

New England Governors Infrastructure Initiative NEPOOL Participants Committee Update

New England States Committee on Electricity
May 2, 2014

Overview

- Report on NEPOOL Sector meetings
- Update on continuing State discussions
- Gas Concept Request for Feedback

NEPOOL Sector Meetings

- **States met with each NEPOOL Sector over two days – March 31 & April 14**
 - States appreciated Sector member time in preparing for and attending discussions
 - States provided written summary of Sector meetings in memo dated April 29, 2014

- **Common Issues/Questions Across Sectors**
 - Whether supportive or concerned about state action, there was generally consistent agreement that New England has a problem to solve
 - Nature of the problem: reliability and economic competitiveness
 - Markets vs. other means
 - ISO-NE role

Status of State Discussions To Date

No +/-or Low Carbon Resources

Natural Gas Pipeline

Cost Allocation on Transmission, Pipeline: Still talking, anticipate consensus view in the near-term

- ✓ Anticipate one-time solicitation for incremental transmission
 - ✓ All states share in costs of transmission
 - ✓ EDC participation in seeking & evaluating power proposals critical, in some states statutorily required
 - ✓ States developing protocols to address EDC Conflicts of Interest
 - ✓ States that enter power contracts will share power costs
- ✓ Anticipate one-time solicitation for incremental capacity
 - ✓ Will request proposals priced in increments of 200 mmcf/day, to allow the evaluation of the cost of adding sufficient increments of additional capacity to achieve levels of at least 1bcf above 2013 levels.
 - ✓ Seeking input on, alternatives to concept states set out in April 30, 2014 memo

Natural Gas Pipeline Development Concept

The six New England states are interested in exploring a concept through which to develop incremental gas pipeline for electric power system reliability as explained in a memorandum dated April 30, 2014.

To that end, the states welcome comment -

- On the approach generally, and on characteristics of contracting entity and capacity manager to best serve electric customers and to minimize transaction costs
 - On any alternative configurations and structural means to minimize market distortions
- On the utility proposal as set forth in April 22, 2014 letter to NESCOE
- On specific going-forward market adjustments that would eliminate the need for state action to ensure reliability and economic competitiveness through infrastructure investment after the one-time action currently in process

States presently intend to advance a proposal to NEPOOL for discussion in June toward a Participant Committee vote in September. Because time is of the essence, comments to RegionalInfrastructure@nescoe.com as soon as possible appreciated.

New England States Committee on Electricity

Summary of NEPOOL Sector Sessions on Governors' Infrastructure Initiative

April 29, 2014 - On March 31, 2014 and April 14, 2014, NEPOOL sector representatives met with representatives of New England Governors' offices, through NESCOE, to provide an additional forum for feedback and discussion on the New England Governors strategic energy infrastructure initiative. NESCOE appreciates the time and effort the sectors invested to prepare for and participate in these meetings. As communicated to NEPOOL at Participants Committee meetings earlier in 2014, the New England Governors consider enhancements to the region's energy infrastructure critical to New England's economic competitiveness and, as ISO-NE has identified, continued reliable power system operation. NESCOE continues to welcome New England stakeholders' input on and alternatives to the Governors' proposed means to satisfy infrastructure needs.

This memorandum shares some of the predominant themes that emerged in the Sector meetings generally, and on a sector-by-sector basis. Some sectors spoke with a coordinated voice on specific issues and other sectors offered wide-ranging and, at times, contrary points of view. This memorandum does not seek to capture every comment by each sector but rather to give a general sense of predominant themes. This memorandum also provides some state reactions to the discussion. The states continue to discuss details associated with the mechanics to advance needed infrastructure, and welcome suggestions and further questions, which themselves add value, on an ongoing basis.

