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For a thriving New England

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By Electronic Mail (frank.swigonski@ferc.gov)

July 16, 2019

Mr. Frank Swigonski
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Staff-Led Public Meeting Comments of Acadia Center, Conservation Law Foundation, Natural Resources Defense Council, and Union of Concerned Scientists (Dockets No. EL18-182-000 et al.)

Dear Mr. Swigonski,

Enclosed please find a written copy of the comments I delivered yesterday in the above-referenced staff-led public meeting. Thank you again for your time and attention as well as for that of your colleagues and the Commissioners. Please contact me (617-850-1777; dismay@clf.org) if you have any questions.

Sincerely,

David Ismay
Senior Attorney
Conservation Law Foundation

Encl.

cc: sarah.mckinley@ferc.gov

Dockets No. EL18-182-000 et al.

Public Meeting Comments of Acadia Center, Conservation Law Foundation, Natural Resources Defense Council, and Union of Concerned Scientists

Good afternoon, my name is David Ismay. I am a Senior Attorney at Conservation Law Foundation, an environmental non-profit based in Boston. CLF is a Governance-Only Member of NEPOOL's End User Sector and today I have the pleasure to also be speaking on behalf of three other such End User Members: the Acadia Center, the Natural Resources Defense Council and the Union of Concerned Scientists.

Although we share many – if not all – of the concerns voiced just a few minutes ago by Ms. Delaney on behalf of our fellow End Users, Environmental Defense Fund, the Massachusetts Attorney General, and The Energy Consortium, our comments today are focused more narrowly on ISO-NE's treatment of renewable and other state sponsored clean energy resources in this energy security effort.

The core point we would like to highlight for FERC's consideration is the extent to which ISO-NE's proposals appear to consistently underestimate the ability of state-sponsored clean energy resources to materially contribute to providing reliable energy year-round, and particularly during the winter months of concern regarding fuel security. And because ISO-NE's proposed new market constructs generally exclude state sponsored resources, we are very concerned that they risk exacerbating the problem – that is, worsening regional energy security, rather than improving it – while continuing to impose unnecessary costs on energy customers across New England.

Indeed – at various times in ISO-NE's presentation today, it seemed like variable renewable generation is being cast as part of the problem. But the data tells another story – that is, that renewables are instead part of the solution.

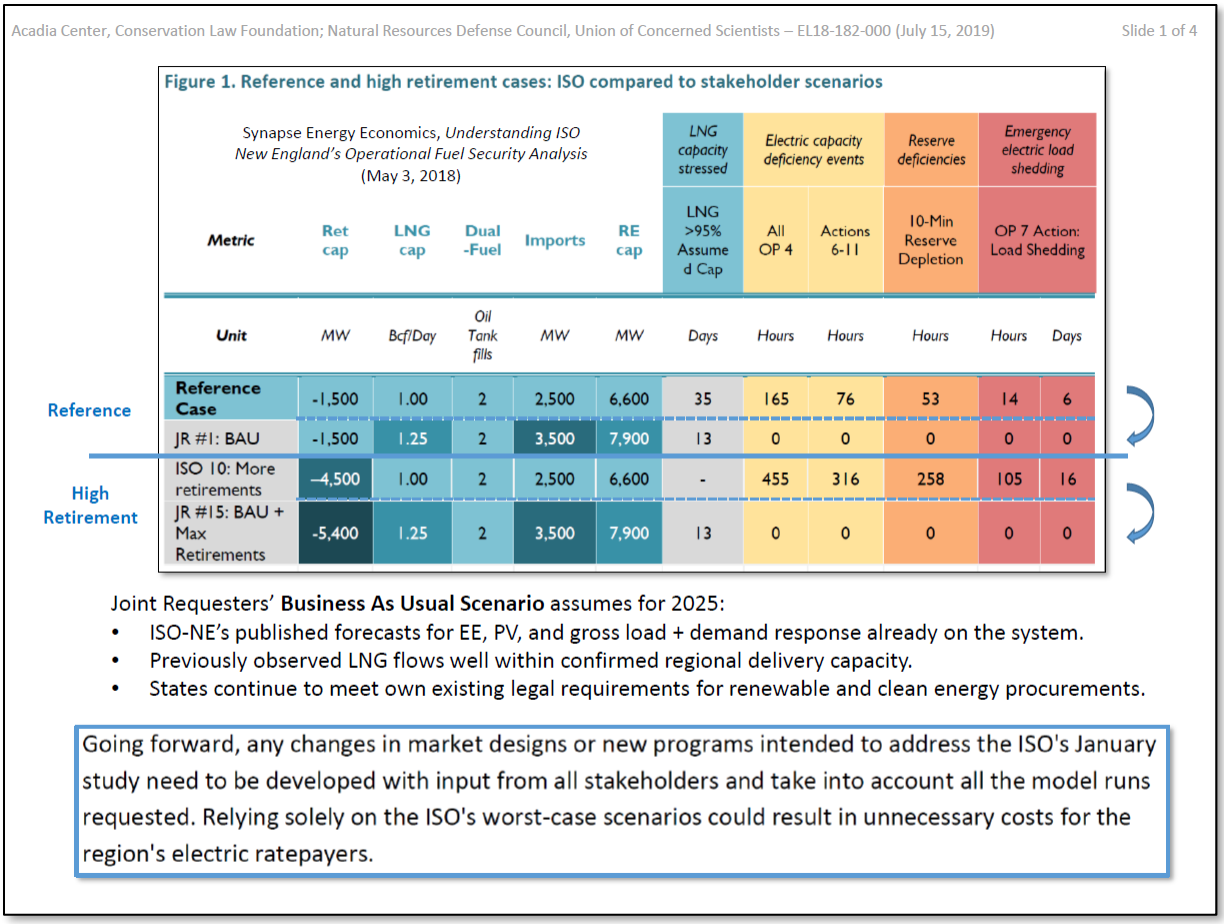
Today I want to briefly highlight four of those data points. And I have one slide to help illustrate each:

