WORLD OF TRANSMISSION & DISTRIBUTION ASSET ANALYTICS

Leverage Data Analytics to Optimize Asset Performance & Maintenance Spending

September 25-26, 2017
Hyatt Regency Mission Bay Spa and Marina
San Diego, CA

Case Studies
American Electric Power
Caribbean Utilities Company
ComEd
Cross Texas Transmission
DTE Energy
Pacific Gas & Electric
Pepco Holdings
PSE&G
Salt River Project
San Diego Gas & Electric
OVERVIEW

Data Analytics is Revolutionizing T&D Asset Management!
Amidst aging transmission and distribution infrastructure and workforce, digitally forward asset managers, equipped with advanced analytics tools are realizing significant gain from using data analytics to improve asset health. Data analytics can be used to monitor T&D assets to gauge their performance, predict and prevent failures, and prioritize asset renewal. As a result, improved decisions can be made on asset strategy and O&M budget spending on aging T&D infrastructure.

At EUCI’s World of Transmission & Distribution Asset Analytics Summit, participants will gain strategic insights from T&D leaders on how data analytics is playing a key role in their asset investment decisions. The summit also provides beneficial best practices from leading utilities on how to utilize data to optimize asset performance and make ‘maintain or replace’ decisions. Do not miss this opportunity to network, establish new business connections, exchange ideas, and gain knowledge.

3 TOP REASONS YOU MUST ATTEND

1. Unrivaled Utilities Case Studies – Highlights how they are utilizing data analytics to make better T&D investment asset decisions, which positively impact their O&M expense.
2. Don’t Miss T&D Leaders’ Panel Discussion – Showcases strategic views from key decision makers responsible for transmission and distribution assets.

UTILITIES CASE STUDIES

- American Electric Power
- Caribbean Utilities Company
- ComEd
- Cross Texas Transmission
- DTE Energy
- Pacific Gas & Electric
- Pepco Holdings
- PSE&G
- Salt River Project
- San Diego Gas & Electric

LEARNING OUTCOMES

- Identify factors driving utilities towards making data-driven decisions
- Discuss evolving utility business model and revenue generation streams
- Benchmark with best practices of using asset analytics in T&D operations
- Review how to enhance grid visualization using GIS Modeling
- Achieve real-time loading with smart meter analytics
- Assess how to manage and overcome data quality challenges

WHO SHOULD ATTEND

Delegates will include decision makers with the job titles of Senior Vice President, Vice President, General Manager, Director, Department Head, Manager, Engineer from the transmission and distribution industry with ultimate responsibility for the following areas but not limited to:
- Asset Management (asset health, maintenance and replacement)
- T&D Operations
- Grid Optimization Analytics
- Data Analytics
- Systems Reliability
- Transformer and Substation Asset Management
FEATURING RENOWNED SPEAKERS

Jeff Benach  
Direct of Engineering, Monitoring Products, Weidmann Diagnostic Solutions

Carlos J. Casablanca  
Director, Advanced Transmission Studies & Technology, American Electric Power

Bill Clarke  
Executive Director, The Energy Authority

Gary Gauthier  
IT Manager, Operational Technology, DTE Energy

Jose Ramon Goizueta  
Director of Maintenance, Performance, and Reliability, Southern California Edison

John H Helm  
Senior Engineer, NERC, Technical Services, PEPCO Holdings Inc.

Jim Horstman  
Principal Consultant, Strateture Solutions

Tom Martin  
Manager, Grid of Things, Pacific Gas & Electric

Michael C. Moy  
Director, Asset Performance & Investment Strategy, ComEd

Glen Sartain  
VP – Grid Analytics, BRIDGE Energy Group

Carey Schneider  
Manager – Transmission System & Asset Monitoring, American Electric Power

Eric Schroeder  
Asst. VP, Transmission Operations, Maintenance & Compliance, Cross Texas Transmission

Grant Smedley  
Manager, Asset Optimization, Salt River Project

Richard Wernsing  
Director Electric Strategic Reliability and Delivery Planning Asset Management & Centralized Services, PSE&G

Jonathan Woldemariam  
Director, Electric Transmission and Distribution, San Diego Gas & Electric

