Sec. 936. The department shall contract with third-party providers to complete an assessment of energy utilization at each state correctional facility. In particular, the department shall endeavor to identify and implement energy-saving initiatives in the various correctional facilities. By April 1, the department shall provide the members of the senate and house appropriations subcommittees on corrections, the senate and house fiscal agencies, the state budget director, and the legislative corrections ombudsman with a report on these efforts.

ARRA Projects

Numerous American Recovery and Reinvestment Act (ARRA) Projects were completed during calendar year 2011. Cumulatively, nine (9) correctional facilities throughout the system received $3,501,824.00 of ARRA funding to accomplish energy saving projects.

ARRA (also referred to as stimulus funds) was established as a Federal Grant to create jobs, promote investment and enable consumer spending. The portion of ARRA which the Michigan Department of Corrections (DOC) benefited from was the portion reserved for State Energy Programs. This was intended to help States invest in energy efficiency and renewable energy. Funding from this Federal Grant is administered through LARA (Michigan Department of Licensing and Regulatory Affairs). All progress reporting and financial reporting is submitted to and monitored by LARA to ensure the state of Michigan meets all criteria set forth.

Energy savings created from these projects creates a significant, long lasting savings for the State of Michigan related to reduce energy consumption. Although our entire goal of savings won’t be fully realized until the projects are completed. A decline in utility usage at those facilities that have finalized their energy saving measures is reflected in their metered readings.

As an example, after the exterior lighting upgrades at the Thumb Correctional Facility was completed, a comparison of the prior three years electrical usage was reviewed. For the first month these lights were operational, a decrease of over 20,000 kWh was noted compared to the same month in the previous three years. Please note however that although the consumption of electrical energy declined, not as of this can be contributed to the lighting projects. There are many other variables that need to be considered such as degree days, staffing level and prisoner count fluctuation, etc. It can be assumed however a savings due to the fact that the manufacturers name plate information between the old and the new fixtures are compared.

Energy Performance Contracts (EPC)

Preliminary tasks related to establishing EPC’s at three correctional facilities began during calendar year 2010. Investment grade audits were finalized late summer 2010 for Kinross Correctional Facility, Parnall Correctional and Cotton Correctional Facility. Contracts for professional services and the performance contractors were established for these sites late 2010. Funding provided from lease agreements for Energy Performance Projects is paid for through savings realized in the DOC Fuel and Utility Account. This allows for much needed facility infrastructure improvements while also creating energy savings.
An important portion of the contracts issued to the three Energy Performance Contractors, requires them to verify actual energy savings after the projects are completed. Since the projects just recently concluded, monthly measurement and verification reports depicting our actual savings have not been calculated.

**Matching Funds Projects**

A total of 15 correctional facilities were approved for matching funds for a total of 22 energy conservation projects. The projects accomplished during 2011 include lighting and electrical efficiencies, natural gas reduction measures, water and sewer conservation projects as well as various other projects meeting energy saving criteria. Funds were reimbursed to the correctional facilities that successfully completed their proposed projects.

Some years ago, the DOC Physical Plant Division established the matching funds program. The concept is intended to encourage facility’s to share in the cost and to invest in energy conservation measures. Facilities submit project proposals for energy conservation projects. If they meet the criteria as viable energy saving measures, an MOP is issued for half of the project material cost. After completion of the project, verification of project completion is performed by the Physical Plant Division. Funds are only transferred to the facilities CSS&M account if the project is successfully completed before the implemented deadline.

Actual savings is assumed by the fact that equipment and materials installed have a verified reduction in energy consumption. All published manufacturer nameplate data from newly installed materials is used for comparison to items removed for verification purposes.

**Future Energy Performance Contracts**

As mentioned above, the DOC recently piloted Energy Performance Contract projects at three correctional facilities. These three project sites have proven to be a success. It is the DOC’s goal to proceed with another round of Energy Performance Projects for fiscal year 2012. DOC Physical Plant Division is currently working with the Department of Technology, Management and Budget Design and Construction on a Request for Proposal (RFP) to obtain a Technical Energy (Investment Grade) Audit.

A priority list of project sites for this next round of Energy Performance Projects has been developed. The following criteria and considerations were used to develop this priority list:

- Facility needing infrastructure and energy efficiency improvements was given top consideration.
- Age is the second priority. With age come an increased need for infrastructure improvements and a need to improve on energy efficiency.
- Since these projects primary target is energy savings, facilities with escalated utility costs were targeted.
- Since central power plants are often related to inefficient energy and water consumption, those facilities utilizing a central power plant were placed high on our list.
- Facilities previously involved with energy performance projects were placed lower on the list.