U.S. DEPARTMENT OF ENERGY | Office of Cybersecurity, Energy Security, and Emergency Response

CESER Overview to DOE EAC

August 10, 2023

CESER Mission

Strengthen the security and resilience of the U.S. energy sector from cyber, physical, and climate-based risks and disruptions.

Evolving Threats to Energy Infrastructure

What We Do

CESER advances the Department's national security mission through:

Risk Assessment. Identifying, analyzing, and prioritizing risks to the energy sector.

Risk Mitigation. Developing policies, tools, and technologies and providing technical assistance to mitigate risks to the energy sector.

Sector Collaboration. Strengthening the security of U.S. energy systems through enhanced public and private sector collaboration.

Preparedness and Response. Facilitating energy sector preparedness, response, and restoration efforts in collaboration with other Federal agencies, the private sector, and state, local, tribal, and territorial communities and international partners.

Energy Supply. Mitigating the impacts of energy supply disruptions on American businesses and consumers.

CESER Divisions

Preparedness, Policy, and Risk Analysis

- Energy Security Policy and Partnerships
- Exercises, Training, Workforce Development
- Risk Analysis, Resilience, and Recovery

Risk Management Tools and Technologies

- All-Hazards Tools and Technologies
- Cyber Tools and Technologies

Response and Restoration

- All Hazards Situational Awareness and Analysis
- All Hazards Response Operations
- Response Preparedness and Support

Office of Petroleum Reserves

- Planning & Engineer Office
- Operations & Readiness
- Budget & Financial Management Technologies
- Management & Administration
- Reserve Lands Management
- SPR Project Management