REGISTER TODAY! CALL 303-770-8800 OR VISIT WWW.EUCI.COM
AGENDA

MONDAY, SEPTEMBER 25, 2017

8:00 – 8:30 am  Registration & Continental Breakfast

8:30 – 8:40 am  Welcome & Opening Remarks by Chairperson  
                Jim Horstman, Principal Consultant, Strateture Solutions

8:40 – 9:00 am  Keynote Address  
                Evolving to Next-Gen Utility: What Does It Take to be a Data-Driven Utility and Make Analytics Driven Business Decision  
                Bill Clarke, Executive Director, The Energy Authority

9:00 – 10:30 am  Strategic View from Leaders - Panel Discussion  
                  Smart Asset Health Management  
                  • Which assets are your focus for asset health analytics? (i.e. transmission vs distribution, specific asset classes e.g. transformers)  
                  • Where are you in the journey to asset health analytics (e.g. thinking about it, just starting, working on a subset, etc.) and what are your future plans?  
                  • Which data is most important and what are the sources for that data? (e.g. AMI, SCADA, sensors, external information such as weather); secondary question what issues do you have with the data (e.g. quality, availability, volume)  
                  • What factors do you consider in determining an asset health index or rating?  
                  Moderator: Jim Horstman, Principal Consultant, Strateture Solutions  
                  Panelists:  
                  Carlos J. Casablanca, Director, Advanced Transmission Studies & Technology, American Electric Power  
                  Eric Schroeder, Asst. VP, Transmission Operations, Maintenance & Compliance, Cross Texas Transmission  
                  Jonathan Woldemariam, Director, Electric Transmission and Distribution Engineering, San Diego Gas & Electric  
                  Richard Wernsing, Director Electric Strategic Reliability and Delivery Planning Asset Management & Centralized Services, PSE&G

10:30 – 11:00 am  Networking Break

11:00 am – 12:30 pm  Strategic View from Leaders - Panel Discussion  
                      Improving Asset Investment Strategies  
                      • Lessons Learned: Securing investment to expand analytics function, and capital spending  
                      • Explore ways to reliably integrate large quantities of DER  
                      • Assess risk factors for optimal operation management  
                      Moderator: Bill Clarke, Executive Director, The Energy Authority  
                      Panelists:  
                      Jose Ramon Goizueta, Director of Maintenance, Performance, and Reliability, Southern California Edison  
                      Richard Wernsing, Director Electric Strategic Reliability and Delivery Planning Asset Management & Centralized Services, PSE&G  
                      Glen Sartain, VP – Grid Analytics, BRIDGE Energy Group  
                      Carlos J. Casablanca, Director, Advanced Transmission Studies & Technology, American Electric Power

12:30 – 1:30 pm  Group Luncheon

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MONDAY, SEPTEMBER 25, 2017 (CONTINUED)

1:30 – 2:15 pm  American Electric Power
Utilizing a Combination of Traditional Data & Real-Time Data to Drive Asset Maintenance and Replacement Decisions
• Problem Statement: Historically, utilities have used inspections and time-based maintenance to drive decisions on asset maintenance and replacement. Without a defined company standard for systems and process, each decision was made in a vacuum. There was not a good way to categorize assets and to justify 'maintain or replace' decisions with regulators and stockholders. Each area performed the functions independently.
• Approach: The inspections and time-based maintenance still hold value, but AEP is also implementing real-time asset monitoring to provide more current and additional data points for decisions. AEP is also utilizing an enterprise Asset Health Software to combine these data types into one algorithm that provides a risk of failure score and replacement score for transformers, a health score and replacement score for circuit breakers, and a health score for batteries
  
  Carey Schneider, Manager - Transmission System & Asset Monitoring, American Electric Power

2:15 – 3:00 pm  Case Study – DTE Energy
Energy Asset Health Analytics Program
  Gary Gauthier, IT Manager, Operational Technology, DTE Energy

3:00 – 3:30 pm  Networking Break

3:30 – 4:15 pm  San Diego Gas & Electric
Improve Grid Visualization using GIS Modeling
• Approach challenges facing all phases of transmission line management
• Manage how key information is exchanged regardless of the IT application
• OpEx 20/20 Initiative
  
