

Guaranteed Energy Efficiency

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This presentation is a case study of a recent guaranteed energy and water efficiency program performed by Burns & McDonnell for the State of Missouri. Kansas City based Burns & McDonnell provided preliminary consulting, facility engineering and construction services through installation of energy and water efficiency measures at facilities across the State. Utility savings generated by the facility improvements are guaranteed by Burns & McDonnell.

The efficiency project identified energy and water savings at twelve sites encompassing over two million square feet throughout the State. Burns & McDonnell prepared an Investment Grade Audit of the surveyed facilities which describes surveyed facilities and provides recommendations for efficiency improvements. The document provided a summary of guaranteed energy savings and associated costs for installation of the upgrades. Items such as replacements of central plants, water heating and lighting fixtures were provided in the analysis. The State of Missouri selected items based on needs of individual facilities as well as the underlying financial criteria of installed cost and payback term. Following selection, Burns & McDonnell provided engineering services in design of the improvements.

In addition to energy and water conservation programs, the project included various capital facility upgrades. Through the program, the State of Missouri has significantly reduced annual utility expenses and promoted energy efficiency and sustainable practices throughout the sites. Other benefits include modernization of aging equipment, installation of new facility equipment and reduction in emissions of CO₂, NO_X, SO₂ and Mercury.

The presentation will outline the program results, sustainable aspects, project details and describe the numerous benefits for the State of Missouri.