(Slide 1) The first data point comes from the beginning of ISO-NE's winter energy security effort – at a time when ISO-NE described its main concern not as energy security 365 days every year, but instead as the availability of fuel during the particularly deep and long winter cold snaps that New England experiences, on average, only once or twice every 7 to 10 years.

Developed without any stakeholder input, ISO-NE's original fuel security analysis excluded from its base case legally mandated state procurements for clean generation, as well as existing LNG deliverability and the ISO-NE's own 2025 forecasts for Energy Efficiency, Demand Response, solar power, and load. The net effect was to overstate the potential fuel

security problem in New England and understate the ability of state sponsored clean energy resources to continue to help solve the problem by decreasing electric and thermal loads while increasing the region's fuel diversity.

When those assumptions were corrected, a different picture emerged, as this slide reminds us:



Acadia Center, Conservation Law Foundation; Natural Resources Defense Council, Union of Concerned Scientists – EL18-182-000 (July 15, 2019) Slide 1 of 4

Figure 1. Reference and high retirement cases: ISO compared to stakeholder scenarios

Synapse Energy Economics, *Understanding ISO New England's Operational Fuel Security Analysis* (May 3, 2018)

	Metric	Ret cap	LNG cap	Dual -Fuel	Imports	RE cap	LNG capacity stressed	Electric capacity deficiency events		Reserve deficiencies	Emergency electric load shedding	
							LNG >95% Assumed Cap	All OP 4	Actions 6-11	10-Min Reserve Depletion	OP 7 Action: Load Shedding	
	Unit	MW	Bcf/Day	Oil Tank fills	MW	MW	Days	Hours	Hours	Hours	Hours	Days
Reference	Reference Case	-1,500	1.00	2	2,500	6,600	35	165	76	53	14	6
	JR #1: BAU	-1,500	1.25	2	3,500	7,900	13	0	0	0	0	0
High Retirement	ISO 10: More retirements	–4,500	1.00	2	2,500	6,600	-	455	316	258	105	16
	JR #15: BAU + Max Retirements	-5,400	1.25	2	3,500	7,900	13	0	0	0	0	0

Joint Requesters' **Business As Usual Scenario** assumes for 2025:

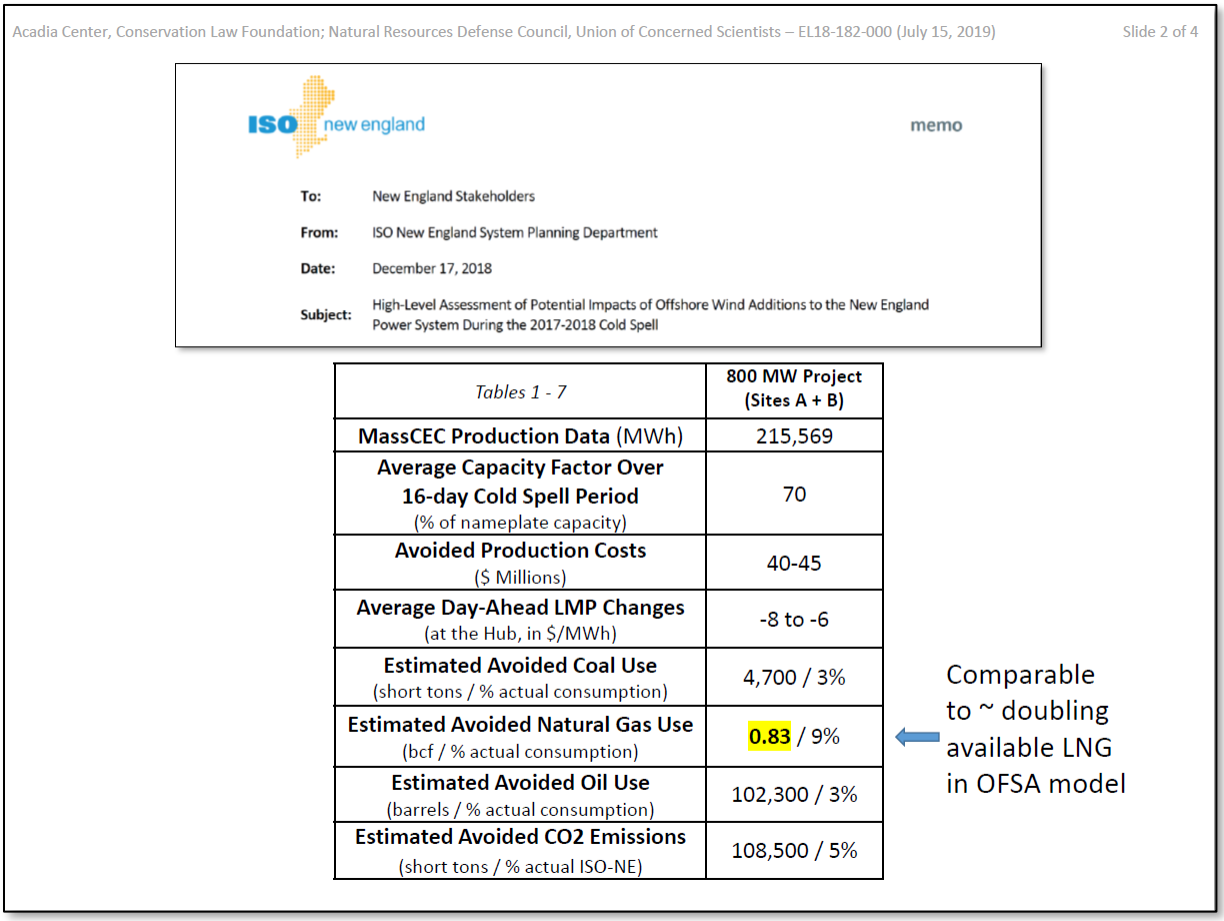
- ISO-NE's published forecasts for EE, PV, and gross load + demand response already on the system.
- Previously observed LNG flows well within confirmed regional delivery capacity.
- States continue to meet own existing legal requirements for renewable and clean energy procurements.

Going forward, any changes in market designs or new programs intended to address the ISO's January study need to be developed with input from all stakeholders and take into account all the model runs requested. Relying solely on the ISO's worst-case scenarios could result in unnecessary costs for the region's electric ratepayers.

ISO-NE's own model indicated that in a business as usual future that *includes* all the clean resources the states have successfully been procuring, we can expect the grid to remain reliable, even in the coldest winters and with a maximum level of near-term future retirements. And as you can see at the bottom of this slide, we cautioned then, as did other stakeholders, that if the ISO's market design effort failed to account for these state-required clean energy resources – EE, DR, solar, wind, imported hydro – businesses and families across New England would likely be saddled with unnecessary and unreasonable costs.

