GRIDSECCON 2021

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October 18–20, 2021

2021 GridSecCon Program Welcome Letter

Welcome to our tenth annual grid security conference, GridSecCon 2021! This is our first year in a completely virtual environment, but we are confident you will find it just as engaging and informative as our previous events. This year's event is co-hosted by NERC, the Electricity Information Sharing and Analysis Center (E-ISAC), and Texas Reliability Entity, Inc. (Texas RE) as part of the Electric Reliability Organization (ERO) Enterprise's collaborative efforts to support industry in securing the North American bulk power system through information sharing, education, and collaboration.

Although we canceled GridSecCon 2020 due to the pandemic, the bad actors have not missed a beat. Since we last convened, we have witnessed multiple headline-grabbing compromises from ransomware to major hacks and physical breaches, making GridSecCon even more relevant as we come together to discuss threats and solutions to help enhance our security efforts. NERC's E-ISAC seeks to be an essential part of enhancing these efforts by helping to educate industry about threats and solutions and by working to strengthen the cyber and physical security of our grid.

Security and reliability are inextricably linked, and events like GridSecCon help industry plan and prepare for contingencies through training, information sharing, and lessons learned. To be successful, we are building a collective defense to avoid, mitigate, and solve our critical security challenges. It is clear from this year's record number of registrants that cyber and physical security remain a top priority in the industry's reliability efforts.

Our program this year is very exciting, and we are delighted that we will have a virtual conversation with U.S. Department of Energy (DOE) Secretary Jennifer Granholm on the second day. During the two days, industry leaders from Texas RE, Analysis and Resilience Center for Systemic Risk, Center for Strategic and International Studies, SolarWinds, and TAG Cyber will share insights into latest strategies and solutions.

The agenda also includes training, panel discussions, and breakout sessions on the Administration's 100-day plan, supply chain lessons learned, the current threat landscape, GridEx, and game-changing research and development. At the conclusion of GridSecCon 2021, we will announce the winner of the inaugural E-ISAC Electricity Security Service Award in honor of Michael J. Assante, who was instrumental in establishing the E-ISAC. The award recognizes individuals or teams that have made significant contributions to support the security of the North American electricity industry.

We know our industry takes security risks seriously, and we remain vigilant as our adversaries continue to develop more sophisticated campaigns that place the North American grid at risk. This is why a learning environment like GridSecCon is increasingly important. We cannot assure reliability without also assuring the security of the North American bulk power system. GridSecCon is one way that the ERO Enterprise fosters a learning environment that supports this common goal. We look forward to the discussions and a successful conference.

Jim Robb
President and Chief Executive Officer
North American Electric Reliability Corporation

Jim Albright
President and Chief Executive Officer
Texas Reliability Entity, Inc.

Agenda

Monday, October 18 | Training

11:00 a.m. – 3:00 p.m. **Training Sessions**

Training Topic	Training Provider
OT Cyber Risk Management	Waterfall Security Solutions
Cyber Physical Grid Training: Cyber-Physical Electric Grid Analysis of Threats, Impact and Defense	Texas A&M University
Sneak Peek at SANS ICS 418-ICS for Managers Course	SANS and Dragos
Building a Phishing Simulation Training Program Without Barriers	Curricula
5G Security 101: From Radio to Cloud	Deloitte
How to Build an Insider Threat Program	Carnegie Mellon Software Engineering Institute
Making Supply Chain Management Work for You	aDolus Technology, Inc.

4:00 – 7:00 p.m. **SANS and Dragos Industrial Control Systems Capture the Flag - DAY 1**

Tuesday, October 19 | DAY 1

11:00 – 11:15 a.m. **Welcome/Opening Remarks**
Manny Cancel – NERC Senior Vice President and CEO, E-ISAC

11:15 – 11:30 a.m. **Regional Entity Keynote**
Jim Albright – President and CEO, Texas RE

11:30 – 11:45 a.m. **Keynote**
Suzanne Spaulding – Senior Adviser, Homeland Security, International Security Program Center for Strategic and International Studies

11:45 – Noon **Keynote**
Bruce Walker – Head of Energy Risk Operations/Energy Chief Risk Officer, Analysis and Resilience Center for Systemic Risk

Noon – 12:15 p.m. **Transition/Break** *(sponsored by Dragos)*

12:15 – 1:15 p.m. **Concurrent Breakout Sessions**

Collective Cyber Defense for NY State Municipalities and Co-Ops
Vic Costanza – Senior Director and Deputy CISO, New York Power Authority
Shawn Wallace – VP Energy, IronNet

Digital Transformations and Precision Time Security – A Roadmap for Risk Mitigation *(sponsored by Keysight Technologies)*
Christine Hertzog – Principal Project Manager, Electric Power Research Institute
David Howard – Office of Electricity Delivery and Energy Reliability, DOE

