



U.S. DEPARTMENT
of **ENERGY**

Office of Cybersecurity, Energy Security,
and Emergency Response

CESER STRATEGIC PLAN

FISCAL YEARS 2026 to 2030



FEBRUARY 2026

MESSAGE FROM THE DIRECTOR

February 2026

Dear Colleagues,

It is an honor to have been appointed by U.S. President Donald J. Trump to head the Office of Cybersecurity, Energy Security, and Emergency Response (CESER) at the U.S. Department of Energy (DOE).

As CESER Director, I pledge to do my utmost to strengthen the security and resilience of the U.S. energy sector. I believe in this pivotal mission for CESER now more strongly than ever before.

The promise of CESER is secure, resilient, affordable, and reliable energy for American communities and national defense. To this end, we must collectively commit our foremost talents, resources, and ingenuity.

This Strategic Plan provides us with organizational focus in applying our capabilities toward successful outcomes for the U.S. energy sector. Our strategic goals include: (1) Develop World-Class Security Technologies; (2) Harden U.S. Energy Infrastructure; and (3) Respond and Recover from Incidents.

With your help, I am confident that we will advance innovative solutions that are practical, useful, and scalable for our energy sector partners. Our intention is to witness the nationwide adoption by industry of the modern technologies and best practices that we in CESER initiate.

Together, under the leadership of President Trump and U.S. Secretary of Energy Christopher Wright, we can protect our critical energy infrastructure from security and operational threats—no matter how persistent, pernicious, or unpredictable.

Please join me in pursuing the goals and objectives outlined for CESER in this plan during fiscal years 2026 to 2030.

Sincerely,



Alexander Fitzsimmons
Director, Cybersecurity, Energy Security,
and Emergency Response



TABLE OF CONTENTS


	PAGE
Introduction.....	2
Threat Landscape.....	3
Energy Sector Interdependencies	4
CESER Mission	5
CESER Vision.....	5
Strategic Goals.....	5
Guiding Principle – Provide Timely and Actionable Information to the Energy Sector	6
Goal 1 – Develop World-Class Security Technologies.....	8
Goal 2 – Harden U.S. Energy Infrastructure	10
Goal 3 – Respond and Recover from Incidents	12
Trump Administration Priorities.....	14
Executive Orders	15
U.S. Secretary of Energy Priorities	17
Key Statutory Authorities Delegated to CESER.....	19

INTRODUCTION

PREFACE

The Office of Cybersecurity, Energy Security, and Emergency Response (CESER) was established within the U.S. Department of Energy (DOE) in 2018. At the time, former U.S. Secretary of Energy Rick Perry said he had “no higher priority” than protecting the energy infrastructure from cybersecurity threats, physical attacks, and natural disasters.

Today, CESER supports the U.S. energy sector on a wide range of activities from threat assessments to risk mitigation and emergency response. CESER is also pursuing new initiatives to harden critical energy infrastructure.

This Strategic Plan for fiscal years 2026 to 2030 sets the foundation for CESER personnel and stakeholders working together to secure the U.S. energy sector. The plan aligns the CESER mission with distinct goals, capabilities, and objectives.

“The Department of Energy is focused on the need to meet growing energy demand while strengthening the resilience and security of U.S. energy infrastructure against all threats and hazards.”

*U.S. Secretary of Energy
Christopher Wright*

From this overarching strategic plan, CESER will develop annual operating and programming plans. Through them, CESER will present the scope, schedule, milestones, and key performance indicators for evaluating program outcomes based on the goals and objectives in this plan. CESER will also align capabilities and projects with long-term resource projections.

EXECUTIVE SUMMARY

The U.S. Secretary of Energy delegated federal statutory authorities and responsibility to CESER for protecting the U.S. energy infrastructure. As the designated Sector Risk Management Agency (SRMA), CESER exercises leadership in collaborating with government, industry, and community partners to solve energy security and resilience challenges.

Energy systems face persistent threats that can disrupt service continuity and impact daily life. Physical and cyber security, economic, and geopolitical threats to U.S. energy and the electric grid can have severe and cascading effects.

To counter these effects, CESER teams with industry on mitigation strategies that safeguard and prevent damage to U.S. energy facilities and operating systems.

This Strategic Plan provides the framework for CESER to implement federal programs that benefit the U.S. energy sector.

THREAT LANDSCAPE

CESER has the preeminent federal role for coordinating with the energy industry to manage security risks effectively and assure consistently reliable electricity across the United States.

