



April 29, 2022

The Honorable Dianne Feinstein
Chair
Energy & Water Development
Senate Appropriations Committee
Washington, DC 20510

The Honorable John Kennedy
Ranking Member
Energy & Water Development
Senate Appropriations Committee
Washington, DC 20510

The Honorable Marcy Kaptur
Chairwoman
Energy & Water Development
House Appropriations Committee
Washington, DC 20515

The Honorable Mike Simpson
Ranking Member
Energy & Water Development
House Appropriations Committee
Washington, DC 20515

Dear Chair Feinstein, Ranking Member Kennedy, Chairwoman Kaptur and Ranking Member Simpson:

As companies and organizations committed to building America's clean energy future, we write to request that Fiscal Year 2023 Energy and Water Appropriations provide robust funding for high-voltage transmission deployment and research through the U.S. Department of Energy's (DOE) Grid Deployment Office, Loan Programs Office (LPO), and Office of Electricity (OE).

Our energy transmission infrastructure is essential to providing Americans access to the power they need. To ensure American families and businesses always have access to power, it is imperative that we invest in and build new transmission to make our grid more reliable, resilient, and interconnected. Upgraded and expanded transmission lines will keep costs down by bringing diverse types of affordable, clean power to more communities.

Additionally, the expansion and modernization of our national power grid is central to meeting our nation's urgent climate and energy security goals. Congress took critical first steps to meeting these goals

in the Infrastructure Investment and Jobs Act (IIJA) by investing \$2.5 billion in direct spending for new transmission and expanding programs aimed at enhancing our grid resilience. However, more will be necessary going forward. Some estimates suggest that fully decarbonizing our electric grid will require high-voltage transmission capacity to expand by 60 percent by 2030, and to triple by 2050.¹

Given that funding will drive substantial clean energy deployment, unleash billions in private investment, create thousands of new jobs, deliver low-cost energy to benefit customers, and substantially reduce emissions, we encourage the Subcommittee to consider the following:

- **Additional Funding for the Transmission Facilitation Program:** IIJA funded Transmission Facilitation Fund at \$2.5 billion (for FY22-26), under which DOE would act as an anchor tenant on large, high-voltage transmission projects by reserving capacity on a line until generation appears. We are requesting \$500,000,000 for FY23 funding for this program, as authorized by IIJA. It should also be noted that in light of the high costs of transmission development, significantly more funding will be required to achieve the program's intended purpose: solve the chicken-and-egg problem of who invests first—the transmission developer before it knows whether renewable energy expected to use the line will actually materialize or the renewable energy developer who needs that transmission to deliver its clean energy to market. Additional future funding should be provided for the program to ensure stable funding for proposed transmission projects, improve grid resilience and reliability, facilitate interregional transfer of electricity, lower greenhouse gas emissions, and advance innovative technologies. This funding would also enable the program to fund multiple long-haul lines simultaneously and increase the impact as revolving funds are returned to DOE and applied to subsequent projects. These type lines enable the least-cost clean energy resources flow to load, and essentially pay for themselves in consumers savings.
- **Additional Funding for Deployment of Technologies to Enhance Grid Flexibility:** The IIJA expanded the Smart Grid Investment Matching Grant Program to enhance electric systems resilience. Additional federal funding of at least \$3 billion (for FY22-26), \$600,000,000 in FY23, is needed to increase grid flexibility nationwide and improve resiliency to extreme weather, disasters and cyber-attacks. This funding should be directed to grants that enable the purchase and installation of advanced transmission technologies that will increase the interregional transfer capacity of the grid and improve responsiveness to changing system conditions. Until new transmission lines can be built, expanding existing transmission through such measures holds the promise of almost doubling the carrying capacity of certain long-haul lines, resulting in a greater ability to integrate clean energy, mitigate the risk of extreme weather events and lower congestion costs that make a large part of consumer bills.
- **Grants for Enhancing Grid Resilience:** The IIJA authorizes \$5 billion (for FY22-26) in grants to support grid resilience to reduce the likelihood and consequences of the impacts to the electric transmission from outages from extreme weather, wildfires, and other natural disasters. We are requesting \$1 billion for FY23 funding for this program, as authorized by IIJA. These funds should be directed to transmission owners and developers to cover expenditures related to the purchase and installation of technologies that increase the operational transfer capacity of the grid at market seams to integrate clean energy, thereby promoting resilience by creating multiple pathways for the flow of electricity. Additionally, these funds should be prioritized on

