

## 1. Step-by-Step Procedure for EPCP Projects

The EPCP provides detailed steps and procedures for the Entity and ESCO to develop and implement an EPC project. This process has been designed to provide a way for the Entity and ESCO to complete EPC projects successfully, within the framework established by the Montana statutes.

**Error! Reference source not found.** below illustrates the basic steps of an EPC project. The steps allow the Entity to determine if EPC is a good solution, identifying cost-saving measures through an audit, negotiating the contract scope, financing and constructing the project, and ensuring guaranteed savings are achieved. The step-by-step approach allows the Entity and ESCO to investigate and move one step at a time, in a logical way, with decision points at various steps along the way.

The two major tasks of the EPC process are the investment grade audit and the energy performance contract. These tasks are completed by the ESCO with the IGA report completed and accepted by the Entity prior to proceeding with the EPC. The Entity also has control over which cost-saving measures will be included in the EPC project.

Communication is a key element throughout the EPC process. The process places responsibilities on the ESCO and Entity as well as DEQ for communication and reporting activities. It is important to keep DEQ informed early and throughout the process to ensure a successful EPC project. DEQ is capable of providing assistance and technical review for all aspects of the EPC process.

See to Section **Error! Reference source not found.** for an outline of roles and responsibilities of DEQ, the Entity and the ESCO.

### 1.1 Introduction

#### A. Initial contact

A qualified energy service provider typically makes the initial contact with the Entity, although occasionally the Entity may choose to investigate energy performance contracting on their own.

#### B. Pre-screening

The Entity does a preliminary internal exploration to determine if their facility is a good fit for EPC based on potential project size, annual utility bills, comfort or maintenance problems, equipment age, funding options, and future plans for renovation or retention. The ESCO may be helpful in assisting the Entity in this process. The ESCO and/or Entity notify DEQ of the possibility of an EPC project. DEQ assists through technical assistance including initial project review and education related to the EPC process.

Some guidelines regarding cost-savings in the pre-screening process include:

- Determine utility consumption and costs on an annual basis. Three years of data is recommended.

- Utility savings for most EPC projects typically do not exceed 30%. A range of 15-25% is common.
- Depending on the source, the finance term is typically 15 or 20 years.
- Ignoring cost escalation (the ESCO generally does not guarantee escalation), the savings should pay for the financing over a period of about 80% of the finance term (11-12 years for a 15 year term or 16 years for a 20 year term). This will provide funding to cover the cost of financing (origination fees, interest, etc.).
- The potential project size that could be supported by an EPC may be estimated by the product of the utility costs, savings percentage, and 80% of the finance term.

Based on these guidelines, a facility with \$20,000 annual utility costs could potentially support an EPC project of \$75-80,000.

#### **C. Entity signs MOA**

The Entity signs an *EPCP Entity's Memorandum of Agreement for participation in the Montana Energy Performance Contracting Program* ("EPCP MOA"). The MOA clearly specifies roles and responsibilities of the Entity and DEQ for cooperation, in a non-legal, non-binding agreement.

#### **D. DEQ signs MOA**

DEQ signs MOA and begins supporting the Entity in the EPC process. DEQ forwards applicable MOAs to A&E Division to provide notice to A&E Division of future plans and submittals. Entities that are under A&E Division's capital improvement authority shall submit all plans and specifications for review.

#### **E. Entity explores project potential and learns about EPC**

The Entity discusses the EPC process and project potential with internal staff, qualified ESCOs, industry experts, peers, A&E Division (for state-owned facilities) and/or DEQ.

#### **F. Financial considerations**

The Entity reviews its financial abilities and potential funding sources. As a minimum, the Entity shall allocate in its budget the full cost of the IGA. This is to ensure that the Entity is financially capable to pay for the cost of the IGA in case the project does not go beyond the IGA phase.

The Entity should also begin its investigation of financing options, whether bonds, loans, grants, capital budgets or other financial resources.

### **1.2 ESCO Selection**

#### **A. Entity develops a Request for Qualification (RFQ) for Selecting an ESCO**

Using the *EPCP SEC: Request for Qualifications for Secondary Selection of ESCO*, the Entity gathers and organizes information about the facility and proposed project to complete Attachment A: Technical Facility Profile of the RFQ. The Entity provides utility use and cost history; completed upgrades; plans for

renovations or changes; comfort and maintenance issues; capital needs or funds available; desired outcome; and other pertinent details about the proposed project.

The RFQ format is used rather than a request for proposal as it requests only general information regarding cost or pricing. The intent is to select the ESCO based on qualifications and how the ESCO is best suited to meet the needs of the Entity. The only cost information suggested is contained in Attachment B: Cost and Pricing Proposal, if included with the RFQ.

