July 24–25 Midwest Summit

American Public Power Association

Midwest Regional Cybersecurity Summit

Kearney, Nebraska

Sponsors

Meeting location:

University of Nebraska at Kearney Nebraskan Student Union, Ponderosa Room 1013 West 27th Street Kearney, NE 68849

American Public Power Association

The American Public Power Association is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. We represent public power before the federal government to protect the interests of the more than 49 million people that public power utilities serve, and the 93,000 people they employ. The Association advocates and advises on electricity policy, technology, trends, training, and operations. Our members strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power.

The Association partners with its members to promote public power, helping community-owned utilities deliver superior services through joint advocacy, education, and collaboration. Our vision is to shape the future of public power to drive a new era of community-owned electric service.

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Agenda

Day	1
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12:00 p.m. Registration and lunch12:30 p.m. Welcome and opening remarks

Honorable Mike Foley, Lieutenant Governor and Director of Homeland Security for the State of Nebraska

12:45 p.m. Panel discussion: Case studies in cybersecurity

Moderator: Chris Kelley, Beam Reach Consulting Group

- Recovering from an incident—what do you do when your city is attacked?
 Chris Lindell, Beatrice City Board of Public Works
- Phishing—Our #1 Threat
 Lourdes Herling, Nebraska Public Power District
- Stories from the field: Russian grid attack
 Michael Tomasiewicz, Omaha Public Power District

2:30 p.m. Networking break

3:00 p.m. Cybersecurity for Energy Delivery System (CEDS): Overview of program and available resources; benefits of the APPA resources

Sam Rozenberg, American Public Power Association

3:30 p.m. Information-sharing resources for resilience and preparedness

Steve Herrin, Electricity Information Sharing and Analysis Center (E-ISAC); North American Electric Reliability Corporation (NERC)

Kyle Bryans, Multi-State Information Sharing and Analysis Center (MS-ISAC)

4:15 p.m. DHS Cybersecurity and Infrastructure Security Agency (CISA): Enhancing public power cybersecurity capabilities

Joseph (JD) Henry, Cybersecurity and Infrastructure Security Agency, DHS

5:00 p.m. Roundtable discussion

Moderators: **Peggy Welsh**, Welsh Energy Consulting; **Chris Kelley**, Beam Reach Consulting Group

5:30 p.m. Testing network investigative techniques (NITs)

Dr. Matthew Miller, University of Nebraska at Kearney

5:50 p.m. Closing remarks

Sam Rozenberg, American Public Power Association

6:00 p.m.- Tour of the Virtual Reality Cybersecurity Laboratory

7:00 p.m. Dr. Sherri Harms, University of Nebraska at Kearney

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Day 2

7:30 a.m. Registration, coffee, continental breakfast

8:00 a.m. Welcome and objectives for the day

Joshua Mauk, Omaha Public Power District

8:15 a.m. Resources discussion: Partnerships, monitoring, and collaboration to support public power utilities

Moderator: Chris Kelley, Beam Reach Consulting Group

Partnerships between the Nebraska National Guard and public/private industry

Tim Pospisil, Nebraska Public Power District

Major Ryan Carlson, Nebraska Army National Guard

 Monitoring and response resources available from the Federal Bureau of Investigation

Special Agent, Federal Bureau of Investigation

 State Resources and Support from the Nebraska Energy Office Joe Francis, Nebraska Department of Environment and Energy

10:15 a.m. Networking break

10:45 a.m. Tools discussion: Specific cybersecurity tools and technologies for public power utilities to establish and maintain your security program

Moderator: Peggy Welsh, Welsh Energy Consulting

 Using the Public Power Cybersecurity Scorecard to assess your utility's cybersecurity maturity

Jason Christopher, Axio

 Neighborhood Keeper—collaborative threat detection and intelligence program for small and medium sized providers

Matt Bodman, Dragos, Inc.

• Elements of the *Public Power Cyber Roadmap* and how to use it effectively as your utility builds its cybersecurity program

Chris Kelley, Beam Reach Consulting Group

12:30 p.m. Working lunch

1:15 p.m. Tabletop exercise: *Incident Response Playbook*

Jack Eisenhauer, Nexight Group

 Facilitated, discussion-based exercise that will simulate a hypothetical cyber attack affecting business and operational systems at multiple power authorities.

