ESCC

Electricity Subsector Coordinating Council

Protecting the energy grid from national-level disasters and threats is a responsibility the government and the electric power industry share.

The CEO-led ***Electricity Subsector Coordinating Council (ESCC)*** is the principal liaison between the electric sector and the federal government, coordinating efforts to prepare for and respond to national-level disasters or threats to critical infrastructure.

As the primary stewards of the energy grid, ESCC members are at the forefront of national security and resilience. The ESCC coordinates emergency response efforts following natural disasters and malicious attacks, facilitates critical conversations on the detection and mitigation of threats to the energy grid, and supports initiatives that improve the sector's overall security and resilience posture.

The ESCC membership consists of CEOs and senior executives from investor-owned electric companies, municipal and public power utilities, electric cooperatives, and their respective trade associations to represent all segments of the industry and reflect the diverse voices of energy grid asset owners and operators.

Unity of Effort & Unity of Message

Rooted in the culture of mutual assistance, the electric sector is unique in its ability to work together in the face of adversity. The ESCC serves as a center of gravity for the sector, leveraging the resources and capabilities of all industry and government partners. This empowers the sector to act with ***unity of effort*** and speak with ***unity of message*** when preparing for and responding to threats to the energy grid.



Strategic Alignment

The ESCC works closely with many national security organizations, including the White House National Security Council, the Department of Energy, the Department of Homeland Security, federal law enforcement, the Electricity Information Sharing and Analysis Center, the intelligence community, state and local governments, international partners, and others. ***Close coordination*** and ***strategic alignment*** across the national security community enable the ESCC and the electric industry to develop strategies and take actions that prioritize resilient against a broad spectrum of threats.

ESCC Program & Initiative Highlights

Securing the Grid of the Future: The U.S. energy grid is growing and changing rapidly. Critical electric infrastructure is becoming increasingly ***technological***, ***interconnected*** and ***automated***, which enables rapid growth and advancement for the industry but also introduces new security and resilience challenges. Highly specialized equipment is difficult – and often impossible – to procure from domestic suppliers, leading to increased reliance on foreign manufacturers. Cyber and physical security for highly technological distribution infrastructure poses a bigger threat today than ever before. Artificial intelligence presents novel and unknown challenges, as well as the potential for greatly advanced capabilities. Meanwhile, the attack surface of the grid continues to grow, exposing the sector to new and potentially catastrophic cyber threats. The ESCC is committed to leveraging the full strength of the industry to understand and address future challenges.

Operational Collaboration: Critical electric infrastructure is an increasingly frequent target of malicious physical and cyber attacks by nation-states, domestic extremists, and other threat actors. The electric industry, the U.S. federal government, and the broader intelligence community depend on the ability for ***trusted, effective collaboration,*** including the two-way flow of threat and vulnerability information, in order to detect, prevent, and mitigate threats to the grid.

Natural Disaster Response: Following Superstorm Sandy in 2012, the ESCC and the Department of Energy (DOE) committed to establishing a coordinated process to respond to natural disasters with ***unity of effort*** and ***unity of message***. Today, industry and government work seamlessly together during catastrophic hurricanes, wildfires, and other natural disasters to leverage all available resources across the sector and ensure that recovery efforts are as safe, efficient, and effective as possible.

Supply Chain Availability: Mitigating the serious threats to security and resilience posed by shortages of critical materials and equipment is a high priority for the ESCC. As society becomes increasingly highly electrified, demand for critical supplies continues to outpace domestic production, while geopolitical tensions threaten the security and availability of overseas supply chains. Following the global supply chain disruptions caused by Covid-19, the CEO-led ***ESCC Supply Chain Tiger Team*** worked closely with federal government partners and critical manufacturers to quantify the severity of our most urgent supply chain shortages, including distribution and large power transformers, and develop mitigation recommendations. Today, the ESCC continues to identify and drive progress on mitigation efforts in response to the industry's continuing supply chain crisis.

Wildfire Mitigation: The ***ESCC Wildfire Working Group (WWG)*** is a CEO-led effort to improve the industry's wildfire detection, prevention, and mitigation capabilities. The WWG, in partnership with the U.S. Forest Service and the Bureau of Land Management, has significantly advanced the sector's land management strategies, including developing more efficient processes for electric utilities to maintain and upgrade their rights-of-way on blue sky days and respond to wildfire emergencies quickly and safely during a crisis.

Cyber Incident Response: Borrowing the concept from traditional mutual assistance networks, the ESCC established a ***Cyber Mutual Assistance program*** to support electric and natural gas companies, municipal and public power utilities, and electric cooperatives as they restore critical computer systems following significant cyber incidents. The program includes more than 190 entities across all segments of the industry, serving more than 85 percent of all U.S. electricity and natural gas customers.

