

# Pumping System Energy Efficiency Workshop (1 day) and PSAT Qualified Specialist Training/Certification (2-1/2 days)

Calera, AL (Ala. Power Co. GSC), May 12-13-14, 2015

Through special arrangement with the instructors, a 1 day workshop on pump system operation and efficiency is available as part of a 2.5 day PSAT Qualified Specialists training and certification. You may register for the 1 day session alone (\$50) or for the full 2.5 day certification course (\$150).

**1 day workshop.** Learn more about pump system performance characteristics. This course discusses performance problems encountered in everyday applications. The workshop covers practical issues involved in field measurements of fluid and electrical data and presents the PSAT software used to assess the performance of pump systems. Learn how the software functions, what data are required, how to use the software when measured data are not available, and what the assessment results mean.

**2.5 day certification.** Earn recognition as a Qualified Pump System Specialist in the use of DOE's PSAT software by attending this qualification workshop. Qualified PSAT Specialists must successfully complete classroom and practical training, pass a rigorous exam, and demonstrate their ability to use the PSAT software tool.

Specialists apply the PSAT tool to help their plant or industrial customers identify ways to improve pumping system efficiency. The U.S. DOE recognizes these industry professionals as Qualified Specialists, but does not specifically endorse any individual or company.



PSAT helps users assess energy savings opportunities in pumping systems, relying on field measurements of flow rate, head, and either motor power or current to perform the assessment. Using algorithms from Hydraulic Institute standards and motor performance characteristics from DOE's MotorMaster+ database, PSAT quickly estimates existing pump and motor efficiency and calculates the potential energy and cost savings of a system optimized to work at peak efficiency.

Demand is high for the software and training, and continues to grow. The qualifying workshops prepare professionals with extensive experience in pumping systems to use PSAT in their system assessments. Participants learn:

- ✓ How to accurately acquire input data for PSAT
- ✓ How to prescreen pumping systems to select the "vital" systems for further review
- ✓ How to use the PSAT software and ValveTool software
- ✓ The difference between measurements and requirements
- ✓ The importance of a system perspective

**Prerequisites.** By special arrangement with the instructors, the 1-day prerequisite Pump System Assessment course will be covered on the first day of the training. No prerequisite is required.

**Costs:** 1 day workshop: \$50 Full 2.5 day PSAT training: \$150

**Registration.** Register online at [http://iac.ua.edu/pumps\\_training.html](http://iac.ua.edu/pumps_training.html)

## About the instructors:

*Don Casada* is Consulting Engineer with Diagnostic Solutions, LLC. He specializes in measurement and evaluation of industrial and municipal pumping systems for energy, productivity, and reliability improvements. He is the author and programmer of the Pumping System Assessment Tool (PSAT), and developer of the DOE PSAT end-user and Qualified Specialist training curricula.

*Daryl Cox* has been a member of the research staff at the Oak Ridge National Laboratory (ORNL) since 1990. He has been heavily involved in the analysis of failure characteristics for fluid system components used in commercial nuclear power plants. He manages and operates a variety of flow test facilities supporting research and energy optimization efforts for industrial pumping systems at ORNL.



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