

# AGENDA

**8:00 AM - Registration and Continental Breakfast**

**8:30 AM to 12:00 PM - Morning Session**

- Overview of motor systems
- Motor applications
- Motor efficiency – how it is measured, classified and affected by environment and load
- Motor operation
  - Load type, control and variation
  - Operating environment
  - Power quality
- Motor management basics
- Electronic adjustable speed drives
- Power factor correction

**12:00 PM to 1:00 PM - Lunch (provided)**

**1:00 PM to 4:30 PM - Afternoon Session**

- Motor system maintenance
  - Managing maintenance
  - Failures and their causes
  - Avoiding failures with proper installation, setup and preventative maintenance
  - Predictive maintenance to foresee and forestall failures
- Motor rebuilding
  - Steps in motor repair and rewinding
  - Repair or rewind actions that can affect the energy-efficiency of the motor
  - Guidelines to use in specifying motor repair and rebuilding
- Guidelines and methods to evaluate repairing versus replacing motors
- MotorMaster+
  - Overview of Software Tool Capabilities
  - Motor Selection Decisions

## **Motor Systems Management Workshop:**

Motors use more than half of all electricity. Their inefficiencies contribute significantly to expensive peak demand. Efficient motors, optimized controls, improved component sizing and repair, better transmission hardware, and more comprehensive motor monitoring and maintenance could cut U.S. electricity demand by 27% to 40%, save motor users and utilities billions of dollars, reduce pollutant emissions, and enhance productivity. This seminar is designed for engineers and managers of facilities that use motors, including manufacturing firms, local governments, water and wastewater authorities, hospitals and schools.

Workshop instructor Gilbert McCoy is an energy expert with the U.S. Department of Energy's Office of Industrial Technologies Clearinghouse and the Washington State University Energy Program. For the past several years, Gil's focus has been on industrial energy, including motors, steam, and compressed air systems. Gil teaches workshops and has written dozens of publications, including Energy Management for Motor-Driven Systems and the Energy Efficient Electric Motor Selection handbook. He is the designer of MotorMaster+ software, is currently updating AirMaster+, and is developing a new International Motor Selection and Savings Analysis software tool. He has also worked with institutional energy systems, peak load management, cogeneration assessments, and renewable resource assessments.

Gil has a Bachelors degree in Metallurgical Engineering from the University of Washington and a Masters degree in Engineering from the University of California at Berkeley.

**Participants will be eligible for an Energy Use Reduction Grant from the PA Department of Environmental Protection upon completion of this workshop. Visit [www.depweb.state.pa.us](http://www.depweb.state.pa.us), keyword Energy Use Reduction Grant, for further information.**

## **Managing Energy as a Resource:**

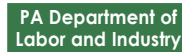
Plan to also attend these other technical training workshops to help you manage your energy costs. They are being provided by SEDA-COG's Energy Resource Center and CPWDC's Advanced Manufacturing Industry Partnership.

- **What to Expect When Energy Caps Come Off / How to Negotiate Energy Rates – May, 2009**
- **Procuring and Working with an ESCO (Energy Service Company) – June, 2009**

Sponsored by:



With funding from:



## **Seminar Costs and Registration – Three ways to register:**

Pre-registration is required. Seating is limited. **The registration fee is \$100.00 per person. (Local government employees will receive a \$50.00 discount.)**

- Register and pay online at [www.seda-cog.org/energy](http://www.seda-cog.org/energy)
- Fax this completed form to 570-524-9190, Attention: Jess Scott
- Mail a completed registration form and check (made payable to Energy Resource Center) to the following address:  
**Jess Scott, SEDA-Council of Governments, 201 Furnace Road, Lewisburg, PA 17837**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Account Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Amount to be charged: \$ \_\_\_\_\_

Check here if you are a manufacturer.

Questions? Call Megan Epler 570-524-4491

# One Day Workshop

**March 25, 2009**

**8:00 AM to 4:30 PM**

Pre-registration is required!

Seating is limited.

**During this one-day workshop, you will learn how to:**

- Evaluate and select optimum motors for different industrial applications.
- Record motor tracking inventory and maintenance actions.
- Develop and use guidelines for motor repair and rewind.
- Manage power transmission and driven loads as they relate to motor operation and use.
- Establish an effective motor systems maintenance plan.
- Use MotorMaster+ software to evaluate motor purchase & repair decisions.
- Locate resources for additional technical support on motor systems.



# Motor Systems Management Workshop

Union County Government Center  
155 North 15th Street  
Lewisburg, PA 17837

**March 25, 2009**

**8:00 am - 4:30 pm**

