

GAINESVILLE RENEWABLE ENERGY CENTER

Operated by **NAES**



January 2015 MONTHLY PERFORMANCE REPORT

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1. SUMMARY

The plant was brought off-line for six days to make two repairs to the tertiary superheater welds. The header will be replaced in late April. There were no safety incidents or environmental events.

Operations:

The unit operated for 592 hours in the month of January. GREC experienced four forced outages and one maintenance outage for the month. Three short outages were related to spurious condenser level deviation trips. The cause of the trips was addressed during the outage taken to repair the tertiary superheater.

Number one attemperator failed requiring operation on the bypass until the valve was repaired, also during the tertiary superheater repair outage.

NERC GADS reporting has been completed for the fourth quarter 2014. GREC began a NERC Gap analysis with NAES NERC Services to prepare for the upcoming FRCC NERC audit scheduled for May, 2015.

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	0	0	0	0	0	0	0	0	0	0	0	49,418	0	0	0	49,418
Net Generation (MWh)	42,953	0	0	0	0	0	0	0	0	0	0	0	42,953	0	0	0	42,953
Solid Fuel Flow (ft3)	REDACTED																
Solid fuel Flow (Tons)	REDACTED																
Natural Gas Usage MMBTU	1,655	0	0	0	0	0	0	0	0	0	0	0	1,655	0	0	0	1,655
Avg Burn rate (Tons/nMWH)	REDACTED																
Operating hours	592	0	0	0	0	0	0	0	0	0	0	0	592	0	0	0	592
Number of trips	5	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5
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	0	0	0	0	0	0	0	0	0	0	0	130	0	0	0	130
End Backlog	73	0	0	0	0	0	0	0	0	0	0	0	73	0	0	0	73
New Wos/Comp Rec WO's	170	0	0	0	0	0	0	0	0	0	0	0	170	0	0	0	170
Total Completed W.O.s	227	0	0	0	0	0	0	0	0	0	0	0	227	0	0	0	227
Received WO's	234	0	0	0	0	0	0	0	0	0	0	0	234	0	0	0	234

3. PRODUCTION STATISTICS

2015																	
Production Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	QTR 1	QTR 2	QTR 3	QTR 4	YTD
Monthly Performance Data																	
Other																	
Ammonia Received (Gallons)	13,008	0	0	0	0	0	0	0	0	0	0	0	13,008	0	0	0	13,008
Ammonia Consumed	11,058	0	0	0	0	0	0	0	0	0	0	0	11,058	0	0	0	11,058
Sodium Bicarbonate Received (Tons)	24	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	24
Sodium Bicarbonate Consumed	20	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	20
Bottom Ash Generated (Tons)	230	0	0	0	0	0	0	0	0	0	0	0	230	0	0	0	230
Fly Ash Generated (Tons)	981	0	0	0	0	0	0	0	0	0	0	0	981	0	0	0	981
Filter Cake (Tons)	78	0	0	0	0	0	0	0	0	0	0	0	78	0	0	0	78
Diesel Fuel																	
Diesel Fuel Received	4,410	0	0	0	0	0	0	0	0	0	0	0	4,410	0	0	0	4,410
Diesel Fuel Burned	4,410	0	0	0	0	0	0	0	0	0	0	0	4,410	0	0	0	4,410
- 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	0
Process Water Usage	10,479,714	0	0	0	0	0	0	0	0	0	0	0	10,479,714	0	0	0	10,479,714
Reclaim Water Usage	13,106,824	0	0	0	0	0	0	0	0	0	0	0	13,106,824	0	0	0	13,106,824

4. SAFETY

NAES Staff

	Month	Hours	First Aid	Recordable	Rec. Rate	LTA	LTA Rate	Near Miss
2014	January	6772.75	0	0	0.0	0	0.0	0
	February		0	0	0.0	0	0.0	0
	March		0	0	0.0	0	0.0	0
	April		0	0	0.0	0	0.0	0
	May		0	0	0.0	0	0.0	0
	June		0	0	0.0	0	0.0	0
	July		0	0	0.0	0	0.0	0
	August		0	0	0.0	0	0.0	0
	September		0	0	0.0	0	0.0	0
	October		0	0	0.0	0	0.0	0
	November		0	0	0.0	0	0.0	0
	December		0	0	0.0	0	0.0	0
Year to Date Total		6,772.86	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
2014	January	2645	0	0	0.0	0	0.0	0
	February	0	0	0	0.0	0	0.0	0
	March	0	0	0	0.0	0	0.0	0
	April	0	0	0	0.0	0	0.0	0
	May	0	0	0	0.0	0	0.0	0
	June	0	0	0	0.0	0	0.0	0
	July	0	0	0	0.0	0	0.0	0
	August	0	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		2,645.11	0.00	0.00	0.00	0.00	0.00	0.00

Accidents:

There were no injuries reported in January.

Near Miss Reports:

No Near Miss Reports were completed in January.

Training:

39 individuals completed 173 safety courses in January.