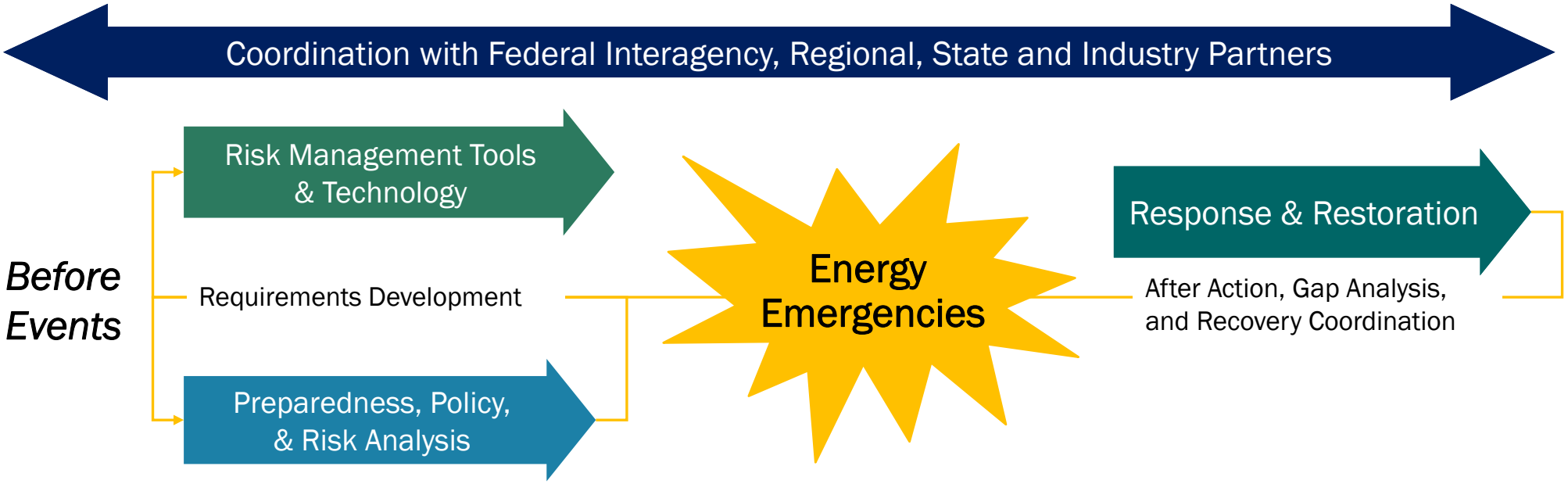
Partnerships

State, Local, Tribal, and Territorial (SLTT) Governments

Federal Departments and Agencies

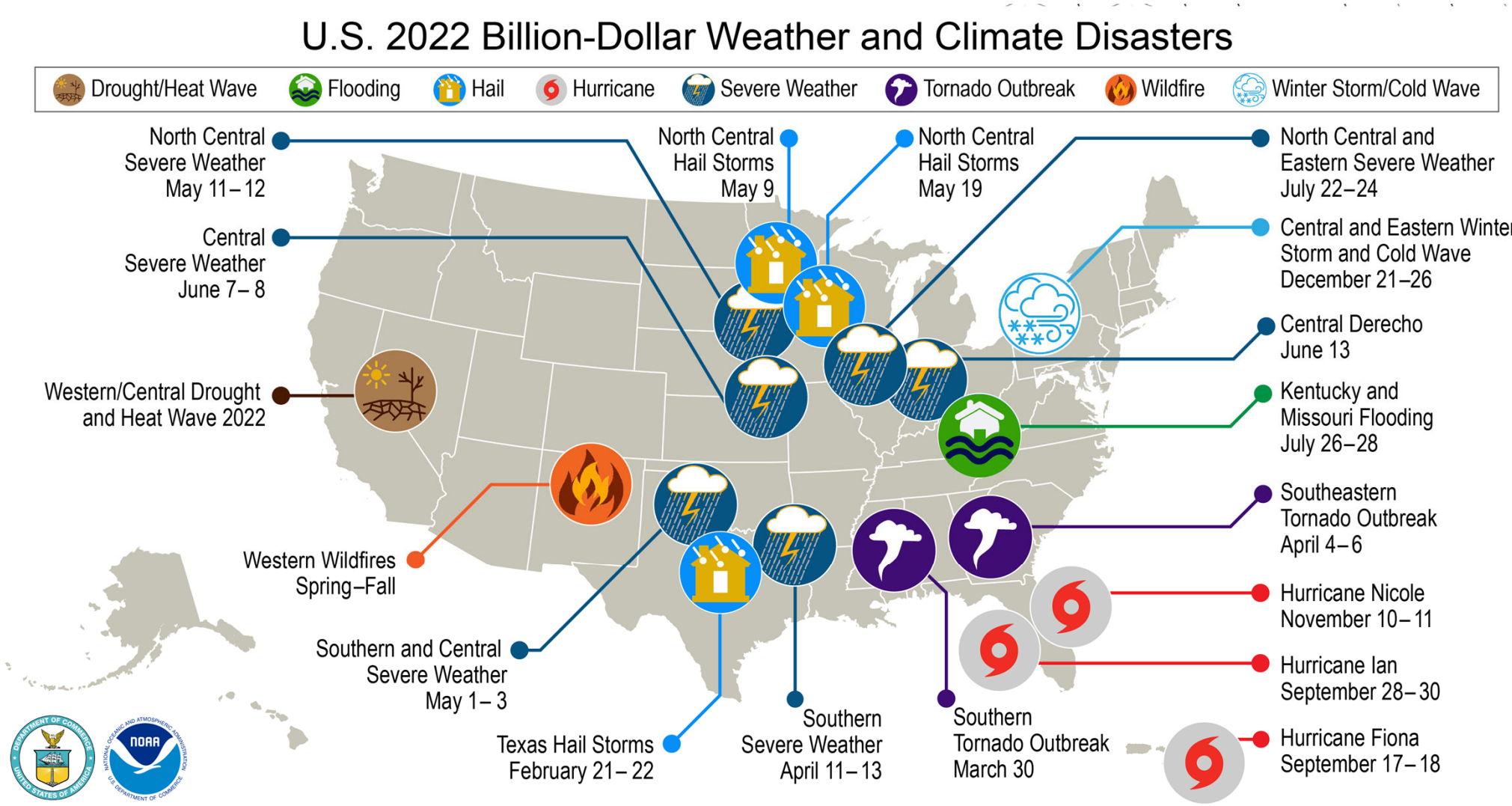
Energy Sector (Electricity, Oil and Natural Gas)

