

DRAFT

# Non-Transmission Analysis: A Regional Framework Template

Prepared for NESCOE by La Capra Associates, Inc.

May 2012

Selected slides from NESCOE  
presentation. All slides available at  
[http://www.nescoe.com/uploads/NTA\\_Framework\\_May\\_2012.pdf](http://www.nescoe.com/uploads/NTA_Framework_May_2012.pdf)

# Non-Transmission Alternatives Analysis: A Regional Framework

DRAFT



- High level framework for discussion
- Identifies elements of Transmission Owners' NTA analysis & process
- A template for common application across New England – assumes adaptation to state-by-state requirements or preferences
- Based on current ISO-NE planning processes & state processes that consider alternatives

# Definitions – NTA and MRA

DRAFT

## Non-Transmission Alternative (“NTA”)

- any configuration of generation or demand-side resources other than transmission which, together, can address a need that has been identified for a proposed regulated transmission solution.

## Market Resource Alternative (“MRA”)

- Alternative terminology for NTAs recently adopted by ISO-NE in conjunction with its “Aligning Planning and Markets” initiative and the Greater Hartford Pilot study.
- Methodology under development (see slide 17)

DRAFT

# Background

Connection to Strategic Planning, Process Observations & Overview

# Background & Objective

DRAFT

In early September 2011, the states expressed their collective intent to obtain from transmission owners (TOs) non-transmission alternative (NTA) analysis *earlier* in the planning process than occurs today, which is typically at the end of the planning process – the siting phase. Earlier analysis will help ensure there is no bias *in timing* between resource type. The states also expressed interest in more uniform analysis from TOs across the region than TOs produce today. See Appendix & [http://www.nescoe.com/uploads/NTA\\_Analysis\\_9.7.11.pdf](http://www.nescoe.com/uploads/NTA_Analysis_9.7.11.pdf)

## The Objectives of the NTA Framework are:

1. To obtain NTA analysis at a point in time in the regional planning process where such analysis provides more practical value to states & market participants than the alternative analysis TOs produce today does. See Appendix
2. To make state siting processes more efficient by reducing need for states to ask TOs for additional analysis during siting proceedings
3. To obtain more uniform alternative analysis across the region
4. To conduct NTA analyses in an open & transparent process

# What the NTA Framework is Not

DRAFT

- *Not* to disrupt the region's general reliance on markets to select & fund resources to meet needs
- *Not* to elongate the transmission planning & siting process. To the contrary, more information earlier in the process will make the siting processes more efficient (reduce requests for further analysis at that late stage & provide timely information to stakeholders)
- *Not* to create new cost allocation mechanisms
- *Not* to duplicate ISO-NE MRA analysis. Need for & scope of NTA analysis revisited as ISO-NE MRA analysis moves along

## Connection to ISO-NE Strategic Planning Initiative

DRAFT

- In October 2011, ISO-NE indicated its intent to conduct market resource analysis (MRA) on a going forward basis in connection with major transmission facility proposals. ISO-NE has also proposed to align markets & planning. The states are very supportive of this effort
- The final form of MRA analysis is unknown – ISO-NE is running “pilots” at this time. Further, the design & implementation of market rules to align planning & markets is down the road
- At some point, the MRA analysis & associated market rule changes may supplant the need for some or most NTA analysis. ISO-NE does not, however, intend to conduct *economic analysis* of MRAs or NTAs; the TOs will continue to produce that to satisfy state siting needs irrespective of when & how ISO-NE’s MRA analysis is fully implemented

# Process Observations, for context

DRAFT

## NTA Analysis Framework contemplates that:

1. ISO-NE & the TOs conduct coordinated, parallel alternative resource studies to inform regional planning process & state siting proceedings (assuming ISO-NE continues to prepare MRA Analysis)
2. ISO-NE & TOs will coordinate & share alternative analysis early in the planning process to enable evaluation of whether alternatives would satisfy reliability needs\*
3. The TOs' NTA Analysis as set forth in this Framework may change over time as ISO-NE's MRA & market mechanisms are developed & implemented; as ISO-NE will not conduct *economic* analysis of alternative resources, the TOs will continue to produce that element of the TO NTA analysis over time

\* This framework assumes that the NTA study process will provide stakeholder participation analogous to the ISO-NE stakeholder process for Needs Assessment, MRA, and Solutions Studies (see slide 12). Specifics of such process will be determined by each state.