The evolving energy sector threat landscape is a major driver for CESER strategic planning.

- **PHYSICAL THREATS** – Direct attacks on infrastructure such as vandalism, intentional sabotage, terrorist attacks, natural hazards, and accidents.
- **CYBER THREATS** – Digital control system and network breaches, disruptions to operations, data exfiltration, hacking, malware, ransomware, and denial-of-service attacks.
- **ECONOMIC THREATS** – Market volatility, under investment, aging infrastructure, regulatory uncertainty, workforce skill shortages, and supply chain interference.
- **GEOPOLITICAL THREATS** – International conflicts, civil unrest, political instability, and trade disputes affecting energy systems and supplies.



"The severe effects from physical, cyber, and geopolitical threats on U.S. energy systems are expected to escalate as adversaries attempt to shape world events and challenge U.S. strength."

*Annual Threat Assessment of the
U.S. Intelligence Community
March 2025*

ENERGY SECTOR INTERDEPENDENCIES

CESER develops integrated cyber and physical security solutions to meet energy sector-specific needs and cross-sector dependencies.

Energy has vital interconnected infrastructure components, a multi-faceted operational environment, and varied ownership and regulatory structures.

Central to the CESER mission is proactive operational collaboration with industry, federal agencies, international allies, and State, Local, Tribal, and Territorial (SLTT) stakeholders.

Through continuing proactive collaboration, CESER maintains real time situational awareness essential for rapid response to disruptions and crises.

“Energy is the infrastructure of life... crucial to national security and the quality of life for all Americans.”

*U.S. Secretary of Energy
Christopher Wright
February 2025*



MISSION, VISION, STRATEGIC GOALS

CESER MISSION

Strengthen the security and resilience of the U.S. energy sector.

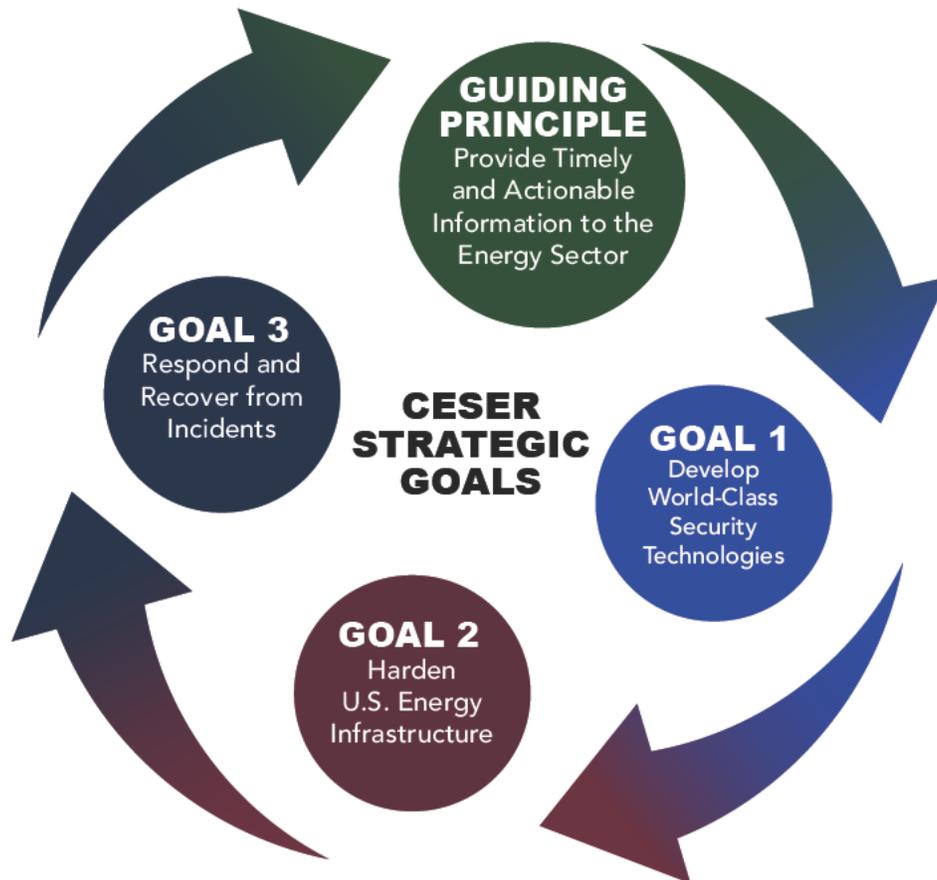
CESER VISION

A secure, resilient, and adaptive energy sector capable of withstanding complex and emerging threats to deliver reliable energy for all Americans.