How We Work: Energy Risk Management Timeline



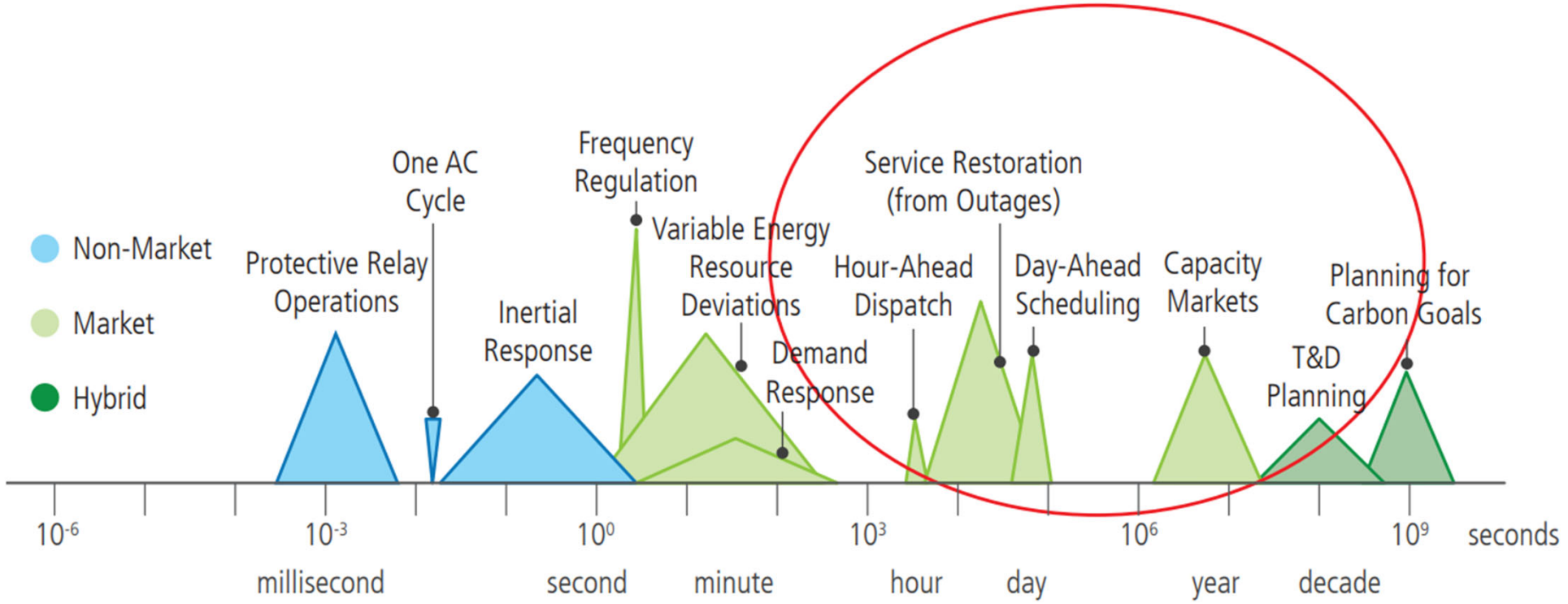
DOE is the ***Sector Risk Management Agency*** for the energy sector and the federal coordinating agency for Emergency Support Function (ESF) #12 -- Energy

