

# Efficiency Bid® Program

## Customer Program Manual

---

MidAmerican Energy Company  
P.O. Box 657  
666 Grand Ave.  
Des Moines, IA 50309

**Version 4.1**  
**Nov. 12, 2009**



# Table of Contents

---

|  |            |
|--|------------|
| <b>EXECUTIVE SUMMARY .....</b>                                   | <b>III</b> |
| <b>1. INTRODUCTION .....</b>                                     | <b>4</b>   |
| 1.1 PROGRAM DESIGN PARAMETERS .....                              | 4          |
| 1.2 DEFINITIONS .....  | 4          |
| <b>2. PROGRAM OVERVIEW .....</b>                                 | <b>6</b>   |
| 2.1 PROGRAM SCHEDULE .....                                       | 6          |
| 2.2 INCENTIVE ALLOCATION .....                                   | 7          |
| <b>3. PROGRAM PARAMETERS .....</b>                               | <b>7</b>   |
| 3.1 PROJECT SPONSOR AND HOST ELIGIBILITY .....                   | 7          |
| 3.2 DSM MEASURE ELIGIBILITY .....                                | 7          |
| 3.3 BID SIZE LIMITATIONS.....                                    | 8          |
| 3.4 CALCULATION OF ENERGY REDUCTION.....                         | 8          |
| 3.5 BID CEILING PRICES .....                                     | 9          |
| 3.6 AWARD PAYMENT .....  | 9          |
| <b>4. PROGRAM PROCEDURES.....</b>                                | <b>9</b>   |
| 4.1 REQUEST FOR PROPOSALS (RFPs).....                            | 9          |
| 4.2 STANDARD PROGRAM AGREEMENT .....                             | 10         |
| 4.3 PROJECT IDENTIFICATION.....                                  | 10         |
| 4.4 PROJECT INSTALLATION .....                                   | 11         |
| <b>5. MEASUREMENT AND VERIFICATION (M&amp;V) ACTIVITIES.....</b> | <b>11</b>  |
| 5.1 GENERAL APPROACH.....  | 11         |
| 5.2 MINIMUM EFFICIENCY REQUIREMENTS .....                        | 12         |
| <b>6. PROGRAM PROMOTION.....</b>                                 | <b>12</b>  |
| 6.1 WEB SITE .....   | 12         |
| 6.2 PROGRAM ASSISTANCE .....                                     | 12         |
| 6.3 PROGRAM ADMINISTRATOR CONTACT INFORMATION.....               | 12         |
| <b>7. APPENDIX A – SAMPLE FORMS.....</b>                         | <b>13</b>  |
| <b>8. APPENDIX B – MINIMUM EFFICIENCY REQUIREMENTS .....</b>     | <b>16</b>  |
| 8.1 ELECTRIC MOTORS .....  | 16         |
| 8.2 OTHER EQUIPMENT.....   | 16         |

## **Executive Summary**

This manual summarizes MidAmerican Energy Company's Efficiency Bid program. The program provides an opportunity for MidAmerican's large industrial customers and qualified providers of energy-related services to capitalize on electric and gas energy efficiency projects. Eligible industrial customers are those MidAmerican customers located in Iowa incurring a demand of 1MW or greater. Qualified energy services providers will include mechanical, electrical, rigging (machinery installation) or building controls contractors; architecture and engineering firms; energy services companies; equipment manufacturers and distributors; and project financing entities. The goal for the program is to achieve approximately 24,370 kW of verified demand reduction and 190,073,000 kWh of verified annual energy savings. Approximately \$1,000,000 of incentives will be available for award annually. The program's incentive funds will be distributed through four (4) bid cycles per year.

Both the project proposal and project reporting processes are designed to encourage potential program participants to design and install comprehensive measures that will help MidAmerican achieve its energy efficiency goals.

## 1. Introduction

Efficiency Bid is one of the programs included in MidAmerican Energy Company’s energy efficiency plan for the years 2009 - 2013. The objective of the program is to promote and implement customer-driven energy efficiency projects among MidAmerican’s large industrial customers in Iowa. Table 1 summarizes the projected energy and demand savings by year.

