NEPOOL SCENARIO ANALYSIS PROPOSAL
March 17, 2016 (12:00 – 3:00 p.m.)[1]
Stakeholder Meeting Agenda

Location: Doubletree Hotel – Milford, MA
Call-in Number: 1-866-803-2146; Passcode: 7169224

1. Chairman's Welcome and Introductions	**12:00-12:10**
2. Process and Schedule for Finalizing NEPOOL Scenario Analysis Proposal and Next Steps	**12:10-12:30**
3. Discussion of Proposed Base Assumptions and Scenarios	**12:30-2:15**
4. Discussion of Proposed Deliverables	**2:15-3:00**

[1] Lunch will be provided at 11:30 for those attending in person.

Discussion Issues for March 17, 2016 NEPOOL Scenario Analysis Meeting

1. **Scenario 3 Modification:**

    a. **Possible changes to Scenario 3 to accommodate different renewable/clean energy scenarios.**

2. **Base Assumptions:**

    a. **Retirement Assumption**

        i. **Retire all convention oil and coal-fired units by 2025, or use a different assumption (e.g. half retired in 2025, other half in 2030)?**

        ii. **If retirement based on fuel type base retirements on primary fuel?**

        iii. **Engage an outside consultant to model economic viability?**

    b. **Load forecast: use 2016 CELT load forecast and use the FCA #10 methodology for Behind-the-Meter Solar PV adjustment**

    c. **Fuel Price and Natural Gas Pipeline Expansion Assumptions:**

        i. **Use the EIA pricing forecast or make assumptions about pipeline expansion?**

        ii. **Develop sensitivities for alternate fuel prices, potentially including the effect of pipeline expansion (in later stage of the study development) and apply exogenously. The impact of alternate fuel prices can be determined exogenously unless they affect the dispatch order of resources**

    d. **Generation assumptions**

        i. **Location of new renewable/clean energy resources: consistent with current queue ?**

        ii. **Assume new renewables are capacity resources?**

        iii. **Develop a mix of wind/large scale solar to meet scenario goals**

        iv. **Existing generation fleet assumed to be those that have cleared in FCA10 plus resources under construction and/or have an I3.9 approval?**

v. **Net ICR met with Natural gas CCs if needed and allow Net ICR to be exceeded to meet renewable goals**

e. **Transmission topology: include reliability projects on March 2016 RSP Project list (per ISO's suggestion)?**

3. **Discussion of Scenarios**

   a. **Inclusion of Scenarios 4 and 5**

4. **Discussion of Deliverables**

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NEPOOL Scenario Analysis Proposal - Stakeholder Comments and Response

1. **Base Case and base case assumptions:** Some commenters suggested there should be a base case or base assumptions. **Response:** The proposal has been revised to include a set of base assumptions. The scenarios are intended to be alternative cases.

2. **Inclusion of Scenarios 4 and 5 that did not assume all RPS requirements being met physically by renewable/clean energy resources:** Some commenters suggested that no scenarios should be included that do not assume RPS requirements being physically met in the future (2025 and 2030). Other commenters want Scenarios 4 and 5 to be included. **Response:** To avoid any one group of stakeholders having a veto over what other stakeholders want to include in the study request, Scenarios 4 and 5 have been retained but revised to assume that RPS requirements will be met in the study years partially through physical resources and partially through alternative compliance payments. In those scenarios, new generation added to meet the Net Installed Capacity Requirement will be natural gas combined cycle ("NGCC") units.

3. **Other Scenarios to include:** One commenter suggested replacing the five scenarios with a set of three that would include the Clean Energy RFP, additional hydro purchases from Canada, and potential additional clean energy purchases to meet the requirements of the Global Warming Solutions Act. **Response:** See response to 2 above regarding retaining Scenarios 4 and 5 for comparison purposes. Also, Scenario 3 can capture additional renewable/clean energy purchases.

