October 16, 2013

Heather Hunt, Executive Director
New England States Committee on Electricity (NESCOE)
4 Bellows Road
Westborough, MA 01581

Via email

Re: Comments on Phase III Gas-Electric Study

Dear Heather:

New England’s natural gas industry and NGA (the Northeast Gas Association) commend NESCOE for its work over the last many months to conduct the three phase analysis on “New England Natural Gas Infrastructure and Electric Generation.” The inter-relation of natural gas and power generation in New England has been a challenging issue for over a decade, and the NESCOE project has brought some timely attention to the current and future issues facing New England in this area.

The NESCOE studies conducted by Black & Veatch (B&V) have been informative and have identified, in our view, the basic reality of the New England situation – that additional natural gas infrastructure is needed to address reliability and pricing concerns for the New England energy market. That is a theme sounded by B&V from the Phase I report through the current report, Phase III.

In anticipation of a discussion of the Phase III report at the October 18 meeting of the New England gas-electric discussion group, we do however want to express some areas of concern we have regarding the Phase III report. Our comments are primarily offered as clarifications, to address possible misimpressions, and as questions/input regarding certain of the underlying data and assumptions. We appreciate the opportunity provided by NESCOE to offer comments on the assumptions and data.

We summarize below the main issues, and look forward to a discussion on October 18. We also are willing at any time to meet with NESCOE and the New England public utility commissioners to expand further on these points.

Natural Gas Industry Clarifications Regarding Phase III Report

Electric Generating Capacity Assumptions
Certainly any study is bounded by the moment in time when the actual study is completed. Since the August 26, 2013 completion date of the Phase III report however, there have been a few significant announcements of planned generating unit retirements in New England in response to ISO-NE’s FCA #8
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– namely, Vermont Yankee in 2014, and Brayton Point in 2017. Together these units alone represent about 2000 MWs. Does the recent delisting activity and planned retirements announced since the report’s completion suggest that the report’s conclusions might be different, or that the central analysis might need to be revisited?

**Future LNG Supply Assumptions**
The study assumes that New England LNG imports will remain at a level of 350 -400 MMcf/d throughout the forecast period, to 2029 (see pages 27-28). Clearly any study has to make assumptions about global gas markets/pricing and their implications for future U.S. market dynamics; but some uncertainty in LNG assumptions need to be factored in.

**LDC Demand Assumptions**
The local distribution companies (LDCs) did provide growth estimates to B&V earlier this year for this analysis. Nevertheless the design day demand of the LDCs appears understated by 30% in the report as displayed in Figure 37 on page 57. That projects an LDC January design-day demand of just slightly more than 3 Bcf/d for the New England gas LDCs. This does not correspond with our actual data experience or the ICF study released by ISO-NE in mid-2012, which identified New England LDC firm gas demand as 4.2 Bcf/d on design day for the year 2010/11 (see ICF/ISO-NE report, 2012, page 26) and growing.

**Low-Demand Case Assumptions**
Given some of the clarifications we suggest in the previous points, we would suggest that the Low-Demand Case would need to be reconfigured.

**Projected Pipeline Assumptions**
It is our understanding that Tennessee Gas Pipeline (TGP) has noted its caution against the projected transportation rate estimated for the planned “Cross-Regional Natural Gas Pipeline” project on page 35, indicating the projections were based upon insufficient classes of data and understated. The actual costs of projects are FERC-regulated matters and, as Tennessee has separately indicated, the actual costs of a new project vary depending upon key factors.

The Report also overstates the contracted customer commitments for the Spectra AIM project – the volume that was utilized by B&V is above the contract demand by 47% using the most recent information.

