



Energy Managers Workshop

Tuesday, May 20, 2014

**The order of the presentations is subject to change.*

“Building an Energy Team at a Site”

Fred Schoeneborn, FCS Consulting Services Inc.



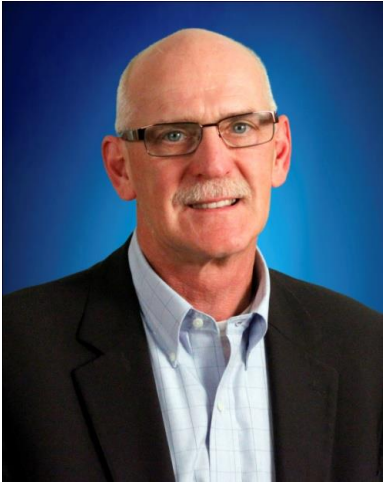
Fred C. Schoeneborn, CEM, CEA is president of FCS Consulting Services, Inc. During his 38 year career with Mobil Oil Corporation, as Global Energy Manager, he created and managed a Global energy management program. Since 2000 Fred has worked as an independent consultant assisting Fortune 100 companies establish their energy programs. Fred supports the EPA Energy Star program by assisting Energy Star partners in improving their energy efficiency. In addition, he conducts In-Plant Training - Implementation workshops for the DOE Oak Ridge National Lab. The ACEEE (American Council for Energy-Efficient Economy) recognized Fred as a “Champion of Energy Efficiency.”

Topic Discussion

Great Energy Programs have a dedicated energy person, who owns energy consumption, at a site. With this position comes the need to build a team that can reach every person at a site and to assist the site energy manager spread the Energy Efficiency word.

Fred will provide suggestions how to develop a team at the site. As a guide he will use the ENERGY STAR - Teaming Guide.

“Identifying and quantifying opportunities in industrial plants”



Walter F. Brockway
Manager of Global Energy Efficiency, Alcoa, Inc.

Walt Brockway is the Manager of Global Energy Efficiency for Alcoa, Inc. located in Knoxville TN where he is responsible for coordinating efforts within all Alcoa businesses and regions to improve energy intensity. He has held various energy and power roles at Alcoa for the past 30 years including:

Power engineer, Power Supervisor, Power and Engineering Manager at the Alcoa Massena Operations.

As Corporate Energy Manager Walt was responsible for facility electricity supply arrangements. In this role he started the Alcoa energy efficiency network which is today one of the premier industrial programs.

As Manager of hydroelectric operations for Alcoa he managed operating assets, modernization of the assets and relicensing of two FERC hydroelectric projects.

As Manager of Energy Regulatory Affairs Walt was responsible for oversight of energy affairs at the federal, regional and state levels for one of the largest electricity consumers in the world.

Prior to joining Alcoa he was employed by General Electric’s Nuclear Energy Business Operations and Niagara Mohawk Power Corp.

Topic Discussion

We all know there are opportunities for energy savings in industrial plants but how do we identify, quantify and validate them?

There are a variety of techniques including assessments, energy kaizens, and standard practices. Each brings value in a different manner. A key to discovering opportunity is involvement at the plant level from a diverse group such as maintenance and engineering, finance, lean manufacturing, procurement, etc.

After identifying an opportunity it is critical to place a true value on them and an action plan to complete them.

This session will describe the techniques and what has been successful in an industrial setting.

“Energy Data Capture and Reporting that Drives Strategic Decisions – Case Study from a Major Manufacturer”

And

“Integrated Industrial Site Planning”



Peter Garforth, Garforth International llc.

Peter Garforth leads a specialist consultancy based in Toledo, Ohio, and Brussels, Belgium. He advises major companies, cities, communities, property developers and policy makers on developing competitive approaches that reduce the economic and environmental impact of energy use. His specialty has been in profitable business development implementing energy productivity. He effectively strives to ensure that any recommended investment approach has a sound business basis and reflects the larger movements in the energy market. Peter is well connected in the energy productivity business and regulatory community around the world. Peter has long been interested in energy productivity as a profitable business opportunity and has a considerable track record establishing successful businesses and programs in the United States, Western and Eastern Europe, Indonesia, India, Brazil, China and elsewhere. He has held senior management roles around the world at Honeywell, Landis & Gyr (now Siemens) and, most recently was Vice-President of Strategy for Owens Corning, the largest US manufacturer of insulation and other materials.

Topic Discussions

Energy Data Capture and Reporting that Drives Strategic Decisions – Case Study from a Major Manufacturer

A prerequisite of any good corporate energy management program is accurate and timely energy information meaningfully presented. Energy reporting should be credible and reported in such a way that various audiences in the company can make tactical and strategic decisions around energy. This session describes how a major manufacturer evolved to have a comprehensive energy data capture and reporting system that is simple, low cost, relevant and credible. It also explores the challenges of reporting overall energy productivity progress in a complex manufacturer with multiple products, processes and locations. It suggests an approach to overall energy productivity reporting that meets the needs of senior management and stakeholder communication.

Integrated Industrial Site Planning

"Measuring Non-Energy Benefits of Industrial Energy Efficiency: The Current Frontier?"



Christopher Russell, Energy Pathfinder Management Consulting, LLC

Christopher Russell is a nationally-recognized expert in the planning, justification, and evaluation of business-sector energy cost control initiatives. He served as the politically-appointed energy manager for the Howard County, Maryland government. He has documented and evaluated energy management practices at dozens of facilities, and has advised corporations, utilities, trade associations, and government agencies in the planning and promotion of industrial energy programs. His reader-friendly publications include "The Industrial Energy Harvest" (2008) and "North American Energy Audit Program Best Practices" (2010). He is recognized by the Association of Energy Engineers both as a Certified Energy Manager and as a Carbon Reduction Manager. He is a capstone advisor to graduate students in the Georgetown University School of Continuing Studies (Real Estate). Christopher is on the Advisory Board for the Texas A&M Industrial Energy Technology Conference. He holds an MBA and a Master of Arts from the University of Maryland, and a Bachelor of Arts from McGill University of Canada. For more information: www.energypathfinder.com.

