

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

Carbon Pricing in FERC-Jurisdictional )  
Organized Regional Wholesale Electric ) Docket No. AD20-\_\_\_\_  
Energy Markets )

**REQUEST FOR TECHNICAL CONFERENCE OR WORKSHOP OF  
ADVANCED ENERGY ECONOMY, AMERICAN COUNCIL ON RENEWABLE  
ENERGY, AMERICAN WIND ENERGY ASSOCIATION, BROOKFIELD  
RENEWABLE, CALPINE CORPORATION, COMPETITIVE POWER VENTURES,  
INC., ELECTRIC POWER SUPPLY ASSOCIATION, INDEPENDENT POWER  
PRODUCERS OF NEW YORK, INC., LS POWER ASSOCIATES, L.P., NATURAL GAS  
SUPPLY ASSOCIATION, NEXTERA ENERGY, INC., PJM POWER PROVIDERS  
GROUP, R STREET INSTITUTE, AND VISTRA ENERGY CORP.**

Pursuant to Rule 207 of the Federal Energy Regulatory Commission’s (“FERC” or the “Commission”) Rules of Practice and Procedure,<sup>1</sup> Advanced Energy Economy, the American Council on Renewable Energy, the American Wind Energy Association, Brookfield Renewable, Calpine Corporation, Competitive Power Ventures, Inc., the Electric Power Supply Association, the Independent Power Producers of New York, Inc., LS Power Associates, L.P., the Natural Gas Supply Association, NextEra Energy, Inc., PJM Power Providers Group, R Street Institute, and Vistra Energy Corp. (together, the “Interested Parties”) respectfully request that the Commission convene a technical conference or workshop to discuss integrating state, regional, and national carbon pricing in FERC-jurisdictional organized regional wholesale electric energy markets.

**I. INTRODUCTION**

With continued focus by states and utilities on policies that reduce carbon emissions from power generation, stakeholders continue to explore the relative roles that competitive wholesale markets and state policies should play in shaping the quantity and composition of resources

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<sup>1</sup> 18 C.F.R. § 385.207 (2020).

needed to meet such carbon emission reduction goals while cost-effectively meeting future reliability and operational needs. In this context, stakeholders are exploring how competitive wholesale markets can better account for state policy objectives. In light of these ongoing conversations and the Commission's important role in them, the electric energy industry and interested stakeholders would benefit from a technical conference or workshop in which the Commission uses its convening authority to gather a wide range of stakeholders to discuss practical technical and implementation issues that are raised if states or other entities propose to adopt carbon pricing policies in regions with organized wholesale electric energy markets.

The scope of the conference or workshop could include examination of a variety of mechanisms through which carbon could be priced on a state, regional, or national level and how wholesale market pricing and dispatch could (or already do) account for the costs arising from compliance with such programs. For instance, the discussion could cover existing regional carbon price mechanisms—like the Regional Greenhouse Gas Initiative (RGGI) or the California-Quebec cap-and-trade agreement—that apply in a subset of states within a regional wholesale market, or individual state carbon pricing mechanisms, either as stand-alone programs or in addition to a regional or national carbon pricing program.

The unique features of organized wholesale electricity markets create an opportunity for integrating policies that directly price carbon emissions into energy market operations. And, indeed, as discussed further, several entities that administer organized markets regulated by the Commission have recently been considering doing so in their markets. The aim of the technical conference would be to facilitate a dialogue among a broad range of stakeholders and interested parties regarding the opportunities and challenges associated with integrating carbon pricing in the organized wholesale electric energy markets, in recognition that such carbon pricing may be

an approach that furthers state policies<sup>2</sup> while preserving the benefits of market-based approaches to electric energy markets.

To be clear, the Interested Parties are neither asking the Commission to institute a rulemaking proceeding, nor are we suggesting that FERC should direct implementation of a carbon pricing mechanism. Further, we recognize that implementation of a carbon price in organized markets may not necessarily require any formal action by the Commission. In fact, as noted above, regional programs like RGGI have been seamlessly incorporated into the wholesale markets without direct Commission involvement. The parties to this Petition simply believe the proposed technical conference or workshop will be helpful to the Commission and stakeholders in the electric energy industry in deciding how best to move forward at the state and regional levels on these issues and in the relevant organized markets. This dialogue would complement state, regional, and national discussions currently taking place.<sup>3</sup>

In the interest of advancing this important discussion on carbon pricing, the Interested Parties respectfully request that the Commission convene the proposed technical conference or workshop. The Interested Parties recognize that this Petition comes at a time when the Commission and the energy industry are responding to new priorities associated with the

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<sup>2</sup> It should be noted that the Interested Parties do not necessarily agree on all aspects of the role of carbon pricing in wholesale markets, including the degree and manner in which state policies will evolve in the future as carbon pricing is more broadly implemented in the electricity sector and beyond.