# Process Observations, for context con't.

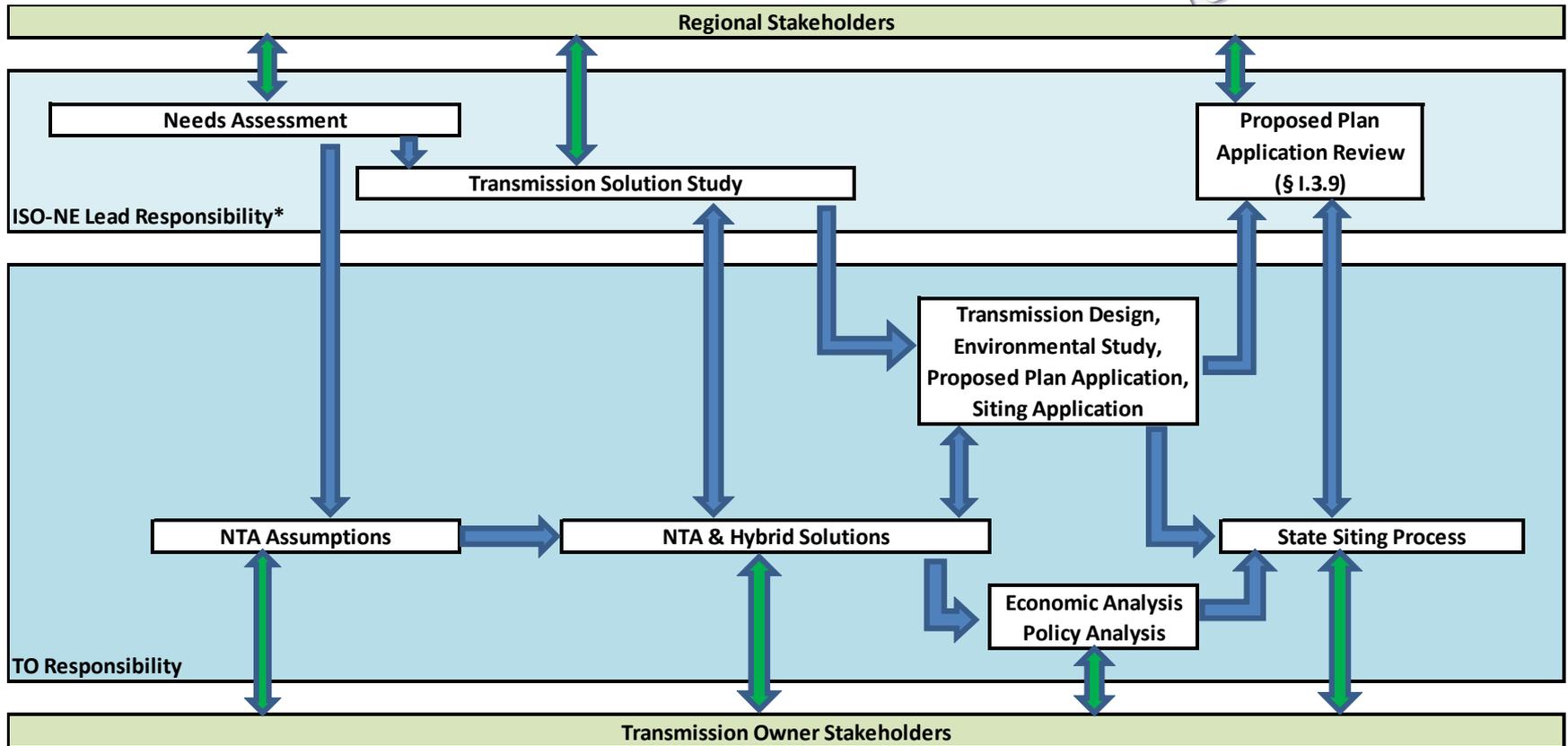
DRAFT

## NTA Framework assumes each state will:

1. Identify when TOs will conduct NTA Studies pursuant to this Framework & communicate that to its jurisdictional TO (e.g., all projects, projects over a certain size, etc.)
2. Provide details to the NTA Analysis framework template consistent with its requirements & preferences & communicate to the jurisdictional TO the specific NTA analysis the state expects to see in advance of siting petitions
3. Discuss with its jurisdictional TO what type & level of stakeholder process the TO should conduct in the service area during the NTA study process (CMP, VELCO may provide examples to consider)
4. Receive the TO NTA analysis earlier in the planning process so that there is no bias *in timing* in resource analysis

# Planning Process Overview

DRAFT



\* ISO-NE Lead Responsibility - analysis may be conducted by the TO or other members of the Study Group

\* Analysis Steps are depicted by the boxes and blue information arrows; stakeholder involvement is depicted in green information arrows

NOTE: This diagram does not include any of the ISO's proposed MRA processes

# TO NTA Analysis: Solutions Design

DRAFT

## Define Alternative NTA Scenarios for Economic Analysis

- Define NTA options that are feasible to address the identified need
- NTA solutions should consider *combinations* of generation & demand side options

## Reliability Planning Considerations

- Reliability of each NTA solution to be tested consistent with transmission solutions
- The scale *and* life span of the NTA solution should be considered relative to transmission solutions\*

## Other Considerations in Defining NTA Solution Scenarios

- States must determine when NTA Analysis is warranted (e.g., project size, other criteria)
- Whether an NTA scenario may meet state or regional economic & policy objectives (e.g., RPS)
- Feasible implementation mechanisms (e.g., TO, merchant)

\* Transmission solutions will be evaluated for “longevity” tied to the loads that can be carried if the solution is implemented

DRAFT

