# INFORMAL SESSIONS

### WEDNESDAY 3:00 PM - 4:00 PM

#### Permanent Magnet Motors with Extremely High Efficiency – Beyond Ultra-Premiums/IES Levels

Keith W. Klontz, Advanced MotorTech LLC; kklontz@advancedmotortech.com

The session will discuss a new class of extremely high efficiency motors by using permanent magnet AC motors. The focus will be on motors suitable for comparison to NEMA's and IEC's efficiency standards, and beyond, especially motors representative of industrial-sized motors in wide use. Efficiency comparison with and without additional motor losses due to the variable frequency drive will be discussed. The presenter will discuss the prospects of such motors becoming available for abundant use in industry and have significant impact on the industrial motor market.

## Facility Managers Talk about Energy Management: Results from a Multiyear National Pulse Survey

Julia Vetromile, DNV GL; Julia.Vetromile@dnvgl.com

Energy efficiency potential and strategy studies show that the commercial and industrial sectors continues to offer enormous opportunities for cost-effective energy efficiency improvements. However, in many regions, the low-hanging fruit of simple technology change-outs and relatively easy targets offered by the largest customers have been saturated. Greater opportunities can be tapped by improving on-going energy management processes and linking them to long-term capital improvement efforts. An ongoing national survey of commercial and industrial facilities and managers probes respondents on their current energy management efforts, goal setting, tracking progress towards goals, implementation of energy efficiency measures, and external assistance sought to implement retrofits and achieve goals. The most recent round of this research (in 2016) also includes findings on resilience efforts undertaken by this segment. The results we will discuss shed light on the value placed on energy efficiency at the facility and central corporate level, as well as the perception of respondents on how energy efficiency efforts relate to other business success measures, such as employee retention, operations efficiency, and their financial bottom line. The survey has been structured so that responses can be compared across a number of customer dimensions, including size, industry, and level of energy efficiency program activity in their locations. The study results can provide a basis for a lively action session on the current maturity of energy management among facility managers.

#### **Improving Analysis and Modeling through Collaboration**

Elizabeth Sendich, US EIA; Elizabeth.Sendich@eia.gov

The U.S. Energy Information Administration (EIA) is in the midst of developing and expanding its models of industrial sector production outside of the United States. While EIA's equivalent domestic models are well developed and provide great detail on industrial sector production and energy consumption across processes, this is not yet true for the international side. This session will explore options—and solicit feedback on—improvements for the international side, including (i) the best ways to add detail by country when data may be insufficient; (ii) means to ensure industry production forecasts are consistent between the U.S. and international models; and (iii) ways to integrate the U.S. and international models.

#### **Industrial Opt-Out Strategy Session**

Alexandra Rekkas, David Gardiner & Associates; Alexandra@dgardiner.com

Industrial energy efficiency programs offer tremendous benefits – including energy savings, increased competitiveness, and reliability. But some states allow their largest customers to opt out of the small payments that all ratepayers provide on their monthly bill to support utility investments in efficiency. When large energy consumers stop participating, both the utility and their customers suffer the consequences of using and paying for more energy than necessary. In 2017, there have been several opt-out policy threats in states across the country, including Pennsylvania, Ohio, Mississippi, and Louisiana. This session will provide a space for policy advocates and industrial companies to discuss their experiences working to help prevent and fight opt-out provisions, as well as other state-level policies that threaten energy efficiency. What approaches have been effective in the past? What approaches have not been as successful? What can we learn from these experiences? The output of the discussion will be a list of ideas on how we can address upcoming threats to utility energy efficiency programs in other states across the country.

## **WEDNESDAY 4:00 PM – 5:00 PM**

New Dataset Links IAC Assessments to Census Bureau Manufacturing Data: Now that we have it, what can (should) we do with it? Gale Boyd, Duke University (gale.boyd@duke.edu)

The US Department of Energy Industrial Assessment Center (IAC) program has assembled a wealth of data on no-cost energy assessments provided to SME manufacturers by university based centers, but the database does not include information about participants after the assessment or on non-participants, limiting its usefulness for further analysis. The Duke University Energy Initiative has created a new linked dataset using the public IAC and non-public data at the Census Bureau. Based on the linking approach, an analysis for SME that received an assessment was done; plants that received an assessment were initially less efficient than peers, but improved their performance over time, relative to industry peers that did not receive assessments. While the creation of the dataset was a project in itself, it is only an ends to a means. This informal session is intended to generate ideas on next steps to expand the simple analysis that has been conducted so far. Dr. Boyd will briefly describe the current status of the project and then brainstorm with participants in the session on what types of useful analysis could be done with this new data resource.