   Some commenters suggested that Scenario 3 should not be limited to Canadian hydro imports. **Response:** Scenario 3 has been revised to not limit additional generation to Canadian hydro.

   One group of commenters has suggested a scenario that would: "Model market performance against estimates of 2025 and 2030 greenhouse gas emissions designed to meet New England state goals for 2050." The scenario would identify system cost and performance with current market rules, including MOPR, while reliability is maintained. The base case for this scenario would be: "Base Case for 2020-2030 should include continued compliance with all current policies and programs (EE, Solar, RPS, RGGI; etc.), and reasonably model the system and its operation "as is"/" as currently forecast" through 2030. For efficiency and completeness, the assumptions used to develop the Base Case in Synapse's The RGGI Opportunity appear to be a useful/reasonable estimation of this." Assumptions for this scenario include: Assume for Scenario A:
   - Tri-State RFP procurement goals are met by 2020 or 2025;
   - Large hydro procurement (comparable to 18.9TWh proposed in Mass. S.1965 (Baker)) by 2025;
   - Substantial offshore wind procurement (comparable to 8.5TWh proposed in Mass. H.2881 (Haddad)) by 2030;
   - Add additional low/non-emitting resources as needed to balance system and achieve emissions targets.

- Assume all transmission needed to support added 2025 and 2030 resources exists when needed; costs allocated among supported new resources as "elective" transmission.

Response: Much of this proposed additional scenario can be picked up in Scenario 3.

4. **Retirement assumption:** Some commenters suggested that there should be a base assumption regarding retirement of existing generation. Some commenters suggested there should be at least one case with no retirements. **Response:** A base assumption has been added for Scenarios 1-3, and 5 that all conventional oil and coal-fired generation will be retired by 2025. This assumption is bracketed in the draft proposal to indicate that it requires further discussion. For Scenario 4 the assumption is no retirement.

5. **Load assumption:** Some commenters suggested that the CELT forecasts for load and energy efficiency might not be appropriate to use as a base assumption without modification. **Response:** the CELT forecasts are included in the base assumptions and alternative load forecasts can be considered as sensitivities based on further discussions with the ISO and the PAC.

6. **Fuel assumptions:** Some commenters suggested that the EIA fuel prices might not be accurate or granular enough. **Response:** The impact of alternate fuel prices can be determined exogenously unless they affect the dispatch order of resources. Any appropriate modifications to fuel price assumptions or sensitivities to be discussed with the ISO and the PAC. Some commenters have suggested that sensitivities be developed for the scenarios that include natural gas pipeline expansion. **Response:** To the extent that pipeline expansion affects fuel prices, alternate fuel prices can be determined exogenously unless they affect the dispatch order of resources. Pipeline assumptions and sensitivities can be further discussed with the ISO and the PAC.

7. **Transmission assumptions:** Some commenters questioned what transmission assumptions would be included. **Response:** The starting assumption will be the transmission topology for June 2019. The ISO has said it will use a GridView "pipe and bubble" model that would show major transmission constraints and would honor known transmission constraints. Additional cases will relax the constraints in order to determine a high level estimate of transmission needed to relieve constraints and would offer a rule of thumb cost estimate, but would not provide a transmission plan with specific transmission costs. For purposes of transmission assumptions, new NGCC resources will be located at the site of retired generation first and then any needed additional generation will be located at the Hub; new renewable generation will be located based on resources now in the interconnection queue.

8. **Deliverables:** Some stakeholders suggested that the deliverables include information on revenues from sources other than the ISO-NE market, such as total costs to consumers, including revenues received by generators through state subsidies. Others opposed this suggestion. **Response:** The ISO has confirmed that it does not have the necessary

information to include in the study. The deliverables have been revised to remove deliverables that depend on information that is not available to the ISO.

