**Work Session #1: RPS Class Requirements**

**Minutes**

**March 15, 2010, 9:00 AM**

**Call-in Phone Number:** 1-866-951-1151**, Conference Room number:** 5518132

**I. Adequacy of sources to meet class requirements**

A. Baseline data sources—what are they (ISO-NE, NEPOOL GIS, utilities, PUC, etc.)?

1. Should we measure supply in terms of energy (kWh) or capacity (kW)?
   - Current requirements are based on a percentage of load measured in kWh, so we should start with generation sources and assume a given level of output per source.
   - Would capacity be related to peak load? Suggestion made that the regulations be adjusted to require a capacity-test (weighted value for generation that has low capacity values).

2. NH sources vs. New England & New York resources
   - NYSERDA completed an RPS review study in 2009.
   - CT Clean Energy Fund Board is studying the CT RPS program (with assistance from consulting firm Sustainable Energy Advantage and NREL), and will release results in April.

3. What assumptions should be used to estimate current supply and demand?
   - Suggestion made that the Commission use the NEPOOL – GIS database to determine the eligible facilities and publicly provide a redacted version (mask generators names).
   - ISO-NE interconnection queue is very long, only about 30% of projects in queue historically get built. Or may be best to use a range. Others agreed that due to siting and financing issues, this assumption is reasonable.
   - When relying on the ISO-NE Interconnection queue, add a 1 year lag to the estimated operation date.
   - Commission should consider using a range of technology-specific capacity factors.
   - Suggestion to use a modeling straw proposal.

B. Class I-IV: Where are the surpluses and shortfalls?

1. Factors contributing to surpluses and shortfalls
2. Should surpluses/shortfalls be addressed? If so, how?
   - There is an oversupply of Class III RECs due to the unforeseen supply of RECs from New York-based LFG facilities. In-state biomass facilities cannot compete in current REC market because the market price is so far below the breakeven price of $85 per MWh. Biomass facilities rely on the REC revenues to recover operation costs (transportation and woodchips).
   - Suggestion made that NH change the Class III in-service date from 2006 to 1998: this would effectively disqualify the newer New York State LFG facilities.

- The Class III market depends on the CT Class I market, such that, when the CT market rebounds, there will be a shortage of NH Class III RECs. As a result, it is uncertain how long the current surplus in Class III RECs will exist.
- There is a shortage of Class IV RECs due to market barriers, such as the 5 MW size maximum and the fish passage requirement (costly to install and reduces output). The Nature Conservancy went on record that it would not support any changes to the current fish passage requirements. Heidi Kroll for Granite State Hydro Association expressed concern on how the PUC may rule in the Holyoke Case (DE 10-151).
- Suggestion made to reduce the Class IV REC requirement.
- There is currently a surplus in Class I RECs. There will be an excess supply of Class II RECs due to the unforeseen plethora of out-of-state sources that are certified. As a result, the price of Class I and Class II RECs has dropped precipitously.

Other Questions:

a) Given that NH represents approximately 9% of the ISO-NE load, how much would an increase in Class requirements affect the market REC price (of each Class)? How would such an increase impact retail electricity rates?
   - NHEC stated that there is a one-to-one impact of REC price increase/decrease on retail rates. Suggestion made for the Commission to use modeling to confirm such an impact.

b) Do you find the REC price of [insert Class] to be adequate toward viable financing of a renewable energy project located in NH?
   - No, the price of Class II RECs is so low that sources must rely on both REC and rebates.

c) What is the overall state of the current REC market [as a tool to increase renewable energy resources in NH]?
   - Everyone agreed that NH ratepayers are supporting too many out-of-state sources. Both RECs and rebates are drivers for investments in Class II sources. There is significant concern that if current REC prices fall any lower than existing levels, than many sources, particularly biomass, will not remain in operation. The current market values existing sources more than new sources.

**II. Class requirements in light of current and expected market conditions**

A. Factors influencing the REC market and retail electricity market

B. Forecasting and modeling

1. Pros and Cons
2. Available forecasting/modeling tools
3. What assumptions do these tools employ?

- Multiple recommendations to use consulting firm Sustainable Energy Advantage (SEA), which offers a New England REC market forecasting model (REMO). REMO has done an excellent job of forecasting the impact of REC imports from NY and Canada. An SEA analyst stated that the REMO model has been pretty accurate in projecting REC prices when reviewing past predictions and price trends.

Other Questions:

d) If you could change the class requirements, would you? How?

- Add a thermal component with a different eligible operation date to the RPS requirements. Another suggestion was made that landfill gas should have its own class. A counterpoint was made that more classes lead to less flexibility. DES pointed out that very few landfills in NH could become eligible for any class of RECs, given the way they were originally constructed.

- In addition to a price cap (which is currently the alternative compliance payment; the ACP), NH could consider adding a price support mechanism similar to the Massachusetts SREC (solar REC) suggested price minimum that is set equal to project cost. Setting an outright price floor is another option. Supporting in-state sources through the use of multipliers is another option. Many expressed the need to create and maintain certainty in the market, particularly as the biomass facilities rely greatly on REC revenues to operate.

- There was significant discussion about the need for the Commission or the legislature to reduce the burden of reading the meters (or verifying the production) of small net-metered sources. Tie monitoring to system performance and let owner report data. Utility suggestion that the RECs should go to the host utility. Discussion ensued on the topic of REC ownership. Owners of small sources want the easiest approach and are rarely interested in playing in the REC market.

e) Where do you expect the REC market to go in the near term? Medium term?

f) What role does the perception of the future REC market play in a decision to develop a renewable energy project in NH? Elsewhere in New England?

**III. Increase (Extension) in requirements beyond 2025 (Class I & II, statute as a whole)**

A. Should an increase be recommended? Why or why not?

B. Would an extension reduce the uncertainty of investing in renewable energy?

- There was a near unanimous consensus that the RPS requirements for all classes must be extended beyond 2025 because all sources have a 20 to 25 years life and rely on this revenue stream through the majority of that project life. It may be instructive to follow the development of the Laidlow project case and SB 118, which proposes to remedy this issue by inserting the word “thereafter.”

**IV. Transition of new sources to existing sources (Class I & II)**

A. When should new sources be re-classified as existing sources, if at all?

1. Methodology for transition

- It may be premature to consider a reclassification at this time. Any re-classification date should be tied to the life (life-cycle) of a given technology.

Workshop adjourned at approximately 11:45 am.

Please email all written comments pertaining to the topics of this workshop to rpsreview@puc.nh.gov no later than 4/12/2011.