STRATEGIC GOALS

CESER success in protecting the U.S. energy infrastructure is furthered through a range of strategic programs and expert capabilities.

“Provide Timely and Actionable Information to the Energy Sector” is a guiding principle underpinning the three strategic goals for CESER to accomplish its mission.



GUIDING PRINCIPLE

PROVIDE TIMELY AND ACTIONABLE INFORMATION TO THE ENERGY SECTOR

CESER places a high priority on providing timely and actionable information to the energy sector. This guiding principle is set apart to illustrate that it underpins all three strategic goals.

With this distinction, CESER emphasizes how consistent, accurate, and actionable information is needed for the energy sector to address threats fully.

This guiding principle is a catalyst for enduring alliances between CESER and the energy industry. Their mutual focus is on reducing risk exposure and safeguarding infrastructure and supply chains from harm.

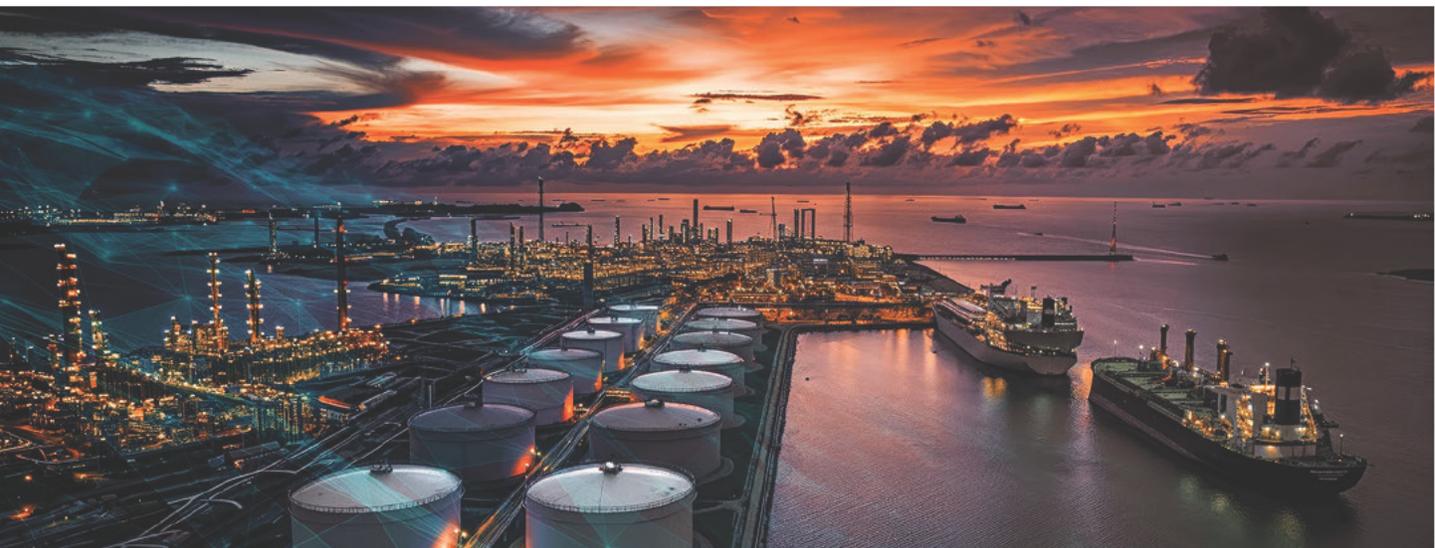
CESER-sponsored programs engage energy owners and operators in addressing current and future threats more effectively.

Aided by new operational technologies, CESER is augmenting traditional analysis and reporting capabilities to improve critical infrastructure, prioritizing security, reliability, and efficiency of operations. Through ongoing work with energy partners, including Power Marketing Administrations, CESER is also continually testing and deploying innovative new technologies.

OBJECTIVE 1 – Develop actionable energy specific threat products and evaluate the effectiveness of CESER advisories to strategic partners.

OBJECTIVE 2 – Increase CESER monitoring for hardware and software vulnerabilities in energy supply chains to improve cybersecurity, operational planning, and energy resilience.