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NEPOOL SCENARIO ANALYSIS PROPOSAL 2016

Implications of Public Policy on ISO-NE Market Design, Reliability, Resource Metrics, Costs, Emissions, System Operability and Revenues of New Generation

Purpose:

The goal of the proposed NEPOOL Scenario Analysis is to provide NEPOOL Participants and regional power market stakeholders information, analyses and observations regarding:

(i) the potential effects on the ISO-New England markets of implementing public policies in the New England states;

(ii) projected energy market revenues, and the contribution of those revenues to the fixed costs of generic new generation; and

(iii) the total cost of supplying load, emissions in New England, and system operability under alternative scenarios.

Scenarios:

Below are base assumptions and a description of the five main scenarios that will be studied.

The Base Assumptions to be included in all Scenarios unless otherwise noted are:

- Generation fleet as of FCA 10, plus any additional generation that is under construction but has not cleared in an FCA. Individual cases will model amounts of capacity and energy-only resources consistent with their respective designs.
- Retirement cases will retire [all conventional oil and coal-fired steam units].
- All Scenarios will model 2025 and 2030.
- Transmission topology used in FCA 10 plus upgrades associated with resources that cleared in FCA 10 (updated as appropriate by ISO-NE)
- Net Installed Capacity Requirement ("NICR") will be determined as load plus a reserve margin of 14% .
- Energy efficiency ("EE"), solar photovoltaic ("PV") and load projections based on 2016 CELT Forecast (with further discussion to see if there is a need for any appropriate modifications to the load or EE forecasts or sensitivities to capture high and low projections).

- Assume prices for RGGI allowances and prices for other environmental emission allowances. Develop specific assumptions through further discussion with the ISO and the PAC and determine if there is a need to create sensitivities for high and low emissions prices.

- When adding natural gas combined cycle ("NGCC") generation, the location will first be assumed to be at the location of retired units and then at the Hub . When adding renewable/clean energy resources, their locations will be at locations consistent with resources in the current interconnection queue (as of April 1, 2016) (i.e., first include generation in the current queue and then add generation, if needed, based on current locations of generation in the queue).

- Fuel price forecasts will come from the EIA. The impact of alternative fuel prices can be determined exogenously unless they affect the dispatch order of resources.

The Scenarios to be included are:

1. **Generation Fleet Meeting Existing State Renewable Portfolio Standards ("RPS") and Steam Units Retired and Replaced with NGCC units:** Use the Base Assumptions. Assume that targeted energy requirement for the New England states' RPS goals as of April 1, 2016 will be met by physical renewable/clean energy resources. Assume that all conventional oil and coal-fired units are retired as of 2025. Any retirement replacement and any supply growth above RPS will be met by new NGCC units.

2. **Generation Fleet Meeting Existing RPS and All Future Needs Met with New Renewable/Clean Energy Resources:** Same as Scenario 1, except assume all needed capacity will be met by renewable/clean energy resources.

3. **Generation Fleet Meeting Existing RPS Plus Additional Renewable/Clean Energy Resources:** Same as Scenario 2 except add [?] MW by 2025 and a total of [3,000?] MW by 2030 of new renewable/clean energy resources. For any portion of the extra that is Canadian hydro, assume 24/7 deliveries; for solar or wind resources, use ISO assumptions for capacity factor.

4. **Generation Fleet Meeting Existing RPS in part through Alternative Compliance Payments with NGCC Additions, and with No Retirements:** Use Scenario 1, except assume: (a) RPS requirements are met first physically with renewable/clean energy resources that are [interconnected to the system or under construction] as of April 1, 2016, and then through alternative compliance payments for any RPS requirements not physically met, (b) any new generation resources added to meet NICR will be NGCC units, and (c) no retirements of existing coal or oil resources.

5. **Existing Fleet Meeting Existing RPS in part through Alternative Compliance Payments and Retirement Replacement with NGCC Additions:** Same as Scenario 4, except assume all conventional oil and coal-fired units retired by 2025 and replace retired units as needed to meet NICR with NGCC generation.

