



UAF Combined Heat and Power Plant Information Item

PROJECT UPDATE

This project is currently on track to be completed on schedule in late November 2018. The project budget could remain under the available funding of \$248,000,000 if future expenses are lower than anticipated. There is a very small contingency available to resolve future unanticipated costs. This small contingency means there is still a reasonable risk that project funding could be exceeded. Construction is 65% complete, so there is a significant amount of construction remaining. The most significant future risk is commissioning. Although the team has evaluated the budget and estimated a normal amount of difficulty, commissioning has the potential to encounter issues of significant cost. There has been an effort from the beginning of the project to minimize risks during commissioning by including protection clauses in contracts, attending factory inspections of major equipment and diligent quality control procedures during construction.

Work Package 6 (WP6), Commissioning, was awarded on budget in early October 2017 for \$3,200,000. WP6 is the last major contract award.

The \$2.7M claim from B&W (boiler vendor) is still unresolved. The claim is offset by UAF's assessment of Liquidated Damages for \$1.4M for late delivery of the structural steel. UAF and B&W held an informal resolution conference and UAF is preparing an initial settlement offer. UAF and B&W would like to resolve the claims this fall.

Construction is 65% complete. There have been no major construction issues since the last update. Major items completed since the last update are:

- Material handling structural steel (100%)
- Boiler hydrostatic testing (100%)
- Piping – all systems (65%)
- Electrical cable tray (80%)
- Air Cooled Condenser (95%)
- Boiler building siding (100%)
- Ash Silo siding (100%)
- Rail extension (100%)
- Underground utilities (100%)

Items in progress:

- Piping – all systems
- Boiler casing
- Electrical cable tray
- Electrical cable installation
- Electrical distribution equipment
- Variable frequency drives
- Instrumentation
- Control system
- Atkinson control system modifications
- Boiler refractory and insulation
- Pipe insulation
- Ash Handling equipment
- Material handling equipment

At this time, UAF has contract commitments of \$242,065,800 (98% of the TPC) and has expended \$169,000,000. There is approximately \$700,000 of contingency available to accommodate unanticipated expenses. The project team is vigilant in identifying cost savings and minimizing the cost of changes.

Challenges to the project budget and schedule still remain, and it is possible that costs could exceed the available funding.

MILESTONES

Stanley Consultants' Design Contract	May 2011
Formal Project Approval	December 2013
Schematic Design Approval (Site Preparation and Equipment Procurement)	June 2014
Schematic Design and Cost Estimate	January 2015
Schematic Design Approval (Site Work)	April 2015
Schematic Design Approval (Balance of Project)	June 2015
Boiler Contract Executed	June 2015
Steam Turbine Contract Executed	June 2015
Air Cooled Condenser Contract Executed	October 2015
Work Package No. 1 Executed (Site Work)	June 2015
Work Package No. 2 Executed (Foundations)	February 2016
Work Package No. 3 (Boiler Installation)	June 2016
Work Package No. 4 (Mechanical)	December 2016
Work Package No. 5 (Electrical, Instrumentation and Controls)	March 2017
Work Package No. 6 (Commissioning)	October 2017
Mechanical Completion (start of Commissioning and testing)	June 2018
Substantial Completion (completion of Commissioning and testing)	November 2018