UAF Combined Heat and Power Plant Replacement Information Item

The consulting team of Stanley Consultants and SLR, Inc. has been advancing work toward the major deliverables of a cost estimate and air permit application. The preliminary design was submitted at the end of July 2012 and the air permit application was submitted on February 5, 2013. UAF has received preliminary comments on the application and a response has been prepared and submitted. It is anticipated that a draft permit will be issued for public comment between July 2013 and September 2013.

The preliminary cost estimate exceeded an earlier Order of Magnitude estimate by a significant margin. This estimate was reviewed further and an independent estimating effort was performed. The current Total Project Cost for the proposed replacement Combined Heat and Power Plant is \$245M. Value engineering will be performed once the cost estimate is finalized to explore potential cost savings without affecting the performance parameters of the proposed facility.

In addition to pursuing the solid fuel option, a cost estimate is being prepared for a natural gas option for UAF should reasonably priced natural gas becomes available. This is being prepared as a contingency as there does not appear to be a reliable, reasonable cost natural gas supply available to UAF in the next 5-10 years. It is anticipated that a natural gas option will be about 60 percent of the cost of a solid fuel plant, but annual operating costs (primarily fuel) would be much higher and more volatile. A cost estimate will be available in mid-May 2013.

The air quality permit is expected to be posted for public comment this summer. When approved, UAF will proceed with the first stage of design, selection of the major equipment vendors (boiler, turbines, and condensers). This effort will cost up to \$3M and UAF will fund it from Deferred Maintenance funds.

Highlights of the Atkinson Heating Plant Critical Utilities Revitalization project since Last Report to Board of Regents

- The contract for the replacement of the deaerator tank, feed-water heater and key high pressure valves is complete.
- The contract for the replacement of Variable Frequency Drives has been awarded. Completion is scheduled for April 2014. Half of the work will be completed in 2013 and the remainder is scheduled for boiler overhaul in 2014.