**Table 1: Projected Cumulative Energy and Demand Savings**

| <b>Year</b> | <b>Energy (MWh/yr)</b> | <b>Demand (MW)</b> |
|-------------|------------------------|--------------------|
| <b>2009</b> | 6,954,561              | 0.892              |
| <b>2010</b> | 20,935,204             | 2.684              |
| <b>2011</b> | 35,657,764             | 4.571              |
| <b>2012</b> | 54,060,964             | 6.931              |
| <b>2013</b> | 72,464,164             | 9.290              |

The Efficiency Bid program was created to promote the development of large and complex energy efficiency projects that do not readily fit within the realm of MidAmerican’s other energy efficiency programs. The program allows the participant to specify the incentive level necessary to make project implementation a reality on an individual project basis.

Four rounds of bidding will be offered each year. In each bid cycle, bids will be evaluated and rated based on cost-effectiveness, proposal quality, likelihood of implementation and the participant’s previous history in energy efficiency programs (if applicable). The bids with the highest ranking will be accepted into the program.

### 1.1 Program Design Parameters

MidAmerican’s intentions for the program are as follows:

- Fund at least 20 to 25 projects each year,
- Ensure that projects are implemented and verified in a time-efficient manner,
- Design a bidding process that is flexible, easily understood, and that rewards projects that conserve energy in the most beneficial way to both customers and MidAmerican,
- Make the program customer-driven as much as possible; responsibility will be placed on the customer to select appropriate trade and professional allies to design and implement the project,
- Encourage implementation of multi-measures, comprehensive projects and
- Encourage the customer to consult with the Program Contractor at all stages of the process.

### 1.2 Definitions

The following terms are used throughout this manual and in other documents and forms related to the program.

1. **Bid** — A proposal to implement energy-savings measures at a Host site, which includes a description of the proposed measures, an estimate of the installed cost of the measures, an estimate of the energy-savings achieved, and a statement of the level of incentive requested (Bid Amount – see below).
2. **Bid Amount** — The total incentive amount requested by the Sponsor. The bid document must show the derivation of the Bid Amount by showing the incentive amount requested per kWh and/or per therm.
3. **Bid Ceiling Price** — The maximum recommended bid per kWh and per therm. A Bid Amount that exceeds the product of the Bid Ceiling Price and the annual energy savings claimed will score poorly in MidAmerican’s cost-effectiveness tests.
4. **Customer** — A business that currently purchases its retail electric service and/or retail natural gas service on an industrial rate tariff from MidAmerican in the State of Iowa, with a billed demand of 1 MW or greater. Customers with multiple facilities having an aggregate demand of 1 MW or greater also are eligible.
5. **Eligible Measure** — Specific equipment or technology approved by MidAmerican for this program, which is to be installed by the Sponsor in a Host’s Facility or Facilities pre-approved by MidAmerican.
6. **Facility** — The Customer’s site at which an Eligible Measure(s) is to be installed. Acceptance of a Facility into this program shall be done at the sole discretion of MidAmerican.
7. **Host** — The MidAmerican customer at whose facility the measures are installed.
8. **Host Customer Acknowledgement** — Document submitted by the Sponsor as part of either a Bid or Pre-Installation Report that must be signed by the Host Customer at the affected Facility or Facilities prior to participation in the program.
9. **Incentive Payment** — Payments by MidAmerican to Sponsor. The first incentive payment is made upon verification of project installation. The final incentive payment is made upon verification of savings. Payment amounts are further defined in Section 3.6 of this manual.
10. **Measurement & Verification (M&V)** — Activities completed by bidders with the assistance of MidAmerican or its representative at various stages of the project in order to establish the baseline energy use and verify energy savings.
11. **Measure Verification Methodology** — The methodology established by MidAmerican to verify the energy reduction resulting from the implemented measure(s).
12. **Post-Installation Report** — The documentation that must be submitted by the Sponsor prior to requesting the first Incentive Payment for installing the Eligible Measure(s) at a Customer’s Facility.
13. **Pre-Installation Report** — The documentation that must be submitted by the Sponsor prior to installing any portion of the Eligible Measure(s) at a Customer’s Facility or Facilities.
14. **Program Contractor** — The contractor retained by MidAmerican to design, implement and administer the Efficiency Bid program.
15. **Project** — A set of proposed or installed DSM measures and associated improvements necessary to reduce energy consumption at a Customer’s Facility or Facilities.
16. **Sponsor** — The entity that submits a bid. The Sponsor can be a provider of energy efficiency equipment or services, in which case the Sponsor will be required to identify a Host, or a Host can be a Sponsor.

