

U.S. DEPARTMENT OF ENERGY

Office of Cybersecurity, Energy Security, and Emergency Response

NASEO Energy Policy Outlook Conference

Brandi Martin, SLTT Program Manager

Megan Levy, SLTT Project Manager

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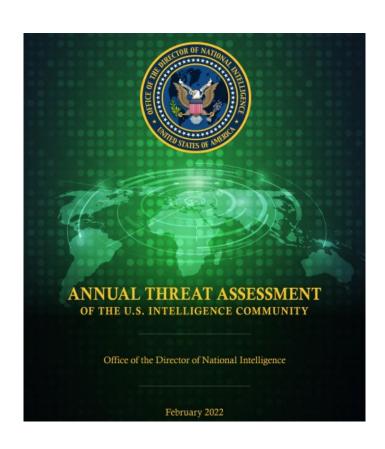
CESER Mission & Energy Threat Landscape

To enhance the security of U.S. critical energy infrastructure to all hazards, mitigate the impacts of disruptive events and risk to the sector overall through preparedness and innovation, and respond to and facilitate recovery from energy disruptions in collaboration with other Federal agencies, the private sector, and State, local, tribal, and territory governments.

Evolving Threats to Critical Infrastructure



Cybersecurity Threats





Cyberattack Forces a Shutdown of a Top U.S. Pipeline

The operator, Colonial Pipeline, said it had halted systems for its 5,500 miles of pipeline after being hit by a ransomware attack.



May 13, 2021

B Bloomberg.com

Russian Hackers Tried Damaging Power Equipment, Ukraine

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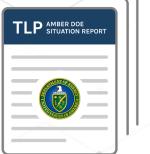
... military intelligence agency launched a cyberattack on Ukrainian energy facilities, according to Ukrainian cybersecurity officials.



Energy Emergency Assurance Coordinators Program

- The EEAC Program is a cooperative effort between DOE CESER, NASEO, NGA, NARUC and NEMA
- State designates primary and secondary contact(s) for each sector (petroleum, electricity, natural gas) in event of an energy emergency
- Provides credible, accurate, and timely source of information and updates on actions taken
- Goal is to improve information-sharing and communication and lower response times
- CESER's SLTT Program sends states a monthly brief with analysis of past disruptions via the EEAC listserv
- See: <u>Guidance on Reviewing and Updating EEAC Contacts</u>







Information Sharing Across the Energy Sector

Information Sharing and Analysis Centers (ISAC)









Energy Emergency Assurance Coordinator (EEAC) Program facilitates 2-way information sharing between DOE and states leading up to and during an energy disruption or emergency



During Events:

DOE shares with states:

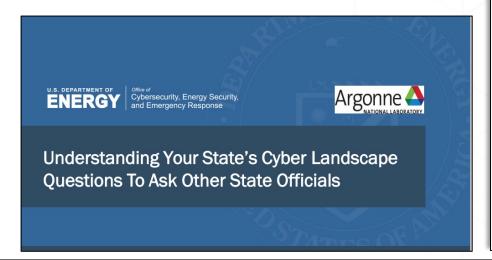
- Outage estimates (pre-event)
- TLP AMBER Situation reports
- Updates on Coordination calls which are scheduled as needed

States share with DOE:

- Updates on status of energy system restoration
- Status of emergency declarations and waivers
- Questions/ unmet needs
- Information is shared with DOE ESF-12 responders, at national, regional, and state emergency operations centers or directly with DOE HQ team

Energy Security Plan (SESP) Technical Assistance

- First formal guidance from DOE on Energy Security Plans
- On behalf of SEP, CESER
 - Led development of SESP Guidance and Framework for state implementation of 40108.
 - Created 8 SESP Drop-ins for states
- Energy Security Planning Hub published





STATE ENERGY SECURITY PLAN GUIDANCE

The energy sector is uniquely critical as all other critical infrastructure sectors depend on power and/or fuel to operate. An impact on critical energy infrastructure can directly affect the security and resilience within and across other critical infrastructure sectors – threatening public safety, the economy, and national security.