U.S. 2022 Billion-Dollar Weather and Climate Disasters



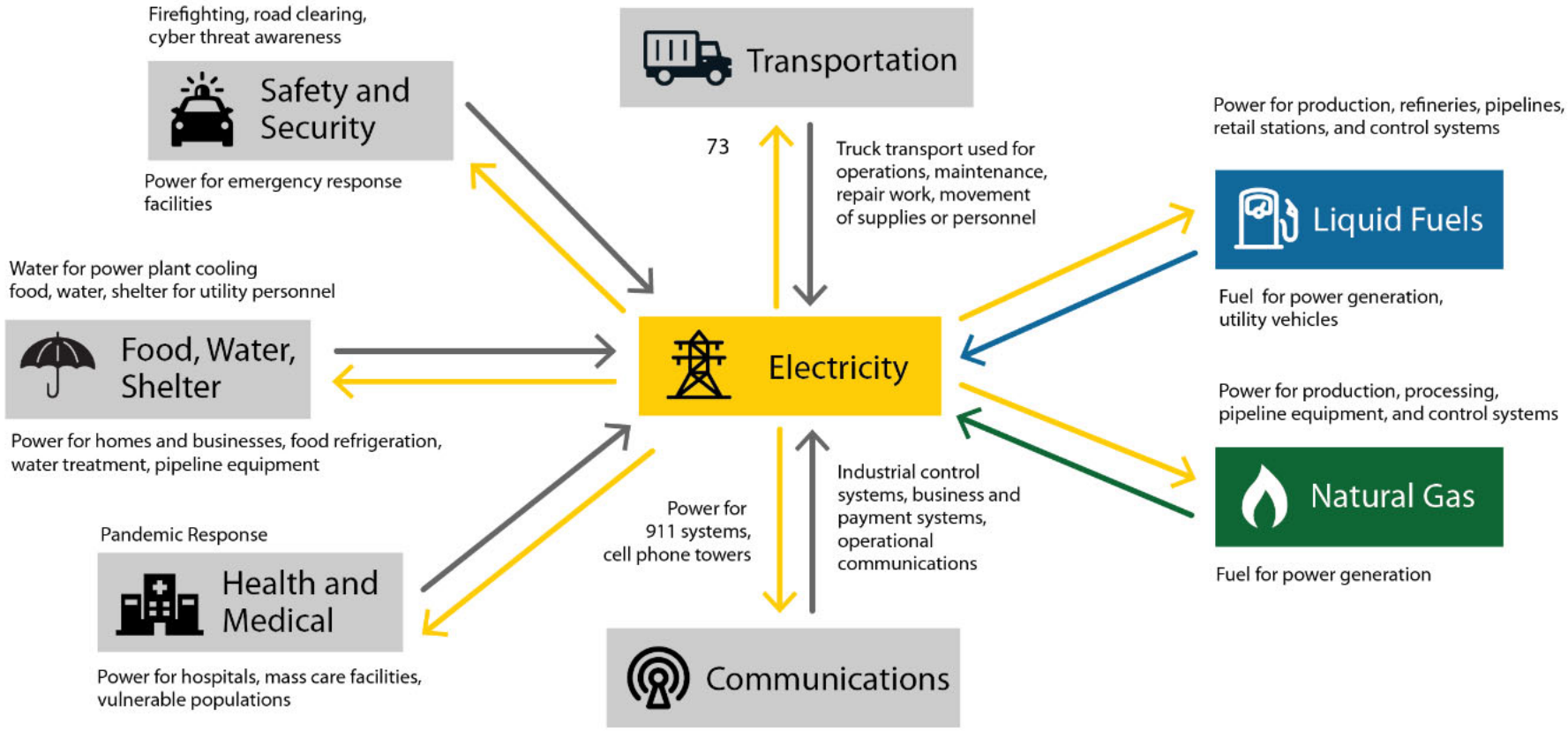
*This map denotes the approximate location for each of the **18 separate billion-dollar weather and climate disasters that impacted the United States in 2022.***

System Reliability Depends on Managing Multiple Event Speeds



Markets are used for traditional grid operations, including hour-ahead, day-ahead, and capacity markets. Long-term planning reaches beyond typical market and financial signals.

