



**Americans for a Clean Energy Grid Comments on the
Department of Energy’s Energy Improvements in Rural or Remote Areas (ERA) Programs
Request for Information (RFI) (DE-FOA-0002841_RFI)**

Americans for a Clean Energy Grid (ACEG)—a not-for profit public interest advocacy organization that brings together a diverse coalition of stakeholders focused on the need to expand, integrate and modernize the high-voltage grid in the United States¹—appreciates this opportunity to provide input to the Department of Energy (DOE) on its request for information regarding its implementation of Section 40103(c) of the Infrastructure Investment and Jobs Act² (IIJA or Bipartisan Infrastructure Law).³ This provision provides \$1 billion to U.S. Department of Energy (DOE) Office of Clean Energy Demonstrations (OCED) for fiscal years (FYs) 2022 through 2026 to improve in rural or remote areas of the United States the resilience, safety, reliability, and availability of energy and environmental protection from adverse impacts of energy generation. ACEG commends DOE for seeking public input on how to most effectively use the Energy Improvements in Rural or Remote Areas (ERA) Program funds.

Inquiries regarding ACEG’s comments should be directed to:

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I. Background and General Comments

Electricity is an essential service, and nearly all aspects of modern life depend on a robust and reliable power grid. But our nation’s existing grid is neither technically nor

¹ The ACEG coalition includes: multi- state utilities that develop, own, and operate transmission; trade groups that include transmission owners and transmission equipment manufacturers among their members; renewable energy trade groups, developers, and advocates; environmental and labor advocacy organizations; buyers of energy; and energy policy experts. ACEG seeks to educate the public, opinion leaders, and public officials about the needs and potential of the transmission grid. These comments do not necessarily reflect the views of individual members.

² Infrastructure Investment and Jobs Act, Public-Law 117-58, 135 Stat. 429, (November 15, 2021).

³ Department of Energy, *Energy Improvements in Rural or Remote Areas Request for Information (RFI)* (October 4, 2022 as modified November 16, 2022) (“Notice”). The full RFI is posted here: <https://oced-exchange.energy.gov/Default.aspx#Foald4fa22789-a7f5-462d-97a6-d6b4433c4627>.



locationally sufficient to meet our modern needs. According to the American Society for Civil Engineers, most of the nation’s transmission and distribution lines were constructed in the 1950s and 1960s and have a 50-year life expectancy, meaning they have reached or surpassed their intended lifespan.⁴ Simply replacing old lines will not resolve current and expected future problems, however. Real-world experience suggests that generation shortfalls resulting from severe weather and other threats are occurring with greater intensity and frequency, and these events tend to be at their most extreme in areas lacking fully interconnected power systems.⁵ Transmission can address such capacity shortfalls by enabling imports from areas less affected by the weather events.

Similarly, a recent report by national security experts noted that “Our electricity grid’s resilience—its ability to withstand shocks, attacks and damages from natural events, systemic failures, cyber-attack or extreme electromagnetic events, both natural and man-made—has emerged as a major concern for U.S. national security and a stable civilian society.”⁶ The report described large scale transmission as a solution noting that

Transmission buildout is critical to resilience as it can relieve line overloading—or ‘congestion’ . . .—on the existing system, lessening the compounding risks that come with a strained grid that could then be tested by an extreme weather event or an attack incident. Moreover, by enabling further development of renewable energy resources over wider geographic areas, well-planned transmission expansion can make targeted attacks on the grid more difficult to plan and carry out.^[7]

The ERA program provides opportunities for investment in grid resilience in rural and remote areas, including siting or upgrading transmission and distribution lines, and opportunities for technical assistance including: assessing permitting and siting needs, assessing the needed interconnection, transmission, and other grid components, and identifying and analyzing financing options for pursuing projects, including partnership opportunities. Because transmission plays an integral role in ensuring grid resilience, ACEG encourages OCED to ensure that the ERA guidelines support the financing and development of large-scale and high-capacity transmission solutions.

⁴ American Society of Civil Engineers, “[Policy Statement 484 - Electricity Generation and Transmission Infrastructure](#),” Adopted by the Board of Direction on July 13, 2019.

