

To: ISO New England
From: NESCOE
Date: June 12, 2018
Subject: Questions Regarding Regional Fuel Security

As states consider the question ISO-NE has posed concerning the level of fuel security risk New England may be willing to accept and associated issues, the following questions have arisen. It would be most helpful to states' deliberations if ISO-NE could provide written responses. If ISO-NE is able to answer some questions more quickly than others, NESCOE would appreciate receiving responses as they are completed (a complete list of answers can be compiled at a later time).

Pay-for-Performance

When the Forward Capacity Market (FCM) transitioned to a two-settlement market design with the Pay-for-Performance (PfP) reforms, ISO-NE commissioned the Analysis Group to perform a market impact analysis and sponsored testimony by six experts when ISO-NE advanced the proposal to the Federal Energy Regulatory Commission (FERC). Analysis Group stated that its market impact "analysis indicates that [PfP] would induce actions aimed at mitigating performance risks associated with gas supply curtailments, particularly during the winter gas season."¹ PfP commenced on June 1, 2018. ISO-NE has recently indicated that PfP may not adequately address fuel security risks and that additional measures to mitigate such risks are necessary.

1. What specific actions and circumstances lead ISO-NE to believe that PfP will not adequately address fuel security risks, such that additional measures are necessary?
2. Given that PfP began on June 1, 2018, and the actual economic impacts of its incentives will not be observable until the winter 2018-2019, please explain why ISO-NE lacks confidence in the ability of this major market reform to address fuel security risks before it becomes effective?
3. What analysis has ISO-NE conducted recently to specifically evaluate the likelihood of PfP's ability to mitigate fuel security risks? Is ISO-NE able to share that analysis with states and market participants?

¹ Analysis Group, *Assessment of the Impact of ISO-NE's Proposed Forward Capacity Market Performance Incentives* (September 2013), at page 4. Available at: https://www.iso-ne.com/static-assets/documents/regulatory/ferc/filings/2014/jan/er14_1050_000_1_17_14_pay_for_performance_part_1.pdf.

4. If PfP is not going to mitigate performance risks associated with gas supply curtailments should ISO-NE modify it?
5. Given that auctions have already occurred and participants have made plans based on certain rules and auction results, is ISO-NE precluded from making any rule changes for Capacity Commitment Periods associated with auctions that have already occurred? For example, if ISO-NE views the existing PfP penalties as too low, would ISO-NE consider changing those penalties for the 10th through 12th Capacity Commitment Periods, if not precluded from doing so?
6. Please provide a description of any benefits ISO-NE has observed that may be related to the implementation of PfP.
7. Given the region has seen about 3 GW of new generation since FCA 9 (which included PfP), is the issue ISO-NE identifies with PfP that it has not brought in enough resources or that it has not brought forward the type of resources ISO-NE wishes to secure for reliability purposes?

OFSA Assumptions Regarding Renewables and Sponsored Policy Resources

8. What would be necessary for ISO-NE to assume: (a) RPS attainment and/or 1,200 MW of additional offshore wind, and (b) 1,000 MW of additional imports in its OFSA/tool for assessing fuel security risk?

The Nature of Fuel Security Needs

ISO-NE conducted the Operational Fuel Security Analysis without regard to natural gas infrastructure and/or transmission system constraints (in other words, on a regional rather than zonal basis), and has otherwise concluded that fuel security risks are regional in nature.

9. What analysis if any has ISO-NE conducted to examine local fuel security issues?
10. What information leads ISO-NE to conclude that all fuel security risks are inherently regional in nature?

Impact of Potential Cost of Service Agreements on Competitive Market

Solving for regional fuel security via cost of service agreements for resources that may retire could have an impact on the wholesale competitive markets.

11. If cost of service agreements may become available to retiring resources to address regional fuel security, how will ISO-NE ensure that such agreements do not erode incentives for wholesale market competition?

12. Can ISO-NE envision a situation in which a resource that gets a cost of service agreement could be brought back into the market, or would it be forced to retire? Under what circumstance(s) does ISO-NE believe such a return to market status would be appropriate? What specific market rules, if any, would require modification to implement such a return?

Short-Term Solution Cost Allocation

13. If ISO-NE enters into cost of service agreements with retiring resources retained for fuel security reasons, how does ISO-NE plan to allocate their costs across the region? Please explain the rationale for ISO-NE's preferred approach.
14. What information will ISO-NE provide to states and market participants regarding the potential cost impacts by load zone of such cost of service agreements?

Market-Based Fuel Security Solution

As ISO-NE commences regional discussion of a market-based solution(s) to address fuel security risks, the states are interested in better understanding resource eligibility for such a solution(s). See, the External Market Monitor's (EMM) comments in the tariff waiver proceeding at Sections IV.B and C, specifically pages 9-12. The EMM noted, for example, the wide variation in the manner and effectiveness with which certain types of resources mitigate fuel security risk and the importance of accounting for these differences when defining the market product and obligations.

15. What are the performance characteristics and/or performance obligations that ISO-NE believes resources must have in order to alleviate fuel security risk to reliable operation of the grid during winter periods?
16. What is the duration of performance needed from such resources? Can this performance duration be subdivided by peak and off-peak periods? (*e.g.*, 24/7 over ninety days seasonal period; ten-day cold snap; peak hours during a cold snap, etc.)
17. Must dispatchability be a qualifying factor for eligibility in the market-based solution?
18. In what year (winter) will such resources be needed to avoid otherwise expected fuel security risk?
19. What is the quantity of such resources that will be needed in that year? While a specific amount of additional fuel secure resources may be subject to a number of variables, has ISO-NE assessed the minimum amount of resources that may be required to meet fuel security concerns? Is there a potential range of additional resources that ISO-New England identified? Is there an equivalent amount of natural gas storage or resources that would similarly address the perceived fuel security concerns?

20. Are there other non-fossil fuel resources that, in aggregate (and/or with some discount factor applied) could substitute for or reduce the quantity of resources needed to alleviate fuel security risk (e.g., energy efficiency)?
21. What is the minimum amount of time in advance of the year (winter) when such resources will be needed that ISO-NE can identify the needed quantity? Said differently, would ISO-NE be able to identify the quantity need closer to the actual winter period or would it have to align with the FCM auction calendar three years ahead of time?