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Subject: RENEW Northeast feedback on the CAR Scope
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Attachments: [RENEW Overlapping Impact Standard Feedback.pdf](#)
[FCM Qual and Overlap Std RC Mta 2012-06-20 - Final.pdf](#)

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Hi Chris and team,

Thank you for your accelerated presentation sharing high level thoughts on the possible scope for the CAR project and the chance to provide feedback. RENEW Northeast provides the following feedback for your consideration:

Mapping out the follow-up scope items - There is a lot of work to do on capacity market reform and we recognize that not everything that is a good idea can be done on the first pass. As many stakeholders voiced at the July 10 meeting, as ISO refines the scope and determines which items will not be part of CAR, it would be very helpful to understand whether these are items that ISO can commit to pursuing in a follow up project and what the timeline for that might be. If ISO determines that something we would like to see in the scope is a good idea but can't be implemented until CCP20, our reaction would be very different (and more positive) than if ISO simply said the item was not going to be in scope for CAR.

How ISO answers the question of what has the most value to the region could inadvertently pick winners and losers - As ISO decides what has the greatest regional value (scope objective 2), if it focuses narrowly on how large an existing class of resource is, it could inadvertently wind up neglecting to address significant aspects of accreditation modeling for growing resource classes. This could have the unintended consequence of picking winners and losers in the market by focusing on the resource types with the most existing MWs and spending little effort on those that are currently smaller but have the potential to grow rapidly. The way ISO considers this value judgement could end up creating barriers to the clean energy transition (e.g., there may be a more dollars at play on day 1 for small corrections to the accredited value of combined cycle plants than for batteries right now, but the share of batteries in the region is expected to grow rapidly in the coming years and there is a need to set proper market signals for these resources as they are developed so they can make reasonable assumptions about what their future accreditation will be). If the accreditation portion of the CAR project is not able to accurately accredit both significant existing resource classes and those that are poised for growth it will not send proper price signals to the market.

Core Scope: Prompt Market - Among the questions that ISO noted would need to be answered as part of the design of the prompt market is what new resources have to do to be eligible to participate. While the prompt market will significantly benefit regional reliability by reducing the participation of "phantom" resources, RENEW still believes that the market must remain open to resources that are credibly expected to achieve commercial operation between the qualification determination date (whenever that may be) and the beginning of the capacity commitment period. Given the much shorter period of time between these two dates,

the uncertainty related to such a resource's critical path schedule should be dramatically lower than in the current forward market, achieving the goal of reducing phantom resources while still enabling new resources to compete in the market without delay.

Core Scope: Accreditation - Within the core scope item related to accreditation, we appreciate ISO's openness to continuing to examine and improve upon the accreditation framework that was developed as part of the suspended RCA project.

During the meeting discussion I pointed out that the RCA impact analysis results for energy storage showed much lower accreditation values than many expected or what's being seen in other regions like NYISO and PJM. I asked whether looking at unexpected results like that in an attempt to determine whether they are an artifact of how ISO is doing its modeling or a true reflection of the resource type's marginal reliability value falls within this core scope item. I think what I heard in ISO's response was that doing this kind of review and follow up on surprising impact analysis results does fall within the core project scope which I was pleased to hear. But what I couldn't tell was whether ISO considers the energy storage results we saw in the RCA impact analysis to be 'surprising' and worthy of a closer look in the CAR project design. Given the enormous interest and focus in the region on developing storage resources over the coming years, even small changes to these values could have a large impact on the trajectory of the region's future resource mix. While RENEW recognizes that energy storage, as with all other technology types, has limitations that impact its marginal reliability value, RENEW is concerned that the modeling methodology ISO is using may be under-counting that value when it comes to storage. In particular, looking at the load shape, how it is scaled, and the impact of bringing the system to 1-in-10 as part of the accreditation model are areas that we believe are worth a closer look to understand how they are influencing the model outcomes (specifically the duration of loss of load events) and whether the modeled risk (and marginal reduction to that risk) is aligning with the actual risk that is expected on our system in the coming year for which the accreditation is being performed.

RENEW also supports ISO looking at further modeling enhancements related to the accreditation process, and encourages ISO to include these in the core accreditation scope (or, barring that, to make clear commitments about when these enhancements will be addressed in follow-up projects). In particular, ambient temperature adjustments for thermal resources and correlated thermal generator outages are two areas that appear to offer high value to improving the accuracy of the marginal accreditation process and we believe must be included in the CAR accreditation scope. RENEW also had concerns about the co-located resource accreditation proposal that ISO shared towards the end of the RCA discussions and would support the simple adjustments to that process that we and some of our members suggested at the Markets Committee and in follow up communications.

Market constraint for limited gas supply - RENEW continues to support ISO's efforts to accurately model the limited gas fuel supply in the region when performing resource accreditation. The proposed market constraint for gas, as part of the seasonal market, appears to be a significant improvement and we appreciate that ISO continues to plan for this as part of the initial market reform effort.

