

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

NSTAR Electric Company d/b/a)	D.P.U. 18-64
Eversource Energy)	
)	
Massachusetts Electric Company and)	
Nantucket Electric Company, each)	D.P.U. 18-65
d/b/a National Grid)	
)	
Fitchburg Gas and Electric Light Company)	D.P.U. 18-66
d/b/a Unitil)	
)	

REPLY BRIEF OF ACADIA CENTER

Acadia Center appreciates the opportunity to file this reply brief concerning the petitions filed by Fitchburg Gas and Electric Light Company (“Unitil”), Massachusetts Electric Company and Nantucket Electric Company (“National Grid”), and NSTAR Electric Company (“Eversource”) (collectively, “the EDCs”) for approval by the Department of Public Utilities (“Department”) of long-term contracts related to the New England Clean Energy Connect project (“NECEC”) pursuant to Section 83D of An Act Relative to Green Communities, St. 2008, c. 169 as amended by St. 2016, c. 188 (“Section 83D”) and 220 CMR §24.00. Specifically, the EDCs seek approval of power purchase agreements (“Proposed PPAs”) with H.Q. Energy Services (U.S.) (“HQUS”) and transmission service agreements (“Proposed TSAs”) with Central Maine Power (“CMP”).

As a regional, non-profit, research and advocacy organization committed to advancing the clean energy future, Acadia Center has a strong commitment to ensuring both that the ratepayers of Massachusetts receive the benefits for which they are paying under the Proposed PPAs, and that

the regional greenhouse gas emissions reductions purportedly resulting from the NECEC project are transparently and verifiably proven out. As such, although Acadia Center did not file an initial brief, it wishes to address issues raised by certain parties in their initial briefs. In short, Acadia Center believes that while the NECEC project has the potential to deliver incremental clean energy generation and greenhouse gas reductions to the region, the Department must address the significant issues created by the Proposed PPAs' lack of provisions to ensure that: a) the full incremental amounts of hydroelectricity contemplated in the RFP process will be delivered (as highlighted in the Initial Brief of the Attorney General's Office); and b) the environmental benefits in the form of regional greenhouse gas emissions are fully realized and tracked (as highlighted the Initial Brief of Sierra Club).

Given these issues, if it is to approve the Proposed PPAs, the Department must ensure that the processes in place will guarantee accountability, independent and transparent monitoring, and verification of incremental energy and regional greenhouse gas reductions delivered to Massachusetts ratepayers. Specifically, Acadia Center recommends that the Department direct the EDCs to work with HQUS to make improvements in the tracking and verification of energy deliveries and regional greenhouse gas reductions and create, through a public stakeholder process, a "disclosure label" for the energy under the 83D contract flowing over the NECEC line.

I. **Principles Underlying Section 83D Solicitations Require Incrementality, Accountability, and Verifiable Benefits to Massachusetts Ratepayers**

At its simplest level, the Section 83D solicitation process was intended to cost-effectively procure more clean energy for Massachusetts to deliver regional carbon benefits over the next 20 years by using a long-term contract. (*See, e.g.*, Section 83D(e) "the Department... shall approve a contract only upon a finding that it is a cost-effective mechanism for procuring low cost renewable

energy on a long term basis...”; Section 83D(j) “a long-term contract... shall... ensure a unit specific accounting of the delivery of clean energy, to enable the department of environmental protection... to accurately measure progress in achieving the Commonwealth’s goals under [the GWSA]”).) As the Proposed PPAs and TSAs stand, the Department is being asked to approve the purchase of energy and environmental attributes from HQUS at a premium in order to achieve these long-term regional carbon reduction benefits. It is incumbent on the Department, then, to not only find that the purported benefits are likely to occur under the contract, but also, to impose conditions that *verify* that the incremental deliveries and greenhouse gas reductions actually do occur.