(Slide 2) – The second data point we'd like to highlight came midway through the ISO-NE's current process, in the winter of 2018. We learned more, then, about the ability of state sponsored resources – particularly offshore wind – to provide winter fuel diversity and to directly help solve the ISO-NE's winter energy concerns. This analysis speaks directly to

one of Commissioner Glick's first questions today to ISO-NE staff regarding the ability of clean energy resources to help improve New England's winter fuel security.



Acadia Center, Conservation Law Foundation; Natural Resources Defense Council, Union of Concerned Scientists – EL18-182-000 (July 15, 2019) Slide 2 of 4

ISO new england memo

To: New England Stakeholders

From: ISO New England System Planning Department

Date: December 17, 2018

Subject: High-Level Assessment of Potential Impacts of Offshore Wind Additions to the New England Power System During the 2017-2018 Cold Spell

Tables 1 - 7	**800 MW Project (Sites A + B)**
MassCEC Production Data (MWh)	215,569
Average Capacity Factor Over 16-day Cold Spell Period (% of nameplate capacity)	70
Avoided Production Costs ($ Millions)	40-45
Average Day-Ahead LMP Changes (at the Hub, in $/MWh)	-8 to -6
Estimated Avoided Coal Use (short tons / % actual consumption)	4,700 / 3%
Estimated Avoided Natural Gas Use (bcf / % actual consumption)	**0.83** / 9%
Estimated Avoided Oil Use (barrels / % actual consumption)	102,300 / 3%
Estimated Avoided CO2 Emissions (short tons / % actual ISO-NE)	108,500 / 5%

Comparable to ~ doubling available LNG in OFSA model

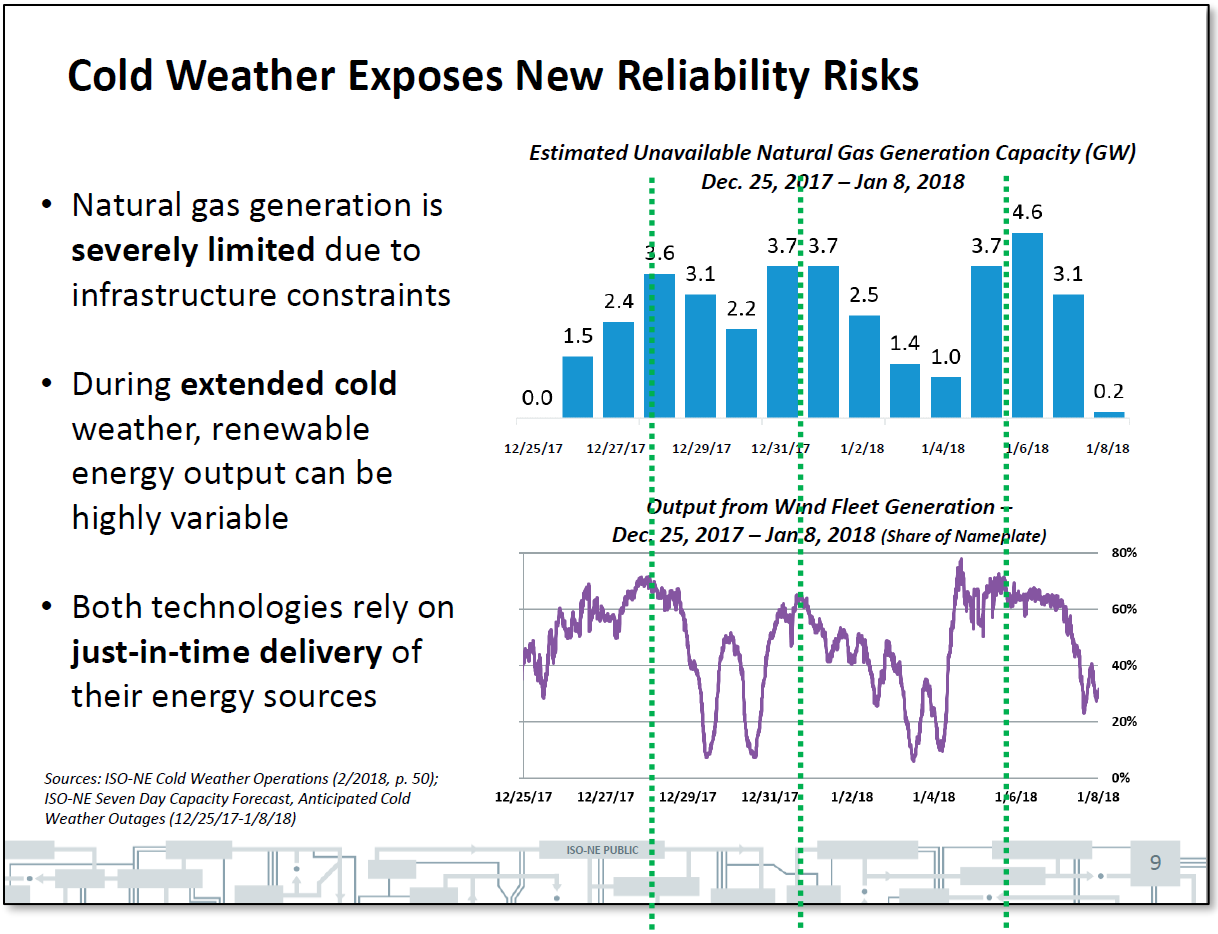
Responding to a request from the Massachusetts Clean Energy Center (MassCEC), ISO-NE confirmed that, had it been operating at the time, the 800 MW of offshore wind that be brought online for Massachusetts in the next two years would have provided significant energy security and cost benefits during a representative "cold-snap of concern" experienced during the 2017-2018 winter.[1]