OBJECTIVE 3 – Clarify expectations for strategic partnerships and conduct annual evaluations to ensure adequate capacity, succession planning, and accountability.



GUIDING PRINCIPLE

CESER CAPABILITIES

CESER has four expert capabilities related to this guiding principle that are important to federal, industry, and SLTT partners. Each provides appropriate settings for sharing threat intelligence on sector risks, identifying issues, and solving problems as they arise.

- ENERGY THREAT ANALYSIS CENTER (ETAC) – Threat intelligence network hub for government, industry, and stakeholders to collaborate and analyze sensitive information for sustaining energy system operations in normal and degraded circumstances.
- CYBER TESTING FOR RESILIENT INDUSTRIAL CONTROL SYSTEMS (CyTRICS) – Cybersecurity supply chain project that finds vulnerabilities in common components of the energy system for mitigation by supply chain manufacturers and energy companies.
- CYBERSECURITY RISK INFORMATION SHARING PROGRAM (CRISP) – A system sensor deployment and monitoring solution for identifying and understanding threats within the energy sector.
- STRATEGIC PARTNERSHIPS – CESER interactive engagements with representatives from private and public sector organizations dedicated to identifying and mitigating energy system threats and vulnerabilities.
 - SECTOR COORDINATING COUNCILS (SCCs) – CESER leads federal interactions with the Electricity Subsector Coordinating Council (ESCC) and Oil and Natural Gas Subsector Coordinating Council (ONG SCC). SCC members are critical infrastructure owners, operators, and trade association leaders on security and resilience strategies.
 - INTERNATIONAL PROGRAMS – CESER shares energy security expertise and insights with hemisphere partners and strategic allies.
 - STATE, LOCAL TRIBAL, AND TERRITORIAL (SLTT) PROGRAM – CESER supports federal energy security planning, emergency preparedness, response, and recovery with SLTT partners.
 - REGIONAL ENERGY EMERGENCY COORDINATION – CESER reviews Energy Security Plans and participates in critical information exchanges with regional emergency coordinators.

GOAL 1

DEVELOP WORLD-CLASS SECURITY TECHNOLOGIES

A primary goal of CESER is to develop cutting-edge technologies useful to energy partners.

CESER subject matter experts work with utility and oil and gas company cohorts on practical, scalable technologies. Their aim is to protect infrastructure, systems, and supply chains in real-time threat situations.

CESER technology projects must anticipate the evolution of interconnected energy systems to improve resilience, security, and affordability.

As U.S. Secretary of Energy Wright emphasized:
"Advancing emerging technologies into real-world deployment is a priority."

OBJECTIVE 1 – Issue a research, development, and demonstration (RD&D) roadmap for technologies in which CESER is investing. Conduct a quarterly progress review of approved projects.

OBJECTIVE 2 – Accelerate CESER RD&D projects to complete at least two new technology solutions for adoption by the private sector each year over the next five years.

OBJECTIVE 3 – Increase the return on investment of CESER technology projects by establishing a formal requirements process.



CESER CAPABILITIES

- **ARTIFICIAL INTELLIGENCE FOR OPERATIONALLY RESILIENT TECHNOLOGIES AND SYSTEMS (AI-FORTS)** – Comprehensive technology program to expand the AI testbed and tools to secure control systems, protect infrastructure from attacks, and advance energy sector applications. CESER is developing AI-FORTS technologies to: (1) secure energy infrastructure from AI-enabled attacks; (2) leverage AI to detect, operate through compromise, and enhance supply chain testing tools; and (3) secure AI-based systems used to operate, control, or defend U.S. energy systems.
- **CYBER-INFORMED ENGINEERING (CIE)** – Advanced design practices for incorporating cybersecurity features into physical operating systems with digital connectivity, sensors, monitoring, and control.
- **GENESIS MISSION** – CESER will actively participate in this DOE-wide initiative which is mobilizing all 17 DOE National Laboratories and manufacturing and national security sites to create the Genesis platform for advancing scientific breakthroughs to tackle three national challenges. (1) Energy Dominance – accelerating advanced nuclear, fusion, and grid modernization using AI to make power abundant, safe, and resilient. (2) Scientific Discovery – revolutionizing physics, materials science, and quantum computing, seeing molecules in motion, understanding the full range of the physical universe, and generating new quantum algorithms. (3) National Security – securing critical minerals, strengthening supply chains, and speeding development of critical and defense-ready materials and advancing manufacturing.