To date, much of the discussion within this proceeding and the companion transmission line approval proceedings in Maine has centered around what is *reasonably expected* to happen to energy deliveries and regional carbon emissions once contract deliveries begin. These expectations are based on statements made by HQUS (and the EDCs) about the current generation fleet, system plans and operations, as well as predictions developed by retained experts. As testimony in this docket demonstrates, under reasonable assumptions about the future there is a range of possible outcomes, including scenarios that would result in both reduced regional carbon reductions or. (*Compare, e.g.,* DOER-JT at 14 (NECEC project will reduce an estimated 36.61 million metric tons of carbon dioxide equivalents); AG-DM at 15-16 (regional greenhouse gas emissions could either increase or decrease, depending on circumstances); NEER-JT at 20-22 (plausible that the Proposed PPAs will increase global greenhouse gas emissions)). Even regulatory agencies’ conclusions reflect that predictions over a long-term period rely on assumptions that can diverge from actual events. For instance, the Maine PUC’s Examiners’ Report concludes that the line is likely to result in incremental energy deliveries and GHG benefits, but acknowledges that those

benefits could diverge from forecast, in practice. (Maine PUC Docket 2017-00232, No. 622, Examiners Report, PUC Staff (March 29, 2019) at 114-115.)

The NECEC project is in the public interest if the benefits that have been predicted to result actually come to pass. HQUS is a rational economic actor with profit motive, working within PPAs with multiple degrees of economic flexibility. Even if all parties agreed on the likely outcomes of future forecasts, under certain scenarios, it would be rational to consider that reality could diverge from predictions over the course of a 20-year contract. Because predictions are not assurances, to ensure that the Proposed PPAs are in the public interest, and continue to be so, it is appropriate for the Department to monitor the actual outcomes delivered.

In short, Acadia Center sees two concerns with the Proposed PPAs that, if addressed, would significantly improve the ability to ensure that the benefits that Massachusetts ratepayers should receive under the contracts are realized: a) the “incrementality” of the delivery of TWh of hydroelectricity, compared to historical baselines; and b) the potential for market dynamics to affect the carbon content of the deliveries, even if the “incrementality” issue is addressed.

As the Department highlighted in its approval of the RFP, there is a risk to ratepayers that unless the attributes are defined sufficiently strictly, customers could be paying for a net increase in megawatt-hours per year or greenhouse gas emissions reductions, but not receive the service. (D.P.U. 17-32 at 33). Given the divergence in forecasts put forth in this docket, as well as the possibility of shifts in economic behavior over a twenty-year contract, Acadia Center believes the same risk is present unless verification procedures are sufficiently defined as well. The Department can address both issues by improving the tracking and verification of energy deliveries

and regional greenhouse gas reductions and creating, through a public stakeholder process, a “disclosure label” for the energy delivered under the Proposed PPAs and Proposed TSAs.¹

A. Proposed PPAs Do Not Adequately Require Deliveries to Be Incremental to Historical HQUS Sales to New England

Acadia Center supports the Attorney General’s conclusion that the Proposed PPAs do not require deliveries to be incremental to historical HQUS deliveries to New England, in contrast with the terms solicited by the RFP, offered in the bid, and assumed in evaluation and selection. (*See* Br. AGO at 17-26.) It was plainly the intent of the statute, the RFP, and the draft PPA to procure incremental clean energy – i.e. “a net increase in MWh per year of hydroelectric generation... as compared to the 3-year historical average and/or otherwise expected delivery of hydroelectric generation... into the New England Control Area.” (Exh. JU-2 at 5). Given that, in its bid, HQUS indicated that the 3-year historical average of 2014-2016 imports to New England was 14.8 TWh, and gave no indication that “otherwise expected delivery” in the future would differ meaningfully from this historical figure, as the Attorney General concluded, a fully incremental PPA should reflect total deliveries of 24.35 TWh (9.55 TWh of Contract Energy plus 14.8 TWh of Baseline Hydro). (Br. of AGO at 20, citing Exh. NECEC RFP Response (HRE)_Confidential, at 19).

However, this intent has been frustrated by the Proposed PPAs’ requiring zero per cent (for Eversource and Unitil) and, at most, 44% (for National Grid) of the contract energy to be above the historical average. (AG-DM-8.) As such, Acadia Center agrees with the conclusion of the Attorney General and other parties that the terms of the Minimum Baseline Hydro requirements in the Proposed PPAs could permit HQUS to decrease its overall imports into New England,

¹ *See, infra*, at Section II for more details on the proposed disclosure label.

relative to 2014-2016, while receiving full payment under the Proposed PPAs, and, potentially, making no use of the NECEC line.² (*See* Br. AGO at 20-24; Br. Sierra Club at 10 (concluding that “the EDCs’ failure to incorporate meaningful safeguards in the contracts to ensure the generation being procured is truly incremental... denies Massachusetts ratepayers the benefit of the bargain.”). This is plainly inconsistent with the intent of the statute.

