

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Offshore Wind Integration in RTOs/ISOs

Docket No. AD20-18-000

NOTICE INVITING POST-TECHNICAL CONFERENCE COMMENTS

(March 11, 2021)

On October 27, 2020, Federal Energy Regulatory Commission (Commission) staff convened a technical conference to discuss whether and how existing transmission planning, interconnection, and merchant transmission facility frameworks in Regional Transmission Organizations/Independent System Operators (RTOs/ISOs) can accommodate anticipated growth in offshore wind generation in an efficient and cost-effective manner that safeguards open access transmission principles, and to consider possible changes or improvements to the current frameworks should they be needed to accommodate such growth.

All interested persons are invited to file post-technical conference comments on the questions listed in the attachment to this Notice. Commenters need not answer all of the questions but are encouraged to organize responses using the numbering and sequencing in the attached questions. Commenters may also respond to the questions outlined in the October 22, 2020 supplemental notice of technical conference.<sup>1</sup> Commenters need not answer all of the questions included in the October 22, 2020 notice, but, to the extent that commenters respond to any of those questions, please utilize the question numbering included in that notice. In addition, commenters are invited to reference material previously filed in this docket, including the technical conference transcript and submitted opening remarks, but are encouraged to avoid repetition or replication of previous material. Comments must be submitted on or before 60 days from the date of this Notice.

Comments may be filed electronically via the Internet. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's website <http://www.ferc.gov/docs-filing/efiling.asp>. For assistance, please contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov) or toll free at 1-866-208-3676, or for TTY, (202) 502-8659. Although the Commission strongly encourages electronic filing, documents may also be paper-filed. To paper-file, mail an original and five copies to:

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<sup>1</sup> *Supplemental Notice of Technical Conference*, Docket No. AD20-18-000 (October 22, 2020), <https://www.ferc.gov/sites/default/files/2020-10/AD20-18-000-Tech-Conf-Errata.pdf>.

Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426.

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Kimberly D. Bose,  
Secretary.

### **Post-Technical Conference Questions for Comment**

Commenters may respond to the questions outlined in the October 22, 2020 supplemental notice of technical conference.<sup>2</sup> In addition, based on discussions during the Offshore Wind Integration in RTOs/ISOs technical conference, Commission staff request responses to the following questions. To the extent there is additional relevant information that should be considered, commenters may include such information. Where applicable, commenters should seek to identify specific reforms that could be made to existing Commission policies or regulations or to RTO/ISO tariffs in the short, medium, and long term to reduce barriers to integrating offshore wind generation into the transmission system. Responses should point to specific tariff sections, Commission rules, orders, or policy statements.

#### **1. Opportunities to Improve the Interconnection Procedures for Offshore Wind Generation**

- a. Should the relevant RTOs/ISOs consider revising their Large Generator Interconnection Procedures/Large Generator Interconnection Agreements (LGIP/LGIA) to facilitate more economically efficient transmission expansion and network upgrades to integrate offshore wind generation? If so, why and what specific revisions would be beneficial for which RTO/ISO LGIP and/or LGIA?
- b. What are the pros and cons of allowing a state to submit a single interconnection request as a placeholder for the winner of a specific offshore wind generating solicitation as compared to every developer participating in a state solicitation entering the queue individually? If such an approach is feasible, what type of information would the state need to include in its solicitation process to ensure it satisfies the requirements of the RTO/ISO generator interconnection procedures? If this approach is not feasible, should changes be made to the existing generator interconnection procedures to enable this or a similar approach? If so, please explain what changes should be made and why. How would such an approach, if implemented, impact other generators in the interconnection queue? What are the opportunities to minimize such impacts on other generators in the interconnection queue? Similarly, how would such an approach impact existing interconnection queue procedures and agreements?

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<sup>2</sup> See *Supplemental Notice of Technical Conference*, Docket No. AD20-18-000 (October 22, 2020), <https://www.ferc.gov/sites/default/files/2020-10/AD20-18-000-Tech-Conf-Errata.pdf>.

- c. Is a clustering or shared network upgrade approach necessary or desirable for offshore wind generation projects, given the uniquely location-constrained nature of offshore wind generation and associated interconnection facilities and network upgrades?
- d. Are there barriers, either due to system design/configuration or as a result of modeling deficiencies, that prevent transmission planners from accurately determining that offshore wind resources can provide essential reliability services, such as frequency response as required by FERC Order No. 842?
- e. How do changes to turbine technology, turbine size, or the offshore collector system impact network upgrades needed by interconnection customers, and how can these impacts be handled in a way that does not unreasonably delay interconnection of offshore wind resources?

