

Powering Midwestern Expansion through Transmission DOE Collaboration with the States

Michelle Manary, Deputy Assistant Secretary for Electricity Delivery

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Biden-Harris Administration Goals for the Grid

- Achieve net-zero emissions, economy-wide, by no later than 2050
- A carbon pollution-free electricity sector no later than 2035 (Executive 14008 of January 27, 2021)
- Accelerate the deployment of clean energy and transmission projects in an environmentally stable manner (Executive <u>14008</u> of January 27, 2021)
- Clean and zero-emission vehicles for Federal, State, local, and Tribal government fleets, including vehicles of the United States Postal Service (Executive <u>14008</u> of January 27, 2021)



BRIEFING ROO

Executive Order on Tackling the Climate Crisis at Home and Abroad

JANUARY 27, 2021 · PRESIDENTIAL ACTIONS

The United States and the world face a profound climate crisis. We have a narrow moment to pursue action at home and abroad in order to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents. Domestic action must go hand in hand with United States international leadership, aimed at significantly enhancing global action. Together, we must listen to science and meet the moment.

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

PART I — PUTTING THE CLIMATE CRISIS AT THE CENTER OF UNITED STATES FOREIGN POLICY AND NATIONAL SECURITY

Section 101. Policy. United States international engagement to address climate change — which has become a climate crisis — is more necessary and urgent than ever. The scientific community has made clear that the scale and speed of necessary action is greater than previously believed. There is little time left to avoid setting the world on a dangerous, potentially catastrophic, climate trajectory. Responding to the climate crisis will require both significant short-term global reductions in greenhouse gas emissions and netzero global emissions by mid-century or before.

It is the policy of my Administration that climate considerations shall be an essential element of United States foreign policy and national security. The United States will work with other countries and partners, both bilaterally and multilaterally, to put the world on a sustainable climate pathway. The United States will also move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifest and will continue to intensify according to current trajectories.



Current Key Trends Driving Electricity System Operations

Achieving the Administration's clean energy goals will require significant investment and expansion in transmission and storage.

Information revolution in the grid (sensor-data-analysis-machine learning/AI)

The electrification of transportation and buildings will require distribution modernization.

Increasing demand resilient and reliable grid- requires additional system flexibility

Evolving markets is creating operational and planning complexity

The Electric Grid Now

The U.S. electric grid is a complex interconnected system of electric transmission lines linking generators to loads.



Source: https://www.energy.gov/sites/prod/files/2017/02/f34/Appendix--Electricity%20System%20Overview.pdf

Partnerships

DOE's Office of Electricity (OE) partners with electricity industry groups to help achieve cross state analysis and approaches to solving energy needs through:

1. Convening

 DOE has a unique role as a convener to bring different stakeholders together to help tackle electricity system issues

2. Technical Assistance

 Funding National Laboratories and other TA groups to provide modeling and analysis to help meet State objectives or future policies

3. Infrastructure Deal Implementation

 Many Sections in the Bipartisan Infrastructure Deal provide States and Tribes with funding to study and harden their Transmission and Distribution Grid



Transmission Authorities and Responsibilities

The Office of Electricity implements the following regulatory and statutory authorities:

- Issuance of **Presidential permits** for transmission facilities at the U.S. border pursuant to Executive Order 10485, as amended
- FAST-41 Compliance/Federal Permitting Improvement Steering Council (FPISC)
- Lead the Integrated Interagency Pre-Application (IIP) process for qualifying interstate transmission projects per section **216(h) of the Federal Power Act**.
- Designate energy corridors on Federal land, in coordination with the Secretaries of Defense, Agriculture, Commerce, and Interior pursuant to section **368 of the Energy Policy Act of 2005**
- Produce the National Congestion Study and designate National Interest Corridors, as appropriate
 pursuant to section 1221 of the Energy Policy Act of 2005
- Authority to accept third-party financing to upgrade or build new transmission facilities in the Western
 Area Power Administration Southwestern Power Administration footprint pursuant to section 1222 of
 the Energy Policy Act of 2005

Bipartisan Infrastructure Deal (BID) and Build Back Better Act (BBB)

Congressional legislation has provided billions of dollars worth of opportunities to improve electricity infrastructure through the Bipartisan Infrastructure Bill and may add more through the Build Back Better Act. State's will be a key partner in implementing these new activities.

Potential areas of Office of Electricity and State collaboration:

- Preventing Outages and Enhancing the Resilience of the Electric Grid (BID Section 40101)
- Siting of Interstate Electric Transmission Facilities (BID Section 40105)
- Transmission Facilitation Program (BID Section 40106)
- Deployment of Technologies to Enhance Grid Flexibility (BID Section 40107)
- Transmission Line and Intertie Incentives (BBB Section 30451)
- Grants to Facilitate the Siting of Interstate Electricity Transmission Lines (BBB Section 30452)
- Organized Wholesale Electricity Market Technical Assistance Grants (BBB Section 30453)
- Interregional and Offshore Wind Electricity Transmission Planning, Modeling, and Analysis (BBB Section 30454)



Thank you!

Michelle Manary

Deputy Assistant Secretary, Electricity Delivery

Office of Electricity

Department of Energy

Email: Michelle.Manary@hq.doe.gov