Further, the GHG benefits of the NECEC project are premised on the contract energy being incremental to historical average deliveries. In its quantitative evaluation, Tabors Caramanis and Rudkevich (“TCR”) assumed full incrementality in evaluating the bid. *See*, Tr. Vol. 1, at 180-182. The evaluation committee relied on the TCR evaluation of GHG reductions in determining that the bid would deliver on the principles behind the Section 83D requirements. The EDCs continue to rely on TCR’s modeling to show that the Proposed PPAs will contribute to the goals of the GWSA. (Br. EDCs at 23). But, given that TCR’s modeling is not actually based on the Proposed PPAs before the Department, Acadia Center agrees with Sierra Club’s conclusion that any modeled benefits based on full incrementality should be disregarded. (Br. Sierra Club at 11). As AGO witness Murphy has demonstrated, and commonsense dictates, GHG reductions for Massachusetts would be far lower if HQ delivers only what is required under the Proposed PPAs, instead of the full incrementality that was intended under the statute and sought in the RFP approved by the Department. (Exh. AG-DM-Rebuttal-1, at 10-11.)

B. Greenhouse Gas Reductions Associated with Deliveries Should be Viewed Regionally

The EDCs propose to use the New England Power Pool (“NEPOOL”) Generation Information System (“GIS”) to account for and track energy generation from HQUS hydroelectric plants for

² Acadia Center does not dispute that HQUS has the potential capacity to provide the full 24.35 TWh of hydro; however, the Proposed PPAs do not require this full performance and should.

purposes of reflecting that generation in the MA greenhouse gas emission inventory. (Exh. EDC-RB-1 at 13). This tracking, when combined with attribute certificate tracking via North American Renewables Registry (“NAR”) and MA DEP inventory calculations is designed to adequately ensure that environmental attributes from the clean energy generating units serving the contract are not double-counted for the limited purpose of the MA GHG emission inventory. Prevention of double-counting of attributes is essential to preserving the integrity of the contract deliveries’ eligibility to meet the Massachusetts Clean Energy Standard (“CES”) requirements. While these systems are a reliable means to monitor and achieve the outcome of compliance with Massachusetts-specific internal inventory requirements, there is more to ensuring that regional greenhouse gas reductions actually occur.³ Acadia Center concurs with Sierra Club’s point that “there is no environmental benefit to shifting the greenhouse gas emissions of existing generation from one jurisdiction’s greenhouse gas balance sheet to another” (Br. Sierra Club at 12) and share NextEra’s concerns over the Proposed PPAs’ and existing tracking system’s ability of to ensure environmental benefits, due to this potential for leakage. (Br. NextEra at 8-9).

The nature of the interconnected markets in the northeast region of Canada and the US poses a potential risk of “leakage” of the benefits of clean energy deliveries under the Proposed PPAs that could erode or erase the expected carbon reductions associated with clean energy deliveries under certain circumstances. As described by AGO witness Miller, the terms of the Proposed PPAs are insufficient to account for leakage during the contract’s term. (Exh. AG-DM at 15). Miller goes on to say this leakage would take the form shifting of energy flows that may occur in

³ Acadia Center’s use of the term “regional” here refers to overall emissions reductions within New England, as well as the interconnected markets to which Hydro Quebec may deliver energy (New York, Ontario, New Brunswick, and Quebec). This concept has been described by other parties as “global” (*e.g.* Exh. AG-DM at 15 (“overall global emissions reductions, not reductions in one region or sector that might be offset by a corresponding increase that is triggered elsewhere, or reductions that would have occurred regardless of the proposed action.”)).

order the fulfill contract commitments and involve the deployment of generation not tracked under these systems. (*Id.*) If the backfilling generators have higher emission rates than the units identified in the contract, emissions could increase rather than decrease.

Acadia Center agrees with this conclusion, and suggests the Department implement appropriate safeguards that could detect whether such shifting or backfilling is undermining the intent of the Proposed PPAs to secure greenhouse gas reductions in line with the statute.

