

Speaker Biographies Improving Human Performance on the Grid

A Conference and Workshop on Improving Human Performance and Increasing Reliability on the Bulk Power System

March 17-19, 2015

Speakers are listed in order of presentation

Dr. James Merlo



James Merlo is the Senior Director of Reliability Risk Management at NERC. Joining NERC in July 2011, James works with the talented professionals in the electric reliability organization to promote

the understanding and learning from events and occurrences that are experienced on the Bulk Electric System, assess the industry status and needs with regard to human performance challenges affecting bulk power system (BPS) reliability and provide world class training for the ERO staff and industry. In this role, he identifies opportunities and methods for improvement based on proven methods from other industries, and develops and promotes industry-wide sharing and collaboration to improve human performance components of BPS reliability.

James served in a variety of leadership roles in the US Army including combat tours in Desert Storm and Operation Iraqi Freedom. Significant positions include: Deputy Brigade Commander in Baghdad, Iraq 2004-2005 and as an assistant professor and program director at the United States Military Academy.

James has his B.S. in Human Factors Psychology from West Point, his M.S. in Engineering Psychology from the University of Illinois and his PhD in Applied Experimental and Human Factors Psychology from the University of Central Florida. He is the author of over 50 publications and book chapters on the subjects of human factors engineering and human performance.

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Mark Lauby



Mark G. Lauby is senior vice president and chief reliability officer at NERC. Joining NERC in January 2007, Mr. Lauby has held a number of positions, including vice president and director of Standards, and vice president and director of Reliability

Assessments and Performance Analysis.

Prior to joining NERC, Mr. Lauby worked since 1987 for the Electric Power Research Institute (EPRI) where he held a number of senior positions, including: director, Power Delivery & Markets; managing director, Asia, EPRI International; and manager, Power System Engineering in the Power System Planning and Operations Program. Mr. Lauby started his career in the electric industry at the Mid-Continent Area Power Pool, in

Minneapolis, Minnesota in 1979. His responsibilities included transmission planning, power system reliability assessment, and probabilistic evaluation.

In 2012, Mr. Lauby join the North American Energy Standards Board (NAESB). In addition, the secretary of energy appointed Mr. Lauby to the Department of Energy's Electric Advisory Committee in 2014. Mr. Lauby has served as Chair and is a life member of the International Electricity Research Exchange (IERE), and served as Chair of a number of IEEE working groups. Mr. Lauby has been recognized for his technical achievements in many technical associations, including the 1992 IEEE Walter Fee Young Engineer of the Year Award. In November 2011, Mr. Lauby was named a Fellow by IEEE. He received the honor for "leadership in the development and application of techniques for bulk power system reliability," and in 2014, Mr. Lauby was awarded the IEEE Power and Energy Society's Roy Billinton Power System Reliability Award.

He is the author of numerous papers on the subjects of power system reliability, expert systems, transmission system planning, and power system numerical analysis techniques. Mr. Lauby earned his bachelor of electrical engineering in 1980 and master of science in electrical engineering in 1989 from the University of Minnesota. In addition, Mr. Lauby attended the London Business School Accelerated Development Program.

Monika Bay



Monika Bay leads BGE's Serious Injury and Fatality Prevention Team (SIFT), an employee-based team focused on solutions that reduce the risk of serious injuries and fatalities. Within the portfolio of SIFT initiatives,

Monika directly leads BGE's new risk management approach called Just Culture, designed to improve

safety and operational performance by focusing on how we design our systems and how we manage our behavioral choices.

Monika's 34 year career with BGE includes experience in nuclear and fossil generation, environmental land use management, military contracts and utility privatization, distribution pole asset management, and business transformation architecture. Monika earned her BES degree in Civil Engineering from the Johns Hopkins University in Baltimore, MD.

Shari Heino



Shari Heino started her career in the Texas electric industry in 1999 as an attorney for the Electric Reliability Council of Texas, Inc. ("ERCOT"), where she helped develop and manage the ERCOT market rules, handled market

participant disputes and managed regulatory filings. In 2007, she joined Mathews & Freeland, a small utility law firm, and continued to practice utility law. In 2011, she became the Compliance Manager for Brazos Electric Power Cooperative, a Texas generation and transmission cooperative, where her responsibilities include overseeing Brazos' NERC compliance program in addition to Brazos' compliance supporting and risk management activities in other areas. Shari is a member of the Texas Reliability Entity's Member Representatives Committee ("MRC") and the Vice Chair TRE's NERC Standards of Review Subcommittee. Shari has been training dogs for most of her life and competes with her dogs in several dog sports including agility, flyball, and canine freestyle.

