 3,059 | 0 | 1,792 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,059 | 1,792 | 0 | 0 | 4,851 |
| Avg Burn rate (Tons/nMWH) | REDACTED | | | | | | | | | | | | | | | | |
| Operating hours | 0 | 0 | 17 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 19 | 0 | 0 | 37 |
| Number of trips | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Backlog | 110 | 91 | 93 | 116 | 163 | 151 | 176 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Wos/Comp Rec WO's | 18 | 20 | 32 | 26 | 36 | 140 | 127 | 143 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Completed W.O.s | 114 | 157 | 157 | 139 | 152 | 172 | 166 | 157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Received WO's | 40 | 198 | 188 | 184 | 59 | 196 | 136 | 194 | 0 | 0 | 0 | 0 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ammonia Consumed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bottom Ash Generated (Tons) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fly Ash Generated (Tons) | 43 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 0 | 0 | 0 | 68 |
| Filter Cake (Tons) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diesel Fuel | | | | | | | | | | | | | | | | | |
| Diesel Fuel Received | 0 | 0 | 845 | 3,550 | 985 | 793 | 0 | 0 | 0 | 0 | 0 | 0 | 845 | 5,328 | 0 | 0 | 6,173 |
| Diesel Fuel Burned | 0 | 0 | 845 | 3,550 | 985 | 793 | 0 | 0 | 0 | 0 | 0 | 0 | 845 | 5,328 | 0 | 0 | 6,173 |
| - 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 | | | | | | | | | | | | | | | | | |
| Process Water Usage | 256,162 | 80,763 | 2,037,975 | 16,664 | 1,207,276 | 78,329 | 93,203 | 88,328 | 0 | 0 | 0 | 0 | 2,374,900 | 1,302,269 | 181,531 | 0 | 3,858,700 |
| Reclaim Water Usage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78,329 | 0 | 0 | 78,329 |

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 | 0.00 | 0 | 0 | 0.0 | 0 | 0.0 | 0 |
| October | 0.00 | 0 | 0 | 0.0 | 0 | 0.0 | 0 |
| November | 0.00 | 0 | 0 | 0.0 | 0 | 0.0 | 0 |
| December | 0.00 | 0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Year to Date Total | 48,337.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Contractors

| Month | Hours | First Aid | Recordable | Rec. Rate | LTA | LTA Rate | Near Miss |
|---------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| January | 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 | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 0 |
| October | 0 | 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 | 1,015.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Accidents:

There were no accidents in August.

Near Miss Reports:

No Near Miss Reports were completed in August.

Training:

38 individuals completed 85 safety courses in August.

5. ENGINEERING & ENVIRONMENTAL

- 8/5: ACEPD 2nd Quarter Submittal
- FDEP AOR Clarifications
- NOX Ozone Season – September 30th

6. OPERATIONS

There was no electrical generation during the month.

One truck was unloaded with 22.3 tons of wood received.

There were a total of 106 Safe Work Permits, 44 LOTOs, and 5 Confined Space Permit issued.

Turbine conservation- Changed from continuously running turning gear to running TG LO once a week and rotating shaft (as per OEM.)

7. WATER CHEMISTRY

- **Cooling Tower:** Continue to recirculate CT basin in order to maintain chemistry.
- **Boiler/ Make-Up Water:** Periodically running the make-up water system to flush and maintain readiness. Chlorine skids have been moved adjacent to bulk tank in order to minimize use of totes.
- **Well/Reclaim Water:** Reclaim water has been secured and well water use as been curtailed while in Reserve Shutdown.
- **ZDS:** ZDS systems are in standby. System is filled and run with clean water once per month to maintain reliability.
- **Potable water:** Completed and submitted monthly and quarterly samples, including Bacteria, Primary Inorganic Contaminates, and Secondary Disinfection By-products.

8. FUEL HANDLING

- Received 1 truck of wood fuel.
- PMs performed on belts and machines.
- Began performing grating inspections
- Performing plant mowing.

9. TRAINING

- GPiLearn: 38 individuals completed 89 total courses in August.
- One contractor received NAES site safety training in August.

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.
- Valmet worked on backup drives, Metso DCS.
- Worked on nitrogen generator installation.
- Cleaned all AC coils, and changed filters.
- Pulled monthly oil samples.
- IC/E techs worked on breaker logic tracing and troubleshooting.
- IC/E techs worked on fuel yard control system (will not reset).
- Mechanics worked on north manway door gasket (leaking on condenser water box North side).
- Attended Brush Holder Shaft Grounding Meeting with NAES / CUTSFORTH.
- Repaired exit sign.
- Had yearly backup generator load tested and serviced.
- Performed PMs on North MCC/PDC room.
- Checked coupling on #1 rotary feeder.
- Repaired # 1 and #3 roll up door at the truck tipper.
- Completed hurricane preparedness list.
- Had vendor on site to evaluate ZDS system corrosion / painting issues.
- Repaired damaged switchgear disconnect in North PDC.
- Repaired 3rd pass ash conveyor flights.
- Replaced sensor on reclaimer luffing encoder.
- Filter press work orders for repairs completed.
- Scheduled work orders for August: 188. Completed work orders: 143.

11. ADMINISTRATION

Staffing:

There were three Fuel Yard positions open as of August 31, 2016, which will not be filled immediately.

Temporary Staffing:

There was no temporary labor on site in August.

Statistics:

- Payroll: 76 Payroll records processed.
- Accounts Payable: 131 invoices processed*, 82 payments processed.
*August invoices will continue to be processed through September 15, 2016.
- Procurement: 68 Requisitions reviewed, 68 Purchase Orders generated.
- Overtime: 5.57% of total hours.
- 2016 annual overtime: 7.23% of total hours.

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