The Entity may consider developing the RFQ to consider multiple phases based on the facilities to be included in the overall project. This is particularly useful for larger campuses or Entities with multiple facilities. The benefits for phasing include:

- one RFQ to select the ESCO to provide services to all facilities
- less impact on budget requirement for allocating capital funds to meet the cost of the IGA as the cost could be spread over several years
- if the Entity is dissatisfied with the selected ESCO or wishes to re-open the process to other ESCOs, they may issue a new RFQ for subsequent phases

When considering phases, it is important that the RFQ contains language defining the initial scope of work (facilities) and references that the scope may include additional facilities. If this language is not included, then a new RFQ will be required for additional phases or facilities.

**B. Entity submits RFQ to DEQ for review**

The Entity submits the RFQ to DEQ for review prior to issuing.

**C. Entity issues RFQ**

The Entity shall give at least 14 days' public notice of an RFQ. The notice must be published at least once a week for 2 consecutive weeks in a newspaper of general circulation in the area where the Entity intends to institute the cost-saving measures, and RFQs must be sent to at least three ESCOs on the qualified energy service provider list.

**D. Entity hosts pre-submittal meeting and walkthrough**

Prior to the response deadline, the Entity describes the proposed project, reviews the selection criteria, conducts walkthroughs of appropriate buildings and answers questions.

**E. Entity receives and evaluates statements of qualifications from ESCOs**

The ESCOs, particularly those that are contacted directly, are expected to respond to the RFQ. Appropriate responses include submitting the SOQ or sending a letter declining participation in the project. Failure of the contacted ESCO to respond is unacceptable.

**F. Entity evaluates ESCOs**

Depending on the number of responses from the ESCOs, the Entity may combine steps F and G. Through an evaluation of the ESCOs' submittals, the Entity may develop a "short-list" of ESCOs it wishes to interview.

The Entity shall evaluate qualifications using, but not limited to, the following capabilities and criteria:

- a. Experience with:
  - i. design, engineering, installation, maintenance, and repairs associated with cost-saving measures;
  - ii. overall project management;
  - iii. projects of similar size and scope;
  - iv. post-installation measurement and verification of guaranteed cost savings;
  - v. in-state projects and Montana-based contractors;
  - vi. commissioning of projects;
  - vii. training of building operators;
  - viii. conversions to a different fuel source; and
- b. quality of technical approach

Price or cost is not part of the selection process for several reasons. The main reason is that the project scope is likely not developed fully to allow the ESCO to put together a bid for the project at the time of the SOQ. It is best to negotiate fees with the selected ESCO. The Entity may request some basic pricing information, such as a range of percentages of total project costs, by which they may make a comparison between ESCOs (see Attachment B in EPCP\_SEC). The goal is to select the ESCO that is most qualified to meet the specific needs of the project.

#### **G. Entity interviews and evaluates shortlisted ESCOs**

The Entity holds interviews of interested, shortlisted ESCOs. The ESCO's interview team must consist of the individuals that will be assigned to this project. The ESCO should be prepared to present in detail, the criteria in F above which will be evaluated according to the Montana rules and legislation.

#### **H. Entity Decision Point! Entity chooses an ESCO or rejects all**

After evaluation of the interviewees, the Entity may 1) select an ESCO or 2) decline if none of the ESCO responses are acceptable and re-open interviews with non-short-listed ESCOs

### **1.3 Negotiate Investment Grade Audit**

The IGA is the first major task in the EPC process. It is critical that the IGA is completed with sufficient detail as all guaranteed savings are based on the data collected and the IGA report. Section **Error! Reference source not found.** has more detailed information regarding the investment grade audit and report.

#### **A. Negotiate IGA Contract with selected ESCO**

The Entity uses the *EPCP Investment Grade Audit Contract* (“IGA Contract”) template and negotiates with the selected ESCO. The Entity and ESCO agree on the project scope, including buildings to audit, total square footage and audit price.

Often during the negotiation phase, the Entity will provide the ESCO with general information regarding plans, needs, problems and other factors that may affect the IGA. This information is beneficial to the ESCO in developing its approach to the IGA and the EPC process as a whole. The Entity or the ESCO may have specific measures they would like evaluated in the IGA, however the audit should look at all cost-saving opportunities.

The Entity shall negotiate an IGA Contract with the most qualified provider at a price that the Entity determines fair and reasonable, taking into account the scope of the services rendered. If the Entity is unable to negotiate a satisfactory contract with the most qualified provider, negotiations with that firm must be formally terminated and the Entity shall select the next most qualified provider until an agreement is reached or the process is terminated.