Dr. Jake J. Mazulewicz



Jake Mazulewicz serves as Dominion Virginia Power's Human Performance Specialist. He focuses on designing and leading interactive Human Performance cases and classes.

He served as a Senior Instructional Designer, and created interactive training courseware for Distribution and Transmission Linemen, Substation Electricians, Designers and other technical specialists.

He is a former College Professor who taught Organizational Behavior, and Leadership at Bentley University near Boston. He earned his Ph.D. in Education from the University of Virginia. For four years he led Outdoor Experiential Learning courses for corporate clients. He is a former Firefighter, EMT, and Paratrooper.

Dr. Michael E. Legatt



Michael E. Legatt is the principal human factors engineer for the Electric Reliability Council of Texas (ERCOT), which manages the flow of electricity to 22.7 million Texas customers. Mr. Legatt has been a

programmer for over 20 years, and worked in the energy, financial, medical, neuroscience research and educational sectors.

He has a Ph.D. in clinical health psychology/neuropsychology from the Ferkauf Graduate School of Psychology/Albert Einstein College of Medicine, and is currently pursuing a Ph.D. in energy systems engineering at the University of Texas at Austin.

As an amateur (ham) radio operator, he received a commendation for helping to provide emergency communications during the 2003 blackout in the northeastern United States, which sparked his interest in the psychology of energy management. He works to build systems designed to provide operators with needed information, optimizing for perception, speed, comprehension, and stress management. He also works at the organizational level to support the growth of the industry's high reliability culture.

At ERCOT, his development of the Macomber Map® has been featured in the New York Times, National Public Radio and T&D World. The Macomber Map was credited as being instrumental in helping ERCOT operators maintain grid reliability during several record-setting wind generation levels since 2010, and through several severe weather events since 2009. Macomber Map is now freely available as an open-source application.

He also works on the behavioral aspects of consumer electric use, researching electric vehicle to grid integration, behavioral aspects of conservation and consumer awareness in grid management, and the cybersecurity, behavioral, and reliability issues that arise with integration of new technologies across layers of the grid. He is ERCOT's lead on a collaborative project with the University of Texas at Austin, EV-TEC and the Pecan Street Project to study integrating electric vehicle charging and driver behavioral patterns with the bulk electric system. This research project looks at the viability of EVs to intelligently charge in a distributed fashion and provide ancillary services.

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Rob Fisher



Rob Fisher is currently the owner and president of *Fisher IT, Inc.* a Native-American owned business that was recently awarded a Top-100 Native-American Owned Business in the US and a Top-50 Emerging Business in North Carolina by DiversityBusines.com.

Rob has extensive experience in performing event investigations, designing performance improvement systems, designing and improving corrective action programs, designing and running procedure programs, and educating staff. He is a sought after trainer, and is routinely invited to speak at international, national and regional conferences on safety, procedures, performance improvement, human performance and event investigation. Fisher IT has most recently been recognized internationally as instrumental in reducing fatalities and serious / life-altering injuries in high hazard industries using human performance and procedure concepts.

Fisher IT, Inc. provides training and consulting services in Human Performance Improvement, Root Cause, Corrective Action Program and Procedures / Programs / Processes for multiple industries. Current projects include US Nuclear, Non-Nuclear power generation and transmission, US Industrial and Petrochemical, Department of Energy and international clients.

Ron Fenex



Ron Fenex is the Energy Delivery Training Manager and has been with the Arizona Public Service Company for 32 years. Ron has worked in Fossil Generation, Nuclear Generation and the Transmission & Distribution areas

during his career at APS.

Ron started his career in operations and since that time has worked extensively in the development areas of Corrective Action Programs, Human Performance Improvement (HPI), Nuclear Safety Culture and other associated training programs.