## Economic Analysis Elements for *Each* Transmission, NTA & Hybrid Option

- **Regional Cost Benefit Analysis**
  - Identify total cost of the solution without consideration of cost allocation
  - Identify total benefit of the solution (e.g., production cost savings, reduced cost of energy to load)
- **State-Specific Cost Benefit Analysis**
  - Identify total cost allocated to state's ratepayers considering cost allocation
  - Identify total economic benefit of the solution to state's ratepayers
  - Each state to defines the specific decision criteria to be applied to proposed projects
- **State or Regional Policy Cost Benefit**
  - Consideration of the solution's contribution to other policy objectives, as appropriate

# TO NTA Analysis: Economic Analysis Methods

DRAFT

## Economic Analysis Metrics for Each Solution Include:

- **Annual cost to consumers over the life of the solution**
  - Annual revenue requirements for Cost of Service elements
  - Market costs for merchant elements
- **Annual economic benefits over the life of the solution**
  - Avoided cost savings, net market revenues, reductions in market costs to consumers
- **Comparison of solutions on costs & benefits**
  - Net Present Value of annual costs & benefits
  - Rate impacts
  - Societal Benefits Test

# Next Steps

DRAFT

1. States communicate to TOs pursuit of this approach; further communicate approach to NEPOOL Chairs & ISO-NE on May 23, 2012 in Maine
2. In June, La Capra, NESCOE & states as they wish provide draft Framework to TOs, meet with TOs together to discuss Framework & get feedback. Modify as appropriate.
3. Discuss any changes with ISO-NE
4. NESCOE convert power point into outline of NTA Template Framework & provide to states
5. Each state: a.) modify NTA Template Framework as needed to comply with specific state requirements/preferences & b.) consider & implement appropriate process to execute NTA Framework. *NESCOE may as states wish help facilitate sharing of information about state modifications &/or implementation mechanisms*

*Ongoing:* Monitor implementation of ISO-NE MRA Analysis & development & implementation of market mechanisms to determine whether modifications to the NTA Analysis is warranted