**B. IGA Contract review**

The Entity submits the IGA Contract to DEQ for review prior to signing.

**C. Sign and Submit IGA Contract**

The Entity and the ESCO sign the IGA Contract. The ESCO sends an electronic copy of the fully executed contract to DEQ.

**1.4 Investment Grade Audit**

**A. ESCO begins Investment Grade Audit**

The ESCO identifies cost-saving measures, develops the baseline and provides preliminary cost and savings estimates. The ESCO and the Entity identify potential utility incentives, grants, loans and other financing sources.

**B. ESCO presents preliminary findings**

The ESCO presents a preliminary assessment of energy use, savings potential, potential cost-saving measures and potential for developing an EPC.

**C. Entity Decision Point! Entity may: Continue or stop here**

If preliminary findings do not fulfill the Entity’s requirements, the Entity may terminate the process at this point. Refer to the IGA Contract for details.

**1.5 Investment Grade Audit Report**

**A. ESCO completes IGA**

The ESCO completes the IGA in accordance with statute and contract documents, particularly the IGA scope of work. The Entity reviews the IGA report. The report includes the following information:

- Overview including contact information and summaries of cost-saving measures and annual energy and water consumption;

- description of the facility including existing equipment, systems and conditions;
- baseline consumption for energy and water and baseline rates for utility commodities;
- detailed descriptions of cost-saving measures including existing conditions, savings estimates including assumptions and calculations;
- estimated costs and guaranteed savings for each cost-saving measure;
- preliminary commissioning plan;
- preliminary measurement and verification plan following the IPMVP; and
- project cash flow analysis identifying guaranteed savings, O&M savings, M&V costs, and other economic factors regardless of guarantee status.

**B. ESCO submits IGA to DEQ for review prior to acceptance**

The ESCO shall submit the IGA report to DEQ for review at the same time as the report is submitted to the Entity. This is mandatory if state funds are used to finance the project.

**C. Entity accepts IGA**

The Entity signs the Certificate of Acceptance for the IGA report. The ESCO submits an electronic copy of the IGA COA and the final IGA report to DEQ.

**1.6 Proceed or Evaluate Alternatives**

Once the IGA report has been accepted, the Entity must decide whether it will proceed with an EPC or explore alternative means to complete the project or portion thereof. In most cases, the Entity will move to the next step to begin implementation of measures identified in the IGA report. The Entity has the option to:

- a. Proceed with the EPC as recommended in the IGA report;
- b. Proceed with the EPC with modifications (possibly reduced scope) to keep the project within the financial ability of the Entity or requirements of the EPCP;
- c. Terminate the EPC and proceed with implementation of measures through design/build, design/bid/build or other construction process. At this point the savings guarantee is terminated. An alternative procurement method may also be required as the EPC procurement method is only permitted for EPC projects.
- d. Terminate the EPC and do nothing.

The IGA contract contains the time frame that the Entity may decide whether or not to proceed to the EPC. Typically this period is 90-120 days. If the Entity decides to terminate the EPC process at this point, the Entity is responsible for paying the ESCO for the IGA under the terms specified in the IGA Contract.

**1.7 Negotiate Energy Performance Contract**

The energy performance contract is the second major task in the EPC process. It is at this phase that the ESCO completes the design and implements the cost-saving measures negotiated from the IGA report. The Certificate of Acceptance for the IGA report must be completed prior to proceeding to the EPC phase.

**A. Entity and ESCO negotiate an Energy Performance Contract**

Using the *EPCP Energy Performance Contract*, the Entity and the ESCO negotiate the contract. The energy performance contract finalizes the details of the project from scope of work through measurement and verification. It is critical that the Entity understand each part of the contract and the services to be provided. The contract should be reviewed by the Entity's legal services.

**B. Project financing**

The ESCO helps the Entity arrange or procure financing. Although some ESCOs may provide financing either directly or through a third party, most prefer the Entity to secure the financing. The main obligation for the ESCO in financing is to provide the technical information to the financial institution to secure the financing.

**C. Entity submits EPC to DEQ prior to signing**

Prior to signing, the Entity submits the EPC to DEQ for review. For state owned facilities, DEQ may forward the contract to the A&E Division.

**D. Entity and ESCO sign EPC**

The Entity and the ESCO sign the EPC. The ESCO sends an electronic copy of the executed contract to DEQ.

**E. ESCO submits project profile to DEQ**

The ESCO works with the Entity to develop a marketing overview of the project for sharing in DEQ marketing efforts.