<sup>3</sup> While this request for a technical conference or workshop is focused on examining ways to incorporate carbon pricing into regional power markets, some of the Interested Parties believe a global or national economy-wide carbon pricing program is the most effective means to achieve carbon reductions.

COVID-19 pandemic. We respectfully request that the Commission convene the technical conference or workshop at a time the Commission deems suitable.

## II. BACKGROUND

The Interested Parties represent a broad cross section of stakeholders, including trade associations representing leading competitive power producers and marketers for traditional, renewable, and advanced energy technologies and some of their individual members; energy policy advocates; environmental advocates; and the trade group for natural gas suppliers.

The Interested Parties recommend that this technical conference or workshop pick up where the Commission left off in its May 2017 technical conference regarding the interplay between the Eastern Regional Transmission Organization (RTOs) and Independent System Operator (ISOs) wholesale markets and state policy choices for certain resources or resource attributes, including pricing state policy choices in order to reduce carbon emissions in the footprint of these markets.<sup>4</sup> That technical conference signaled an interest on the Commission's part to explore, among other things, the ways in which state carbon emission reduction policies can be integrated into wholesale markets. Based on the discussion at the conference and the comments submitted thereon, there was broad support for the notion that a carbon price in wholesale markets was worth further consideration.<sup>5</sup> For instance, conference participants and

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<sup>4</sup> State Policies and Wholesale Markets Operated by ISO New England Inc., et al., Docket No. AD17-11-000, Transcript of May 2, 2017 RTO Conference (May 30, 2017) ("May 2 Transcript"); *see also* State Policies and Wholesale Markets Operated by ISO New England Inc., et al., Notice Inviting Post-Technical Conference Comments, Docket No. AD17-11-000 (May 23, 2017).

<sup>5</sup> *See, e.g.*, Post-Technical Conference Comments of Brookfield Renewable, Conservation Law Foundation & Nextera Energy Resources, LLC at 1–3, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of NRG Energy at 4, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Calpine Corp. at 6–7, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Hydro Quebec Energy Services at 1–2, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Exelon at 11, Docket No. AD17-11-000 (June 22, 2017); Post-Technical

commenters noted that carbon pricing could alter the economic dispatch to prioritize less carbon-intensive resources and could increase energy market net revenues and thus lower net going forward costs for resources that displace more carbon-intensive resources.<sup>6</sup>

In the three years since that technical conference, wholesale market operators and their stakeholders have taken actions or made statements reinforcing that this issue warrants more concerted attention from stakeholders and the Commission. For example:

- The New York Independent System Operator (“NYISO”) released a proposal in 2019 explaining how to introduce a carbon price in its wholesale electricity market.<sup>7</sup>
- The CEO of ISO New England (“ISO-NE”) has publicly stated support for a carbon price.<sup>8</sup>
- PJM Interconnection (“PJM”) has conducted a study on carbon pricing and examined related leakage mitigation in its footprint to examine how it could implement

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Conference Comments of Solar Energy Industries Association at 13–15, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Noble Environmental Power, LLC at 8–9, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Nuclear Energy Institute at 8–9, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of City of New York at 7–9, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Advanced Energy Management Alliance at 12, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Eastern Generation at 5–6, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Independent Power Producers of New York at 5–9, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Shell Energy North America (US), L.P. at 14, Docket No. AD17-11-000 (June 22, 2017); Post-Technical Conference Comments of Dominion Energy Services, Inc. at 7–8, Docket No. AD17-11-000 (June 22, 2017).

<sup>6</sup> See generally May 2 Transcript.

<sup>7</sup> See Integrating Public Policy Task Force (IPPTF), *Carbon Pricing Proposal* (2018), <https://www.nyiso.com/documents/20142/2244202/IPPTF-Carbon-Pricing-Proposal.pdf/60889852-2eaf-6157-796f-0b73333847e8> (last visited April 13, 2020); see also Ethan D. Avallone, NYISO, *Carbon Pricing: Market Design Complete* (June 2019), available at [https://www.nyiso.com/documents/20142/7129597/6.20.2019\\_MIWG\\_Carbon\\_Pricing\\_MDC\\_FINAL.pdf/cf67ebb8-d0fc-7b4b-100f-c3756d6afae8](https://www.nyiso.com/documents/20142/7129597/6.20.2019_MIWG_Carbon_Pricing_MDC_FINAL.pdf/cf67ebb8-d0fc-7b4b-100f-c3756d6afae8) (last visited April 13, 2020).

