

Capital Project to Supplement the New Gas-Fired Boiler at the Central Steam Plan

JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

May 8, 2019

The Board of Visitors approved the Gas-Fired Boiler at the Central Steam Plant project with a \$6.8 million total project cost at its April 3, 2017 meeting. The scope and budget for the project resolution were based on metrics for similar projects and internal reviews. The project is being implemented in three phases: (1) hazardous material abatement, demolition of existing decommissioned boiler and associated piping; (2) manufacture and delivery of a new boiler; and (3) installation of the new boiler and associated piping. Phase one is complete. Phase two is under contract and the new boiler is scheduled for delivery in July 2019. Phase one is \$140,000 under its budget, and Phase two is \$24,000 under its budget for a total savings of \$164,000. The costs to accept bids for Phase three are \$1.564 million over its budget. Applying the savings from Phase one and Phase two, the project requires a \$1.4 million supplement to the existing \$6.8 million budget for an adjusted budget of \$8.2 million. The university has worked to control costs of the installation and has determined this is the lowest possible cost to have the boiler operational on schedule.

The new 100,000 pound per hour gas-fired boiler would produce 60 percent of the Plant's natural gas steam generation with a \$495,000 lower annual fuel costs than the current gas assets. As with all self-supporting projects, the university has developed a financing plan to provide assurance regarding the financial feasibility of the project. This funding plan calls for the use of fuel and operating savings to pay back an internal loan for the entire cost of the project. The additional \$1.4 million would extend the payback period by approximately two years for a total payback period of 11 years.

Under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the budget, size, scope, and overall funding of nongeneral fund capital outlay projects. This request is for a \$1.4 million supplement to adjust the total authorization for the Gas-Fired Boiler at the Central Steam Plant project to \$8.2 million.

**RESOLUTION FOR CAPITAL PROJECT SUPPLEMENT FOR
THE NEW GAS-FIRED BOILER AT THE CENTRAL STEAM PLANT**

WHEREAS, the Virginia Tech Central Steam Plant supplies steam to the Blacksburg Campus; and,

WHEREAS, the Board of Visitors approved the Gas-Fired Boiler at the Central Steam Plant project with a \$6.8 million total project cost at its April 3, 2017 meeting; and,

WHEREAS, demolition work is complete, the new boiler has been ordered, and installation bids reveal the actual total project costs exceed the \$6.8 million authorized budget; and,

WHEREAS, the costs to complete the project are \$8.2 million, or \$1.4 million over the authorized budget; and,

WHEREAS, the project is necessary to increase the Central Steam Plant's capacity to meet present and projected future campus growth; and,

WHEREAS, the university has developed a 100 percent nongeneral fund resource plan to support the adjusted total project budget of \$8.2 million; and,

WHEREAS, under the 2006 Management Agreement between the Commonwealth of Virginia and Virginia Tech, the Board of Visitors has authority to approve the budget, size, scope, and overall funding of nongeneral funded major capital outlay projects.

NOW, THEREFORE BE IT RESOLVED, that the university be authorized to move forward with a \$1.4 million supplement to adjust the total project authorization for the Gas-Fired Boiler at the Central Steam Plant project to \$8.2 million.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to supplement and complete the Gas-Fired Boiler for the Central Steam Plant project be approved.

June 3, 2019

Resolution for Capital Project Supplement for the New Gas-Fired Boiler at the Central Steam Plant

DWIGHT SHELTON

Vice President for Finance and Chief Financial Officer

BOB BROYDEN

Associate Vice President for Capital Assets and Financial Management

JUNE 3, 2019



Supplement for the Gas-Fired Boiler at the Central Steam Plant

- *Approved with a \$6.8 million total project cost, April 2017*
- *Will produce 60 percent of the Plant's natural gas steam generation with \$495,000 lower annual fuel costs than the current gas assets*
- *Implemented in three phases:*
 - *Demolition: complete*
 - *New Boiler Fabrication: to be received in July*
 - *Installation: bid exceeds available funding*



Supplement for the Gas-Fired Boiler at the Central Steam Plant

- Adjusted total costs are **\$8.2 million**
- The financing plan calls for use of fuel and operating savings to pay back an internal loan
- The \$1.4 million supplement would extend the loan period by approximately two years for a total payback period of 11 years



Resolution for a Capital Project Supplement for the Gas-Fired Boiler at the Central Steam Plant

NOW, THEREFORE BE IT RESOLVED, that the university be authorized to move forward with a \$1.4 million supplement to adjust the total project authorization for the Gas-Fired Boiler at the Central Steam Plant project to \$8.2 million.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to supplement and complete the Gas-Fired Boiler for the Central Steam Plant project be approved.

JUNE 3, 2019