

Stakeholder Process for Submitting Economic Study Requests



Planning Advisory Committee (PAC) Meeting

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Purpose

- To initiate the process for stakeholder economic study requests in accordance with Attachment K, Section 4.1(b) of the Tariff



Objective of the Economic Study Process

- Provide forum for stakeholder review of the impact of alternative future New England system scenarios
 - Include economic evaluations
 - Supplement with environmental emissions analysis
 - Consider potential economic benefits of relieving transmission constraints
 - Also shows benefits of developing resources in alternative locations
 - Similar to “what-if” framework of Scenario Analysis
 - Not an introduction to a specific Market Efficiency Transmission Upgrade, e.g., “Attachment N” project
 - Provides information to stakeholders



Submittal and Consideration of Economic Study Requests

- Requests for Economic Studies by stakeholders must be submitted for public posting by April 1 each year
 - These will be posted to the ISO PAC website
- The ISO may add its own proposals
- The ISO will develop a rough scope of work and cost estimate for all requested studies that are specific enough to proceed and within the scope of exploration of economic studies
- The ISO shall develop a preliminary prioritization based on perceived benefits
- By May 1 of each year, a PAC meeting shall be held at which Economic Study proponents provide an explanation of their request

Submittal and Consideration of Economic Study Requests, cont.

- By June 1 of each year, the PAC shall meet, discuss and prioritize up to three Economic Studies to be performed
 - The costs will be recovered under the Tariff
 - The ISO will present a straw priority list
 - Additional meetings may be held to discuss the prioritization or substance of the studies
- If agreement is not reached on prioritization or study substance, then the dispute resolution provisions may be invoked by any PAC member by August 30
- The ISO will issue a notice to the PAC detailing the prioritization of the Economic Studies
- There are no deadlines for completion of studies within the Tariff

PROCESS FOR SUBMITTING ECONOMIC STUDY REQUESTS

Process for Submitting Economic Study Requests and Timeline

Key Milestone	Details	Date
Submission of Economic Request	In writing , via email to: PACMatters@ISO-NE.com	April 2 by 5 pm
ISO to contact all presenters of Economic Requests regarding logistics	i.e. Time allotted for presentation; indication of similar requests	April 4 by COB
Stakeholder presentation materials are due to ISO	Email: PACMatters@ISO-NE.com ISO will advise stakeholders of any major issues, such as whether or not the material is CEII, prior to posting.	April 11 by 3 pm
Stakeholders present their requests at a PAC meeting	Succinctly summarize the request and reasons the study should be performed	April 26 PAC meeting
PAC meeting when requests will be discussed	Draft scope of work and draft assumptions presented by the ISO	May 16 PAC meeting

Process for Submitting Economic Study Requests, cont.

- Additional Considerations:
 - While it is not usual for an Economic Study request to include CEII-type information, if you do label any materials as CEII, please also provide a redacted version that can be posted publicly
 - ISO will post all requests, in their original form, on the PAC website
- **All communications to ISO** should be made to PACMatters@ISO-NE.com

ECONOMIC STUDY BACKGROUND FOR CONSIDERATION BY PAC

Economic Studies – Samples

- 2007 Study – 10-year study of base system resource expansion and sensitivity analyses to fuel prices and demand resources
- 2008 Study – 10-year study of postulated various expansions of resource additions and relief of transmission constraints
- 2009 Governors’ Request – Year 2030 analysis of large-scale integration of renewable resources in the 20-year timeframe
- 2009 Request – Year 2013 interregional analysis conducted by the Joint ISO/RTO Planning Committee (JIPC) showing the effects of increasing the transfer capability between New York and New England
- 2010 Request – Follow-up on Governors’ Request examining generation unit retirements for the year 2030
- 2011 Request – Wind Integration study
- 2012 Request – 2012 Economic Study of various resource expansion and retirement scenarios
- 2013 Request – The Economic Impact of Different Levels of Imports on HQ Phase II
- 2015 Requests – Wind expansion scenarios in the Keene Road, Northern New England, and off the shore of Rhode Island and Massachusetts
- 2016 Request – Six resource expansion scenarios, which examined 2025 and 2030 with the transmission system constrained and unconstrained
- 2017 Request – Three scenarios resource expansion scenarios for 2030 based on the 2016 Economic Study Scenario 3

Typical Economic Study Metrics

- Production Costs
- Load Serving Entity Energy Expenses
- Congestion
- Interface Flow Duration Curves
- Generation Energy Production by Fuel Type
- Environmental Air Emissions by Electric Generators



Economic Study Assumptions Affecting Energy Cost Results

- Potential retirements
 - Coal
 - Nuclear
- Fuel price
- Environmental emission allowance prices
- Energy Efficiency growth rates
- Renewable development and integration
- Types and locations of new resource development



Content of Economic Study Requests

- Indicate suggested general location and type of resource expansion along with relaxed transmission constraints
 - Example 1: Add 4,000 MW of dual fuel capability to existing natural gas fired units using a particular fuel cost profile
 - Example 2: Add 1,000 MW of Canadian hydro power into the Orrington South Interface and
 - Identify needed increase in transmission constraints to relieve all congestion
 - Alternatively, suggest increase of specific transmission limits
 - Example: Increase Orrington – Boston by 2,000 MW
 - Example 3: For a given system resource mix, show the effects of various levels of PV, EE, and wind generation expansion at various locations
 - Economic studies are not meant to evaluate individual Participant business plans, such as conversion of individual oil-fired unit to natural gas, effect of retiring individual nuclear plant, optimizing import schedules on Phase II at a particular price, etc.
- Details of a specifically proposed transmission project aren't required, but can be provided
- Energy efficiency and photovoltaics
 - Can be captured by simulating several years
 - Example: stakeholders may assume load stays at the 2017 level
 - Specific EE amounts or load reductions may be postulated
 - Amounts and locations of PV may be simulated

Problematic Requests

- Violations of the Information Policy
 - Studies of individual resource assets
- Not consistent with Economic Study requirements
 - ISO market analysis of RECs, etc.
- Ill defined scope
 - Insufficient specificity of scenarios to be analyzed by ISO
- Too broad a scope
 - Address all aspects of variable resource integration

Stakeholder Process for Conducting 2018 Economic Study

- The ISO will seek input from the PAC
 - High level scope of work
 - General study assumptions
 - Overall study results and conclusions
 - Review of draft report
- Special economic study working groups *may* be formed to provide the ISO input on very detailed technical modeling and simulation methods not of interest to the more general PAC audience
 - This has been done to support past Economic Studies
 - Past study groups required a very limited number of conference calls
 - May have different study working groups for each Economic Studies
- ***Alternatively or in addition to the economic study working group***
 - PAC presentations will be structured to discuss the general PAC economic study issues upfront
 - More technical discussions will be discussed with PAC members as a last meeting agenda item