

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Improvements to Generator Interconnection)
Procedures and Agreements)

RM22-14-000

COMMENTS OF THE AMERICAN COUNCIL ON RENEWABLE ENERGY

The American Council on Renewable Energy (“ACORE”), a national nonprofit organization dedicated to advancing the critical importance of renewable energy and to advocating for the market structures, policies and financial innovations designed to advance renewable energy deployment, hereby submits these comments in response to the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) June 16, 2022 Notice of Proposed Rulemaking, issued in the above-captioned proceeding, seeking comments on proposed reforms to the *pro forma* Large Generator Interconnection Procedures (LGIP), *pro forma* Small Generator Interconnection Procedures (SGIP), *pro forma* Large Generator Interconnection Agreement (LGIA), and *pro forma* Small Generator Interconnection Agreement (SGIA).¹

I. INTRODUCTION

ACORE agrees with the Commission’s finding that the current *pro forma* LGIP, SGIP, LGIA and SGIA result in rates, terms, and conditions for generator interconnection service that are unjust and unreasonable and unduly discriminatory, and also result in rates, terms, and conditions in the wholesale electric markets that are unjust and unreasonable and unduly discriminatory or preferential.² The current interconnection processes represent a significant

¹ Improvements to Generator Interconnection Procedures and Agreements, Docket No. RM22-14-000, 179 FERC ¶ 61,194 (2022) (“NOPR”).

² NOPR at P 22.

barrier to the deployment of renewable and storage resources waiting in the interconnection queues.

ACORE generally supports the reforms proposed in this NOPR as initial steps to address the interconnection queue backlogs and recommends some improvements in these comments. But these reforms will not be sufficient without the requisite expansion of the transmission system and the incorporation of interconnection needs through comprehensive transmission planning. Grid Strategies LLC found in its 2021 study of shortcomings in the interconnection processes and cost allocation that marginal reforms will be insufficient without a fundamental expansion of the transmission system.³

Energy Systems Integration Group (“ESIG”) addressed the need for a more comprehensive approach in a summary of a recent workshop on interconnection, where it reported that:

[M]uch of today’s transmission upgrades stem from generation interconnection processes that are narrowly focused on least-cost upgrades to ensure local reliability over a time frame of only a few years. Participants discussed how upgrades based on generation interconnection may be a sub-optimal, expensive, and ultimately ineffective way to accomplish transmission expansion for tomorrow’s electricity system.⁴

The workshop summary further quotes the Brattle Group’s Hannes Pfeifenberger’s recommendation that one option “could be for the scope of upgrades triggered by the generation interconnection process to remain focused on local transmission needs only, with the identification of deeper transmission upgrades benefiting the entire system following as a part of

³ Jay Caspary, Michael Goggin, Rob Gramlich, Jesse Schneider, Grid Strategies LLC, *Disconnected: The Need for a New Generator Interconnection Policy*, (January 2021), at 21-24, available at: <https://acore.org/disconnected-the-need-for-a-new-generator-interconnection-policy/>.

⁴ Energy Systems Integration Group, *Summary of the Joint Generator Interconnection Workshop*. Virtual workshop held by the Energy Systems Integration Group, North American Generator Forum, North American Electric Reliability Corporation, and Electric Power Research Institute, August 9-11, 2022, at 3, available at: <https://www.esig.energy/event/joint-generator-interconnection-workshop/>.

comprehensive transmission planning process. This type of approach is currently used in Great Britain, called Connect and Manage, and helped to drastically reduce the time required.”

Bruce Tsuchida, also with the Brattle Group, further states that “proactive planning allows changing system needs to be captured as generation is being added across the system and system load continues to grow and change in its characteristics over the study horizon” and also “allows optimal transmission solutions to be identified that accommodate these changes in a reliable and cost-effective way. This, in turn provides developers with greater certainty around the costs of deeper transmission upgrades and thus could reduce the number of speculative projects and withdrawals from the queue.”⁵

Some Regional Transmission Organizations and Independent System Operators (RTOs/ISOs) have begun to incorporate interconnection needs into the planning process. As noted in Clean Energy Coalition comments on the Joint Federal State Task Force on Electric Transmission (“CEC Task Force Comments”), the California ISO (“CAISO”) “has done a comparatively good job of identifying system upgrades needed to support new interconnection requests through the regional planning process,” resulting in Network Upgrade costs that “are typically lower for generators interconnecting in the CAISO region.”⁶

Given the significant development of renewable and storage resources expected to result from the incentives provided in the Inflation Reduction Act (IRA), more fundamental reforms

⁵ *Id* at 9-10, citing the findings of: The Brattle Group, *Proactive Planning for Generation Interconnection* (September 2022), available at: <https://www.esig.energy/proactive-planning-for-generation-interconnection-a-case-study-of-spp-and-miso/>.