## 2. Program Overview

The Efficiency Bid program will issue a series of Requests for Proposals (RFP) throughout the program term. Sponsors will be asked to describe a proposed project and request an incentive for the implementation of the project. This incentive is known as a bid; projects will be ranked according to the cost-effectiveness of the project and other qualitative parameters. MidAmerican (or one of its contractors) will determine cost-effectiveness through industry-recognized tests that consider the value of the conservation achieved. Projects will be subject to pre- and post-installation verification, and the equipment installed will have to meet minimum efficiency standards.

### 2.1 Program Schedule

Each bid cycle will consist of the following stages:

- A two-month RFP response period,
- A two-month evaluation and contract signing period (subject to the response time from MidAmerican evaluation staff and its evaluation contractor),
- A period of one year, from date of bid award, in which to commence project implementation and
- A period of two years, from date of bid award, in which to complete project implementation.

Table 2 summarizes the program timeline for the 19 bid cycles between April 2009 and December 2013.

**Table 2: Key program dates and deadlines**

| <b>Bid Cycle</b> | <b>RFP Issue Date</b> | <b>Bid Due Date</b> | <b>Bid Award Date</b> | <b>Commence Implementation By</b> | <b>Complete Implementation By</b> |
|------------------|-----------------------|---------------------|-----------------------|-----------------------------------|-----------------------------------|
| 09B              | Apr 1, 2009           | Jun 1, 2009         | July 31, 2009         | July 30, 2010                     | Aug 1, 2011                       |
| 09C              | Jul 1, 2009           | Sept 1, 2009        | Oct 30, 2009          | Nov 1, 2010                       | Nov 1, 2011                       |
| 09D              | Oct 1, 2009           | Dec 1, 2009         | Feb 1, 2010           | Feb 1, 2011                       | Feb 1, 2012                       |
| 10A              | Dec 31, 2009          | Mar 1, 2010         | Apr 30, 2010          | Apr 29, 2011                      | May 1, 2012                       |
| 10B              | Apr 1, 2010           | Jun 1, 2010         | Jul 30, 2010          | Aug 1, 2011                       | Aug 1, 2012                       |
| 10C              | Jul 1, 2010           | Sep 1, 2010         | Nov 1, 2010           | Nov 1, 2011                       | Nov 1, 2012                       |
| 10D              | Oct 1, 2010           | Dec 1, 2010         | Feb 1, 2011           | Feb 1, 2012                       | Feb 1, 2013                       |
| 11A              | Dec 31, 2010          | Mar 1, 2011         | Apr 29, 2011          | May 1, 2012                       | May 1, 2013                       |
| 11B              | Apr 1, 2011           | Jun 1, 2011         | Aug 1, 2011           | Aug 1, 2012                       | Aug 1, 2013                       |
| 11C              | Jul 1, 2011           | Sep 1, 2011         | Nov 1, 2011           | Nov 1, 2012                       | Nov 1, 2013                       |
| 11D              | Sep 30, 2011          | Dec 1, 2011         | Feb 1, 2012           | Feb 1, 2013                       | Jan 31, 2014                      |
| 12A              | Dec 30, 2011          | Mar 1, 2012         | May 1, 2012           | May 1, 2013                       | May 1, 2014                       |
| 12B              | Mar 30, 2012          | Jun 1, 2012         | Aug 1, 2012           | Aug 1, 2013                       | Aug 1, 2014                       |
| 12C              | Jun 29, 2012          | Aug 31, 2012        | Nov 1, 2012           | Nov 1, 2013                       | Oct 31, 2014                      |
| 12D              | Oct 1, 2012           | Nov 30, 2012        | Feb 1, 2013           | Jan 31, 2014                      | Jan 30, 2015                      |
| 13A              | Jan 1, 2013           | Mar 1, 2013         | May 1, 2013           | May 1, 2014                       | May 1, 2015                       |
| 13B              | Apr 1, 2013           | May 31, 2013        | Aug 1, 2013           | Aug 1, 2014                       | Jul 31, 2015                      |

|     |             |              |              |              |              |
|-----|-------------|--------------|--------------|--------------|--------------|
| 13C | Jul 1, 2013 | Aug 30, 2013 | Nov 1, 2013  | Oct 31, 2014 | Oct 30, 2015 |
| 13D | Oct 1, 2013 | Nov 29, 2013 | Jan 31, 2014 | Jan 30, 2015 | Feb 1, 2016  |

Note that MidAmerican or its representative may require measurement and verification (M&V) work prior to project implementation, in order to establish the baseline energy consumption for the project. MidAmerican or its representative also may perform post-installation M&V activities to verify that energy savings have been achieved.