Deliverables:

The scenarios will be designed to provide information, analyses and observations regarding the impacts of public policies on four major areas of concern to policy-makers, market participants, and consumers, potentially including the following deliverables (with ISO using outside consultant(s) as necessary):

Reliability	Resource Metrics	Costs	Emissions
1. Resource mix changes and/or general transmission additions needed to maintain reliability The study will not provide specific transmission planning solutions, but will identify transmission capacity needed between areas and cost out additions at a high level.	1. Metrics provided in Economic Studies, including: • Production Costs • Load Serving Entity Energy Expenses • Congestion • Interface Flow Duration Curves • Generation Energy Production by Fuel Type • Air Emissions	1. For each scenario, total costs in $/MWh	1. For each scenario, the total emissions of NOx, Sox, mercury and CO2 compared environmental targets/requirements
	2. Estimated revenues from energy markets based on cost-based bidding. 3. Energy revenue requirements for new generating units added in the study	2. The cost components, including capacity, energy, reserves, and infrastructure of each scenario	
	4. The percent of total energy provided by resource type and		

	capacity factor		
	5. The fuel that sets the marginal clearing price 6. Estimated FCA clearing prices for each scenario		

There are two other major deliverables of the study. First the study will provide information and analysis on projected energy market revenues, and the contribution of those revenues to meeting the fixed costs of new generation, for various generation types under particular sets of assumptions. Second, the study will provide information and analysis on the operability of the system under various scenarios and sensitivities. **This operability analysis might come in a second phase of the study, depending on its difficulty and how long it will take.**

Public Policies to Be Included in the Scenarios

- RPS
- Energy Efficiency programs
- Solar programs
- State long-term renewable/clean energy procurements
- Climate Change - RGGI pricing

Tasks:

A. Further define the scenarios
B. Identify the mixes and locations of additional conventional and renewable/clean energy resources to be included in each scenario analysis and their respective construction costs, operating profiles or drivers, operating costs, and emissions rates
C. Agree on other assumptions to be used and sensitivities to be applied in the study
D. Agree on public policies to be modeled
E. Perform modeling and analyze the results

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NEPOOL SCENARIO ANALYSIS PROPOSAL 2016

Implications of Public Policy on ISO-NE Market Design, Reliability, Resource Metrics, Total Costs, Emissions, System Operability and Revenues of New Generation

Purpose:

The goal of the proposed NEPOOL Scenario Analysis is to provide NEPOOL Participants and regional power market stakeholders information, analyses and observations onregarding:

(i) the potential impactseffects on the ISO-New England markets of implementing public policies in the New England states;

(ii) an examination of projected energy market revenues, and the contribution of those revenues to the generic fixed costs of generic new generation, for various generation types under particular sets of assumptions; and

(iii) the potential impacts under the status quo forecast versus the public policy overlay on reliability, resource metrics, total cost of supplying load, emissions in New England, and system operability under alternative scenarios.

Scenarios:

NEPOOL Participants, with input from ISO-NE and other regional stakeholders, will determine the specific scenarios to be modeled and the assumptions to be used.

Scenarios will be limited to a manageable number in an effort to maintain an aggressive timeline for the study results. Appropriate sensitivities applied to the scenarios are expected to provide useful information for a range of hypothetical cases. Possible variables to define scenarios to be studied include various plausible combinations of:

Below are base assumptions and a description of the five main scenarios that will be studied.

The Base Assumptions to be included in all Scenarios unless otherwise noted are:

- Generation fleet as of FCA 10, plus any additional generation that is under construction but has not cleared in an FCA. Individual cases will model amounts of capacity and energy-only resources consistent with their respective designs.
- Energy Consumption Growth (consumed MWh)
- Load Profiles (load shape and daily peak) that reflect behind-the-meter resources, mainly including photovoltaics ("PV") and energy efficiency ("EE")
- Retirement cases will retire [all conventional oil and coal-fired steam units].
- Fuel Supply Cost (high/low)
- Total resource mix, including retirements, additions and general locations

- All Scenarios will model 2025 and 2030.