⁶ *Joint Supplemental Comments of the American Clean Power Association, Advanced Energy Economy, the Solar Energy Industries Association, and the American Council on Renewable Energy on Generation Interconnection Queue Processing and Cost Allocation Reforms*, Dockets RM21-17-000, AD21-15-000 (June 1, 2022) at 15-16, available at: <https://acore.org/clean-energy-coalition-comments-on-generation-interconnection-queue-processing-and-cost-allocation-reforms/>.

will be needed to deploy the full array of clean resources. A recent report from Credit Suisse found that the use of the tax credits is likely to be double what the Congressional Budget Office projects and that the IRA will “definitively changes the narrative from risk mitigation to opportunity capture.”⁷

While recognizing the importance of incorporating interconnection requirements into transmission planning, ACORE also is submitting comments on several specific components of this NOPR in the next section.

II. COMMENTS ON PROPOSED REFORMS

ACORE generally supports the proposed reforms to the LGIA, SGIA, LGIP and SGIP to use cluster studies as the required interconnection study method; eliminate the serial first-come, first-served study process and instead use a first-ready, first served cluster study process; replace the “reasonable efforts” standard with firm study deadlines; require study and interconnection agreement deposits, site control provisions, commercial readiness demonstrations, and withdrawal penalties; establish a transition process; and better accommodate co-located, hybrid, and storage resources. These provisions will likely produce some reductions in the queue timelines and the uncertainty of the process, but further improvements can be made within the scope of the NOPR.

A. The Commission Should Establish Uniform and Transparent Study Assumptions, Methodologies, and Best Practices

ACORE supports the NOPR’s provisions to provide greater certainty in the Affected Systems studies through the requirement for a detailed Affected Systems study process within the *pro forma* LGIP that “would prevent the use of ad hoc approaches that may give rise to

⁷ Robinson Meyer, *The Climate Economy Is About to Explode*, The Atlantic (October 5, 2022).

interconnection customers being treated in an unjust, unreasonable, unduly discriminatory, or preferential manner.”⁸

Unfortunately, there is no such analogous provision for the other interconnection studies. ACORE therefore recommends that the Commission initiate a proceeding to establish uniform, transparent, and reasonable interconnection study assumptions and criteria that allow for reproducible study results. As the CEC Task Force comments stated, such a “standardized study approach would protect Interconnection Customers, and ultimately ratepayers, by reducing the uncertainties and risks to interconnecting generators, thereby allowing for more efficient development and financing.”⁹ These study criteria should incorporate standard congestion management through system redispatch as well as consideration of grid enhancing technologies.¹⁰

Such study criteria should also incorporate best practices, such as the use of automation, to reduce the time to conduct the studies. Moreover, customers should be permitted to use third-party consultants to produce required studies if a Transmission Provider cannot do so on-schedule. Regardless of individual RTO/ISO actions, the Commission should ensure such best practices are adopted across RTOs/ISOs. As CEC’s Task force comments noted, “interconnection best practices that increase transparency, process efficiency, and resolve information asymmetry are not location dependent. The technologies, and even the personnel, that enable interconnection reforms do not rely on geography. Regional flexibility should not stand in the way of progress.”¹¹

⁸ NOPR at P 193.

⁹ CEC Task Force Comments at 17.

¹⁰ *Id.* at 18 and Footnote 42.

¹¹ CEC Task Force Comments at 22.

In its comments on the NOPR on *Building for the Future Through Transmission Planning and Cost Allocation and Generator Interconnection*, ACORE recommended the establishment of an independent transmission monitor to assist with the identification of best practices and ensure transparency in transmission planning.¹² Such an entity could play a similar role in identifying interconnection study criteria, transparency and best practices.

B. Transmission Providers Should Incorporate Alternative Transmission Technologies in the Interconnection Studies

The Commission proposes to require that “transmission providers upon request of the interconnection customer, evaluate the requested alternative transmission solution(s) during the LGIP cluster study and the SGIP system impact study and facilities study within the generator interconnection process.”¹³ The Commission specifies the technologies for which such an evaluation may be requested as: “advanced power flow control, transmission switching, dynamic line ratings, static synchronous compensators, and static VAR.”¹⁴

ACORE recommends that, as part of the identified best practices, the Commission should require inclusion of these technologies within the studies, or at a minimum apply an “opt-out” policy, rather than have such incorporation depend upon a request from an interconnection customer.

