NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Speaker Biographies[1]
Eleventh Annual Monitoring and Situational Awareness Conference

Theme: The Ever-Changing Landscape of the Energy Management Systems

October 3-4, 2023

Phil Hoffer

Phil Hoffer is currently the manager of EMS Applications at AEP. His group is responsible for the state estimator and contingency analysis systems in AEP's three footprints (ERCOT, SPP, and PJM) and maintaining the operational model of the transmission system network in each of them.

Mr. Hoffer has been with AEP Transmission Operations since 1986. He has a BSEE from The Ohio State University and is a registered Professional Engineer in the state of Ohio.

Branden Sudduth

Branden Sudduth, Vice President of Reliability Planning and Performance Analysis, is responsible for WECC's technical and analysis functions, including Reliability Planning and Assessments, Standards Development, Performance Analysis, Event Analysis, and Situation Awareness.

In his previous role as Director of Reliability Risk Management, Branden provided leadership and strategic direction for the Performance Analysis and Event Analysis/Situation Awareness departments and was responsible for supporting several industry stakeholder efforts through WECC's Operating and Market Interface Committees.

Branden holds a Bachelor of Science degree in electrical engineering from Brigham Young University, a Master of Engineering degree in electrical engineering from the University of Idaho, and an MBA from Weber State University.

Wei Qiu

Wei Qiu is currently Lead Engineer of Event Analysis, in the Reliability Assessment & Performance Analysis group at NERC. As an EMS SME, Wei is responsible for analyzing the EMS events reported, understanding the causes, trending and working with the industry to develop remediation strategies.

Prior to NERC, Mr. Qiu was a software manager managing the EMS applications, especially state estimation and real-time contingency analysis at GE Grid Solutions (formerly AREVA, Alstom) in Redmond, WA.

[1] Biographies are listed in order of presentation.

Mr. Qiu earned his PhD in Electrical Engineering from Illinois Institute of Technology. He is a senior member of IEEE.

Tony Tatum

Tony Tatum joined NERC's BPSA team on August 30, 2021. Prior to NERC, Mr. Tatum worked for Southern Company in transmission and generation. In transmission, Mr. Tatum served as a reliability coordinator, transmission operator, balancing authority, interchange authority and power system coordinator. In generation, Mr. Tatum served as a multi-craft operator at combined cycle and simple cycle plants.

With GE Hitachi Nuclear, Mr. Tatum served as a field engineer directing boiling water reactor refueling outages in the Northeast and Midwest.

Mr. Tatum is a veteran of the United States Navy's Nuclear Propulsion Program and served in the submarine force.

Mr. Tatum is a NERC certified Reliability Coordinator. Mr. Tatum holds a bachelor's degree in business from Piedmont College and an associate's degree in engineering technology from Gainesville College.

Michael Legatt

Michael Legatt is founder and CEO of ResilientGrid, a company that provides situational awareness software for operators in the electric utility control room. Dr. Legatt has PhDs in both Energy Systems Engineering and Clinical Health Psychology/Neuropsychology. Prior to founding ResilientGrid, Dr. Legatt spent a decade as the principal human factors engineer for the Electric Reliability Council of Texas (ERCOT), where his development of the Macomber Map® software system has been helping ERCOT operators for over ten years maintain situational awareness and manage transmission operations

Dr. Legatt presents regularly at energy industry and government events about the impact of organizational culture and the importance of optimizing human-computer interaction within complex socio-technical systems, and he has contributed to several articles, research projects, and books on the subject.

Dr. Legatt also co-founded and leads the Human Performance Community of Practice, a group of electric utility industry professionals, academia and Human Performance professionals, experts, and enthusiasts.

Kristy Prystay

Kristy Prystay is the Lead Engineer supporting advanced power system applications at Manitoba Hydro (MH).

Kristy was born and raised in Thompson, Manitoba. After completing high school, Kristy obtained a diploma in Electrical/Electronic Engineering Technology and accepted a position with INCO Ltd. Following one and a half years' employment with INCO, Kristy moved to Manitoba Hydro as a telecommunications Technician. Kristy subsequently completed a two-year training program and worked as communications technician throughout northern Manitoba.

In 2010, Kristy took leave from Manitoba Hydro to pursue a degree in Electrical Engineering. Following the completion of her degree, Kristy

returned to Manitoba Hydro and entered their Engineer-in-Training (EIT) program. As an EIT Kristy supported Manitoba Hydro's numerous northern generating stations, in addition to completing rotations with Distribution Engineering and Live Line Tools.

