

**Comments from Public Interest Organizations on Dr. Frank Felder’s Report:
*NEPOOL’s Pathways to the Future Grid Process***

January 22, 2021

Acadia Center, Natural Resources Defense Council, Conservation Law Foundation, Sierra Club, and Union of Concerned Scientists (Public Interest Organizations or PIOs¹) appreciate the opportunity to comment on Dr. Frank Felder’s January 2021 report on *NEPOOL’s Pathways to the Future Grid Process*.² Although we generally agree with Dr. Felder’s categorizations of the four broad pathway types discussed at the Participants Committee (PC) in recent months and many of his observations and proposed criteria for evaluating future pathways, we also have several comments on the report, many of which suggest next steps for NEPOOL.

As further discussed below, our overarching comments include:

- We agree with Dr. Felder’s observations that a full discussion of the transition to the future grid must include consideration of flexible resources and transmission needs to ensure reliability under the future resource mix. Potential future reliability gaps are being discussed within the parallel joint Markets and Reliability Committee (MC-RC) process. Transmission planning has not yet been included in the PC or MC-RC discussions, which is a gap in the NEPOOL process, though transmission is part of New England states’ separate Energy Vision discussions.³ While these issues are also important to address in New England’s long-term grid transition, PIOs submit that they are not threshold issues for taking near-term steps to address other immediate concerns, such as double capacity payment under the region’s flawed Forward Capacity Market (FCM).
- NEPOOL’s discussions of potential future market frameworks should explicitly incorporate and respond to New England states’ October 2020 Energy Vision statement and unfolding stakeholder discussions, including the states’ five principles provided by the states:
 1. Meet States’ decarbonization mandates and maintain resource adequacy at the lowest cost by using market-based mechanisms;
 2. Establish effective mechanisms that accommodate existing and future long-term contracts for clean energy resources executed pursuant to state law;
 3. Integrate distribution-level resources effectively and efficiently;
 4. Allow interested buyers and sellers to participate; and

¹ Public Interest Organizations submitting these comments include both NEPOOL (Acadia Center, Conservation Law Foundation, Natural Resources Defense Council, and Union of Concerned Scientists) and non-NEPOOL (Sierra Club) members.

² Frank Felder, *NEPOOL’s Pathways to the Future Grid Process: Project Report* (Jan. 2021), https://nepool.com/wp-content/uploads/2021/01/NPC_20210107_Felder_Report_on_Pathways_rev1.pdf (hereinafter “Felder Report”).

³ New England Energy Vision, “Transmission Planning,” <https://newenglandenergyvision.com/transmission-planning/> (visited Jan. 22, 2021).

5. Provide for an appropriate level of state involvement in market design and implementation.⁴

- While states have expressed openness to exploring potential new market frameworks or reforms to procure clean energy, the states have not suggested that ISO-administered wholesale markets are the only or inevitable mechanism for procuring the resources needed to meet state policy goals. Accordingly, while it is appropriate to evaluate a broad range of potential market approaches, NEPOOL should not establish as a threshold criteria that proposed wholesale market frameworks themselves must procure the level of new clean energy resources required to meet state laws. Frameworks that facilitate, recognize, and/or accommodate the entry of new clean energy procured through other means (including competitive state-run solicitations) should be considered.
- To this end, Dr. Felder’s report should be revised to recognize other Alternative Resource Adequacy Constructs (ARAC) discussed at NEPOOL but not discussed in his report. These include (1) elimination of the current broad Minimum Offer Price Rule (MOPR) in the FCM, and (2) conversion of the FCM into a voluntary residual capacity market. Rob Gramlich discussed both approaches during his presentation at the September 3, 2020 PC meeting.⁵ These frameworks would enable, though not require, state clean energy procurements outside of the ISO-administered wholesale markets. Notably, elimination of the broad MOPR and/or conversion of the FCM into a voluntary residual market would not exclude the creation of other new market frameworks, including others under discussion, that could provide states with an alternative wholesale market mechanism to procure new clean energy *if they choose*.
- NEPOOL’s future grid discussions should continue to be undertaken thoroughly, but expeditiously and, to the extent ISO-NE participates in and/or builds upon NEPOOL’s future grid discussions, those efforts should further seek to identify balancing resource needs, analyze and assess all the future grid pathways presented to date, and consider transmission planning, all in a thoughtful yet expeditious manner.
- Finally, we strongly encourage opening up NEPOOL’s future grid discussions to other stakeholders. To the extent NEPOOL members hope to develop market reforms that may significantly alter how states achieve their decarbonization goals, broader perspectives are essential to create an enduring, politically viable consensus.

