

Meeting Minutes
RI DEM • Room 300

In attendance: Janet Coit, DEM, Council Chair
Kevin Flynn, DOA/Planning
Marion Gold, OER
Michael Lewis, DOT
John Leyden, Building Code Commission
Jamia McDonald, EMA
Marcel Valois, CommerceRI
James Boyd (for Grover Fugate), CRMC
Julia Gold (for Dr. Michael Fine), DOH

Special Guest: Representative Art Handy

Others: See attached sign in sheet

Director Coit called the meeting to order at 11:01 am. She noted that Director Licht had informed her he was unable to attend due to pressing business.

Approval of minutes for the April 4th meeting. Director Coit mentioned a few typos that need to be corrected. Jim Boyd asked that the reference on page 4 to “a CRMC subcommittee” be changed to “the Ocean SAMP subcommittee.” All voted in favor of the minutes with these amendments.

Opening Remarks. Director Coit thanked Council members for attending and recognized several members of the audience, including Representative Handy. She reviewed the upcoming, busy meeting schedule. She emphasized her desire to engage each member in the discussions, to make sure we get all perspectives and produce a report we can all stand behind. She then commented on the importance of today’s topic, the draft State Energy Plan, as well as the progress made in RI in recent years thanks in large part to the great leadership and staff at the Office of Energy Resources (OER). Director Coit noted that the Plan is especially important as a strategy for mitigation, i.e. reducing emissions of greenhouse gases (GHG), but that energy efficiency and clean energy will also be part of our adaptation and resiliency strategies. She asked members to stay focused on what the key policy issues that the Council’s report may need to address and what recommendations the report needs to include.

Presentation and Discussion. Commissioner Gold explained that, where previous presentations have primarily focused on impacts from climate change and on adaptation, this one would focus primarily on mitigation. The GHG inventory for RI shows that almost all emissions are associated energy generation or consumption, which presents both challenges and opportunities. The new Plan shows what is already being done and how we can build on that to achieve additional GHG reductions; these are doable and effective mitigation strategies that we can start working on right now. Rhode Island is already a leader in carbon mitigation: our energy efficiency programs are consistently ranked in the top 10 nationally, and our participation in the Regional Greenhouse Gas Initiative (RGGI) both helps reduce emissions and raise funds for clean energy. While RI is a small state, we are at the table and leveraging our neighbors in the region to move forward on our climate and energy goals. Commissioner Gold then introduced Danny Musher, Programming Services Officer at OER, who has been working with Navigant Consulting, a

20-member advisory council, stakeholder groups, and a consulting team to develop a “data-driven aspirational vision for the energy future of Rhode Island.”

Danny Musher thanked the Council and its Chair for inviting him to speak. He then provided a detailed presentation of the draft energy plan, the first update to the State Energy Plan (SEP) since 2002. (Slides posted at www.planning.ri.gov/statewideplanning/climate.) It will become an element of the State Guide Plan, which will likely be adopted in November 2014. The SEP presents a statewide strategy and vision around energy use and production in Rhode Island and provides policymakers with guidance as to actions needed to achieve energy goals. The vision of the plan is that “In 2035, RI will provide energy services across all sectors – electricity, thermal, and transportation—using a secure, cost-effective, and sustainable energy system.” The plan addresses reliability impacts (from increasing number of severe weather events), economic impacts (overall energy expenditures rose from \$2.5 billion to \$3.5 billion over 10 years), and environmental impacts (adequate GHG reduction is not possible without dealing with energy generation and use).

Jim Boyd asked what is driving the big increase in expenditures – increased consumption or increased prices. Mr. Musher responded that it depends on the sector. Director Coit called on Director Lewis to comment on these trends in the transportation sector, given that transportation generates more GHG emissions than any other sector. Director Lewis said that a portion of the increase is due to an increase in Vehicle Miles Traveled (VMT), but that increases in the price of oil have played a large role, as well. Also, VMT has been on a downward trend in recent years.