Topic Discussion

This presentation will address the challenge of making energy efficiency proposals more compelling. Much has been said in recent years about top management support, but that approach has practical limits. Energy efficiency is still widely perceived by many as a "pill to be swallowed." An alternative perspective performs philosophical jiu jitsu-- leveraging the financial weight of inaction against industrials who resist the positive business outcomes of energy efficiency. What I offer is not survey research, but rather a reasoned opinion that is the product of past research.

“Industrial Opportunities from Federal GHG Emissions Regulations”



Dr. R. Neal Elliott, American Council for an Energy Efficient Economy

Neal Elliott is the Associate Director for Research of the American Council for an Energy-Efficient Economy (ACEEE), coordinating ACEEE's overall research efforts. Elliott has been with ACEEE since 1993, and is an internationally recognized expert and author on energy efficiency programs and policies, industrial energy policy, combined heat and power, and a frequent speaker at domestic and international conferences.

Prior to joining ACEEE, Elliott was an adjunct associate professor of Civil and Environmental Engineering at Duke University and Senior Engineering Project Manager at the N. C. Alternative Energy Corp. (now Advanced Energy). Elliott received B.S. and M.S. degrees in Mechanical Engineering from North Carolina State University, and was a Dean's Fellow and received a Ph.D. from Duke University. He is a registered Professional Engineer in North Carolina and has six patents. Elliott serves on the Strategic Advisory Group for the Institute for Industrial Productivity and the Board of the Industrial Energy Technology Conference.

Topic Discussion

Following the Supreme Court ruling that green-house gases (GHG) are a criteria pollutant that EPA should regulate, the EPA is developing a rule for electric utility emissions, which is likely to include end-use energy efficiency and CHP as allowable offset a state implementation plan (SIP). This rule could increase the cost of electricity, particularly for states that depend upon coal for electric generation. Depending upon how states choose to proceed with their SIP, a rule could create important opportunities for industrial customers to provide GHG reductions to utilities at a fraction of the cost of fuel switching or emissions controls, containing electricity price increases while also creating a potential for a new source of cash-flow to customers from the sale of these reductions.

This presentation will: review the current state of regulatory proceeding; explore potential implementation paths; present estimates of the available energy efficiency and CHP reductions; and discuss how industrial facilities can position themselves to minimize the risk and maximize their potential to benefit.

“Control Boiler MACT Emissions Through Work Practices and Energy Management”



James E. Robinson, DES Global, LLC

James E. Robinson PE, P.Eng., CEM, CEP is a founding member and Principal Project Engineer at DES Global, LLC. He is responsible for projects in the US and Canada with over 35 years of experience in the design, construction and automation of industrial powerhouses. During that time he had various design, construction, and startup responsibilities at Catalytic Engineering and Construction, Honeywell PMSD, B&W, Gotaverken, Kvaerner, and Siemens Westinghouse. The objective of his work has been the application of advanced controls and in particular Energy Management and Reporting Systems (EMRS) to reduce facility operating cost, reduce emissions and improve overall system reliability. In addition he is a board member of IETC and the Pennsylvania Smart Energy Initiative (SEI).

Topic Discussion

Boiler MACT requires a onetime energy assessment of the facility utility system supplied from the affected steam sources or adoption of an ISO 50001 program. This session will discuss the updating of existing assessments and executing new assessments to Boiler MACT compliance. Special attention will be paid to benchmarking and the energy efficiency credits possible to offset emission limits.

“The Gulf Coast Industrial Investment Renaissance and New CHP Development Opportunities”



David E. Dismukes, Ph.D.

**Professor, Associate Executive
Director &
Director of Policy Analysis,
Center for Energy Studies,
Louisiana State University,
Baton Rouge, Louisiana**

David E. Dismukes is a Professor, Associate Executive Director, and Director of Policy Analysis at the Center for Energy Studies, Louisiana State University. His research interests are related to the analysis of economic, statistical, and public policy issues in energy and regulated industries. Over the past 26 years, he has worked in consulting, academia, and government service.

David has been on the LSU faculty for close to twenty years and has led a number of the Center’s research efforts on topics associated with most all aspects of the energy industry. He speaks regularly to professional, trade, and civic associations on important energy issues, trends, and topics.

Dr. Dismukes received his M.S. and Ph.D. in economics from the Florida State University.

Topic Discussion

Louisiana has a long history with combined heat and power (“CHP”) applications dating back to even before the Public Utilities Regulatory Policies Act of 1978 (“PURPA”). Most of the state’s CHP applications have been at large refinery or petrochemical facilities and have traditionally rivaled utility generation capacity in size. While the State saw a second post-PURPA surge in CHP applications during the 1998-2001 merchant power era, CHP development in Louisiana has been relatively quiet since that time. Low and stable natural gas prices, however, are beginning to change Louisiana CHP market dynamics and may lead to a new era of CHP capacity development.

This presentation summarizes the past and current state of Louisiana CHP development and provides the results of a recent study estimating technical and economic cost-effectiveness potentials

for new CHP at existing industrial locations. Additionally, this paper summarizes the recent surge in industrial project announcements in Louisiana and explores the impact that this new industrial development is likely to have on regional power and gas markets as well as future CHP development potentials. Lastly, a number of policy issues associated with recent moves to expand the scope of the region's transmission system and bulk power markets, and the impacts this expansion has for all natural gas-fired generation, including natural gas-backed CHP, is also explored.