

To: ISO-NE and NEPOOL Stakeholders
From: NESCOE
Date: April 29, 2021
Subject: Pathways Analysis Scenario Request

As you know, NESCOE is evaluating many features of various proposed FCEM models and our responses to questions or analysis suggestions should be viewed in that context. They do not indicate and should not be interpreted to signal design preferences, or the point of view or position of NESCOE or any NESCOE Manager.

In general, NESCOE understands the theory that there would be market efficiency benefits from application of a broad product definition common across all states: a broad eligibility definition would increase competition and likely achieve lower overall costs. We agree that the base modeling should reflect such a broad product definition.

As noted, we continue to evaluate the many features of a proposed FCEM design, including the workability of, and any impediments to, the implementation of a broad product definition. To help inform our thinking, and possible approaches, we are interested in two proposed scenarios, FCEM with multiple constraints and a hybrid model. Again, we seek these scenarios to obtain information to further our understanding, not as design preference.

We explain these scenarios below and would be pleased to talk further about them if helpful.

FCEM with Multiple Constraints

Most state laws have objectives in terms of “renewable energy”, or specific objectives, such as solar. The assumption for modeling purposes is that these state programs will remain. A CEAC demand bid for a broad common product definition could result in a purchase of attributes from resource types that may not meet one or more states legal requirements.

To mitigate this risk, a possible approach is to include a constraint in the FCEM for these existing state program requirements (similar to a zone in the Forward Capacity Market – or reserve product constraint in the energy market).

To better understand some of the effects of such a design change, we suggest a scenario where each requirement stands on its own and there is no relationship between them (incremental requirements). For example, under this scenario the FCEM would procure products with broad eligibility and also for renewable¹, off-shore wind, and solar photovoltaic (PV) minimum requirements.

¹ This would be defined as On-shore Wind, Hydro, Anaerobic Digestion, Geothermal, Solar Thermal, Ocean Thermal, Wave, Tidal, Fuel Cell, Anaerobic Digestion. For efficiency reasons, we note the modeling may be limited to just a certain set of resources.

We are open to the specific volume targets; however, they should be large enough to illustrate the difference between this scenario and the base FCEM case.

Before moving forward with the analysis, we would like to discuss with ISO-NE to better understand how modeling these constraints in the FCEM would produce different results than just modeling the FCEM with the existing state programs, as our expectation is that expected revenues from state programs would impact how resources may offer into the FCEM.

Hybrid Model

In its March 5, 2021 memo to ISO-NE and NEPOOL stakeholders, NESCOE questioned if there should be a hybrid model.² As with the previous scenario request, we understand the possible reduction in economic efficiency resulting from a hybrid model; however, efficiency associated with a single product is a theoretical and long-run concept.

Under this possible scenario, holding all else equal, a hybrid model would have an FCEM supply eligibility that is limited to any resource that would qualify as “new” under the current FCM rules (or cleared in a prior FCEM where it met the prior eligibility) combined with net carbon pricing set at a level to ensure revenue adequacy for largest existing clean energy resource.³

² See page three question 9 of March 5, 2021 memo to ISO-NE and NEPOOL stakeholders.

³ We believe this would be the Millstone facility.