



March 5, 2021

VIA ELECTRONIC MAIL

Secretary Aida Camacho-Welch
Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, NJ 08625-0350
board.secretary@bpu.nj.gov

Re: *Investigation of Resource Adequacy Alternatives,*
NJBPU Docket No. EO20030203

Dear Secretary Camacho-Welch:

Enclosed for filing please find the Public Interest Organizations' Supplemental Comments Regarding the Integrated Clean Capacity Market in the above referenced matter. Thank you for your consideration and assistance.

Respectfully submitted,

/s/ Danielle C. Fidler

Danielle C. Fidler
Staff Attorney, Clean Energy Program
Earthjustice
1001 G Street NW, Suite 1000
Washington, DC 20001
(202) 667-4500, Ext. 1439
dfidler@earthjustice.org

Counsel for Sierra Club

**BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITY**

In the Matter of)
Investigation of Resource)
Adequacy Alternatives)

Docket No. EO20030203

**PUBLIC INTEREST ORGANIZATIONS'
SUPPLEMENTAL COMMENTS REGARDING THE INTEGRATED CLEAN
CAPACITY MARKET**

Danielle C. Fidler
Staff Attorney, Clean Energy Program
Earthjustice
1001 G Street NW, Suite 1000
Washington, DC 20001
(202) 667-4500, Ext. 1439
dfidler@earthjustice.org

Casey Roberts
Senior Attorney
Sierra Club
1536 Wynkoop St., Suite 200
Denver, CO 80202
Casey.roberts@sierraclub.org

Greg Wannier
Staff Attorney
Sierra Club
2101 Webster Street, Suite 1300
Oakland, CA 94612
(415) 977-5646
Greg.wannier@sierraclub.org

Attorneys for Sierra Club

Thomas Rutigliano
Senior Advocate
Natural Resources Defense Council
1125 15th Street NW, Suite 300
Washington DC 20005
trutigliano@nrdc.org

For Natural Resources Defense Council

Dated: March 5, 2021.

TABLE OF CONTENTS

I. Even Under Ideal Circumstances, the ICCM Will Likely Take Years to Implement, and Cannot Resolve New Jersey’s Immediate Needs	2
II. Simpler Solutions May Be Available to the Problems the ICCM Aims to Solve	5
III. The ICCM Represents a Commitment to a Market Structure Whose Future Remains Unclear	8
IV. The Board Must Resolve Legal Ambiguities Regarding Whether and How States Can Maintain Control Over CEAC Markets	9
V. The Board Should Consider Implementing the ICCM Program as Part of an Independent Fixed Resource Requirement Market	12

PUBLIC INTEREST ORGANIZATIONS’ SUPPLEMENTAL COMMENTS REGARDING THE INTEGRATED CLEAN CAPACITY MARKET

Pursuant to the New Jersey Board of Public Utility’s (“BPU” or “Board”) January 21, 2021 Notice of Work Session, the Natural Resources Defense Council (“NRDC”) and Sierra Club (collectively, “Public Interest Organizations” or “PIOs”) submit these supplemental comments on the Integrated Clean Capacity Market (“ICCM”) proposal described in the white paper co-authored by Board staff and consultants at The Brattle Group (“Brattle”), as further described by Brattle during the February 19, 2021 BPU work session in its ongoing Investigation of Resource Adequacy Alternatives.¹ As explained in more detail in the following sections, PIOs appreciate the sophisticated analysis and innovative design work that Brattle employed to develop the ICCM proposal, and believe elements of the proposal warrant further exploration over the next several years. However, given the complexity of the proposal, and in particular what

¹ Notice of Work Session, Docket No. EO20030203 (NJ BPU Jan. 21, 2021) (“January 21 Notice”), <https://www.nj.gov/bpu/pdf/publicnotice/Public%20Notice%20for%20RA%20Work%20Session%20on%20Clean%20Energy%20Markets.pdf>.

appear to be a number of legal uncertainties that would need to be resolved before the ICCM could be adopted or implemented, we urge the Board to move forward with more immediate market reform options while the ICCM proposal continues to be developed.