  Jonathan Woldemariam, Director, Electric Transmission and Distribution, San Diego Gas & Electric

4:15 – 5:00 pm  Cloud Based Analysis of Transformer Insulation Quality
• Problem statement: Insulation Quality in Transformers & HV Bushings is only measured periodically. On-Line Monitoring of HV assets can be achieved with Continuous monitoring with Cloud based technology.
• Approach: Cloud based continuous monitoring technology of a single asset or transformer fleet can provide a simple health indication of insulation quality of transformers and bushings.
• Results: The cost of smart monitoring equipment is a fraction of the cost of replacing an HV transformer. Maintenance costs can be reduced by only testing transformers based on need instead of by calendar.
  
  Jeff Benach, Direct of Engineering, Monitoring Products, Weidmann Diagnostic Solutions

5:00 – 5:10 pm  Day One Closing Remarks by Chairperson

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AGENDA

TUESDAY, SEPTEMBER 26, 2017

8:00 – 8:30 am  Continental Breakfast

8:30 – 8:35 am  Welcome & Opening Remarks by Chairperson
Jim Horstman, Principal Consultant, Strateture Solutions

8:35 – 9:15 am  PG&E
Real-Time Loading Using Smart Meter Analytics
• Problem Statement: As DERs grow in penetration, there is a need for significantly more visibility into loading on the system (existence of “phantom load” from solar).
• Approach: This project started with Smart Meter data, then layered in weather, forecasted solar output, non-Smart Meter loads, etc. to create a predictive loading model for areas where sensing equipment either isn’t deployed yet or isn’t practical (could go all the way down to the transformer)
• Solution Demo
Tom Martin, Manager, Grid of Things, Pacific Gas & Electric

9:15 – 10:00 am  How to Manage and Overcome Data Quality Challenges
• Problem Statement: One of the biggest challenges to creating a successful analytics program is addressing the data quality issues that are prevalent in the utility industry. Many times, data is not trusted and therefore provides little if any value to the business users.
• Approach: Creating an “as-you-go” strategy provides for the data accuracy and availability necessary to implement successful analytics initiatives. Implementing a governance framework that can be added to every project assures success and eliminates the big bang approach to cleaning up data.
• Solution: A purpose built approach for implementation of data accuracy for analytic use cases
Glen Sartain, VP – Grid Analytics, BRIDGE Energy Group

10:00 – 10:45 am  Cross Texas Transmission
Next Level Grid Operations – Harvesting Data for Intelligent Automation
• Problem Statement: Grid modernization plus regulations equals complexity
• Approach: Optimizing data processing strategies to intelligently manage information
• Results: Enhanced grid resiliency and human performance
Eric Schroeder, Asst. VP, Transmission Operations, Maintenance & Compliance, Cross Texas Transmission

10:45 – 11:15 am  Networking Break

11:15 am – 12:00 pm  DTE Energy
OT / IT Convergence: The Marketplace for Disruptive Innovation
• Problem Statement: DTE Energy is seeking to take a sharp step up in improving our electric reliability, while maintaining a very low operating cost structure and effectively applying material increases in Distribution Operations capital investments over the next decade.
• Approach: DTE has chosen to incorporate ‘Applied Analytics’ to strengthen traditional approaches toward investment prioritization and to inculcate a culture of innovation aimed at making highly favorable impacts to our customers and reliability metrics.
• Results: DTE has reprioritized spending plans, shifted targeted areas for capital investment and enabled coordination of efforts underway across the business unit to optimize the impact of our investments.
Gary Gauthier, IT Manager, Operational Technology, DTE Energy
AGENDA

TUESDAY, SEPTEMBER 26, 2017 (CONTINUED)

12:00 – 12:45 pm  PSE&G
Managing “The Risk of Getting Old”
• Problem Statement: Aging T&D infrastructure and pressure to improve reliability while lower on-going maintenance costs
• Approach: PSE&G’s CMMS – A data driven decision support system that assists in making repair, replace and maintenance decisions for transformers, load tap changers, breakers, circuit switchers, transmission OH and UG assets, and 26 KV UG transformers and protectors
• Results: Asset health scores based on CMMS system
Richard Wernsing, Director Electric Strategic Reliability and Delivery Planning Asset Management & Centralized Services, PSE&G

