## **ATTACHMENT J-9**

**ESPC Post-Installation Report Outline**

[**NOTE:** All content called for in this outline is required (if applicable), except items noted as optional.]

**Contract # / Task Order # / Modification #:**  (include as appropriate)

**Post-Acceptance Performance Period Dates Covered:** \_\_\_\_\_\_\_\_\_\_\_ to\_\_\_\_\_\_\_\_\_\_\_\_\_

**J-9.1 Executive Summary**

**J-9.1.1 Project Background** *-* Provide an overview of project background, including:

**A.** Contract # / Task Order # / Modification # (as appropriate)

**B.** Dates of relevant contract and task order modifications

**C.** Post-acceptance performance period dates covered

**D.** Project acceptance date (actual or expected)

**J-9.1.2 Brief Project and ECM Descriptions**

**A.** Provide an overview what was done and how savings are generated.

**B.** Note any changes in project scope between the awarded Task Order (including any relevant contract / task order modifications) and as-built conditions.

**J-9.1.3 Proposed and Expected Energy and Cost Savings for Year 1 of the Post-Acceptance Performance Period**

**A.** Include completed Table 1 – Proposed Annual Savings Overview, and Table 2 – Expected Savings Overview for 1st Performance Year, from Section J-9.1.3.C and D.

**B.** Compare expected savings for first performance year to first year guaranteed cost savings. State whether guarantee is expected to be fulfilled for first year. If not provide a detailed explanation.

Note: Expected savings are a prediction for the first year based on post-installation M&V activities. Verified savings for the first year of the post-acceptance performance period will be documented in the annual report. The proposed savings for each ECM are included in TO Schedule 4 of the Task Order.

**C.** Table 1 - Proposed Annual Savings Overview

[Include all applicable fuels/commodities for project, such as: electric energy, electric demand, natural gas, fuel oil, coal, water, etc., using Year 1 utility rates.]

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ECM | Total energy savings (MMBtu/yr) | Electric energy savings (kWh/yr) | Electric demand savings (kW/yr)\* | Natural gas savings (MMBtu/yr)\*\* | Water savings (gallons/yr) | Other energy savings (MMBtu/yr)\*\* | Total energy and water cost savings, Year 1 ($/yr) | Other energy-related O&M cost savings, Year 1 ($/yr) | Total cost savings, Year 1 ($/yr) |
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|  |  |  |  |  |  |  |  |  |  |
| Total savings |  |  |  |  |  |  |  |  |  |
| First year guaranteed savings: $\*\*\* | | | | | | | | | |
|  | | | | | | | | | |
| Notes: MMBtu=106 Btu.  \*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.  \*\*If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to cost schedules (e.g., 0.003413 MMBtu/kWh).  \*\*\*Guaranteed cost savings for the project are defined in TO Schedule 1 in the Task Order. The proposed savings for each ECM are included in TO Schedule #4 in in the Task Order. | | | | | | | | | |

**D.** Table 2 - Expected Savings Overview for First Performance Year

[Include all applicable fuels/commodities for project, such as: electric energy, electric demand, natural gas, fuel oil, coal, water, etc., using Year 1 utility rates.]

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ECM | Total energy savings (MMBtu/yr) | Electric energy savings (kWh/yr) | Electric demand savings (kW/yr)\* | Natural gas savings (MMBtu/yr)\*\* | Water savings (gallons/yr) | Other energy savings (MMBtu/yr)\*\* | Total energy and water cost savings, Year 1 ($/yr) | Other energy-related O&M cost savings, Year 1 ($/yr) | Total cost savings, Year 1 ($/yr) |
|  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Total savings |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | |
| Notes: MMBtu=106 Btu.  \*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.  \*\*If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to cost schedules (e.g., 0.003413 MMBtu/kWh). | | | | | | | | | |

**J-9.1.4 Energy, Water, and O&M Rate Data**

A. Detail energy and water rates used to calculate cost savings for this period.

**B.** Provide post-acceptance performance period rate adjustment factors for energy, water, and O&M cost savings, if used.

**C.** Report actual energy and water rates at site for same period (optional).

**J-9.1.5 Savings Adjustments**

**A.** Provide a summary of any energy and/or cost savings adjustments required between awarded TO (including any relevant contract / task order modifications) and as-built conditions.

**B.** Describe the impact in changes between the proposal (including any relevant contract / task order modifications) and as-built conditions based on post-installation M&V results.

**J-9.1.6 Implementation / Construction Period Savings**

**A.** Provide a summary of implementation / construction period savings, if applicable.

**B.** Provide an overview of how implementation / construction period savings are calculated.

**J-9.1.7 Status of Rebates, Incentives or Credits** - Include if applicable.

**A.** Provide a summary of the source of any third-party rebates or incentives provided on this project.

**B.** Provide status of any third-party rebates or incentives.

**J-9.2 ECM-Specific M&V Activities and Expected First Year Savings**

Develop section for each ECM.

**J-9.2.1 Overview of ECM, M&V Plan, and Savings Calculation for ECM**

**A.** Summarize the scope of work, location, and how cost savings are generated. Describe source of all savings including energy, water, O&M, and other (if applicable).