We also recommend that the Board focus primarily on development of the ICCM to be implemented by New Jersey (possibly in combination with other states), as a means to procure capacity under the Fixed Resource Requirement (“FRR”) (or other opt-out mechanism, should one become available), rather than as a PJM-wide endeavor. As explained in more detail below, this would avoid a significant amount of complexity and delay associated with transforming PJM governance sufficient to ensure cooperative implementation of the ICCM.

I. Even Under Ideal Circumstances, the ICCM Will Likely Take Years to Implement, and Cannot Resolve New Jersey’s Immediate Needs

Perhaps the most pressing reason to be concerned about a long-term commitment to the ICCM construct (if it comes at the expense of more timely market reforms) is that by Brattle and Board Staff’s own admission the ICCM would take approximately three years to develop and implement.² This is not a surprising estimate, and in fact it is likely optimistic: as Dr. Kathleen Spees noted in her February 19 presentation,³ enabling any given state to participate in the ICCM will require a detailed demand curve-development process based on that state’s particular mix of clean energy policies, renewable credits, renewable portfolio standards, and other myriad systems states have set up over the years. This process will be time consuming, as it will require input from a broad range of

² January 21 Notice, Attach. A at 6 (hereinafter “Brattle Report”).

³ BPU, Investigation of Resource Adequacy Alternatives Work Session Slides (Feb. 19, 2021) (“Spees”), https://www.nj.gov/bpu/pdf/publicnotice/RAA%20Investigation%20Work%20Session_2.19.21%20Final%20Slides.pdf.

stakeholders in that state to ensure that any Clean Energy Attribute Credit (“CEAC”) demand curve established for the ICCM system fully and appropriately reflects the policy priorities that underlie a given state’s mix of renewable policies in the first place. Our organizations have participated in numerous such processes over the years, and our universal experience has been that such stakeholder processes tend to take longer than anticipated.

The estimated three-year period also can only begin after a state actually decides to elect this option; as this docket demonstrates, those decisions will be complicated and require their own stakeholder engagement and decision making processes. And even after making the decision to start down this path, states would still need to resolve several questions PIOs currently have about the specific legal mechanisms by which states would go about creating a design curve. For instance, would states be expected to pass new laws to authorize and manage these mechanisms; would state agencies determine this curve; or would some other process be followed?

Were the ICCM to be pursued as a PJM Interconnection LLC (“PJM”)-wide approach, there would also be an extensive stakeholder process at PJM to discuss the market design, followed by a Federal Energy Regulatory Commission (“FERC”) proceeding to consider the changes. Given the complexity of the market design, and the multiple variations to be considered, three years is the minimum for any such implementation. This timeline could be further stretched out given the need to resolve governance issues—i.e., to make sure that states have adequate authority with respect to design and implementation of the CEAC market.⁴ The state-level processes we’ve

⁴ Brattle Report at 5–6.

described could perhaps proceed in parallel with ICCM design at PJM, though there is some question about the merit of proceeding with discussions at PJM before a critical mass of states has “opted in” to the CEAC procurement.

As a result, even with full buy-in it could be many more than three years before an ICCM system could be implemented. In the meantime, as the Board and Brattle would agree, there is much work that needs to be accomplished now to address existing rules (most notably including the Minimum Offer Price Rule (“MOPR”)) that present immediate constraints on New Jersey’s progression to a more sustainable future. For instance, the Board in June 2019 granted New Jersey’s first offshore solicitation for construction of 1,100 megawatts of wind power,⁵ and which is expected to begin operation in 2024. However, this project will not be able to earn capacity revenues while the MOPR is in place, which PJM has announced will be the case during its consideration of capacity market reform.⁶ There is also no guarantee that New Jersey will be aligned with whatever replacement plan does come out of PJM.

