MONTHLY PROGRESS REPORT

Project:	**Wallingford Energy Center Expansion Project**
Client	**Wallingford Energy II, LLC**
Location	**Wallingford, Connecticut**
Job Number:	**1015-5113**
Reporting Period	**September 1st, 2017 through September 30th, 2017**

Submitted:
October 6th, 2017
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EXECUTIVE SUMMARY

ProEnergy is pleased to report three (3) Major Milestones were completed this month. However, PES is disappointed to report the SCR 6 and SCR 7 Major Assembly completed were both over a month behind schedule. The scheduled dates below are based on the October 26th Baseline Schedule. Two (2) completed milestones are:

- SCR 6 Major Assembly Complete (Mile 4.40) – The SCR 6 assembly was complete on September 21st. PES is disappointed this was 34 days behind of the August 18th scheduled date.
- SCR 7 Major Assembly Complete (Mile 4.50) – The SCR 7 was completed on September 26th. PES is disappointed this was 39 days behind of the August 18th scheduled date.

Both of these milestones slipped because of the shop fabrication in Mexico behind schedule and the transportation issues of the shipments crossing the USA/Mexico border. Neither of these delays effected the Substantial Completion date.

The third Major Milestone completed this month was the GSU Backfeed (MileConst.10). The 8X GSU backfeed was completed on September 17th. This backfeed date of the 8X GSU was changed several times since the beginning of the year. The July 24th scheduled date was changed to a September 15th date by LS Power. This was changed to accommodate LS Power's / Wallingford Electric switchyard work outage and the PES backfeed outage of the 8X GSU into one outage.

PES understands there was no guaranteed outage granted by ISO New England for the July 24th outage. The first guaranteed dates given by ISO New England were the September 9th through the 15th dates.

All previous backfeed outage dates were not guaranteed. PES was required to be able stop work and restore the system within 24hour notice if ISO New England needed the 1305 line. The September 15th date was first guaranteed outage duration of 6 days from Saturday September 9th at 06:00 to Friday morning September 15th at 09:00.

Several unforeseen issues extended this outage to Sunday September 17th:

- The scope change by LS Power required three additional relays to be tied in to the existing live relay panel "A".
- Wallingford Electric was late complete terminating and testing the new CT cables installed for their switchyard protection.
- GSU Protection relay settings changed by POWER Engineers late Friday afternoon, requiring the relay testing to be completed again.
- A buss on Unit 6 had to be removed and silver plated.

ProEnergy is disappointed to report the Substantial Completion of the project has slipped 15 days to the 7th December 2017 date.

The slippage was caused by the late delivery of the power and control wiring diagrams needed for pulling and terminating cables. PES is adding additional engineering resources to expedite the completion of the wiring diagrams.

The focus for PES this month was to have back feed power to the MCC by the end of the September 15th Outage. This would enable PES to start all the oil flushes and complete motor run-ins. The focus was also to continue with the cable pulls, terminations, complete the 125VDC and 24VDC systems to support controls checkouts.

The critical path is presently completing the cable terminations and the oil flushes.

Critical to completing this project is powering up the MCC through the aux transformers. LS Power has not allowed PES to backfeed the MCC's until the billing meter telemetry issue is resolved with the plant and Wallingford Electric / Eversource.

Weekly review meetings are held each Thursday morning to discuss project status and issues.

ProEnergy is actively looking to improve the schedule dates for each major milestone and most importantly the Substantial Completion.

1. MAJOR ACTIVITIES COMPLETED

1.1. ENGINEERING- None reported

1.2. PROCUREMENT - None reported

1.2 FABRICATION / SHOP WORK - None reported

1.3 CONSTRUCTION

1.4.1. MECHANICAL

<u>#6 CTG Equipment</u>

- Replace air oil separator piping to roof flange gaskets.
- Installed tubing at roof connection for air oil separator PDSH

<u>#6 De-Icing System</u>- No Work Scheduled

<u>#6 Auxiliary Skids</u> - No Work Scheduled

#6 Sprint Skid
- Removed check valves in Sprint system for testing.
- Tested all check valves including system inside the turbine package. All tested good.

#6 Oil Systems
- GLO System – ready and waiting for flush
- Re-work of GLO mechanical pump suction & discharge lines.
- Replaced the hydraulic hoses with SS flex braided hose.
- TLO System – ready and waiting for flush
- Fin Fan LO Cooler – Continue with the oil flush
- Jacking Oil System – ready and waiting for flush

#6 Fuel Gas System
- Fabricated & installed drain lines.
- Painted fuel gas vents
- Installed instrumentation on the fuel/gas coalescing units on 6
- Fuel gas vent valves – Set up as fail open.

#6 Ammonia Injection Skid
- Installed outlet pipe from blower to the manifold.
- Greased motor & shaft bearings.

#6 Evap System
- Continued installing pipe hangers Side B
- Installed sump drain actuator side A,
- Filled pumps with oil & grease motors

#6 Fin Fan Lube Oil Cooler Skid- No Work Scheduled

#6 LP Water Injection Skid
- Filled pump & gear box with oil & grease motors

#6 CO2 Rack Skid – No scheduled work

#6 Wash Water & Oil Water Drains
- Continued working on waste water lines

#6 Wash Water Drains – No scheduled work

#6 Stack & SCR
- Finished welding.

- Installed insulation, ladders & platforms
- Installed all liner plates in unit 6 upper ring.
- Installed tubing & regulators at SCR valve FCV 401

#7 CTG Equipment

- Installed internal tubing to PDSH's for filter house
- Installed tubing at roof connection for air oil separator PDSH.
- Finished installation of CTG platform at Aux skid.

#7 De-Icing Systems - No Work Scheduled

#7 Auxiliary Skids - No Work Scheduled

#7 Sprint Skid

- Removed check valves in Sprint system for testing.
- Tested all check valves including system inside the turbine package. All tested good.

#7 Oil Systems

- GLO System – ready and waiting for flush
- Re-work of GLO mechanical pump suction & discharge lines.
- Replaced the hydraulic hoses with SS flex braided hose.
- TLO System – ready and waiting for flush
- Fin Fan LO Cooler – Continue the flush. Fabricated mounting bracket & installed instrument air regulator & SOV.
- Jacking Oil System – ready and waiting for flush

#7 Evap System

- Installed pipe hanger supports
- Filled pump with oil & grease motors

#7 Ammonia Injection Skid

- Installed outlet pipe from blower to the manifold.
- Greased motor & shaft bearings.

#7 Fuel Gas System

- Fabricated & installed drain lines.
- Installed instrumentation on the fuel/gas coalescing units on 7
- Hanged CTG fuel gas vents Unit 7
- Fuel gas vent valves – Set up as fail open.

#7 Fin Fan Lube Oil Cooler Skid– No scheduled work

#7 LP Water Injection Skid

- Hanged CTG fuel gas vents Unit 7
- Fuel gas vent valves – Set up as fail open.

#7 CO2 Rack Skid – No scheduled work

#7 Oily Water Drains– No scheduled work

#7 Wash Water Drains

- Fabricated overflow for waste water tank and Lift Station.
- Finished fab of 6" overflow. Fabricating 4"

Waste Water tank

- Installed 6" overflow. Fabricate pipe support.
- Fabricated tank piping. Line for level transmitter

#7 Stack & SCR

- Installed expansion joints.
- Finished putting platforms & ladders
- Installed unit 7 Ammonia header
- Finished welding.
- Fabricating stack drains
- Installed valves under ammonia headers

Fuel Gas Pipeline Installation – No scheduled work

1.4.2. ELECTRICAL

15KV System

- Working on Shallbetter switchgear
- Changed out bus from Unit 7 Switchgear to Unit 6 Switchgear
- Backed and energized the 8X and re-energized the 7X Transformers to the Unit 6&7 Load Interrupter switches and their respective breakers
  - All cables and relays tested by EPST
  - Sent out and silver plated the damaged "B" buss bar. It was reinstalled and insulated.
- Working on interconnect wiring schematics

480 Auxiliary Switchgear and Transformer

- Engineering added remote start switches for the SWGR Breakers for personnel safety

480V System

- Continued installation of power and control cables.
- Continue wiring MCC buckets

Control, Instrument and Power Cables

- Continue installing conduit and cables to skids

PDC Building

- Completed HVAC installation
- Completed internal grounding to existing equipment.
- Continue fabrication of the BOP cabinet and back panels for the new NEI PLC system

Lighting

- Prefabrication and installation of lights ongoing.

