FCR 5

Office of the President February 19, 2021

Members, Board of Trustees:

REPAIR/UPGRADE/EXPAND CENTRAL PLANTS - DEAERATORS CAPITAL PROJECT

<u>Recommendation</u>: that the Board of Trustees approve the initiation of the Repair/Upgrade/Expand Central Plants - Deaerators capital project.

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

The University's Steam Heating Utility Plants require deaerator tanks to remove dissolved gasses from the water supply into the plant boiler. These tanks are an integral part of an efficient steam production system that protects the boiler, reduces water consumption and energy costs, minimizes the water treatment additives allowing the condensate to be reused instead of being wasted.

Several of the oldest tanks currently in use were installed in the 1960's or 1970's, putting those well past their expected life span. Another is approaching two decades of continual operation. All tanks go through yearly maintenance to provide extended use. With the constant use of operation, metal fatigue and structural failures are occurring, as are limitations to the capacity of water they can service, resulting in supporting boilers not being able to operate at plant capacity.

The scope of this capital project is \$6,000,000 and will be completed over several phases as annual funding becomes available. This first phase, Phase 1, is not anticipated to exceed \$1,750,000. This capital project is well within the \$112,000,000 total legislative authorization by the 2020 Kentucky General Assembly and will be funded with agency funds.