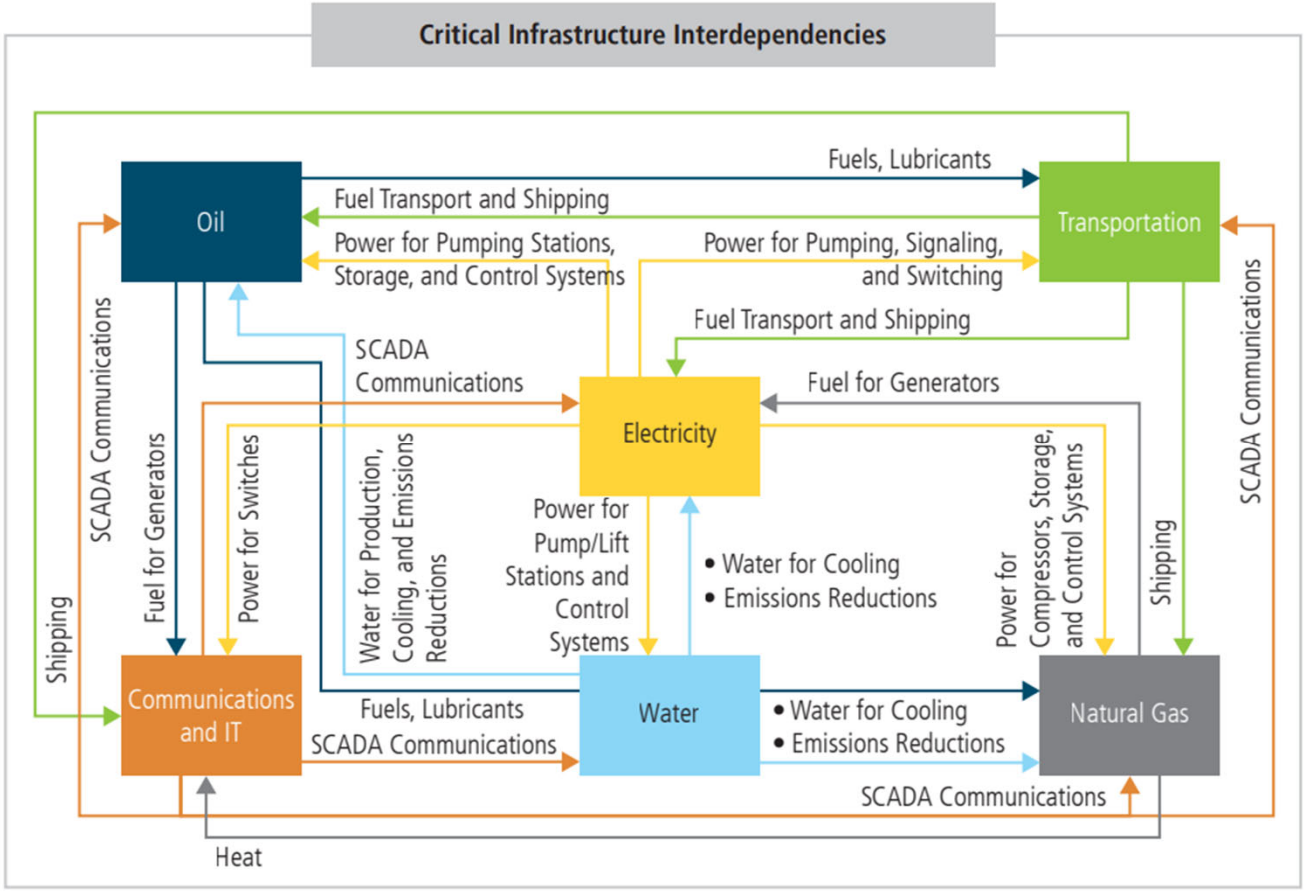
Critical Infrastructure Interdependencies



Critical Infrastructure Interdependencies

Key critical infrastructure interdependencies represent the core underlying framework that supports the American economy and society.