⁵ Goggin, Michael, [Transmission Makes The Power System Resilient To Extreme Weather](#), 2021.

⁶ National Commission on Grid Resilience, “[Grid Resilience: Priorities for the Next Administration](#),” at 1, 2020.

⁷ *Ibid.*, at 42.



II. Comments to Specific Questions

Category 2: Potential Project Details

Section 40103(c) of the BIL provides that federal support, including financial assistance to rural or remote areas, may be provided for the purpose of:

- A. Improving the overall cost-effectiveness of energy generation, transmission, or distribution systems;
- B. siting or upgrading transmission and distribution lines;
- C. reducing greenhouse gas emissions from energy generation by rural or remote areas;
- D. providing or modernizing electric generation facilities;
- E. developing microgrids; and
- F. increasing energy efficiency.

Questions 2.4 Given the purposes referenced above (bullets A-F), what types of energy projects would be most impactful?, 2.5 Would this type of project(s) address energy burdens, economic burdens, environmental impacts, lack of quality jobs, or other energy equity and environmental justice considerations? If so, how?, and 2.6 What barriers have been encountered or would be anticipated for these types of projects or relevant analogs? What are potential paths to overcoming them? Provide specific examples of the types of barriers of interest in the categories of permitting, financing, community engagement, materials acquisition and construction, and operations and maintenance.

One billion dollars over five years, though significant, is only a portion of the total investment needed to ensure the resilience, safety, reliability, and availability of energy and environmental protection in rural and remote areas. Nevertheless, every dollar is important, especially dollars that can bring projects to completion or that can reduce overall costs for ratepayers. While all of the projects listed in bullets A through F are important, ACEG encourages OCED to place a special emphasis on using ERA funds to support transmission infrastructure development (bullets A and B) as the return on such projects is significant.

Indeed, between 2012 and 2014, the Southwest Power Pool (SPP) completed \$3.4 billion in transmission expansion projects to better integrate the power system's eastern and western regions and reduce overall congestion on the SPP grid.⁸ SPP estimates that the net present value of all quantified benefits, including production cost savings, is expected to total over \$10 billion over the next 40 years. Similarly, the recently approved first tranche of the Midcontinent Independent System Operator's (MISO) Long-Range

⁸ SPP, "[The Value of Transmission](#)" at 5, January 2016.



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Transmission Planning (LRTP) includes 18 projects.⁹ The projects have a net cost of \$10.3 billion dollars but are expected to deliver \$37.3 billion in benefits, a benefit-to-cost ratio of at least 3.6.¹⁰ In short, every dollar spent on high-speed regional transmission an enable access to generation that is \$3 to \$4 cheaper than would otherwise be available.

Transmission projects also have the potential to produce significant economic benefits. A recent study by Vibrant Clean Energy (VCE) found that transmission expansion and modernization in the Eastern US region alone will unleash up to \$7.8 trillion in investment, mostly in rural America.¹¹ Additional studies have found power projects provide extra income to farmers, ranchers, and other private landowners with annual drought-proof lease payments totaling \$1.3 billion and new tax revenues from clean power projects totaling \$1.2 billion.¹² By 2030, it is projected that wind and solar will generate about \$5 billion annually in taxes and land lease payments for rural communities; significant transmission upgrades could greatly increase those amounts.¹³

Despite the need for and substantial benefits of expanding and modernizing transmission, in the last decade, regionally planned transmission investment has decreased by 50 percent and almost no new interregional lines have been planned.¹⁴ Even when lines get built, transmission projects can take at minimum 5-10 years to plan, develop, and construct,¹⁵ and in some cases have taken over 15 years to receive permits and begin construction.¹⁶

The barriers to building transmission can largely be traced to financing difficulties, insufficient planning processes, and delays in siting and permitting the lines.¹⁷ While these issues are complicated, ERA funds can help clear a path for transmission projects to move faster and to better benefit rural areas. Potential projects that will benefit

⁹ MISO, "[Tranche 1 Portfolio Focused on Midwest Subregion](#)," July 25, 2021.