3:15 p.m. Networking break

3:30 p.m. Continue tabletop exercise: *Incident Response Playbook*

Jack Eisenhauer, Nexight Group

4:30 p.m. Group discussion

Moderators: **Peggy Welsh**, Welsh Energy Consulting; **Chris Kelley**, Beam Reach Consulting Group

5:15 p.m. Closing remarks

Sam Rozenberg, American Public Power Association

5:30 p.m. Close

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Speakers

Matt Bodman

Director of Special Programs and Privacy Officer, Dragos, Inc.

Mr. Bodman is the Director of Special Programs and Privacy Officer at Dragos, Inc. Before joining Dragos he spent more than 20 years in government service. This included work with the U.S. Navy and the intelligence community managing and advising clients on computer network operations.

Since 2013, he has served as an Adjunct Law Professor at the University of Baltimore, School of Law, where he teaches courses related to internet, cybersecurity, and information privacy law. Mr. Bodman received a B.A. in Economics from University of Maryland, College Park; a J.D. from the University of Baltimore; and an LL.M in National Security Law from Georgetown Law School. He also maintains status as a Certified Information Systems Security Professional (CISSP) and as a Certified Information Privacy Professional (CIPP/US).

Kyle Bryans

Program Specialist, Multi-State Information Sharing and Analysis Center™

Kyle Bryans is a Program Specialist for the Multi-State Information Sharing and Analysis Center (MS-ISAC), a division of CIS (Center for Internet Security, Inc.®). He is a member of the Stakeholder Engagement team, which works with our nation's state, local, territorial, and tribal (SLTT) governments, providing free cybersecurity resources and services to enhance their collective posture. Mr. Bryans manages the accounts of the hundreds of MS-ISAC members throughout the Northeast and Midwestern U.S., supporting their overall cybersecurity posture. He also co-chairs the Business Resiliency and Continuity Workgroup.

MAJ Ryan Carlson

Team Chief, Defense Cyberspace Operations, Nebraska Army National Guard

Major Ryan Carlson enlisted in the Nebraska Army National Guard in 2001 and served nine years in the 734th Transportation Battalion in various positions. He deployed to Iraq in 2006 and 2007 with the 734th and served as the Battalion Tactical Operations NCO. In 2008, MAJ Carlson provided humanitarian relief in Louisiana in the aftermath of Hurricane's Gustav and Ike.

MAJ Carlson attended Officer Candidate School in Camp Ashland, Nebraska and was commissioned as a Second Lieutenant in 2010. He served in the 234th Network Support Company in Lincoln, Nebraska as a Platoon Leader, Executive Officer, and Company Commander until 2016. During his time in the 234th, MAJ Carlson provided communications support for the Incident Site Command in the Chadron, Nebraska area during the northwest Nebraska wildfires of 2012. MAJ Carlson went on to serve as the Battalion Communications Officer for the 1-376th Aviation Battalion in Grand Island, Nebraska from 2016 to 2018.

In 2017 he deployed to Jacksonville, Florida on a humanitarian response mission in the aftermath of Hurricane Maria.

MAJ Carlson currently serves as Team Chief of the Defense Cyberspace Operations–Element, charged with securely operating the U.S. Department of Defense Information Network and conducting targeted Defensive Cyberspace Operations in support of federal and state directives. In 2018 he oversaw the Nebraska National Guard's first ever Cyber Incident Response mission to Beatrice, Nebraska. He currently lives in Waverly, Nebraska with his wife, Arica, of 13 years and two sons who are eight and five years old.

Jason Christopher

Chief Technology Officer, Axio

Jason Christopher is the Chief Technology Officer for Axio. His responsibilities include providing technical leadership on security and resilience issues relevant to Axio, its partners, and clients, and the development of all Axio technology platforms for security metrics and benchmarking.

Prior to Axio, Mr. Christopher led the research for cybersecurity metrics and information assurance at the Electric Power Research Institute. Previously, he was the technical lead for cybersecurity capability and risk management at the U.S. Department of Energy, where he managed the Cybersecurity for Energy Delivery Systems Operations program, which included the Cybersecurity Capability Maturity Model and other collaborative efforts. Mr. Christopher also served as the program lead for both Critical Infrastructure Protection Standards and Smart Grid Security at the Federal Energy Regulatory Commission. Mr. Christopher worked on a variety of infrastructure projects, particularly in the field of industrial control systems design and implementation. He has also researched and designed technology systems across multiple industries, including energy, water, transportation, and communications. He has been a representative on the Federal Smart Grid Task Force, the Critical Infrastructure Protection Committee (CIPC), and other technical committees.