In short, while PIOs appreciate the interest in the next generation of market mechanisms and the potential benefits of more integrated market mechanisms, we urge the Board not to put all its eggs in the ICCM basket. If the Board does decide to explore this option going forward, it should not do so at the expense of supporting more

⁵ Staff Stakeholder Notice, Docket No. QO20070478 (NJ BPU July 22, 2020), <https://www.bpu.state.nj.us/bpu/pdf/publicnotice/OSW%20Solicitation%202%20Guidance%20Document%20Stakeholder%20Meeting%20Notice%20-%2007-22-20.pdf>.

⁶ Capacity commitments for the 2024/2025 delivery year will be determined by the Base Residual Auction to be held in June 2022. PJM, *Update on Residual Auction schedule* (Nov. 19, 2020), <https://pjm.com/-/media/committees-groups/committees/mrc/2020/20201119/20201119-item-03-2022-2023-base-residual-auction-schedule-presentation.ashx>.

immediate action at FERC and PJM to undo the MOPR, which would otherwise be a serious setback to New Jersey's ability to achieve state policy requirements at least cost.

II. Simpler Solutions May Be Available to the Problems the ICCM Aims to Solve

PIOs also have concerns that the ICCM has been presented to “solve” inefficiencies that may not actually play out in state renewable incentive programs, or which at least might be resolved through simpler means. Much of the case for the CEAC market that would be run side-by-side with the capacity market centers on a belief that, because it is “market-based,” it must therefore be more efficient than existing clean energy procurement constructs.⁷ This assumes that existing Renewable Energy Credit (“REC”) procurement methodologies are insufficiently competitive; but this strikes us as an oversimplified description of the status quo.⁸ For instance, much of the purported benefit centers on the “technology-inclusive” nature of the CEAC; but much of the state-level REC procurement underway in New Jersey and elsewhere is also inclusive of multiple renewable technologies.⁹ In PJM, carve-outs for specific types of resources or specific projects are the exception, as are state policies requiring that Renewable Portfolio Standards requirements be met in-state.¹⁰ Further explanation of how the ICCM

⁷ See Brattle Report; Spees.

⁸ See generally Comments of Advanced Energy Economy, Docket Nos. ER18-1314, ER18-1314-001, EL18-178 (consolidated) (FERC Oct. 2, 2018) (referencing stiff competition in existing REC markets), https://elibrary.ferc.gov/eLibrary/filelist?document_id=14709234&accessionnumber=20181002-5270.

⁹ Brattle Report at 2. PIOs acknowledge that Zero-Emission Credits (“ZEC”) programs in New Jersey and elsewhere are a significant exception to this rule.

¹⁰ See Protest of Clean Energy Advocates, at App. A-1, Docket No. ER18-1314 (May 7, 2018) (summarizing PJM state RPS policies as of 2018 and finding that while resource carve-outs are common, they typically account for a very small proportion of the overall RPS requirement); see also Skyler Marzewski et al., *State RPS Fulfillment*, Monitoring Analytics, at 4 (Oct. 24, 2019) (summarizing geographic restrictions on state RPS and showing that the significant majority of REC purchases can be made from any state within PJM), <https://www.pjm.com/>

would provide opportunities for competition between clean resource types that are not currently available under state law would help to establish the case that ICCM provides significant benefits in this respect.

Furthermore, where states have decided to pursue technology-specific or geography-specific requirements, there are policy reasons for those decisions that state policymakers may not wish to revisit. For instance, state procurements that prioritize community ownership and involvement of underrepresented communities or target very specific locations will be difficult to replicate in a generic CEAC market, but present real benefits, the forfeiture of which states (and PIOs) are unlikely to support.

