APPENDIX E. ESPC ANNUAL REPORT OUTLINE

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

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

Performance Period Dates Covered: _____to_____

1. Executive Summary

1.1 Project Background

1.1.1 Provide an overview of project background, including the following

- Contract #/Delivery Order #/Task #/Modification # (as appropriate)
- Dates of relevant delivery order modifications
- Performance period dates covered
- Project acceptance date

1.2 Brief Project and ECM Descriptions

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

1.2.2 Note any changes in project scope between the final proposal (including any relevant delivery order modifications) and as-built conditions as recorded in post-installation report.

1.3 Summary of Proposed and Verified Energy and Cost Savings

1.3.1 Compare verified savings for performance year # to guaranteed cost savings for year #. State whether guarantee is fulfilled for year. If not, provide detailed explanation.

1.3.2 Define performance period.

1.3.3 Summarize information in Tables E-1 through E-3.

Table E-1. Proposed Annual Savings Overview

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

ECM	Total energy savings (MMBtu/year)	Electric energy savings (kWh/year)	Electric demand savings (kW/year)*	Natural gas savings (MMBtu/year)	Water savings (gal/year)	Other energy savings (MMBtu/year)	Total energy & water cost savings, Year # ($/year)	Other energy-related O&M cost savings, Year # ($/year)	Total cost savings, Year # ($/year)
Total Savings									
Year [#] guaranteed cost savings: $									

Notes
MMBtu = 10^6 Btu.
*Annual electric demand savings (kW/year) 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 delivery order schedules (e.g., 0.003413 MMBtu/kWh).
Guaranteed cost savings for project are defined in cost schedule DO-1 in delivery order. The proposed savings for each ECM are included in schedule DO-4 in the delivery order.

Table E-2. Verified Savings for Performance Year [#]

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

ECM	Total energy savings (MMBtu/year)	Electric energy savings (kWh/year)	Electric demand savings (kW/year)*	Natural gas savings (MMBtu/year)	Water savings (gal/year)	Other energy savings (MMBtu/year)	Total energy & water cost savings, Year # ($/year)	Other energy-related O&M cost savings, Year # ($/year)	Total cost savings, Year # ($/year)
Total savings									

Notes
MMBtu = 10^6 Btu.
*Annual electric demand savings (kW/year) 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 delivery order schedules (e.g. 0.003413 MMBtu/kWh).

[Table E-3 is to summarize the variance to guaranteed savings as verified per the M&V plan and Risk and Responsibility Matrix as well as a estimated net variance to the guarantee when including impacts to cost savings due to government actions that are outside the ESCO's responsibility. Government impacts to savings may include, but are not limited to operational hours changes, heating/cooling set point changes and/or physical changes or removal of equipment.]

Table E-3. Summary of Cost Savings Impact Due to Performance and O&M Issues

I. Per M&V Plan and RRPM Matrix	Energy (MMBtu)	($)	Responsibility
a. Proposed Cost Savings [from Table E-1]			ESCO
b. Verified Cost Savings [from Table E-2]			ESCO
c. Guaranteed Cost Savings [from Table E-2]	N/A		ESCO
d. Variance to Guarantee (b. - c.)	N/A		ESCO
II. Estimated Government Impact to Savings	**Energy (MMBtu)**	**($)**	**Responsibility**
e. Government Impact on ECMs (Estimated change to energy/cost savings, express losses as negative, increases as positive)			Government
f. Net Energy/Cost Savings to Government (b. + e.)			
g. Net Variance (f. - c.)	N/A		

1.4 Savings Adjustments

- Provide summary of any energy and/or cost savings adjustments required.

1.5 Performance and O&M Issues

- Note effect of operating deficiencies or enhancements on generation of savings.
- Note effect of maintenance deficiencies on generation of savings.
- Detail any deficiencies that need to be addressed by ESCO or government in Table E-4.

Table E-4: Detail of Cost Savings Impact due to Performance and O&M Issues

ECM #	Impact to Energy Savings (MMBtu)	Impact to Cost Savings ($)	ECM Location	Cause of Savings Impact	Responsibility (ESCO/Government)

1.6 Energy, Water, and O&M Rate Data

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

1.6.2 Provide performance period rate adjustment factors for energy, water, and O&M cost savings, if used.

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

1.7 Verified Savings to Date

- Summarize information in Table E-5.

2. Details for ECM [name/#]

- Develop section for each ECM.