Of particular note here, as you can see, is the ability of offshore wind to displace a huge volume of fossil-fueled power – cost-effectively, saving customers across New England $40M to $45M – and exactly when the region needs it most. As you may recall, ISO-NE's fuel security analysis is very sensitive to the amount of non-pipeline gas available to the system. By displacing significant volumes of gas-fired mega-watt hours, offshore wind will relieve a

[1] ISO-NE's "High-Level Assessment of Potential Impacts of Offshore Wind Additions to the New England Power System During the 2017-2018 Cold Spell" analysis is available here: https://www.iso-ne.com/static-assets/documents/2018/12/2018_iso-ne_offshore_wind_assessment_mass_cec_production_estimates_12_17_2018_public.pdf

significant amount of pressure on the system, comparable – in ISO-NE's model – to *doubling* the amount of LNG available to the region.

I want to highlight that this is the same cold snap that ISO-NE (Matthew White) discussed on slides 7 and 9 of its presentation today. I urge the commissioners and staff to look at the graphs on slide 9 closely:

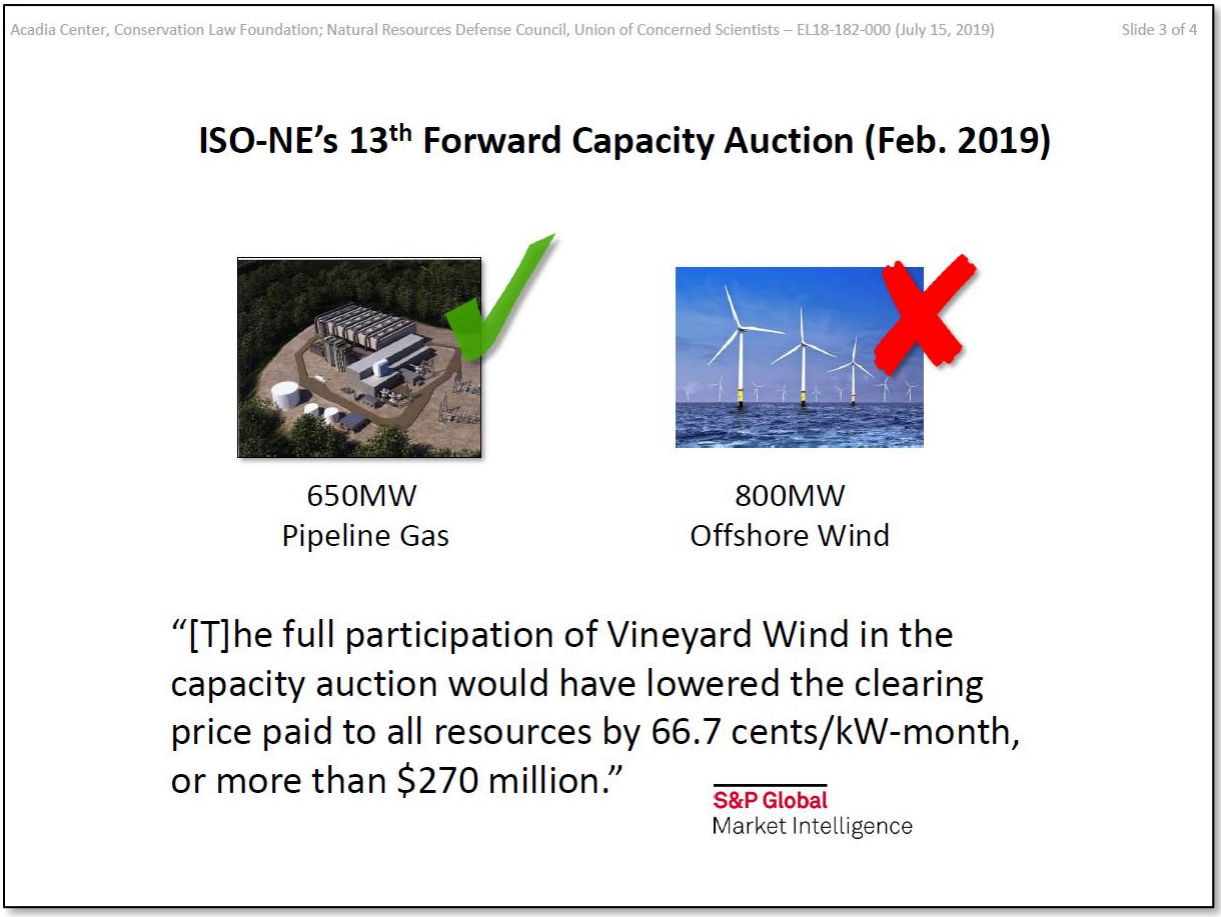


ISO today treated the two graphs separately – using the graph on top to show that pipeline gas for gas-fired generators was constrained during the 2017-18 cold snap; and using the graph on bottom to emphasize that wind power generation during the cold snap was variable.