12:45 – 1:45 pm  Group Luncheon

1:45 – 2:30 pm  Salt River Project
Leveraging Data Analytics to Manage Risk over the Transformer Lifecycle
• Problem Statement: To broaden the use of data analytics into the management of entire transformer lifecycle – from procurement to monitoring to spare inventory levels.
• Approach: SRP used data analytics, coupled with practical considerations, to develop programs to optimize each of the critical lifecycle steps associated with transformers.
• Solution: SRP’s goal is to minimize the risk of catastrophic failures by optimizing each of the steps in the transformer lifecycle. The infrastructure and approach used for transformers was developed with the goal of being sustainable over time and applicable to other asset types.
Grant Smedley, Manager, Asset Optimization, Salt River Project

2:30 – 3:15 pm  Pepco Holdings
Design and Implementation of an Area Based Reliability Plan
• Problem Statement: Aging infrastructure, animals, vegetation, and weather continue to produce challenges for providing reliable electric service. What is the most cost effect manner to improve reliability and reduce the impacts on O&M spending?
• Approach strategy: Synergistic approach to improving system reliability by improving reliability of multiple system elements simultaneously.
• Results: Reliability plans that are cost effective based on current and prior reliability programs, create pockets of “reliability” in the system, reduce the amount of distribution level outages, enable the implementation of distribution automation schemes, and reduce O&M spending.
John H Helm, Senior Engineer, NERC, Technical Services, PEPCO Holdings Inc.

3:15 – 4:00 pm  Networking Break

4:00 – 4:45 pm  ComEd
Asset Health Indices & Risk Scoring Leveraging Big Data Integration
• Problem Statement: With millions of grid assets dispersed across its 11,400 square-mile service territory in northern Illinois, ComEd is tasked with critical decisions on where and how to invest in equipment maintenance and replacement.
• Approach: The introduction of health indices and risk scores delivered a step change improvement in the company’s ability to identify asset risks and direct investments strategically. These are quantitative methods of targeting the worst performing assets and investing in most impactful projects to reduce system risk.
• Results: Substantial results in terms of reliability, environmental, and safety performance improvement.
Michael C. Moy, Director, Asset Performance & Investment Strategy, ComEd

4:45 – 5:00 pm  Q&A, Closing Remarks, and End of Summit
SPONSORSHIP OPPORTUNITIES

Do you want to drive new business through this event’s powerful audience? Becoming a sponsor or exhibitor is an excellent opportunity to raise your profile before a manageably sized group of executives who make the key purchasing decisions for their businesses. There is a wide range of sponsorship opportunities available that can be customized to fit your budget and marketing objectives, including:

- Platinum, gold, or VIP sponsor
- Reception host
- Networking break host
- Tabletop exhibit
- Workshop sponsor
- Lanyard sponsor
- Luncheon host and Breakfast host

Please contact Jyothi Rajan at jrajan@euci.com or 720-988-1262 for more information.

INSTRUCTIONAL METHODS

Case studies, PowerPoint presentations and group discussion will be used in this event.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for a minimum of four hours to be eligible for any continuing education credit.

IACET CREDITS

EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.4 CEUs for the conference

EVENT LOCATION

A room block has been reserved at the Hyatt Regency Mission Bay Spa and Marina, 1441 Quivira Rd, San Diego, CA 92109, for the nights of September 24-25, 2017. Room rates are $169 USD plus $10 resort fee per day and applicable tax. Call 1-619-224-1234 or click here for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is August 24, 2017 but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

REGISTER 3, SEND THE 4TH FREE

Any organization wishing to send multiple attendees to this event may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.
A room block has been reserved at the Hyatt Regency Mission Bay Spa and Marina, 1441 Quivira Rd, San Diego, CA 92109, for the nights of September 24-25, 2017. Room rates are $169 USD plus $10 resort fee per day and applicable tax. Call 1-619-224-1234 or click here for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is August 24, 2017 but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

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Sign me up for Energize Weekly

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Substitutions & Cancellations
Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before August 4, 2017 in order to be refunded and will be subject to a US $195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI’s liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800.

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