

WUSTL ENERGY EFFICIENCY RESERVE

BACKGROUND:

Washington University in St. Louis has been investing in strategies that improve the energy efficiency of its operations for decades. These strategic investments have led to energy use remaining flat over the last 25 years despite a doubling of the University's building area and have resulted in a cumulative savings of over \$100 million in operating costs.

Utility companies, including Ameren Missouri, have also embraced energy efficiency as an important resource for minimizing the need to build costly power plants, for managing peak demands, and for curbing carbon emissions. In 2009, Missouri passed the Missouri Energy Efficiency Investment Act (MEEIA), which led to the development of utility-run energy efficiency incentive programs for commercial and residential customers, including Ameren Missouri's BizSavers program. These programs are funded through a percentage surcharge on customers' utility bills. Customers can then apply to the utility for incentives for energy efficiency projects.

Washington University actively participated in the BizSavers program from 2013 to 2015, pursuing energy efficiency incentives for a broad array of projects. At the end of 2015, University staff assessed the value of the BizSavers program to the University and found that the University was only able to recoup 68% of the money it contributed to the program. As a result, University leaders approved a recommendation to opt-out of the program by not pursuing any incentives for three full years, 2016 – 2018, and to create an internal Energy Efficiency Reserve that will allow the University to invest 100% of these funds to energy efficiency.

PURPOSE OF RESERVE:

Consistent with the intent of MEEIA and Ameren's BizSavers program, Washington University's Energy Efficiency Reserve will provide a dedicated funding source for energy efficiency and carbon emission reduction projects that will be used to implement projects that might not otherwise be pursued due to competing budget priorities or longer payback periods.

RESERVE FUNDING:

Washington University is creating a central Energy Efficiency Reserve that will cover the Central Fiscal Unit, the South 40 residential area, and the six Danforth Campus academic Schools. North Campus, West Campus, South Campus, and Quadrangle are not covered under this program.

The reserve will be funded through the continued allocation of the Ameren Program charge to the Danforth Campus and South 40 Campus. The charge was previously included in the

electric raw utility cost until January 2019 when the opt-out of the Ameren program occurred. Moving forward, the cost will be separately allocated and charged to buildings on each campus based on actual electrical usage. The charge will remain at the same level as before, and therefore, will be experienced as cost neutral. The University will benefit by having direct control over the funds and being able to dedicate 100% of the funding to projects. The Schools will benefit from energy cost savings due to the projects funded by the reserve.

The initial reserve transfer will occur at FY19 year-end and will represent one-half of the budgeted Energy Efficiency Charge from Ameren of \$401,500 for Danforth Campus and \$64,096 for South 40 Campus that was built into the FY20 budget. At FY20 year-end, the reserve transfer will be the total of the recovered \$401,500 Danforth Campus Energy Efficiency charge and the recovered \$64,096 South 40 charge. For FY21 and beyond, the energy efficiency recoveries and subsequent reserve transfer will increase by 3%.

USE OF RESERVE FUNDS:

The Energy Efficiency Reserve will not be the sole source of funding for energy conservation projects, but rather a source of strategic capital to be deployed as gap financing for high-impact and/or priority projects. Fund allocation will be decided annually by a committee consisting of the Associate Vice Chancellor of Danforth Facilities, the Danforth Utility Director, the Assistant Vice Chancellor for Sustainability, the Director of Maintenance Operations, the HVAC Services Manager, and the Sustainable Design and Construction Project Manager.

Funds are to be allocated with the following guidelines in mind:

1. Funded projects must be related to energy conservation or carbon reduction.
2. The Energy Efficiency Reserve is intended to fund projects that would not proceed without gap financing.
3. Priority will be given to projects with the highest potential for carbon reduction. This may include projects that have a lower immediate reduction of emissions, yet strategically enable larger emissions reductions in coming years, such as electrification projects.
4. The funds can be used for enabling work that directly leads to carbon reduction projects.

Eligible uses of the Energy Efficiency Reserve include, but are not limited to: equipment replacement, software and controls upgrades, retro-commissioning, lighting projects, HVAC projects, utility projects, construction costs, and consultant/design fees associated with projects. In addition, the following uses may be eligible for Energy Efficiency Reserve funding and should be evaluated on a case-by-case basis: studies related to energy conservation and carbon reduction that fill a specific gap and would not otherwise be funded from another source and staff positions that directly result in energy conservation and carbon reduction.