**Assumptions about LDC Capacity Release**
We believe that B&V has a good understanding of the dynamics of the natural gas market and its interrelations with the power market. We do have a more general concern related in a sense to the broader ongoing discussion in New England about the role of LDC capacity release as a safety valve within the regional gas-electric interface. NGA has expressed its concerns to ISO-NE and New England regulators over the years about the impact of a more constrained pipeline capacity market on gas LDCs, as the level of non-firm capacity held by power generators and marketers has increased at the same as overall demand for natural gas within the region has grown. There seems to be an assumption by some that the power market in New England can continue to rely on gas LDC capacity release to manage the market in the absence of any actions by the power market to secure more firm gas pipeline...
transportation capacity. (After a decade and more, the New England power market really needs to address its over-reliance on non-firm gas transportation capacity.)

**Specific Predictions of City Gate Basis Prices Relative to Henry Hub (“Secondary Market Prices”)**
The B&V report makes very specific predictions on Secondary Market Prices in New England, but does include disclaimers about such predictions. Clearly any such predictions are based upon the underlying data and assumptions used in the theoretical modeling.

The implications of making any city gate basis price assumptions can be far reaching, particularly for those that rely on such markets (i.e., generators and the ISO-NE market design), as well as electric customers that pay electric generation prices largely based upon a market clearing price primarily set by New England city gate gas prices.

For example, predictions of low Secondary Market Prices may be used by market participants relying on such a market as a reason not to construct any pipeline capacity even if such capacity may increase reliability and provide a net cost benefit.1

Any Secondary Market price predictions, in our view, should be posed with great caution, and, if made, should utilize the best available data and supportable assumptions run under a variety of scenarios. Historically any similar predictions have often proved inaccurate, as the secondary market is a relatively low liquidity market and supply availability is an “if and when available” proposition. The price is based upon highly unpredictable (even over the short term) market forces - including weather, availability of pipeline capacity, LNG import levels and other market factors. Making long term Secondary Market Price predictions is inherently more difficult as it is dependent upon numerous variable assumptions.

**Capacity Assumptions**
The design day analysis on page 57 appears to be in need of review in several respects. The analysis appears to suggest that New England has excess pipeline capacity on design peak day after serving all demands, including power generation, and without using any LNG peak shaving (i.e., the reference where is it suggested that 4.8 bcf of pipeline capacity exists to serve 4.2 bcf of design day demand for gas LDCs and power generation). The demand number data issue is described earlier, but with respect to capacity, real-time information provided by New England pipelines during the focus group process indicates that both Tennessee’s and Algonquin’s forward haul capacity is not only used on design day, it is fully utilized most every winter day (and some non-winter days as well). Furthermore, NGA’s

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1 Regarding Secondary Market Prices, in essence the Phase III report, based upon its original data and assumptions, specifically predicts that such prices will be relatively low (and lower than last winter, which was slightly warmer than normal) throughout the forecast period with some upward and downward movements based upon the AIM project going into service. The implications of making such a prediction are impactful and can result in the gas for electric generation “over-reliance issue” not being adequately addressed.
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awareness of the gas portfolios of the LDCs indicates that on the colder days of the winter LDCs are using peak shaving because they have fully utilized all of their pipeline capacity under contract.²

The capacity information contained in the design day analysis seems to imply a supply cushion for the New England market that is not borne out by physical capacity and demand, history and market realities.

**Conclusion**

We appreciate the opportunity to comment on this report. We again thank NESCOE for its initiative in analyzing important natural gas infrastructure matters as they relate to the electric market in the region. Given the potential implications to energy markets of this report, we believe, along with NESCOE, that it is important that such a report and its underlying modeling reflect the most accurate information possible, and that embedded sensitivities are fully understood by policymakers and market participants. We stand ready to provide further input on the report, its data and assumptions and any other matter where factual gas input would be helpful to the process. Thank you for your consideration of our comments.

Sincerely,

[Signature]

Stephen Leahy

cc: New England Gas-Electric Discussion Group

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² Possibly the total capacity number mischaracterizes Everett and Canaport LNG imports as “pipeline capacity.” If this is the case, the assumption of year-round availability should be reassessed as it is inconsistent with recent experience.