

September 19-20, 2012

**INFORMATIONAL ITEM:**

**Geothermal Mine Water for the Natural Resources Building (DOE Grant DE-EE0002821)**

Montana Tech of The University of Montana received a federal Department of Energy (DOE) grant (DE-EE0002821) in the amount of \$1,072,744 in January 2010. Spending authority for this project was authorized as part of the \$5,400,000 additional authority approved by the Fifty-Ninth Montana State Legislature to the Department of Administration to build the Natural Resources Building (NRB). The building was designed and built with internal building components in place should the geothermal project (grant) be funded. The exit and return lines are already “stubbed out” of the NRB past the parking lot and ready for connectivity upon completion of construction of the project. The grant consisted of two phases, with Phase 2 contingent upon the findings of Phase 1.

Phase 1 was a \$72,744 grant to prepare a feasibility study and grant application documents for a Phase 2 submission to DOE to promote the use of geothermal mine water to supplement the heating and cooling systems in the NRB. The project objectives of Phase 2 include installation of a large centralized hybrid geothermal system using off-the-shelf technology to reduce the operating costs of Montana Tech’s new NRB. In order to promote commercialization of the technology, the project will document system performance, publish the operational and performance information, and involve academic faculty, researchers, and engineering students in teaching, research, and training projects that utilize the system.

On June 8, 2012, the DOE gave approval and authorized \$1,000,000 to proceed to Phase 2 (Construction) of the project. Phase 2 approval was dependent upon the results of the feasibility study and National Environmental Policy Act (NEPA) approval. The NEPA approval took a considerable amount of time, thus delaying Phase 2 approval until June, 2012.

The Department of Administration (through its Architecture & Engineering Division) is authorized by law to manage, supervise and control the construction of all state buildings and facilities approved by the Montana State Legislature and thus will manage construction on this project as part of the authority delegated by the Fifty-Ninth Montana Legislature. Montana Tech is responsible for the additional cost-share portion in the amount of \$1,082,753 (50.2% of the aggregate). Cost share will come in the form of faculty/researcher salaries, benefits, IDC’s and, if approved, use of foundation (private) funding to develop the related underground mining project of the Montana Tech Mining Department. The cost-sharing will be recognized by the end of the grant period September 30, 2014.

Per the attached Memorandum of Understanding & Financial Agreement between the Department of Administration and Montana Tech of The University of Montana, the Department of Administration agrees to provide project management, construction documents, alternative delivery construction procurement, and to award the necessary documents for the project. Montana Tech, as the grant recipient, is responsible for all requirements of the grant, including data collection, cost-sharing, grant monitoring, and reporting requirements to the DOE.

ATTACHMENTS:

Feasibility Study  
Memorandum of Understanding & Financial Agreement