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STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET
LANSING

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Energy Efficiency Revolving Fund Report

Required by Section 890 of Public Act 87 of 2021, FY2022

Prepared for
(Insert legislative recipients, e.g. House and Senate Appropriations Committees)

Department of Technology, Management and Budget
(Insert Program Responsible for Report, e.g. Procurement)
(Insert Date of Report)

DTMB - General Services Building Lighting Upgrade:

Summary:

Partnering with Consumers Energy and Graybar to participate in Graybar's Smart Lighting Turn Key Program. This program streamlines the process of LED conversions and Advanced Lighting Controls (ALCs) in commercial building spaces. An assessment of the General Services Building was conducted and the recommendation was to upgrade 100% of the building with LEDs and advanced lighting controls (ALC). The estimated utility rebate for this project is about 50% of the total cost. Utility rebates are incentives provided by the utility companies to help reduce the capital investment costs into energy efficiency technologies and practices. DTMB will utilize 100% of the rebate monies received and reinvest it into additional LED and ALC projects in DTMB-owned and managed facilities.

Monetary Savings Realized:

\$77,132

DTMB - State Warehouse Complex Solar Array:

Summary:

To build a solar array system that generates approximately 400,000 kwh of electricity, providing 100% of electricity with renewable energy to six buildings at the State Warehouse Complex. The utilization of solar energy improves our government's environmental footprint, reducing CO2 emissions and other pollutants created by fossil fuels used to feed grid-based power. In addition, generating our own, on-site electricity will lower our overall utility costs, ultimately savings taxpayer dollars. This solar array would be located behind the State Warehouse Complex adjacent to 496 and can be seen from the highway as well as Saint Joseph Street. In addition, a sign will be placed adjacent to the highway stating the solar array is a joint project between the State of Michigan and the Board of Water and Light.

Monetary Savings Realized:

Project is still in the design phase, and physical work has not started yet. Construction expected to complete by September 2023. There are no monetary savings at this point.

DOC - St. Louis Correctional Facility

Summary:

MDOC's green prison initiative energy performance project includes four energy conservation measures (ECMs) designed to reduce energy use, water consumption, greenhouse gas emissions, and operating and maintenance (O&M) costs at the St. Louis Correctional Complex. The four ECMs include:

1. Solar PV: Install two 800 KW solar photovoltaic (PV) generation arrays at the St. Louis and Central Michigan Correctional Facilities to provide renewable electric power. The new PV systems will enable the St. Louis Complex to reduce grid-sourced and fossil fuel-generated electricity, significantly reduce site greenhouse gas emissions, improve energy resilience, and reduce grid-dependency.
2. Interior LED Lighting: Retrofit and/or replace 6,750 existing interior fluorescent and TLED lamps with new solid-state LED lighting at the St. Louis and Central Michigan Facilities. These upgrades will standardize the lighting design at the St. Louis Complex and provide improved light quality, light levels, color rendering, and reduced energy consumption.
3. Water Improvements: Retrofit and/or replace 1,900 toilets, urinals, shower heads, and faucets at the St. Louis and Central Michigan Facilities. The new plumbing fixtures will standardize plumbing products, reduce water consumption and wasted water through the use and implementation of new plumbing controls.
4. Kitchen Hood Upgrades: Install new variable frequency drives (VFDs) and control systems on the make-up air units (MAU) supply and exhaust fans associated with the main kitchen hoods at the St. Louis and Central Michigan Facilities. New VFDs and controls will help reduce the amount of excess energy consumed by the kitchen ventilation and makeup air systems.

Monetary Savings Realized:

Project is still in the design phase, and physical work has not started yet. There are no monetary savings at this point.