Since the meetings with NEPOOL sectors, the New England states have spent considerable time discussing the range of issues to satisfy the Governors' objectives. To date, the states have made progress on cost allocation to govern investment in transmission infrastructure and natural gas pipeline and anticipate achieving a consensus position in the near-term. With respect to procurement of no-or low carbon power, the states believe participation by electric distribution companies in developing and evaluating power proposals is critical, subject to protocols to protect against real or potential conflicts of interest. In some states, electric distribution companies have statutory obligations relative to power procurements. The states are working with electric distribution companies on such protocols at this time. Those states that enter into power contracts will share associated power costs. With respect to natural gas, the New England states anticipate investing in natural gas pipeline to increase capacity into the region, with delivery point(s) optimized to achieve maximum reliability and economic benefits. The states anticipate a one-time solicitation for additional capacity, priced in increments of 200 mmcf/day, to allow the evaluation of the cost of adding sufficient

increments of additional capacity to achieve levels of at least 1bcf above 2013 levels. The structure the states are currently considering is set forth in a memorandum to NEPOOL and the New England Gas-Electric Focus Group dated April 30, 2014.

General:

- ***New England Has a Problem to Solve:*** Across the sectors, there were both expressions of appreciation to the states for seeking to resolve New England’s infrastructure constraints and its consequences and expressions of concern about the states doing so through the concepts presented to date. Those who spoke in support of the states’ efforts encouraged the states to act quickly and to bring forward more detailed proposals. Those who expressed concern about state action in connection with energy infrastructure also generally acknowledged that New England has an infrastructure problem to solve.
- ***Nature of the Problem – Reliability and Economic:*** Several sectors inquired about whether the states were seeking to solve infrastructure constraints for reliability or economic reasons. The states seek to invest in new infrastructure for both reliability and economic competitiveness purposes. While much of the discussion focused on economics, sector meetings included comments about system operational challenges and the reliability benefits of enhanced infrastructure.

The states underscored concerns about economic disparities between New England and other areas driven by higher energy prices during the sector meetings. In short, New England residents and businesses are paying higher prices for energy than if they lived and worked elsewhere largely because of a lack of infrastructure to deliver the lowest-priced supplies of natural gas into New England.¹ A real consequence of not moving toward adequate infrastructure is keeping New England consumers in an adverse economic position relative to other consumers. For example, over the weekend of November 23, 2013, delivered natural gas prices at New England locations were *more than double* the prices at other northeastern locations outside of New England (Pennsylvania, New Jersey, and New York).²

Putting the cost consequences aside entirely, increasing and diversifying New England’s energy infrastructure would reduce risks to the region’s highest power system priority – reliable electric service. ISO-NE has identified New England’s reliance on natural gas as a strategic risk to reliable electric service. The New England states consider continued reliable electric service to be the highest priority.

¹ ISO-NE draft Winter Operations Summary: January-February 2013, February 27, 2013 (“Winter Operations Summary”) at p.11.

² For more information, see also: <http://www.eia.gov/todayinenergy/detail.cfm?id=13591>.

At some level, reliability and economics are not severable. As discussed in some sector meetings, addressing the economic disparity arising from gas system constraints will have resulting reliability benefits. In addition:

- On behalf of ISO-NE, the Analysis Group estimates that an interruption to electric service could cost the region just under a Billion dollars *per hour*.³
- In 2013, ISO-NE made out-of-market payments to resources needed for reliability. These payments totaled \$66 Million for January and February 2013 alone. That compares to \$87 million for *all* of 2012.⁴
- As insurance against ISO-NE identified reliability risks during the winter 2013-2014 period, ISO-NE implemented an out-of-market winter reliability program that cost New England consumers \$78 Million for one winter season.

Incremental infrastructure would also enhance fuel source diversity and thus security, and have the ancillary benefit of helping the region satisfy public policy objectives and requirements.

- ***Market v. Other Means:*** A predominant although not universal theme across the sector meetings was concern about the implications of state actions to facilitate energy infrastructure on New England's wholesale competitive markets. Some asked why the states were not offering market-based proposals and some suggested the states wait for incremental market adjustments of recent years to take hold or for market-based solutions to emerge based on circumstances of this past winter.