We provide additional comments on specific sections of the report below.

⁴ NESCOE, *New England States’ Vision for a Clean, Affordable, and Reliable 21st Century Regional Electric Grid* (Oct. 2020), http://nescoe.com/wp-content/uploads/2020/10/NESCOE_Vision_Statement_Oct2020.pdf, at 2 (hereinafter, “Energy Vision”).

⁵ Rob Gramlich, “Resource Adequacy Models and Low Carbon Power Markets” (Sep. 3, 2020), https://nepool.com/uploads/FGP_NPC_20200903_Gramlich.pdf, at 7, 10.

Section II. Background

Report text: “Within NEPOOL’s “Pathways to the Future Grid” process, four major categories of pathways were discussed and are listed in Table 1.” (p. 2)

Comment: While PIOs agree the four broad categories of pathways listed reflect NEPOOL’s discussions to date, as noted above and further below, the report’s discussion of pathway 4 -- Alternative Resource Adequacy Constructs (ARAC) -- is too narrow and does not fully capture the PC’s discussions. Namely, ARAC constructs discussed by Rob Gramlich, including eliminating the MOPR and converting the current FCM to a voluntary residual capacity market, are not discussed but should be in this report.⁶ Both of these constructs represent relatively modest and readily achievable alterations to the status quo that would quickly alleviate a key inefficiency in ISO-NE’s wholesale markets, while still allowing for more in-depth discussions about other aspects of future market design to address other issues that arise with decarbonization.

Section III. Potential Pathways/Market Frameworks to Support New England’s Clean Energy Transition⁷

Report text: “First, the effort underway to reconcile conflicting objectives of wholesale electricity markets and States’ clean energy policies is clearly an ambitious and challenging undertaking. Any successful reconciliation is not likely to occur without broad agreement being reached among the New England States and NEPOOL stakeholders.” (pp. 5-6)

Comment: In their Energy Vision,⁸ the New England states expressed their view that the ISO-NE governance “. . . does not give a sufficiently meaningful voice to State and consumer interests and its mission does not reflect the relationship between ISO-NE’s functions and the New England States’ legal requirements, policy imperatives, and associated consumer interests.” The statement further describes the associated NEPOOL stakeholder process and public access to deliberations and decision-making around regional grid matters as inadequate and lacking transparency, pointing out that these shortcomings seriously jeopardize the political durability of any solutions under consideration under the Pathways to the Future Grid Process.

Most New England states have laws and policies aimed at making the energy system cleaner and more efficient, including goals for reducing carbon emissions. Those commitments are increasing and spurring a transition to a fully decarbonized economy energized by a no- or very low-carbon grid. States all place value on a regional grid that delivers affordable and reliable electricity, but they also have additional goals and

⁶ A similar omission is found in the table on page 12 in the “Major Design Questions, Components and/or Alternatives” row under “Alternative Resource Adequacy Constructs.”

⁷ Note that this and subsequent sections of the report are misnumbered (i.e., the report lists this section as a second Section II rather than a new Section III).

⁸ Energy Vision at 6-7.

responsibilities to their people including reducing air pollution, protecting health and safety, expanding economic opportunities, and addressing the institutional inequities borne by communities disproportionately impacted by pollution and climate change risks.

The alternative market frameworks that are under consideration will have far-reaching implications for the pace of the market transformation, as well as for who might experience shifts in the costs and benefits driven by those frameworks. As this process moves forward, PIOs make the following recommendations:

- Expand the deliberations to include entities outside of the NEPOOL membership that have a stake in the outcomes of this process. In particular, we request, going forward, that this process include those non-NEPOOL stakeholders most affected by the decisions often made within the non-transparent NEPOOL structure.
- Evaluate how potential market frameworks fulfill or do not achieve a full range of objectives beyond reliability and electricity price outcomes. Additional objectives should include economic, distributional, health and other social policies - such as environmental justice - that are states' responsibilities.