GSU Area

- Completed power and control wiring to the GSU 8X and 7X

125 VDC System

- Charged, ductor tested and the 125VDC battery bank.
- Powered up the inverter with DC power

24VDC System

- Added acid to the batteries.
- Completed wiring of the battery chargers

CEMS

- Worked on umbilical cord supports.
- Fabricated & installed supports at CEMS shack.
- Installed Transformer

1.4.3. CONTROLS

- PES hired NEI to complete the MCC I/O design, turbine controls, BOP integration and system checkouts. CEG is contracted to design the Generator Protection Panel. The table below shows the tasks and percent complete.

1	Create BOP integration one-line integration topology diagram. (4)	90%
2	Purchase BOP integration PLC hardware (5)	100%
3	Install, test, and commission BOP integration PLC hardware. (6)	50%

4	MCC New PLC Programming (8)	25%
5	90/70. Review current program relating to MCC monitoring, control, and protection. (10)	0%
6	Functional testing and commissioning of MCC I/O devices to new PLC. (12)	0%
7	MCC. Integrate new MCC PLC controller into BOP HMI. (13)	0%
8	CEMS: Test and commission communications between the CEMS PLC's and the new DAHS system. Determine requirements to integrate the two new CEMS data into the facility DAHS (15)	5%
9	Unit 6 & Unit 7 - Review current local Wonderware HMI screens	100%
10	Unit 6 &7 - NEI to make necessary modifications to the Local Wonderware HMI screens. (18)	25%
11	Install local Workstation computer.	100%
12	Sega Cable List (50 to BOP Cabinet): Review Cables List with GE Numbers to determine any new I/O that needs to be added to the MCC BOP PLC. - Create point to point termination drawings for items in the Sega list & BOM. (26)	75%
13	Sega Cable List (50 to BOP Cabinet): Modify MCC BOP PLC inter-connect drawing to add additional BOP I/O based on Cables List. Create new MCC BOP PLC hardware BOM based on additional BOP I/O. (27)	90%
14	WEII - Exhibit B-1, 6.1 Balance of Plant Control System (Facility SCADA). Review, analyze, and implement required SCADA screens. (34)	10%
15	WEII - Exhibit B-1, 6.2 Combustion Turbine Generator & Auxiliaries. Review, analysis, and implementation to Integration T6 and T7 remote monitoring and control into existing facility SCADA (Cimplicity) HMI. (37)	50%
16	WEII - Exhibit B-1 - xc.pdf, 6.3 Continuous Emission Monitoring System. Review, analyze, and incorporate new CEMS shelter into existing facility CEMS server/DAHS. (40)	0%
17	SCR. Review, analyze, and incorporates stand-alone controls into existing facility BOP. (43)	0%
18	8X Transformer. Review, analyze, and incorporate monitoring into existing facility BOP. (46)	100%
19	Heat Trace. Review, analyze, and incorporate monitoring into existing facility BOP. (52)	0%
20	8X Transformer Hydrogen (Dissolved gas) Review, analyze, and incorporate monitoring into existing facility BOP. (55)	95%
21	Unit 6 & 7 10-Minute Start. Review, analyze, implement & Test (58)	0%

22	Mk VI Fuel Controller. Install Unit T6 & T7 CPU. Power up and install program. (64)	100%
23	Unit 6 & 7 90/70: Sequence modifications: Add anti-icing monitoring, control, and protection. (66)	0%
24	Unit 6 & 7 90/70: Sequence modifications: Add Evap cooler monitoring, control, and protection. (67)	0%
25	90/70: Sequence modifications: Add Fuel block and bleed, monitoring, control, and protection. (68)	0%
26	NEI Startup support: (81) Installation, Testing, and Commissioning	0%
27	Device Calibrations: LM6000 Instrumentation Calibrations. (Assumes 6, 10-hour days). Instrument Tech. ST, OT, and DT (85)	20%
28	Loop checks: (88)	0%
29	TCP LM90 Sequencer PLC (94)	100%
30	Create new MCC drawing schematics (95)	100%
31	Create 125VDC Drawing (96)	100%
32	#6 & #7 Generator Breaker Failure Indication (97)	0%
33	#6 7 #7 Review "Fiber" requirement for generator protection relays SEL-2664 and SEL-700G. Define cable for PES to order if needed. (99)	50%
34	Create new Shallbetter 115KV Switchgear as-built wiring schematics (102)	80%
35	Generator Protection Panel Design and Wiring Schematics (103)	0%
36	Unit 6 and Unit 7 Aux transformer Termination drawings (105)	100%
37	U 6 and Unit 7 GE Cable Optional List Review(106)	70%
38	MCC Main Breaker Wiring Drawing (107)	90%
39	MCC Transfer Switch Restoration (108)	0%

1.4.4. CIVIL

- Continued installing cleanout covers
- Continued grout supports & Stacks
- Layout stone and gravel around East side of sound wall
- Removed storage shed and grading lay down yard area
- Installed bollards around fire hydrant
- Backfill at waste water tank
- Cutting ground to grade at North East fence line. Gravel & compact.
- Started working on berm.

- Layout light pole foundations & dig for concrete supports.

1.4.5. STRUCTURAL

GSU Sound Wall & H-Frame

- O&G, installed door at the east side of the GSU
- O&G on site this date with Worcester Door to repair the caulk at the GSU door, repair has been complete and acceptable

CTG Sound Wall

- O&G on site this date, Coreslab returned to finish patching open erection bolt holes- patching complete –acceptable

2. PLANNED ACTIVITIES FOR NEXT PERIOD

2.1. ENGINEERING

2.1.1. Controls - NEI & CSE will continue to work on the BOP Integration, battery systems and SCADA screens

2.2. PROCUREMENT LOOK AHEAD

2.2.1. Continue with Procurement as outlined in the schedule.

2.3. FABRICATION / SHOP WORK - No scheduled work

2.4. CONSTRUCTION

2.4.1. MECHANICAL

#6 CTG Equipment –

- Install Engine and Dressout

#6 Auxiliary Skid

- Complete all remaining piping & pipe supports

#6 Sprint Skid

- Complete all remaining piping & pipe supports

#6 Fuel Gas System

- Install the 3" pipe & pipe supports from the fuel gas filter to the turbine compartment.
- Install the system vents.

#6 Ammonia Injection Skid

- Complete all remaining piping & pipe supports

#6 Evap System
- Complete all remaining piping & pipe supports

#6 De-Icing System
- Complete piping & pipe supports

#6 LP Water Injection Skid
- Complete all remaining piping & pipe supports

#6 CO2 Rack Skid –
- Replace skid with the heated skid

#6 Oily Water Drains –
- Complete all remaining piping & pipe supports

#6 Wash Water Drains
- Install Waste Water Drain Tank
- Complete installation of the lift Station pump and control wiring.

#6 SCR
- Complete installation

#6 Stack
- Complete installation

#7 CTG Equipment
- Install Engine and Dressout

#7 Auxiliary Skid
- Complete all remaining piping & pipe supports

#7 Sprint Skid
- Complete all remaining piping & pipe supports
- Flush Piping

#7 Fuel Gas System
- Install the 3" pipe & pipe supports from the fuel gas filter to the turbine compartment.
- Install the system vents.
- Complete air blows

#7 Ammonia Injection Skid
- Complete all remaining piping & pipe supports

#7 Evap System
- Complete all remaining piping & pipe supports

#7 De-Icing System
- Complete piping & pipe supports

#7 LP Water Injection Skid
- Complete all remaining piping & pipe supports

#7 CO2 Rack Skid – No Work Scheduled

#7 Oily Water Drains –
- Complete all remaining piping & pipe supports

#7 Wash Water Drains
- Complete all remaining piping & pipe supports

#7 SCR
- Complete installation

#7 Stack
- Complete installation
- Install the system vents.