<sup>8</sup> Gordon van Welie, President and CEO, ISO New England, *State of the Grid: 2020* at 13-14 (Mar. 6, 2020) (“Pricing carbon is the simplest, easiest, and most efficient way to ease” the tension between New England state policies encouraging “the development of new renewable resources” and the fact that “other needed resources rely only on market revenue”), available at [https://www.iso-ne.com/static-assets/documents/2020/03/20200306\\_stateofthegrid2020.pdf](https://www.iso-ne.com/static-assets/documents/2020/03/20200306_stateofthegrid2020.pdf) (last visited April 13, 2020).

measures to adapt to a subset of PJM states operating with a carbon price, such as through border adjustments to counteract leakage.<sup>9</sup>

- The California Independent System Operator Corporation (“CAISO”) accommodated California’s cap-and-trade law for carbon emissions in the CAISO Electricity Imbalance Market (“EIM”), placing a carbon adder on bids coming into California from other states that are not subject to the California cap-and-trade law.<sup>10</sup>
- ISO-NE, NYISO, and PJM all have adopted tariff mechanisms to reflect in wholesale rates the costs arising from compliance with RGGI.<sup>11</sup>

### III. OBJECTIVES OF PROPOSED TECHNICAL CONFERENCE

Currently, certain FERC-jurisdictional wholesale electric energy and capacity markets are grappling with how to reconcile wholesale markets and state policies related to reducing carbon emissions, which has a bearing on FERC’s jurisdictional scope, such as how these markets function and the prices charged therein. In recognition of the fact that a number of organized markets are considering how to incorporate carbon pricing into organized wholesale electric markets to better align with state and regional carbon pricing mechanisms, the time appears ripe for the Commission to convene a technical conference or workshop on these issues.

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<sup>9</sup> See PJM Carbon Pricing Senior Task Force, *PJM Study of Carbon Pricing & Potential Leakage Mitigation Mechanisms* (Jan. 14, 2020), available at <https://pjm.com/-/media/committees-groups/task-forces/cpstf/2020/20200114/20200114-item-03-pjm-study-of-carbon-pricing-and-potential-leakage-mitigation-mechanisms.ashx> (last visited April 13, 2020).

<sup>10</sup> *Cal. Indep. Sys. Operator Corp.*, 165 FERC ¶ 61,050 at P 3 (2018) (explaining that CAISO developed “a bid adder that would permit CAISO to reflect GHG compliance costs within locational marginal prices for EIM participating resources serving CAISO demand”). The Commission also approved CAISO’s rule allowing California generation resources to recover the costs of compliance with state-imposed GHG restrictions. *Cal. Indep. Sys. Operator Corp.*, 141 FERC ¶ 61,237 at P 29 (2012) (“As a general matter, we find that it is reasonable to incorporate the emissions costs of the greenhouse gas allowances into the calculation of generating units’ variable costs as calculated in CAISO’s tariff. Such a revision is required in order to provide generators a reasonable opportunity to recover their variable energy costs incurred as a result of the California Program.”).

<sup>11</sup> See ISO-NE, Market Rule 1, App’x A § III.A.7.5.1 (effective Mar. 1, 2020); NYISO Market Services Tariff §§ 4.1.9.2, 23.3.1.4.1.3 (effective Aug. 12, 2019); PJM Interconnection, Inc., Operating Agreement Sch. 2 § 3, Sch. 2 Exh. A (effective Dec. 3, 2019).

This action is backed by the broad support at the May 2017 technical conference for the Commission to further discuss carbon pricing.<sup>12</sup> Building off the robust discussion of these issues at that conference, the technical conference or workshop could bring together a broad spectrum of stakeholders to further discuss the opportunities and challenges of pursuing carbon pricing in RTOs and ISOs.<sup>13</sup>

With a broad range of input from all interested parties at the conference or workshop, the Commission could facilitate an exchange of information regarding how the costs of emissions of carbon and other pollutants are already incorporated into wholesale markets today, and how these experiences inform current discussions regarding the manner in which a carbon price established by states or other entities could be integrated into the markets in a way that achieves efficient operation of wholesale electricity markets. Participants could also discuss the potential role of carbon pricing in creating adequate regulatory certainty and incentives that assist in the financing of resources that further state environmental goals and maintain reliability while cost-effectively serving customers. Further, the technical conference or workshop could explore the degree to which a state or regional price on carbon would allow the energy market to co-optimize reliability, price, and carbon emissions. Stakeholders could also share perspectives on the relative merits and practical issues and potential obstacles to effectively incorporating state or regional carbon prices into the wholesale markets (e.g., the potential for leakage when some states within an organized market do not have carbon pricing programs).

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<sup>12</sup> See *supra* note 5 and accompanying text.

<sup>13</sup> While the May 2017 Technical Conference was limited to Eastern RTOs and ISOs, the Interested Parties believe that the proposed technical conference or workshop should consider carbon pricing in all FERC-jurisdictional organized markets. For instance, the CAISO has already undertaken steps to address carbon pricing in its market and some states in the energy imbalance market are actively pursuing carbon pricing.

