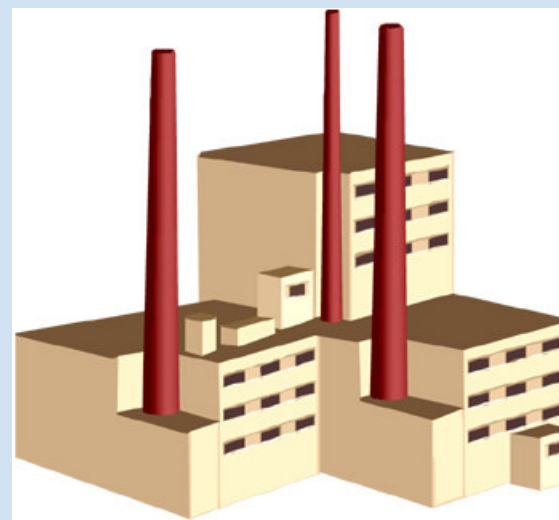


INDUSTRIAL PROGRAM PLANNING COMMITTEE

Exploring Energy Management as an Opportunity for Programs

Ted Jones
Sr. Program Manager
August 20, 2008
2:00-3:30 pm Eastern



Housekeeping

Web Portion

- ✓ Ensure that your pop-up blocker is turned off
- ✓ Minimize the number of applications running
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Audio Portion

- ✓ Dial *6 to Mute/UnMute
- ✓ Please ask questions by using the chat feature on your screen or waiting until the end of the presentation.
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Today's Agenda

Introduction

- Background on Energy Management as a Program Opportunity

Presentation

- BC Hydro's Sustainable Energy Management Program
Alex Adams, Sr. Engineer, Industrial Marketing for BC Hydro

Clarifying Questions

Discussion



Committee Background

- In 2007, CEE launched the **Industrial Program Planning Committee** to:
 - provide a forum for members to share program strategies in the industrial sector
 - tap into the collective experience of member industrial efficiency programs
 - identify and prioritize industrial opportunities & resources
 - recommend program strategies, as appropriate

Envisioned Exploring Savings Opportunities within Specific Industrial Sectors and Across Key Processes/Systems

	Food Processing – SIC 20	Pulp and Paper – SIC 26	Chemicals – SIC 28	Petroleum Refining – SIC 29	Stone, Clay & Glass – SIC 32	Primary Metals – SIC 33	Mining	Other – SIC 21-25, 30-31, 39	Water/Wastewater
Industrial Boilers									
Process Heating									
Process Cooling									
Machine Drive									
Electro-Chemical Processes									
Other									



Working Together, Advancing Efficiency

Initial Committee Findings

- Energy management was identified as an attractive cross-cutting opportunity for industrial programs
 - Availability of DOE, EPA and other supporting resources
 - Development of energy management standard through ISO and Plant Energy Efficiency Certification
 - Area of interest and activity for many programs
- Formed an Energy Management SubCommittee to explore the opportunity
 - Co-Chaired by Sergio Dias, NW Energy Efficiency Alliance
 - Met July 23, 2008 conference call

What is an Energy Management Program?

- **Working Definition:** A comprehensive program approach that enables selected industrial customers to take a systematic approach to continuous energy performance improvement by addressing to both the management and technical elements of energy management.
- Could encompass a broad spectrum of measures, including prescriptive measures for energy management systems, load management/demand response programs, motor management programs, energy management assessments, monitoring tracking and reporting programs and cost-sharing the salaries of dedicated energy managers for industrial customers.

Why is CEE Exploring Energy Management?

- Hypothesis: Programs that support building management infrastructure around energy management will enable greater participation in efficiency programs in terms of frequency and scale.

Energy Management Opportunity

Energy management could a be a good vehicle for efficiency programs to encourage customers to achieve deeper savings. How to identify which industrial customers are good candidates for energy management assistance is a key question.

- Patrice Lundquist, Snohomish County PUD

Are CEE Members Supporting Energy Management Today?

Yes, but in different ways and across a wide spectrum of program approaches and measures.

- BC Hydro
- NW Energy Efficiency Alliance
- Xcel Energy
- Ontario Power Administration
- NYSERDA
- Nevada Power
- MidAmerican
- Ohio Department of Development
- ComEd

Today's Presentation

BC Hydro's Sustainable
Energy Management Program

Alex Adams
Sr. Engineer, Industrial Marketing



Program Framework for Energy Management

1. Program Planning and Market Research
2. Elements of Program Design
3. Evaluation

Draft Program Framework for Energy Management

1. Program Planning and Market Research

A. Industrial Customer Profile

- Sector, size, and energy consumption (where, how, when)
- Management receptiveness to energy management
 - management and reporting systems currently in place
 - motivations – corporate, major customers, ISO, etc.
- Future viability

B. Program Design

- Program objectives
- Threshold criteria for program participation
- Degree of justifiable program support
- Target market segments

Draft Program Framework for Energy Management (cont.)

2. Elements of Program Design

A. Energy Management Assessments

- Screening for management and end-use opportunity

B. Building Management Infrastructure

- Starts with senior-level commitment (plant or corporate), aids in the development of energy management goals, policies and action plans; supports acquiring in-house management resources, works toward adoption of continuous energy improvement. Variety of approaches.

C. Education and Support

- Employee education, awareness, buy-in
- Technical training tied to customer's energy management goals/policies
- Positive re-enforcement – recognition, performance review, compensation

D. Systems Improvement (capital, installation, O&M)

E. Measurement and Reporting

- Establishing management performance metrics and a system to track them.



Draft Program Framework for Energy Management

3. Program Evaluation

- What are the incremental benefits?
- Identify incremental energy savings attributed to program support of energy management over and above savings achieved from supporting individual projects.

Energy Management Resources and Development Activities

EPA ENERGY STAR

- Energy Management Guidelines
- EPA Focus Industries
(Guidelines, EPIs, Matrices)

SEP Plant Energy Efficiency Certification

- ANSI-MSE Energy Management Standard (Georgia Tech)
- ASME System Assessment Standards
- M&V Protocols

DOE ITP

- Save Energy Now Initiative
- Assessments
 - Training
 - Software Tools, such as plant energy profiler tool (Quick PEP)

International

- ISO Energy Management Standard Development via US TAG

Consulting Companies

- Envinta One-2-Five



Potential Next Steps

- Learn more about program approaches to EM
 - Schedule another webinar featuring a program supporting energy management
 - Host an energy management workshop (multiple presentations)
- Develop a model energy management program for members via a recommended CEE Initiative?
- Support energy management development activities, such as:
 - ISO Energy Management Standard Development via US TAG
 - Testing of System Assessment Standards (4)
 - Hosting Plant Certification Pilots

Thank you.

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