Mr. Musher explained that OER worked with Navigant Consulting and Environment Northeast to gather data, establish a historic baseline, and model future scenarios. In response to a question, he confirmed that the data are for in-state generated energy. He pointed out that the graph shows levels of consumption remarkably similar in all three sectors: electric, thermal (non-electric heating), and transportation; whereas impacts (emission levels) are not similar, i.e. they are significantly lower in the electric sector and highest in the transportation sector. This is related to the dominant role of natural gas in the electric and approximately half of the thermal sectors, and of oil in the transportation and remaining thermal sectors. He then reviewed projections for each sector under “business as usual” conditions, i.e. under policies and programs that are already in place, such as least cost procurement of energy efficiency, RGGI, federal fuel economy standards, zero emission vehicle programs, etc. These show that RI is on track to achieve regional GHG reduction goals for 2035 both through decreasing demand and increasing clean supply (which is not to say that this outcome is a given or that “business as usual” is the most cost-effective strategy).

Janet Coit pointed out that energy efficiency can be seen as another ‘resource’, just like natural gas or solar energy – but that it is normally ‘produced’ at a fraction of the cost of traditional supply. Marion Gold also wanted to emphasize that the projections build in savings from very aggressive energy efficiency programs. These programs should not be taken for granted and require dedication and hard work from many stakeholders (National Grid, OER, DPU, PUC, advocates, EERMC, et al.).

For future scenario modeling, three scenarios were developed, focusing on energy security, cost-effectiveness, and sustainability, respectively. The goal was to identify measurable targets for providing energy, using a resource mix that meets all three criteria. The results show that RI can:

- 1) increase fuel diversity in each sector (but overall will have a continued reliance on natural gas),
- 2) achieve economy-wide benefits for the state, and

3) achieve 45% GHG emissions reductions by 2035.

Danny Musher noted that natural gas may play an increasing role in the transportation sector, which could significantly reduce GHG emissions in this sector (but affect fuel diversity gains economy-wide). Director Lewis noted that the natural gas market has experienced a lot of uncertainty (swings in prices, questions around fracking, potential export markets, etc.). Making a major shift to natural gas as fuel requires significant investment in fleets and infrastructure. Are we in fact confident that we can predict a long-term reliable and affordable natural gas supply to justify that investment?

Jamia McDonald also highlighted that changing fuel sources (between electricity and natural gas, for example) can impact resilience and hazard mitigation, especially during recovery scenarios. Marion Gold recommended a new book on the potential and pitfalls of natural gas: "The Boom" by Russell Gold. With respect to economic benefits, Julia Gold commented that the benefits mentioned only refer to direct savings on energy expenditures. They do not include other, including social or indirect benefits that are often difficult to quantify.

Danny Musher pointed out that the modeling and analysis indicates that "business as usual" is the most expensive path for RI towards its energy goals. Savings between \$8.8 and \$14.5 billion (net present value or NPV) are possible but would require \$7 billion in investments. Each of the modeled scenarios would provide economy-wide net benefits, ranging from \$1.6 to \$7.7 billion NPV, as well as create more than 20,000 jobs.

With respect to sustainability, the modeling indicates it is possible to reduce GHG emissions by 45% below 2013 levels at "reasonable cost" by 2035, in a manner that would also put RI on track to a generally accepted target of 80% reductions by 2050 (believed to be necessary to avoid the worst consequences of climate change). It needs to be understood, however, that reaching these goals will still require creative policy-making and difficult decisions. Director Coit suggested that we **do adopt a 2035 (interim) GHG reduction goal**, since the goals presented in the GHG inventory session only included goals for 2020 and 2050. She also inquired into why OER used 2013 as a baseline instead of 1990 (most other agencies use 1990 as the GHG emission baseline data year). Danny Musher explained that the GHG emissions in 2013 and 1990 in Rhode Island were roughly comparable.