2.4.2. ELECTRICAL

15KV System
- Complete Generator Protection
- Complete terminations

480 Auxiliary Switchgear and Transformer
- Complete pulling power and control cable
- Complete terminations

480V MCC
- Complete power and control cables termination.

Control, Instrument and Power Cables
- Complete pulling power cables to the #6 CTG Aux skids.

- Complete pulling power cables to the #7 CTG Aux skids.
- Complete terminating power and instrument cables to both units.

PDC Building
- Install all fire stop cable tray penetrations
- Complete the Generator Protection Panels

Grounding – No work scheduled

2.4.3. CONTROLS

- Complete Control Wiring Drawings
- PDC BOP Rx3I PLC
  - Complete device IP Addresses
  - Complete engineering design of the Motor Control Center (MCC) monitoring and control system.
  - Program new PLC.
- Wonderware HMI
  - Review existing display screens for Unit T6 and Unit T7.
  - Modify existing Wonderware HMI screens as required.
  - Install Annex1 (Unit T6)
  - Annex2 (Unit T7) HMI's in PDC.
  - Install Annex3 as the engineering station in the PDC
- Unit T6 and Unit T7 Specific Activities:
  - Install and power up new Mk VI fuel controller UCVD.
    - Down load program.
    - Verify proper operation.
  - Power up 90/70 PLC Sequencer.
    - Down load program.
    - Verify proper operation.
- Modify control system program to incorporate:
  - Anti-icing monitoring, control, and protection.
  - Evap cooler monitoring, control, and protection.
  - New fuel block and bleed monitoring, control, and protection.
- Review existing display screens for Unit T6 and Unit T7. Modify existing Wonderware HMI screens as required

2.4.4. CIVIL

- Build the berm on the East side of the CTG sound wall

2.4.5. STRUCTURAL

- NA

3. STARTUP & COMMISSIONING

SUMMARY

Acceptance Testing

- Emissions Testing
  - CEMS Certification
  - Protocol Complete
  - Compliance Testing
  - Protocol Complete
- Performance Testing
  - Protocol Complete
- Reliability Testing
  - Procedure Complete
- 10 Minute Start
  - Commissioning working on Procedure
- Sound Level Test Procedure
  - Commissioning working on Procedure
- Auxiliary Load Test Procedure
  - Protocol Complete
- Ammonia Consumption Test
  - No movement (Need to Write Procedure)

Commissioning activities

- Status Generator Protection Work
- Verifying MCC and motor cable pulls and terminations
- Developed System List
- Breakdown of Instrumentation by System
- Working on breakdown of Cable List by System
- Working on equipment description on Cable List
- Working on System walk downs
  - Schedule
  - Walk downs
  - Turnovers from Construction 12 of 28
- I&C Instrument Calibrations Started
- Schedule meeting with Ron LeClair to discuss Controls Status
- Status remaining works for Construction Turnover
- Status of work for energization of 480V MCC
- Energized 480V MCC
- Continued GLO & TLO fin fan flushing. Unit 6 & 7
- Systems which have been turned over from Construction to Commissioning:
  - Instrument Air
  - Service Air

- Fuel Gas
- Potable Water
- Demineralized Water
- Hydraulic Start #6 & #7
- High Voltage
- Medium Voltage
- Low Voltage
- UPS &125DC
- Turbine Lube Oil Units #6 & #7
- Generator Lube Oil Units #6 & #7

3.1. Mechanical

- Started Flushing Unit #6 Generator L/O
- Started Flushing Unit #7 Generator L/O
- Started Flushing Unit #6 Turbine L/O
- Started Flushing Unit #7 Turbine L/O
- Ran Unit #6 NOx Injection Motor

3.2. Instrumentation

- Instrumentation Summary
- Calibration Summary
  - Unit #6 Calibrations 26% Complete
  - Unit #7 Calibrations 22% Complete
- Loop Checks
  - Unit #6 Loops shot
  - Unit #7 Loops Shot

3.3. Electrical

- MCC's and/or equipment which has been energized and is under commissioning jurisdiction as follows:
  - Generator L/O Unit #6
  - Generator L/O Unit #7
  - Turbine temporary L/O pump Unit #6
  - Turbine temporary L/O pump Unit #7
  - Turbine L/O heater Unit #6
  - Turbine L/O heater Unit #7
  - Generator space heater #6
  - Exciter space heater #6
  - Generator space heater #6

- Exciter space heater #6
- Generator Enclosure lighting Unit #7
- Exciter space heater #7
- 125 DC battery chargers
- 24V DV battery chargers

3.4. Control System

- Working on Controls schedule for setup to begin checkout and testing scheduled to begin Mon. the 9th.

3.5. Safety

- All Commissioning personnel have had safety orientation.
- Systems turned over to Commissioning must be under green tagged have a LO/TO applied for any work to be performed.
- Discussed the no smoking in the plant. Working on Controls schedule for setup to begin checkout and testing – Scheduled to begin Mon. the 9th.

3.6. Planned Activities:

- Set up Control Equipment hardware.
- Conduct Control ground checks
- Power up control system
- Start Loop Checks on Unit #6
- Start Loop Checks on Unit #7
- Power up CEMS Equipment
- Power up Communication to CEMS?
- Continue Oil Flushing
- Complete Cals on Unit #6
- Complete Cals on Unit #7
- Continue to push for FF

4. PROCUREMENT STATUS – None

5. DELIVERY STATUS

On Site	IFB	PO	RTS	Shipping	Critical @ Site Date	Notes
GSU 1 & Bushings			5-Jun	at site 6/20	21-Jun	Complete
480V SWGR 1	14-Dec	18-Jan	26-Apr	at site 5/2	14-Aug	Complete
480V SWGR 2	14-Dec	18-Jan	26-Apr	at site 5/2	18-Aug	Complete
480V Aux XFMR 1	14-Dec	19-Jan	9-Jun	19-Jun	28-Jun	Complete
480V Aux XFMR 2	14-Dec	19-Jan	9-Jun	19-Jun	20-Jul	Complete
13.8kV SWGR / GCB	5-Dec	31-Jan	2-Jun	6-Jun	19-Jul	Complete
Dead End Structure w/ Disconnect	18-Aug	22-Nov	4-May	at site 5/12	15-May	Complete
PDC Enclosure			21-Apr	load 5/30 at	at site 6/8	Complete
Gen Protection Panels x 2	31-Jan	7-Apr	31-Jul		9-Aug	material on order to build panel out
GSU Protection Panel x 1	31-Jan		31-Jul	at site 8/3	27-Sep	CEG fabricating
Cable Bus	14-Dec	13-Apr	9-Jun	at site 6/14	2-Aug	Complete
CTG 1 Package		Packaging	27-Jun	at site 4/4	22-May	Complete
CTG 2 Package		Packaging	27-Jun	at site 4/5	25-May	Complete
CT 1		Aero	30-Dec		23-Oct	In Sedalia storage
CT 2		Aero	30-Dec		23-Oct	In Sedalia storage
Gen 1		Packaging	24-Feb	at site 4/6	29-May	Complete
Gen 2		Packaging	11-Feb	at site 3/30	1-Jun	Complete
LO Fin Fan 1		12-Oct	21-Apr		4-Aug	Complete
LO Fin Fan 2		12-Oct	21-Apr		4-Aug	Complete
WI LP Skid 1		Packaging	30-Dec		21-Aug	Complete
WI LP Skid 2		Packaging	30-Dec		21-Aug	Complete
Aux Skid 1		Packaging	1-Feb		21-Aug	Complete
Aux Skid 2		Packaging	1-Feb		21-Aug	Complete
SPRINT Skid 1		Packaging	3-Feb		21-Aug	Complete
SPRINT Skid 2		Packaging	3-Feb		21-Aug	Complete
Final FG Coalescer 1	12-Dec	10-Jan	21-Jun		5-Sep	Complete
Final FG Coalescer 2	12-Dec	10-Jan	21-Jun		5-Sep	Complete
CTG 1 SCR / Stack		29-Aug	1-Jun		2-Aug	remaining material to ship 8/29-8/30
CTG 2 SCR / Stack		29-Aug	1-Jun		11-Oct	remaining material to ship 8/29-8/30
CEMS	7-Dec	24-Jan	30-Jun	1 day	15-Sep	FAT 7/13
Filter House 1		Packaging	19-May		12-Jul	Complete
Filter House 2		Packaging	19-May		12-Jul	Complete
Fire Protection Cabinet 1		Packaging	2-Dec		27-Sep	Complete
Fire Protection Cabinet 2		Packaging	2-Dec		27-Sep	Complete
CTG 1 Controls			31-Aug		21-Oct	NEI Performing Work
CTG 1 Rebuild Server / HMI			31-Aug		21-Jul	NEI Performing Work
CTG 2 Controls			31-Aug		21-Oct	NEI Performing Work
CTG 2 Rebuild Server / HMI			31-Aug		21-Jul	NEI Performing Work
BOP Controls			31-Aug		20-Oct	NEI Performing Work
Waste Water Tank / Assembly	4-Jan		10-Jul	at site 8/3	24-Oct	Heater Pads delivery slipped
Manhole / Lift Station	4-Jan		5-May		19-Sep	Complete
CTG Sound Wall	6-Feb		19-Jun	at site 7/10	29-Jun	
GSU Sound Wall	6-Feb		26-Jun	at site 7/10	9-Aug	

