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To: Mike Henderson, Director of Regional Planning & Coordination, ISO New England

Re: New England Electricity Scenario Analysis, June 18th, 2007 Draft

Date: June 26, 2007

NSTAR commends ISO New England for undertaking the Scenario Analysis project. A review of the general implications of various technological choices in New England is a useful guide for policy makers.

However, a concern we have with the report is that it appears to draw conclusions about the inability of future resources to recover investments in future energy markets. These statements could lead policy makers to the conclusion that the wholesale electricity market has failed, or will fail in the future.

As Mr. van Welie stated in a presentation to the Restructuring Roundtable on June 22, the Scenario Analysis is *not* a prediction of the future. Therefore, we believe the report should avoid specific conclusions on a topic that is as unpredictable as whether or not wholesale market revenues will provide investment recovery years in the future. For example, the report states:

The gap between net electric energy market revenues and annual revenue requirements is large for all technologies except energy efficiency, demand response, and imports from neighboring systems. (page 56)

Our suggestion is that statements like this should be replaced with general comparative statements that highlight the differences between technology choices without drawing conclusions about market revenues in the distant future. This is because the market prices used in the Scenario Analysis are based on a marginal cost dispatch reflecting more of a spot market and therefore do not take into account commitments made under bilateral arrangements in forward markets which typically earn higher revenues than spot markets. In addition, the scenarios do not capture other revenues such as tax credits, emissions trading, ancillary services and renewable portfolio standards compliance costs to name just a few other sources of revenue. Since the analysis does not capture the economics of these types of transactions, it cannot be dispositive as to the viability of investments under future energy markets.

The best indication of viability at this point is the circa 11,000 MW response to the first Forward Capacity Auction. Clearly, investors believe that the market will contain sufficient revenues to spur these types of investments.

For your convenience, I attach a selection of quotes from the Scenario Analysis report that are of concern on the adequacy of revenues. We would be happy to suggest language changes to the report or review your changes to address the above points.

Thanks for undertaking this effort and for the opportunity to comment.

Sincerely,

James G. Daly
Director Electric and Gas Energy Supply
NSTAR

Specific Citations

1. Investment in most power technologies appear to require more support than can be provided through the electric energy markets alone, so evaluating the technology options must fully consider capital and operating costs as well as variable energy market operating costs. Only energy efficiency resources (as illustrated in the single technology “double-energy-efficiency case”) and some technologies in Scenario #1 (the queue) show sufficient revenues from the electric energy market and capacity markets alone to economically justify investment. p6
2. These technologies show a modest-to-significant gap between the net revenues these technologies receive in the New England wholesale electric energy markets and the annual revenue requirements (ARRs) associated with investment. Therefore, to induce investment in these technologies and have them enter the market, some other means would need to be used to fill this revenue gap, such as through payments from the Forward Capacity Market, the provision of ancillary services, tax credits, the sale of emission allowances, Renewable Energy Certificates, the effects of any new regulatory environment, and other sources. P6
3. By presenting a series of economic, reliability, and environmental results – for such metrics as the cost to produce electricity, electricity prices, the ability of market based revenues to support investment in different technology options, electric power supply reliability, fuel diversity, total emissions, and other dimensions of interest – this exercise sheds light on each technology path’s implication for the region and future investment in electricity resources. P10-11
4. The narrower the gap between a power supplier’s net energy revenue and the total of its fixed plus variable costs not captured in the simulation (its ARR), the less “other revenues” it will need to stay in the market. P37
5. This type of result sheds light on whether a particular technology path would likely induce its own type of technological investment or require additional policy support beyond that currently reflected in today’s market and regulatory framework. P37
6. Where a gap exists between the net electric energy market revenues and the ARR for a particular type of resource, other means of support may be needed to induce investment in this resource. P37
7. Figure 5-4 illustrates the extent to which individual resource types are likely to cover their revenue requirements through their net revenues in the regional energy markets. P51

8. By contrast, the mid-to-high cost estimates for nuclear and some renewables indicate that the amount of revenue in the energy markets alone is insufficient to support these technologies, although this snapshot does not reflect the significant tax advantages that may accrue to investors in advanced nuclear and renewables technology. P55
9. The gap between net electric energy market revenues and annual revenue requirements is large for all technologies except energy efficiency, demand response, and imports from neighboring systems, ... p56
10. Investment in most power technologies appear to require more support than can be provided through the energy spot markets alone, so evaluating technology options must fully consider capital and operating costs as well as production costs. Only energy efficiency resources (such as in the double energy efficiency sensitivity case) and some technologies in Scenario #1 (the Queue) show sufficient revenues from the energy spot market and capacity markets alone to economically justify investment. P69