But if you look closely, there's a correlation (I've added dashed green lines to ISO-NE's graphic) that calls for exactly the type of analysis that Commissioner Glick asked for this morning – and it *matches* the analysis that ISO conducted for the MassCEC: Wind – particularly offshore wind – is a solution, providing a high output of cost-effective power exactly when the region's pipelines were most constrained. Fuel diversity brings fuel security, a finding that is consistent with the corrected operational fuel security analysis that I just discussed.

The clean energy resources that the New England states are procuring more and more each year, can and will provide the kind of winter energy diversity and winter energy security that ISO has told us our regional electricity system needs. That raises a serious question: Why are they not part of ISO's Chapter 3 solution set?

(Slide 3) – The third data point for consideration centers on the results of ISO-NE's latest Forward Capacity Auction (FCA) this past February. As far as winter energy security is concerned, those results are troubling and raise serious concern regarding the direction and scope of ISO-NE's Chapter 3 market reform, which is not proposing any material adjustment to the Forward Capacity Market (FCM).



As FERC is likely aware, as far as the procurement of new resources is concerned, the net effect of ISO-NE's most recent capacity auction, together with its new Competitive Auctions with Sponsored Resources (CASPR) mechanism, was to do two things:

First, the FCM procured a large new, pipeline gas power plant – exactly the type of generator that ISO's analysis shows to be problematic for winter energy security; and second: the FCM and CASPR worked to effectively exclude almost all of Massachusetts'

initial 800MW offshore wind procurement which we just discussed the winter energy benefits of.

