MEMORANDUM OF AGREEMENT

Between
Montana Department of Environmental Quality
And
Montana Department of Corrections
Men's State Prison
Campus-wide Lighting Upgrade
A & E Project No. 2015-12-02

This Memorandum of Agreement (MOA) is made and entered into between the Montana Department of Environmental Quality, hereinafter referred to as DEQ, and the Department of Corrections, hereinafter referred to as the Agency.

Background

The State Buildings Energy Conservation Program (SBECP) reduces operating costs in state facilities by identifying and funding cost-effective energy and water efficiency improvements. All projects are designed so that cost savings resulting from the investments will be sufficient to repay the investments. In most cases, savings will continue well after the investment has been repaid.

This program uses state special funds and/or funds revolved from a federal grant from the Department of Energy specifically allocated to the program. DEQ in some cases augments the program funds with utility funding to complete the evaluation and implementation of efficiency improvements. The resulting cost savings are used, in turn, to pay back the funds for reinvestment in other energy and water efficiency projects.

DEQ, through established contracting policies and procedures, contracts with private engineering firms to perform comprehensive energy analyses of state facilities and may also engage the services of utility companies to complete audits of less complex state facilities or may use DEQ engineering staff to complete the audits. DEQ reviews the studies and recommends cost effective energy improvements for implementation.

Estimated energy and water cost savings are projected utility savings based on engineering models using average weather condition, anticipated occupancy, building operation parameters, and current fuel rates. These estimated savings are the source of funds for repaying the investment in the project and are captured by dividing the agency's utility budget into two portions, the amount of the budget that is still needed for utility costs, and the amount of the budget that is no longer needed for utility costs because of efficiency savings that is then used to repay the project costs. DEQ will bill the agency once a year to recover the project costs and deposit funds collected into the Energy Conservation Repayment Account. Savings are based on utility costs at the time an energy analysis is completed and on the known building use at the time of the energy analysis. The utility costs and savings estimates may be adjusted if there are additional energy consuming measures installed at the time of the project or if building use changes in a way that increases energy use.

Purpose

The purpose of this MOA is to reduce energy use and lower the utility costs for the Agency by implementing a project developed from an energy analysis of campus lighting. Based on the energy analysis, a two phase upgrade project has been developed. The Agency desires to participate in the program, and has determined that cost-effective energy savings could be achieved with the project. Project costs include the cost of the energy analysis, the SBECP expenditures for the construction of the project, and 3% interest calculated on an annual percentage rate. State law requires that energy cost savings be placed in the Energy Conservation Repayment Account until the cost of the project is repaid. Currently, this MOA includes only phase one financials. As Phase 2 is finalized, the program will amend this MOA to reflect anticipated costs.

The scope of Phase 1 includes upgrade from predominately High Pressure Sodium to LED lighting technology. The upgrade is for MSP exterior fixtures including high mast lights, fence perimeter lights, parking lot lights and building wall-pack lights (for all campus buildings). A small portion of Phase 1 also includes lighting upgrades at the dairy main barn and for the Treasure State facility. LED fixtures use about half the energy of the existing fixtures and have demonstrated significantly extended maintenance free life. Phase 1 has been calculated to save approximately 840,960 kwh of energy annually and result in a reduced utility rate of about $67,300 per year. Based on a 15-year lamp life the total life-cycle savings for Phase 1 is estimated to be about $1,009,152. Phase 1 has a 5-year simple payback.

Phase 2 work, currently in design, will add outdoor auxiliary lighting as needed for security purposes. Phase 2 will also include upgraded lighting in the food factory, the furniture factory, the dairy milking parlor and the facility entrance guard station.

Following completion of the project, DEQ shall collect and evaluate energy use data to determine whether energy improvements are performing as expected. If they are not, DEQ and the Agency may modify Attachment A Repayment Schedule.

DEQ uses State Buildings Energy Conservation Program funds to leverage utility contributions wherever feasible allowing additional improvements that would otherwise not be possible. In these cases, DEQ will include energy savings from the investment of utility funds in calculating the benefits to the project but will not require that utility contributions be repaid.

The Agency shall contact DEQ if there are any concerns about its ability to achieve savings from the project. DEQ shall review the potential problem and determine whether Attachment A should be modified.

The Agency shall begin paying the annual payment as indicated in Attachment A. The Agency shall pay the annual payment indicated in Attachment A in subsequent fiscal years until the total repayment indicated in Attachment A has been repaid.

Energy savings will be captured through the biennial budgeting process. The following adjustments will be made to the agency's budgets in the biennia following the project's completion until the total repayment is made:

1. State Accounting Code 69205–Principal Payment-SBECP, and Code 69206-Interest Expense-SBECP, will be added to the budget templates.

2. The amount of the annual payment indicated in Attachment A will be split to Code 69205-Principal Payment-SBECP and Code 69206-Interest Expense-SBECP.
3. The utility budget (State Accounting Codes 62601 or 62603) will be decreased by an equal amount.

The Agency shall disburse to DEQ the annual payment each fiscal year at DEQ's request. DEQ shall deposit the amounts disbursed by the Agency into the Energy Conservation Repayment Account.

Accounting instructions for the MOA are governed by Generally Accepted Accounting Principles (GAAP) and Montana Operations Manual (MOM), Chapter 345. If accounting treatment changes because of changes to GAAP or MOM, the parties shall communicate those changes via written inter-agency memorandum or email rather than modification to this MOA.

Projects may be repaid early through larger principal payments or a lump sum payment after the first year of payment has been made.

The Department and the Agency recognize that the actual cost of the project could change the amount of the MOA, repayment period, total amount to be repaid, and accounting guidelines. Modifications to this agreement will be made through a memo from DEQ with a revised Attachment A. Agency shall pay in accordance with the revised Attachment A.

This Memorandum of Agreement shall remain in effect until the Agency has reimbursed DEQ for the Total Repayment indicated in Attachment A. **The first year of billing will be FY18.**

DEPARTMENT OF ENVIRONMENTAL QUALITY

3-11-16
Date

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