

SB191 State Energy Advisory Council (SEAC) Meeting Meeting Notes

Location: LOB 302-304

Date: March 7, 2014

Time: 1:30 to 3:45 pm

Council Members in Attendance:

- Meredith Hatfield, Director of the Office of Energy and Planning, SEAC Chair
- Tom Burack, Commissioner of the Department of Environmental Services
- Amy Ignatius, Chairman of the Public Utilities Commission
- Senator Martha Fuller Clark
- Representative Herbert Vadney

Other agency staff in attendance:

- Mike Fitzgerald, DES
- Karen Cramton, OEP

1:40 Meeting Called to Order and Meeting Note Approval

- The SEAC approved the meeting notes for the February 10, 2014 SEAC meeting
- The SEAC approved the meeting notes for the February 21, 2014 SEAC meeting

1:45 Welcome, Introductions and Review of Agenda

1:50 Navigant Presentation -

Revised Energy Vision Discussion

The Energy Vision should focus on where NH wants to be in 2025. Navigant revised the energy vision based on comments and feedback from the SEAC, stakeholders, and public comments received during and since the February 21, 2014 SEAC meeting.

Comments:

- Concern that the revised energy vision is very ambitious; particularly the energy efficiency and new construction wording.
- Vision scattered and un-focused; hard to read. Instead of visioning for businesses vs. residential, maybe instead write the vision for generators, consumers, urban areas, rural areas, etc. The energy vision should be a guide post as to where we want to be.

- Many statements included in the energy vision are very general and do not add value. The vision should be specific for NH. For example, even though NH is a small state, we have 5 heating zones. The vision needs to recognize where we are today and our limits (i.e. NH will not be able to keep expanding biomass use).
- Remember, this is the vision; not the strategy and not nuts & bolts of how we can achieve the vision. The vision should guide us to the strategy. The vision is the desired end goal – it should consider more than we know we can do in order to truly be a vision.
- Navigant Response – the resource potential helps define how we want to achieve NH’s energy vision. Should we increase the vision’s time horizon... change the energy vision date to 2050?
- Public Comments:
 1. The revised energy vision needs to be accepted by the public. Would like to see the 4 sectors broken out individually (residential, commercial, industrial and transportation) to help people relate to the document.
 2. The energy vision is the end game, then a more focused vision for 2025 to drive strategy. Include more specifics in 2025 vision.
 3. How will the vision impact tourism? What does the economy look like?
 4. Last paragraph – change creating high quality jobs in all sectors, not just energy.
 5. NH is not an island; the vision needs to address regional challenges and plans.
 6. The vision needs to define milestones so stakeholders don’t lose motivation.
 7. The vision doesn’t recognize community access to thermal energy. There is great disparity within NH; the vision needs to recognize different regions will need different solutions.
 8. There is a perception that natural gas will solve thermal problems, but only 22% have access to natural gas; therefore, natural gas will not solve problem.
 9. Financing and mechanisms for financing need to capture market based and private investment solutions. Leverage private investment with public funding. Public funding is not enough. Vision needs to focus in on the development of market mechanisms that will allow us to achieve the vision.
 10. The statute requires the development of a 10-year strategy; therefore the vision should be for the year 2025. Write vision based on the defined statute requirement which identifies 8 goals.
 11. Strategy should empower people to move forward. Likes diversity of the vision.

Preliminary Resource Potential Discussion

Four tiers of potential for each resource studied:

1. Business as Usual (BAU)
2. Economic Potential
3. Technical Potential
4. Total Potential

Today, we will focus on the first three tiers for each resource (Energy Efficiency Resources, Thermal and Transportation Fuels Resources and Power Generation and Energy Infrastructure Resources).

Energy Efficiency Resources:

- Residential Sector –
 - no comments
- Commercial Sector –
 - Remember, tremendous interplay between thermal efficiency and electric usage
- Industrial Sector –
 - Economic potential is closer to the technical potential than in the commercial sector, why?
 - Navigant Response – because energy is a larger portion of their cost structure; therefore, as a sector they are investing more in efficiency.