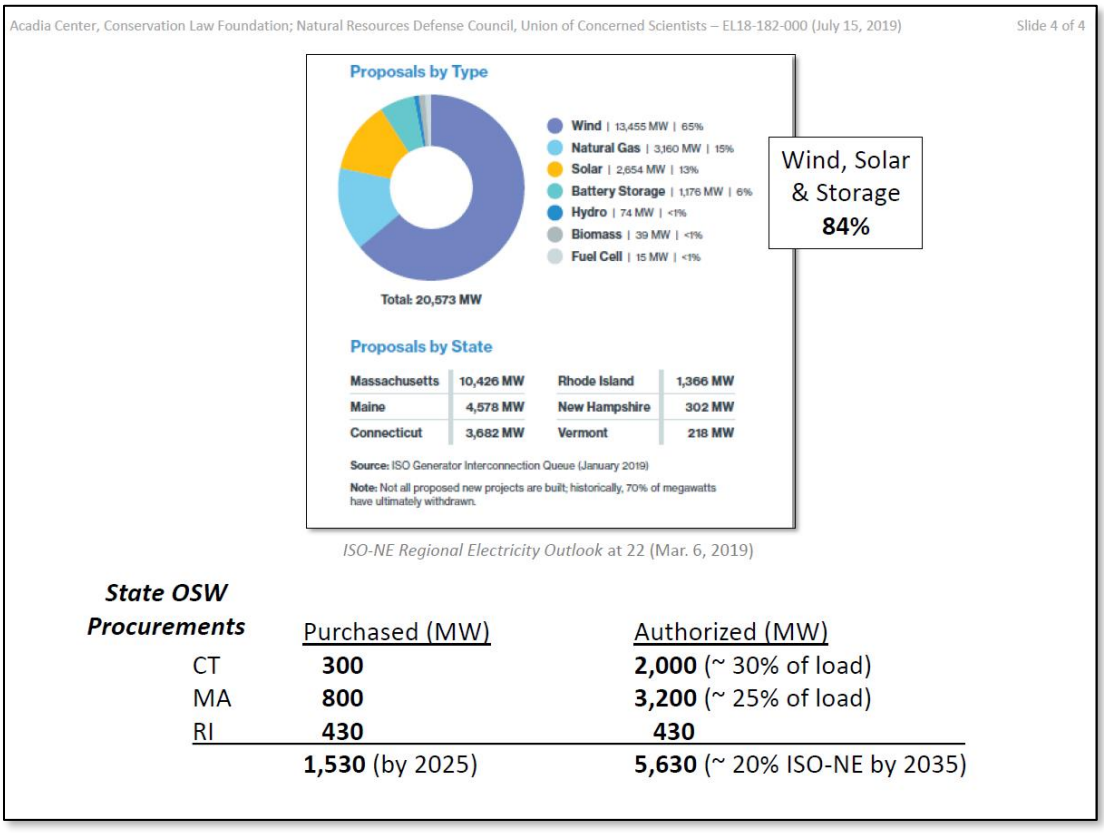
If cost-effective winter energy security is the goal, the outcome of ISO-NE's most recent Forward Capacity Auction appears to run exactly *contrary* to that goal, excluding a resource that ISO's own analysis has demonstrated will dramatically aid winter energy security in favor of one that will almost certainly make it worse . . . all while imposing significant extra cost – hundreds of millions of dollars – on businesses and families across New England.

We think this is an important point for FERC to keep in mind, particularly after hearing ISO-NE's presentation on impact analysis this morning – and it speaks to Commissioner Glick's question to Commissioner Dykes about potential conflicts with state policy.

When speaking to its slides 46 and 47 ("Solutions Will Ultimately Impact the Capacity Market"), ISO-NE (Chris Parent) explained that it expects that its new "Chapter 3" options market will affect the FCM, tending to make it harder for resources without stored fuels – that is, resources that cannot offer to sell ISO-NE's Chap. 3 options – to clear the FCA, while making it easier for those that do (the older, higher-cost, higher heat rate plants in ISO-NE's slide 25 category (b) and (c)). That reflects a continuation of the same issue my slide is intended to frame.

These new market mechanisms are not designed for New England's future, which will be dominated by renewables. And right now, there appears to be a strong risk that ISO-NE's proposed market solution will set-up a negative feedback loop none of us wants.

(Slide 4) Finally: the near, mid-, and long-term future of the New England grid is not in doubt.



Renewables dominate ISO-NE's interconnection queue, and the states are actively procuring huge quantities of offshore wind.

As we understand FERC's order, ISO-NE should be designing a long-term market solution for the region. And indeed today, ISO-NE (Matthew White) stated that it was ISO-NE's goal to design a "long-term market framework."

But if ISO-NE's Chap. 3 market design doesn't expressly incorporate state-procured clean energy resources, and fails to engage their proven winter reliability value, we are concerned that ISO-NE's effort will at best be temporary – yet another ineffective "band-aid" – and at worst, will potentially allow the fuel security problem to worsen.

In summary – we're concerned that ISO-NE is re-designing its markets for the wrong future. New England's future is not the "energy constrained" one that ISO-NE has described. Instead it is one that – thanks to aggressive and to-date successful state procurements required by valid state climate and energy law – will have abundant, zero marginal cost clean and renewable energy.

Thank you very much for your time today, and for allowing us to offer these comments.