PIOs appreciate that Brattle’s proposal envisions retaining states’ ability to continue with state-driven procurements.¹¹ However, this flexibility is in tension with the promised efficiency benefits from competition among technologies, and could make the use case for the CEAC market quite narrow. The Board should remain realistic about the level of likely state, city, and private buyer interest in a generic CEAC market as compared to existing or more customized direct procurement models already in use.¹² This dynamic would substantially reduce the reward for investment in developing the ICCM, and suggests that more work should be done to gauge interest in using the

[/media/committees-groups/task-forces/cpstf/20191024/20191024-item-07-state-rps-fulfillment.ashx](#).

¹¹ Brattle Report at 3 (“A central tenet of the ICCM is that states will set their own policy goals.”).

¹² Some of the most significant corporate buyers, such as Google, have developed sophisticated purchasing strategies to match the time and location of renewable energy generation to the company’s load. *See, e.g., Google, 24/7 by 2030: Realizing a Carbon-free Future* (Sept. 2020), <https://www.gstatic.com/gumdrop/sustainability/247-carbon-free-energy.pdf>. As a step toward a less differentiated renewable energy product, ICCM may not meet the needs of these buyers.

unrestricted CEAC market before committing further Board resources to development of this idea.

The question of whether simpler alternatives might more feasibly accomplish the main goals of the ICCM proposal is best addressed by comparing ICCM's benefits with those of such alternatives. For instance, one major motivating factor for Brattle's ICCM proposal is that it would send appropriate advanced price signals for clean energy development that are differentiated from more generic capacity price signals. This is a meaningful benefit; but it might also be accomplished far more simply through approaches similar to existing REC markets and transparent bilateral contracting without a centralized clearing mechanism. Buyers acting in accordance with state policy requirements naturally establish price signals for capacity offerings from different resource types. Those resources can then be used as self-supply in PJM markets, with PJM's capacity auction reduced to a "backstop" mechanism to ensure resource adequacy. Such an approach still requires eliminating the MOPR, but it is otherwise straightforward, and might accomplish the ICCM goals with a small fraction of the costs or bureaucratic investment. In short, we urge the Board to examine closely whether a fully developed centralized clean capacity auction is essential to achieving its goals.

The Brattle Report also lists among its key benefits that the ICCM would "[i]ncentivize developers to site clean energy where it can provide maximum reliability benefit"—which is an important signal to send to clean energy projects under development.¹³ But locational RPM prices already provide an incentive for new renewable development to site where their resource adequacy value would be highest, thus enabling them to offer

¹³ Brattle Report at 6.

their environmental attribute at a lower price than a similar resource earning less capacity revenue might be able to. As such, we urge Board staff to further examine the idea that the ICCM would create a *unique* incentive for renewable energy projects to be located where optimal. There may well be benefits to the ICCM in this respect (i.e., potential for more refined locational signals), but we have not seen those articulated. It would also be worth further exploring whether the ICCM's price signals would continue to offer meaningful incentives for optimal resource adequacy value if the CEAC market prices end up significantly outstripping prices in the capacity market side of the ICCM.

III. The ICCM Represents a Commitment to a Market Structure Whose Future Remains Unclear

PIOs also note that, while the ICCM proposal ultimately represents an economically elegant solution to addressing the RPM's failure to value environmental attributes, the continued viability of the RPM structure remains unclear. As resource mixes shift from traditional fossil generation to more diverse forms of generation with differing technical implications, including not just variable sources but also storage and demand-side management, it is not clear that a single, fully fungible capacity product will be the right approach to ensure system reliability in a decarbonized system. For instance, increasing attention is being paid to portfolio-based approaches for getting the biggest resource adequacy value for the system as an alternative to a centrally cleared market.¹⁴

¹⁴ See, e.g., Susan F. Tierney, *Wholesale Market Design in a Future Low-Carbon Electric System: A Proposal for Consideration*, Analysis Group (Nov. 28, 2020), <https://www.rff.org/documents/2779/tierney-white-paper-on-wholesale-market-design-12-15-2020-final-to-wri-rff.pdf>; Steven Corneli, *Criteria for Evaluating Market Mechanisms*, New England Energy Vision (Jan. 25, 2021), <https://newenglandenergyvision.files.wordpress.com/2021/01/steve-corneli-presentation.pdf>.