How Do Your Trade Associations Help the Industry Become More "Cyber Secure"? *(sponsored by Dragos)*
Bridgette Bourge – Director, Legislative Affairs, National Rural Electric Cooperative Association (NRECA)
Fritz Hirst (moderator) – Director, Legislative and Regulatory Affairs, NERC
Alex Hoffman – Vice President, Technical and Operational Services, American Public Power Association
Leah Michalopulos – Director, Government Relations, Canadian Electricity Association
Hailey Siple – Manager, National Security Policy, Edison Electric Institute

Safe and Secure Autonomous Scanning Solution for Energy Delivery Systems (SSASS-E) *(sponsored by Network Perception)*
Adam Gormley – Control Systems Engineer, Chelan PUD
William Hofer – Cyber Security Engineer, Pacific Northwest National Laboratory

Security Concerns with DNP3
Jacob Brodsky – IT Specialist (INFOSEC), Federal Energy Regulatory Commission

Security Threats from Drones
Alex Benoliel – Director, Corporate Security, Southern California Edison
Benjamin Gibson – Senior Physical Security Analyst, E-ISAC
William "Tom" Hewitt – Chief, Unmanned Aircraft Systems Threat Integration Cell, U.S. Department of Homeland Security
Travis Moran – Vice President of Operations, Welund North America

1:15 – 1:30 p.m. **Transition/Break** *(sponsored by IronNet)*

1:30 – 2:30 p.m. **Concurrent Breakout Sessions**

A Year of Supply Chain Lessons

Brian Barrios (moderator) – VP of Cybersecurity and IT Compliance, Southern California Edison
Tim Brown – CISO and Vice President, Security, SolarWinds
Allan Liska – Senior Security Architect, Recorded Future
Andrew Serwin – U.S. Chair and Global Co-Chair, Data Protection, Privacy and Security Practice, DLA Piper
Zachary Tudor – Associate Laboratory Director, National and Homeland Security, Idaho National Laboratory (INL)

Advancing the Utility Industry's Cybersecurity with Essence

Phil Craig – Founder, BlackByte Cyber Security, LLC
Doug Lambert – Senior Principal, Grid Solutions, NRECA
Emma Stewart – Chief Scientist, NRECA

Best Practices for an Insider Threat Program

Margaret Fenner – Director, Threat Intelligence and Investigations, Enterprise Protective Services, Duke Energy
Greg Klein – Supervisory Special Agent, FBI
Brittany McBride – Insider Threat Fusion Center Team Lead, Southern Company
Jazmin Perez – Manager, Insider Risk and Intelligence Safety, Security and Business Resiliency/Corporate Security, Southern California Edison

Diversity and Inclusion in the Electricity Industry

(sponsored by Tripwire)
Stephen Brown – Director, Cyber and Physical Security, SERC Reliability
Lam Chung – Vice President and Engineer for Strategy, Innovation, and Finance, Midwest Reliability Organization
Joan Jacobs – Vice President, Learning and Inclusion, Con Edison
Janet Sena (moderator) – Senior Vice President, Policy and External Affairs, NERC
Tabice Ward – Area Vice President, Business Security Risk Advisory and Support Services, Xcel Energy

Secure Authentication and Discerning Control

Abdo Saad – Department Manager, Con Edison

The Five Electric Utility Languages

Brent Castagnetto – Senior Security Consultant, Archer
Nick Weber – Senior Security Consultant, Archer

2:30 – 2:45 p.m. **Transition/Break** *(sponsored by Tripwire)*

2:45 – 3:45 p.m. **General Session: Cybersecurity Risk Information Sharing Program (CRISP) Briefing**
Frank Honkus – CRISP Program Manager, E-ISAC
Carter Manucy – Director IT/OT and Cybersecurity, Florida Municipal Power Agency
Michael Toecker – CRISP Task Lead and +30 PM, DOE

3:45 – 4:00 p.m. **Closing Remarks**
Manny Cancel – NERC Senior Vice President and CEO, E-ISAC

4:00 – 7:00 p.m. **SANS and Dragos Industrial Control Systems Capture the Flag Challenge DAY 2**

Wednesday, October 20 | DAY 2

11:00 a.m. **Welcome**
Manny Cancel – NERC Senior Vice President and CEO, E-ISAC

11:00 – 11:30 a.m. **Keynote: Virtual Conversation with the Honorable Jennifer Granholm**
The Honorable Jennifer Granholm – Secretary of Energy, DOE
Jim Robb – President and CEO, NERC

11:30 – 11:45 a.m. **Keynote**
Ed Amoroso – CEO and Founder, TAG Cyber LLC

11:45 – Noon **Keynote**
Tim Brown – CISO and Vice President, Security, SolarWinds