A strong believer and advocate for HPI, Ron currently serves as the WECC Human Performance Working Group Vice Chairman.

Ron continues to look for new and innovative ways to teach and anchor HPI within current and newly developed training programs for both operators and electrical field workers.

Ron is a graduate of Ottawa University and holds degrees in Communication and Human Resources/Business Administration.

John Patton



John Patton started his career at Pacific Gas & Electric in 1997 as Substation Construction Electrician. In 2000 he was asked to join the Field Safety Team where he served as the Safety Chairman for 8 years. He is

currently a coach for the Grass Roots Safety Team, a member of the Trans Ops Safety Council and the PG&E Safety Culture Change Team. In 2010, he became a Sr. Contract Management Inspector, and continued as a trainer in that role through 2012.

John's present role at PG&E is a Transmission Operation Senior Human Performance Specialist. He is a certified Human Performance Practitioner, has completed NERC causal coding, and has completed the INPO course for Human Performance Leads. John is the Vice-Chair for WECC Human Performance Work group, a member of PG&E's Trans Ops Safety Council and Safety Culture Change Team. John received an AA degree from American River College in Sacramento, California.

Tom Neary



Tom Neary, P.E. is the CEO and Co-Founder of OpCon Technologies, Inc. Tom has spent the last eleven years helping companies to develop the ability to implement user generated video via mobile devices at the field operator

level to create high levels employee engagement and collaboration. Tom pioneered the use of video collaboration at the supervisor unit level to improve the quality of work methods and procedures. Tom also teaches safety specialists how to create video event reports so that lessons learned, near misses and high value events are easily and rapidly disseminated across the mobile devices of every field operator.

Tom has a passion for the strategic use of mobile devices to streamline difficult and complex corporate processes. Tom is an avid iOS developer and is fluent in Apple's ecosystem as applied to the corporate enterprise from deployment through security and privacy.

Prior to founding OpCon Technologies, Tom designed and installed industrial process control systems for 17 years. Tom holds a bachelor's degree in Chemical Engineering from University of New Hampshire and a Master's degree in Chemical Engineering from Tulane University in New Orleans,

LA. Tom is a Registered Professional Engineer in the state of California.

Deveny Bywaters



Deveny Bywaters is the Operations Training Manager for the Western Electricity Coordinating Council since May 2014.

Deveny's 26 year training career began with the Medical Manager

Software, later to become part of WebMD. During this time, she led cross-functional teams, developed corporate training programs, and implemented the corporate online university. Leading the training program through Y2K software changes along with company mergers and re-structuring, Deveny gained first-hand experience of what happens to Human Performance in times of major change.

Prior to joining WECC, Deveny worked six years at Bonneville Power Administration. Here she continued to exercise her passion for developing and delivering training throughout BPA from management to field personnel on topics ranging from GIS, substation asset management, diversity, leadership, and performance management.

Whether it is field training or diversity training, Deveny is always exploring creative ways to "make training stick."

Tony Muschara



Tony Muschara is Principal Consultant and Owner, Muschara Error Management Consulting, LLC, specializing in human error risk management in high-hazard, industrialized facilities. Recent clients include: Amgen, PPL EU,

Babcock and Wilcox (B&W), Biogen Idec, and The SI Group (chemical).

Purpose: Helping managers and leaders of highhazard facilities protect people, products, and property from the human element by providing comprehensive and practical error management applications developed from leading-edge research and experience, while honoring God and others through Wisdom, Integrity, and Love.

Over 36 years' experience in consulting, training, and management positions in commercial and military nuclear power operations

Authored numerous human performance guidelines and manuals for the nuclear power industry while employed by the *Institute of Nuclear Power Operations* (INPO) (22 years) in Atlanta, Georgia; several documents adopted by the U.S. Department of Energy and the International Atomic Energy Agency (IAEA)

A **Certified Performance Technologist** (CPT) awarded by the *International Society for Performance Improvement* (ISPI); considered a niche expert and specialist in the field of human error management

Qualified as a senior reactor operator (SRO) as a control room simulator instructor at Farley Nuclear Plant, while employed by Westinghouse Electric Corporation

Earned a Master in Business Administration (MBA) from *Kennesaw State University* near Atlanta, Georgia