Mr. Christopher is a member on the Institute of Electrical and Electronics Engineers (IEEE-USA) Energy Policy, Communications Policy, and Research & Development Policy Committees. Over the past decade, he has focused on the development of cybersecurity standards and practices for the nation's critical infrastructure.

Jack Eisenhauer

President, Nexight Group

Mr. Eisenhauer is co-founder and president of Nexight Group, a strategy and technical consulting firm in Silver Spring, Maryland. For the past 40 years he has led strategic planning and partnership efforts in infrastructure protection and resilience, cyber security, and advanced energy technologies. He works with senior executives of the U.S. Department of Energy, the U.S. Department of Homeland Security, the National Infrastructure Advisory Council, and the national laboratories on strategies to reduce risks to critical infrastructures. Mr. Eisenhauer has conducted more than 50 tabletop exercises with infrastructure owners and operators, and has been honored with four awards of appreciation for his outstanding contributions to DOE.

Honorable Mike Foley

Lieutenant Governor and Director of Homeland Security, State of Nebraska

Lieutenant Governor Foley was elected to office as the running mate of Governor Pete Ricketts on November 4, 2014. He served two terms as the Nebraska Auditor of Public Accounts from 2007 through 2015. His work in that office resulted in the exposure of many millions of dollars of waste, fraud and inefficiency in government operations. Prior to his election as Auditor, he served six years in the Nebraska Unicameral Legislature as the State Senator for the 29th District in South Lincoln. While in the Legislature he served on various committees including Appropriations, Banking, Transportation, and Judiciary.

Lieutenant Governor Foley received his undergraduate degree from the State University of New York and his Master's degree from Michigan State University. Prior to moving to Nebraska, he lived 20 years in Washington, DC where he was the Director of Financial Analysis for the National Association of Regulatory Utility Commissioners. He and his wife Susan have been married for 28 years and are the parents of six children.

Joe Francis

Associate Director, State of Nebraska Department of Environment and Energy

For more than 44 years Mr. Francis has worked with the Nebraska Department of Environmental Quality. His responsibilities include program management and implementation of programs related to Small Business Assistance, Community Right to Know, Emergency Response, and six field offices. He earned a Master's in Public Administration at the University of Nebraska at Omaha, and his bachelor's degree from the University of Nebraska—Lincoln.

Dr. Sherri Harms

University of Nebraska at Kearney

Dr. Harms has several years of industry experience in software development and database management. She has numerous peer reviewed journal and conference publications, with research funded by NSF, USDA, Google, and state agencies. Over her career, Dr. Harms has been involved with more than \$2,000,000 in research grants and contracts.

Dr. Harms has been instrumental in starting undergraduate research in the Cyber Systems Department at UNK, and she has mentored hundreds of student publications and presentations. She is actively committed to service learning, with student projects that have aided hundreds of local, regional, and national organizations. She is passionate about research and service in computer science education, recruiting and retaining women in CS, and in database and data mining.

Her two recent grants are a Google CS4HS grant and a Nebraska Rural Futures Institute (RFI) grant for implementing social media plans for small businesses and non-profits through service learning. She is a Math/CS councilor for the Council on Undergraduate Research (CUR); and the CUR Math/CS Division received the 2019 Division of the Year award. Dr. Harms received the 1997 Governor's Award for Teaching Excellence for Lincoln University in Missouri.

Joseph (JD) Henry

Cybersecurity Advisor, Cybersecurity and Infrastructure Security Agency, Department of Homeland Security

J.D. Henry serves as the Region VII (Missouri, Kansas, Iowa, and Nebraska), Cybersecurity Advisor for the Regional Operations Branch of the Integrated Operations Directorate. He supports the Department of Homeland Security (DHS) and Cybersecurity and Infrastructure Security Agency (CISA) mission of strengthening the security and resilience of the nation's critical infrastructure. His program coordinates cyber preparedness, risk mitigation and incident response, and provides cyber security resources, including assessments, to the nation's sixteen critical infrastructure sectors and state, local, tribal, and territorial government entities.

Mr. Henry has 19 years' experience in the Information Technology field, to include multiple civilian assignments within the Department of Defense. Additionally, he is currently serving as a Cyber Warfare Officer in the United States Air Force Reserves. Mr. Henry has numerous IT and cyber certifications, including: Certified Information System Security Professional (CISSP), Certified Information Systems Manager (CISM), GIAC Certified Forensic Analyst (GCFA), and GIAC security Essentials Certification (GSEC).

