Operational Technology Defender Fellowship Program

Operational Technology Defender Fellowship

Overview

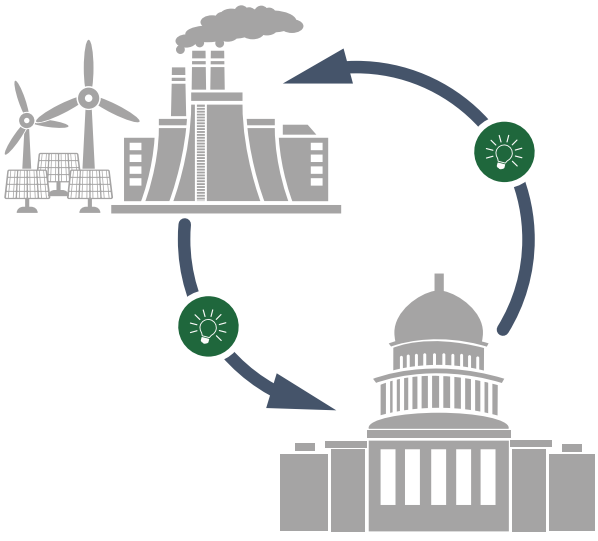
Protecting the nation's energy infrastructure from evolving threats is critical to our national security. Security managers play a decisive role in defending the energy sector against cyber-enabled sabotage and physical security breaches, ranging from storm surges to kinetic attacks. Their work bridging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

Based on the recommendations of the U.S. Cyberspace Solarium Commission, and to better support these 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 managers in the U.S. energy sector an opportunity to understand the cyber strategies as well as the tactics, techniques, and procedures adversarial state and nonstate actors use in targeting U.S. energy infrastructure.

Sponsorship

The fellowship is sponsored by DOE and hosted by Idaho National Laboratory (INL), with support from Foundation for Defense of Democracies' Center on Cyber and Technology Innovation.

Fellowship Goals



Serve as an information and idea exchange platform between government and energy sector experts, contributing to the bi-directional advancement of improved cybersecurity and information sharing capabilities and processes.

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Familiarize and discuss the current state of cybersecurity operations, capabilities, gaps, constraints, and areas for mutual improvement to better defend our nation's critical energy infrastructure.

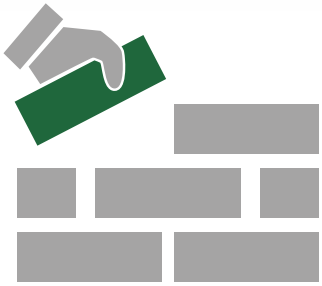
Operational Technology Defender Fellowship

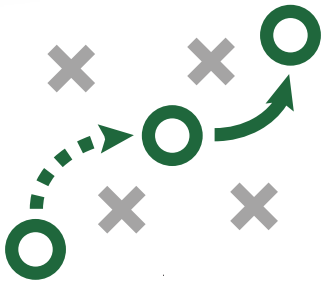
https://inl.gov/otdefender/

Fellowship Objectives

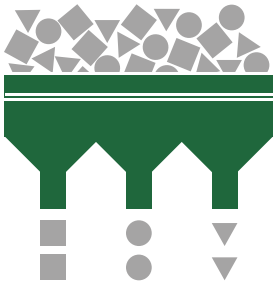
At the conclusion of the OT Defender Fellowship, success will be measured by accomplishing the following objectives:

Build and enhance relationships between energy sector and government cybersecurity managers to increase cyber defense preparedness.



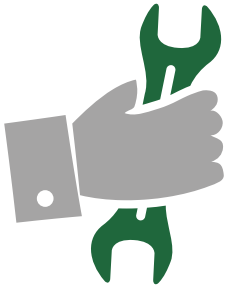


Provide awareness of the U.S. government's energy infrastructure cyber defensive strategy as well as related adversarial geopolitical impacts.



Develop and discuss strategies to better organize, consume, and operationalize tactical information about indicators of cyberattacks on critical energy infrastructure.

Provide an increased understanding of adversarial cyber threats to critical infrastructure, the potential for a cyberattack to result in physical effects, and current capabilities for detection of, defense against, and recovery from these attacks.



Equip Fellows with strategies, actionable information, and connections to apply post-Fellowship within their areas of responsibility.

Other OT Related Training Programs

CyberStrike Workshop

To reduce the consequences of cyber-enabled sabotage, DOE-CESER, in collaboration INL, developed the CyberStrike training program. This program works to enhance the ability of energy sector owners and operators to prepare for a cyber incident impacting operational technology.

The training is a unique opportunity for OT Fellows to both attack and defend the equipment used in a utility on a daily basis, leveraging insights from a real-world cyberattack. The training offers participants a technical understanding of cyberattacks from the information gathering phase to the impact phase to enhance their ability to defend critical energy infrastructure from adversarial cyber operations.