Report text: “Second, the required types, amounts and timing of balancing services needed to accommodate increasing levels of VRER has not been defined or articulated. Without knowing these requirements, analyzing whether proposed pathways will be successful in providing the resources needed for reliability to support decarbonization let alone cost effectively cannot be performed.” (p. 6)

Comment: PIOs agree that understanding the future resource mix, including the need for additional flexible resources; demand characteristics, including the possibility and need for increased levels of flexible demand; and potential transmission gaps and needs is critical for ensuring reliability under the future grid. As noted above, these issues are being discussed to some extent in the parallel “gap analysis” which NEPOOL is conducting through the MC-RC process (though transmission needs is a gap in the current NEPOOL process). While these issues are important to address in New England’s long-term grid transition, they do not necessarily need to be solved simultaneously as NEPOOL explores other important market reforms to address immediate concerns, such as double capacity payment under the region’s current, flawed FCM.

Report text: “One major example of the need for more development is the intersection of the proposed pathways and transmission expansion and cost allocation, and the region’s push for extensive expansion of offshore wind is a prime example. Evaluating impact on generation and transmission investments due to the intersection of a particular pathway and regional transmission planning will be necessary in order to ensure that these investment decisions are aligned to achieve the least cost joint deployment of generation and transmission.” (p. 6)

Comment: Dr. Felder correctly identifies the need for assessing the intersection of the proposed future grid pathways and transmission planning. The New England states also recognize the need to evaluate the intersection between market reforms and transmission

planning, having included separate technical forums on “Transmission Planning Reforms” in their Energy Vision process. As Dr. Felder and the states acknowledge, transmission planning will play a critical role in the transition to a clean energy grid. The MC-RC process has not included any analysis of transmission planning, which is a significant gap.

Section IV. High-level Description of Pathways and Open Issues⁹

Report text: “The third issue is ensuring sufficient price integrity in the markets (i.e., addressing price suppression).” (p. 7)

Comment: PIOs disagree with the contention that market designs should aim to avoid “price suppression,” as that term has been used over the last several years by those advocating for the effect of state policies to be nullified by the wholesale market rules. The concept that prices are suppressed when they are lower than they would be *but for* the impacts of state policy is an argument that prices should depart from supply and demand fundamentals. If states are procuring a set of resources under their policies, which the market does not then need to separately procure, resulting in lower capacity market prices, this is not “price suppression” but instead an efficient market outcome reflecting the current oversupply of polluting resources relative to market demand for such resources. As Dr. Kathleen Spees and Dr. Samuel Newell recently explained in a report filed at FERC, “the correct capacity price is that which aligns supply and demand, given other policies and/or markets that policymakers have identified as necessary to address the externality.”¹⁰ FERC Chairman Rich Glick has similarly expressed disagreement with the concept that capacity market prices should be protected against “price suppression” that results from state policies.¹¹ NEPOOL participants should reject a design criteria that will lead to a market design that systematically increases costs and supply above what is just and unreasonable, and that is unlikely to be approved by FERC.

Dr. Felder goes on to state that “[p]rice suppression is an identified concern for both economic efficiency and reliability reasons (which is discussed below regarding balancing resources).”¹² The argument that permitting state policies to affect wholesale market prices would result in prices that are so low that reliability would be threatened is

⁹ Misnumbered as Section III in the report.

¹⁰ Written testimony of Kathleen Spees and Samuel Newell before the Federal Energy Regulatory Commission on behalf of the Natural Resource Defense Council, the Sustainable FERC Project, Earthjustice, Sierra Club, American Wind Energy Association, Alliance for Clean Energy New York, and Advanced Energy Economy, regarding the economic impacts of buyer side mitigation in the New York Independent System Operator (NYISO) capacity market, Docket No. EL21-7-000, available at https://brattlefiles.blob.core.windows.net/files/20558_2020-11-18_the_brattle_group_ce_parties_protest.pdf.

¹¹ See, e.g., *Independent Power Producers of New York, Inc. v. NYISO*, 170 FERC ¶ 61,118 (Feb. 20, 2020) (Commissioner Glick, concurring).

¹² Felder Report at 7.

misguided; low prices are indicative of ample supply and thus a high degree of resource adequacy.¹³ If the concern is that capacity prices would drop too low to maintain the needed quantity and profile of so-called “balancing resources,” the solution is not to prop up capacity prices in the hope this will also provide the needed “balancing” services, but instead to more precisely procure those services.