**1.8 Construction and Commissioning**

*Refer to the signed EPC and the current Commissioning Guidelines for the EPCP for additional requirements.*

**A. ESCO completes design of retrofit work and obtains approval from Entity**

**B. ESCO installs and commissions measures**

Commissioning is an important process in any construction project. Commissioning ensures that the installation is complete and functioning as intended under various loads and conditions. While commissioning may be completed by the ESCO or independent third party, it is important that the Entity also be present for checkout and testing. Commissioning should be a prerequisite for substantial completion. Final acceptance and payment should not occur until after the commissioning report and other documents are received and accepted.

**C. Entity requests review of construction completion by DEQ**

The Entity may request DEQ to review the project prior to accepting construction completion.

**D. Entity signs Certificate of Acceptance**

The Entity signs Certificate of Acceptance for the installed equipment, and sends an executed electronic copy to DEQ. Performance period begins.

**E. ESCO submits Post-Installation Report**

The ESCO updates counts, runtime and other assumptions to match installed conditions and issues a *Post-Installation Report*. This required report provides the final, as-built cost and savings figures.

**F. Payment**

Applications for payment shall be made according to the terms in the EPC between the Entity and the ESCO.

**1.9 Project Performance – Measurement and Verification**

*Refer to the signed EPC and the current Measurement and Verification Guidelines for the EPCP Program for additional requirements.*

**A. Measurement and Verification**

Measurement and verification (M&V) is required for all EPC projects. The cost for M&V shall be included in the EPC and paid for by the Entity during the initial monitoring period (minimum of three years). M&V shall follow the guidelines established in the IPMVP. See Section **Error! Reference source not found.** for more information on the M&V process and requirements.

**B. ESCO performs ongoing project monitoring**

During the guarantee period, the ESCO shall measure and verify reductions in utility use and costs attributable to the cost-saving measures of the EPC. The ESCO performs the ongoing project monitoring (recommended quarterly during the first year) and notifies the Entity of any problems.

**C. Entity informs ESCO of significant changes in operation**

The Entity informs the ESCO of any significant changes in operation that could affect the savings calculations. Changes that may affect the savings calculations include:

- operating hours
- facility use
- equipment (new or additional)
- occupancy

The EPC should include a section that describes how potential changes will be handled during the guarantee period.

**D. ESCO determines annual savings**

Using the IPMVP procedures, the ESCO determines the units of energy and water saved by the cost-saving measures as well as any O&M cost savings as negotiated with the Entity and determined through the EPC. The utility savings are then multiplied by the baseline unit costs and any escalation rates included in the EPC, regardless of whether or not the escalation rates are guaranteed. The cost savings

are then compared to the guaranteed cost savings to determine whether or not the savings guarantee has been met.

**E. ESCO submits annual M&V report**

For each year of the guarantee period, the ESCO submits the annual M&V report to the Entity and sends an electronic copy to DEQ. The format of the report is provided in EPCP\_MVRpt

**F. Entity and DEQ review report**

The Entity and DEQ review and provide comments to the ESCO.

**G. ESCO finalizes report**

The ESCO addresses comments from the Entity and DEQ, finalizes the report and sends an electronic copy to the Entity and DEQ. The ESCO then makes any shortfall payment to the Entity.

**H. Guaranteed savings shortfall**

If the guaranteed savings are not met during any year of the guarantee period, the ESCO shall pay the Entity the difference between the actual (measured) savings and the guaranteed savings.

If the guaranteed savings are not met for any year in the initial monitoring period, then the ESCO is responsible for the M&V costs after the initial monitoring period until guaranteed cost savings are achieved for a term of consecutive years equal to the initial monitoring period.

If there is a shortfall, the Entity and the ESCO may negotiate the terms of M&V and the shortfall payment for the remainder of the EPC finance term.

**I. Excess guaranteed savings**

If the actual (measured) savings exceed the guaranteed savings in any year of the guarantee period, the excess savings shall remain with the Entity. Excess savings may not be used to offset any shortfall in previous or subsequent years of the guarantee period.

**J. Modifications for M&V**

Modifications to the M&V process during the guarantee period are limited to those mutually agreed to by the Entity and the ESCO.

**1.10 Project Closeout**

**A. ESCO provides summary report to DEQ**

The ESCO provides a summary report to DEQ that includes basic project information – cost, financed cost, savings, etc. – using a form provided by DEQ.

**B. ESCO submits EPCP Case Story to DEQ**

The ESCO works with the Entity to develop a complete marketing overview of the project including photos and quotes, for sharing in DEQ marketing efforts. The case story may be posted on the DEQ website for EPC.

**C. DEQ posts results to website**

DEQ posts the results of the project to the website.

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