~~Five main scenarios and some basic assumptions have been discussed:~~

- Transmission topology used in FCA 10 plus upgrades associated with resources that cleared in FCA 10 (updated as appropriate by ISO-NE)

- Net Installed Capacity Requirement ("NICR") will be determined as load plus a reserve margin of 14% .

- Energy efficiency ("EE"), solar photovoltaic ("PV") and load projections based on 2016 CELT Forecast (with further discussion to see if there is a need for any appropriate modifications to the load or EE forecasts or sensitivities to capture high and low projections).
- Assume prices for RGGI allowances and prices for other environmental emission allowances. Develop specific assumptions through further discussion with the ISO and the PAC and determine if there is a need to create sensitivities for high and low emissions prices.

- When adding natural gas combined cycle ("NGCC") generation, the location will first be assumed to be at the location of retired units and then at the Hub . When adding renewable/clean energy resources, their locations will be at locations consistent with resources in the current interconnection queue (as of April 1, 2016) (i.e., first include generation in the current queue and then add generation, if needed, based on current locations of generation in the queue).

- Fuel price forecasts will come from the EIA. The impact of alternative fuel prices can be determined exogenously unless they affect the dispatch order of resources.

The Scenarios to be included are:

1. **Generation Fleet Meeting Existing State Renewable Portfolio Standards ("RPS")~~:~~ and Steam Units Retired and Replaced** ~~Beginning~~ **with** ~~the fleet of generation expected as of 2019/20, examine scenarios for the years 2025 and 2030. Use FCA#10 results and transmission system for 2020. Project net load and resources using the CELT Report (gross load, PV and EE forecasts, extrapolated out to 2030). Use EIA fuel forecasts with reasonable projections to 2030~~**NGCC units:** Use the Base Assumptions.~~-~~ Assume that targeted energy requirement for the New England states ~~2016~~' RPS goals as of April 1, 2016 will be met ~~in their entirety~~by physical~~ly~~ ~~. Add specified assumed mix and locations of additional wind and PV resources that would meet the growth requirements of existing RPS targets.~~renewable/clean energy resources. Assume that all conventional oil and coal-fired units are retired as of 2025. Any retirement replacement and any supply growth above RPS will be met by new NGCC units.

2. **Generation Fleet Meeting Existing RPS and ~~Retirement Replacement:~~** ~~Start with the assumptions in Case 1 and examine scenarios for 2025 and 2030, assuming retirements of specified generators or use criteria for retiring generators (such as older than X years with particular fuel types). Add mix of wind and photovoltaic~~**All Future Needs Met with New Renewable/Clean Energy Resources:** Same as Scenario 1, except assume all needed capacity will be met by renewable/clean energy resources ~~specified in Case 1~~.

3. **Generation Fleet Meeting Existing RPS Plus ~~Extra:~~** ~~Start with the assumptions of Case 2 and add specified hydro imports from Canada (MW, MWHRs, and location).~~**Additional Renewable/Clean Energy Resources:** Same as Scenario 2 except add [?] MW by 2025 and a total of [3,000?] MW by 2030 of new renewable/clean energy resources. For any portion of the extra that is Canadian hydro, assume 24/7 deliveries; for solar or wind resources, use ISO assumptions for capacity factor.