GOAL 2

HARDEN U.S. ENERGY INFRASTRUCTURE

CESER strives to improve energy system resilience for American communities and national security. To strengthen U.S. energy infrastructure, CESER provides technical assistance to speed innovation on hardware, software, and equipment solutions.

Hardening critical infrastructure encompasses:

Cybersecurity measures to protect digital systems and networks that can disrupt energy operations and cause cascading failures.

Physical security to reinforce infrastructure, such as power lines, counter-UAS capabilities, and system upgrades for critical facilities.

Prototypes for effective recovery from disruptions, including backup power systems, emergency communications, and redundant power sources.

OBJECTIVE 1 – Within a two-year period, rank and harden defense critical energy infrastructure for national security sites. Include primary and auxiliary suppliers to critical defense facilities.

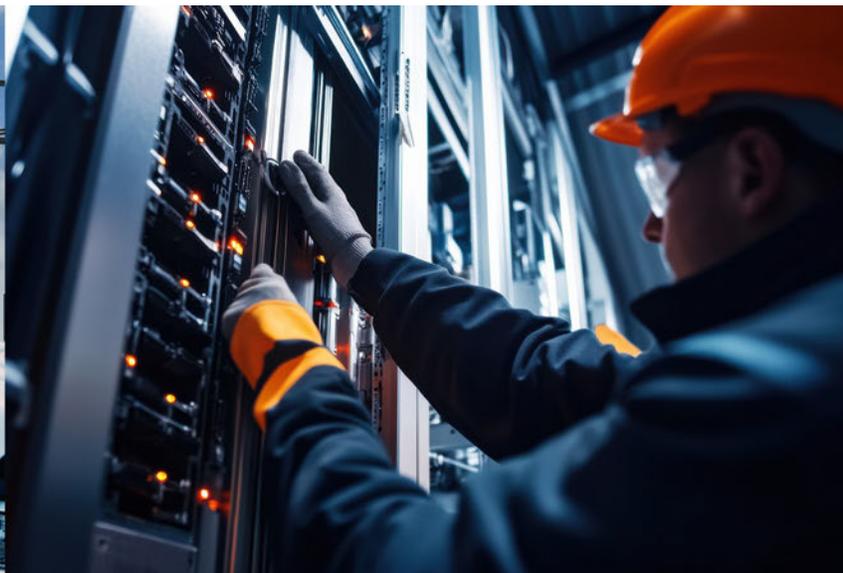
OBJECTIVE 2 – Provide direction and technical assistance for federal agency and industry partners to install cyber and physical security and resilience upgrades at priority sites within two years.

OBJECTIVE 3 – Establish and implement an annual energy security training and exercise baseline. Issue a consolidated set of lessons learned and best practices to industry and SLTT stakeholders on an annual basis.



GOAL 2**CESER CAPABILITIES**

- **PROJECT ARMOR** – Five-year initiative for hardening U.S. critical energy infrastructure sites through assessments, technical guidance, and cyber and physical security upgrades. Strengthens energy systems to prevent and recover from wildfires and other hazards.
- **RURAL AND MUNICIPAL UTILITY ADVANCED CYBERSECURITY PROGRAM (RMUC)** – Cooperative agreements and awards to municipal and locally-owned utilities for advanced cybersecurity technologies, training, and assistance.
- **WORKFORCE DEVELOPMENT (CyberForce, OT Defender, CyberStrike)** – Multiphase cybersecurity career development programs and professional competitions for academic, industry, and government contenders.



GOAL 3

RESPOND AND RECOVER FROM INCIDENTS

CESER is the lead U.S. government coordinating agency for the energy sector during emergencies. This role entails emergency preparedness and capabilities development for response readiness.

When natural disasters, physical attacks, or cyber incidents occur, CESER intervenes to minimize disruptions and support reliable energy.

CESER coordinates resource recovery and issues immediate advisories on the status of energy systems.

CESER has authority to issue emergency orders and concur with fuel standard waivers to deliver power and fuel.

Within a unified response framework, CESER provides technical assistance and engineering expertise to service providers and communities.

OBJECTIVE 1 – Streamline federal preparedness and continuity of operations processes in alignment with Executive Order 14239, Achieving Efficiency Through State and Local Preparedness.

OBJECTIVE 2 – Standardize CESER processes for issuing and obtaining approval of emergency orders and waivers. Implement metrics for quality and efficiency.



