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Sent: Wednesday, November 13, 2013 8:35 PM
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Subject: FAQs/Assertions & Q on timing and timelines

1.) **FAQs:** Please find attached a revised FAQ/assertion document that incorporates feedback recieved. Please let us know if there is any other work you would like us to do on this document.

2.) **Question on timing and timelines**: In talking with ISO on follow-ups to your Nov 7th conversation, a question arose about the specifics associated with state interest in fast action on pipeline/transmission and development of a timeline (with decision points). Is there is a date or timeframe by which states want to achieve some specific milestone on pipeline/transmission development? If anyone has a simple answer to that (the date and milestone) it would be helpful. I do not intend to trigger here a significant amount of email traffic on this so if the answer is not straightforward, we can park this question for discussion.

Thanks -

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FREQUENTLY ASKED QUESTIONS/ASSERTIONS

State facilitation of transmission to enable hydropower, renewable power and gas pipeline development

TRANSMISSION TO ENABLE HYDRO AND/OR RENEWABLE POWER

1. The New England States collectively created a competitive wholesale energy market for all resources and in this context, any out of market activity to facilitate resource development should be open to all resources.

   Reply: Most states have state statutory requirements related to clean energy requirements and in some cases, to reduce carbon emissions and to encourage fuel diversity. The competitive wholesale market is not designed to select or encourage resources that enable states to meet clean energy or environmental requirements. Regional market rules that are designed to be resources neutral and subject to federal jurisdiction have not to date adequately accommodated state statutory requirements.

2. The expectation that a transmission line to enable the addition of large amounts of hydropower to New England's resource mix will reduce consumer costs is flawed if one considers that recent hydro contracts have been structured to float with market prices (capped at upper and lower bounds).[1]

   Reply: There are a variety of ways to structure the proposed transaction, but even if it turns out that a hydro contract is around the current market price, long-term contracting would allow states to achieve carbon objectives at prices customers are currently paying to carbon-emitting generation.

3. Importing large quantities of power, even at market-based prices, will result in lower energy and capacity prices within New England forcing native generation in New England to retire early. This will make the region dependent on imports flowing over long-distance transmission lines for reliable service and will ultimately make the region less reliable.

   Reply: The region is already dependent on natural gas imported from outside New England, not to mention its dependence on other imported fossil fuels. Canadian imports are a way to diversify the region's energy

[1] For example, the Vermont Department of Public Service noted that under the contract with Hydro-Quebec "After the first year, the price of power under the HQ PPA is derived by a formula based on regional electricity prices and the movement in general of price levels observed across the U.S. economy, subject to a damping feature that limits the change from the prior year's price." Order dated 4/15/2011 in Docket 7670.

supply and reliance on remote fuel sources. In that light, Canadian imports can help to improve the reliability of the system. With pending FCM reforms and evolving gas-electric interactions, it is premature to speculate about which generation resources will retire or emerge from this period of transition.

4. Why seek to develop a transmission project now rather than wait and use the Order 1000 Public Policy Process that ISO-NE will administer?

   Reply: Implementation of Order 1000 is likely some time away, probably not until early 2015 for public policy projects. Furthermore, the process, as ordered by FERC,[2] limits the states' ability to drive the process and may result in costly projects that in the states' judgment are not the preferred or most cost effective means to fulfill public policy goals. Further, under Order 1000, FERC has positioned itself as the ultimate arbiter if there is disagreement about state policies and/or the specific execution of them. Authority to implement state laws properly rests with states and so using a process other than Order 1000 makes the best sense from the states' perspective.

5. Why use of out-of-market contracts - within the context of New England's competitive energy market - as opposed to developing other mechanisms that would allow existing generators to build public policy-related costs into the current market construct?

   Reply: Long-term contracts have been an effective tool through which states can satisfy specific policy objectives within specific timeframes and at costs states determine to be acceptable. To date, no market mechanism has proved able to deliver the same or similar ends.

6. Over their lifetimes, newly flooded Canadian reservoirs may emit something on the order of two-thirds of the greenhouse gases emitted by natural gas power plants so states should not fund a transmission line to enable increasing amounts of imported hydro.

   Reply: States will need power from various types of renewable and low carbon resources to meet clean energy and greenhouse gas reduction goals. Hydropower is a dispatchable, consistent low-to-no carbon resource that could help balance intermittency of other renewable resources. Finally, as to the assertions about reservoir greenhouse gas emissions, there are

[2] *See* Request for Rehearing of NESCOE and the Five New England States, Filed June 17, 2013 and pending before FERC (challenging FERC's rejection of a proposed New England process where NESCOE and the states would play a central role in the evaluation and selection of public policy projects), at http://www.nescoe.com/uploads/1000_Rehearing_Request_ER13-193_and_196_Final.pdf.

certainly existing Canadian supply sources that have minimal greenhouse gas emissions and other analysis concludes that the two-thirds assertion is wrong in any case.