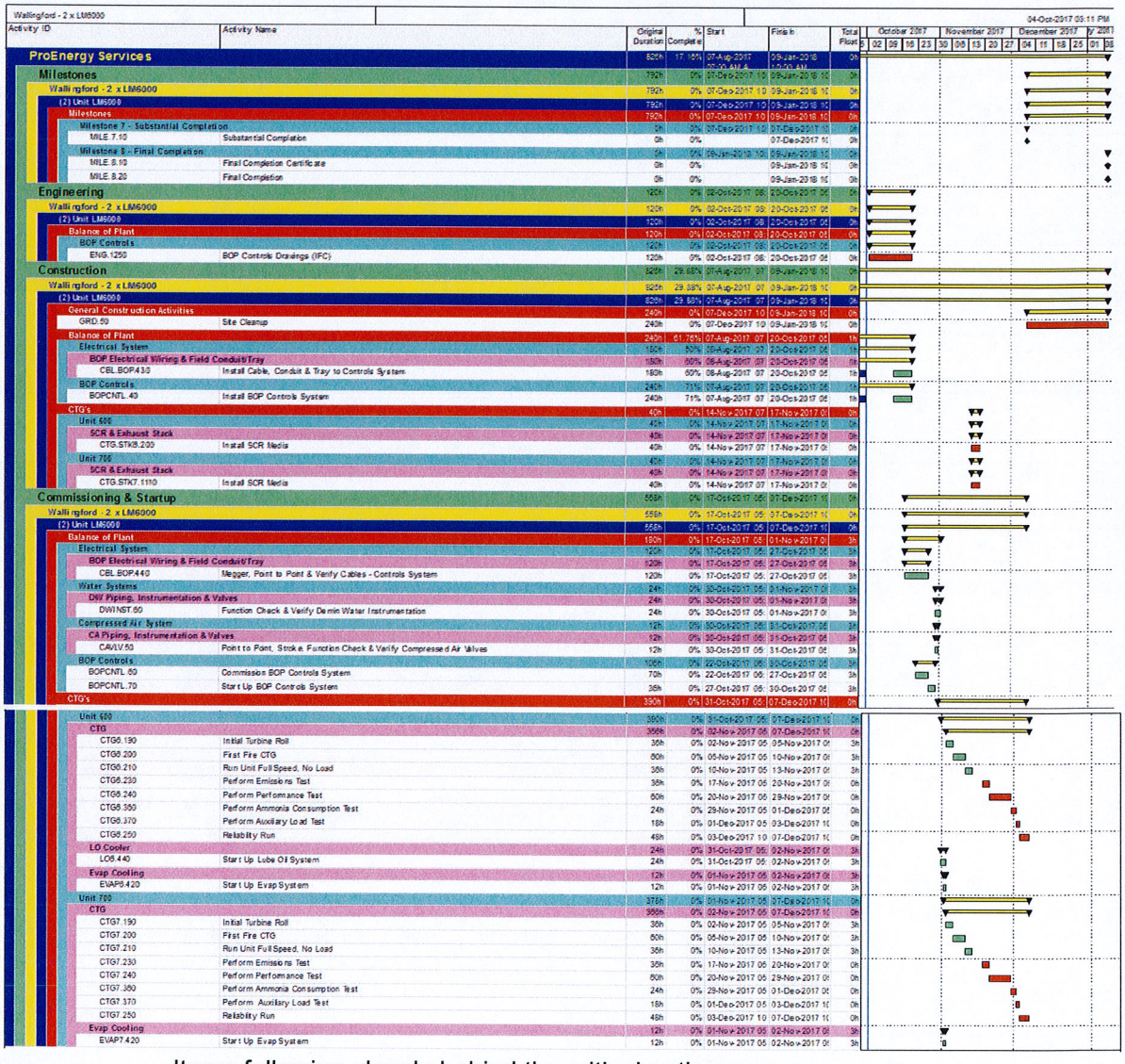
6. SCHEDULE

6.1. CRITICAL PATH ANALYSIS

The current critical path flows through installing the controls system/control cables into starting up the supporting skids of the CTG packages into starting up the CTG's.

There have been several issues that have had to be worked through and new drawings created with termination locations for cables from the controls to the equipment.

Please note that the system is only critical to the activities driving the substantial completion date but not past the 12/15/2017 contractual date. Currently Substantial Completion is December 7.



Items following closely behind the critical path are:

- Performing/Finalizing Generator & Turbine Lube Oil Flushes
- Terminations/Testing Electrical Cables
- Dressing Out Packages
- Installing the Updated Fire Protection Skids

Lube oil flushes are in progress for the Auxiliary Skid and Packages. The flushing of the fin fans is nearing complete as the screens are getting fairly clean. It is expected to possibly be complete flushing the fin fan coolers near the beginning of October. Flushing of the remaining lube oil system is expected to last until October 23.

The planned path forward to assist on improving finalizing cable terminations and testing is to roll more of the Dinto electricians off installing conduit and focus mainly on termination of control cables. The ProEnergy subcontractors will work on finalizing conduit and terminating power cables to motors. The pulls and terminations are continuing to be tracked by cable number so progress can be tracked and the work force redirected if necessary.

The package dressout naturally falls near the critical path with completion being based on when the lube oil flushing completes and being able to install the engines. Once installed, the packages can be dressed out and perform final checks and tests.

The exchange of the existing fire protection skids for winterized enclosures has moved closer to becoming critical based on ship time from the vendor. It is expected for these enclosures to ship the first week of October and be dressed out in Sedalia then transfer to site for final install.

6.2 MILESTONES COMPLETED:

- GSU Backfeed – 9/18/2017
- SCR6 Major Assembly Complete – 9/21/2017
- SCR7 Major Assembly Complete – 9/26/2017

6.3 MILESTONE SLIPPAGE

6.3.1. I&C Engineering IFC Drawings Released

- Slippage caused again by more updating MCC Interconnect drawings based on new findings on equipment. NEI and PES plans to be complete by 10/22/2017 with these drawings. Progress is continuing for design, fabrication and construction as individual drawings are released.
- Slipped 45 calendar days.

6.3.2. CTG7 First Fire

- Due to not starting the LO flushing as soon as expected as well as electrical/controls wiring progress.
- Slipped 8 calendar days.

6.3.3. CTG7 First Fire

- Due to not starting the LO flushing as soon as expected as well as electrical/controls wiring progress.
- Slipped 7 calendar days.

6.3.4. CTG6 First Sync

- First sync has moved out due to the first fire date slipping.
- Slipped 11 days.

6.3.5. CTG7 First Sync

- First sync has moved out due to the first fire date slipping.
- Slipped 12 days.

6.3.6. Mechanical Completion

- Due to starting up the unit later, the mechanical completion has pushed out.
- Moved 7 days.