CESER CAPABILITIES

- EMERGENCY SUPPORT FUNCTION (ESF) #12 – CESER manages centralized coordination of federal emergency resources to support SLTT entities in the response and recovery of damaged energy systems.
- EAGLE-I – The interactive geographic information system (GIS), data visualization, and situational awareness platform that monitors electric utility outages and ONG disruptions. EAGLE-I provides authoritative and real-time information on energy impacts to government agencies, utilities, and emergency responders.
- FEDERAL POWER ACT § 202(C) AUTHORITY (16 U.S.C. § 824(a)c) – Statutory authority granting the U.S. Secretary of Energy discretion to require changes in operation of the U.S. electricity system. Applies during wartime or when “an emergency exists for any reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or the facilities for the generation or transmission of electric energy, or fuel or water for generating facilities, or other cause.”
- CYBERSECURITY INCIDENT RESPONSE – CESER provides guidance to the energy sector for preparation, detection, analysis, and recovery from cybersecurity incidents. In collaboration with industry, CESER leads the federal response to data breaches, malware attacks, sabotage, and other cyber incidents to minimize system damage and ensure operational continuity.
- EXERCISES (Liberty Eclipse, Clear Path) – Hands-on adversarial testing, learning modules, and courses for sector participants to apply during real-life energy incidents.



TRUMP ADMINISTRATION PRIORITIES

In signing Executive Order 14213, President Trump established the National Energy Dominance Council to:

- Reinvigorate U.S. energy industries
- Reduce regulations
- Increase critical materials production
- Promote U.S. leadership in artificial intelligence
- Strengthen electric grid reliability and security

CESER is implementing the new federal action-oriented approach articulated by President Trump which includes:

- Shifting the U.S. government national infrastructure policy from an “all hazards approach” to a “risk-informed approach,” prioritizing resilience and action.
- Overhauling the national continuity policy by modernizing the framework, streamlining operations, and rightsizing the federal footprint for sustained readiness.
- Evaluating national preparedness policies to reformulate the process and metrics for federal responsibility.
- Streamlining federal functions for working more effectively with states and communities.



EXECUTIVE ORDERS

CESER initiatives are shaped by executive orders, proclamations, and policies, such as:

- Executive Order 14156, DECLARING A NATIONAL ENERGY EMERGENCY
“The integrity and expansion of our Nation’s energy infrastructure—from coast to coast—is an immediate and pressing priority for the protection of the United States’ national and economic security. It is imperative that the federal government puts the physical and economic wellbeing of the American people first.”
- Executive Order 14262, STRENGTHENING THE RELIABILITY AND SECURITY OF THE U.S. ELECTRIC GRID
“It is the policy of the United States to ensure the reliability, resilience, and security of the electric power grid.”
- Executive Order 14239, ACHIEVING EFFICIENCY THROUGH STATE AND LOCAL PREPAREDNESS
“It is the policy of the United States that my Administration streamline its preparedness operations; update relevant Government policies to reduce complexity and better protect and serve Americans; and enable State and local governments to better understand, plan for, and ultimately address the needs of their citizens.”
- Executive Order 14299, DEPLOYING ADVANCED NUCLEAR REACTOR TECHNOLOGIES FOR NATIONAL SECURITY
“Advanced computing infrastructure for AI capabilities and other mission capability resources at military and national security installations and national laboratories demands reliable, high-density power sources that cannot be disrupted by external threats or grid failures. These facilities and resources’ vulnerability to energy disruption represents a strategic risk that must be addressed.”



CESER Director Alex Fitzsimmons with U.S. President Donald J. Trump, Secretary of Energy Christopher Wright, Secretary of Interior Doug Burgum, Secretary of Transportation Sean Duffy, and others in a photo taken at the White House on February 14, 2025, upon Presidential signing of Executive Order 14213, Establishing the National Energy Dominance Council.