7. Imports from Hydro-Quebec are not tagged as to the origin of the resource and imported power could include nuclear or fossil fuel-powered electricity.

   Reply: The Governors/Eastern Canadian Premiers July 2013 Resolution identified the need to consider a resource tracking system.

8. Why build new transmission to distant resources that have associated carbon emissions when local renewable resources located much closer to load need new transmission and would provide carbon-free energy?

   Reply: The region needs hydropower *and* local renewable resources to meet clean energy and carbon reduction goals. Further, depending on its configuration, a new transmission line to distant hydropower resources could facilitate the development of New England's local renewable resources. The greater potential quantity of hydropower that states could access with new transmission would provide a consistent supply of low-to-no carbon energy that could help balance intermittent local renewables like wind and solar.

9. Building new transmission to distant resources will have negative environmental and land use impacts. Why not focus on local, distributed renewable resource development instead?

   Reply: New England will need to access all kinds of renewable resources in order to significantly reduce the region's reliance on carbon-emitting fossil fuels. Hydropower provides renewable energy at scale and at a reasonable cost. A diverse portfolio of generating resources also helps to resolve issues related to the region's over dependence on natural gas as a fuel supply and, in this manner, provides reliability benefits.

10. In recent years, the daily energy flowing into the New England wholesale electric system from wind generation has increased meaningfully. States should not interrupt continued development of local, no-carbon renewable resources by flooding the market with hydropower from Canada over a new transmission line.

    Reply: To achieve clean energy and environmental objectives, the region needs an array of clean energy resources. There is no evidence that increasing hydro imports will impede development of renewable resources needed to satisfy state RPS requirements or that incremental hydro imports will displace state interest in supporting local no carbon power resources. Further, large-scale hydro does not generally qualify to satisfy or

otherwise reduce RPS requirements that support a host of renewable resource technologies.

11. If states select a geographic area in which to place a new transmission line, states will inherently select generation "winners" that may be not be the least cost way to achieve objectives.

    Reply: States plan to collaborate to find the most cost-effective overall means to transport no and low carbon power to load centers and achieve diverse policy objectives at a cost the states determine to be reasonable.

12. Why spend states' limited resources to further the development of Canadian resources instead of developing domestic resources located closer to load?

    Reply: To achieve aggressive carbon reduction goals, the region will need diverse no and low carbon resources; the suggestion that taking advantage of plentiful low carbon resources located nearby in Canada entails a "subsidy" or has to be done at the expense of developing local resources is a false choice.

13. If states intend to sign long-term contracts with power to flow over new transmission, states will create the risk of exposing consumers to significant amounts of stranded investment, assuming the costs of renewable power continue to decline over the 15 or 20-year contract period.

    Reply: No investment decision is risk-free. Without long-term contracts, the resources required to satisfy states' clean energy and environmental statutory requirements are not getting built at adequate levels. Long-term contracts allow states to determine the level, timing and prices of resources that state officials determine to be reasonable.

14. If states do not sign long-term contracts for power to flow over new transmission, states will create the risk of consumers investing in underutilized infrastructure (so-called transmission to nowhere) or may enable greater transmission system access for fossil fuel-powered generation.

    Reply: First, a multi-state collaborative approach to funding transmission does not preclude one or more states from also signing long-term contracts with specific generation resources. Second, renewable power like wind and hydro has to be developed where the natural resource exists, which is often remote from population centers and so access to transmission is often a barrier to renewable resource development. Providing access to transmission levels the playing field for renewables.
    In addition, the transmission investment will be targeted to areas rich in renewable resource potential and can be located close to the interconnection point of these renewable resources.

15. Extremely long-distance transmission such as that to reach Canadian resources creates power system vulnerabilities.

    Reply: Vulnerabilities exist throughout the power system and are managed continually in real-time and over the long-term with proper planning. The benefits of new transmission to access renewable resources outweigh the costs of managing any vulnerability. Further, hydropower adds to the diversity of New England's power generation fleet and for that reason would provide an increased measure of reliability benefits.

16. New England has plans to build $11 billion in new transmission over the next six years. Why do we need additional transmission to import hydro?

    The $11 billion in new transmission that is now being planned or built is needed to meet federal grid reliability standards. New transmission to access renewables will bring the energy from remote resources to load centers in New England and should have an attendant reliability benefit by diversifying the fuel portfolio.