Received a Bachelor of Science degree in mechanical engineering from the *U.S. Naval Academy*, served in the *U.S. Submarine Service* 25 years (active and reserve), Qualified in Submarines, and qualified as Engineer of Naval Nuclear Propulsion Systems; retired Captain, USNR-Retired

Married to his best friend, Pam, for 35 years, three children, and two grandchildren; lives near Atlanta, GA; enjoys hiking alpine trails in the Rocky Mountains

George Wegh



George Wegh has 25 years of Electrical Engineering experience, including 15 years in the utility industry. George has served in a wide variety of technical and managerial roles both inside and outside Eversource Energy (formally Northeast Utilities) prior

to his present position. George has been working in the Transmission Protection and Controls Department for 9 years. He is presently serving as the NPCC representative on the NERC System Protection and Controls Subcommittee (SPCS) and serves as the Vice Chairman of the NPCC Task Force on System Protection (TFSP).

George has a BSEE from Purdue University and a MSEE degree from Worcester Polytechnic Institute.

Kevin Harris



Kevin Harris has 27 years of service with Eversource Energy (Formally Northeast Utilities) in the field of Test and Commissioning of Generation, Substation and Switchyard facilities. In 2004, Kevin joined

the Eversource Energy Transmission Group with an opportunity to participate in the startup of the newly formed Transmission Test Department (Field P&C/Apparatus Test). In 2007, Kevin participated in an opportunity to explore human performance with several consultants. Kevin has since co-championed a successful human performance improvement initiative within the Eversource Energy Transmission Group (72% reduction in Transmission Grid Events initiated by human error.) In 2012, Kevin presented on Electric Utility Industry Practices with Human Performance Tools at the first annual NERC conference on Human Performance in Atlanta, GA. He followed the NERC presentation opportunity with a presentation on a supervisor's perspective at the first PPI Human Performance Conference in Galveston, TX. In 2013, he presented at the first WECC Human Performance Work Group Conference: Job Briefings, Creative Defense Barriers and HP Metrics in Salt Lake City, UT and was asked in 2014 to team with Mike Carden of Dominion and present at the 2014 WECC Human Performance Work Group Conference in Portland, OR. Kevin currently serves a team of 45 Field Engineers and technicians in Connecticut and Western Massachusetts for Eversource Energy as Manager of Transmission Test and Technical Support.

David W. Bowman



David Bowman has over 25 years of industrial experience with a strong focus on operations, maintenance, safety engineering, and organizational alignment. David served in the United States

Marine Corps and has held various leadership roles with R&R Marine Maintenance, Chevron, Chevron-Phillips, and Entergy. David started Knowledge Vine, LLC and is the Chief Executive Officer.

David is a subject matter expert in Human Performance and led those efforts for Entergy Corporation for over 12 years. David has a proven track record in organizational effectiveness and alignment which led Entergy to its best record in the history of the company in 2013. David gained his experience and knowledge in the petrol-chemical, nuclear power, fossil fuel generation, and utility transmission and distribution industries. David has a Bachelor of Science in Safety Engineering.

David is an effective leader and dynamic speaker. He can engage audiences at any level and is ready to help any organization achieve their full potential. David believes you can have safety, reliability, and quality if you seek to eliminate errors.

Rizwan Shah



Rizwan Shah, Organizational Culture Program Advisor, provides direct consultation (assistance) to DOE and Contractor senior officials and their organizations on the

development, management, assessment and improvement of organizational culture and performance reliability programs and interventions. He maintains close contact with field and oversight organizations to ensure awareness of the state of organizational culture throughout the DOE

complex. He provides authoritative advice to and coach's senior Department officials on issues that affect organizational culture to promote continuous improvement and consistency across the complex on related topics.

Mr. Shah works to develop and deliver necessary education and training materials to DOE leaders and personnel. He leads developing Departmental Safety Culture and guidance documents working through DOE's Integrated Safety Management (ISM) process. He also serves as the Department's staff level liaison with other government, international and professional organizations in the area of Organizational Culture, High Reliability Organization, Human Performance Improvement, and Safety Programs. He is also the DOE liaison for the Institute for Nuclear Power Operations (INPO).