II. **The Department Should Impose A Monitoring and Verification Protocol to Address Both Shortcomings of the PPAs**

Although Acadia Center agrees with the Attorney General's conclusion the Proposed PPAs' "lax requirements undermine the original intent and purpose of the solicitation" to purchase incremental energy (Br. AGO at 17), and Sierra Club's conclusion that the Proposed PPAs fail to ensure an environmental benefit in the form of real world greenhouse gas emissions (Br. Sierra Club at 12), it disagrees on the appropriate remedy that the Department should apply to address these issues. Both issues should be addressed through a process that would credibly and transparently document, monitor, and affirm the incrementality of energy deliveries and the regional greenhouse gas emissions impacts.

In New England and New York, there are many examples of legislative, regulatory and market tools in use that prevent issues such as attribute double-counting and leakage that would otherwise undermine regulatory goals. These tools include: measurement, monitoring and verification protocols under various state Renewable Portfolio Standards (RPS), the Regional Greenhouse Gas Initiative (RGGI) and other cap and trade programs; and reliance on transparent independently operated attribute tracking systems like the NEPOOL GIS and NYGATS that encompass and account for the attributes of all internal generation plus imports and exports for a control area.

However, Hydro Quebec, which is interconnected to New England, New York, Ontario, New Brunswick, and Quebec, has no such comprehensive, system-wide tracking system or other form of transparency that would allow the verification of the regional carbon benefits of the Proposed PPAs. HQUS's ability to arbitrage between interconnected markets in the northeast region of Canada and the US could erode or erase the carbon benefits purchased by Massachusetts ratepayers in the Section 83D procurement.

The ideal solution would be for Quebec to implement a comprehensive attribute tracking system that is compatible and equivalent to the NEPOOL GIS or NYGATS and resolve both issues through appropriate tracking. In the absence of a GIS equivalent in Quebec, a public "disclosure label" for the energy under the 83D contract and flowing over the NECEC line will go a significant way to addressing these concerns.

Acadia Center believes that the Department should require the creation of a stakeholder-driven process that would result in a system to verify and track energy deliveries and regional GHG emission benefits over the course of the contract. Doing so would both satisfy Section 83D(j)'s requirement that the Department ensure that an appropriate tracking mechanism will accurately measure the progress of achieving GWSA goals and enhance transparency through the use of a publicly accessible "energy and emissions data disclosure label". The label, its inputs and protocol developed through a stakeholder working group should demonstrate in an independently verifiable manner the incremental energy and regional carbon reduction benefits that are the purpose of the contract and transmission line are actually being delivered. The disclosure label would be based on a combination of energy and emissions data from publicly available sources, as well as confidential HQ system data, held in trust by the entity who develops and publishes the label and periodic reports, an approach similar to the operation of the NEPOOL GIS. This process would

allow the Department and interested parties to affirm whether HQUS operations and energy market participation practices (including imports and exports between New England and other adjacent control areas) are achieving the region-wide greenhouse gas emissions reductions estimated in regulatory dockets, evaluate whether leakage is impacting the intent of the Proposed PPAs, and verify that the energy delivered under the contract is incremental to historical deliveries under the spot market.

III. Conclusion

For the reasons stated above, Acadia Center respectfully requests that, if the Department determines that approval of the Proposed PPAs and Proposed TSAs is otherwise appropriate, it directs the EDCs to work with HQUS to create, through a public stakeholder working group, an “energy and emissions data disclosure label” that will demonstrate in an independently verifiable manner whether the incremental energy and regional carbon reduction benefits are being delivered.

Respectfully submitted,
ACADIA CENTER

By its attorney,

/s/ Amy E. Boyd

Amy E. Boyd (BBO #667482)
ACADIA CENTER
31 Milk Street, Suite 501
Boston, MA 02109
617-742-0054 x102
aboyd@acadiacenter.org

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CERTIFICATE OF SERVICE

I hereby certify that on April 3, 2019, I electronically served the foregoing documents upon each person identified in the Department's service lists for the above-captioned proceedings.

/s/ Amy E. Boyd

Amy E. Boyd (BBO #667482)
ACADIA CENTER
31 Milk Street, Suite 501
Boston, MA 02109
617-742-0054 x102
aboyn@acadiacenter.org