Operational Technology Defender Fellowship Program

Overview

Protecting the nation's energy infrastructure from modern threats is critical to national security. Cybersecurity managers play a decisive role in defending the Energy Sector against cyber-enabled sabotage and physical security breaches ranging from storm surges to kinetic attacks. Their work bridging executive intent and technical reality is both critical and challenging—and the necessary resources are often limited.

Based on the recommendations of the bipartisan, congressionally mandated U.S. Cyberspace Solarium Commission, and in the effort to better support front-line managers, the U.S. Department of Energy's (DOE) Office of Cybersecurity, Energy Security, and Emergency Response (CESER) created the Operational Technology (OT) Defender Fellowship. This training offers middle to senior-level OT security and operations managers in the U.S. Energy Sector an opportunity to understand high-level strategies and tactics adversarial state and nonstate actors use in targeting U.S. energy infrastructure; and the and roles and capabilities of U.S. departments and agencies to support critical infrastructure owners and operators.

Operational Technology Defender Fellowship ™

Sponsorship

The OT Defender Fellowship Program is sponsored by the U.S. Department of Energy (DOE) and hosted by Idaho National Laboratory (INL), with support from Foundation for Defense of Democracies' Center on Cyber and Technology Innovation.

While recognizing that private-sector entities have primary responsibility for the defense and security of their networks, the U.S. government must bring to bear its unique authorities, resources, and intelligence capabilities to support these actors in their defensive efforts.

*U.S. Cyberspace Solarium Commission, March 11, 2020.*

Fellowship Composition

Composition of the Fellows across the Energy Sector is diverse by design, with the intent that contributions yield creativity and unique problem solving. Annual selection of Fellows includes a deliberate blend and balance of energy subsector representation, organizational size, and primary geographic location.

Summary

- Electric utilities: 23
- Oil & Natural Gas utilities: 13
- Electric + ONG companies: 14
- Number of states represented: 29
- Total Fellows (through 2024): 50
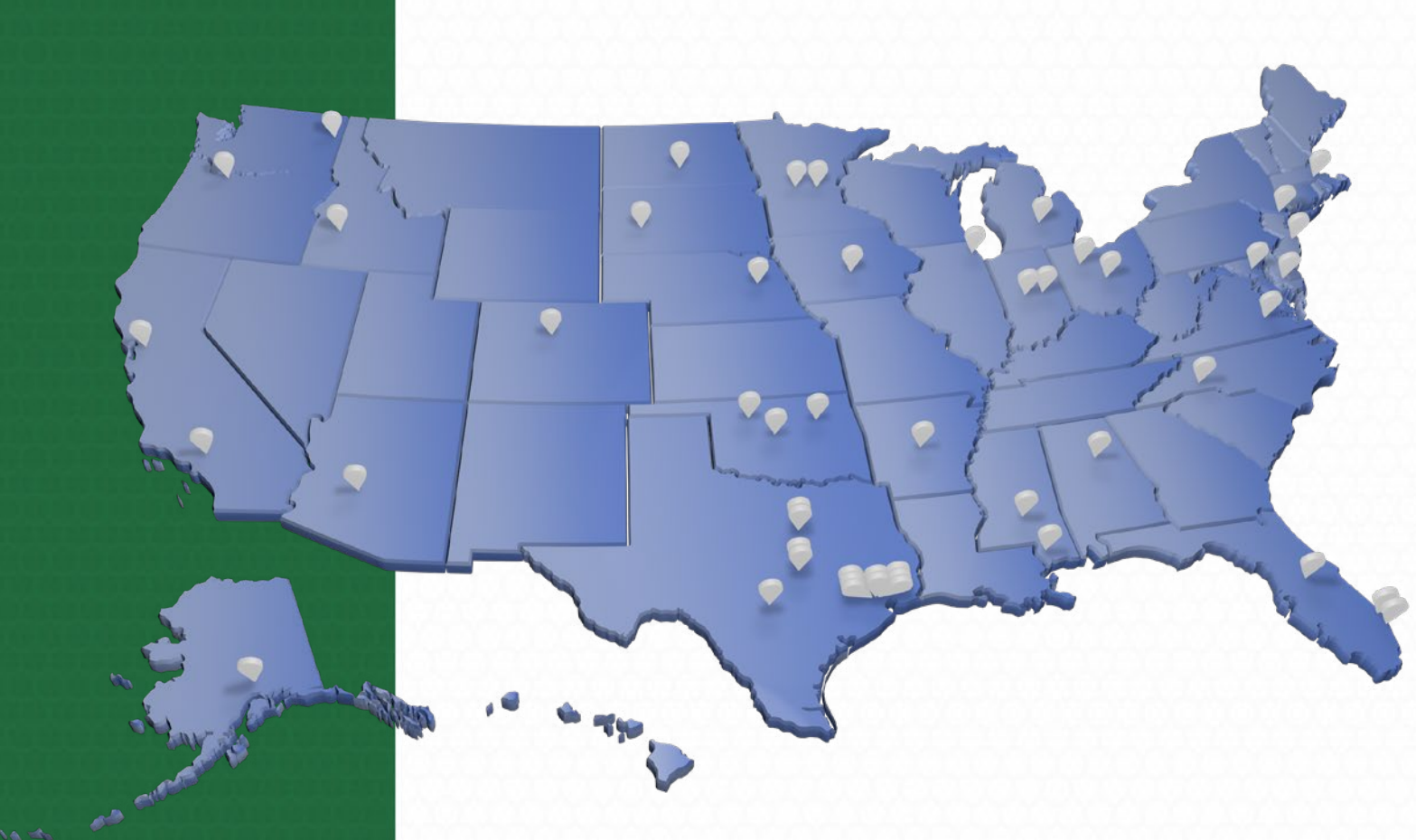
Fellowship Objectives

Upon completion of the OT Defender Fellowship cohort year, Fellows join the Alumni Cohort where opportunities to include participating in educational webinars, collaborative activities and network strengthening events are offered.

Collaboration

Fellowship serves as a bi-directional information and idea exchange forum between government and Energy Sector experts, contributing to the collective advancement of improved cybersecurity and information sharing capabilities and processes.

Knowledge

Broader understanding of adversarial cyber threats to critical infrastructure, how cyberattacks can be a means to result in physical damage or cognitive effects, and current capabilities for protection against, detection of, and recovery from these attacks.

Resources

Fellows engage with experts from various U.S. Government agencies, gaining insights into federal cybersecurity support, risk management efforts, incident response procedures, cyber policymaking, threat-actor analysis, and the latest cybersecurity related research.

Network

Fellows from across the Energy Sector forge peer-to-peer connections, leveraging collective insights to address challenges and enhance problem-solving strategies through shared experiences and mutual support. Fellows develop connections with federal agencies, building rapport and trust, fostering a collective cybersecurity resiliency.