## 2.2 Incentive Allocation

The maximum incentive awarded to a successful bidder may include up to 100 percent of the available incentive pool for that bid cycle.

## 3. Program Parameters

### 3.1 Project Sponsor and Host Eligibility

Any entity meeting the application requirements of installing eligible energy efficiency measures at an eligible facility may participate in the program as a project Sponsor. Eligible project Sponsors may include (but are not limited to):

- Individual customers that install measures in their own facilities,
- National or local energy service companies (ESCOs),
- National or local companies that provide energy-related services (*e.g.*, contracting) or products (*e.g.*, lighting, air compressors, drives and motors),
- Design/build firms and
- Architectural firms.

The participating Host site must purchase retail electricity or natural gas from MidAmerican on an industrial tariff, with a demand of greater than 1 MW. Hosts with multiple sites with an aggregate demand of greater than 1 MW also are eligible, but measures proposed must be installed at all sites, if practical. Sites on a commercial or residential rate and wholesale customers purchasing electricity for resale do not qualify.

### 3.2 DSM Measure Eligibility

The program does not specify explicit eligible measures, in order to provide program participants maximum flexibility in identifying potential projects. Eligible measures must meet the following requirements:

- Measures must produce a measurable and verifiable reduction in demand and/or energy consumption,
- Measures must produce savings through an increase in energy efficiency or better utilization of energy through improved production equipment or controls,
- Measures may be installed in either new or retrofit applications and
- Measures must have a minimum useful life of 10 years.

The following measures are *excluded* from consideration in this program:

- Measures that rely solely on changes in Host behavior,

- Measures that require no capital investment,
- Measures that merely terminate existing processes, facilities, or operations,
- Measures with an expected lifetime or persistence of less than 10 years,
- Measures that are required by state or federal law, building or other codes, or are standard industry practice,
- Measures that involve plug loads,
- Measures that receive an incentive through any other energy efficiency or DSM program offered by MidAmerican,
- Measures that generate electricity, including cogeneration or renewable energy generation and
- Measures that achieve savings through equipment maintenance, commissioning, or operational changes, without an equipment efficiency upgrade.

Examples of eligible measures are listed in Table 3. Project sponsors are free to propose measures not included in the table, as long as the above requirements are met.

**Table 3: Examples of eligible measures**

|  |
|--|
| <ul style="list-style-type: none"><li>• Replacing motors with NEMA Premium<sup>®</sup> efficiency motors</li><li>• Variable-speed drive installations</li><li>• Lighting system upgrades</li><li>• Compressed air system improvements</li><li>• Energy management and control systems</li><li>• HVAC system improvements</li><li>• Chiller and refrigeration system improvements</li><li>• Heat recovery systems</li><li>• Natural gas upgrades</li><li>• Efficient transformers</li><li>• Process changes that improve energy efficiency</li><li>• Industrial heat pumps</li><li>• Control upgrades resulting in improved energy efficiency</li></ul> |
|--|

### 3.3 Bid Size Limitations

The minimum target electric energy reduction amount per proposal is 100,000 kWh and the minimum target natural gas reduction amount is 7,500 therms. Bidders may submit multiple bids or combine multiple projects within a single proposal as long as the program requirements are met.

MidAmerican reserves the right to waive these restrictions if it appears they may prevent the program from achieving savings goals.

### 3.4 Calculation of Energy Reduction

For payment purposes, energy reduction is simply the total net annual energy usage reduction occurring as a result of the implementation of the project. Payment will be based on the energy usage reduction achieved over one year only.

Savings will be calculated in relation to a baseline value. Information on minimum efficiency baseline values is presented in Section 5.2.

### 3.5 Bid Ceiling Prices

Each bid must include a requested incentive amount (in dollars) and an estimate of energy usage reduction (in kWh/year or therm/year). The bid amount must be less than or equal to the applicable bid ceiling price(s), shown below in Table 4, multiplied by the estimated annual energy reduction. MidAmerican may adjust bid ceiling prices as necessary during the course of the program. The bid amount(s) proposed by the bidder should be based on receiving payment for only one year of savings.