Noon – 1:00 p.m. **Concurrent Breakout Sessions**

Incident Response Preparedness Assessment Tool (IRPAT)
Bheshaj Krishnappa – Program Manager, Resiliency and Risk, ReliabilityFirst
David Sopata – Principal, Reliability Consultant, ReliabilityFirst

Ransomware "Are You Ready"? – The Importance of an Integrated IT/OT Defense
(sponsored by Attivo Networks)
Greg Baker – Senior Associate, Incident Response, Booz Allen Hamilton
Kyle Miller – OT Cybersecurity Practice Lead, Booz Allen Hamilton
Bridget Quinn Choi – Director, Incident Response, Booz Allen Hamilton
Juan Villarreal – Senior Associate, Booz Allen Hamilton

Security Regulations: Are We Giving Away the Blue Team Game Plan?
Jason Christopher – Principal, Cyber Risk Advisor, Dragos
Eóin Cooke – Vice President, Security and Information Systems, AltaLink
Lonnie Ratliff – Senior Manager, Cyber and Physical Assurance, NERC
Betsy Soehren-Jones – Director, Cyber and Physical Security Strategy, Exelon

Situational Awareness and Collaboration in Blended IT/OT Events *(sponsored by Nozomi Networks)*
Michael Legatt – CEO and Founder, ResilientGrid
Jodi Heintz Obradovich – Chief Research Scientist, ResilientGrid

The Cybersecurity for the Operation Technology Environment (CyOTE) Methodology
Sam Chanoski – Technical Relationship Manager, INL

The Enemy Within: How to Protect Yourself from a Third Party Breach *(sponsored by Fortinet)*
Jeffrey Sweet – Director, Security Assessments, American Electric Power

1:00 – 1:30 p.m. **Transition/Break** *(sponsored by IronNet, Tripwire, and Dragos)*

1:30 – 2:30 p.m. **General Session: A Decade of GridEx**
Caitlin Durkovich – Special Assistant to the President and Senior Director for Resilience & Response, National Security Council
Kate Ledesma (moderator) – Resilience and Policy Manager, E-ISAC
Adam Lee – Vice President and Chief Security Officer, Dominion Energy
Brock Long – Former Administrator of the Federal Emergency Management Agency, and Hagerty Consulting's Executive Chairman
Mark Weatherford – Chief Strategy Officer and member of the board at the National Cybersecurity Center; Chief Information Security Officer, AlertEnterprise; Founding Partner of Aspen Chartered

2:30 – 3:30 p.m. **General Session: Joint Presentation on 100-Day Plan**
Manny Cancel – NERC Senior Vice President and CEO, E-ISAC
Rob Lee – CEO, Dragos

3:30 – 3:35 p.m. **General Session: E-ISAC Electricity Security Service Award in Honor of Michael J. Assante, Capture the Flag Competition Winners, and Closing Remarks**
Manny Cancel – NERC Senior Vice President and CEO, E-ISAC

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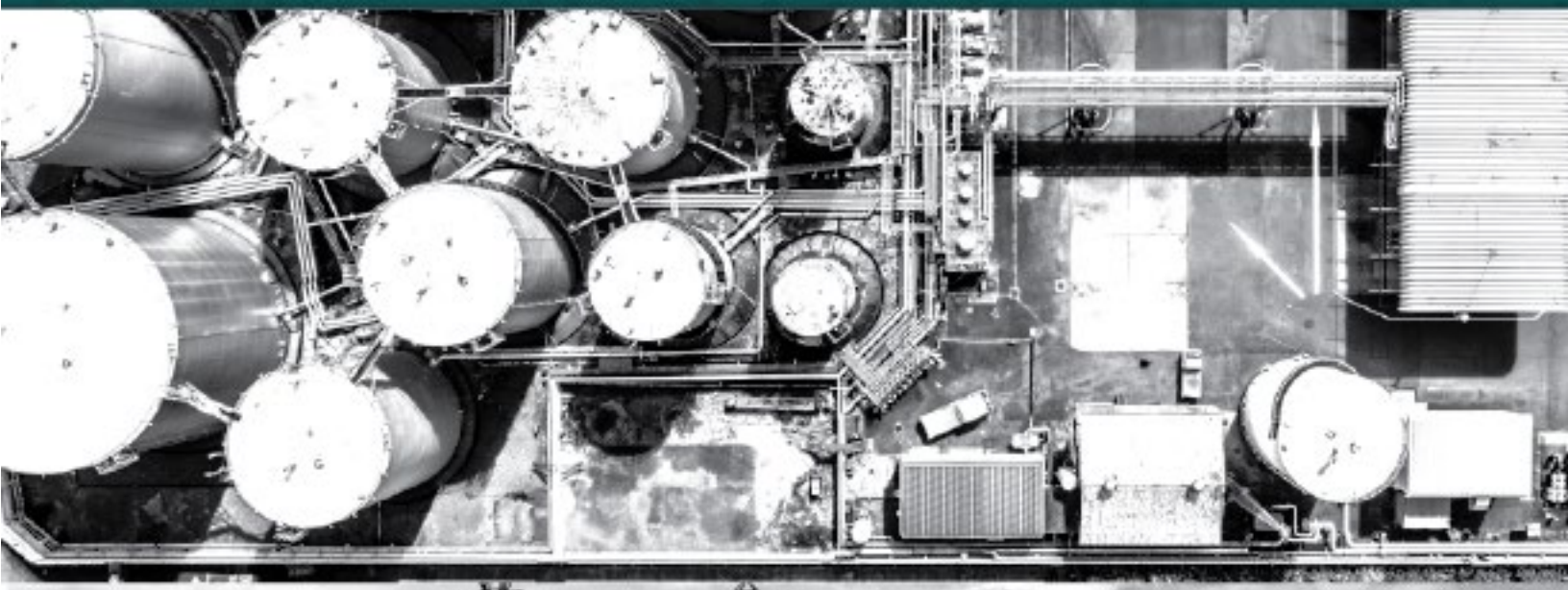

