

**SB191 State Energy Advisory Council (SEAC) Meeting
Meeting Notes
January 24, 2014**

Council Members in Attendance:

- Meredith Hatfield, Director of the Office of Energy and Planning, SEAC Chair
- Senator Bob Odell
- Senator Martha Fuller Clark
- Representative Beatrix Pastor
- Representative Charles Townsend
- Representative Herbert Vadney
- Tom Burack, Commissioner of the Department of Environmental Services (arrived late) and Mike Fitzgerald, DES-ARD
- Amy Ignatius, Chair of the Public Utilities Commission

Other agency staff in attendance:

- Karen Cramton, OEP
- Brandy Chambers, OEP

Introductions and Review of Agenda

Ms. Hatfield called the meeting to order at 1:37pm. The Council approved the meeting notes from December 17, 2013; they will be posted on OEP's website.

Navigant will host a BAU webinar for the public on Tuesday, January 28, 2014 at 1:30 pm; instructions for participation are on OEP's SB191 webpage. Please sign up for notices of meetings, etc. if you are interested by emailing Brandy Chambers at OEP at (brandy.chambers@nh.gov).

Business as Usual (BAU) Presentation & Discussion

Navigant Consulting presented the draft BAU forecast; full PowerPoint presentation will be posted to OEP website. A summary is provided below:

Overview:

- Purpose of BAU - Establish baseline so recommendations can be evaluated against the baseline. BAU is Task 2 of project.
- Methodology –
 - Data - Navigant used publicly available data sets then reconciled those data sets with what is currently happening in NH;
 - Plans, Policies & Assumptions - specifically reviewing NH's existing plans, policies and programs
 - Metrics – quantitative indicators broken out by sector

Electric Sector (data set, plans & policies, metrics, key take-aways):

- Summary – demand is steady through forecast period, emissions decline and costs increase.

Questions and Comments:

Rep. Vadney – Capacity: does analysis include capacity factors?

Answer: Capacity factors are considered in model

Comm. Ignatius – regional or state focus? – For example, when considering emissions is demand weighted average of emissions throughout region or NH specific?

Answer: The emissions are a demand share weighted percent of all ISO-NE emissions.

Dir. Hatfield – Are Ventryx Generation and T&D Database public data sets?

Answer: These are subscription based databases, so available for a fee.

Public – Are the new policy changes regarding the new air source standards from the EPA (mercury)?

Answer: policy assumptions updated through September, 2012

Navigant will specifically look into the 2 regulations questioned.

Assumptions:

- Coal and oil fired plants continuing low utilization (low capacity factors)
- Seabrook will continue to operate throughout forecast period (2033)

Rep. Vadney – Will NH reach its goal of 20% by 2025?

Answer: Expect NH will fall short and will need to make compliance payments

Follow-up: If NH achieves 20%, how does it impact greenhouse gas emissions?

Answer: BAU considers these reductions with other changes and did not parse out only the 20% by 2025 goal.

Follow-up: Is large scale hydro included in 20%?

Answer: Probably not but Navigant will check.

Comm. Ignatius – Do you build into the capacity forecast the fact that plants may close (retire) due to increased fuel prices?

Answer: Navigant will confirm how possible plant closures are considered in model.

Rep. Townsend – Slide 10 shows a reduction in amount of hydro generation. Why?

Answer: This is strictly in-state hydro generation and it is forecasted to be utilized less.

Rep. Vadney – Discussion that there will likely be more heat pumps utilized for home heating in the future thereby increasing electric demand and decreasing demand for oil. Is this factored in?

Answer: Navigant will verify whether or not air source heat pumps are considered and consider anticipated impact. Generally, electric demand is fairly stable, electric products will become more efficient but consumers will use more electronics.

M. Fitzgerald – price of fuels – natural gas fairly constant, yet wholesale electric prices are increasing by almost 33% - what is the primary driver for this? (Slide 11)

Follow-up: does this data represent state or regional prices?