**Table 4: Bid ceiling prices**

| Measure Category           | Ceiling Price | Units     |
|----------------------------|---------------|-----------|
| Electric energy efficiency | \$0.11        | Per kWh   |
| Thermal energy reduction   | \$1.00        | Per therm |

### 3.6 Award Payment

Project Sponsors that request cash incentives will receive payment in two installments as individual projects are completed. The first payment, the installation payment, will be issued upon acceptance of the post-installation report (see Section 4.4). This payment will be equal to 50 percent of the total bid incentive based on the project’s estimated savings according to the following formula:

$$\begin{aligned}
 \text{installation payment} = & 50\% \times \{ [\text{estimated electric energy savings (kWh)} \times \text{bid price (\$/kWh)}] \\
 & + [\text{estimated gas savings (therms)} \times \text{bid price (\$/therm)}] \}
 \end{aligned}$$

The second payment, or performance payment, will be based on the project’s verified energy savings. This payment will be approved after any necessary post-installation M&V activities have been completed. The project’s performance payment will be calculated according to the following formula:

$$\begin{aligned}
 \text{performance payment} = & [\text{verified electric energy savings (kWh)} \times \text{bid price (\$/kWh)}] + \\
 & [\text{verified gas savings (therms)} \times \text{bid price (\$/therm)}] - \text{installation} \\
 & \text{payment}
 \end{aligned}$$

This performance payment formula is valid for verified energy savings of up to 125 percent of original bid estimated savings. Under no circumstances will MidAmerican make award payments for verified energy savings in excess of 125 percent of a project sponsor’s total contracted savings amount. In no event will incentives be awarded that exceed the project cost. To be eligible for award payment, projects must be installed and post-installation reports submitted by the applicable bid cycle deadline (see Table 2).

Project Sponsors that request incentives other than cash payments (e.g. interest buy down) will receive the incentive at regular intervals over the life of the project, with such intervals being determined by MidAmerican.

## 4. Program Procedures

### 4.1 Request for Proposals (RFPs)

MidAmerican will issue an RFP to solicit program participants for each bid cycle. The RFP will be simplified and streamlined to help facilitate participation by non-ESCOs such as customers, vendors, architects and design-build firms. Response to the RFP will be summarized on the Bid

Cycle Application form (included with the RFP) and will include any supplementary information necessary for a full and accurate evaluation of the bid.

#### 4.1.1 Required Information

Program participants will be asked to provide the following information in response to the RFP:

- Project Sponsor contact and business information,
- Host contact and business information,
- Facility location and description,
- Identification of measure types,
- Listing of any identified projects and corresponding savings estimates,
- Comprehensive energy-savings estimates,
- Bid prices and
- Participation in past MidAmerican DSM programs (if applicable).

Bidders may submit multiple bids, or package different types of measures or identified projects within a single proposal, as long as the limitations listed in Section 3.3 are met.

#### 4.1.2 Evaluation Methodology

The evaluation process will identify those projects which are the most cost-effective and most likely to result in verifiable savings for MidAmerican. The following five criteria will be used to prioritize responses to the RFPs:

- Cost-effectiveness of proposal, calculated using the methodology described in the MidAmerican energy efficiency plan,
- Overall quality and responsiveness of the proposal,
- Likelihood of project implementation,
- Performance in previous DSM programs or other measure of ability to deliver estimated savings and
- Level of detail of project proposal (i.e, identification of specific projects will rank more favorably than speculative proposals in which specific projects have not been identified).

It should be noted that projects that result in demand reduction during MidAmerican's system peak load period will perform better in the cost-effectiveness tests than those that do not result in such demand reduction.

## 4.2 Standard Program Agreement

Once the Project Sponsors have been selected, MidAmerican will prepare a Standard Program Agreement that Project Sponsors will be required to sign before installing any measures. The terms of the Agreement will be standard for all Project Sponsors. The Standard Program Agreement will specify the program rules and procedures.

## 4.3 Project Identification

Upon signing the Standard Program Agreement, Project Sponsors finalize individual project details. Prior to project installation, a Project Sponsor must submit a pre-installation report (PIR)

for each project. The pre-installation report will include a description of the project, plans and specifications for the project, a detailed calculation of the demand and/or energy reduction that will result from the project, and a signed Host Customer agreement if necessary. Customized forms to be used by the Project Sponsor for submission of the pre-installation report will be made available on the MidAmerican Web site. Following the submittal of a pre-installation report and prior to project installation, the program administrator may conduct any necessary M&V activities to establish the baseline energy consumption. A sample PIR form is shown in Appendix A.