Report text: “The fourth issue is the increasing need for balancing resources in a future state. Pathways may not procure sufficient amounts and types of balancing resources that the region needs to operate the grid reliably or if they do, it is not clear that they do so in the most cost-effective manner. ” (p. 8)

Comment: PIOs agree that a highly decarbonized electric system will require a different mix of services than our current system, including resources available to meet demand during occasional periods of low wind or solar generation. However, as Dr. Felder astutely notes earlier in the report, “the required types, amounts and timing of balancing services needed to accommodate increasing levels of VRER has not been defined or articulated. Without knowing these requirements, analyzing whether proposed pathways will be successful in providing the resources needed for reliability to support decarbonization let alone cost effectively cannot be performed.”¹⁴ It is even more premature to assess whether any particular pathway procures the unknown types or amounts of balancing resources in a “cost-effective manner.” PIOs submit that a pathway’s ability to address far more immediate issues facing the region, such as double capacity payment, should be given greater weight than its ability to ensure cost-effective procurement of a not-yet-defined need for balancing resources.

Some NEPOOL members have suggested that “balancing resources” are a more pressing issue because lower prices resulting from a multitude of factors (including state policy compensation for avoided externalities), could cause the retirement of so-called balancing resources. PIOs strongly disagree that capacity market design and prices should be distorted in a misguided attempt to retain a minimum amount of “balancing resources” on the system. The FCM is simply the wrong tool for that job. PIOs therefore wish to highlight Dr. Felder’s observation that “[w]hether employment of an FCM-like mechanism is the preferred means to procure the required balancing services is an open question given that such a mechanism is designed primarily to procure new resources to maintain resource adequacy as opposed to maintain existing resources to provide

¹³ See Spees & Newell, supra note 10, at 17 (“By its nature, the downward sloping demand curve simply cannot produce market outcomes with low prices and low reliability at the same time. If prices are low due to the entry of policy resources, this means that there is ample supply of capacity on the system. In this long market condition the low capacity prices signal that high-cost resources should retire and new entry is not needed. If the supply-demand balance tightens, prices will rise and signal the need to attract and retain scarce capacity. Thus the Complainants’ concern that low prices will produce low reliability is unfounded (and a mathematical impossibility).”)

¹⁴ Felder Report at 6.

balancing services.”¹⁵ We also note that it has not been established that “retaining” existing resources under the FCM or other market constructs would be the most efficient approach, or the most consistent one with state climate policies, for ensuring a reliable regional grid.

A. Forward Clean Energy Market and Integrated Clean Capacity Market

Report text: “Whether the FCEM and ICCM avoid the double capacity payment issue by procuring resources that are not considered receiving States’ subsidies for the purposes of the MOPR is not clear.” (p. 9)

Comment: PIOs agree this is a critical issue that deserves further attention, including, but not limited to, as part of the PC’s upcoming legal/jurisdictional discussion on future markets at the monthly February meeting. While FCEM and ICCM have been presented as potential solutions to conflicts between state policies and the MOPR, there is as of yet no guarantee as to how the IMM or FERC would interpret revenues from such markets. Additional comment from the IMM, outreach to FERC, and analysis by NEPOOL counsel as well as other outside experts may be informative.

PIOs also support further consideration at the PC on the possibility of eliminating the MOPR as applied to state policy resources, which Rob Gramlich raised as another pathway to avoid the current market’s double payment problem. Eliminating the overly broad MOPR would provide certainty and help address potential double payment concerns both for resources built as a result of competitive state-led procurements and resources built with revenues from future market mechanisms such as FCEM or ICCM.

B. Alternatives to the Forward Capacity Market

Report text: “Two options propose changes/reforms to the FCM: Capacity as a Commodity (Gabel Associates, 2020) and Always on Capacity Exchange (“AOCE”) (Reliable Energy Analytics, 2019).” (p. 9)

Comment: While the two ARAC options presented in this section were discussed at NEPOOL, they are not the only such approaches that have been discussed. As noted above, the ARAC constructs discussed by Rob Gramlich in his September 3, 2020 presentation should also be included and discussed in this report, including the possibilities of eliminating the overly broad MOPR and/or converting the current FCM to a voluntary residual capacity market. As with other options, these potential pathways are not necessarily exclusive and could potentially be pursued prior to or alongside other market constructs or reforms discussed in the report.

¹⁵ Felder Report at 6.