External contributing factors are causing rates to increase. Oil and coal will still be used marginally and they are adding to the increase. Need further clarification. Navigant will confirm prices are specific to NH.

Rep. Vadney - Slide 15 - Why does SO2 increase in 2022?

Answer: Due to which resources are being dispatched. Navigant will provide more specifics.

Thermal Sector (data set, plans & policies, metrics, key take-aways):

- Summary: Demand expected to hold steady whereas fuel expenditures are expected to rise by 25% by 2033.

Rep. Vadney – Slide 19 - heat pumps would cause oil use to decrease and electric use to increase. Make sure that is in analysis.

Answer: Navigant will account for these off-sets.

Dir. Hatfield – Can we see a compilation of all energy usage by sector? For example, add electricity to thermal discussion.

Answer: Navigant will look into adding this into forecast.

Public – Slide 19 – The graph doesn't show Geothermal, why?

Answer: Little historical data is available so it is hard to predict trend, and it is such a small % that it likely would not show.

Dir. Hatfield: NH utilities include geothermal through CORE so we can get install data. (PSNH representative in the audience said that approximately 50 -100/year are installed through the CORE programs)

Rep. Borden – market transformation is happening and the ability to finance measures and technologies through new financial mechanisms is occurring (solar PPA now in NH).

Answer: Dir. Hatfield – We could explore this as an option for a policy direction when we get to that phase.

M. Fitzgerald – Why does natural gas usage stay flat?

Navigant – supply constraint and cost constraints to hook new people up to pipelines.

Comm. Ignatius – Gas expansion through non-pipeline (trucked) expansion – was this considered?

Navigant – truck delivery is not impacting residential; expansion in residential unlikely due to cost (need a 4-year payback).

Rep. Vadney: Why do commercial sector thermal expenditures increase so much?

Answer – More commercial activity, plus prices are higher.

M. Fitzgerald – Slide 25 – it's hard to see the distinction between fuels

Navigant will re-label the slide to make it more clear.

Transportation Sector (data set, plans & policies, metrics, key take-aways):

- Summary – demands and emissions are declining due to increases in fuel economy; however total expenditures are rising due to increased fuel costs.

Assumptions:

- MPGe = 33.7 kWh/mpg
- Constant dollars – no inflation assumed

Public – Does the analysis include the new federal adjustment for ethanol (biofuel mandates)?

Answer: Navigant will get back to us.

Summary:

Summary - slide 41 –

- The thermal sector offers most promising opportunities
- Overall expenditures are increasing by approximately 30% over next 20-years; exceeding estimated economic growth.

M. Fitzgerald – How does data compare to economic growth?

Answer: Navigant will provide per gross domestic product or per capita growth comparisons.

Dir. Hatfield – slide 44 – across all sectors. Can you provide same analysis by sector?

Answer: Yes

Sen. Fuller Clark – When will you look at this analysis in relation to the rest of New England? From an NH competitive analysis, will we no longer be competitive? Will NH fall behind if we do not change?

Answer: Navigant can discuss the type of analysis on a qualitative basis; however, analytical analysis is out of scope. We can plan to discuss other states' energy plans in relation to NH's plan.

Wrap Up

The SEAC encourages participation in webinar on 1/28 to review BAU and take questions and suggestions.

BAU feedback due by close of business 2/3/14.

February 10, 2014 SEAC Meeting – preliminary agenda:

- BAU revisions presented
- Begin energy vision discussion
- Roundtable energy vision discussion on 2/21

Dir. Hatfield: Question to SEAC: when and how often do we go out to the public outside of Concord? How do we get around the state to get public input?

- People seem to like webinars as they provide access without having to travel.
- Avoid early March as this is town meeting time.
- Maybe go out late March, early April? Maybe take policy stakeholder meetings out in the community.
- OEP will work on ideas and provide to the SEAC at the next meeting.

Public Comment: No additional comments.

3:15 pm – meeting adjourned.