FCR 23

Office of the President June 17, 2022

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.

At its February 22, 2020 meeting, the Board approved the initiation of the Improve Center for Applied Energy Research Facilities – Carbon Fiber Development Facility capital project with a scope of \$2,500,000. The University's Center for Applied Energy Research (CAER) is working in partnership with Oak Ridge National Laboratory Carbon Fiber Technology Center (ORNL) to construct a new laboratory building to serve as a pilotscale process development unit for the conversion of coal to high-value carbon products. The new laboratory will be approximately 5,000 square feet and located at the CAER location adjacent to the Spinline and Pitch Lab buildings. In partnership with ORNL, the CAER will produce high-value carbon fiber from raw coal at the largest scale in the United States. This new purpose-built facility is necessary to process tons of coal efficiently and safely into mesophase pitch, recover and utilize by-products and develop new sustainable technologies to generate high-value carbon fiber, binders, and other materials for composite structures.

The design process has resulted in the project scope coming in \$1,000,000 higher than budgeted. A value engineering process was pursued during design. However, this process did not bring the project back within the approved budget. The pricing is indicative of increases in construction costs, lack of competition among bidders as well as supply shortages caused by heavy demand.

This \$3,500,000 project, authorized by the 2022 Kentucky General Assembly, is well within the total legislative authorization of \$20,000,000 and will be funded with a combination of federal funds from the Department of Energy and agency funds.



Kentucky

CAPITAL PROJECT (CARBON FIBER DEVELOPMENT FACILITY)