4. ~~**Existing**~~ **Generation Fleet Meeting Existing RPS in part through Alternative Compliance Payments with NGCC Additions~~:~~** ~~Beginning with the fleet of generation expected as of 2019/20, examine scenarios for the years 2025 and 2030. Use FCA#10 results and transmission system for 2020. Project net load and resources using the CELT Report (gross load, PV and EE forecasts, extrapolated out to 2030). Use EIA fuel forecasts with reasonable projections to 2030. Use representative reserve margins to determine needed generation, which would be met by natural gas combined cycle ("NGCC") proxy units added at the Hub or at load centers. Assume prices for the Regional Greenhouse Gas Initiative ("RGGI") and prices for other environmental emission allowances.~~**, and with No Retirements:** Use Scenario 1, except assume: (a) RPS requirements are met first physically with renewable/clean energy resources that are [interconnected to the system or under construction] as of April 1, 2016, and then through alternative compliance payments for any RPS requirements not physically met, (b) any new generation resources added to meet NICR will be NGCC units, and (c) no retirements of existing coal or oil resources.

5. **Existing Fleet Meeting Existing RPS in part through Alternative Compliance Payments and Retirement Replacement with NGCC Additions:** ~~Start with assumptions in Case 4 and examine scenarios for the years 2025 and 2030, assuming retirements of specified generators or use criteria for retiring generators (such as older than X years with particular fuel types). To meet the representative reserve margins, add NGCC proxy generation as needed. Locate assumed NGCC proxy units at the Hub or brownfield sites near load where~~ Same as Scenario 4, except assume all conventional oil and coal-fired units retired by 2025 and replace retired units as needed to meet NICR with NGCC generatio~~rs~~n ~~have been assumed to retire~~.~~-~~

Deliverables:

The scenarios will be designed to provide information, analyses and observations regarding the impacts of public policies on four major areas of concern to policy makerspolicy-makers, market participants, and consumers, potentially including the following deliverables (with ISO using outside consultant(s) as necessary):

Reliability	Resource Metrics	Total Costs to Consumers	Emissions
1. Determination of rResource mix changes and/or general transmission additions needed to maintain reliability [Note: theThe study will not provide specific transmission planning studiessolutions, but will identify transmission capacity needed under different scenarios and locational assumptions.]between areas and cost out additions at a high level.	1. Usual mMetrics provided in Economic Studies, including: • Production Costs • Load Serving Entity Energy Expenses • Congestion • Interface Flow Duration Curves • Generation Energy Production by Fuel Type • Environmental Air Emissions by Electric Generators	1. For each scenario, all intotal costs to consumers in $/MWh	1. For each scenario, the total emissions of NOx, Sox, mercury and CO2 compared against RGGIenvironmental targets/other targetsrequirements

2. For each scenario the percent of annual energy requirements and installed capacity requirements met by each resource class	2. Estimated revenues from energy markets based on cost-based bidding. - Compare3. eEnergy revenues with assumed annual carrying charges for representativerequirements for new generating units. added in the study - Determine others potential revenue streams, such as from RECs, net metering and out-of-market public policy contracts.	2. For each scenario, a breakdown of all inThe cost components, including capacity, energy, reserves, and infrastructure of each scenario	
	34. An analysis of theThe percent of total energy provided by resource type and capacity factor, and of what fuel type sets the clearing price		
	45. Percent of hours Reserve Constraint Penalty Factor estimated to setThe fuel that sets the marginal clearing price - Calculate effect of resources on6. Estimated FCA clearing prices for each scenario		

There are two other major deliverables of the study. First the study will provide information and analysis on projected energy market revenues, and the contribution of those revenues to meeting the fixed costs of new generation, for various generation types under particular sets of assumptions, which can be used by interested persons to evaluate resource sustainability.

Second, the study will provide information and analysis on the operability of the system under various scenarios and sensitivities. **This operability analysis might come in a second phase of the study, depending on its difficulty and how long it will take.**

Public Policies to Be Included in the Scenarios

- RPS
- Energy Efficiency programs
- Solar programs
- ~~Net metering programs~~
- State long-term renewable/clean energy procurements
- Climate Change - RGGI pricing

Tasks:

A. Further define the scenarios
B. Identify the mixes and locations of additional conventional and renewable ~~technology~~/clean energy resources to be included in each scenario analysis and their respective construction costs, operating profiles or drivers, operating costs, and emissions rates
C. Agree on other assumptions to be used and sensitivities to be applied in the study
D. Agree on public policies to be modeled
E. Perform modeling and analyze the results

