

SB191 Energy Advisory Council  
Meeting Notes for October 10, 2013

Council Members in Attendance:

- Director of the Office of Energy and Planning Meredith Hatfield
- Chair of the Public Utilities Commission Amy Ignatius
- Commissioner of the Department of Environmental Services Tom Burack
- Senator Martha Fuller Clark
- Senator Bob Odell
- Representative Beatriz Pastor
- Representative Charles Townsend

The meeting opened at 2:01 p.m. with introductions; OEP Director Meredith Hatfield noted that as the energy strategy progresses, relevant materials and notices will be posted on the OEP website, and that interested parties can also sign up for an email distribution list on the SB191 project webpage on the OEP site.

The meeting then moved into an overview of NH's energy infrastructure, presented by the PUC. Tom Frantz, Director of the PUC's Electric Division, provided a high-level overview of the electricity picture in NH, including:

- How the fuel mix has changed over the last decade
  - Used to be largely oil, now almost no oil; huge increase in natural gas; large-scale biomass also playing a role
  - NH's fuel mix currently is nuclear 31%, natural gas 28%, coal 13%, oil 12%, hydro 11%, renewables and other sources 5%
- The history of the restructuring process and where it stands now
  - How wholesale markets impact retail prices
  - Competitive electric suppliers vs. aggregators; 16 competitive suppliers and 45 electricity aggregators now registered to do business in NH
- The impact of renewable energy sources on the transmission system
  - Curtailments of output by ISO due to transmission limitations; generation not being built close to load centers (particularly wind)

Commissioner Ignatius then presented on other energy issues, including:

- Natural gas import constraints
  - Building new pipelines is very expensive, and pipeline operators generally want firm load commitments; additionally, laws that prohibit the inclusion of construction costs in utility rates before a project is completed and serving customers ("Anti-CWIP" law (CWIP = construction work in progress) can make it difficult to finance the projects. Not every state has this prohibition, but it has been part of NH's statutes since 1979 and was an important legal issue in PSNH's bankruptcy. (See RSA 378:30-a
  - There is increasing interest in trucked CNG (compressed natural gas), and town-level distribution.
    - This topic has been flagged for further discussion in a future meeting.
- Landfill gas capture

- These projects are big win-win for energy and environment; not only get essentially ‘free’ energy, also significantly reduce greenhouse gas emissions—the methane that is released from landfills is a very potent GHG and if not captured is often just flared; landfill methane projects at the Turnkey Landfill in Rochester and the Mt. Carberry Landfill in Success are now operational
- Status of nuclear energy
  - Vermont Yankee (located in Vermont on NH’s western border) will begin shutting down by late 2014; it would need to refuel at that point in order to continue operations, and decided was not economic to do so.
  - Seabrook is seeking to extend its license to move the end date from 2030 to 2050; application is under review at the federal level. There are two significant issues: possible degradation of Seabrook’s concrete due to chemical reactions to moisture and, for all nuclear plants, the long term plan for disposal of high level radioactive waste, namely the spent fuel rods. Owner NextEra believes these issues will be resolved and the license extended to 2050.
  - Spent fuel rods at both Seabrook and Vermont Yankee are to be stored for the indefinite future using on-site storage casks.
  - Ongoing issue nationally is what to do with spent fuel now that Yucca Mountain facility no longer being pursued.
    - At the moment, all plants storing the fuel on site.
    - For Seabrook, Nuclear Decommissioning Finance Committee meets regularly to ensure that sufficient funds are being set aside to decommission plant long after its closure (50+years) (see RSA 162-F)
  - Some other types of generation must also have decommissioning plans; most difficult for older plants, hard to know what might be in the soil as a result of operations in periods prior to strict environmental regulation.
    - Commissioner Burack noted that the SEC typically requires a decommissioning plan when certificating a new facility.
  - Renewables
    - NH adopted a Renewable Portfolio Standard in 2007 (see RSA 362-F) that requires electric providers to obtain Renewable Energy Certificates (RECs) to match certain percentages of their load in 4 renewable energy classes. If they can’t obtain RECs at a reasonable (legislatively defined) price they make Alternative Compliance Payments to the state instead. ACP funds are distributed by the PUC through rebate programs and competitive grants.
    - 356 facilities in New England are certified as complying with NH’s RPS standards, 299 of those facilities are located in NH.
    - There are 3 large scale wind facilities now operational, for total of 163 MWs of installed capacity

The Council then discussed issues related to capacity factors for wind, and how those resources are integrated into the electric system. Questions were raised as to who evaluates the need for projects, the ISO or the SEC. It was suggested that the energy strategy should consider how the state could match potential future need for energy and projects as they are proposed.

Becky Ohler of DES presented on the current status of transportation energy issues in NH.

- We drive 35 million miles a day on NH roads, at a cost of \$7.5 Million a day, which is half of all of our energy expenditures and accounts for 1/3 of our GHG emissions.
- Land use patterns have a big influence on this—as growth moves away from city and town centers and become dispersed in more rural areas, ability to walk or bike or otherwise take alternate transportation suffers.
  - Although our population has only doubled since 1970, vehicle miles traveled has tripled.
- Three main strategies to reduce expenditures and GHG emissions:
  1. Change fuel type
  2. Improve vehicle efficiency
  3. Decrease miles traveled
- The 3<sup>rd</sup> point above is being driven by demographics at either end of the spectrum—older people find themselves unable to drive, and younger generations are increasingly demanding walkable communities and public transportation.
  - Difficult to meet that demand in absence of strong planning and dedicated funding streams for public transportation
- NH participates in regional and national efforts to increase the use of alternative fuel vehicles, including electric (EV) and natural gas. The New England Governors and Eastern Canadian Premiers recently adopted a goal of 5% alternative fuel vehicles, including EVs, by 2020 in the region. Next year the group will develop a regional target for “enhanced transportation,” e.g. walking, biking, and public transit. DES estimates that currently NH has about 90-120 electric vehicle registered. (Interesting note: NH has 1.3 million people and 1.4 million registered vehicles).
- The state energy strategy should consider how to adapt to the increasing using of electric vehicles, and how best to integrate them into our electric grid so that they are not increasing peak demand.
- The Council discussed the fact that NH is the only state that hasn’t adopted CALEV fuel efficiency standards, but we do get many cars here that meet those requirements because automakers and dealers need to serve surrounding states that do have that in place.
- NH hasn’t increased the gas tax in many years and that limits funding for new transportation projects and approaches.
- The 2009 Climate Change Action Plan has a section devote to transportation and land use, which the Council should review in detail during the strategy development process.

Senator Fuller Clark expressed concern about the broad mandate and short timeline, and asked whether the group could meet more frequently before the start of the new legislative session. She also suggested that we develop a timeline for the project. Others agreed and OEP will send out possible times to meet over the next few months.

The meeting was opened up for public comment. One member of the public suggested that we consider tourism as a major aspect of our economy.

Senator Fuller Clark also suggested that we keep track of where NH is different from other New England states on policy issues that we will consider during this process.

The meeting adjourned at 4:31 p.m.