In 2015, Kristy commenced a six-year tenure with MH's Integrated Network Performance section. In this role Kristy supported the System Control Centre by providing real-time and day ahead/transfer limit studies conducted between MH and its interconnections with adjacent utilities. Recently, Kristy transferred to the Advanced Power System Applications section where Kristy currently leads a team purposed with assimilating integrated applications into system operations while providing real-time applications support.

Brent Schellenberg

Brent Schellenberg is currently a Computer Engineer with 8 years of experience supporting EMS systems at the Manitoba Hydro System Control Center with a focus on EMS software lifecycle, custom application development, and continuous integration of operational and security updates.

Jeffrey Tiemann

Jeff Tiemann is an energy professional with more than 12 years of broad experience within the electricity industry. Currently responsible for PJM's Energy Management Suite of applications including Supervisory Control and Data Acquisition (SCADA), Automatic Generation Control (AGC), Transmission Network Applications (TNA) and Model Management (MM). Responsibility includes the operations, maintenance, technology life cycle management and roadmap planning of all EMS technologies. Most recently completing the implementation of an OSI SCADA AGC in May of 2023.

Tiemann joined PJM in 2011 working in various roles within the Information Technologies Services Division. During this period, he led several teams and initiatives. Tiemann led the Security Patch Management Team which is responsible for assessment and implementation of security patches of all PJM technologies. Tiemann also was responsible for the ITS Security and Compliance organization focused on the compliance with the NERC CIP standards and associated security controls. He joined System Operations in 2015.

Tiemann earned a Bachelor of Science in computer science and a Master of Information Technology Leadership, both from LaSalle University.

Tim Miller

Tim Miller is Manager of Modeling and Data Integrity at Southwest Power Pool. He is responsible for the maintenance of the network and commercial models used within SPP's operations and markets functions along with operational support of the Energy Management System, including real-time data exchange, state estimation, contingency analysis, automatic generation control, and load forecasting. Tim started at Southwest Power Pool in 2005 as an EMS Engineer and was part of the teams that built the Energy Imbalance Services market models and stood up the Dispatch Training Simulator. He has held positions in contract services, long-term planning, and operations support over his eighteen-year tenure.

Tim attended John Brown University where he received a Bachelor's degree in Engineering. After graduating, Tim started his career at Southwest Power Pool. Today, he enjoys raising kids with his wife of fourteen years, playing tennis, cycling, learning new things, and engaging with his neighbors in Little Rock, Arkansas.

Joe Brennan

Joseph Brennan is the lead architect for the first major integrated cloud system implementation at Midcontinent Independent System Operator (MISO). Joseph has over 20 years of experience leading digital transformation in the areas of enterprise & service-oriented architecture, multi-tenant cloud services, applications development and management, and integration & middleware services. He has demonstrated experience in multiple industries including Utilities, Health Care, Military/Government, Retail, Banking, Airlines, and Manufacturing. Joseph has an MBA from Saïd Business School, University of Oxford, a Bachelor of Science degree in Computer Science from Minnesota State University, Moorhead, and is an AWS Certified Solutions Architect – Associate.

Seong Lok Choi

Seong Lok Choi is responsible for Bulk Electric System (BES) Energy Management System (EMS) support at the Power System Engineering Center at NREL. As part of his work with the Global Power System Transformation (G-PST) Consortium engagement, he assists control room operators to modernize the control room in developing countries.

His expertise is focused on real-time grid operation simulator implementation, EMS/DTS software development, AI technology research, energy system resilience, digital twin, cybersecurity, and the control room of the future. Prior to NREL, Mr. Choi was a senior EMS support at Peak Reliability Coordinator (PeakRC), a software architect with WECC, and was with Ameren as a software developer.

Mr. Choi is a graduate of the Korea Advanced Institute of Science & Technology (KAIST), Seoul National University (course work only), and Washington University in St. Louis, MO.

Matthew C. Lewis

Matthew Lewis joined the North American Electric Reliability Corporation (NERC) on March 24, 2014 and currently serves as the Manager of Event Analysis and previously served as the Manager of Training and Education. He retired with over 25 years of service as a U.S. Army officer. Matt served in a variety of leadership and staff positions in the fields of operations, special weapons effects and response, technical intelligence, and joint exercises/training. During his military service, he participated in combat tours in Desert Storm and Iraqi Freedom. Matt has a Bachelor of Science in Physics from the University of Arkansas at Little Rock and a Master of Science in Applied Physics from the Air Force Institute of Technology. You can learn more about Matt's professional experiences at his LinkedIn page.

