Opportunities for Collaboration

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Consortium for Energy Efficiency
Today’s Outline

• Historical perspective on collaboration
• Why nationwide collaboration is important today
• Why collaboration is locally invaluable
• Current national collaborations
• Works in progress
Why collaborate? – Lessons Learned

**With other Efficiency Programs**

- Markets are larger than program areas
  - National markets can’t respond to Tower of Babel efficiency programs
- Aligning specifications and programming
  - A louder and clearer message to the market allows you to do more with less

**With other Market Participants**

- Tap the market participants’ understanding of their markets
  - They live or die by their knowledge of the market
- Leverage the self-interest of market participants to advance efficiency
  - Allows your limited resources to be more cost effective
Collaboration Layering

- Statewide programming
- Regional programming
- National alignment, promotion
- National brands and marketing platforms
- National programming
- National partnerships
Historical Efficiency Program Collaborations

- SERP – Super Efficient Refrigerator Program
- ENERGY STAR
- Residential Clothes Washers
- Premium Efficiency Motors
Types of Efficiency Program Collaborations at CEE

- Common Specifications of High Efficiency
- Common Brands for Energy Efficiency
  - ENERGY STAR
  - NEMA Premium
- CEE Initiatives and Industry Partnerships
Current CEE Specifications

- Residential Appliances
  - Clothes washers
  - Dishwashers
  - Room and Central AC
  - Refrigerators
- Gas Furnaces
- Traffic signals
- Commercial Clothes Washers
- Commercial Unitary AC

- Commercial Refrigeration
  - Solid door Reach-In Refrigerators
  - Solid door Reach-In Freezers
  - Glass door Reach-In Refrigerators
  - Ice Makers
- Motors
- Transformers
- T-8 Lighting Systems (F32T8)
National Brands Promoted by Efficiency Programs

[Logos: NEMA Premium, ENERGY STAR]
Current Efficiency Program Collaborations at CEE

- ENERGY STAR Survey
- CEE/ARI HVAC Directory
- Lighting for Tomorrow
- Motor Decisions Matter (MDM)
CEE member Sponsors

Alliant Energy
Bonneville Power Administration
KeySpan
Long Island Power Authority
MidAmerican Energy Company
Midwest Energy Efficiency Alliance
National Grid USA
Nevada Power
Northwest Energy Efficiency Alliance
NSTAR Electric & Gas
Sacramento Municipal Utility District
Southern California Edison
Unitil Corporation
Western Massachusetts Electric Co.
Wisconsin Dept. of Administration
Xcel Energy
CEE Directory of ARI Verified Equipment

Introduction
The CEE/ARI Verified Directory identifies a list of products (less than 65 Mbtuh) that the manufacturer represents as meeting energy performance tiers established by the Consortium for Energy Efficiency (CEE) as part of the Air Conditioner and Heat Pump Initiative and the High-Efficiency Commercial Air Conditioning Initiative. These tiers make use of tiers to differentiate equipment on the basis of energy performance with a higher tier representing a higher level of claimed performance. Additional information on these CEE Initiatives can be found at www.CEE1.org.

All products identified by the Directory are ENERGY STAR® qualified, a distinction granted by the US Environmental Protection Agency for energy efficient central air-conditioning and heat pump equipment. More information on ENERGY STAR can be found at www.energystar.gov.

CEE would like to acknowledge the following efficiency program administrators for providing financial support for the development of this database:

- Connecticut Light & Power/Northeast Utilities
- Energy Trust of Oregon
- National Grid USA
- Nevada Power and Sierra Pacific Power
- New Jersey Clean Energy Program
- New York State Energy Research and Development Authority (NYSERDA)
- NSTAR
- Pacific Gas and Electric (PG&E)
- San Diego Gas and Electric (SDGE)
- Sacramento Municipal Utility District (SMUD)
- Southern California Edison (SCE)
- TXU Electric Delivery
- United Illuminating (UI)
CEE Sponsors and Partners

- Bonneville Power Administration
- Cape Light Compact
- Efficiency Vermont
- Long Island Power Authority
- National Grid
- New Jersey Clean Energy
- NEEP
- Connecticut L&P
- Northwest Energy Efficiency Alliance
- NSTAR
- NYSERDA
- Pacific Gas & Electric
- Sacramento Municipal Utility District
- San Diego Gas & Electric
- Southern California Edison
- United Illuminating Co.
- Unitil Corporation
- Western Massachusetts Electric Co.
Grand Prize
“Salem” by
American Fluorescent

