



Texas Industries of the Future

Questions and Answers for Plants Considering Participation in the Plant Energy-Efficiency Certification Pilot Project (ver. 4/28/2008)

1. What is the project? When will it occur?

The US Department of Energy is working with The University of Texas at Austin to pilot an energy-efficiency certification program for manufacturing plants. From May 2008 to October 2009, energy experts will be working with staff from five manufacturing plants in Texas to test the components of a proposed national plant energy-efficiency certification program. This program includes assessments of significant energy systems according to proposed ANSI standards; training of plant staff on how to implement an energy management system that complies with MSE 2000:2008; coaching by energy management system experts during energy management system implementation; and monitoring and verification of energy savings.

The goal of the pilot project is to verify that the processes, standards, and performance criteria considered for application to a plant under the certification program are practical and achievable, provide benefit to participating plants, and reliably identify plants that meet the proposed certification criteria.

A description of the proposed national Certification Program can be found in Attachment 1. A schedule for the pilot project is found in Attachment 2. Attachment 3 contains the application instructions. **Applications to participate in the pilot project are now being accepted.**

2. What are the benefits of participating in the pilot program?

As a pilot plant, you can expect:

- At least two energy system assessments by an energy expert, providing you with a list of cost-effective opportunities.
- An opportunity to train your staff on how to conduct an energy system assessment in other systems not addressed by the energy experts.
- Management system training and coaching. Energy management system experts will coach your team on development and implementation of an energy management system that is tailored to your plant's needs.
- An opportunity to participate in finalization of the national energy management and system assessment standards, as well as to provide input into development of a national Monitoring and Verification methodology.
- A jump start on:
 - Formalizing your plant's energy management program or

*Texas Industries of the Future is a project of The University of Texas at Austin
Center for Energy and Environmental Resources
10100 Burnet Rd. – CEER R7100
Voice: 512-232-4823 - kferland@mail.utexas.edu
<http://texasiof.ces.utexas.edu>*

- Raising the bar on energy management at your plant by implementing a world-class energy management program.
- You will reap the benefits of learning by doing, working with leading national energy experts in systems optimization and energy management.
- National recognition by the US DOE of your participation in this important pilot project.
- An opportunity to align your organization from top to bottom on energy management.

In addition:

- Plants that significantly meet the criteria for certification by the end of the pilot project will receive continued support from US DOE to assist them in completing the certification process.
- The corporation has the opportunity to leverage the experience learned at one plant to others, in advance of the rollout of the national energy efficiency plant certification program and energy management and system assessment standards.

3. How are the System Assessments that are part of the pilot project different from the DOE “Save Energy Now” assessments the plant may have already completed?

System Assessments will be offered in steam, process heating, pumping, and compressed air. These System Assessments will be based on using a proposed ANSI standard now under development. The System Assessments are more detailed than the DOE “Save Energy Now” assessments and may take longer. No specific software tool is required to conduct a System Assessment. System Assessments will be significantly more comprehensive than the Save Energy Now assessments. As a result, DOE expects that more opportunities for saving energy and reducing costs will be found during a System Assessment.

4. Who will be involved from the company? What is the time commitment?

The key contact or project manager for the company will participate in three training sessions of 2.5 days each to be held in Texas at a site mutually agreeable to the participating plants. In addition, at least one other key person involved in energy management should attend the training sessions with the project manager. At the end of the pilot program, a one-day meeting to debrief and recognition meeting will be held for all of the participating companies.

In between training sessions, plant personnel will work on implementing the energy management system and participating in the energy system assessments. It is anticipated that plant personnel will spend 120 to 200 hours over a 12 month period to implement the energy management system. **This time depends on the sophistication of the company’s current energy program.** In addition, the engineer responsible for the energy system(s) being assessed could expect to spend at least 8 days on the assessment effort: gathering data, assisting with the assessment and reviewing the assessment report.

These estimates do not include the resources needed for implementation of any projects identified in the assessment report. Project implementation will depend upon the opportunities identified and the gap between current plant energy performance and the certification program criteria. Project implementation is at the discretion of the participating plants. See the certification criteria in Attachment 1.

Table 1, page 6, displays the commitments from the US DOE and Texas IOF (what you will receive) and the commitments from participating plants. This will help you in evaluating resource commitments.

5. Who are the sponsoring organizations?

The project is funded by the US Department of Energy Office of Energy Efficiency and Renewable Energy and the Texas State Energy Conservation Office. The Texas Industries of the Future program, located at The University of Texas at Austin, is coordinating the pilot project in Texas. Other organizations working under contract to US DOE include Oak Ridge National Lab, Lawrence Berkley National Lab and Georgia Tech, which is providing assistance on implementation of the Management System for Energy (MSE) 2000:2008.

Companies participating in the pilot project will also be recognized as contributing to the development of this important national program.

6. Will my information be confidential?

Plant information can be handled confidentially, if preferred by the plant. If a plant would like to execute a Non-Disclosure Agreement, they should indicate this up front, so that negotiation does not delay training, assessments and pilot program implementation.

7. What does it cost a site to participate for a site outside Texas?

Plants outside Texas will be responsible for covering all costs of participation. It is estimated that these costs range from \$36,000 to \$72,000, assuming a complex plant with two large energy systems to be assessed. The final anticipated cost for future participation in the certification program is anticipated to be lower than the cost of participating in the pilot.

See the addendum to this document, page 8, for a complete discussion of the basis of these costs and assumptions involved.