IronNet

Collective Cyberdefense for NY State Munis and Co-Ops

OCTOBER 19 | 12:15 PM - 1:15 PM ET

Shawn Wallace, IronNet and Vic Costanza, NYPA

NYPA and IronNet have partnered to address a unique challenge: how to provide advanced cybersecurity and collective defense to munis and co-ops. After addressing the need and outlining benefits to stakeholders, we will share the program plan, schedule, and outreach package. We will discuss challenges, lessons learned, and the issues we encountered. Leveraging the results of the pilot, we will plan for ways to improve other future efforts and advance overall sector cybersecurity.

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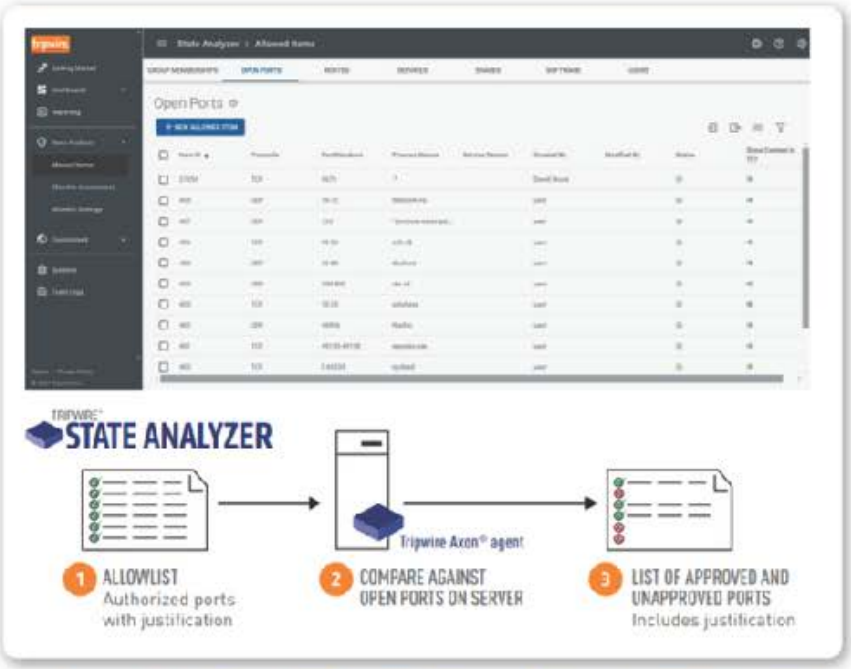

Fig. 1 Overview of Tripwire State Analyzer's process flow in the context of network port allowlisting.
Step 1: User defines an allowlist of authorized network ports
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Step 3: Report is generated, listing authorized and unauthorized open ports

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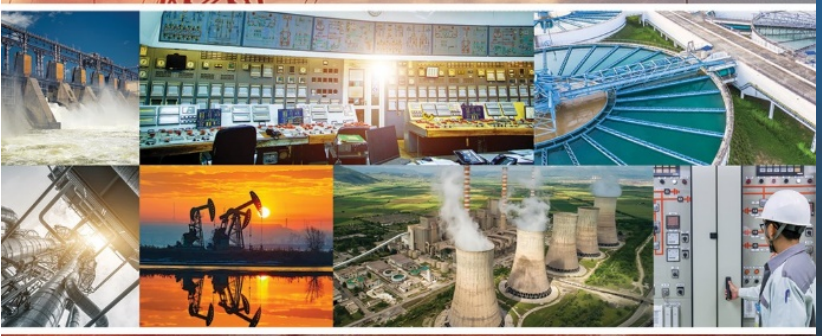

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