EXECUTIVE ORDERS

- Executive Order 14306, SUSTAINING SELECT EFFORTS TO STRENGTHEN THE NATION'S CYBERSECURITY

"I am ordering additional actions to improve our Nation's cybersecurity, focusing on defending our digital infrastructure, securing the services and capabilities most vital to the digital domain, and building our capability to address key threats."
- Executive Order 14308, EMPOWERING COMMONSENSE WILDFIRE PREVENTION AND RESPONSE

Agencies shall "promote the use of a risk-informed approach to develop new policies that remove barriers to preventing and responding to wildfires, including through year round response readiness..."
- Executive Order 13636, IMPROVING CRITICAL INFRASTRUCTURE CYBERSECURITY

"...the Secretary shall use a risk-based approach to identify critical infrastructure where a cybersecurity incident could reasonably result in catastrophic regional or national effects on public health or safety, economic security, or national security..."
- Executive Order 14363, LAUNCHING THE GENESIS MISSION

"...a dedicated, coordinated national effort to unleash a new age of AI-accelerated innovation and discovery that can solve the most challenging problems of this century. The Genesis Mission will build an integrated AI platform to harness federal scientific datasets — the world's largest collection of such datasets, developed over decades of federal investments — to train scientific foundation models and create AI agents to test new hypotheses, automate research workflows, and accelerate scientific breakthroughs."
- Presidential Proclamation, CONTINUATION OF THE NATIONAL EMERGENCY WITH RESPECT TO SIGNIFICANT MALICIOUS CYBER-ENABLED ACTIVITIES

"...significant malicious cyber-enabled activities continue to pose an unusual and extraordinary threat to the national security, foreign policy, and economy of the United States."
- Presidential Policy Directive (PPD) 44, ENHANCING DOMESTIC INCIDENT RESPONSE

Establishes federal government unity of effort for incident response and assigns agencies, including DOE/CESER to "develop strategic objectives, priorities, and planning efforts necessary for the federal government to respond to the incident..."

U.S. SECRETARY OF ENERGY PRIORITIES

U.S. Secretary of Energy Wright issued his first Secretarial Order in February 2025 directing the Department of Energy to take immediate action to unleash American energy. His statements resonate with the CESER mission.

- UNLEASHING AMERICAN ENERGY INNOVATION

“The Department’s Research and Development (R&D) enterprise is the envy of the world. We must focus our time and resources on technologies that will advance basic science, grow America’s scientific leadership, reduce costs for American families, strengthen the reliability of our energy system, and bolster America’s manufacturing competitiveness and supply chain security. As such, the Department’s R&D efforts will prioritize affordable, reliable, and secure energy technologies...”

- STRENGTHENING GRID RELIABILITY AND SECURITY

“Fortifying America’s electric grid is critical to the reliable and secure delivery of electricity. Under President Trump’s Executive Order, “Declaring a National Energy Emergency,” the Department will identify and exercise all lawful authorities to strengthen the nation’s grid, including the backbone of the grid, our transmission system. This is an imperative as we consider current and anticipated load growth on our nation’s electric utilities. Moreover, after two decades of very slow demand growth, electricity demand is forecast to soar in the coming years. The Department will bring a renewed focus to growing baseload and dispatchable generation to reliably meet growing demand.”



U.S. SECRETARY OF ENERGY PRIORITIES

- STREAMLINING PERMITTING AND IDENTIFYING UNDUE BURDENS ON AMERICAN ENERGY

“The Department’s mission is vital to American security and prosperity. Working together, we will accelerate American science, reduce energy costs for American families and businesses, and strengthen the reliability and security of our nation’s energy system — all in our quest to better human lives...”

- REFILLING THE STRATEGIC PETROLEUM RESERVE

“As President Trump has stated, the SPR is a national asset that protects our security in times of crisis. It must be refilled. Unfortunately, the SPR is currently at historically low levels. We will not permit this to become a new status quo. Moreover, the Department will review SPR infrastructure and develop appropriate plans to safeguard this important strategic asset.”