Mr. Henry earned a Master's in Business Administration from Lindenwood University, and Bachelor of Science degrees from the University of Maryland University College in Information Systems Management and Southern Illinois University Carbondale in Workforce Education and Development.

Dr. Lourdes Herling

Corporate Cyber Security Manager, Nebraska Public Power District (NPPD)

Dr. Herling currently serves as Nebraska Public Power District's Corporate Cyber Security Manager. She joined NPPD in June 2016 as a Cyber Security Analyst and was moved to her current position in December 2018.

Before joining NPPD, Dr. Herling worked as a developer/software engineer for a Department of Defense contractor and a manufacturing company. She also spent 13 years in academia teaching Computer Science at Wayne State College and Information Technology at Central Community College.

She lives in rural Colfax County with her husband of 32 years. They have two grown children and one grandchild.

Steve Herrin

Director, Operations & CRISP Manager, Electricity Information Sharing Analysis Center (E-ISAC)

Steve Herrin has been in the Electricity Information Sharing Analysis Center since August 2015. He is the Director of Operations and Manager of the Cybersecurity Risk Information Sharing Program (CRISP). His responsibilities include oversight of Watch Operations, Physical Security Analysis, and the Cyber Analysis and Context teams.

Mr. Herrin served as the Branch Chief of the Infrastructure Analysis Branch for eight years with the U.S. Department of Homeland Security's Office of Infrastructure Protection, evaluating the potential consequences of disruption from physical or cyber threats and incidents. After graduating from Georgia State University with a Bachelor's in Business Administration in Risk Management and Insurance, he joined the insurance brokerage firm McGriff, Seibels and Williams, Inc. as a Marketing Account Executive,

managing portfolios for many large electric utility clients. He received his Executive MBA from Georgetown University in 2015. Mr. Herrin also served in the U.S. Navy Submarine Service for more than 12 years.

Christopher Kelley, PMP

Vice President, Beam Reach Consulting Group

Chris Kelley is a management and technology consultant with more than 20 years' experience in the energy and technologies industries. His background includes developing and improving utility, technology, and energy strategy and execution-oriented program management offices. He has facilitated effective collaborations of disparate groups focused on critical national challenges, innovation and ideation, industry-wide opportunities, and organizational strategy.

Mr. Kelley's recent support includes human factors change management for a distributed energy interconnection project at a large utility, and program design and stakeholder engagement for a national energy resilience program. He is currently working with the public power Cybersecurity Roadmap Advisory Committee to support development of a Cybersecurity Roadmap for small- to medium-sized public power utilities. Prior to serving as a consultant in energy and infrastructure, he was the Director of the Enterprise Project Management Office at Constellation Energy and a leader in Information Technology at Baltimore Gas & Electric Company.

Mr. Kelley holds a Bachelor of Science in Information Systems from the University of Maryland, Baltimore County and a Master of Business Administration in Strategy from the University of Maryland, College Park Smith School of Business. His is a certified Program Management Professional and a Scout Leader for his son's active Cub Scout Pack.

Chris Lindell

Electronic Systems Analyst, Beatrice City Board of Public Works

Mr. Lindell's official title is Electronic Systems Analyst, but his position has evolved over the years to include a wide variety of responsibilities. From generic computer help to creating and maintaining custom software, running the SCADA system, and multi-department budgeting, his responsibilities mirror those of many smaller cities. A small IT department usually results in each person wearing multiple hats to fulfill a variety of roles.

While not hammering away at a keyboard, he enjoys spending time with his wife, three sons, and three dogs camping and traveling. His sons have recently pulled him into the Boy Scouts of America program and he has jumped in with both feet (he used to be a Bobwhite), serving as a new Cubmaster and Assistant Scoutmaster with the local pack and troop.

Joshua Mauk

Director of Security and Information Protection, Omaha Public Power District (OPPD)

Joshua Mauk is the Director of Security and Information Protection for the Omaha Public Power District (OPPD). He currently leads the cybersecurity, corporate security, business continuity and disaster recovery functions for OPPD. Over the past 21 years Mr. Mauk has held a number of leadership positions in the IT, Information Security, and Assurance areas for Charles Schwab, PeopleSoft, Safeway, Gap,

University of Nebraska and Mutual of Omaha. Mr. Mauk has a degree in Finance from Xavier University and Master's in Information Systems from University of San Francisco. He also serves as an adjunct instructor in the University of Nebraska Omaha's cybersecurity program.