Mr. Shah has experience in Leadership and Human Resource Development, Safety and Change Management, and Organizational Culture spanning 23 years and 13 countries. He has earned a Masters in Organizational Psychology from Columbia University and a Bachelor's of Science in Technical Management from Embry-Riddle Aeronautical University with a minor in Aviation Safety.

His office is located in the Department of Energy Germantown, Maryland office under the Office of Environmental Protection, Sustainability Support, and Corporate Safety Analysis

Chris Hart



Christopher A. Hart was sworn in as a Member of the National Transportation Safety Board on August 12, 2009, and designated by the President for a 2-year term as Vice Chairman of the Board on August 18, 2009. In

August 2013, President Obama nominated him for a second term as Board Member and after Senate

confirmation of his nomination, the President, in October 2013, designated him for a third term as Vice Chairman. He has served as Acting NTSB Chairman since April 26, 2014 and in July 2014 was nominated by the President to serve as Chairman of the NTSB.

Hart joined the Board after a long career in transportation safety, including a previous term as a Member of the NTSB. Immediately before returning to the Board in 2009, Member Hart was Deputy Director for Air Traffic Safety Oversight at the Federal Aviation Administration (FAA). He was previously the FAA Assistant Administrator for System Safety.

He served as a Member of the NTSB from 1990 to 1993. After leaving the Board, he served as Deputy Administrator of the National Highway Traffic Safety Administration, before moving to the FAA in 1995.

From 1973 until joining the Board in 1990, Member Hart held a series of legal positions, mostly in the private sector. He holds a law degree from Harvard University and Master's and Bachelor's degrees in Aerospace Engineering from Princeton University. He is a member of the District of Columbia Bar and the Lawyer-Pilots Bar Association.

Hart is a licensed pilot with commercial, multiengine, and instrument ratings.

Hart's family has a tradition of accomplishment in the field of transportation. His great uncle, James Herman Banning, was the first African-American to receive a pilot's license issued by the U.S. Government in 1926.

Brenda Boline



Brenda Boline has been the Continuing Education Program Coordinator for NERC since May of 2013. Brenda has worked in the utility and nuclear field for over 25 years. She currently works

with the industry's training providers to ensure program criteria is met for system operator continuing education. Brenda has two decades of electric industry instructional design, curriculum development, and instructor training experience. She has a passion for engaging and effective training experiences. Brenda is an active member of Toastmasters and has been a featured speaker in 2014.

Emma Agola



Emma Agola currently serves as Instructional Designer/ LMS Administrator at NERC. She is a trained instructional designer with 15 years of

experience in the training and education industry. She previously served in an instructional design and training capacity for multiple organizations, including Delta, Hewlett Packard, and Atlanta Public Schools. Emma holds Masters Degrees in Education, Information Design and Technical Communication from Columbus State University and Southern Polytechnic State University respectively.

Dominic DiBari



Dominic DiBari has over 25 years of operations, project management, and engineering experience possessing a sense of urgency, bias for action, and strong commitment to teamwork necessary for achieving best in class results.

Recognized for improving under-performing assets

as well ensuring assets maintain a continuous improvement trend, Dominic has a critical eye for identifying behavioral and process gaps that when closed greatly improve operational performance and efficiency. Adept at facilitating the value conversation between operational, engineering, and commercial points of view for improved performance at the right cost and risk, Dominic started his career in shipboard operations with the U.S. Coast Guard where he led teams that safely rescued upwards of 1,000 economic refugees on the high seas in the Florida Straits and Greater Antilles. He transitioned to the de-regulated power generation industry holding positions of plant engineer, general manager (solid fuel power plants, PJM/MISO markets), director of operations support (PJM/ERCOT/NYISO/NEPOOL markets), portfolio vice president of combined cycle gas assets in the ERCOT market. Dominic is currently with Black & Veatch providing consulting services worldwide to owner/operators, private equity, infrastructure funds, and debt investors in power generation assets. He is also a retired commander (O-5) in the U.S. Coast Guard Reserves. Dominic holds an undergraduate degree from the U.S. Coast Guard Academy, graduate degree from the University of Illinois, and a diploma from the U.S. Naval War College. He lives in the greater New York City metro area and works out of Black & Veatch's Manhattan office. A member of the Board of Directors for the Valerie Fund, Dominic is also an active fundraiser benefiting children and their families dealing with pediatric cancer and blood disorders.