8. What happens at the end of the project in October 2009?

Plants that significantly meet the criteria for certification by the end of the pilot will receive continued support from US DOE to assist them in completing the certification process. This might be additional coaching to achieve full implementation of the energy management standard or additional energy system assessments for energy systems that were not addressed during the pilot project.

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Plans call for setting up the certification organization by February 2010. Thus, your plant should be well-positioned to be one of the first to be certified. The requirements for certification are listed in Attachment 1.

9. What are the criteria for participating in the pilot?

We are recruiting 5 Texas plants that:

- Have management that is serious about saving money on its energy bill by implementing an energy management system, as well as conducting technical assessments to find cost-effective opportunities. Management commitment is required for participation;
- Have at least two energy systems (pumps, steam, compressed air, or process heat) that they are interested in evaluating for opportunity;
- Have sufficient metering in place (by May 2008) that a baseline on energy use can be constructed by plant personnel and savings can be measured.

10. What is the process of applying?

- Documents on the pilot project, including the application, can be requested from Paul Scheihing at the address listed below.
- Contact Paul Scheihing to get your questions answered and let us know of your interest.
- Get your management on board!
- Send the application letter to Paul Scheihing at Paul.Scheihing@ee.doe.gov. Applications will be reviewed in the order they are received. The first training is June 24.
- An interview will be scheduled for May/June 2008 with your project contact and management.

11. Who does the company contact with questions?

If you would like to explore participation in the pilot project, contact:

Paul Scheihing
Industrial Technologies Program
Office of Energy Efficiency and Renewable Energy
US Department of Energy
202-586-7234
Paul.Scheihing@ee.doe.gov

or

Kathey Ferland
Texas Industries of the Future
The University of Texas at Austin
Center for Energy and Environmental Resources
512-232-4823
kferland@mail.utexas.edu

Table 1: Commitments by Pilot Project Team and Site Team
(ver. Jan 30, 2008)

Activity	Pilot Project Team (US DOE and TxIOF team) ¹	Pilot Project Site Team
3 training sessions on Energy Management Systems. 2.5 days per training.	Provide 3 training sessions on components of an Energy Management System. Provide practical strategies and tools for implementing system components.	Site Project Lead attends all training sessions. At least one other company person is strongly encouraged to attend. Participation rotates depending on training topic. Other plant energy team members also invited to the training sessions.
Implementation of Energy Management System	Provide 6 hours of coaching per month per site to assist with system implementation.	Staff implement or refine management system. Includes completion of all homework assignments from the training sessions. Plan, implement, and monitor energy projects. Quarterly reporting to pilot project team. (July 08-June 09)
Energy System Assessments (at least 2 per plant)	National energy expert to conduct on-site assessment(s) and prepare report of energy saving opportunities.	<ol style="list-style-type: none"> 1. Baseline energy system data collection in advance. 2. Coordination of onsite assessment with plant. 3. Review draft report. 4. At 6, 12 and 24 months, report on project savings.
Pre-certification Audit for Energy Management System	Team from Georgia Tech to conduct audit of energy management system and prepare report for plant management and TxIOF and DOE.	Site project lead to review report and participate in audit. (4 days in June/July 2009)
Pre-certification Audit for Energy Performance (M&V Component)	M&V company to conduct energy performance review to identify progress and gaps re: plant energy performance certification criteria.	Site project lead to review report and participate in audit (4 days June-Oct 2009)

¹ Includes Georgia Tech, Oak Ridge National Lab, Lawrence Berkley National Lab, and consultants who are qualified specialists and trainers on energy systems.

Activity	Pilot Project Team (US DOE and TxIOF team)	Pilot Project Site Team
Project Wrap-up	<ol style="list-style-type: none"> 1. In conjunction with the plants, prepare case studies on plant experiences with certification pilot project components (management systems, assessments, M&V, etc.). Plants will approve all case studies before they are finalized. 2. National recognition from US DOE upper management at event. 	<p>October 2009</p> <ol style="list-style-type: none"> 1. Work with external Project Team on case study 2. Provide feedback on assessment standards, certification criteria, and monitoring and verification protocol.

Addendum: Can plants outside of Texas participate in the pilot project?

Participation in the upcoming pilot project on energy efficiency plant certification is open to up to 5 plants outside Texas. Plants outside Texas will be responsible for covering all costs of participation. It is estimated that these costs range from \$36,000 to \$72,000, assuming a complex plant with two large energy systems to be assessed. The final anticipated cost for future participation in the certification program is anticipated to be lower than the cost of participating in the pilot.

This estimate includes the cost of energy management system training, coaching on management system implementation, two system assessments, and monitoring and verification. The actual cost will depend upon whether the site conducts self-directed assessments or contracts with the energy system expert to conduct the assessment.

This estimate does NOT include the cost of travel, lodging or food for participants during the training (except meals provided as part of the training.) This *does* include a \$4,000 training fee for the Management System for Energy training.

The project kicks off **June 24, 25 and 26, 2008** with the first management system training to be held at a Texas location. Participants must be available to attend the training in order to participate in the pilot project.

An estimated budget is provided below.

Management System for Energy training fee	\$ 4,000
MSE Implementation Coaching	\$10,500
Energy System Assessments (2 assessments)	\$5,000-\$41,000
(Low-end estimate assumes self-implementation of the standard with expert coaching; high-end estimate assumes use of an energy system expert, paid by the participant. It may also be possible to reduce this upper end cost estimate by working with your state, utility or the DOE Save Energy Now programs.)	
Monitoring and Verification of Savings	\$16,000