## **2. Incorporating State Policies into RTO/ISO Transmission Planning and Interconnection Processes**

- a. Do existing RTO/ISO transmission planning processes, which are required to consider transmission needs driven by public policy requirements, accommodate states that seek to collaborate with the RTO/ISO to identify and advance planned transmission projects to efficiently and cost-effectively integrate offshore wind generation? Are the existing processes adequate, or should they be reformed to better accommodate state initiatives?
- b. Are states acting to promote the development of adequate transmission to support the integration of offshore wind generation that they plan to procure? Do current state procurement processes favor the development of Interconnection Customer Interconnection Facilities and Network Upgrades developed in tandem with a new generator interconnection request and sized to accommodate a single generation facility? What, if any, changes to the state procurement processes for offshore wind generation are states considering related to the development of comprehensive interconnection and transmission solutions for offshore wind generation? Can the existing generator interconnection procedures accommodate different state procurement processes for offshore wind? If not, should they and how?
- c. Several conference panelists stated that transmission planned to accommodate anticipated offshore wind generation does not fit neatly

into the existing regional transmission planning categories (i.e., reliability, economic and public policy). What are the barriers, if any, to developing transmission solutions to more efficiently or cost-effectively integrate offshore wind generation? Do these barriers differ by region, and if so, how? Can RTO/ISO existing transmission planning processes incorporate state offshore wind generation laws or regulations as transmission needs driven by public policy requirements? If so, how? If not, why, should they, are the challenges unique to offshore wind, and what specific changes could be made to better accommodate transmission needs driven by state laws and regulations related to offshore wind generation?

- d. Panelists noted that, due to limitations on the ability of states and other stakeholders to provide input, there are challenges within the public policy transmission planning processes in multi-state RTOs/ISOs with respect to developing the transmission needed to integrate offshore wind generation. What are these challenges? Are they unique to offshore wind, or do they exist more broadly? Should RTOs/ISOs consider reforms to evaluate various scenarios of potential planned transmission approaches to accommodate planned offshore wind generation?
- e. Panelists stated that there may be barriers to developing interregional transmission projects to integrate offshore wind generation. How could existing interregional transmission coordination mechanisms be improved to reduce barriers to identifying interregional transmission projects that would integrate offshore wind generation in a more efficient or cost-effective manner? Are these barriers unique to interregional transmission projects to integrate offshore wind generation, or do they exist more broadly? Beyond improving existing interregional transmission coordination mechanisms, are there other ways to more effectively facilitate interregional projects to integrate offshore wind resources?
- f. Do challenges exist to allocating costs of transmission facilities needed to integrate offshore wind resources? If so, what are they? Are they unique to offshore wind, or do they exist more broadly? What are the opportunities to overcome these challenges?
- g. How should the cost of network upgrades to interconnect offshore wind generation be assigned? Are existing policies to directly assign costs to the generator(s) appropriate? Why or why not? Alternatively, should the costs be assigned to a broader set of potential beneficiaries? If so,

how should such beneficiaries be identified, should those beneficiaries include the offshore wind generator(s), and what would that cost allocation method look like? For network upgrades to interconnect offshore wind generation needed to meet a state law or regulation, should the network upgrade costs be allocated entirely to that state's consumers or would a different cost allocation methodology be more appropriate? Are these questions unique to offshore wind, or do they apply more broadly?

- h. Do existing RTO/ISO processes allow for or facilitate states to jointly initiate planning for transmission to meet their respective policy goals with respect to offshore wind?

### **3. Quantifying the Potential Benefits of Planned Transmission Solutions for Offshore Wind Integration**

- a. Several panelists stated that existing transmission planning processes might not capture all the benefits of transmission planned for anticipated offshore wind generation. What benefits, if any, are not currently being captured but should be considered? What quantitative and/or qualitative metrics should be used to evaluate those benefits? Could the existing transmission planning process be improved to better consider the benefits of transmission planned for anticipated offshore wind generation? If so, how?
- b. Panelists indicated that transmission planning time horizons may need to be expanded given the long lead times for offshore wind generation deployment and the time frames considered by existing state policies, some of which contemplate delivery many years into the future. Are transmission planning process time horizons able to consider the benefits of transmission expansion to accommodate anticipated offshore wind generation? If not, should they be revised? What are the pros and cons of expanding the time horizons for existing transmission planning processes for reliability, economic and public policy projects?

### **4. Dedicated Transmission Planning Processes for Offshore Wind Integration**

- a. As discussed in the questions above, panelists identified the challenges associated with capturing the benefits of transmission planned for anticipated offshore wind generation within existing transmission

planning processes. Should the Commission consider the concept of a dedicated transmission planning process tailored to anticipated offshore wind generation, and if so, please describe how the Commission could do so? What are the pros and cons of a dedicated transmission planning process versus considering transmission expansion for anticipated offshore wind generation within existing transmission planning processes? If there is a dedicated transmission planning process for offshore wind integration, how should it interact with existing planning processes?

- b. Should a dedicated transmission planning process for anticipated offshore wind generation be conducted on a regional or interregional basis? Please describe the tradeoffs between separate dedicated transmission processes conducted within RTOs/ISOs (i.e., on a regional basis), versus a dedicated interregional transmission coordination process that considers transmission needs across two or more RTOs/ISOs.
- c. If a dedicated transmission planning process were to be implemented, how frequently should it be carried out? Should it be carried out on a fixed reoccurring basis, coordinated with state policies on offshore wind generation, or on some other basis?