Dr. Matthew Miller

Assistant Professor, University of Nebraska at Kearney

As an Assistant Professor at the University of Nebraska at Kearney, Dr. Miller seeks to teach students skills that they need to become great programmers. He also provides cybersecurity consulting for businesses and lawyers. Dr. Miller provides network scanning and remediation solutions to increase the security posture of network connected businesses, and conducts computer program reverse engineering and analysis for both malware and lawful network investigative techniques (NITs).

Tim Pospisil

Director of Corporate Security and Chief Security Officer, Nebraska Public Power District (NPPD)

Timothy S. Pospisil currently serves as Nebraska Public Power District's Director of Corporate Security and Chief Security Officer (CSO), with responsibility for Physical and Cyber Security for the District. Mr. Pospisil joined the team at Nebraska Public Power District in 1999 at Cooper Nuclear Station in Brownville, Nebraska where he served as a Procurement and Environmental Qualification engineer. In 2005, Mr. Pospisil transferred from NPPD Cooper Nuclear station to the Corporate Office in Columbus and served as an SAP IT Business Analyst. Prior to current assignment, he served NPPD as an IT Consultant on NPPD's NERC CIP implementation projects, served for three years as the District's IT Security Supervisor.

Before joining NPPD, Mr. Pospisil served as a Test Engineer at Motorola Semiconductor Product Sector (SPS), in Austin, Texas from 1989 until 1996. He then was assigned to be the Test & Packing Section Manager for White Oak Semiconductor in Richmond, Virginia, a joint-venture start-up company between Motorola-SPS and Siemens Semiconductor until 1999.

He is married to his wife Kathy of 29 years, with a son and a daughter, and works at NPPD's Corporate Office in Columbus.

Sam Rozenberg

Engineering Services Security Director, American Public Power Association (APPA)

Mr. Rozenberg is the Engineering Services Security Director at the American Public Power Association (APPA). He has worked with utilities on a variety of physical and cybersecurity issues as well as emergency response. Mr. Rozenberg has been with the APPA since December 2016.

Before joining APPA, Sam worked for a large investor-owned utility for six years, overseeing physical security operations for 32 hydro stations in three states as well as a 24/7 Global Security Operations Center. Sam earned his Master's in Public Administration and Bachelor's in International Criminal Justice from John Jay College of Criminal Justice in New York City.

Michael Tomasiewicz

Lead Cyber Security Analyst, Omaha Public Power District (OPPD)

Mike Tomasiewicz is the Lead Cyber Security Analyst for the Omaha Public Power District. He has more than 25 years of experience in IT and cyber architecture, design, implementation, administration, and troubleshooting. His primary focus is on emerging cyber security threats to critical infrastructure and ensuring that OPPD cyber systems remain up to the challenge of defending against all adversaries.

Peggy Welsh

Principal, Welsh Energy Consulting, LLC

Peggy Welsh is the Founder and Principal of Welsh Energy Consulting, LLC, a woman-owned small business offering management consulting services to the energy sector. Her specialties include program management, policy analysis, strategic planning and implementation, report writing and editing, research and analysis, government relations, coalition building, and event planning, execution and post-event analysis.

Prior to establishing Welsh Energy Consulting, Ms. Welsh was Program Manager of Electricity Programs at Energetics Incorporated where she worked on electric power policies and programs. At Energetics, she supported the U.S. Department of Energy's Electricity Office, the Energy Policy and Systems Analysis Office, and the Energy Efficiency and Renewable Energy Office, in addition to serving several private sector clients.

Prior to joining Energetics, Ms. Welsh was Senior Vice President of the Consumer Energy Council of America, a non-profit research organization that undertook research and conducted consensus building on energy public policy. Previously, she served as Executive Director of the National Association of Regulatory Utility Commissioners, the national association representing state utility regulators. She also served as Executive Director of the Electric Generation Association (EGA), a national trade association representing independent power producers. EGA and its counterpart merged to become the Electric Power Supply Association (EPSA). Ms. Welsh facilitated the merger while serving as Acting Executive Director of EPSA until its launch.

Ms. Welsh has held numerous other positions, including serving as Administrative Director of the Independent Power Producers Working Group, a coalition of independent power producers, while she was a lobbyist for the law firm of Dickstein, Shapiro and Morin. Earlier Peggy worked in the White House during the Ford Administration and began her career with U.S. Senator Dewey F. Bartlett (R-OK).