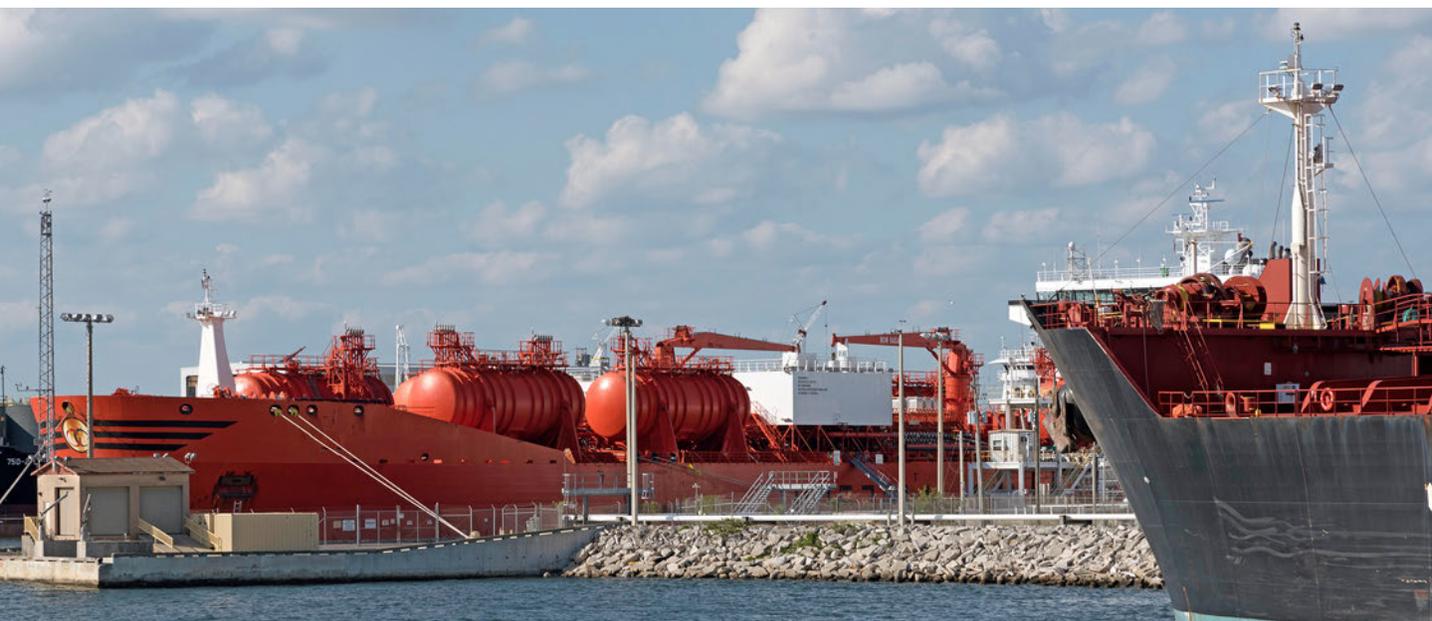
KEY STATUTORY AUTHORITIES DELEGATED TO CESER

- SECTOR RISK MANAGEMENT AGENCY (SRMA) (P.L. 115-283, § 9002, National Defense Authorization Act (NDAA), for FY 2021, 6 U.S.C. § 665d) – Explicit SRMA authority given to DOE and CESER. CESER leads federal collaboration with the electricity and ONG subsectors. Specialized expertise includes risk management, vulnerability assessments, incident mitigation, and emergency preparedness.
- FEDERAL POWER ACT (FPA), as amended (§ 215A and § 202(c), 16 U.S.C. § 824) – CESER has emergency authority for grid security and can issue orders for electric utility interconnection, service, or operation to ensure reliability.
- SECTOR SPECIFIC AGENCY (SSA) (P.L. 114-94, § 215A(c)(2), Fixing America's Surface Transportation (FAST) Act (amendments to the FPA) – CESER is the designated SSA responsible for coordination with the U.S. Department of Homeland Security (DHS) on system vulnerabilities and mitigation efforts. Collaborations involve other government agencies, critical electric infrastructure owners and operators, independent regulators, and SLTT entities.



KEY STATUTORY AUTHORITIES DELEGATED TO CESER

- EMERGENCY PREPAREDNESS AND RESPONSE (42 U.S.C. § 5195 et seq., William Stafford Disaster Relief and Emergency Assistance Act, as amended; ESF #12, Energy) – CESER coordinates federal government emergency response capabilities, services, and technical assistance for the energy sector.
- DEFENSE PRODUCTION ACT, as amended (50 U.S.C. § 4501 et seq.; 10 C.F.R. § 217) – CESER provides critical electric infrastructure risk assessments, technical support, and infrastructure hardening. On behalf of the U.S. Secretary of Energy, CESER implements the energy priorities and allocation system for national defense.
- INFRASTRUCTURE INVESTMENT AND JOBS ACT (P.L. 117-58, Division D, Title VI, Cybersecurity) – CESER manages cybersecurity research, development, and demonstration and technical projects for the energy sector.
- JONES ACT (46 U.S.C. § 501) – CESER has waiver authority exempting energy from U.S. flag vessel shipping requirements during emergencies.





U.S. DEPARTMENT
of **ENERGY**