



U.S. Government Accountability Office

Electricity Grid Resilience

Mid-West Electric Consumers Association

65th Annual Meeting

December 6, 2022

GAO - Overview

The U.S. Government Accountability Office (GAO) is an independent, nonpartisan agency that works for Congress.



Source: GAO. | GAO-23-900398

Electricity – What We Audit

Federal efforts related to

- grid reliability and resilience to climate, cybersecurity, and other risks
- grid modernization
- market oversight
- federal power generation, transmission and marketing
- commercial nuclear power



Electricity Grid Resilience

Disaster Recovery and Climate Change



Source: Federal Emergency Management Agency (top) and Puerto Rico's Central Office for Recovery, Reconstruction, and Resiliency (bottom). | GAO-20-141

Electricity Grid Resilience

Disaster Recovery and Climate Change

- DOE Should Address Lessons Learned from Previous Disasters to Enhance Resilience, [GAO-22-105093](#)
- Climate Change Is Expected to Have Far-Reaching Effects and DOE and FERC Should Take Actions, [GAO-21-346](#)
- Opportunities Exist for DOE to Better Support Utilities in Improving Resilience to Hurricanes, [GAO-21-274](#)



Source: Federal Emergency Management Agency. | GAO-22-105093



Source: Braeden/stock.adobe.com

Electricity Grid Resilience

Cybersecurity and other risks

- Electricity Grid Cybersecurity: DOE Needs to Ensure Its Plans Fully Address Risks to Distribution Systems, [GAO-21-81](#)
- Critical Infrastructure Protection: Actions Needed to Address Significant Cybersecurity Risks Facing the Electric Grid, [GAO-19-332](#)
- Critical Infrastructure Protection: Protecting the Electric Grid from Geomagnetic Disturbances, [GAO-19-98](#)



Upcoming and Future Work



- Climate risks to federal utilities
- Nuclear power plant climate resilience
- Strategic transformer reserves
- Development of microgrids and renewable energy on tribal lands
- Utility-scale energy storage technology assessment
- Recent funding for grid infrastructure and resilience



GAO on the Web

Connect with GAO on [LinkedIn](#), [Facebook](#), [Flickr](#), [Twitter](#), [YouTube](#) and our Web site: <https://www.gao.gov/>.
Subscribe to our [RSS Feeds](#) or [Email Updates](#). Listen to our [Podcasts](#) and read [The Watchblog](#)

Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov
(202) 512-4400, U.S. Government Accountability Office
441 G Street, NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov
(202) 512-4800, U.S. Government Accountability Office
441 G Street, NW, Room 7149, Washington, DC 20548

Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov,
(202) 512-4707, U.S. Government Accountability Office,
441 G Street NW, Room 7814, Washington, DC 20548

Copyright

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.