Because the ICCM proposal is optimized around this existing capacity construct, its main contribution is that it could help balance the existing capacity market; but it carries with it all of the increasingly problematic and potentially outdated aspects of that construct. As a result, to the extent this proposal is intended to work with the PJM capacity market, the Board may find itself moving forward with an improvement on a resource adequacy model that is no longer in place.

IV. The Board Must Resolve Legal Ambiguities Regarding Whether and How States Can Maintain Control Over CEAC Markets

While the Board and Brattle are to be commended for developing a conceptual fix for the RPM's failure to value environmental attributes, PIOs' greatest current concern is that the proposal is unsupported by a robust legal analysis of whether or how state authority over CEAC demand curve design and procurement can be maintained in a PJM-run ICCM under FERC's jurisdiction. PIOs appreciate that the Board and Brattle took great pains to emphasize that states must retain authority over CEAC procurement for the ICCM to work,¹⁵ but the Brattle Report also acknowledges that current PJM markets have actively interfered with state efforts to decarbonize.¹⁶ In this context, it is troubling that neither Brattle nor the Board have explained the legal path or likelihood of correcting a power imbalance so heavily disfavoring both states and "disruptive new entrants"¹⁷ that

¹⁵ See Brattle Report at 3 ("A central tenet of the ICCM is that states will set their own policy goals."), 5 (stating that the ICCM "would be implemented under a new governance model that maintains appropriate state authority to establish clean energy policy for their own constituents," which "must offer greater voice to states, customers, clean energy companies, and disruptive new entrants"). States must retain this ultimate authority because the alternative could be PJM (and by extension, FERC) interference with carefully crafted State renewable energy policies.

¹⁶ *Id.* at n. 5 (referring to the PJM capacity market as "an artifact of the flawed PJM governance structure that offers inappropriately large opportunities for incumbent generators and their transmission owner affiliates to influence market rules").

¹⁷ *Id.* at 5.

is a feature and not a bug of the existing PJM structure.¹⁸ Moving forward without certainty on these questions would risk undermining states' control over their procurement policies and priorities and subjecting them to PJM and FERC oversight. Thus, before moving forward, PIOs urge, in the strongest possible terms, the Board to conclusively resolve outstanding legal ambiguities before committing to any particular course of action.

The most significant legal uncertainties endemic to the ICCM proposal stem from its idea of adding a renewable attributes market explicitly designed to influence the outcome of PJM-run capacity markets. The Federal Power Act gives FERC jurisdiction over wholesale electricity rates in interstate commerce and any rule or practice “affecting” such rates.¹⁹ It is hard to see how a CEAC market that is inherently intertwined with PJM’s capacity market is not a rule or practice “directly affecting” wholesale electricity rates, especially where the envisioned CEAC market explicitly allows states to incorporate their existing REC, ZEC, or other procurement programs and allows for resource-specific bidding. Although FERC has found that RECs do not themselves constitute the transmission of electric energy or the sale of electric energy at wholesale in interstate commerce, it has also held that it has jurisdiction over RECs sold as part of bundled transactions because they affect the price paid for a FERC jurisdictional product.²⁰ And while a FERC friendly to state policy interests might decide

¹⁸ See, e.g., Stephanie Lenhart, *Regional Transmission Organization Governance: Comparisons and Differences with an ISO-NE Focus*, Boise State University (Feb. 25, 2021), <https://newenglandenergyvision.files.wordpress.com/2021/02/lenhart-presentation.pdf>.

¹⁹ 16 U.S.C. §§ 824(b), 824e(a); *FERC v. Elec. Power Supply Ass’n*, 136 S. Ct. 760, 774 (2016) (bounding FERC’s jurisdiction to rules or practices that “‘directly affect the wholesale rate.’” (citation omitted)).

