

United States Senate

WASHINGTON, DC 20510

May 13, 2019

The Honorable Gene Dodaro
Comptroller General of the United States
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Dodaro,

We are writing today to ask that the Government Accountability Office (GAO) evaluate domestic efforts to increase the resilience of U.S. energy infrastructure, as well as study relevant promising practices used by other countries in order to determine whether and how those practices could be successfully applied here in the U.S.

As you know, extreme weather events are expected to become more frequent and intense due to climate change, according to the National Academies and the United States Global Change Research Program. In 2017, Hurricanes Irma and Maria illustrated the vulnerability of energy infrastructure to extreme events, destroying much of the electricity grids' transmission and distribution systems in Puerto Rico and the U.S. Virgin Islands, leaving millions without power and resulting in the longest blackout in U.S. history. Following the hurricanes, it took roughly five months for power to be restored to all of the customers in the U.S. Virgin Islands, which has an estimated population of 106,405 people, and roughly eleven months for power to be restored to all of the customers in Puerto Rico, which has an estimated population of 3.3 million people. Also, in October 2012, Hurricane Sandy caused more than 8 million utility customers to lose power within 24 hours of its landfall. Among other impacts, fuel distribution networks were paralyzed and critical terminals for petroleum and petroleum products were badly damaged.

The federal government owns vulnerable energy infrastructure, such as the Strategic Petroleum Reserve; regulates aspects of other vulnerable energy infrastructure, including the safety and security of nuclear power plants and the reliability of electricity transmission lines; and also provides disaster assistance and other incentives and services to private energy infrastructure owners. In January 2014, GAO reported that changes in the climate are projected to affect energy infrastructure throughout all major stages of the energy supply chain, thereby increasing the risk of disruptions.¹

Additionally, GAO found that although the federal government generally has a limited role in directly adapting energy infrastructure to potential impacts, key federal entities— such as the

¹GAO, *Climate Change: Energy Infrastructure Risks and Adaptation Efforts*, [GAO-14-74](#) (Washington, D.C.: Jan. 31, 2014).

Department of Energy, the Environmental Protection Agency, the Federal Energy Regulatory Commission, and the Nuclear Regulatory Commission—play important supporting roles that can influence private companies' infrastructure decisions. Specifically, the federal government can influence companies' decisions through providing information, regulatory oversight, technology research and development, and market incentives and disincentives. Further, GAO reported that these federal entities had begun to take steps to address climate change risks.

The 2014 report laid the groundwork for more forward-looking analyses of how the federal government can increase the resilience of the nation's energy system. In this context, we would like GAO to review, and as applicable, make recommendations about, the following:

1. To what extent, if at all, have federal agencies taken measures that can increase the resilience of U.S. energy infrastructure to the effects of climate change since GAO's 2014 review was completed?
2. What are the strengths and limitations of different options to increase the resilience of U.S. energy infrastructure owned, regulated, and influenced by the federal government?
3. What, if any, energy infrastructure resilience best practices are employed by other countries that the U.S. would be wise to explore and consider adopting?
4. To what extent are these options and best practices employed in the U.S., and how, if at all, can current federal efforts be improved?

Thank you very much for your attention to this important issue. If you have any questions, please ask your staff to contact Michal Freedhoff, a member of the minority staff of the Senate Environment and Public Works Committee, at Michal_Freedhoff@epw.senate.gov, or Luke Bassett, a member of the minority staff of the Senate Energy and Natural Resources Committee, at Luke_Bassett@energy.senate.gov.

Sincerely,



Tom Carper
Ranking Member
Committee on Environment and
Public Works



Joe Manchin III
Ranking Member
Committee on Energy and
Natural Resources