Dwayne Fewless

Dwayne Fewless is currently a Principal Analyst in Operational Analysis & Awareness Department and previously held the position of Reliability Consultant in the Entity Engagement Department at ReliabilityFirst.

Mr. Fewless has over 18 years of utility industry experience working in Transmission Operations as a System Operator at Wolverine Power and responsible for Technical Training at MISO and ITC.

At Wolverine Power, Mr. Fewless was a Transmission Operator and was responsible for monitoring the Transmission System and responding to events, coordinating and switching on the Transmission System.

At MISO and ITC, as a trainer, Mr. Fewless taught classes on various tools and applications, as well as human performance improvement and situational awareness designed for the Control Room Operations staff. Mr. Fewless was also involved in new-hire training, simulation training, power system restoration drills, and evacuation drills. Mr. Fewless was responsible for developing and carrying out training plans to include scheduling and facilitating.

Robert Melis

Robert Melis is the Director of Information Security and Network Operations at the California Independent System Operator (California ISO). Robert has worked at California ISO since June 1997, initially as an onsite vendor resource supporting network and telecommunications services for California ISO prior to start up. Robert became a full time California ISO employee in May 2001, as a Network and Security Engineer. Robert has had management responsibilities at California ISO that include networks, telecommunications, cyber security, asset management, and change, configuration and release management. Prior to California ISO, Robert was a Telecommunications Engineer for a national voice and data carrier. Robert has a Bachelor's degree in Electrical and Electronic Engineering from California State University, Sacramento.

Dusty Wright

Dusty Wright is the Manager of SCADA & Reliability Systems at Tennessee Valley Authority (TVA). Dusty started at TVA in 2008 as an intern working with the Transmission Operators. Dusty started with the SCADA & Reliability Systems team in 2011 as a Power Systems Engineer working primarily on SCADA/EMS applications and has now been managing the team for three years.

Prior to working at TVA, Dusty served four years of active-duty service in the U.S. Army. After his military service, Dusty worked as a Diesel Technician for Mack and Volvo Equipment. Dusty then used the G.I. Bill to obtain a Bachelors degree in Electrical Engineering from the University of Chattanooga, Tennessee, which ultimately let to his employment with TVA.

Manu Parashar

Manu Parashar has been with GE for 13 years and most recently been serving as the Senior Product Director for the Transmission Segment at GE Digital. Prior to this he was the Services Director managing the Applications Engineering team across WAMS, Market Applications and Generation.

Before joining GE, Manu worked for a Los Angeles based consulting firm where he was responsible for coordinating R&D activities across utility stakeholders including ISOs, government labs, universities, and the Department of Energy.

Manu received his BS (summa cum laude), MS and Ph.D in Electrical Engineering from Cornell University. He has been active in various technical forums in North America such as the North American SynchroPhasor Initiative (NASPI) and IEEE Power Systems Relaying Committee (PSRC), and has numerous publications including a co-author of the "Wide Area Monitoring and Situational Awareness" chapter of the Electric Power Engineering handbook.

Manu has been the recipient of the Gilbreth Lectureship by the National Academy of Engineering which established to recognize young outstanding engineers and voted the Seattle PES Chapter Outstanding Engineer for 2015.

Xin Jiang

Xin Jiang is currently Product Management Director at OSI. He is responsible for EMS product management. His experiences include electricity market, transmission, and generation for ISOs and electric utilities. Xin earned his PhD in Systems Science and Mathematics from Washington University in St. Louis and MBA from Wharton School. He is an IEEE Senior Member.

A.J. Singh

A.J. Singh is a Global Product Manager in the Network Control group at Hitachi Energy, Houston. A.J.'s main area of focus is on Power Grid Control Systems which includes SCADA, GMS, EMS, ADMS, OMS, etc.

A.J. has been with Hitachi Energy since 2017 and in his current role, he is responsible for the development and evolution of the Network Manager System. His experience includes designing control room solutions for utilities around the globe. Before Hitachi Energy, A.J. spent almost 8 years working as an EMS/SCADA engineer at National Grid's New England control room.

A.J. earned his B.S. in Electrical & Computer Engineering from Cornell University, NY, and holds a Master of Engineering degree in Power Systems from Worcester Polytechnic Institute, MA.

Jason Lindquist

Jason Lindquist is the US Head of EMS Delivery Engineering at Siemens Grid Software. He joined Siemens in 2006 as a Transmission Network Analysis application developer. Today, his engineering departments include US and global talent responsible for the development, delivery, and support of EMS solutions to global customers. Jason holds a master's degree in electrical engineering from the University of Minnesota.