#### **4.4 Project Installation**

Upon completion of installation or construction activities for each approved project, Project Sponsors will submit a post-installation report (POR) that identifies the measures installed and the estimated award payment. The post-installation report will include a description of the installed project and a revised estimate of the savings associated with the project. Customized forms to be used by the Project Sponsor for submission of the post-installation report will be made available on MidAmerican's Web site. Upon completion of projects submitted under the program, MidAmerican's Program Contractor may conduct M&V activities to verify the energy reduction that has occurred as a result of project implementation. A sample POR form is included in Appendix A.

### **5. Measurement and Verification (M&V) Activities**

The objective of M&V is to verify the project's savings. The general approach is to estimate savings using pre-installation, or baseline, usage and post-installation usage. Incentive payments to Project Sponsors are based on these verified savings. MidAmerican's Program Contractor will assist Sponsors in the establishment of baselines and the measurement of savings. The Program Contractor will be responsible for verifying project implementation and other verification activities, including review of M&V reports and site inspections. Project Sponsors may be required to provide supporting information or materials to complete the M&V process.

#### **5.1 General Approach**

M&V procedures will vary in detail and rigor depending on the measures installed. M&V procedures for common energy efficiency measures will be prepared and distributed with the RFPs. For remaining measure types, the procedures will depend upon the predictability of equipment operation, the availability of evaluation data from previous programs, and the benefits of the chosen M&V approach relative to its cost. M&V procedures may be classified according to three distinct approaches that represent increasing levels of detail and rigor.

1. *Deemed savings.* Savings values are deemed based on engineering calculations using typical equipment characteristics and operating schedules for particular applications, without on-site testing or metering. Applicable deemed savings estimates will be developed based on industry-accepted performance standards or estimated existing equipment performance (where available).
2. *Simplified M&V.* Savings values are based on engineering calculations using typical equipment characteristics and operating schedules developed for particular applications, with some spot measurements, short-term testing, or simple long-term metering.
3. *Full M&V.* Savings are estimated using a higher level of rigor than in the deemed savings or simple M&V approaches through the application of metering, billing analysis or computer simulation.

Upon receipt of a project's pre-installation report, the Program Contractor will identify the appropriate M&V activities (using either the established protocols for common measures or through the process described above for unique projects) and assist the Project Sponsor in establishing the baseline prior to approving the submittal and granting permission to proceed with the installation of the measures.

## **5.2 Minimum Efficiency Requirements**

The minimum efficiency standards for equipment installed as a result of participation in this program are shown in Appendix B.

## **6. Program Promotion**

### **6.1 Web Site**

Links to program information and materials can be found on the MidAmerican Web site (<http://www.midamericanenergy.com>), including:

- A description of the program and participation requirements,
- All necessary program forms and manuals for download,
- Updates on current program status,
- Deadlines for current and upcoming bid cycles and
- A frequently asked questions (FAQ) section.

### **6.2 Program Assistance**

Bidders having questions regarding the RFP or the program in general are encouraged to contact the Program Administrator. If you would like to meet with the Program Administrator to discuss the program and potential bids, please contact your MidAmerican key account manager or the Program Administrator and a meeting will be scheduled at a time convenient for all parties.

### **6.3 Program Administrator Contact Information**

Sam Mueller  
Nexant, Inc.  
1232 Fourier Dr., Suite 125  
Madison, WI 53717  
Tel 608-824-1220  
Fax 608-829-2723  
E-mail [efficiencybid@nexant.com](mailto:efficiencybid@nexant.com)

## **7. Appendix A – Sample Forms**



# Efficiency Bid<sup>®</sup>

## Pre-Installation Report (PIR)

| Administrative Use Only |  |
|-------------------------|--|
| Application #           |  |
| Date received           |  |
| Date approved           |  |
| Approved by             |  |

### Host Profile

|                    |            |                  |  |
|--------------------|------------|------------------|--|
| Organization Name: |            | Project Contact: |  |
| Parent Company:    |            | Contact Address: |  |
| Tax ID No.:        |            |                  |  |
| Type of Business:  |            | Contact Phone:   |  |
| Business Sector:   | Industrial | Contact Fax:     |  |
|                    | Commercial | Contact E-mail:  |  |

### Project Sponsor Profile

|                    |  |                 |  |
|--------------------|--|-----------------|--|
| Organization Name: |  | Contact Phone:  |  |
| Parent Company:    |  | Contact Fax:    |  |
| Project Contact:   |  | Contact E-mail: |  |
| Contact Address:   |  |                 |  |

### Project Information

|   |  |
|---|--|
| Project Description<br><small>(Please list all measures providing a detailed description. Attach additional sheets if necessary.)</small> |  |
| Projected Cost  |  |
| Projected Annual Savings (\$)   |  |

### System Savings Data

| Estimated System Savings             |                          |                     |
|--------------------------------------|--------------------------|---------------------|
| Peak Summer Demand <sup>1</sup> (kW) | Annual Electricity (kWh) | Annual Gas (therms) |
|                                      |                          |                     |

<sup>1</sup>Peak demand savings occur during the periods of 4 to 5 p.m. on weekdays in June, July, August or September, excluding holidays.

