FCR 10

Office of the President February 21, 2020

Members, Board of Trustees:

IMPROVE CENTER FOR APPLIED ENERGY RESEARCH FACILITIES CAPITAL PROJECT (CARBON FIBER DEVELOPMENT FACILITY)

<u>Recommendation</u>: that the Board of Trustees approve the request to initiate the Improve Center for Applied Energy Research Facilities Capital Project (Carbon Fiber Development Facility).

<u>Background</u>: Pursuant to Administrative Regulation 8:2, any capital project with an estimated cost of \$1,000,000 or more must be approved by the Board prior to initiation.

The University's Center for Applied Energy Research (CAER) is working in partnership with the Oak Ridge National Laboratory Carbon Fiber Technology Facility (ORNL) on the conversion of coal to high-value carbon products. Carbon fiber is being increasingly used in aerospace and automotive applications to replace more traditional metals. Pursuant to this partnership, CAER will construct a new laboratory building to serve as a pilot-scale process development unit.

The new laboratory will be approximately 5,000 square feet and located on Research Park Drive, Lexington, KY, adjacent to other CAER facilities (the Spinline and Pitch Lab buildings). In partnership with ORNL, CAER will produce high-value carbon fiber from raw coal on the largest-scale in the United States. The new special purpose-built facility is necessary to efficiently and safely process tons of coal into mesophase pitch, recover and utilize by-products, and develop new sustainable technologies to generate highvalue carbon fiber, binders, and other materials for composite structures.

This \$2,500,000 project, authorized by the 2018 Kentucky General Assembly, is well within the total legislative authorization of \$20,000,000 and will be funded with federal funds from the U.S. Department of Energy.



Kentucky

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