6.3.7. CTG Units Arrive at Site

- The CTG engines are still scheduled to arrive to site October 23, which is 6 days later than previously planned.

6.4 NOTABLE CHANGES:

6.4.1. Removed predecessors TENCL6.40 'Dress Out Turbine Enclosure' and TENCL7.40 'Dress Out Turbine Enclosure' from GRD.20 'Perform Final Site Grading' as the grading will be completed prior to final dress out of the enclosures.

6.4.2. Changed successor CTG6.190 'Initial Turbine Roll' of activity CEMS6.260 'Start Up CEMS Equipment' to CTG6.230 'Perform Emissions Test'. This change was performed because the CEMS will not need to be active until testing is performed.

6.4.3. Changed successor CTG7.190 'Initial Turbine Roll' of activity CEMS7.310 'Start Up CEMS Equipment' to CTG7.230 'Perform Emissions Test'. This change was performed because the CEMS will not need to be active until testing is performed.

6.4.4. Reduced durations on activities FP6.230 'Commission & Check Out Fire Protection Equipment' and P7.210 'Commission & Check Out Fire Protection Equipment' from 10 days to 8 days.

6.4.5. Added predecessors CTG6.220 'Run Unit Full Speed, 25% / 50% / 75% / 100% Load' and CTG7.220 'Run Unit Full Speed, 25% / 50% / 75% / 100% Load' to better represent logic ties to other site activities.

6.4.6. Added predecessor DEL.300 'Review - Punch List Submittal (30 Days Prior to Substantial Completion)' to GRD.60 'Perform Punch List Activities' to better drive the start of performing the punch list tasks.

6.4.7. Removed predecessor MILE.7.10 'Substantial Completion' from activity GRD.60 'Perform Punch List Activities' based on a better driving activity as noted in the above change.

6.4.8. Adjusted FS relationship between BOPCNTL.60 'Commission BOP Controls System' and CBL.BOP.440 'Megger, Point to Point & Verify Cables – Controls System' to a FF relationship because the system will be able to be commissioned and to start testing while the Controls System cabling is being finalized.

6.4.9. Adjusted FS relationship between CTG6.CNTL.50 'Commission CTG Controls System' and CTG6.CBL.280 'Megger, Point to Point & Verify Cables – Unit Controls' to a FF relationship because the system will be able to be commissioned and to start testing while the Controls System cabling is being finalized.

6.4.10. Adjusted FS relationship between CTG7.CNTL.50 'Commission CTG Controls System' and CTG7.CBL.280 'Megger, Point to Point & Verify Cables – Unit Controls' to a FF relationship because the system will be able to be commissioned and to start testing while the Controls System cabling is being finalized.

6.5. OVERVIEW

6.5.1. Schedule attached.

7. QUALITY -

7.1 Organizing documentation

7.2 Compiling QC punch list for structural/Civil/Piping

7.3 Final inspection for the GSU and the CTG sound walls have been completed and found acceptable.

7.4 QA spoke with Randy (LS Power) requested approval for Rust-Oleum paint V7400-Safety Yellow- Carbon steel fuel lines, Silver Grey for all the carbon steel drain piping. Randy/Gordon approved the request.

8. SAFETY

8.1. Daily safety audits performed on PES Crafts and subcontractors working on job site. No major issues to report.

8.2. Provide safety orientations to new personnel and new contractors coming to the job site as per PES EHS Manual.

9. ISSUES

9.1. There is a delay of powering up the MCC through the Auxiliary Transformers due to the billing relay telemetry. This telemetry issue is not in PES scope of work. At LS Power's request PES is helping to resolve this issue by coordinating activities of NEI to work with Eversource to determine the method of communication for the units #6 & #7. PES is using a temporary diesel generator for commissioning activities. By mid-October PES will need the normal power fed to the MCC in order to complete commissioning activities in a timely manner. This delay may soon effect the Substantial Completion Date of Dec 15th.

10. CHANGE MANAGEMENT

10.1. Open Change Orders

10.1.1. Change Order NO 8 – 125VDC System
10.1.2. Change Order NO 9 – Temporary Diesel Generator Power
10.1.3. Change Order NO 10 – Past and Future Power Costs for Trailers
10.1.4. Change Order NO 11 – SB 270 Credit
10.1.5. Change Order NO 12 – Underground Fiber Optic Vault Interference / Relocation
10.1.6. Change Order NO 13 – Install Crushed Stone Along FG Pipe
10.1.7. Change Order NO 14 – H-Tower Disconnect Switch Credit
10.1.8. Change Order NO 15 – Billing Meter Telemetry

10.2. Pending Change orders

- PES is working on a several miscellaneous changes orders that will be issued next month.

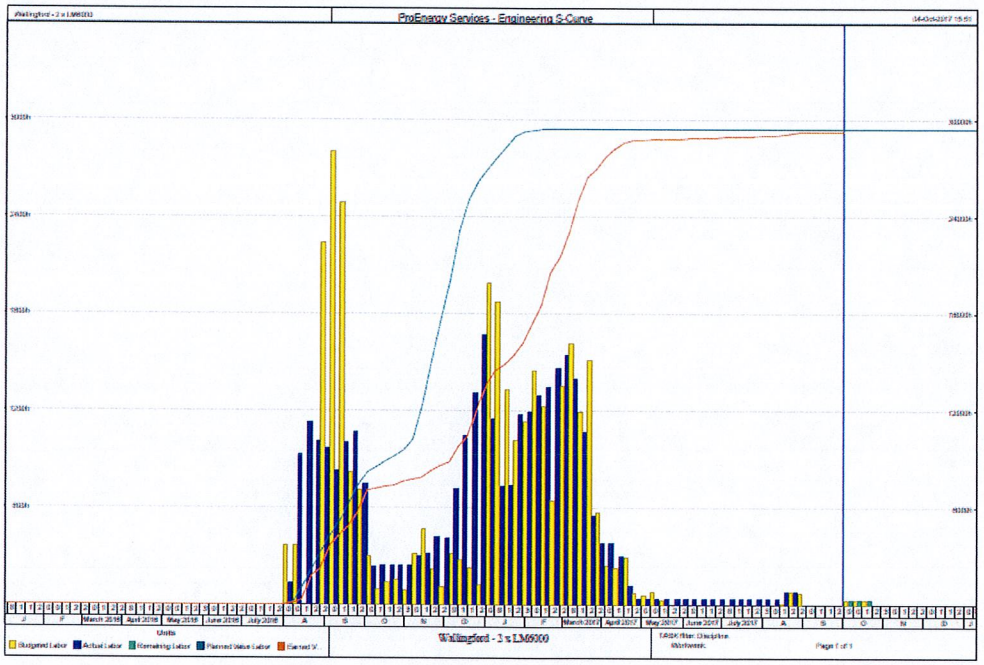
11. DRAWING LIST

11.1. Schedule shows key drawing dates.

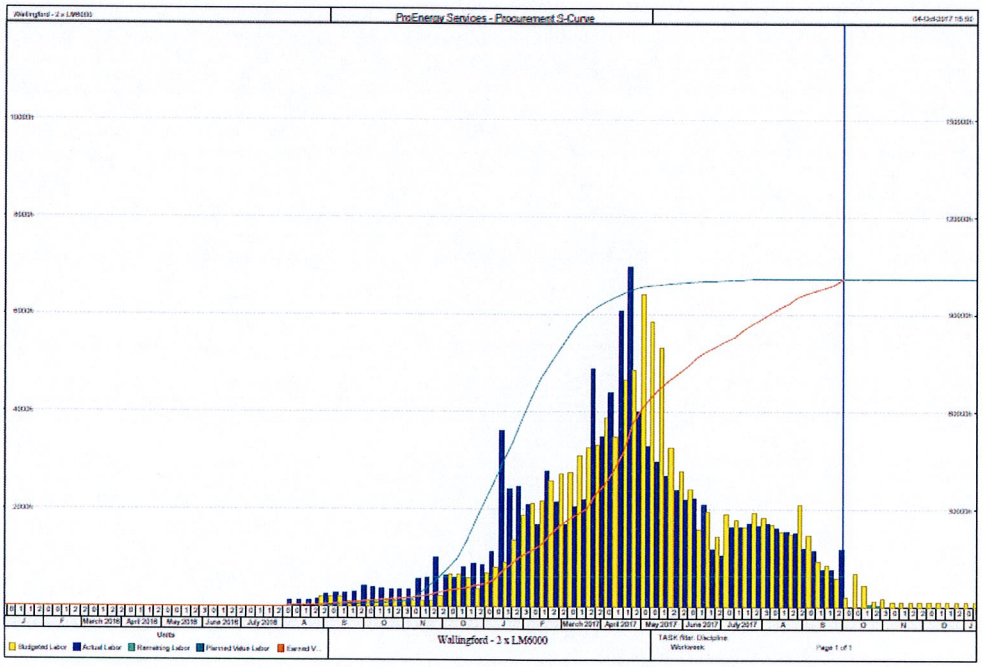
12. ANALYTICAL

See attached progress curves.

