SB 218 Thermal RPS Stakeholder Meeting
August 3, 2012

Introduction of Thermal RPS Program Development

After brief welcome and introductions Jack Ruderman provided an overview of **SB 218** as it pertains to useful thermal energy and the development of a program for thermal Renewable Energy Certificates pursuant to SB 218. SB 218 amends the Renewable Portfolio Standard (RPS) law, RSA 362-F and creates a Class I sub-class for useful thermal renewable energy. Beginning in January 2013, 0.2% of Class I REC requirements are to be met with thermal resources. The requirement increases by 0.2% annually to 2.6% by 2025. The PUC is required to "establish procedures by which electricity **and useful thermal energy** production not tracked by ISO-New England from customer-sited sources, including behind the meter production, may be included within the certificate program, provided such sources are located within NH. RSA 362-F:6, II."

Class I thermal sources may be aggregated and the energy production is "to be monitored by and verified by an independent entity designated by the PUC, which may include electric distribution utilities, **or by such other means as the commission finds adequate in verifying that such production is occurring."** The calculation of thermal energy produced is expressed in megawatt-hours, where each 3,412,000 BTUs of thermal energy produced is equivalent to one megawatt-hour. RSA 362-F:6, V. There is a price ceiling of $25 per thermal REC, verses $55 for other Class I RECs. In addition, sources must be located within New Hampshire.

The New Hampshire Department of Environmental Services has agreed to assist the PUC in the development of this program. Contacts at both agencies follow:

- Jack Ruderman, PUC Sustainable Energy Director, 603-271-6012, Jack.Ruderman@puc.nh.gov
- Liz Nixon, PUC Energy Analyst, 603-271-6018, Elizabeth.Nixon@puc.nh.gov
- Joe Fontaine, DES Trading Programs Manager, 603-271-6794, joseph.fontaine@des.nh.gov

Rule Making

The PUC is charged with developing rules for the Thermal RPS Program. Suzanne Amidon provided an overview of the rule making process. She explained that the rule making process typically takes at least six months and requires the PUC to follow the Joint Legislative Committee on Administrative Rules (JLCAR) process. The process has multiple steps and each step has both procedural and time requirements that cannot be truncated. The Commission has considered doing interim rules, but has found that interim rules take as long as the full rule-making process.

Discussion

- Representative Jim Garrity explained that in New Hampshire, the JLCAR committee will approve or object to the approved rules, based upon the plain wording of the statute, and the statute

should not be interpreted to mean other than what it says. The Executive branch does not have the final say.

- Clarification was sought regarding the date that the minimum electric renewable portfolio standards will change. The RPS obligations by class and year take effect January 1, 2013.
- A question was raised about how projects that come on-line before the rules are completed will be handled. It was clarified that SB 218 includes the production of useful thermal energy provided the source began operation after January 1, 2006 except as follows:
    - Geothermal energy in the form of useful thermal only if the unit began operation after January 1, 2013.
    - Solar thermal energy, if the solar thermal energy output is in the form of useful thermal energy only if the unit began operation after January 1, 2013.
- Stakeholders questioned whether geothermal includes air source heat pumps.
- Individuals raised the issue that this bill may create a situation in which one or more large thermal sources dominate the market for Class I thermal RECs, thereby crowding out small thermal facilities. It was clarified that the Legislative intent was to provide a "first come, first served" program for thermal RECs and not to necessarily cover the spectrum of sources that generate useful thermal RECS. SB 218 provides for a modest start. The example of a biomass plant was offered. The plant currently has waste steam going up the chimney. If the facility is converted to a combined heat & power facility it will be eligible to receive electric RECs for the power produced and thermal RECs for the useful thermal energy produced. In theory, a single large plant could produce enough thermal RECs to meet all the Class I thermal requirement in a single year.
    - It was stated that 0.2% represents 22,000 MWh in 2013, or about 75,000 MMBtu, and a typical home uses 100 MMBtu per year. Thus, aggregation of 750 homes would achieve the requirement.
    - Market uncertainty was also discussed.
- It was noted that there is a need for effective metering. Parametric metering (i.e., measurement of a factor other than actual thermal output) may be necessary. The ASTM is currently working on standards for thermal metering. It was noted that this stakeholder group and the PUC should coordinate with ASTM on metering standards for thermal sources. The ASTM method may not be available until mid-2013.
    - The RECs must account for the efficiency of the system. Therefore, the RECs should be based on thermal output, not input.
    - Puc Chapter 900 deals with net metering.
    - Written comments were received after the meeting from Water Energy Distributors, Inc.
- The PUC must also work with NEPOOL-GIS on the development of the program to include useful thermal in the RPS.

The process to establish this program will be "organic" and as the PUC formulates draft rules, it will call another stakeholder meeting for input and feedback.