The states support and are committed to competitive energy markets. The states would strongly prefer not to be in a position where state action is necessary. Competitive market responses and corrections to New England's pressing challenges would be ideal, and the states encourage the region to pursue them as it has over time. The fact remains, however, that the region's infrastructure deficiencies have long been identified from both a reliability and economic perspective and the nature of the problem and potential market-based solutions have been discussed for years in various venues, such as NEPOOL, FERC, and the New England Gas-Electric Focus Group. Operational and economic pressures have become acute and unsustainable.

To satisfy power system reliability concerns during the winter of 2013-2014, ISO-NE needed to procure resources outside of the markets. The total wholesale cost of serving load during this past winter was over \$5 billion - \$3 billion more than in prior typical winters. During the months of January and February 2014, the average real-time LMP in the region rose 100% compared to January 2011. To illustrate the nature of the economic urgency, one state observed during sector meetings that some manufacturing facilities closed down at times this past winter - and sent employees home - due to unacceptably high power costs. The risk to

³ For more information, see http://www.iso-ne.com/committees/comm_wkgrps/strategic_planning_discussion/materials/natural-gas-reliance.pdf.

⁴ Winter Operations Summary at p. 11.

reliable system operation and the economic burden on consumers that disadvantages New England's consumers and economy relative to other regions and neighboring states has to be corrected in the nearest possible term.

If there is a market solution to this challenge capable of near-term implementation that solves New England's problems holistically and expeditiously, proposals to implement them should be advanced and implemented promptly.

- ***ISO-NE Role:*** A question from several sectors, including generators and suppliers, concerned the states' view of ISO-NE's role and specifically the use of ISO-NE's tariff to fund gas pipeline for the benefit of electric consumers in light of ISO-NE's role as a neutral market administrator. In considering how to structure a tariff provision that will increase fuel availability to the benefit of the electric power system and electricity customers, the states agree entirely with ISO-NE and stakeholders that structuring such tariff in a way that preserves ISO-NE's neutral role as market administrator is paramount.

Some sectors also asked why state processes outside the tariff were not being contemplated to achieve the procurement of incremental gas pipeline. The states are interested in and listening to other possible paths to address the identified challenge. The use of the ISO-NE tariff presents an opportunity to match the class of principle beneficiaries (i.e., regional electric consumers) with the costs related to new regional projects to solve regional challenges, as well as a process for seeking FERC approval of the funding mechanism and for ultimate project development.

The following are some general observations and reactions on a sector-by-sector basis:

- ***Alternative Resources:*** As discussed above generally, members of the Alternative Resource sector expressed concern about the implications of the infrastructure investment on the competitive markets and inquired why the states were not pursuing a market-based solution. In reply to a question about the rationale for pursuing incremental natural gas, the states indicated that an objective is to eliminate the significant disparity between what New England consumers pay relative to consumers in other regions and neighboring states and that solving natural gas constraints will address both reliability and regional economic competitiveness problems. The Alternative Resource sector also observed that it takes longer for clean energy resources to move through ISO-NE's interconnection queue than it does to build a natural gas pipeline and correcting that, and/or adding transmission to reach wind resources in New England, could reduce prices and diversify fuel supply.
- ***End Users:*** Many in the End User sector expressed appreciation for the states' efforts to work around the decades-old natural gas paradigm that is not meeting New England electric consumer needs and encouraged states to bring forward