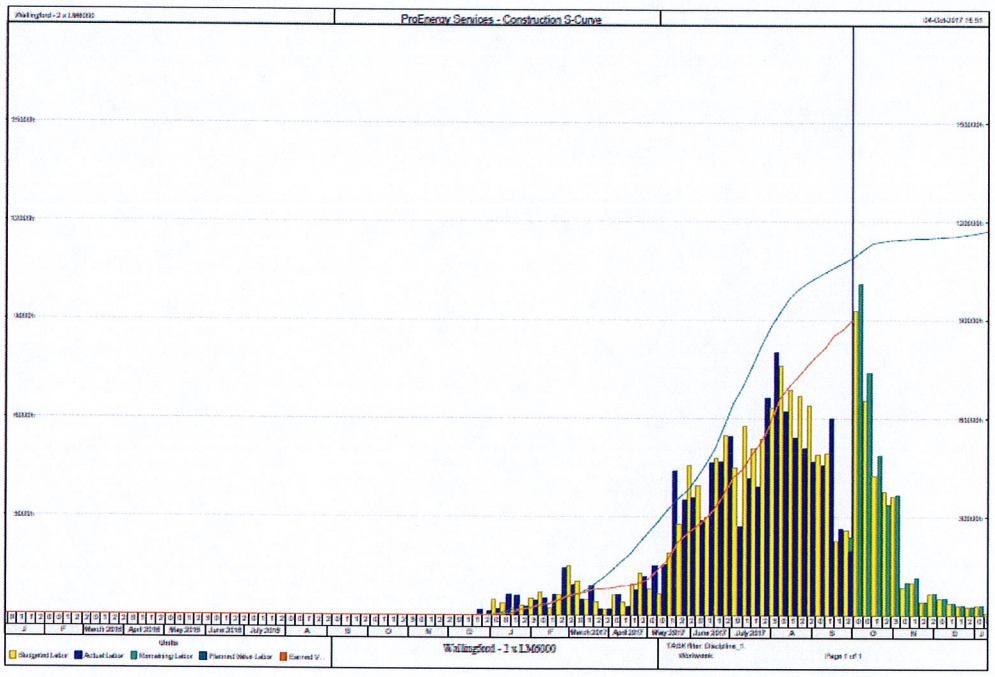
12.1. Engineering.



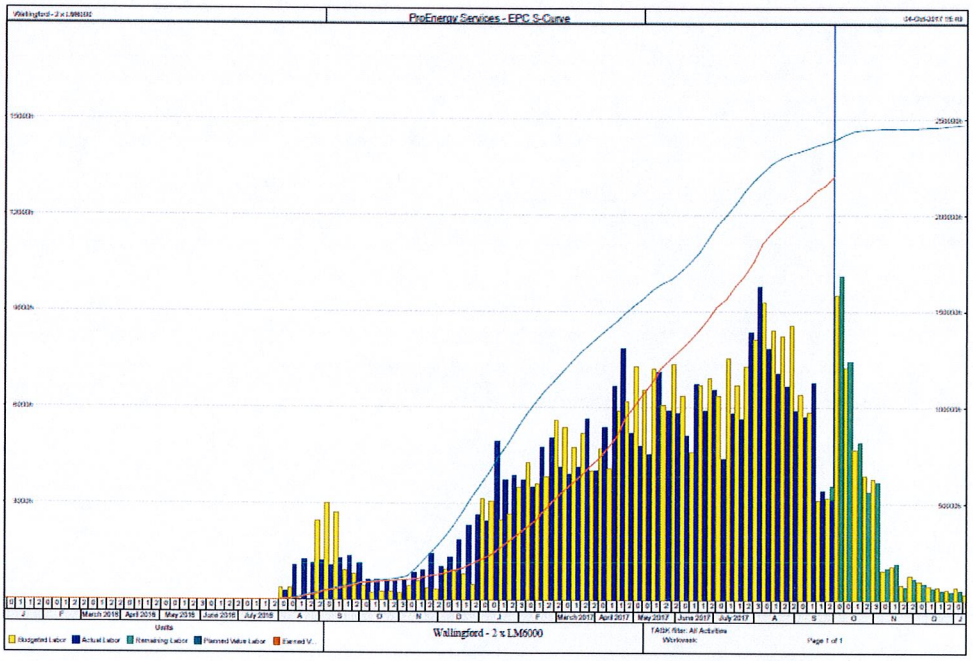
12.2. Procurement.



12.3. Construction.



12.4. EPC.



12.5. MATERIALS INSTALLED

CIVIL

Foundations	Flowable Fill	Concrete	Total Cubic Yards
GT Generators	172	344	516
Exhaust Stack/SCR	290	420	710
Electrical / Control Building	50	75	125
GSU Transformers 13.8kV delta x 13.8kV / 230 kV	30	100	130
Fin fan lube oil, Sprint, Water Injection, CTG removal pad, CO2 rack, Auxiliary skids, Fuel Filter	250	175	425
Cable Tray & Bus foundations	54	114	168
Sound wall & Grade beams	0	472	472
Back fill underground piping	566	0	566
Total cubic yards installed	**1412**	**1700**	**3112**

PIPING

Pipe	Installed in September	Total installed
Large Bore Pipe	0	788'-3"
Small Bore Pipe	0	6,000'-1"

CABLES & TERMINATIONS

Total Terms	From Terms Complete	To Terms Complete	% Terms Complete	% Cables pulled	Estimated Length	Actual Length
5,604	1,422	1,364	49.7%	95.04%	207,553	197,268

13. LABOR STATISTICS.

13.1. ProEnergy Services Safety Information for Wallingford Project

	2017 September	Project Total
Employees	86	86
Hours worked	7,943.00	97,265.50
Lost Workdays Incident Rate	0	0
Total Recordable Incident Rate	0	0
DART (Days away, restricted, transferred)	0	0

14. PERMIT STATUS.

14.1. ProEnergy received Connecticut Major Contractor license.

14.1.1. Storm Water received October 3.

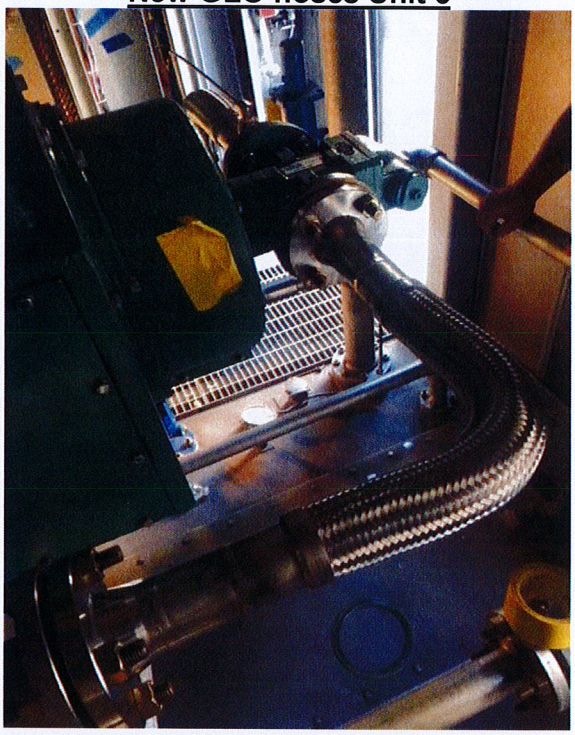
14.1.2. D&M approval received on September 29.