What can be included in offer/bid prices - In ISO's presentation, the topic of what costs a capacity seller can include in their offer or bid prices under the prompt/seasonal market construct was included as an additional item that may or may not ultimately be in the CAR scope. As I said at the meeting, I do not know how a prompt/seasonal market could be

implemented without determining what costs can be included in the offers and bids. It seems that this must be included in the core design scope.

Modeling inflexible resources - RENEW strongly agrees with statements from the ISO and EMM recognizing that inflexible capacity resources (e.g., those with very long notification and start up times) provide less reliability value to the region than flexible resources, and continues to be concerned about the efficiency of a capacity accreditation system that does not recognize this difference. RENEW also acknowledges that the ISO's current modeling software does not recognize this important resource characteristic, as it assumes every resource is available in every hour that it is not on outage and has no ability to model unexpected variations in load or resource availability. RENEW believes that this is a critically important aspect of capacity accreditation that should be reflected in the ISO's model, but also understands that this presents challenges to implement due to the MARS limitations. RENEW strongly encourages ISO to map out a plan for how this can be addressed - what would be involved in implementing this modeling improvement, what resources would it take, what would the tradeoffs be in order to include it in the CAR scope for FCA 19. If through this evaluation ISO and stakeholders determine that the tradeoffs would be too high to implement this as part of CAR, RENEW requests that ISO map out how and when this effort can be implemented through a follow-on project. This would provide a proper signal to the marketplace that this reliability difference will be addressed by a date certain, even if not immediately.

Enabling competition between domestic capacity resources and imports behind a common transmission constraint - For ISO's consideration in mapping out capacity market improvements in future projects after CAR, we request again that the capacity market enable competition between domestic capacity resources and imports that are both behind a common transmission constraint internal to New England. Since the FCM began, the Orrington-South interface in Maine has been constrained, as the full quantity of existing capacity resources and New Brunswick import capability were not deliverable across this interface when the FCM was implemented. Because of that transmission constraint, no resources built in northern Maine since the start of the Forward Capacity Market have been able to qualify to participate in the market. In FCA 5, the New Brunswick capacity import limit (tie benefits plus capacity market sales) in the FCM was limited from the 1,000 MW NB-NE interface limit to 700 MW in recognition of the transmission constraint and the existing capacity overhang. Since then, 700 MW of capacity deliverability across the Orrington-South interface has been reserved for imports, with no ability for new capacity resources built in northern Maine to compete in the market with the imports. As announced at the July 16 Reliability Committee, the NB capacity import limit is being increased to 980 MW, an increase that was enabled by increases to the Orrington-South and Surrowiec-South interfaces within Maine. This 980 MW of capacity deliverability across the Orrington-South and Surrowiec-South interfaces will be reserved for NB imports (split between tie benefits and capacity market sales). Whether or not the imports fully utilize that 980 MW capability, the policy decision to reserve this transmission transfer capability for imports again prevents any new capacity resources built within Maine to the north of the Surowiec-South interface from competing with the imports to sell their capacity. In 2012 RENEW had identified that this was an inefficient use of the region's limited transmission transfer capability and proposed a solution that would allow domestic capacity to compete on an annual basis with imports. This would allow for more efficient market outcomes by allowing the transfer capability to be fully utilized even in years when imports alone do not fully utilize it, and by allowing increased competition consumers would get the best possible price in the market. Conceptually, RENEW believes that the proposal it laid out

in 2012 would work and would benefit the market. Where there are new capacity resources that are unable to qualify for the capacity market due solely to an internal transmission constraint that is shared with imports, these new capacity resources should be able to participate in the capacity market on a 1-year basis on-par with capacity import sales. With the recent change to the Maine interface limits, and the expected further change to those limits that will result from certain interconnection-related upgrades that are currently under study by ISO-NE, we believe it is time to take up this issue again. We recognize that this is beyond the scope of what ISO may be able to accomplish as part of the CAR scope, but request that ISO consider the concept and map out how it could be evaluated and hopefully implemented as part of a future capacity market improvements project. We are attaching here the original RENEW memo on this topic and ISO response from May/June 2012 for reference, since these materials from more than 10 years ago are no longer on the ISO-NE website (items 3 and 4 of the memo are the ones on this topic, with item 1 providing helpful background).

Design Objectives Need to Be Explicit, not Implicit - RENEW agrees with the many stakeholders who expressed a desire to see clear design objectives for the CAR project. During the July 10 discussion I think you had said that the objective of designing an efficient capacity market that is J&R and meets the region's reliability needs went without saying, but we think the ISO's CAR design objectives need to be made explicit and cannot be assumed.

RENEW understands that CAR is an enormous project that ISO is embarking on and appreciates ISO is being so thoughtful and deliberate in laying out the project scope with the opportunity for stakeholder feedback. We look forward to working collaboratively with ISO on this project so that it will result in an improved market that will support the system as it transitions to a clean energy future.

Be well,
Abby

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