- details around initial concepts quickly. There was some reference to a preference for incremental steps and interest in allowing other solutions to come forward. The states indicated again that alternative solutions are welcome. With respect to increasing gas availability, there was an expression of the need to connect electric ratepayers, the beneficiaries of new gas pipeline, to the costs of new gas pipelines. There was concern about the consumer cost implications of any solution that required gas-fired generators to sign up for firm fuel.
- **Generators:** The Generator sector was interested in the states' purpose in seeking incremental gas pipeline, explained above. Generator sector members were concerned about the prospect of using the regional electric tariff rather than New England's local natural gas distribution companies to support incremental gas pipeline, also discussed above. As noted, the problem of access to natural gas has emerged in the context of the electric power system, not in supply to retail natural gas customers, and the beneficiaries of incremental gas pipeline will primarily be electric ratepayers, not natural gas consumers. With regard to transmission development, the Generator sector focused on the cost of incremental hydropower and the market implications of state action to increase no-and/or low-carbon power. As the states observed in connection with hydro analysis in the fall of 2013, absent a competitive procurement or negotiation, it is not possible to predict with accuracy the price of incremental hydropower. The states do not intend to purchase incremental hydropower (or associated transmission) unless the states determine that the consumer benefits exceed the costs.
 - **Public Power:** Public power has concluded that the path the region is currently moving down will not achieve the right balance between reliability, consumer cost and public policy objectives. Public power indicated that it supports the Governors' proposal for increased natural gas capacity. Like other sectors, public power posed a series of questions about implementation details. Public power recommended the states review the means used to develop the Phase II Interconnection to Quebec. To the extent that fixed costs are allocated to publicly owned entities, public power seeks opportunities for ownership in projects and use of its own sources of capital to fund at least its share of these costs. Further, public power concluded that problems with the wholesale market design have contributed to and exacerbated the impact of infrastructure constraints on electric consumers. As noted, the states encourage market-based proposals that could satisfy in the near term the objectives that underlie the Governors' December 2013 Statement to be advanced promptly.
 - **Suppliers:** The Supplier sector was generally concerned about the implications of the proposed infrastructure development on the competitive wholesale markets. The states noted that despite substantial discussions about potential market-based solutions that have taken place over many years, no market solution has solved the New England challenge at issue to date. The states welcome discussion around any market solution(s) that could resolve New England's current infrastructure challenges holistically and in the near term. The Supplier sector

- questioned whether the states could ask New England's natural gas distribution companies to resolve the region's gas infrastructure challenges. The states noted that the current natural gas challenges have emerged in the context of the electric power sector, and electricity consumers will be the beneficiaries of incremental infrastructure. Like others, the Supplier sector asked a series of questions related to the details of approach to natural gas infrastructure development. In connection with transmission development, the Supplier sector had questions about the assumed cost of incremental Canadian hydropower. The states are discussing approaches to transmission development and welcome inputs on structures or approaches that would minimize the prices consumers would pay for transmission and associated power. As noted above, it is not possible to know with certainty the cost of incremental hydropower absent a competitive process or negotiation. The states will not enter arrangements to fund incremental infrastructure unless the benefits to consumers outweigh the costs to consumers.
- **Transmission:** The transmission sector was supportive of the states' effort to increase natural gas capacity into New England and indicated that the need was urgent. A number of sector members appeared to express general support for a transmission solicitation as well. The transmission sector, like some others, suggested the states review the Phase II Interconnection agreement concept. The Transmission sector discussed authority issues in connection with various approaches. The transmission sector discussed different approaches to soliciting transmission and generation, such as whether seeking transmission and generation proposals sequentially or simultaneously would bring forward the most advantageous proposals.

New England States Committee on Electricity

To: NEPOOL, New England Gas-Electric Focus Group
From: NESCOE
Date: April 30, 2014
Subject: **Governors' Infrastructure Initiative – Comments Welcome on
Approach to Increasing Natural Gas Infrastructure**

Over the last several months, the six New England states, acting through NESCOE, have welcomed feedback on the Governors' infrastructure initiative and the concepts put forward to advance the Governors' objectives relative to system reliability and economic competitiveness. The New England states have received constructive responses from a cross-section of the gas and electric industries, including, for example, through discussions with NEPOOL sectors, comments from Gas-Electric Focus Group members, and other conversations.¹ The states appreciate the continued interest in the Governors' initiative and the productive discussions around potential solutions.

Means to Increase Natural Gas Supply For the Benefit of Electric Distribution

Company Customers: In addition to talking with interested stakeholders, the states have spent considerable time in deliberation about potential solutions. A concept the six New England states consider to be worth further exploration is outlined in the attached flowchart, referred to here as the Incremental Gas for Electric Reliability (IGER) concept. The states understand the concept is just that, and requires details to be discussed by stakeholders, including through NEPOOL, and ultimately considered by the Federal Energy Regulatory Commission (FERC).