The Interested Parties have attached as Appendix A hereto a draft agenda that could serve as the basis for the technical conference or workshop requested herein. Broadly speaking, the Interested Parties envision the Commission using this technical conference or workshop to solicit input from a diverse array of stakeholders, including market participants, environmental groups, states, ISOs and RTOs, technical experts, and officials involved in regional and state Greenhouse Gas initiatives. Panels composed of these speakers could address specific topics likely to play an important role in implementing carbon pricing in wholesale electric energy markets.

The Interested Parties believe the electric energy industry as a whole would benefit from the Commission using its broad authority to bring all stakeholders together to exchange ideas on a significant issue facing wholesale electric energy markets today (*i.e.*, furthering state carbon emission reduction policies while preserving the benefits of market-based approaches to electric energy markets). With this information, the Commission and stakeholders will be well-positioned to navigate the best path forward for considering carbon pricing in organized wholesale electric energy markets.

#### IV. CONCLUSION

WHEREFORE, the Interested Parties respectfully request that the Commission grant this request for a technical conference or workshop on carbon pricing in the organized electric energy markets.

Respectfully submitted,

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## **Appendix A**

### **Draft Agenda for Technical Conference**

#### **I. STATE AND REGIONAL GREENHOUSE GAS INITIATIVE OFFICIALS**

- A.** Updates on relevant recent developments in regional greenhouse gas (GHG) initiatives—RGGI and California.
- B.** What are the opportunities and challenges of using a regional framework to pursue state carbon emission reduction goals? For instance:
  - 1.** How do regional organizations coordinate state level allowance caps relative to the overall regional supply of allowances; and
  - 2.** How are allowance caps coordinated when states use additional carbon reduction tools (*e.g.*, a state-specific carbon adder)?
- C.** How do organized markets currently incorporate the cost of carbon emissions set by existing state and regional GHG initiatives?
- D.** How would posing a border charge on emissions as part of a carbon pricing program in a wholesale market impact leakage from state and regional GHG programs?
- E.** Relationship of RGGI and the California state carbon program with current ISO/RTO market rules and pricing in those markets to account for the programs.

#### **II. ISO/RTO REPRESENTATIVES (ISO-NE, NYISO, PJM, CAISO, AND SPP)**

- A.** What are the ISOs/RTOs currently doing to facilitate a discussion about carbon pricing, and what further can they do to facilitate that dialogue?
- B.** Should ISOs/RTOs manage leakage and other displacements? If so, how?
- C.** Are there existing market rules that would need to be revised to implement carbon pricing? If so, what?
- D.** Are there modeling, dispatch, or other technical constraints on implementing carbon pricing? If so, what?
- E.** What should the respective roles of the states, ISOs/RTOs, and FERC be in implementing carbon pricing?
- F.** What is the implication for wholesale markets (*e.g.*, energy prices, retirements) if some form of carbon pricing is not implemented?
- G.** What impact would carbon pricing have on capacity markets?

- H. What concerns do you have about carbon pricing?
- I. What role, if any, should FERC play in facilitating regional carbon pricing? How does this role affect ISOs/RTOs and states in their roles?

**III. STAKEHOLDERS AND EXPERTS (LOAD, GENERATION, RENEWABLE AND ADVANCED TECHNOLOGIES, ENVIRONMENTAL AND OTHERS)**

- A. How do stakeholders view the benefits and challenges of carbon pricing?
- B. Should ISOs/RTOs manage leakage and other displacements? If so, how?
- C. Would carbon pricing create the incentive to invest in the resources needed to satisfy and support public policy goals? How should carbon pricing be implemented in light of other state public policy goals and mandates already on the books?
- D. What role, if any, should FERC play in facilitating regional carbon pricing? How does this role affect ISOs/RTOs and states in their roles?

**IV. STATES**

- A. What are the challenges for carbon pricing in multi-state organized markets with varying state carbon reduction objectives? What are the solutions?
- B. What specific goals and objectives do states believe carbon pricing would achieve? What specific goals and objectives would carbon pricing fail to achieve?
- C. How will carbon pricing interact with other state carbon reduction policies, both within and outside the electricity sector? Do the States believe that policies supporting specific low- and zero-carbon resources would continue unchanged if carbon pricing were implemented? Does the answer depend on the magnitude of the carbon price?
- D. How would states think about an ISO/RTO including a carbon price in the ISO/RTO tariff if the states had some enhanced governance rights (*e.g.*, FPA Section 205 rights similar to that which the SPP Regional State Committee has over resource adequacy) over tariffs of the markets in this respect?
- E. Where there is not consensus within a region to pursue carbon pricing in an organized market, should the ISO/RTO still take steps to manage leakage and displacements? If so, how should this be done?