²⁰ *WSPP Inc.*, 139 FERC ¶ 61,061, at P 18 (Apr. 20, 2012).

not to exercise jurisdiction over a non-jurisdictional product bundled with a jurisdictional one, one need only recall that the recent (misguided) justification for the expanded MOPR was FERC’s concern regarding mere *potential* price impacts of state policies on the PJM-operated capacity auction.

While the legality of the expanded MOPR is highly contested and not fully decided, when evaluating the risks of the ICCM proposal the Board should consider the risk that FERC – or the courts - might assert jurisdiction over capacity-interacting auctions even years after they are enacted, whether on their own initiative or in response to a complaint that the CEAC is unjust, unreasonable, or unduly discriminatory.²¹ Additionally, the Board should give in-depth consideration to the question whether an Regional Transmission Operator (“RTO”) such as PJM may operate a market that directly interfaces with a tariff-approved market, but which sits outside of that RTO’s approved tariff.

It may be possible to structure the ICCM in order to minimize many of these risks. Alternatively, the Board could seek a definitive ruling directly from FERC in advance of establishing the ICCM and argue that such an opinion is binding down the road, or push for a rulemaking that clarifies the authority of states to play the kind of role envisioned by an ICCM-type model. But these legal considerations must be discussed openly and addressed explicitly prior to making a significant investment in the ICCM model, or the Board may well end up reaping unanticipated impacts from a PJM-centric ICCM, up to and including FERC seizing control of state-level renewable subsidies or

²¹ See, e.g., *New York v. FERC*, 535 U.S. 1 (2002), Justices Thomas, Scalia, and Kennedy dissenting on majority decision to uphold FERC decision not to exercise jurisdiction over transmission bundled with retail sales.

other policy preferences, which could send New Jersey back to a worse place than it began.

V. The Board Should Consider Implementing the ICCM Program as Part of an Independent Fixed Resource Requirement Market

Given the numerous uncertainties listed above, there are reasons to be cautious about heading down a pathway where the ICCM is operated on a PJM-wide basis, which would require numerous individual state REC demand curves to be aggregated and optimized against the PJM-run capacity auction. But many of the reservations PIOs listed above could be avoided with a more measured approach to an ICCM system. Specifically, we encourage the Board to focus on how it might implement this two-part market as part of New Jersey implementing its own FRR. The benefits of such an approach are multiple: the Board could test and troubleshoot this system without the limitations that come from operating in the PJM space; it could develop the ICCM in tandem with its exit from the PJM capacity auction and thereby possibly avoid many of the jurisdictional questions listed in the previous section.

There are many ideas well worth pursuing in Brattle's ICCM proposal, and we appreciate that the Board is serving as a thought leader to transition New Jersey away from inefficient capacity markets that needlessly favor fossil generation. But it is also important to identify the appropriate forum to test those ideas; and we believe that such testing would be best done in a setting where the state retain maximum flexibility.

Dated: March 5, 2021.

Respectfully submitted,

/s/ Danielle C. Fidler

Danielle C. Fidler

Staff Attorney, Clean Energy Program

Earthjustice

1001 G Street NW, Suite 1000

Washington, DC 20010

(202) 667-4500, Ext. 1439
dfidler@earthjustice.org

/s/ Casey Roberts

Casey Roberts
Senior Attorney
Sierra Club
1536 Wynkoop St., Suite 200
Denver, CO 80202
casey.roberts@sierraclub.org

/s/ Greg Wannier

Greg Wannier
Staff Attorney
Sierra Club
2101 Webster Street, Suite 1300
Oakland, CA 94612
(415) 977-5646
Greg.wannier@sierraclub.org

Attorneys for Sierra Club

/s/ Thomas Rutigliano

Thomas Rutigliano
Senior Advocate
Natural Resources Defense Council
1125 15th Street NW, Suite 300
Washington DC 20005
trutigliano@nrdc.org

For Natural Resources Defense Council