Energy Security Planning ensures a reliable and resilient supply of energy through efforts to identify, assess, and mitigate risks to energy infrastructure and to plan for, respond to and recover from events that disrupt energy supply. Our nation's energy infrastructure and delivery systems are vulnerable to a variety of threats and hazards, including severe weather (exacerbated by climate change), cyberattacks system failures, pandemics, and deliberate physical attacks. Because most of the nation's critical infrastructure is owned and operated by private companies, both the government and private sector.

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ements outlined in Section eafter referred to as the "BIL. vide additional clarification



The energy sector is uniquely critical because all of the other critical infrastructure sectors depend on power and fuel to operate. Unfortunately, this makes the Nation's energy infrastructure an attractive target for cyber-attacks. Table 2 lists known cyber-attacks that have impacted energy systems. States are encouraged to add examples to this Table. All energy systems have vulnerabilities to cyber threats, 100% security is not possible. But many steps can be taken to harden OT systems to mitigate these thereats.

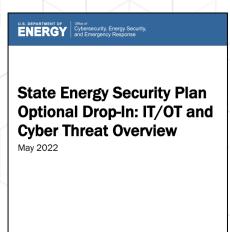
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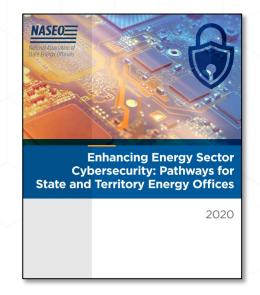
Projects	Element	Activities
Contractor RFP guidance	All	 Develop guidance and RFP template language for states who decided to engage outside groups to assist with their plan. Avoid 100% outsourced plans with little or no state engagement (resulting in poor unusable plans) Provide guidance on in-state collaborators "best practice" engagements.
Risk Assessment Toolkit**	(4)	 DOE will create an energy risk assessment toolkit or guide for state officials. No state guides currently exist Guidance on how to use the assessment to evaluate and prioritize risk reducing projects
Address threats & vulnerabilities Inform mitigation approach**	3, 5, 6	DOE will facilitate multiple cohorts with an emphasis on regional coordination to address multi-state infrastructure interdependencies, threats, hazards, vulnerabilities, and best practices in developing hazard mitigation strategies as well as relationships with industry and other key groups.
Phase 2 "drop ins"	All	 Develop examples/excerpts that meet IIJA elements, instructional guidance and educational webinars. Create fuel templates and guidance that states can utilize for mitigation and response
Cybersecurity Pilots		DOE will facilitate pilot workshops with different states, across multiple state agencies to discuss the cyber roles and responsibilities of state energy and emergency officials, how coordination may be increased, ways industry is (or could be) engaged, how the state's cyber response plan can incorporate a cyber-physical attack, and how state partners can work with State Energy Offices on the cybersecurity portion of the SESP.

^{**}Linkage to 40101

Cybersecurity Considerations

- Cybersecurity is part of all-hazard energy security planning
- Explore use of IIJA dollars for cyber investments (training, equipment, etc.)
 - RMUC 20124
 - Inclusion of cyber in RFPs / procurement
- Attend NARUC Cyber Training and NARUC resources
- Collaborate with your State: Information Security Officer, Homeland Security Advisor and Public Utility Commissioners
- Institute regular threat briefings for energy stakeholders and state officials
- Build well-defined, trusted information-sharing processes and implement exchange mechanisms that meet the needs of federal, state, and private sector partners.
 - Exercise information sharing protocols and channels.





CESER SLTT and Communications Contact Information



Brandi Martin
SLTT Program Manager
Brandi.Martin@hq.doe.gov
202-586-7983



Megan Levy
SLTT Project Manager
Megan.levy@hq.doe.gov
202-209-3184



Juan Gomez
Energy Sector Specialist
Juan.gomez@hq.doe.gov



Website: energy.gov/ceser



@DOE_CESER



CESER LinkedIn





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