14.1.3. None required for Change Order 2 work.

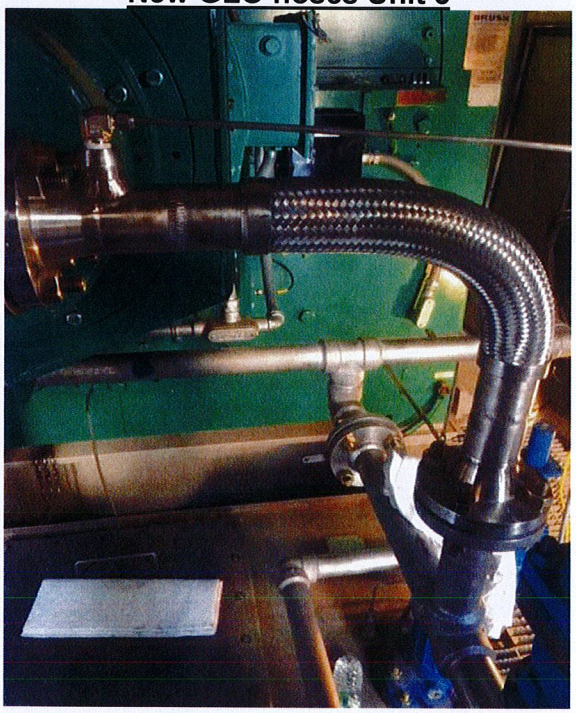
15. PHOTOS

Welding hanging supports on filter house on unit #6

New GLO hoses Unit 6

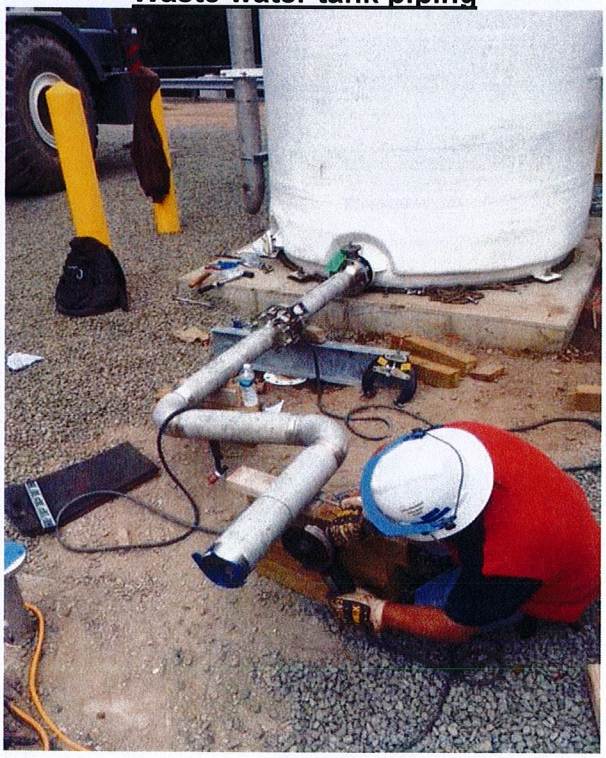


New GLO hoses Unit 6



Installed waste water tank overflow

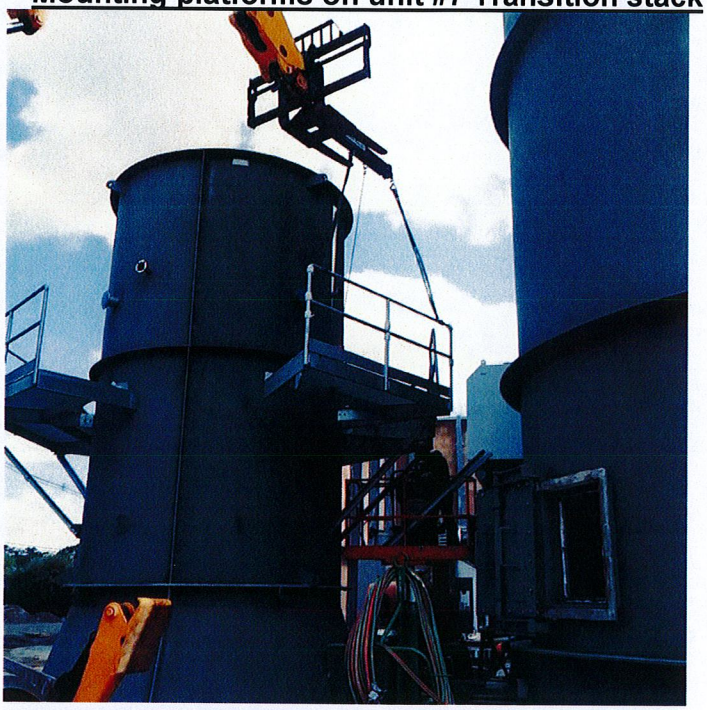
Waste water tank piping



Fuel gas vents

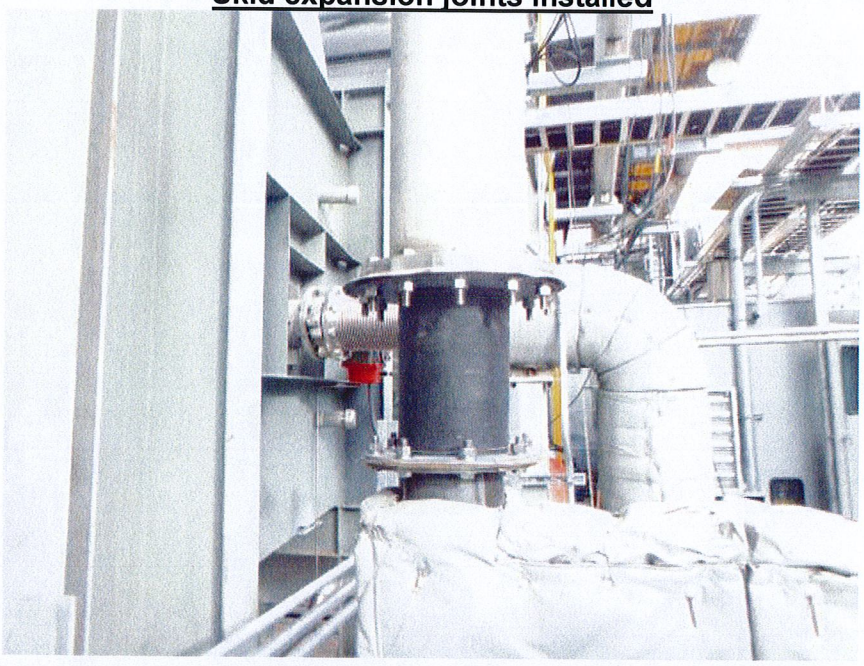
Installing platforms on unit 7 transition