Kent Peterson



Kent Peterson is the Manager of the Human Performance Improvement program for the Transmission organization at Xcel Energy in Minneapolis, MN. Kent works with the Transmission Technical Compliance Training group and is

responsible for leading the organization's efforts promote Human Performance Improvement – which leads to reducing errors, minimizing events, and increasing reliability.

Prior to his current position, he served in a variety of roles and positions at Xcel Energy, beginning in 1980 at the Monticello Nuclear plant, where he spent 22 years in the plant Operations department and the Operations Training organization. He has also led the Operations training program for fossil, hydro and alternative energy for Xcel. Kent currently serves on the core team of the North American Transmission Forum's Human Performance committee, and has been active in presenting Human Performance Improvement to other electric utilities, WECC and MISO groups.

Kent has earned a Bachelor's degree from Winona State University in Applied Physics, licensed as both Reactor Operator and Senior Reactor Operator by the U.S. Nuclear Regulatory Commission, and senior instructor-qualified for classroom and simulator by INPO. Kent has also worked as curriculum developer and author of the text and course work for the Alternative Energy program in association with the National Center for Construction Education and Research (NCCER) through the Florida Energy Workforce Consortium, (in alliance with the University of Florida).

Kent resides in Andover, MN with his wife Melanie, their son, and two daughters.

Michael Carden



Michael Carden has been with Dominion Virginia Power's System Protection organization for 30 years. The first 23 years were spent building and commissioning the control

systems for Dominion's transmission grid and power plants.

The last 7 years have been spent developing and implementing best work practices for field technicians and electricians around the Dominion system.

These best practices include the Human Performance Work Zone Tools designed to create physical and visual defenses that reduce the "hands-on" human errors which affect the reliability of the electric transmission system.

B.S. Business Management, A.S. Industrial Instrumentation

Christopher Lazzaro



Christopher Lazzaro's passion is to architect cultures where artisans come together to build remarkable products and services - the ones people tell stories about. To do this, he preaches a gospel of relentless

learning, exceptional craftsmanship, humane leadership, and design thinking. Plus he expects people to have fun and enjoy their work. This has caused him to be branded by some as a rebel and heretic. He's happy to oblige these titles by shaking things up organizationally whenever and wherever necessary to make good things happen. Once he was even burned at the stake... don't worry, he got better.

During the day, Christopher is manager of the Energy Systems department: several teams of programmers and technicians serving the core energy production and grid management needs of *Associated Electric Cooperative*. This includes the Energy Management System and other critical systems that fall under CIP and reliability standards. Basically, all the good stuff.

At night (and sometimes really, really early in the morning), he works with his team at *MetaMythic* to

build amazing training experiences. Through the process of Applied Fiction, the MetaMythic team adds fiction and storytelling to complex and technical training so people engage, understand, and remember.

Drink the Kool-Aid with him at the Applied Fiction Redux presentation...

Ben McMillan



Ben McMillan joined NERC staff on June 20, 2011 as a Risk Analysis Engineer. Prior to this, Ben spent time in the manufacturing industry, working in the fields of quality and process improvement, as the Division Quality Manager. A

naval officer for 20+ years, he served in the surface warfare and nuclear power community, certified as a Naval Nuclear Engineer. Additionally he held positions in the operational testing of weapons and command /control systems. He holds a Bachelor of Science in Mathematics from the United States Naval Academy and a Master of Engineering Management degree from Old Dominion University.

A Senior Member of the American Society for Quality (ASQ), Ben holds certifications from ASQ as a Quality Engineer (CQE), Reliability Engineer (CRE), Quality Auditor (CQA) and Manager of Quality/Organizational Excellence (CMQ/OE). He is also a Six Sigma Black Belt, and has been teaching Root Cause Analysis for 4 years, having developed the course for NERC as well as his previous employer.

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Jule Tate



Jule Tate is the Senior Manager Events Analysis in the Reliability Risk Management Group at NERC. Jule joined NERC in April 2008 and is currently responsible for managing NERC activities for

analyzing BPS events to identify cause(s), risk to reliability and corrective actions. In this role, he shares this information with the industry to promote learning and prevent reoccurrence of events to assure continuous improvement of operational performance.