He then gave a high-level summary of the policy recommendations in the report. (For more detail, see the slides at the link provided above.) Some key takeaways were:

1. Policy recommendations will be integrated into several forums:
 - a. Guiding RGGI funding, Grid Modernization Working Group, Renewable Energy Thermal Working Group/Pilot, Delivered Fuels Working Group, etc.
 - b. Direct/advise potential and current climate policy and implementation
 - c. Create a common vision among state agencies
2. 20 policy recommendations create an "all of the above" clean energy strategy:
 - a. Maximize energy efficiency
 - b. Promote renewable energy in-state and regionally
 - c. Mobilize capital and reduce costs
 - d. Invest in infrastructure
 - e. Expand renewable and alternative fuels in transportation and thermal sectors
 - f. Include short, medium, and long-term goals

Note: To assist agencies, policy briefs will be available for each recommendation.

Director Coit thanked Danny Musher for his presentation. She reiterated that this is a draft plan that will shortly be open for public comment. The next steps are: 1) OER puts final touches on the draft; 2) the advisory council meets and reviews the final draft; 3) Statewide Planning staff review the draft; 4) the draft moves into the statewide approval process with an approximate approval date in early November.

Director Lewis pointed out that the results of the study are very dependent on the modeling inputs and the robustness of the models Navigant used. Do we have confidence in these assumptions? Danny Musher responded that, while we do not have a “crystal ball” and no model will predict the future with 100% confidence, the modeling used the best available information and projections (from state and federal data sources) and ran sensitivity analyses on important factors. From the sensitivity analyses, it appears that the prices of natural gas and oil are the factors that could most affect the model outcomes; however, one thing that remains constant in any event is the cost-effectiveness of energy efficiency as a resource.

Director Coit wanted to ensure that we are highlighting actions we are already taking, as well as leading by example as state agencies. What are ways we can better coordinate at a state level to reach our goals? Marion Gold commented that after a conversation with Tim Horan (National Grid), they agreed that we need to be better at communicating our successes through stories, not just numbers. How can we better tell the stories of how energy efficiency is impacting businesses and economic development in Rhode Island? She also discussed how we are leading by example in municipalities with the RI Public Energy Partnership and a Green Communities Program in development that will marry energy efficiency and renewable energy programs for municipalities. Further, RI is working in a regional coalition to address natural gas capacity constraints in New England.

Jamia McDonald commented that RIEMA sees localized generation (diesel generators, distributed generation) as part of RI’s work on resiliency. They have seen a large uptick in requests for generators. Kevin Flynn suggested focusing on a short term recommendations, such as the regional partnership around the proposed gas pipeline expansion. Pipeline work is incredibly complex and needs private sector support, not just government support. Marion Gold further explained that there some serious market failures have been identified that could prevent the expansion of the gas pipeline, which is why state governments across New England have been engaged in this effort. The private sector is engaged in these discussions as well.

Director Lewis was asked how transit fits in to short and medium-term recommendations around energy usage. This involves increasing the accessibility of public transit, giving serious thought to changes at RIPTA, among others. A few things to keep in mind: 1) Many programs to reduce energy use in the transit sector are not held back by policy, but by funding issues; 2) in addition, transportation programs are often held back by public will; driving is easy and affordable in Rhode Island – do we really want to propose policy that would affect this (such as tolls or taxes based on VMT), and do we know what impact would that have on economic development? 3) RI is a very small player. What we do will never lead the industry (fuel standards, fuel make-up of our commercial fleet) – we are just too small. But we can play a part. OER recognizes that it currently does not have transportation energy expertise on staff and is looking forward to ways to interact with DOT to increase focus on this sector.

Marcel Valois wanted to ensure that we are not just considering the supply, but also the demand side of the equation. How do Navigant's projections change when we consider the potential for growth in Rhode Island's economy?

Next Steps: OER will draft recommendations based on the draft plan, for consideration by the Council (whether to include in its report). Two that were of particular interest to the Council were the Green Communities initiative and continued involvement in the natural gas pipeline regional partnership.

Public Input. Director Coit asked if members of audience had any questions or comments. No one did.

With no further business, Director Coit asked for a motion to adjourn. Motion was made and unanimously adopted.