# National Environmental Policy Act Implementing Procedures Department of Energy, DOE–HQ–2023–0063

## COMMENTS OF THE AMERICAN COUNCIL ON RENEWABLE ENERGY

The American Council on Renewable Energy (ACORE) appreciates the opportunity to provide these comments on the Department of Energy's (DOE) proposed amendments to its National Environmental Policy Act (NEPA) implementing procedures.<sup>1</sup>

#### I. INTRODUCTION

ACORE strongly supports NEPA reforms that remove barriers to the expansion of the renewable energy and transmission. An expansion of Categorical Exclusions (CEs) is one of many needed actions to accelerate the siting and permitting of transmission and renewable energy while also maintaining NEPA's core environmental protections.

DOE's Proposed Rule and Technical Support Document adequately demonstrate that the proposed revisions meet the requirements of a CE under NEPA. In addition to avoiding an adverse environmental impact, upgrades to transmission and the expansion of solar and storage will have net environmental benefits. DOE cites evidence that "on a life-cycle basis, solar PV systems provide many years of electricity generation without GHG emissions."<sup>2</sup> Similarly, the National Renewable Energy Laboratory found that lithium-ion storage has carbon dioxide emissions on a life-cycle basis comparable to photovoltaic solar, and far below conventional

<sup>&</sup>lt;sup>1</sup> 88 FR 78681, November 16, 2023 ("Proposed Rule").

<sup>&</sup>lt;sup>2</sup> Proposed Rule at 78683.

resources.<sup>3</sup> A greater use of storage will also increase the availability of other renewable resources, further improving the net greenhouse gas reductions of the full portfolio of resources.

Transmission expansion will be essential to fully achieve the potential reductions in greenhouse gas emissions and other pollutants from the increasing deployment of renewable and storage resources. For example, the Midcontinent ISO projects that the first tranche of Long Range Transmission Planning projects will reduce carbon emissions by 399 million metric tons over 20 years and 677 million metric tons over 40 years.<sup>4</sup> Modeling conducted by Princeton University's REPEAT project found that "to keep up with growing electricity demand and connect to the best wind and solar resources across the country, the pace of electricity transmission capacity more than doubles under Current Policies scenarios relative to the Frozen Policies scenario (and increases more than four-fold under the Net-Zero Pathway)."<sup>5</sup>

While the building of new transmission will be essential, reconductoring existing lines will also greatly expand the delivery of energy from renewable resources. One key benefit of the proposed CE revisions for transmission upgrades and rebuilds is to further enable the use of high-performance conductors. DOE points out that "[u]pgrades and rebuilds can also help reduce the need for new powerlines and can allow the replacement of components with newer, more

<sup>4</sup> Midcontinent ISO, *MTEP21 Report Addendum: Long Range Transmission Planning Tranche 1 Executive Summary*, <u>https://cdn.misoenergy.org/MTEP21%20Addendum-</u> LRTP%20Tranche%201%20Report%20with%20Executive%20Summary625790.pdf.

<sup>&</sup>lt;sup>3</sup> National Renewable Energy Laboratory, *Life Cycle Greenhouse Gas Emissions from Electricity Generation: Update* (September 2021), <u>https://www.nrel.gov/docs/fy21osti/80580.pdf</u>.

<sup>&</sup>lt;sup>5</sup> Jenkins, J.D., Mayfield, E.N., Farbes, J., Schivley, G., Patankar, N., and Jones, R., *Climate Progress and the 117th Congress: The Impacts of the Inflation Reduction Act and the Infrastructure Investment and Jobs Act*, REPEAT Project, Princeton, NJ (July 2023) at 73, <u>https://doi.org/10.5281/zenodo.8087805</u>.

efficient and resilient technology."<sup>6</sup> The potential benefits of reconductoring are demonstrated by an ACORE-sponsored study estimating that reconductoring 5,000 miles of transmission annually with high-performance conductors would integrate roughly 27 gigawatts of additional renewable capacity per year.<sup>7</sup> A recent study found reconductoring can add four times more transmission capacity when compared to the base case and can expand transmission capacity on a shorter timeframe than new transmission lines.<sup>8</sup>

## II. RECOMMENDATIONS

While strongly supporting the proposed rule, ACORE is also making the following recommendations:

## A. Expand the Solar CE to Include Agricultural Land

DOE's solar CE covers "solar PV systems located on a building or other structure or, if located on land, within a previously disturbed or developed area."<sup>9</sup> ACORE supports DOE's proposed removal of the acreage limitations and requests that language be added to include solar PV on agricultural land within this CE.

DOE's Solar Energy Technology Office states that the co-location of solar and agriculture on the same land, known as agrivoltaics, "could provide benefits to both the solar and

<sup>&</sup>lt;sup>6</sup> Proposed Rule at 78684.

<sup>&</sup>lt;sup>7</sup> Caspary, J. and Schneider, J., *Advanced Conductors on Existing Transmission Corridors to Accelerate Low Cost Decarbonization*, (March 2022), at 19-20, <u>https://acore.org/wp-</u>content/uploads/2022/03/Advanced Conductors to Accelerate Grid Decarbonization.pdf.