Please attach all assumptions and formulas used to calculate the project cost, estimated electricity and/or gas energy savings, and electric peak demand savings (if applicable). Please also include descriptions of all variables used in these formulas and example calculations for each measure. Electronic copies of all files, spreadsheets, or computer simulation input files should be included with the PIR.

### Bid Cycle Information

| Bid Cycle Number | Project Implementation Deadline | Project Completion Deadline |
|------------------|---------------------------------|-----------------------------|
|------------------|---------------------------------|-----------------------------|

We, the undersigned, agree that, to the best of our knowledge, the energy efficiency measures listed above are representative of the project we expect to implement as part of MidAmerican's Efficiency Bid program. By signing this document, the customer acknowledges that the project sponsor listed above has discussed with the customer or others in the customer's organization, the implementation of energy efficiency measures within the customer's facility or facilities in conjunction with MidAmerican's Efficiency Bid program, corresponding to the bid cycle shown above. The customer's signature also indicates that:

- 1) The customer's company intends to undertake the installation of these measures.
- 2) All installation and/or construction activities will be completed no later than the project completion date listed for the appropriate bid cycle.
- 3) Company management has given the necessary authorization to install these measures.
- 4) The customer agrees to allow MidAmerican to verify the energy savings achieved as a result of the installed measures by providing reasonable access during normal business hours. MidAmerican's review or inspection of any energy-conservation measures will not constitute any representation as to the technical or economic quality of the measure. MidAmerican, its officers, employees and contractors will not be liable for the performance of these measures. MidAmerican will not release any proprietary information about the customer's business without its permission.

|                              |                                   |      |
|------------------------------|-----------------------------------|------|
| Customer Contact Name        | Customer Contact Signature        | Date |
| Project Sponsor Contact Name | Project Sponsor Contact Signature | Date |



# Efficiency Bid<sup>®</sup>

## Post-Installation Report (POR)

| Administrative Use Only |  |
|-------------------------|--|
| Application #           |  |
| Date received           |  |
| Date approved           |  |
| Approved by             |  |

### Host Profile

|                    |            |                  |  |
|--------------------|------------|------------------|--|
| Organization Name: |            | Project Contact: |  |
| Parent Company:    |            | Contact Address: |  |
| Tax ID No.:        |            |                  |  |
| Type of Business:  |            | Contact Phone:   |  |
| Business Sector:   | Industrial | Contact Fax:     |  |
|                    | Commercial | Contact E-mail:  |  |

### Project Sponsor Profile

|                    |  |                 |  |
|--------------------|--|-----------------|--|
| Organization Name: |  | Contact Phone:  |  |
| Parent Company:    |  | Contact Fax:    |  |
| Project Contact:   |  | Contact E-mail: |  |
| Contact Address:   |  |                 |  |

### Project Information

|   |  |
|---|--|
| Project Description   |  |
| (Please list all measures providing a detailed description. Attach additional sheets if necessary.) |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |

|                |  |                               |  |                           |  |
|----------------|--|-------------------------------|--|---------------------------|--|
| Projected Cost |  | Projected Annual Savings (\$) |  | Project Installation Date |  |
|----------------|--|-------------------------------|--|---------------------------|--|

### System Savings Data

| Estimated Baseline Energy               |                             |                     | Estimated System Savings                |                             |                     |
|---|-----------------------------|---------------------|---|-----------------------------|---------------------|
| Peak Summer Demand <sup>1</sup><br>(kW) | Annual Electricity<br>(kWh) | Annual Gas (therms) | Peak Summer Demand <sup>1</sup><br>(kW) | Annual Electricity<br>(kWh) | Annual Gas (therms) |
|   |                             |                     |   |                             |                     |

|  |  |     |  |    |
|--|--|-----|--|----|
| Have the energy-savings calculations changed since the PIR submittal?<br>(If yes, please provide revised documentation.) |  | Yes |  | No |
|--|--|-----|--|----|

<sup>1</sup>Peak demand savings are those that occur during the periods of 4 to 5 p.m. on weekdays in June, July, August or September, excluding holidays.

