



Texas Industries of the Future

May 2011

CALL FOR ABSTRACTS FOR FALL ENERGY FORUM. Texas IOF is requesting one page abstracts on energy efficiency topics for presentation at the Fall Energy Forum, to be held Oct. 6, in conjunction with the STS-AIChE Regional Process Technology Conference. Abstracts are due June 10 to kferland@mail.utexas.edu For more information, go to <http://texasiof.ces.utexas.edu/PDF/Meetings/2011/Call%20for%20AICHE%20Energy%20Abstracts.pdf>

PROCESS COOLING, CHILLER AND REFRIGERATION (PCCR) ASSESSMENTS AVAILABLE FROM TEXAS INDUSTRIES OF THE FUTURE.

Texas Industries of the Future, with funding from the Department of Energy, will be conducting two Process Cooling, Chiller and Refrigeration (PCCR) assessments at energy intensive plants in the next year.

Texas plants with significant process cooling, chilling and refrigeration demands are encouraged to apply. The ideal plant will be one that meets the following criteria:

- Has an estimated total **PCCR demand of at least 1,500 hp or a cooling demand greater than 1,500 RT.**
- Has **multiple** chillers and/or refrigeration systems.
- Has **multiple temperature level requirements** for PCCR systems.
- Has some level of **data acquisition (and historian) capability** on the PCCR systems to allow for evaluation of a baseline, load-profiling and operational characteristics.
- Has a **demonstrated commitment from management** for implementing cost-effective energy efficiency projects. (This can be demonstrated by your site's participation in an energy efficiency program, such as DOE's Save Energy Now, EPA's Energy Star, Texas IOF projects, Superior Energy Performance or other programs identified by the company.)

Application: Apply via email to kferland@mail.utexas.edu with the PCCR assessment contact for your facility. Include a brief description of your facility and your PCCR system. For more information go to <http://texasiof.ces.utexas.edu/PDF/Meetings/2011/PCCR%20Assessment%20Announcement.pdf>

FIVE TEXAS PLANTS ARE FIRST IN THE NATION TO BE CERTIFIED FOR SUPERIOR ENERGY PERFORMANCE. On April 7, 2011 the U.S. Department of Energy (DOE) recognized the five Texas plants that are the first industrial plants in the

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country to be certified under the Superior Energy Performance (SEP) program. The SEP energy management certification program is accredited by the American National Standards Institute (ANSI).

The program was piloted from 2008 to 2010 in Texas at four sites: Cook Composites and Polymers, Houston plant; Freescale Semiconductor, Inc., Oak Hill plant; Owens Corning, Waxahachie plant; and Union Carbide (a subsidiary of Dow Chemical Company), Texas City, which had two plants participating. **The five plants certified as of April 7, 2011 saw verified energy performance improvements of 6.5% to 17% over a two to three year period.** To view presentations from the Texas pilot plants, check out the Texas Industrial Energy Management Forum April 7, 2011 presentations available at <http://texasiof.ces.utexas.edu/documents.htm>



First row, left to right: Paul Scheihing, DOE; Mark Krawczyk, Freescale Semi-conductor; Dave Hake, Dow Chemical; Kathey Ferland, Texas IOF; Gary Chastain, Owens Corning; Dub Taylor, SECO. Second row, left to right: Larry Hamilton, Dow Chemical; Patricio Cueva, CCP; and Robert Auerback, DEKRA.

The pilot program began in May 2008 as a partnership between DOE and Texas Industries of the Future, located at the University of Texas at Austin, with additional funding from the Texas State Energy Conservation Office. More information on SEP can be found at www.SuperiorEnergyPerformance.Net

ENERGY-EFFICIENCY OPPORTUNITY CALCULATOR FOR SMALL AND MEDIUM-SIZED MANUFACTURERS (VERSION 2) NOW AVAILABLE. The purpose of this spreadsheet-based tool and accompanying user's manual is to provide managers or engineers at small or medium-sized manufacturing plants with a list of questions and a calculator so that they can quickly assess whether they have opportunities for energy and cost savings at their facility. Case studies of energy project implementation consistently show that many facilities can achieve energy cost savings of up to 10-15% with little capital investment. The tool assists these manufacturers to find their 15% of energy cost savings. The calculator will estimate the potential savings based on plant inputs, for 16 energy cost reduction projects commonly identified at manufacturing plants. Projects range from reducing compressed air leaks to improving

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controls. In addition to the 16 energy efficiency projects included in Version 1 of the tool, Version 2 provides the following upgrades:

- A summary worksheet so that you can view savings across all projects.
- An “Other Projects” worksheet, so you can include savings from other projects not specified in the calculator.
- Options for selecting emission factors at the state or EGRID region level, or inputting emission factors specific to your local utility. The calculator can be used anywhere in the US.
- Simplified navigation.

To download the tool, go to <http://texasiof.ces.utexas.edu/tiof/sme2.asp> You will need Office 2007 or an equivalent software to use the spreadsheet.

NEW TOOL ON ASSESSING EFFICIENCY IN CHEMICAL PLANTS AND REFINERIES AT LOW RUN RATES AVAILABLE FROM TEXAS IOF. The chemical and refining industries are primarily continuous processes that are designed and optimized for maximum production. It is well known that during times of low demand these operations become less energy efficient. Due to historically low fuel prices and the uncertainty associated with the duration of low demand periods, energy efficiency at low demand operating conditions has not been given much consideration. This tool was developed for plant owners, operators and energy managers. The tool provides basic information to help plants improve their energy efficiency in general, with a special focus on low-cost opportunities that can be realized during periods of low demand. It is a collection of BestPractices from the DOE, general industry literature, academia and industry experts. Download it from the Texas IOF website at <http://texasiof.ces.utexas.edu/tools.htm>

UPCOMING TEXAS IOF EVENTS. Go to the Texas IOF website for program and registration information, unless otherwise specified.

- **US DOE Steam End User Workshop, May 24, 2011**
Nederland, Industrial Safety Training Council office. Registration open at page <http://TexasIOF.ces.utexas.edu> under “What’s New”.
- **Energy and the Environment: Meeting the Twin Challenges. June 9**
Texas IOF Track at the Texas Chemical Council Annual EHS Seminar
Galveston, Tx. Registration open at <http://ehs-seminar.com/index.php?page=attendeeRegistration>
- **Texas Industrial Energy Management Forum, October 6, 2011**
Galveston, Tx.
In conjunction with the AIChE Process Technology Conference. Submit one page abstracts to kferland@mail.utexas.edu by June 10.

Professional development hours are available for participation in all programs.

If you would like to receive this newsletter in your inbox once a month, go to <http://texasiof.ces.utexas.edu/tiof/tiofcontact.asp> to subscribe. Your information is never sold.

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