2.1 Overview of ECM, M&V Plan, and Savings Calculation for ECM

2.1.1 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).

2.1.2 Discuss any changes in scope/results recorded in post-installation M&V report.

2.1.3 State M&V guideline and option used.[30]

2.1.4 Provide an overview of M&V activities for ECM.

- Explain the intent of M&V plan, including what is being verified.

2.1.5 Provide an overview of savings calculation methods for ECM.

- Provide a general description of analysis methods used for savings calculations.

2.2 M&V Activities Conducted This Period

- Detail measurements, monitoring, and inspections conducted this reporting period in accordance with M&V plan.

2.2.1 Measurement equipment used

2.2.2 Equipment calibration documentation

[30] M&V options include A, B, C, and D (see Section 4). Guidelines include the *International Performance Measurement & Verification Protocol* (IPMVP), Volume I (http://www.evo-world.org/index.php?lang=en).

Table E-5. Verified Savings for Performance Period to Date

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

Year #	Total energy savings (MMBtu/year)	Electric energy savings (kWh/year)	Electric demand savings (kW/year)*	Natural gas savings (MMBtu/year)	Water savings (gal/year)	Other energy savings (MMBtu/year)	Total energy & water cost savings ($/year)	Other energy-related O&M cost savings ($/year)	Total cost savings ($/year)	Guaranteed cost savings for year
Total savings										

Notes
MMBtu = 10^6 Btu.
*Annual electric demand savings (kW/year) 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).

2.2.3 Dates/times of data collection or inspections, names of personnel, and documentation of government witnessing

2.2.4 Details to confirm adherence to sampling plan

2.2.5 Include all measured values for this period. 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.).

2.2.6 Describe how performance criteria have been met.

2.2.7 Detail any performance deficiencies that need to be addressed by ESCO or government.

2.2.8 Note effect of performance deficiencies or enhancements on generation of savings.

2.3 Verified Savings Calculations and Methods

2.3.1 Provide detailed description of analysis methods used.

- Describe any data manipulation or analysis that was conducted prior to applying savings calculations.

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

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

2.3.4 Details of any baseline or savings adjustments made.

2.3.5 Detail energy and water rates used to calculate cost savings.

- Provide performance period energy and water rate adjustment factors, if used.
- Report actual energy and water rates at site for same period (optional).

2.3.6 Detail verified savings for this energy conservation measure for performance year.

- Include Table E-6.

2.4 Details of O&M and Other Savings (if applicable)

2.4.1 Describe source of savings, if applicable.

- Describe verification activities.
- Provide performance period O&M savings adjustment factors, if applicable.

Table E-6. Verified Annual Savings for ECM for Performance Year #

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

	Total energy use (MMBtu/ year)	Electric energy use (kWh/ year)	Electric energy cost, Year # ($/year)	Electric demand* (kW/year)	Electric demand cost, Year # ($/year)	Natural gas (MMBtu/ year)*	Natural gas cost, Year # ($/year)	Water use (gal/year)	Water cost, Year # ($/year)	Other energy use (MMBtu/ year)	Other energy cost, Year # ($/year)	Other energy-related O&M costs, Year # ($/year)	Total costs, Year # ($/year)
Baseline use													
Performance Year # use													
Savings													

Notes
MMBtu = 10^6 Btu.
*Annual electric demand savings (kW/year) 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).

2.4.1 Describe source of other savings, if applicable.

- Describe verification activities.
- Provide performance period adjustment factors, if applicable.

2.5 O&M and Other Activities

2.5.1 Operating requirements include the following.

- State organizations that will perform measurement and verification of equipment operations. If appropriate, detail how such activities are shared.
- Summarize key operating procedures and any related verification activities.
- Detail any deficiencies that need to be addressed by ESCO or government.
- Note effect of operating deficiencies or enhancements on generation of savings.

2.5.2 Preventive maintenance requirements include the following.

- State organizations that will perform maintenance. If appropriate, detail how such activities are shared.
- Verification of scheduled maintenance items completed by ESCO or government.
- Detail any deficiencies that need to be addressed by ESCO or government.
- Note effect of maintenance deficiencies on generation of savings.

2.5.3 Repair and replacement requirements include the following

- State organizations that will perform repair and replacement. If appropriate, detail how such activities are shared.
- Summary of activities conducted this period by ESCO or government.
- Detail any deficiencies that need to be addressed by ESCO or government.
- Note effect of equipment deficiencies on generation of savings.