Supplemental Responses to RFI
Identify Transmission That Could Facilitate Delivery of Renewable Resources

March 21, 2011 – The New England States Committee on Electricity (“NESCOE”) is pleased to report that it received a robust set of Supplemental Information Forms (“SIFs”) in response to the “Request for Information” (“RFI”) issued in December 2010. The RFI solicited information on new renewable energy resources that could help meet the region’s renewable energy goals in the most cost-effective manner.

To date, the RFI has been successful in:

- Confirming that New England can develop or import enough qualifying renewable energy to meet the region’s renewable energy goals; and

- Identifying transmission projects in various stages of development that, subject to further analysis, would facilitate the delivery of renewable energy to New England loads.

NESCOE previously announced that in early February 2011, developers of new renewable generation projects in New England and adjacent regions that: 1) could be operational by 2016; and 2) whose output would qualify for five New England states’ (Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island) Renewable Portfolio Standards and Vermont’s renewable energy goals provided information to NESCOE on over 50 renewable generation projects totaling more than 4,700 MW of nameplate capacity. Wind projects - on-shore and off-shore combined - represented over 90% of that 4,700MW.
The RFI presented an opportunity for renewable project developers and transmission owners and developers to provide additional information in SIFs at the end of February 2011. The SIFs could include information about the generation projects or about potential transmission projects that would facilitate the delivery of these and/or other renewable energy projects to New England loads.

Respondents submitted a total of 15 SIFs, which fell into two broad categories:

- Eight generation-related SIFs were associated with specific generation projects or technologies;
- Seven transmission-related SIFs were submitted for transmission projects that could facilitate delivery of renewable energy to New England loads.

The generation-related SIFs provided supplemental information on individual generation projects that submitted basic information in early February, such as additional data on the projects’ technology, interconnection location and status, and potential regional benefits.

The seven transmission-related SIFs provided information on three broad categories of transmission projects:

- One SIF described a proposed off-shore transmission system that would collect and deliver energy produced by off-shore wind turbines located in the region south and east of Martha’s Vineyard and Nantucket.
- One SIF described a proposed increase in the transmission capacity between upstate New York and northern Vermont, thus allowing additional wind energy to be delivered from generators in New York to New England loads.
The remaining five transmission-related SIFs describe various transmission projects designed to deliver wind energy from Maine to New England loads. These five projects are designed to facilitate the delivery of energy from on-shore wind generators located in Maine.

The SIFs that relate to delivering wind from Maine are generally consistent with the information submitted to NESCOE by generators in early February. That is, over 50% of the total identified generating capacity submitted was associated with on-shore wind projects that would be located in Maine.

The Maine-focused transmission SIFs included different technologies (e.g., underground, overhead, underground and/or submarine HVDC cables, overhead AC lines of 115 kV and/or 345 kV) and general locations (some projects would extend to Boston, while others would interconnect portions of the Maine grid). They presented less variation in the project capacities: most projects contemplated the ability support an additional 1000 - 2000 MW of on-shore wind generation.

Three of the transmission-related SIFs described projects that have been publicly announced, including the Maine Power Connection, the Green Line project and the Northeast Energy Link.

The table below summarizes the seven transmission projects. According to the information in the SIFs, any of these projects could be placed into service by the end of 2016.
### Summary of Transmission Projects

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Description</th>
<th>Miles of New Transmission</th>
<th>Technology</th>
<th>Capacity (MWs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Off-shore transmission system to deliver energy from off-shore wind turbines to loads in southern New England</td>
<td>Not specified</td>
<td>Not specified</td>
<td>Up to 4000 MW, in 1000 MW increments</td>
</tr>
<tr>
<td>2</td>
<td>Interconnection between upstate NY and northern VT</td>
<td>Not specified</td>
<td>230 or 345 kV interconnection points</td>
<td>600</td>
</tr>
<tr>
<td>3</td>
<td>Connection from Maine Public Service Company transmission system to CMP transmission system</td>
<td>~26</td>
<td>345 kV AC line within Maine</td>
<td>200+ (at least 200 MW of wind projects have been identified)</td>
</tr>
<tr>
<td>4</td>
<td>HVDC link between northern Maine and downtown Boston</td>
<td>~300</td>
<td>HVDC overhead line and submarine cable</td>
<td>800</td>
</tr>
<tr>
<td>5</td>
<td>Transmission upgrades in western Maine</td>
<td>Not specified</td>
<td>115 and/or 345 kV AC lines</td>
<td>Up to 1100</td>
</tr>
<tr>
<td>6</td>
<td>HVDC link between central Maine and northern Massachusetts</td>
<td>230</td>
<td>HVDC underground line</td>
<td>1100 (with potential for some additional increase on existing lines)</td>
</tr>
<tr>
<td>7</td>
<td>AC transmission upgrades between Maine and southern New England</td>
<td>Unknown</td>
<td>Unknown</td>
<td>1000-2000</td>
</tr>
</tbody>
</table>

NESCOE appreciates the time generation project developers and transmission owners and developers took to provide information to inform consideration of means of meeting the region’s renewable energy goals. NESCOE will announce its next steps in this process in the relative near term.