



Strong Federal Transmission Policy: A Key Component of a Clean Energy Future

In order to transform the nation's antiquated energy system into a modern, reliable and cleaner one, the United States must quickly enact an economy-wide cap on global warming pollution and a strong federal renewable electricity standard. Upgrading the U.S. transmission system is an essential complement to those policies, because it will help remove existing barriers that prevent the nation from realizing its vast renewable energy development potential.

Specifically, the United States needs new federal policies to increase the reliability and efficiency of the electric grid and maximize the integration of renewable resources within it. Because many of our most plentiful and economic renewable resource producing areas are located far from populous load centers, "Green Energy Superhighways" are needed if the United States is to expand the use of clean, renewable electricity and reduce carbon emissions from the electricity sector. To do this, we need to reform how transmission lines are planned, sited and managed.

Legislation is needed that would give the federal government the authority to ensure that needed transmission lines are built in a timely manner and costs are fairly allocated. States and regions should have primary responsibility to work out transmission agreements, but the federal government should be able to step in when states can't agree on the need for new facilities that serve a broader national interest.

Today's transmission system, regulatory authorities, and policies prevent us from unlocking the potential for a clean, reliable, job-creating 21st century electricity system.

The United States has abundant potential to use more renewable energy to create local jobs, increase energy independence and reduce carbon dioxide and other harmful emissions. By diversifying our energy system with more renewable resources, we will also create new low-carbon competitors to coal and nuclear power and reduce consumer energy bills. Fuel diversity will make our economy less vulnerable to potential energy supply shortages or interruptions, price spikes, price increases or price manipulation.

To effectively tap the nation's clean, affordable renewable energy resources, we will need to make new investments

in the transmission system to connect areas rich in renewable energy resources with population centers. Additionally, improving connections between regions and building a strong national grid can enable the integration of higher levels of renewable energy sources like wind and solar at lower costs. While the winds at any given location are highly variable, the output of wind turbines is much more evenly distributed and predictable when integrated over a large area.

At the same time, we shouldn't build more transmission than we really



need. Ample opportunities exist to reduce the amount of electricity we generate and use by improving energy efficiency, developing local renewable electricity sources, and using smart grid technologies that help consumers and utilities respond quickly to and manage changes in demand and available power supplies. A smarter grid will also decrease our electricity system's vulnerability to cyber-attacks and natural disasters. Furthermore, we should take advantage of existing transmission rights-of-way to the greatest extent possible through upgrades and the installation of advanced technologies that can expand transmission capacity within existing footprints.

Today, planning and siting transmission is very difficult. The public lacks confidence that utilities are taking advantage of all opportunities to improve efficiency and develop clean resources, which would reduce the need for new facilities. New competitors are not able to access the system due to lack of needed facilities or constraints on the existing system. States are not always able to site long-distance transmission whose benefits may be realized across a broader region. Transmission developers do not always seek to minimize their environmental footprint and/or avoid sensitive areas. And finally, decisions over who should pay for new transmission facilities can be very contentious. All of these problems create barriers to the effective planning, siting and cost allocation of new transmission facilities.

We need a better planning and decision-making process.

Transmission reform must start with a process that is fair, comprehensive, broadly participatory and transparent. It should take into account and build on state and regional analyses and initiatives already underway. This process must be designed to involve a broad array of stakeholders, including states, utilities, independent developers, environmentalists, ratepayers and unions to address immediate concerns and avoid delays later in the process. The federal government should provide the framework, guidelines, timelines and backstop decision-making authority. Cost allocation policies should ensure that the cost of paying for new transmission facilities is broadly

shared, consistent with the broad range of benefits realized by increasing reliability, fuel diversity, and a cleaner environment. Clear and simple cost recovery policies will increase investor confidence and ultimately reduce costs to all electricity users.

The process must take into account the considerable contributions that distributed generation, energy efficiency and demand response can make to reduce the need for new facilities. These options must be considered on a level playing field with new transmission and generation. The process should target and prioritize new transmission facilities that access areas rich in renewable energy resources. The new process must ensure that we better utilize existing transmission infrastructure and rights of way, and incorporate innovative smart grid technologies that can improve reliability and system control and reduce customer demand. Finally, new transmission plans must be environmentally responsible and be designed to protect sensitive lands and important natural and cultural resources.

New transmission should not undermine existing efforts to curb carbon emissions.

In the Northeastern United States, currently unused capacity from existing coal plants to the west and south of the region could produce the equivalent generation and carbon emissions of 15 new coal plants—three and a half times the cuts expected under the northeastern Regional Greenhouse Gas Initiative (RGGI). These emissions would equal those from more than 9 million extra cars on the road. Absent a strict federal cap-and-trade system, some current proposals to expand the existing transmission grid that allows power to flow from west to east would enable more coal-based electricity to stream from Ohio, Pennsylvania, and West Virginia for example—states that have not joined RGGI—to Delaware, Maryland, and New Jersey: all states that have agreed to cap their emissions. These increased emissions could also make it harder and more expensive to meet forthcoming federal carbon reduction policies.

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