Resilient Communications: The ability to effectively communicate, coordinate, and maintain situational awareness across the electric sector during an emergency is critical. The ***ESCC Resilient Communications Working Group (RCWG)*** was established in partnership with the Electric Power Research Institute (EPRI) and DOE to enhance the industry's emergency communications strategies and advance our technological capabilities. As technologies and the threats we face continuously evolve, advancing our resilient communications posture remains a top ESCC priority.

Covid-19 Pandemic Response: When COVID-19 first emerged in the U.S. early in 2020, the ESCC established an unprecedented ***ESCC Covid-19 Tiger Team.*** With more than 300 volunteers from the electric industry, the E-ISAC, the natural gas and nuclear energy industries, Canadian electric companies, independent power producers, and the federal government, the tiger team developed and aligned response strategies across the sector to ensure the resilience of the grid as the pandemic unfolded in real time. Within days, the tiger team produced the first of ten versions of the ***Covid-19 Resource Guide***, which has been adapted for use by cross-sector partners, translated for use by international partners, and lauded domestically and internationally as a key guidance tool in responding to the virus.

EMP Mitigation Research: The ESCC worked in close partnership with the EPRI and the federal government to explore the risks posed by ***electromagnetic pulses (EMPs)*** and to develop and implement mitigation strategies. EPRI produced a series of reports on EMP impacts on energy infrastructure, including an assessment of the tools and methods the sector can use to evaluate their vulnerability to an EMP event.

ESCC Playbook: The ***ESCC Playbook*** provides a framework for collaboration, addressing steady state and crisis state roles and responsibilities for ESCC members and the many operational organizations that protect the grid and restore power when an incident occurs. The Playbook is designed to facilitate coordination between senior industry and government executives, ensuring that the electric sector is communicating effectively and able to support preparedness and response efforts when needed.

RD&D Prioritization: The ESCC promotes ongoing collaboration with the federal government, the DOE national labs, and the investment community to align research, development, and deployment needs and priorities with those of industry and to encourage the deployment of high-priority technologies. The ESCC has hosted several ***ESCC National Lab Roundtables***, bringing together representatives from industry, government, manufacturers and suppliers, and the labs to establish common RD&D priorities and objectives.

Preparedness Exercises: Each year, the ESCC participates in a variety of preparedness exercises to test and update its coordination and messaging protocols. The ESCC plays a significant role in the E-ISAC's ***GridEx*** exercise series, which includes a designated senior executive tabletop session that is fundamental to the ESCC's identification of industry-wide priorities. Government-sponsored exercises, such as DOE's ***Clear Path*** exercise series and the Federal Emergency Management Agency's ***National Level Exercises***, provide the ESCC with important opportunities to test response strategies in the face of natural disasters and other catastrophic events. The ESCC also participates in exercises hosted by individual trade associations.

ESCC Executive Committee

Trade Associations

Scott Corwin
American Public Power Association

Drew Maloney
Edison Electric Institute

Jim Matheson
National Rural Electric Cooperative Association

Asset Owners

Bill Fehrman
American Electric Power

Thomas Kent
Nebraska Public Power District

Duane Highley
Tri-State Generation and Transmission Association

ESCC Members

Jason Grumet
American Clean Power Association

Buddy Hasten
Arkansas Electric Cooperative Corporation

Scott Thon
Berkshire Hathaway Energy

Travas Deal
Colorado Springs Utilities

Tim Cawley
Con Edison

Bob Blue
Dominion Energy

Harry Sideris
Duke Energy

Pedro Pizarro
Edison International

Andrew Marsh
Entergy

Calvin Butler
Exelon Corporation

Greg Ford
Georgia System Operations Corporation

Donna Walker
Hoosier Energy

Peter Gregg
Nova Scotia Power

Sean Trauschke
OG&E

Lesley Gallinger
Ontario Independent Electric System Operator

Patti Poppe
Pacific Gas & Electric

Ralph LaRossa
Public Service Enterprise Group

Dan Beans
Roseville Electric

Chris Womack
Southern Company

Peter Dion
Wakefield Municipal Gas & Light Dept.

Bob Frenzel
Xcel Energy

ESCC Secretariat

Adrienne Lotto
Michael Coe
Brandi Martin
American Public Power Association

Jennifer DeCesaro
Ashley Lubenkov

Edison Electric Institute

Ashley Slater
John Ransom

National Rural Electric Cooperative Association