Thermal and Transportation Fuels Resources:

- Residential Thermal –
 - Will we really be going back to electric heat?
 - Navigant Response – this represents the conversion to air source heat pumps for example
 - Are you suggesting we will be increasing our electricity usage to heat our homes? Should we go back to using electricity to heat homes?
 - Navigant – this data represents the technical potential; not a suggestion on the method (or fuel) NH should use to heat homes
 - What are the technical constraints for biomass?
 - Navigant will share these details during the upcoming webinar
 - Slide 16 shows heat pumps are good!
 - Specifically state the graph shows thermal output (COP – coefficient of performance)
 - Navigant – BBTU is the thermal output that is available to heat your home

- Graphs illustrate what could be done; not what should be done.
- The graphs and analysis assume unchanged demand.
- Commercial & Industrial Thermal –
 - Why was solar thermal not included?
 - Navigant Response - solar thermal is really specific to water heating, it doesn't fit well with commercial and industrial.
 - Is commercial and industrial solar considered?
 - Solar is included in power generation.
- Transportation Resource –
 - Why is the economic potential limited to a 10 year time frame?
 - Navigant Response – something else needs to happen to reduce the economics
 - Does this analysis include infrastructure costs (i.e. natural gas and electric fueling stations)?
 - Navigant – yes, those costs are being considered
 - Does natural gas include the 10% biofuel mandate change?
 - Navigant – will confirm those changes were considered
 - The U.S. is thinking about exporting natural gas. The exporting natural gas this will cause price levels to greatly increase to worldwide price levels

Power Generation and Energy Infrastructure Resources

- Power capacity (slide 21) –
 - “Roof top solar” confirmed this category includes all solar production except utility scale solar
 - Why is utility scale solar PV and off shore wind capped?
 - Navigant Response – capped for graphing purposes only. Height of bars is really twice as high.
 - How is potential for utility scale solar determined?
 - Navigant: Based on NREL study.
 - Full potential generates twice the power NH actually needs.
 - Wind turbines and in-stream tidal power would drive down economic costs. Is this considered in the model?
 - Navigant Response – the model does not look at specific benefits of co-locating power generation facilities
 - Regarding biomass, the power generation is over optimistic; especially is you achieve the economic potential for generating heat using biomass.
 - Navigant Response – all graphs are independent of one another
 - Does biomass potential include potential for biomass CHP?
 - Navigant – yes, CHP is a potential resource but not fuel specific CHP
 - MW designation is the name plate capacity
 - Biomass seems unrealistic given NH's resources

- Navigant – the resource availability projections come from the Climate Action Plan
 - That plan was written prior to the new biomass plants coming on line
 - When comparing Utility scale solar to roof top solar installations – where do you get this most bang for your buck?
 - Navigant - Roof top solar is more economical
 - BAU – confirming 16 MW of roof top solar in 10 years (true)
- Power Generation (slide 22) -
 - No comments
- Alternative Energy Infrastructure -
 - What is electric storage on this slide?
 - Navigant Response – off-grid storage, battery type storage being held (for load shifting)

Next Steps:

- Resource Potential Webinar scheduled for Friday, March 14th at 10 AM
- Feedback regarding the resource potential study is due by March 21st
- Friday, March 28th - SEAC meeting. Topics: resource potential study recap and policy gap analysis
- Friday, April 11th – SEAC meeting. Topics: policy discussion (recommendations and beginning of strategy)

Public Comment/Wrap Up:

- The Resource Potential presentation is too long; the information (potential) needs to be more intuitively obvious.
- The Resource Potential will become an appendix to the overall strategy document. The document will include words to describe and define the material presented in the graphs.
- The Technical Potential may not be useful; keep the discussion simple.
- Navigant will define top 5 resource potentials (for example in a chart)
- Is there more detail available for the resource potential analysis? The specific assumptions are not spelled out. What are they?
 - Navigant Response – Navigant’s proprietary model was utilized to complete the resource potential analysis; however, Navigant can address specific questions. Navigant’s technical team will participate on the webinar and will answer specific questions.
- Where does energy efficiency fit in as a resource potential?
 - Navigant Response – refer to slides 10 – 12.

3:40 -- Director Hatfield presented the upcoming meetings and lead a discussion about when to host public meetings outside of Concord.

- Public meetings had been discussed for the last week of March and the first week of April, does this still make sense? Should we instead wait until after the draft strategy is available to go to public?
 - Move public meetings to the May/June timeframe?
 - Another idea is to increase webinar offerings and information on the website. Offer a webinar in the evening?
 - Agree, we should push public meetings out to May. Pre-draft public meetings were not mandated by legislation. Webinars provide an opportunity to get feedback from public. Publicize webinars to keep participation high.
 - Agree, public meetings prior to a draft strategy would be difficult to manage and make useful for the public.

- Do public meetings outside of Concord need to be in the evening?
 - Yes (all council members in agreement)
 - SEAC will seek input on locations.

The meeting was adjourned at 3:45.