¹ Available at <https://environmenthalfcenury.princeton.edu/>.

investments that have the potential to unlock GWs of incremental clean energy and provide reliability and resiliency benefits across a wide footprint.

- **Funding for Title XVII—Loan Guarantees:** Decarbonization of the electric sector will require significant new investments in new and improved transmission technologies and scaling up loan guarantees will support such deployment. We request support to increase the President’s FY23 budget request for loan guarantee authority by at least \$3 billion, plus the necessary funding to cover any additional credit subsidy costs of extending or guaranteeing this credit, to support the deployment of new and improved advanced grid integration and storage, transmission lines, and offshore wind infrastructure.
- **Moonshot for Converter Stations:** Converter stations are the costliest component of high-voltage direct current (HVDC) lines, which are critical to accessing affordable and reliable clean energy over long distances. With this in mind, we request \$100 million in funding for DOE’s HVDC moonshot initiative to support R&D to bring down the costs of HVDC converter stations, thereby increasing the ability to exchange power transmission between HVDC and AC transmission systems (i.e., allowing for more “pick-up” and “drop-off” stations to be deployed on HVDC lines). This would, in turn, enable more local connections to the grid from HVDC lines and expand benefits to communities along these lines, as well as including providing services, such as Black Start capability, that support reliability and security.
- **National Transmission Planning Needs and Long-Term Planning Studies:** As part of the Building a Better Grid Initiative, DOE intends to conduct a Transmission Needs Study to analyze where new or upgraded transmission facilities can relieve expected future constraints and congestion driven by the deployment of clean energy. DOE will also lead a Long-Term Transmission Planning Study (15- to 30-year) to identify regional, interregional, and national transmission strategies to accelerate decarbonization while maintaining system reliability. We are requesting \$60 million in FY23 funding to support these studies, which will be critical for modernizing transmission planning and ensuring it provides greater certainty to drive investment to the highest-need transmission projects and enable development of the projects with the largest long-term benefit for consumers.
- **Transmission Planning Technical Assistance for States:** DOE develops important modeling tools and capabilities that can be leveraged to provide technical analysis to states to support transmission planning that identifies regional and interregional transmission solutions that will best meet national interests by enhancing the electric system within and across regions. For instance, this technical assistance can aid in long-term energy planning that considers new scenarios for reaching grid decarbonization goals cost effectively and under new conditions, thereby aligning planning with federal and state public policy goals. We are requesting \$30 million for this important work in FY23.

These investments in grid infrastructure will be critical moving forward. We thank you for your consideration and hope that you will continue to support the progress that has already been made through investments in transmission in the Fiscal Year 2023 Energy and Water Appropriations Bill.

Sincerely,

Advanced Power Alliance

American Clean Power Association

American Council on Renewable Energy

Americans for a Clean Energy Grid

Anbaric

Apex Clean Energy

Avangrid

Berkshire Hathaway Energy

BlueGreen Alliance

Clean Energy Buyers Association

CustomerFirst Renewables LLC

Direct Connect Development Company

EDF Renewables

Enel North America

ENGIE North America Inc

Google

Hannon Armstrong

IBEW Local 1245

Infrastructure & Energy Alternatives Inc. (IEA)

Innergex

Invenergy

Lightsource bp

National Wildlife Federation

Natural Resources Defense Council

Ocean Winds NA

Ørsted

Pattern Energy

Pine Gate Renewables

Renewable Northwest

RES Group

Smart Wires Inc.

Sol Systems

Solar Energy Industries Association

TPI Composites Inc.

VEIR

WATT Coalition