### Bid Cycle Information

|                  |  |                                 |  |                             |  |
|------------------|--|---------------------------------|--|-----------------------------|--|
| Bid Cycle Number |  | Project Implementation Deadline |  | Project Completion Deadline |  |
|------------------|--|---------------------------------|--|-----------------------------|--|

We, the undersigned, agree that, to the best of our knowledge, the energy-efficiency measures listed above are representative of the project implemented as part of MidAmerican's Efficiency Bid program. Your signature also indicates that you agree to allow MidAmerican to verify the energy savings achieved as a result of the installed measures by providing reasonable access during normal business hours. MidAmerican's review or inspection of any energy-conservation measures will not constitute any representation as to the technical or economic quality of the measure. MidAmerican, its officers, employees and contractors will not be liable for the performance of these measures. MidAmerican will not release any proprietary information about the customer's business without its permission.

|                       |                            |      |
|-----------------------|----------------------------|------|
|                       |                            |      |
| Customer Contact Name | Customer Contact Signature | Date |

|                              |                                   |      |
|------------------------------|-----------------------------------|------|
|                              |                                   |      |
| Project Sponsor Contact Name | Project Sponsor Contact Signature | Date |

## 8. Appendix B – Minimum Efficiency Requirements

New equipment installed as a result of participation in this program must meet certain minimum efficiency standards.

### 8.1 Electric Motors

Motors installed in retrofit projects implemented by program participants must meet the minimum efficiency standards as defined by NEMA for premium efficiency motors. The NEMA Premium<sup>®</sup> efficiencies for permanently wired, poly-phase motors that are at least one horsepower in size and that are used for fan, pumping and conveyance applications, are defined in the following table.

Note that the following motors are exempt from these requirements:

1. Motors in appliances,
2. Refrigeration compressor motors,
3. Multispeed motors and
4. Motors used as components of cooling equipment where the motor efficiency is considered in developing the overall efficiency rating for that equipment.

**NEMA Premium motor qualifying efficiencies (%)**

| HP  | 3600 RPM |      | 1800 RPM |      | 1200 RPM |      |
|-----|----------|------|----------|------|----------|------|
|     | ODP      | TEFC | ODP      | TEFC | ODP      | TEFC |
| 1   | 77.0     | 77.0 | 85.5     | 85.5 | 82.5     | 82.5 |
| 1.5 | 84.0     | 84.0 | 86.5     | 86.5 | 86.5     | 87.5 |
| 3   | 85.5     | 85.5 | 86.5     | 86.5 | 87.5     | 88.5 |
| 4   | 85.5     | 86.5 | 89.5     | 89.5 | 88.5     | 89.5 |
| 5   | 86.5     | 88.5 | 89.5     | 89.5 | 89.5     | 89.5 |
| 7.5 | 88.5     | 89.5 | 91.0     | 91.7 | 90.2     | 91.0 |
| 10  | 89.5     | 90.2 | 91.7     | 91.7 | 91.7     | 91.0 |
| 15  | 90.2     | 91.0 | 93.0     | 92.4 | 91.7     | 91.7 |
| 20  | 91.0     | 91.0 | 93.0     | 93.0 | 92.4     | 91.7 |
| 25  | 91.7     | 91.7 | 93.6     | 93.6 | 93.0     | 93.0 |
| 30  | 91.7     | 91.7 | 94.1     | 93.6 | 93.6     | 93.0 |
| 40  | 92.4     | 92.4 | 94.1     | 94.1 | 94.1     | 94.1 |
| 50  | 93.0     | 93.0 | 94.5     | 94.5 | 94.1     | 94.1 |
| 60  | 93.6     | 93.6 | 95.0     | 95.0 | 94.5     | 94.5 |
| 75  | 93.6     | 93.6 | 95.0     | 95.4 | 94.5     | 94.5 |
| 100 | 93.6     | 94.1 | 95.4     | 95.4 | 95.0     | 95.0 |
| 125 | 94.1     | 95.0 | 95.4     | 95.4 | 95.0     | 95.0 |
| 150 | 94.1     | 95.0 | 95.8     | 95.8 | 95.4     | 95.8 |
| 200 | 95.0     | 95.4 | 95.8     | 96.2 | 95.4     | 95.8 |

### 8.2 Other Equipment

In retrofit applications, the minimum efficiencies for new equipment other than motors are considered to be the minimum efficiencies required by government or industry regulation, if such standards have been established.