



EUCI Presents its 4th Annual Conference on:
**USING OMS/AMI/SCADA DATA
TO MAKE RELIABILITY BUSINESS
DECISIONS**

May 20-21, 2010

And a Workshop on:

**OUTAGE MANAGEMENT
SYSTEM DEVELOPMENT**

May 19, 2010

Sheraton Raleigh Hotel • Raleigh, NC



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EUCI is authorized by IACET to offer 1.0 CEUs for this conference and 0.5 CEUs for the workshop.

OUTAGE MANAGEMENT SYSTEM DEVELOPMENT WORKSHOP

May 19, 2010

OVERVIEW

An Outage Management System (OMS) will certainly help utilities identify and restore outages sooner and more efficiently. However, an OMS can be so much more than just a tool for the utilities Operations Department. Customer Service, Planning, Asset Management, Engineering and Regulatory Affairs departments can all find significant value from information collected in the OMS database.

This EUCI workshop will be a comprehensive educational experience on all things OMS. It will consist of an in-depth discussion on developing, building, maintaining and improving OMS. Managers of OMS systems at two major utilities, one small and one large, will be facilitating this discussion. Through this discussion, attendees will have the opportunity to learn about:

- Justifying OMS purchases and upgrades
- Managing expectations of management and customers
- Improving existing processes and evaluating future needs
- Dealing with software and hardware issues, platforms and integration
- Developing efficient communications between departments, customers, media and regulators
- Using OMS to measure and improve reliability
- Dispatching linemen and providing them with necessary information in the field
- Measuring customer service improvements
- Managing assets through investment and component control
- Judging different approaches for large and small utilities
- Differing uses of OMS for routine vs. major outages

To further bridge the gap between the multiple departments involved in the different facets of these systems, specific presentations have been designed to address the business benefits of moving data to useful information for customer service, asset managers and reliability engineers.

WHO SHOULD ATTEND:

- Transmission/Distribution Management
- Engineers and Planners
- Reliability Directors
- Customer Service Directors
- Asset Managers
- Procurement Managers
- Operations Supervisors
- Regulators and Regulatory Staff
- Information Technology Professionals

ABOUT THE FACILITATORS

J. David Lankutis, PE, Manager, Planning/Reliability, Electric Utilities Group, Black Hills Corporation

David Lankutis, PE has 37 years of diverse experience in the electric utility industry. He has worked as an employee of and consultant to investor-owned, cooperative and municipal utilities in the United States and overseas. He is currently Manager of Planning and Reliability for Black Hills Power in South Dakota. He managed the development of the Outage Management System for BHP that went live in 2003. He is the past Chairman of the IEEE Rural Electric Power Committee.

Glenn C. Lampley, Project Manager – Smart Grid, Progress Energy Carolinas

Glenn Lampley, PE, has 35 years of electric utility experience with Progress Energy Carolinas. He has worked in the areas of Transmission Planning, Customer Service, Rates & Service Practices, Marketing, Distribution Engineering, Distribution Reliability, and Distribution Control Center/Grid Management. While serving as Lead Engineer in Distribution Reliability, he played an integral role in integrating fault locating into the Outage Management System. Glenn is currently the Project Manager for the Smart Grid-Distribution System Demand Response Program at Progress Energy.

USING OMS/AMI/SCADA DATA TO MAKE RELIABILITY BUSINESS DECISIONS

May 20-21, 2010

WORKSHOP AGENDA:

WEDNESDAY, MAY 19, 2010

Registration and Continental Breakfast: 8:00 – 8:30 a.m.

Course Timing: 8:30 a.m. – 3:30 p.m.

Vendor Demonstrations: 3:30 – 5:30 p.m.