The financial services sector (not pictured) is also a critical infrastructure with interdependencies across other major sectors supporting the U.S. economy.



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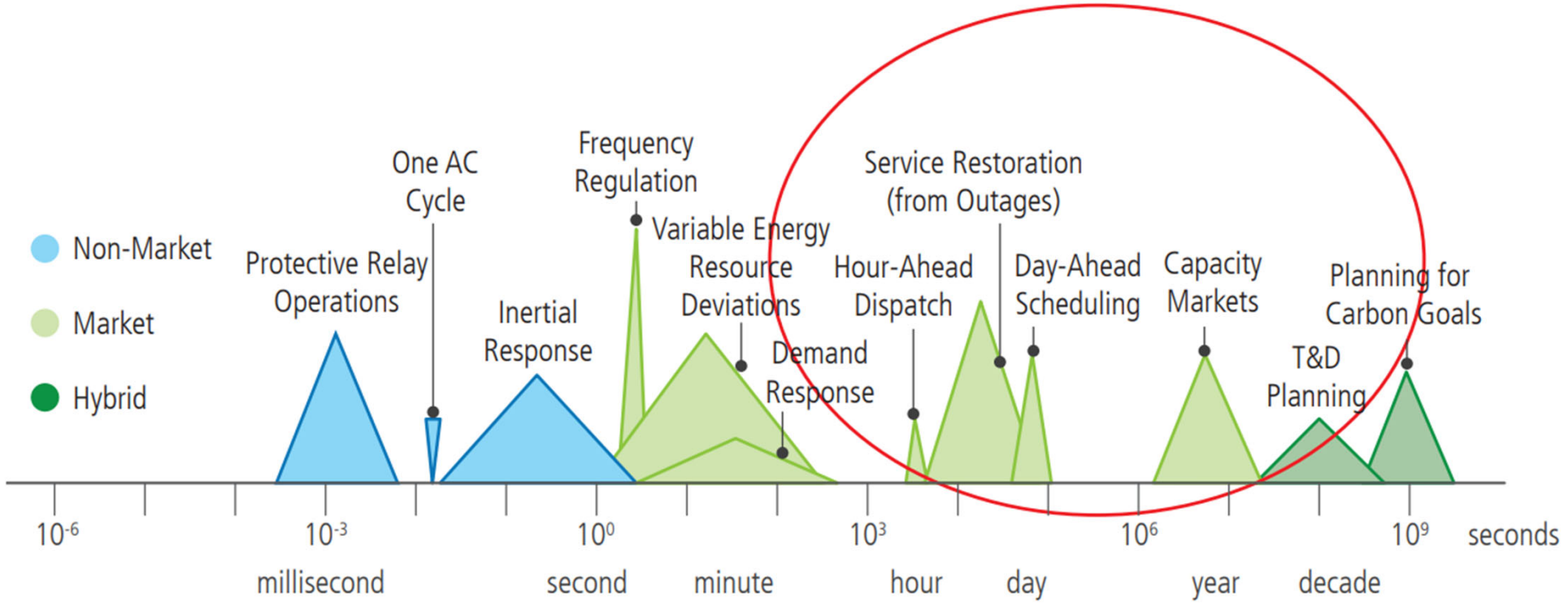

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FY24 Budget Request Highlights

- Strengthen U.S. energy sector security and resilience through advanced risk analysis
- Integrate cybersecurity and resilience into the energy sector industrial base
- Reduce risks to the electricity, oil, and natural gas systems through threat-informed research, development, and demonstration
- Build security and resiliency capacity across industry and SLTT entities through exercises, training, technical assistance, and workforce development initiatives
- Strengthen emergency preparedness and response capabilities by enhancing CESER's ability to address all hazards impacting or potentially impacting the energy sector

Questions?

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