17. Market participants have already proposed projects on a large scale, most recently a project running from Quebec to Vermont, to enable a significant incremental expansion of hydropower into New England. If the market is responding to this demand, why not let the market take its course rather than disrupt market actions and shift the investment risk to consumers?

    Reply: There is no guarantee that a proposed project will be developed, financed and constructed. Most states have statutory obligations to promote clean energy resources and some are required to satisfy carbon emissions requirements. To date, the market has not delivered the infrastructure necessary to ensure states meet their objectives. While market-driven investments are the preferred means of advancing projects, the market is not an end in itself. The start and stop nature of market activity cannot unreasonably inhibit the ability of states to advance and satisfy critical public policies. Also, the states may well use competitive mechanisms to facilitate the development of additional transmission.

18. If the New England States intend to satisfy some or all of the RPS requirements through long-term contracts for power that would flow over new transmission, suppliers would be left not knowing how much renewable energy they need to purchase to satisfy RPS requirements (v. how much will be satisfied via long-term contracts.)

    Reply: While long-term contracts may affect the market for RECs, suppliers will still need to meet their RPS requirements. To the extent that

state incentives for renewables increase the availability of RECs, suppliers may be able to meet their RPS requirements at lower cost.

19. Moving to a system of state-procured power transfers investment risk from developers/shareholders to captive ratepayers.

    Reply: To date, the current market system has not resulted in adequate private sector investment in resources the states require to satisfy energy and environmental objective or requirements.

20. If states intend for contracted power to flow over new transmission lines and for utilities to be counterparties to such contracts, utilities should not have their companies' balance sheet worth encumbered by long-term contracts with renewable resources. Alternatively, utilities should be compensated for adverse financial impacts to utility shareholders.

    Reply: Long-term contracts for transmission and/or hydro and/or renewable resources are intended to remove a barrier to new resource development and deliverability. Long-term contracts that utilities are required to enter into should not have an adverse impact on a utilities' financial position, but in the event that adverse impacts arise, utilities should approach their regulators to discuss the issue and whether or what type of remedy is warranted.

STATE FACILITATION OF NATURAL GAS PIPELINE DEVELOPMENT

1. State involvement in expanding one pipeline will benefit the generators connected to that pipeline, giving them increased access to more reliable and low priced gas than generators that are connected to other pipelines. Such state action would favor of specific natural gas-fired generators and distort the competitive market.

   Reply: Pipelines are evolving all the time. Whether it's states or LDCs or marketers that cause the pipeline to expand, the same would be true. Certain generators interconnected to Algonquin, for example, will benefit from the planned AIM project. Moreover, bringing additional gas into the New England market at any location will have the effect of reducing the cost of gas throughout the market due to displacement.

   Ultimately, pipeline constraints are causing New England gas and electric consumers to pay far more for natural gas than consumers outside New England, and its putting New England at a competitive disadvantage.

2. Various pipeline companies have proposed new infrastructure in New England. The states should allow the market to work and not interrupt private sector investment decisions.

   Reply: That New England needs more natural gas is not news and to date, there is no new pipeline in the ground. Until there is, New England's power system is vulnerable and customers are paying far more than customers in other areas of the country with greater access to natural gas. Moreover, it is unclear that the announced projects will in fact come on line, or be sufficiently subscribed to bring the electricity and gas costs in New England in line with gas-rich regions of the country.

3. Why not rely on the wholesale electricity market and wait to see if Forward Capacity Market changes result in increased pipeline contracts?

   Reply: Many experts have asserted that FCM PI redesign alone will not result in more generators signing up for long-term firm pipeline contracts. In the meantime, electricity consumers are paying much more than they would if the region had greater access to natural gas. In fact, in theory, more natural gas in New England could ultimately reduce the costs of FCM PI, if it is implemented, by reducing constraint and scarcity events.

4. If the states cause pipeline capacity to be expanded and acquire firm rights over the pipelines, who gets access to those firm rights and how?

   Reply: Most likely, the services of an independent third party with experience in managing these types of assets to their highest value will be retained to ensure the capture of that value for those who bear the cost of acquiring the capacity. FERC rules already provide competitively neutral capacity release markets.

5. Some states carbon reduction requirements over the long-term require investment in low or no carbon renewable resources, not more carbon-emitting natural gas. State investment in natural gas infrastructure runs counter to long-term environmental objectives.

   Reply: Natural gas-fired resources emit carbon, but less than older, less efficient coal- and oil-fired resources. Further, natural gas-fired resources are generally considered a good way to balance the intermittent nature of some renewable resources. But for electric generation purposes, natural gas can be viewed as a transition fuel, providing a window of opportunity to develop renewable resources. And, to the extent that bringing in more natural gas to New England enables fuel oil heating customers to switch to gas, it will have emissions benefits.