<sup>&</sup>lt;sup>8</sup> Chojkiewicz, E., Paliwal, U., Abhyankar, N., Baker, C., O'Connell, R., Callaway, D., and Phadke, A., *Accelerating Transmission Expansion by Using Advanced Conductors in Existing Right-of-Way*, Energy Institute at Haas Working Paper (November 2023) at 8, <u>https://haas.berkeley.edu/wp-content/uploads/WP343.pdf</u>.

<sup>&</sup>lt;sup>9</sup> Proposed Rule at 78686.

agricultural industries."<sup>10</sup> Benefits of agrivoltaics include improved renewable energy performance, food production and water savings.<sup>11</sup> In recognition of these potential benefits, ACORE requests that DOE extend the CE for solar to include agricultural lands, especially where the solar installations agree to follow certain practices to protect native habitats and manage stormwater.<sup>12</sup>

#### **B.** Further Expand Categorical Exclusions for Transmission

DOE should also expand the existing CE under section B4.12, either in this rulemaking or a future rulemaking. This CE is applicable to: "Construction of electric powerlines approximately 10 miles in length or less, or approximately 20 miles in length or less within previously disturbed or developed powerline or pipeline rights-of-way." Similar to the proposed revisions to B4.13, DOE should remove or increase the maximum length of powerlines within previously disturbed or developed rights-of-way (ROW) as projects in these areas are not expected to result in significant adverse effects on the human environment. Expanding this CE would provide appropriate incentives for transmission developers to prioritize projects in existing ROW over new greenfield projects. As DOE notes in the Technical Support document accompanying the proposed rule, "[m]ileage thresholds are not reliable factors in determining the potential significance of environmental impacts from upgrading or rebuilding powerlines and the

<sup>&</sup>lt;sup>10</sup> Solar Energy Technologies Office, U.S. DOE, *Agrivoltaics: Solar and Agriculture Co-Location*, <u>https://www.energy.gov/eere/solar/agrivoltaics-solar-and-agriculture-co-location</u>.

<sup>&</sup>lt;sup>11</sup> National Renewable Energy Laboratory, *Benefits of Agrivoltaics Across the Food-Energy-Water Nexus* (Sep. 19, 2019), <u>https://www.nrel.gov/news/program/2019/benefits-of-agrivoltaics-across-the-food-energy-water-nexus.html</u>.

<sup>&</sup>lt;sup>12</sup> See further discussion of such practices by the National Renewable Energy Laboratory at: <u>https://www.nrel.gov/solar/market-research-analysis/agrivoltaics.html</u>.

required level of NEPA review."<sup>13</sup> The same logic would apply to the construction of new lines in these ROWs and would spur more efficient development of transmission necessary for the clean energy transformation.

ACORE also encourages DOE to investigate options for additional CEs that can improve the efficiency of permitting renewable energy and transmission projects. Such opportunities may include new CEs for interstate transmission projects identified in a Federal Energy Regulatory Commission (FERC)-approved transmission planning process as well as in areas designated as National Interest Electric Transmission Corridors (NIETCs).

## C. Avoiding Overly Burdensome Requirements

To the extent permitted by the statutory language, DOE should ensure that the requirements for obtaining the CE retain the needed environmental protections while not posing undue burdens on project developers. For example, it is not clear how the requirement to demonstrate that transmission and storage comply with appropriate design and construction standards, control technologies, and best management practices will be demonstrated. ACORE recommends that given these are likely to be standard practices, a simple submission of a signed statement verifying compliance should suffice.

## D. Encourage Other Federal Agency Adoption of CEs

In its proposed Phase 2 revisions to NEPA,<sup>14</sup> the Council on Environmental Quality (CEQ) outlined a procedure for one agency to adopt the CE of another agency as follows:

<sup>&</sup>lt;sup>13</sup> Technical Support Document at 2.

<sup>&</sup>lt;sup>14</sup> National Environmental Policy Act Implementing Regulations Revisions Phase 2, Council on Environmental Quality, 88 FR 49924 (July 31, 2023).

(e) An agency may apply a categorical exclusion listed in another agency's NEPA procedures to a proposed action or a category of proposed actions consistent with this paragraph. The agency shall:

(1) Identify the categorical exclusion listed in another agency's NEPA procedures that covers its proposed action or a category of proposed actions;

(2) Consult with the agency that established the categorical exclusion to ensure that the proposed application of the categorical exclusion is appropriate;

(3) Evaluate the proposed action or category of proposed actions for extraordinary circumstances, consistent with paragraph (b) of this section;

(4) Provide public notice of the categorical exclusion that the agency plans to use for the proposed action or category of proposed actions; and

(5) Publish the documentation of the application of the categorical exclusion.<sup>15</sup>

In anticipation of CEQ's issuance of a final rule on these NEPA revisions, it would be

beneficial for DOE to conduct proactive outreach to other agencies, such as the Department of

Interior, to develop procedures for other agency adoption of this DOE CE for projects where

DOE is not the lead agency.

# III. CONCLUSION

ACORE urges DOE to finalize these CE expansions expeditiously, including the

recommendations contained herein, while also continuing to identify additional CEs for

transmission and renewable energy projects.

Respectfully submitted,

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<sup>&</sup>lt;sup>15</sup> CEQ Proposed NEPA Phase 2 Revisions at 49970, proposed language for 40 CFR chapter V, §1501.4 (e).