Justifying the OMS Purchase

- Identifying value for all stakeholders
- Customer/media/regulatory communications
- Planning and asset management
- Operations supervisors and linemen
- Reliability engineers
- Cost/benefit analysis

Writing the Specifications and Contract

- Evaluating compatibility with and connection to existing (or to be purchased) systems including:
 - Geographic Information (GIS)
 - Supervisory Control (SCADA)
 - Smart Meters (AMI)
 - Customer Information (CIS)
 - Interactive Voice Response (IVR)
 - Meter Data Management (MDM)
- Review of NIST Smart Grid Interoperability Standards
 - When Congress passed the Energy Independence and Security Act (EISA) in 2007, it provided the National Institute of Standards and Technology (NIST) with the “primary responsibility to coordinate development of a framework that includes protocols and model standards for information management to achieve interoperability of Smart Grid devices and systems...” As NIST moves forward with this initiative it will impact hundreds of standards in use today. The focus of NIST will be centered around Demand Response and Consumer Energy Efficiency, Wide Area Situational Awareness, Electric Storage, Electric Transportation, Advanced Metering, Infrastructure, Distribution Grid Management, Cyber Security, and Network Communications. This presentation will discuss at a high level, the impact that the NIST Interoperability Standards will have on the integration of OMS, AMI, and SCADA systems that are in use by electric utilities today. The evolution of CIM and MultiSpeak standards will be addressed.
 - Glenn C. Lampley, Manager - Smart Grid, Progress Energy Carolinas
 - Greg Robinson, President, Xtensible Solutions
 - Andrew Owens, Plexus Research
- Hear from a utility who has recently chosen a vendor
 - Mathew Wells, Colorado Springs Utilities

Building and Developing

- Determine realistic size of database
- Manage expectations of:
 - Management and regulators
 - End users
 - Customers
- Change management strategies
- Selecting pilot project to demonstrate deliverables to all stakeholders ASAP

Maintaining the Database

- Data scrubbing techniques
- Temporary switching
- New installations
- Frequency of updating the database

Using OMS/IVR/AMI/SCADA/Web/Social Networking Technology to Provide Superior Customer Service

Studies have proven that higher customer satisfaction translates into improved financial performance for utilities. This will be an overview of how several utilities have leveraged technology to allow customers to report outages and get status reports quickly and easily.

Using Technology to Provide Superior Customer Service

Living in the southeast, storms are an integral part of everyday life. Customers may not remember that single outage that occurred last month but they do remember that last major storm that knocked out power for two weeks. North Carolina's weather goes from ice storm in the winter, thunder storms in the spring and summer, to hurricanes in late summer/early fall. Customer surveys have revealed that when the lights go out, customers want to know what happened and when they can expect the power to return. Progress Energy Carolinas has developed a comprehensive storm response plan that includes communicating with customers, emergency management, community leaders, and the media. These communication plans would not be possible if it were not for the OMS systems providing outage data to operation managers and the control center. In response to customer requests, PEC has implemented several tools on its web site where customers can not only learn about preparing for storms but can also track the outages they cause. New mapping systems now provide outages down to the street level and provide reliable estimates for when service will be restored. These and other tools will be discussed showing how technology can be used to improve customer satisfaction and provide superior service.

THE BUSINESS DISTRIBUTION RELIABILITY ENGINEERING AND DATA ANALYSIS

May 20-21, 2010

OVERVIEW

OMS, SCADA, GIS and AMI systems are capable of generating a monumental amount of data. This conference will review various methods that are being used to assemble this data strategically in order to make the business case for distribution reliability expenditures. It will be an opportunity for utility analysts to interact with representatives of vendors of these systems and discuss how to improve and standardize the reporting engines they provide. There will be discussion on developing meaningful measures of reliability for incentive programs.

PROGRAM AGENDA

THURSDAY, MAY 20, 2010

8:00 – 8:30 a.m.

Registration and Continental Breakfast

Conference Moderators:

- J. David Lankutis, Manager of Planning/Reliability, Electric Utilities Group, Black Hills Corporation
- Glenn Lampley, Project Manager - Smart Grid, Progress Energy Carolinas

8:30 – 8:45 a.m.

Introduction and Welcoming Remarks

- Robert A. Sipes, P.E., Vice President – Distribution, Progress Energy Carolinas

8:45 – 9:45 a.m.