Mounting platforms on unit #7 Transition stack



Setting ladders and platforms on unit 6

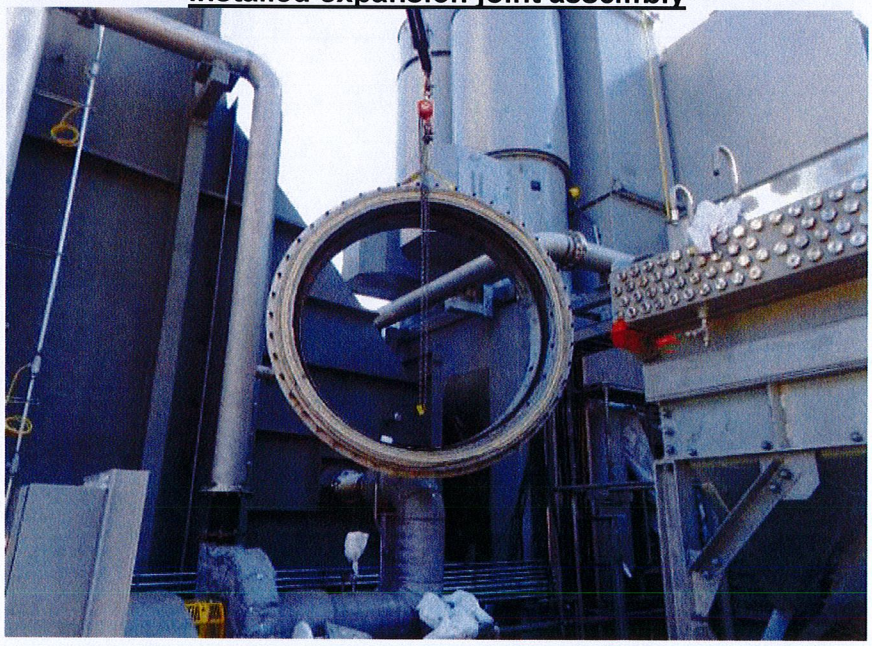
Skid expansion joints installed



Repositioned platforms due to ladder cage door fouling

Installed extension ring

Installed expansion joint assembly

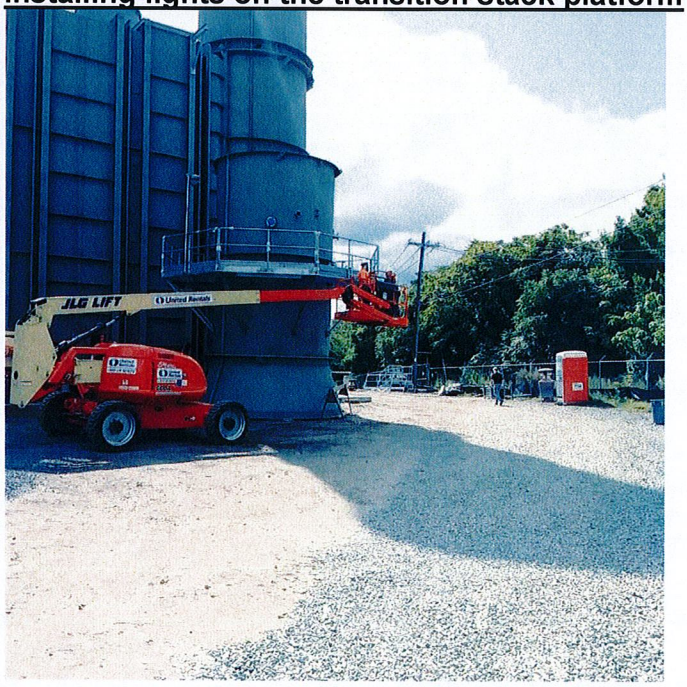


Installing platforms and ladders.

Continued structure installation

Testing & inspecting various panel connections

Installing lights on the transition stack platform



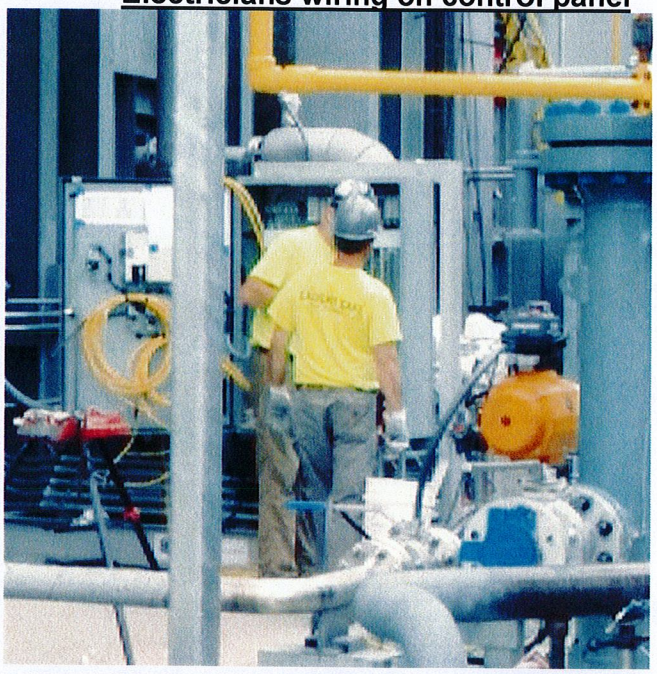
Installed instruments on the fuel/gas pads units 6 and 7

Fishing lines thru conduit on unit 7 SCR

Electricians working on unit #7

Electricians wiring on unit 7

Electricians wiring on control panel

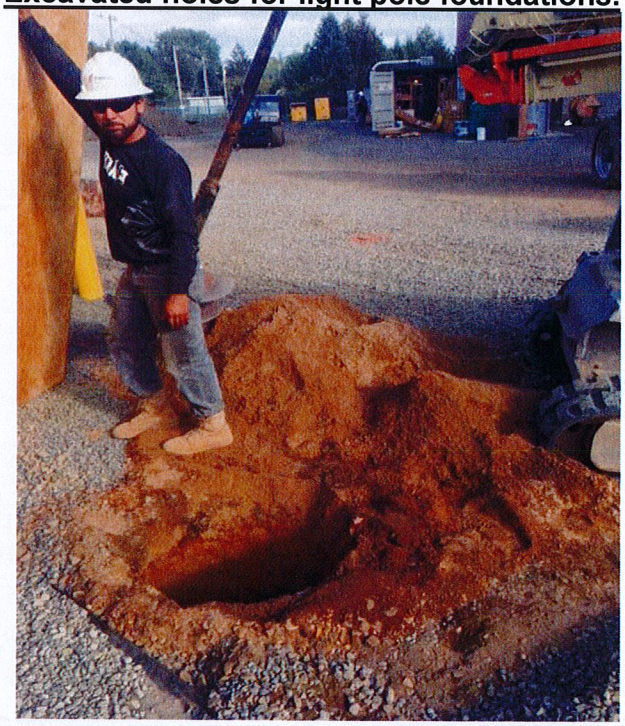


CEMS umbilical cord supports

Placed concrete for bollards around the waste water tank

Backfilled at waste water tank

Excavated holes for light pole foundations.



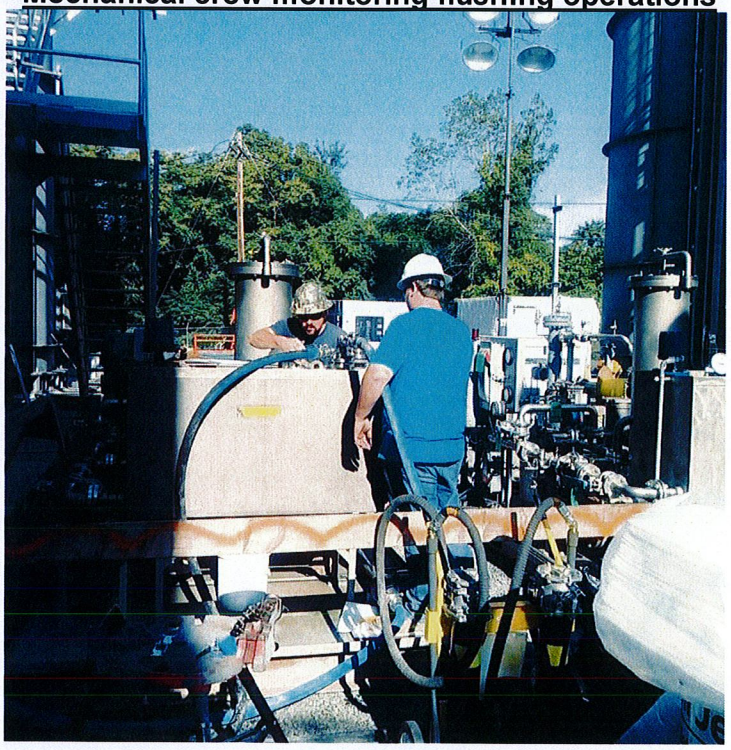
Placed bollards around waste water tank and sump

O&G hanging the door on the east wall on the GSU #7

GSU door has been installed and reworked the caulk

Mechanical prepping for flushing operations

Mechanical crew monitoring flushing operations



September panoramic pics

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