The states, ISO-NE and many stakeholders with whom the states have spoken consider maintaining ISO-NE's neutral role in the marketplace, both in fact and in appearance, to be critical. The IGER approach appears to satisfy that objective by limiting ISO-NE's activities to issuing invoices and payments pursuant to a tariff approved by (FERC).

To inform further consideration, the states welcome feedback on the IGER approach generally and are particularly interested in feedback on the characteristics of the contracting entity and capacity manager in order to best serve electric customers and minimize costs, including but not limited to transaction costs. For example, the states might consider an appropriate capacity manager to be an entity with 1) deep natural gas management experience and 2) demonstrated ability to comply strictly with detailed tariff obligations. The states might consider an appropriate contract entity to be 1) creditworthy, with 2) demonstrated ability to conduct business transparently and 3) accountability, as the states will ensure the investment delivers the expected benefits.

¹ A high level summary of the meetings between NEPOOL Sectors and the states has been circulated to NEPOOL and is available at www.nescoe.com under Infrastructure Initiative. Comments from members of the Gas-Electric Focus Group are available at www.nescoe.com under Gas-Electric Exchange.

The ability to minimize transaction costs would be an important factor for both a capacity manager and a contract entity. Finally, because the New England states are seeking to invest in infrastructure needed for reliability and economic competitiveness in the context of the competitive markets, which have not satisfied these fundamental needs, the states also welcome comment on any structural means by which IGER could minimize market distortion.

Several New England utilities recently responded to the states' general requests for ideas to advance the Governors' objectives in the form of a proposed approach to facilitate the construction of incremental gas pipeline capacity (EDC proposal).² The EDC proposal includes electric distribution companies entering into long-term contracts with interstate pipeline companies as a means to provide creditworthy counterparties as a backstop to funding through the ISO-NE tariff. The proposal includes a number of features and details to move the region toward increased natural gas capacity in order to enhance reliable electric system operations, including capacity management and rate recovery.

The New England states appreciate the effort to advance solutions on an expeditious timetable given the acute challenges in our region. Therefore, in addition to inviting comment on the IGER, the states also welcome any feedback on the EDC proposed model, as well as any alternative proposals to the IGER or the EDC proposal. The EDC proposal indicates the utilities' desire to serve as the contract entity. Any parties that are interested in serving in that function, or any other proposed function, are certainly free to make such expressions of interest. Serious consideration of any proposals to serve in any particular function, however, would be premature until the states have considered feedback and finalized the IGER concept.

Going Forward Market Adjustments: In discussions with NEPOOL sectors, many market participants asked whether the states considered market-based changes as a means to implement the Governors' objectives. As discussed, the reliability and economic competitive challenge has long been the subject of regional debate and no market-based solution has been adopted that resolves it. The states would strongly prefer that New England not be in a circumstance that requires state action, but do not believe that there are any market adjustments, either under implementation or currently proposed, that could reasonably be expected to provide a solution to the region's infrastructure constraints within the desired timeframe. The states welcome specific suggestions about adjustments to New England's competitive wholesale markets that would, on a going forward basis, eliminate the need for government to support additional infrastructure investments in the future to ensure reliability and economic competitiveness.

Timing: The states presently intend to advance a proposal to NEPOOL through NESCOE for discussion in June 2014, with consideration by the Participants Committee in September. With time of the essence, the states seek feedback on the above, or alternative proposals, as soon as possible.³ Comments should be sent to

² The letter is available at:

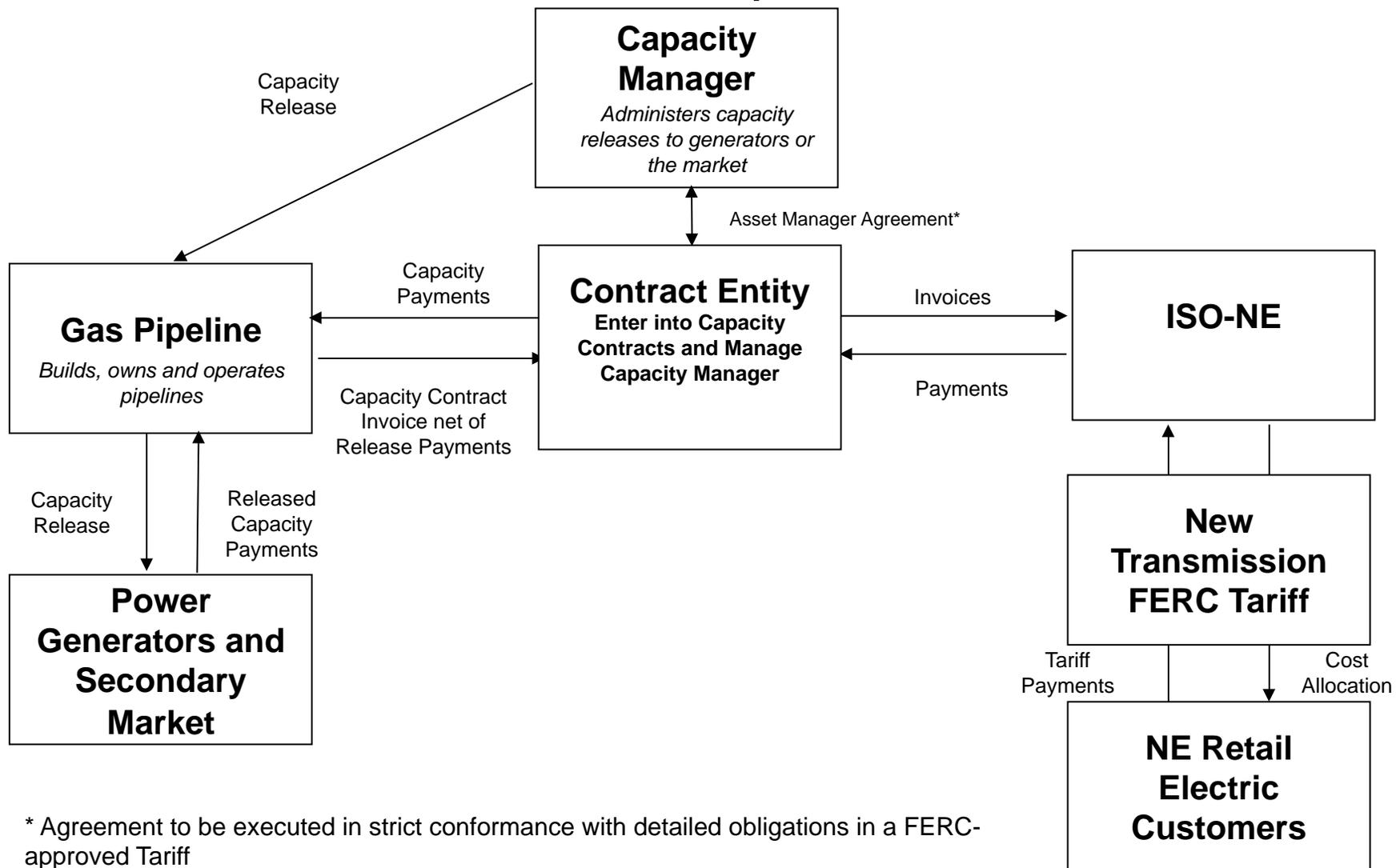
http://www.nescoe.com/uploads/EDCLetter_RegionalInfrastructure_22April2014.pdf.

³ Consistent with past practice, NESCOE expects to post on its website any responses or proposals received. Respondents should *not* submit any information that they believe to be

RegionalInfrastructure@nescoe.com. NESCOE will post all comments received at www.nescoe.com as well as on the Gas-Electric Focus Group information exchange consistent with prior practice.

confidential or commercially sensitive and should *not* expect NESCOE to treat any information provided as confidential or commercially sensitive.

Incremental Gas for Electric Reliability (IGER) Concept



* Agreement to be executed in strict conformance with detailed obligations in a FERC-approved Tariff