Outage Reporting for Decision Making

PECO has achieved steady improvement in reliability of electric service to its customers in Philadelphia and adjacent counties over the last decade with no increase in electric rates. While the fundamentals of reliability analysis and reporting have not changed since earlier times, the interruption records created by the outage management system can now be combined with information from other systems to create reports customized to the needs of decision makers in operations, design, planning, maintenance and management. This presentation will show how reliability reports are used at PECO and point out the keys to making reports that can lead to decisions. Examples:

- Prioritization of individual corrective maintenance and vegetation management tasks based on likely customer impacts.
- Composite scorecards to determine worst performing circuits.
- Restoration performance around the clock.
- Measures of effectiveness of distribution automation.
- Decomposition of SAIFI into metrics for exposure, system health, and system reaction to outages.

- Joe Viglietta, Senior Engineer, Distribution Reliability, PECO Energy Company

9:45 – 10:45 a.m.

Using Outage Management Data to Improve Reliability: Tools, Techniques and Methods

PacifiCorp has leveraged data generated by its automated outage management system. It began its development with an elementary database and geospatially-based pair of applications and as it has evolved, continues to enhance functionality of these tools to improve reliability across the six states it serves. These approaches have led to improvements in the data fed by the automated outage management system and have been instrumental in corporate staff, regional engineers and area management improving reliability of the electric system.

- Heide Caswell, Director-Network Performance, Pacific Power

10:45 – 11:15 a.m.

Networking Break

PROGRAM AGENDA

THURSDAY, MAY 20, 2010

11:15 a.m. – 12:15 p.m. Closing the Crevice: Achieving Valuable Maintenance Analyses by Linking Corporate Data with Maintenance Analysis Software

There is currently a gap or crevice between corporate databases and powerful maintenance analysis software, such as Exact. This crevice has impeded the development of usable maintenance decision models. The CMMS has not ventured into this area, and general-purpose data warehouses are ill-equipped to handle the analysis and the complex requirements of maintenance and reliability. This presentation describes a flexible technique called LRCM (Living RCM), developed with the needs of reliability analysts in mind. LRCM enables the automated filtering of large volumes of work and monitoring data in order to produce the "Events" and "Inspections" tables of the quality and form required for analysis, modeling and processing by an Exact decision agent. The process will be described using examples from Hydro One's experience in the challenging area of data management and decision making.

– Norm Hann, Performance Manager, Hydro One

12:15 – 1:15 p.m. Group Luncheon

1:15 – 2:15 p.m. Creating the Business Case and Risk Analysis for Distribution Reliability Expenditures

This presentation will describe how Black Hills leverages the data from OMS, SCADA and AMI systems to make the business case for reliability improvements on their distribution system. The presentation will cover not only the process of identifying which circuits need attention but also how the most cost effective mitigation plans are chosen.

– J. David Lankutis, Manager of Planning/Reliability, Electric Utilities Group, Black Hills Corporation

2:15 – 3:15 p.m. Reliability Engineering and Analysis at Progress Energy

Progress Energy Carolinas (PEC) has maintained top quartile ranking for customer satisfaction and distribution reliability in the JD Power Survey over the past several years. This has been possible in part due to the availability of data from the OMS and DSCADA systems. PEC has been analyzing outage data from an OMS for over ten years and has developed an extensive database reflecting feeder performance. In addition to outage data, PEC has also collected an extensive history of lightning data and has performed in-depth regression analysis looking at weather and its relationship to outages. This presentation will discuss how data from OMS and DSCADA are used to measure feeder performance, develop reliability improvement work plans, and provide meaningful reports to management.

– Steven Craig, P.E., Lead Engineer – Distribution Reliability, Progress Energy Carolinas

3:15 – 3:30 p.m. Afternoon Break

3:30 – 4:30 p.m. Overview of the New IEEE Guide on Interruption Reporting Practices

Rodney will review the latest revision of the IEEE standard for "Collecting, Categorizing and Utilization of Information Related to Electric Power Distribution Interruption Events". This standard is intended to promote consistency in how the industry collects and shares data for the purpose of measuring distribution system performance.