This same policy should apply to advanced conductor. A recent Grid Strategies LLC report pointed out that the “short lead time to reconductor existing lines can help manage risk

¹² Comments of the American Council on Renewable Energy, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, RM21-17-000 (August 17, 2022), at 15.

¹³ NOPR at P 297.

¹⁴ NOPR at P 298.

and uncertainties and significantly increase system capacity to mitigate overloads identified in interconnection studies.”¹⁵ Moreover, “the incremental capacity generated by deploying advanced conductors to address just 25% of aging infrastructure needs in NERC regions can facilitate the interconnection of at least 27 Gigawatts (GW) of zero-carbon generating capacity annually over the next 10 years.”¹⁶

C. Study Deposits and Penalties Should be Re-Evaluated at Future Intervals

ACORE recommends periodic re-evaluation of the study deposits, withdrawal penalties and readiness requirements. The Commission acknowledges that many provisions in the NOPR may improve the interconnection process and reduce the need for customers to establish a queue position for uncertain projects. In particular, the Commission notes that “the first-ready, first-served cluster study process will substantially improve transmission providers’ ability to manage their interconnection queues.”¹⁷

ACORE recognizes that the more stringent commitments are likely to provide some benefits and also recommends that the Commission establish a process for re-evaluating these commitments if the other provisions achieve some measure of success. For example, the study deposits and withdrawal penalties could be reduced if queue wait times fall below a certain duration.

D. Criteria Should be Established to Reduce Uncertainty in the Recovery of RTO/ISO Penalties

¹⁵ Jay Caspary and Jesse Schneider, Grid Strategies, LLC, *Opportunities to Use Advanced Conductors to Accelerate Grid Decarbonization* (February 2022) at 9, available at: https://acore.org/wp-content/uploads/2022/03/Advanced_Conductors_to_Accelerate_Grid_Decarbonization.pdf.

¹⁶ *Id* at 2.

¹⁷ NOPR at 102.

The Commission appropriately recognizes the difficulty of applying penalties to a non-profit corporation and explains that “in the context of reliability penalties, the Commission has recognized that, as not-for-profit entities, RTOs/ISOs may need to seek to recover from other entities the costs of monetary penalties imposed on the RTO/ISO.”¹⁸ The Commission therefore proposes “to require RTOs/ISOs to propose tariff provisions that require the RTO/ISO to submit requests to recover the costs of specific interconnection study penalties under FPA section 205,” and “may include a provision that the RTO/ISO may make a FPA section 205 filing seeking to allocate such penalties to the appropriate transmission owner that is responsible for, or contributed to, the delay.”¹⁹ ACORE recommends that as part of such a filing, the RTOs/ISOs minimize the uncertainty of the allocation of such penalties through the establishment of explicit criteria for the determination of such responsibility or contributions to the delay.

E. The Commission Should Move Forward on a Broader Cost Allocation Rulemaking for Network Upgrades

Regarding the allocation of the costs of cluster studies²⁰ and network upgrade costs,²¹ ACORE is not commenting on the specific methodologies proposed but agrees with the use of a formula to provide greater certainty. We also urge the Commission to move forward with a rulemaking that provides for the allocation of network upgrade costs to both interconnection customers and load. A 2021 ICF Resources LLC analysis of a representative sample of network upgrade projects in MISO and SPP found “that the network upgrades provide benefits to consumers that can exceed their allocated costs, resulting in an inconsistency between the

¹⁸ NOPR at 172.

¹⁹ *Id.*

²⁰ NOPR at P 82.

²¹ NOPR at P 88.

payments and the benefits received.”²² We therefore urge FERC to address improvements to such cost allocation, including an evaluation of the alternatives to participant funding provided in the CEC Task Force Comments.

III. CONCLUSION

ACORE greatly appreciates these first steps towards improvements in the interconnection processes and agreements. We further recommend that the Commission continue to move forward on establishment of a more comprehensive transmission planning process and initiate a rulemaking to improve the cost allocation of interconnection network upgrades.

Respectfully submitted,

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²² Vish Sankaran, Himali Parmar, Ken Collins, ICF Resources LLC, *Just & Reasonable? Transmission Upgrades Charged to Interconnecting Generator Are Delivering System-Wide Benefits (September 2021)*, at 40, available at: <https://acore.org/just-and-reasonable-report/>