Section V. Specific Findings Regarding Pathways and Their Variations¹⁶

A. Overall Findings Comparing Pathways

Report text: “Some variations of ARACs are intended to further State-specific clean energy objectives. These ARAC alternatives, such as the alternatives that involve regional or state-level integrated resource planning, were not extensively discussed as part of this effort.” (p. 11)

Comment: PIOs disagree with this characterization. Currently, several New England states are pursuing clean energy objectives outside of ISO-NE’s FCM, at least in part because the current market construct does not properly incentivize or value the resources needed to achieve state climate policies. Continued state-led resource procurements is a potential future pathway discussed on the Gramlich-Corneli panel and has been properly introduced in the PC discussions. Because state-led approaches inherently rely on actions taken outside the wholesale markets, the types and roles of market reforms and the wholesale markets themselves are different and may be more limited. For example, under a voluntary residual capacity market or a market that eliminates today’s overly broad MOPR, the role of the FCM would be to procure only those resources that are needed for resource adequacy and that are beyond the clean energy resources states procure themselves.

Report text: “Moreover, many pathways could be combined with each other with varying degrees of merit, although EOM and ARACs are by definition mutually exclusive.” (p. 11)

Comment: PIOs believe that EOM and ARACs can be complementary approaches and are not necessarily mutually exclusive. In fact, by providing potential alternatives to the FCM, some ARAC approaches may effectively convert the ISO-administered market into an EOM while continuing to enable state-led resource procurements. PIOs do agree that, to the extent well-designed energy and ancillary service markets provide necessary revenues to new clean energy resources, state-led ARACs may become less important drivers of investment. However, as also recognized in Dr. Felder’s report, an EOM will not “in and of itself achieve States’ clean energy objectives,”¹⁷ absent other measures.

Report text: Table 3: High-level Comparison of Four Pathways and Major Variations (p. 12)

Comment: See comments above on *Section II. Background* of the report. Table 3 should also include other ARAC frameworks discussed at the PC, including the possible elimination of the overly broad MOPR and the possible conversion of the FCM to a voluntary residual capacity market.

¹⁶ Misnumbered as Section IV in the report.

¹⁷ Felder Report at 10.

C. Carbon Pricing Related Findings

Report text: “Under Carbon Pricing, it is possible that carbon emissions do not decrease sufficiently to meet States’ ambitious carbon reduction goals and requirements.” (p. 13)

Comment: Dr. Felder’s finding that carbon pricing may not be sufficient to meet states’ carbon reduction goals is significant, and should be fully evaluated in any future discussions about this pathway. Further, as NESCOE indicated to NEPOOL in 2017, and affirmed in 2020, the states have no interest in a new, incremental carbon pricing-style mechanism administered by ISO-NE and subject to FERC jurisdiction to execute the requirements of state laws. As NEPOOL moves forward with its future grid pathways discussions, it is clear that jurisdiction will be a key factor for the New England states as they weigh the different pathways.

D. Energy Only Market Related Findings

Report text: “Shortage pricing, the key feature of EOM, can be combined with FCM and its variations (e.g., FCEM and ICCM) and ARACs.” (p. 15)

Comment: As noted earlier in our comments and suggested in the above report language, PIOs believe an EOM and ARACs can be complementary approaches. Shortage pricing reform on its own, without creating an EOM, could also complement ARACs and other FCM reform proposals being discussed at the PC.

E. ARACs Related Findings

Report text: “As discussed in the prior section, the two ARACs that had stand-alone presentations at the NPC, SFPFC and Capacity as a Commodity, did not explicitly propose mechanisms for the procurement of clean energy resources.” (p. 15)

Comment: As noted above, Dr. Felder’s report does not fully capture the range of ARACs that have been discussed at the PC. This includes overlooking the voluntary residual market and elimination of the overly broad MOPR pathways presented by Rob Gramlich. Such pathways would allow for and recognize state clean energy procurements and planning processes as legitimate exercise of state authority rather than trying to counteract state policies in the wholesale markets or requiring that resources only be procured through existing or newly created ISO-administered markets.

PIOs are concerned that the framing of Dr. Felder’s report implies that market approaches that do not include explicit mechanisms for the procurement of clean energy resources *through an ISO-administered market* are underdeveloped or incomplete solutions. To the contrary, in New England States’ Energy Vision, the states have expressed openness to exploring potential new market frameworks or reforms to procure clean energy, but have not suggested that ISO-administered wholesale markets are the only or inevitable mechanism for procuring the resources needed to meet state policy goals.

While it is appropriate for NEPOOL to evaluate a broad range of potential market approaches, including new approaches to help procure clean energy through ISO-administered markets, this should not be a threshold criteria for NEPOOL discussions. Market reforms that facilitate, recognize, and/or accommodate the entry of new clean energy procured through other means, including competitive state-run solicitations, should also continue to be considered.

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Thank you for considering our comments on the report. We look forward to further participation in these discussions.

Sincerely,

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