– Rodney Robinson, Director of Reliability Management, Westar Energy

4:30 – 6:00 p.m. Networking Reception and Vendor Demonstrations

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USING OMS/AMI/SCADA DATA TO MAKE RELIABILITY BUSINESS DECISIONS

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PROGRAM AGENDA

FRIDAY, MAY 21, 2010

(Friday's conference program will take place at the Progress Energy Distribution Control Center. Transportation from the conference hotel to the Progress Energy offices will be provided.)

8:30 a.m. – 12:00 p.m. **Day Two Conference Timing**
8:00 a.m. **Bus Departs from Conference Hotel**

Roundtable discussion with OMS/SCADA/AMI/MDM vendors to determine strategies for software vendors to provide more robust reliability reporting needed for electric utilities.

Tour of Progress Energy Distribution Control Center

The Distribution Control Center of Progress Energy Carolinas is located at the Customer Service Center in Raleigh North Carolina. The Customer Service Center building was constructed in 1996 and at that time all regional dispatch centers were consolidated into one entity located in Raleigh. From this single location all outages in North and South Carolina are handled and dispatched to service crews. The Distribution Control Center also has an engineering organization, DCC/Grid Management, who is responsible for providing technical assistance to the distribution system operators. The Distribution Control Center has responsibility for maintaining the OMS and DSCADA systems for Progress Energy Carolinas.

Sponsorship Opportunities

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Please contact
Greg Schriener,
720-988-1221 or gschriener@euci.com for more information.

Register Today! Call 303-770-8800 or visit www.euci.com

PROCEEDINGS

A copy of the conference proceedings will be distributed to attendees at the event. If you are unable to attend or would like to purchase additional copies, flash drives are available 2 weeks after the conference is complete. The cost per Flash Drive is US\$395 [add US\$50 for international shipments]. Flash Drives include visual presentations only. Upon receipt of order and payment the Flash Drive will be shipped to you.

NOTE : All presentation flash drive sales are final and are non-refundable.

CONFERENCE LOCATION

A room block has been reserved at the Sheraton Raleigh Hotel, 421 S. Salisbury Street, Raleigh, NC 27601, for the nights of May 18-20, 2010. Room rates are US \$159 single/double guest rooms. Call 800-325-3535 for reservations and mention the EUCI conference to get the group rate. Make your reservations prior to May 2, 2010. There are a limited number of rooms available at the conference rate. Please make your reservations early.

REGISTRATION INFORMATION

REMEMBER, EVERY 4TH REGISTRANT IS FREE

For instant registration, call (303) 770.8800 or fax the Registration Form to (303) 741.0849.

Register 3, Send 4th Free!!

Any organization wishing to send multiple attendees to this conference may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.

All cancellations received on or before April 16, 2010 will be subject to a US\$195 processing fee. Written cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI conference or publication. This credit will be good for six months. In case of conference cancellation, Electric Utility Consultants' liability is limited to refund of the conference registration fee only. For more information regarding administrative policies such as complaint and refunds, please contact our offices at (303) 770.8800.

EUCI reserves the right to alter this program without prior notice.

MAIL DIRECTLY TO:

Electric Utility Consultants, Inc. (EUCI)
5555 Preserve Drive
Greenwood Village, CO 80121

FAX TO: (303) 741.0849 **PHONE:** (303) 770.8800

PLEASE REGISTER THE FOLLOWING

- Using OMS/AMI/SCADA Data to Make Reliability Business Decisions Conference Plus Workshop, May 19-21, 2010, US\$1795,
Early Bird on or Before May 7, 2010, US\$1595
- Using OMS/AMI/SCADA Data to Make Reliability Business Decisions Conference Only, May 20-21, 2010, US\$1395,
Early Bird on or Before May 7, 2010, US\$1195
- Outage Management System Development Workshop Only, May 19, 2010 \$695
Early Bird on or Before May 7, 2010, US\$595
- I'm sorry I cannot attend, but please send me the conference proceedings at \$395. (Please add \$50 for international shipping)

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