Prior to joining NERC, Jule was employed by Progress Energy for over 12 years where he held several positions in Power System Operations. As the Manager, Power System Operations Training Jule was responsible for the system operator's initial and continuing education training programs. Additionally he was responsible for training compliance with applicable NERC standards and other regulatory guidance and the testing, activation, and operation of Carolinas and Florida's backup energy control centers. As the Supervisor, Power System Operations Jule supervised control room operations of all generation and transmission resources in producing and delivering power to both retail and wholesale customers. Additional responsibilities included short-term planning, load forecasting, unit commitment, reserve planning, transmission system reliability, coordinating unplanned transmission outages. As a qualified Progress Energy System Operator Jule worked on shift in the control room operating generation resources, coordinating interchange schedules, issuing transmission switching instructions. coordinating unplanned transmission outages, and evaluating real time contingency analysis and mitigating the constraints.

Jule served in the US Coast Guard for five years and was accountable for electrical maintenance and

repairs to various lighthouses, was a qualified Coxswain and Boarding Officer, and provided search and rescue operations on the coast of North Carolina.

Jule holds a bachelor's in Electrical Engineering from North Carolina State University and has been a NERC Certified System Operator at the highest level since 1998.

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Ed Ruck



Ed Ruck is a Senior Reliability Engineer and is responsible for performing event analyses of power system events and reviewing the Event Analysis reports written by the industry.

Ed joined North American Electric Reliability Corporation (NERC) as a Regional Compliance Program Coordinator in October 2004 and was responsible for oversight of regional entities in their implementation of the mandatory compliance program, and since then has held roles in compliance auditing and compliance investigations prior to joining the Reliability Risk Management team.

Prior to joining NERC, he worked as a Senior Engineer at Mid-America Interconnected Network performing the Reliability Coordinator function. He also worked on EMS maintenance projects and regional planning studies.

Ed has a Bachelor of Science degree with a major in Electrical Engineering from the University of Illinois Champaign – Urbana.

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Trevor Myers



Trevor Myers is no stranger to electrical utility, having spent many years as an IBEW Member and a Journeyman Lineman, which taught him the importance of safety, quality, and professionalism. Now serving as a Manager of

Knowledge Vine, Trevor is utilizing his experience and business acumen to positively influence the culture in utility organizations through Human Performance and Organizational Alignment. As an employee of Entergy Corporation, Trevor received awards/recognition for safety and leadership, including Apprentice of the Year (2005), Jeff Keeney Lineman Leadership Award (2014), and SAB Member (2006-2014).

Dave Sowers



Dave Sowers has spent the last 25 years "pushing electrons through copper wire" in different capacities across several sectors of the industry. He started his career in power generation in the Naval Nuclear Power Program. After his

service in the Navy, Dave worked for a Semi-Conductor manufacturer in the chemistry department, before returning to his nuclear power roots in the commercial sector. He spent several years working as a nuclear plant operator for both PSE&G in New Jersey and Entergy in Louisiana. Dave returned to government service with US Army Corps of Engineers as a Hydro-Electric Control Room Operator and Emergency Management Specialist. Throughout his 25 year career, Dave has served in many diverse roles including Plant Operator, Procedure Developer, Operations Training, Emergency Response, Control Room Supervision, and Power Plant Management. This broad range of



power generation experience has given Dave a unique diversity of experience and perspective, from the tool room to board room.

Dave Sowers' formal education has also helped to foster this diverse perspective. Dave's learning didn't stop after he graduated from the Naval Nuclear Power Program. While working he continued to gain an extensive formal education. Dave has a Bachelor of Science degree in Resources Management from Troy University, a Master of Science in Management degree from Troy University, and a Master of Science graduate certificate in Emergency Management and Homeland Security from George Washington University; he graduated all three programs Summa Cum Laude.

Dave's work and education experience gives him a unique perspective and ability to bridge the gaps between an organization's frontline workforce and their management team. Since he has lived Human Performance from both perspectives he is an effective, relatable, and credible communicator of its principles and methodologies. Dave Sowers is ready to help your leaders coach and communicate Human Performance to your team.