**B.** State the M&V guideline and option used.

**C.** Provide an overview of M&V activities for ECM. Explain the intent of M&V plan, including what is being verified.

**D.** Provide an overview of Savings Calculation Methods for ECM. Provide a general description of analysis methods used for savings calculations.

**J-9.2.2 Installation Verification**

**A.** Detail any changes between awarded TO (including any relevant contract / task order modifications) and as-built conditions.

**B.** Provide details of energy and cost savings impact from changes between awarded TO (including any relevant contract / task order modifications) and as-built conditions based on post-installation M&V results. Include completed Table 3 - Impact to Energy and Cost Savings from Changes Between Proposal and As-Built Conditions for Each ECM, from Section J-9.2.2.C.

**C.** Table 3 - Impact to Energy and Cost Savings from Changes Between Awarded TO and As-Built Conditions for Each ECM

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total energy savings (MMBtu/yr) | Electric energy savings (kWh/yr) | Electric energy cost savings, Year 1 ($/yr) | Electric demand savings\* (kW/yr) | Electric demand cost savings, Year 1 ($/yr) | Natural gas savings (MMBtu/yr)\*\* | Natural gas cost savings, Year 1 ($/yr) | Water savings (gallons/yr) | Water cost savings, Year 1 ($/yr) | Other energy savings (MMBtu/yr)\*\* | Other energy cost savings, Year 1 ($/yr) | Other energy-related O&M cost savings, Year 1 ($/yr) | Total cost savings, Year 1 ($/yr) |
| Proposed |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Expected |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Variance |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| Notes: MMBtu = 106 Btu.  \*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.  \*\*If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to cost schedules (e.g., 0.003413 MMBtu/kWh).  🡺 Expected savings are a prediction for the first year based on post-installation M&V activities. Verified savings for the first year of the post-acceptance performance period will be documented in the annual M&V report. The proposed savings for each ECM are included in TO Schedule 4 of the Task Order. | | | | | | | | | | | | | |

**D.** Describe implementation / construction period savings (if applicable). Include date ECM was in effect, and reference acceptance documentation.

**E.** Detail savings calculations for implementation / construction period savings.

**J-9.2.3 Post-Installation M&V Activities Conducted** - Detail measurements, monitoring, and inspections conducted in accordance with M&V plan (include all that apply for each one):

**A.** Measurement equipment used.

**B.** Equipment calibration documentation.

**C.** Dates/times of data collection or inspections, names of personnel, and documentation of Government witnessing.

**D.** Details to confirm adherence to sampling plan.

**E.** Include all post-installation measured values. Include periods of monitoring and durations and frequency of measurements. (Use appendix and electronic format as necessary). Include description of data format (headings, units, etc.).

**F.** Describe how performance criteria have been met.

**G.** Detail any performance deficiencies that need to be addressed by the contractor (ESCO) or the Government (ordering agency).

**H.** Note impact of performance deficiencies or enhancements on generation of savings.

**J-9.2.4 Expected Savings Calculations and Methodology**

**A.** Provide detailed description of analysis methodology used. Describe any data manipulation or analysis that was conducted prior to applying savings calculations.

**B.** Detail all assumptions and sources of data, including all stipulated values used in calculations.

**C.** Include equations and technical details of all calculations made. (Use appendix and electronic format as necessary.) Include description of data format (headings, units, etc.).

**D.** Include details of any baseline changes or savings adjustments made.

**E.** Detail energy and water rates used to calculate cost savings.

1. Provide post-acceptance performance period energy and water rate adjustment factors, if used.

2. Report actual energy and water rates at site for same period (optional).

**F.** Detail expected savings for this ECM for the first year. Include completed Table 5 - Expected Year 1 Savings for ECM, from Section J-9.2.6.D.

**J-9.2.5 Details of O&M Savings (if applicable)**

**A.** Describe source of savings, if applicable.

**B.** Describe verification activities.

**C.** Provide post-acceptance performance period O&M cost savings adjustment factors, if applicable.

**J-9.2.6 Details of other savings (if applicable)**

**A.** Describe source of savings, if applicable.

**B.** Describe verification activities.

**C.** Provide post-acceptance performance period adjustment factors, if applicable.

Note: Expected savings are a prediction for the first year based on post-installation M&V activities. Verified savings for the first year of post-acceptance performance period will be documented in the annual M&V report. The proposed savings for each ECM are included in TO Schedule 4 of the Task Order.

**D.** Table 5 - Expected Year 1 Savings for ECM

[Include all applicable fuels/commodities for project, such as: electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total energy use (MMBtu/yr)\*\* | Electric energy use (kWh/yr) | Electric energy cost ($/yr) | Electric demand (kW/yr)\* | Electric demand cost ($/yr) | Natural gas use (MMBtu/yr)\*\* | Natural gas cost ($/yr) | Water use (gallons/yr) | Water cost ($/yr) | Other energy use (MMBtu/yr)\*\* | Other energy cost ($/yr) | Other energy-related O&M costs ($/yr) | Total costs ($/yr) |
| Baseline use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Post-installation use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Savings |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | | | | | |
| Notes: MMBtu = 106 Btu.  \*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.  \*\*If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to cost schedules (e.g., 0.003413 MMBtu/kWh). | | | | | | | | | | | | | |

[END OF ATTACHMENT J-9]