

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) serves as the principal liaison between the federal government and the electric power industry on efforts to prepare for, and respond to, national-level disasters or threats to critical infrastructure. The ESCC works across the sector, and with the Electricity Information Sharing and Analysis Center (E-ISAC), to develop actions and strategies that help protect the North American energy grid and prevent a spectrum of threats from disrupting electricity service.

The ESCC includes CEOs and executives from electric companies, public power utilities, and rural electric cooperatives, as well as their trade association leaders, who represent all segments of the industry. Through the ESCC, the industry works closely with its government counterparts, including senior administration officials from the White House, cabinet agencies, federal law enforcement, and national security organizations. Canadian electric company executives also are represented.

ESCC Strategic Committees

Three strategic principles guide the work of the ESCC: collective defense, collective response, and preparedness & resilience. In support of these principles, the ESCC divides its work among four key strategic committees. CEOs, executives, and staff from the entire sector are encouraged to join these committees:

- **THREAT AND INFORMATION SHARING**

Improve and institutionalize the flow of, and access to, actionable information among public- and private-sector stakeholders.

- **INDUSTRY-GOVERNMENT COORDINATION**

Establish unity of effort and message between industry and government partners to support ESCC missions in steady state and in crises.

- **RESEARCH AND DEVELOPMENT**

Support industry and government research and development (R&D) initiatives to advance improvements in grid resilience.

- **CROSS-SECTOR LIAISONS**

Develop strong partnerships with the communications, oil & natural gas, financial services, transportation systems, and water/wastewater systems sectors.

Significant ESCC Programs & Projects

■ **CORONAVIRUS RESPONSE**

Earlier this year, the ESCC began working with the federal government to coordinate how industry and government would mitigate and respond to the coronavirus. As part of that coordination effort, the ESCC created a series of working groups to identify and help address major issues and challenges during the pandemic response. The groups were comprised of representatives from all segments of the electric power industry, and included participation from the natural gas industry and independent power producers. They developed a Resource Guide with tools and resources that entities across the sector are using to make localized decisions in response to this global health emergency. The guide, which is publicly available on the ESCC website, was praised by cross-sector partners as a key resource during the pandemic.

■ **R&D ALIGNMENT**

The ESCC promotes ongoing collaboration with the federal government, the national labs, and the investment community to align R&D needs and priorities with those of industry and to encourage the deployment of high-priority technologies. The ESCC hosted the first National Lab Roundtable in September 2019, which brought together representatives from industry, the Department of Energy (DOE), and ten DOE National Labs to discuss common R&D priorities and objectives, paving the way for improved coordination on future R&D initiatives.

■ **RESILIENT EMERGENCY COMMUNICATIONS CAPABILITIES**

The ESCC is exploring how the sector can develop and maintain the emergency communications capabilities needed to operate the energy grid manually during a prolonged outage. In partnership with the Electric Power Research Institute (EPRI), DOE, the E-ISAC, and other stakeholders, the ESCC tested several technologies in 2019 and is now developing a long-term pilot project based on the results of the tests.

■ **CYBER INCIDENT RESPONSE**

The ESCC used the concept of traditional mutual assistance networks—voluntary resource sharing partnerships from across the country and Canada—to develop the Cyber Mutual Assistance program that can help electric and natural gas companies, public power utilities, and/or rural electric cooperatives restore critical computer systems following significant cyber incidents. The program now includes more than 155 entities across all segments of the industry, serving more than 80 percent of all U.S. electricity customers.

■ **CYBERSECURITY INFO SHARING**

A top ESCC priority continues to be increasing the exchange of threat information across the electric power industry and with the federal government. As part of that effort, dozens of industry representatives are advising DOE as it develops the CATT™ 2.0 platform – a new approach to information sharing and analysis that relies upon data from multiple sensor programs. In addition, the ESCC is continuing its efforts to further enhance the Cybersecurity Risk Information Sharing Program (CRISP)—a public-private partnership initiative co-funded by DOE and industry and managed by the North American Electric Reliability Corporation's E-ISAC. CRISP facilitates timely bi-directional sharing of actionable unclassified and classified threat information using advanced collection, analysis, and dissemination tools that identify threat patterns and trends across the electric power industry.

■ **THE ESCC PLAYBOOK**

The ESCC developed a playbook that provides senior industry and government executives with a framework to coordinate response and recovery efforts and communication with the public during major incidents. The playbook is updated annually, tested in a series of exercises (most recently GridEx V), and used during real-world events.

- **EMP RESEARCH**

The ESCC is partnering with EPRI and key government agencies to assess the threat posed by electromagnetic pulses (EMPs) and to develop and implement mitigation strategies. In 2016, as part of a major collaborative research effort, EPRI released the first in a series of reports on EMP impacts on energy infrastructure, including the potential threat to large power transformers. Additional research and mitigation strategies were released in 2019, including an assessment of the tools and methods the sector can use to evaluate their vulnerability to an EMP event. The ESCC also is engaged with DOE and the Department of Homeland Security as the agencies address the requirements of the March 26, 2019 Executive Order on Coordinating National Resilience to Electromagnetic Pulses.

- **CROSS-SECTOR COORDINATION**

In 2016, the ESCC appointed CEOs to serve as cross-sector liaisons to the communications, downstream natural gas, financial services, transportation, and water/wastewater sectors. The ESCC now is bringing together executive-level representatives from the electric, communications, and financial services sectors to identify mutual priorities and to develop cross-sector incident response plans and protocols. A tri-sector playbook was developed to inform how the three sectors (electric, communications, and financial services) can work together during major incidents. In addition, the ESCC has continued to support engagement with the transportation sector on the emergency movement of transformers and other heavy equipment.

- **STATE COORDINATION**

Representatives from the ESCC, the federal government, the National Governors Association, the National Association of State Energy Officials, and the National Association of Regulatory Utility Commissioners have formed a working group to discuss how the electric power sector, state officials, federal partners, and regulators can align resources and priorities, unify their message, and enhance overall awareness of incident management and resilience planning.

- **INCIDENT RESPONSE MESSAGING**

The ESCC launched a public affairs initiative to enhance how industry and government communicators prepare for emergencies affecting the energy grid. As part of that initiative, senior public affairs officials from the government and senior industry communications executives meet each year to discuss information-sharing and how public messaging is coordinated during major incidents. The group developed a communications annex to the ESCC playbook, and they developed and tested a standard process for coordinating industry and government messaging immediately following a grid-related cyber incident or other no-notice disaster.

- **WILDFIRE MITIGATION AND RESPONSE**

In response to the growing threat of wildfires and their potential impact to the life, health, and safety of communities, industry and government partners elevated wildfire risk mitigation and response efforts to a national level through the ESCC. As part of this effort, the ESCC is working to enable more effective coordination among stakeholders, including the development and deployment of technologies that will improve the management of wildfire risk.

- **PREPAREDNESS EXERCISES**

Each year, the ESCC participates in a variety of preparedness exercises to test and update its coordination and messaging protocols. These include events hosted by individual trade associations and by investor-owned electric companies, public power utilities, and rural electric cooperatives. Government-sponsored exercises, such as DOE's Clear Path exercise series and the Federal Emergency Management Agency's National Level Exercises, also are important opportunities to test responses to catastrophic incidents. The fifth installment of GridEx took place in 2019, and it included more than 7,000 participants from hundreds of public and private organizations across North America. The ESCC played a significant role in both the distributed exercise play during GridEx V and an executive-level tabletop discussion focused on how industry and government would respond to coordinated physical and cyber attacks on the energy grid.

ESCC Official Roster

LEADERSHIP

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