Summary report: Litéra® Change-Pro TDC 7.5.0.145 Document comparison done on 3/11/2016 3:16:38 PM	
Style name: 1 - Dbl Underline, Strike, Moves	
Intelligent Table Comparison: Active	
Original DMS:iw://HFDMS/VFActive/93434745/1	
Modified DMS: iw://HFDMS/VFActive/93434745/6	
Changes:	
Add	80
~~Delete~~	84
~~Move From~~	2
Move To	2
Table Insert	5
~~Table Delete~~	4
Table moves to	0
Table moves from	0
Embedded Graphics (Visio, ChemDraw, Images etc.)	0
Embedded Excel	0
Format changes	0
Total Changes:	177

[Cover Memo for Transmittal of NEPOOL 2016 Economic Study Proposal]

[DRAFT – 3/11/16]

Attached is a NEPOOL proposal for a 2016 Economic Study (the "Proposal") to be done by the ISO under Attachment K of Section II of the ISO New England Transmission, Markets and Services Tariff. This Proposal results from the following NEPOOL business priority for 2016/17 that was approved by NEPOOL in 2015:

> **Analyses of Markets and Planning**. As the only regional entity with detailed, confidential market information, ISO-NE is counted on to provide and disseminate meaningful markets and planning information. NEPOOL places a priority on ISO-NE (or its consultant) performing analysis in 2016 that reviews more completely the potential impacts of policy implications and risks on the future functioning of the existing and planned markets, following an opportunity for meaningful input from Market Participants on such a study. (footnote omitted)

The ISO included this study in its 2016 Work Plan and has committed to prioritizing it in determining its Economic Studies for 2016.

Consistent with this NEPOOL business priority, the Proposal presents a series of scenarios identified by NEPOOL members in the NEPOOL process that are intended to provide the region information, analyses and observations on: (i) the potential effects on the ISO-New England markets of implementing public policies in the New England states; (ii) projected energy market revenues, and the contribution of those revenues to the fixed costs of generic new generation; and (iii) the total cost of supplying load, emissions in New England, and system operability under alternative scenarios.

The analysis intended by the Proposal would examine a broad range of hypothetical futures based on a series of assumptions. The purpose of hypothesizing about futures is to produce a broad range of data that is directional and indicative only, and ***not*** to predict any particular future. Importantly, none of the hypothetical futures represent a resource plan and none should be considered a plan. Nor is the purpose of the study sought by the Proposal intended to advocate or suggest support for or against any particular outcome or for or against any state laws or policies. Rather, the analysis is a ***study only--*** intended to provide information that all stakeholders in the New England wholesale power markets can use to better understand the interaction of public policies and markets and the ability to achieve common goals.

The Proposal was developed over the course of several months, with three drafts circulated widely, commencing in November 2015, two open stakeholder meetings in February and March 2016, and with ongoing discussions among the elected NEPOOL officers for all the sectors. During that time, disagreement was voiced over whether particular scenarios should be run and the usefulness of the results of particular scenarios. Those disagreements stemmed in part from the fact that a study of the wholesale power market necessarily does not provide full information about the other impacts of particular public policies on, for example, ultimate costs to consumers on the public, or health or the environment. In the end, rather than exclude any

scenarios that were desired by some but not by others, the Proposal limits the scenarios to those that had a general support by a material number of NEPOOL members and reflects the deliberate and expressed desire to include scenarios and sensitivities around those scenarios that are responsive to stakeholders' expressed interests. In order to identify a Proposal for which ISO-NE could produce results in the 2016 calendar year, NEPOOL members worked to define scenarios that would accommodate as many requests within their parameters as possible. The Proposal is not complete in all details and NEPOOL expects that those details will be filled in through discussions with the ISO and stakeholders as ISO-NE proceeds with the analysis.