5. ENGINEERING & ENVIRONMENTAL

- 1/2: Sodium Bicarbonate Injection Reduction
- 1/6: RATA results EPA submittal via CDX ERT
- 1/13: FDEP NOx lb/MMBtu Notification
- 1/22: Title V Permit Modification Discussion with FDEP
- 1/28: CEMS Quarterly EER & EDR submittals
- 1/30: IB MACT CDX CEDRI submittal

Pending

- ACEPD CEMS Hourly Information Q4 2014 – 2/6
- Stormwater Annual Site Evaluation - 2/27
- Tier II Reporting - 3/2
- Stormwater Detention Ponds – Vegetation Removal
- Finalize SMP-4 revisions including Woodyard BMPs
- SWPPP/SPCC new hire training
- Bottom Ash & Salt Cake hauling alternatives
- Mobile vehicular trailer tank notification/disclosure

6. OPERATIONS

A total of 42,953 nMW hours of electricity were generated during the month. The monthly Average Burn Rate was **REDACTED**

A total of 2,514 trucks were unloaded with 70,769 tons of wood received and **REDACTED**

There were 151 Safe Work, 54 LOTO, and 14 Confined Space permits written.

There were three forced outages and one maintenance outage this month. Three of the forced outages were caused by condenser level deviation between three level

transmitters. Investigation found that vibration at the transmitters was causing the spurious trips. The vibration issue was addressed. The second forced outage of the month occurred during a hot restart following a trip. #1 attemperator was not controlling in automatic and the Turbine Generator experienced a low inlet temperature trip.

A Control Disturbance was experience which caused HP & LP FW heater drains to fail open thereby causing water hammer and system swing. Metso Automation hotline was called and their investigation indicated a high probability of an I/O card issue. I/O card was changed out while off line from a subsequent forced outage.

7. WATER CHEMISTRY

- **Cooling Tower:** Sodium hypochlorite pump suction piping has been modified to help minimize system vapor lock.
- **Boiler/ Make-Up Water:** RO cleaning procedure is being modified to prevent fouling of downstream membranes.
- **Well/Reclaim Water:** "B" Well water Pump returned to service January 8th.
- **ZDS:** Has been running very well. Temporary freeze protection has been installed for caustic system.
- **Potable water:** Completed and submitted monthly and quarterly samples, including Bacteria.

8. FUEL HANDLING

- Fuel yard systems have been operating well and yard has returned to normal inventory.
- Increased quantities of barbwire have required a number of extra man hours spent clearing spike rollers.

9. TRAINING

- GPILearn: 39 individuals completed 223 total courses in January.
- 34 contractors received NAES site safety training in January.

10. MAINTENANCE

- Held daily Safety meetings with crews.
- Worked monthly GPI-Learns All Crews
- Performed safety audits around site for the month.
- Safety oriented vendors for the boiler outage.
- IC/E worked on hot well level trip. Determined it was due to vibration of transmitter.
- IC/E change out I/O card for feed water heater emergency drains.
- Mechanics worked on fuel chutes on # 10 belt
- Mechanics filled lubrication feeders on both fuel feed silos.
- Mechanics worked on freeze protection verification of site.
- IC/E sealed stubs tubes under the PDC on boiler. The stubs penetrate up through the flooring of the PDC rack room, poor job of sealing.
- IC/E worked on NERC PRC 005 procedures and documentation for the month of January.
- Started boiler outage plan for BOP, assigned all work orders. Went over job scope for BOP.
- Mechanics changed out many idlers rollers on # 9 & # 10 belts. Cleaned both head scrapers and replaced skirting on each.
- Mechanics installed Ringspan clutch & coupling on # 10 belt drive north side. Inspected the Ringspan clutch/ coupling on the south side. Alignment check performed on both.
- IC/E worked on sealing and cleaning of MCC/PDC Metso cabinets in the boiler.
- Had vendor seal up the bottom of the MCC/PDC during outage.
- Had vendor add speed bump in biomass truck lane over weekend.
- IC/E repaired DC grounding issue.
- IC/E repaired the STG expansion alarm issue during the outage.
- All valves worked during outage have been calibrated by IC/E.
- Mechanics replaced all gaskets on the North & South ejectors to Flexitallic gaskets.
- Mechanics replaced the Hydac filter on control oil tank.
- Mechanics repaired leak at the inlet cooling water for the 2nd and 3rd pass on drag chain conveyer.
- Mechanics changed # 5 head scrapper out, worn badly.
- Mechanics changed # 8 belt head scrapper out, worn badly.
- Mechanics repaired chain feeder on # 2 spike roller.
- Mechanics repaired the RO caustic injection pump.

- IC/E work all routine PMs
- Mechanical crew worked all routine PMs
- SKF Summary Report: 82 asset readings total, 1 action item, and 1 watch item.
- Scheduled work orders: 234 / Completed work orders: 227

11. ADMINISTRATION

Staffing:

There was one fuel yard position open as of January 31, 2015.

Temporary Staffing:

There was no temporary labor on site in January.

January Statistics:

- Payroll: 83 Payroll records processed
- Accounts Payable: 220 invoices processed*, 136 payments processed
*January Invoices will continue to be processed through February 10, 2015.
- Procurement: 111 Requisitions reviewed, 165 Purchase Orders generated
- January Overtime: 25.24% of total hours
- 2015 annual overtime: 25.24 % of total hours

Inventory Value: \$ **REDACTED**