CEE Industrial Motors & Motor Systems Committee

Working Together to Drive Savings in Industrial Motor Systems

CEE Winter Meeting

January 27, 2011

11:00-12:30 pm, PT

Today's Objectives

1. Collect lessons learned from member VFD programs
2. Identify resource(s) needed to enhance program effectiveness
3. Identify available data and analysis to support this effort

CEE M&MS Committee Profile

- Working with aggressive savings targets
- Value prescriptive approaches
  - Low cost to administer; mass market reach
  - Consistency beyond service territory
  - 1-200 hp motors programs achieve(d) savings
- Motors program strategy in transition
  - Recognize large savings available through systems and management approaches
  - Strategy to cost-effectively capture is unclear

M&MS Committee Focus Areas

Focus Area	Initial Approach	Work Product	Current Status
1-200 hp motors	- Explore potential for advanced spec. - Update brochure	- CEE Premium Eff. "Motors List" - Draft Guidebook	- Update 2x annually - Q2 2011 comp.
VFDs	Identify industries and applications w/largest achievable potential	TBD	Active development in 2011
Efficient Motor Rewind Programs	Actively monitor	Understand current program approach	Actively monitor
Motor Management Strategies	Utilize MDM resources, identify program opportunity, develop partnerships	Input to MDM sponsors. Explore current programs.	Actively monitor and engage with trade allies
Motor System Program Strategies	Actively monitor	Included Systems in Program Summary	Actively monitor
"Other" motors	Identify motors	Draft "matrix"	Actively monitor, update matrix

CEE Member VFD Programs

- Offered by approximately 53 members
- HVAC and process applications
- Centrifugal pump and fan systems
  - Heating, chilling, and circulating pumps
  - Supply, return, and exhaust fans
- Facilities/industries: warehouse, “light” and “heavy” industry, manufacturing
- Data requested: motor hp, operating hours

Building on the basics…

- ASD savings opportunity indicators:
  - Centrifugal pumps and fans
  - High torque start up load
  - Bypass loops, pressure releases, throttling valves, guide vanes
- Data/Criteria to identify program opportunity:
  - Baseline energy savings
  - Load shape and operating hours
  - Associated capital and operating costs
  - Technical and market potential

…to strengthen member programs.

- Identify specific industries and applications with greatest achievable savings potential: kWh, kW
  - *Program administrators use to ensure that these are effectively targeted within their service territory*
- Verify savings and associated risk factors, identify load profiles, market potential
  - *Enhance current program effectiveness*
  - *Identify opportunity for national program strategy:*
    - *prescriptive program (e.g. 1-xhp for y applications)*
    - *in-field performance metric for specific applications*
- Credible and consistent messaging
  - *Common platform strengthens message delivered to locally to customers, trade allies, and market*

Discussion Topics

A. Identify other “basics”
   - Specific industries: chemical, metal, paper
   - Specific applications: furnace fans
   - Market factors

B. Identify member needs to enhance program effectiveness that utilize CEE’s unique role

C. Identify resources to develop this resource
   - Market studies, member project data