

USEA Strengthens Energy Security Through Advanced Cyber Simulation Training



The United States Energy Association is advancing global energy security by enhancing the ability of utilities to prevent and respond to cyberattacks. In Vietnam, Central Asia, and Latin America and the Caribbean, USEA delivered cutting-edge SIM-X cybersecurity training to strengthen frontline defenses.

The energy sector's rapid digitalization has transformed utility operations but has also created new vulnerabilities. Smart grids and smart devices provide attackers with more opportunities to disrupt power systems, so robust cybersecurity strategies are essential for protecting assets and ensuring reliability.

To address these challenges, the United States Energy Association (USEA) partnered with Incremental Systems Corporation (IncSys) to deliver a series of virtual cybersecurity simulation trainings in Vietnam, Central Asia, and Latin America and the Caribbean.

At the center of this effort is SIM-X, IncSys's innovative training platform that enables generator and substation operators, IT specialists, and cybersecurity professionals to assume the roles of both attacker and defender. Through real-time, scenario-based simulations, utility staff identified vulnerabilities in their systems, observed how these weaknesses could be exploited, and developed strategies to strengthen defenses.

A total of 92 participants successfully completed the SIM-X training and earned Institute of Electrical and Electronics Engineers (IEEE) certifications, equipping them with the

practical skills necessary to prevent and respond to cyberattacks on critical infrastructure. This combination of hands-on experience and recognized credentials enhances the ability of utilities in participating countries to safeguard their grids, reduce vulnerabilities, and maintain reliable electricity service.

By building the capacity of frontline operators and cybersecurity staff, the program contributes directly to the development of stronger, more resilient power systems in these regions, helping to ensure that communities and economies can rely on secure, uninterrupted access to electricity.