¹⁰ Gramlich, Rob, "[Enabling Low-Cost Clean Energy and Reliable Service Through Better Transmission Benefits Analysis a Case Study Of MISO's Long Range Transmission Planning](#)" at 6, August 2022.

¹¹ Clack, Goggin, Choukulkar, Cote, and McKee, "[Consumer, Employment, and Environmental Benefits of Electricity Transmission Expansion in the Eastern U.S.](#)," at 4, October 2020.

¹² American Clean Power, "[Clean Power Technologies Help Our Economy and Our Planet](#)," April 2021.

¹³ Siegner, Brehm, and Dyson, "[Seeds of Opportunity](#)," January 2021.

¹⁴ Caspary, Goggin, Gramlich, and Schneider, "[Disconnected: The Need for a New Generator Interconnection Policy](#)" at 21, January 2021; Pfeifenberger et al., "[Cost Savings Offered by Competition in Electric Transmission](#)" at 1, April 2019.

¹⁵ Pfeifenberger, Johannes and John Tsoukalis, "[Transmission Investment Needs and Challenges](#)" at 13, June 2021.

¹⁶ *E.g.* Permit applications for the Gateway South line were submitted in November 2007 but did not begin construction until June 2022.

¹⁷ See, *e.g.* Eto, Joseph, "[Building Electric Transmission Lines: A Review of Recent Transmission Projects](#)," September 2016; Reed, Liza, "[Transmission Stalled: Siting Challenges for Interregional Transmission](#)," April 2021.



transmission range from providing technical assistance to providing direct financial support. On the technical assistance end, landowners, communities, and rural-focused groups would benefit from assistance that helps increase community engagement in transmission planning and financing processes so that transmission routes are planned to respect and promote community needs, such action, in turn, can accelerate permitting processes. For example, transmission lines sited in brownfields and existing rights-of-way often encounter less community opposition than those sited in greenfields, but stakeholders and state agencies may need support in identifying or reviewing potential alternate routes. On the direct financial support end, funds could be used to support innovative community partnerships to help finance the development of transmission lines¹⁸ or to finance portions of a larger transmission project that will benefit rural areas directly, such as converter stations on long-distance transmission lines which provide local access to power and improved reliability.¹⁹

Questions 2.16 Which entities would need to be involved in these energy projects for them to be successful? 3.1 Are there best practices OCED should consider for engaging with rural or remote stakeholders?, and 3.21 Are there key organizations that should be considered to provide technical assistance, in addition to the Centers supported through EPA and the national laboratories?

ACEG encourages DOE to engage early and often with rural and remote stakeholders and to ensure projects build trust and lay a foundation for collaboration rather than opposition. Further projects should include both a community participation and an education component, so that communities have the opportunity to both understand and address potential impacts and expected benefits. In so doing, DOE should leverage relationships with existing trusted community partners, including farm bureaus, agricultural cooperatives, and unions.

3.5 What existing Federal, Regional, and or State entities that are already engaging in rural and remote communities should OCED leverage?

In addition to collaborating with other arms of DOE that are managing funding for network improvement projects such as the Grid Deployment Office, OCED is encouraged to collaborate with US Department of Agriculture, Rural Development Office as they also manage funding to support rural energy projects and have long-standing and established

¹⁸ For example, Southern California Edison recently entered into a [financing arrangement](#) with the Morongo Band of Mission Indians has the option to finance a portion of a building a replacement transmission line in exchange for the benefitting from the capacity rights of the line.

¹⁹ See, e.g. [Grain Belt Express Line](#), a nearly 800 mile line between Kansas and Indiana, that includes three converter stations along the route, to convert alternating current (AC) to direct current (DC) and back again.



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relationships with local rural groups. Moreover, as transmission can support the buildout of needed broadband, OCED should collaborate with the National Telecommunications and Information Administration (“NTIA”) the Federal Communications Commission (“FCC”) to maximize the overall impact of the funding streams provided to each agency.

III. Conclusion

ACEG again commends DOE for seeking stakeholder input on ways to improve the ERA Program and encourages DOE to consider and incorporate the recommendations provided herein.

Sincerely,

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