Second Place (3-way tie)

“Soli” by Lightolier
“Torch” by Forecast Lighting
“BetweeN 2 ShapeS” by Scandinavian Light

Together We Can Change National Markets
CEE member Sponsors
ComEd
National Grid
NEEP
Northeast Utilities
Northwest Energy Efficiency Alliance
NSTAR Electric & Gas
NYSERDA
Sacramento Municipal Utility District
Southern California Edison
Xcel Energy

Industry Sponsors-NEMA-EASA-Motor Companies

Together We Can Change National Markets
**The 1-2-3 Approach to Motor Management: Input Page**

### Company Information
- **Company Name:**
- **Contact:**
- **Location:**
- **Date Evaluated (mm/dd/yy):**

### Input: Representative Motor 1

<table>
<thead>
<tr>
<th>Field</th>
<th>Input</th>
<th>Required Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor ID</td>
<td>* Required *</td>
<td>Year motor installed</td>
</tr>
<tr>
<td>Manufacturer</td>
<td></td>
<td>Motor location</td>
</tr>
<tr>
<td>Model</td>
<td></td>
<td>Application</td>
</tr>
<tr>
<td>Size (hp)</td>
<td>* Required *</td>
<td>New Motor &amp; Best Practice Required Costs</td>
</tr>
<tr>
<td>RPM</td>
<td></td>
<td>Actual load (amps) (optional)</td>
</tr>
<tr>
<td>フレーム picks and type</td>
<td></td>
<td>Enclosure type Repairs/Rewinds</td>
</tr>
<tr>
<td>Voltage rating</td>
<td></td>
<td>Full-load efficiency(%)</td>
</tr>
<tr>
<td>Full-load amps</td>
<td></td>
<td>Quantity of similar motors</td>
</tr>
<tr>
<td>Cost of Electricity (note 1)</td>
<td>* Required *</td>
<td>Horsepower breakpoint (hp)</td>
</tr>
<tr>
<td>Desired Payback Period (yrs)</td>
<td></td>
<td>% of Full Load (if available)</td>
</tr>
<tr>
<td>Annual Energy Cost</td>
<td></td>
<td>Capital Investment N/A</td>
</tr>
<tr>
<td>Incremental Investment Cost</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Annual Energy Savings</td>
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<td>N/A</td>
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<tr>
<td>EPAct Motor Cost</td>
<td>* Required *</td>
<td>N/A</td>
</tr>
<tr>
<td>EPAct Motor Efficiency</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Best Practice Rewind Cost</td>
<td>* Required *</td>
<td>N/A</td>
</tr>
<tr>
<td>Best Practice Efficiency</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Current Costs (Base Case)</td>
<td></td>
<td>New Motor &amp; Best Practice Required Costs</td>
</tr>
<tr>
<td>Act Now</td>
<td></td>
<td>Replace with NEMA Premium</td>
</tr>
<tr>
<td>Act Upon Motor Failure</td>
<td></td>
<td>Replace with NEMA Premium</td>
</tr>
</tbody>
</table>

### Results: Representative Motor 1

<table>
<thead>
<tr>
<th>Field</th>
<th>Act Now</th>
<th>Act Upon Motor Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Costs (Base Case)</td>
<td>Replace Immediately with NEMA Premium</td>
<td>Replace with EPAct</td>
</tr>
<tr>
<td>Required With (EPAct)</td>
<td>Replace Best Practice with NEMA Premium</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Decision: Representative Motor 1

- **Act Now**
- **Act Upon Motor Failure**

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**Deliver a Simple Message**

1. **Energy and Non-Energy Benefits**
2. **Leverage Allies**
3. **Customer**

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**Together We Can Change National Markets**
Current Collaborations

- ENERGY STAR – our marketing platform
- Raising Appliance Efficiency
- Promoting efficient residential lighting
- Minimizing Air conditioners’ peak load
- NEMA Premium motors
- Motor Management Planning
Collaborations in Progress

- Gas furnace air handlers
- Next water-energy national initiative
- Drive systems
- Residential HVAC Quality Installation (QI)
- Water and Wastewater Facility Efficiency
- Commercial Lighting
- Commercial building management

Together We Can Change National Markets
Thank you

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www.cee1.org