

To: ISO New England

From: NESCOE

Date: February 15, 2018

Subject: Preliminary Input – Fuel Security Analysis

NESCOE appreciates ISO New England's (ISO-NE) efforts to analyze the region's future fuel-security risk through its Operational Fuel Security Analysis (the Analysis). In response to ISO-NE's inviting states and stakeholders to submit comments on the Analysis and requests for study assumptions, NESCOE provides this request for certain revised study assumptions. We appreciate the opportunity to provide further comments at a later date as appropriate.

One of the Analysis's "key takeaways" is that the future power system may be constrained in its ability to meet electricity demand and maintain reliability without some degree of emergency actions. NESCOE requests that ISO-NE analyze this identified risk in greater detail. Specifically, 13 of the 23 scenarios assume that the New England states will *not* meet statutory renewable and clean energy requirements. Without the future energy contributions from the resources state laws require, the Analysis likely overstates the region's future fuel-security risk. Over time, the New England states have satisfied their statutory requirements so assuming they will going forward is reasonable.

Renewables Assumptions

The Analysis assumed the region would have in 2024 at least the *current* amounts of existing renewables *plus* all the behind-the-meter solar PV forecasted to be installed by 2024. Assuming 6,600 MW of renewables in the Analysis would fall well short of the Renewable Portfolio Standard (RPS) requirements in current law. ISO-NE assumed this level of renewables in 13 of the 23 scenarios.

Scenario Assumption Request

NESCOE requests that ISO-NE: (1) use the High Renewables level (8,000 MW) and Imports assumption of 3,500 MW level in its reference case, (2) use these values as the *minimum* values across all scenarios, (3) consider changing the highest renewables and import cases by adding an incremental 5 TWh of renewable energy and 500 MW of imports respectively, and (4) revise any key takeaways as appropriate that may result from these modified assumptions. The "More Renewables" scenario assumes a level of renewables and additional clean energy that is commensurate with current law in the New England states.

¹ Analysis at 26.

Based on the same methodology used in ISO-NE's 2016 Economic Study, updated with 2017 forecasts and RPS requirements, the region requires approximately 5.1 TWh of additional new renewable energy in 2024, relative to 2017 values, in addition to forecasted behind-the-meter solar PV. Even assuming that all of the forecasted behind-the-meter solar PV would be counted toward RPS (2,015.9 MW @ 14.4% capacity factor = approximately 2.5 TWh), the 6,600 MW assumption would fall well short of states' requirements.

³ Analysis at Appendix A.

Operational Fuel-Security Analysis Assumption Request Form			
Scenario Number Or Input Description (i.e. – Reference Case, Scenario #1-23, Specific Input Variable, Other Request)	Commenter (Name/Organization)	Detailed Request for Change Input or Key Assumption (i.e. – what is the requested input value)	Rationale or Basis for Detailed Request
3-11, 16, 18, 20, 22	NESCOE	Increase the Renewables assumption to 8,000 MW Increase the Imports assumption to 3,500 MW	Reflect requirements of current state laws on renewable and clean energy