

1. Aaron Adler continued his walk-through of the bill from the day before. He started on Pg. 18 and the Energy Transformation section.
 - a. There was a discussion about the “net present value” test (utilities should choose the measures with the least net present value). MacDonald talked about electric heat in condos and that they are cheap to put in but over their full life-cycle have a low net present value and thus are not a good idea for the state.
 - b. Rodgers questioned who was making this calculation and how they were calculating it. Aaron provided him some assurance that it was legit, but Rodgers worried it was getting into some “fuzzy math” and if it was a critical calculation he’d want more info.
 - c. There was a similar discussion on the calculations of taking thermal measures and converting them into MWh with the EIA’s heat rates. Rodgers questioned these calculations as well. Aaron suggested Asa could come in and give a more detailed description if the committee (or Rodgers) wanted.
 - d. When Aaron was describing the process that the utilities would go through at the PSB to get pre-approval for “energy transformation” programs Rodgers questioned if that was a good role for the PSB. He said he thought the PSB had taken on too much already, that they were created to only look at large power and transmission projects and now were looking at thousands of small solar projects – and were not able to do a good job at it as it was not what they were set up to do.
2. Aaron talked about the ACP rates and system. He didn’t mention where the \$ would go, just the rates.
 - a. There was a discussion about pegging it to the CPI and whether that was the best way to go (but nobody had any other ideas – or at least didn’t offer them up)
3. Aaron talked about subsection B, the part about the utilities that are at 100% RE.
 - a. No discussion from committee
4. On the discussion about biomass having to be “thermal led” Rodgers asked several questions and provided comments on wood energy, and said he wanted to hear more about that requirement and any biomass/wood heat related parts of the bill (as Bray was cutting him off saying there would be time later to get into such details).
5. Bill Driscoll of AIV gave brief, big-picture testimony on the state of manufacturing in VT and the high electrical rates that put VT manufacturers at a disadvantage. He said that VT competes not just with New England states but the rest of the country and world and on that level we are woefully uncompetitive. He said that VT already has a very “green” energy footprint and that trying to get to a super high level of RE at the risk of driving away our manufacturers was a bad idea. He said we’ve been promoting clean energy for 10 years and the reason our rates haven’t gone up so much with the increased RE is the REC sales out of state. He said they wanted to make sure the utilities had such cost saving flexibility under this new system. He thought this was especially important with the DG tier, as that could drive up rates the most.
 - a. Bray challenged him on the high rates issue asking that doesn’t VT have lower electric bills even if the rates are above average, and that they should look at bills and not rates. Driscoll said no, that it was the rate that companies looked at and not bills. He said he’d like to come back to have a further discussion about the whole rates vs. bills debate.
 - b. Driscoll said that while the DPS analysis showed long term rate neutrality they would like changes to the bill that made the rates go down and have no short term upward

pressure. He said they were talking with the PSD and others about changes to the bill that would help with this.

- c. He questioned some of the DPS assumptions that led to the analysis of no rate impact – that there were a lot of unknowables and that we should be more careful not to raise rates.
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6. Gabrielle Stebbins of REV gave an overview of REV and the RE industry in VT – how big and diverse it was and how fast it was growing, how VT was a leader in this field, etc...
 - a. Said the bill helped energy security and economic security and climate security and that REV supports the bill but did have a few small changes to suggest when the committee was ready for them.
 - i. Specifically REV wants more clarity that net metering will continue and be strongly supported
 - ii. Wanted more opportunities for wood energy and wanted wood energy on a level playing field with other RE technologies (Sen. Rogers like this)
 - b. She then got into the whole rates vs. bills thing and passed out a table of New England electrical rates that showed VT lower than most. This caused Rodgers to challenge her and say it was not just NE but places like North Carolina that companies in his district were talking about moving to.
 - i. Sen. MacDonald made a comment here about maybe not keeping companies that need such low electric rates. This set off further discussion between the Committee until Bray cut them off and forced them back to the bill.
 - c. Gabrielle answered a question about carbon tax and carbon shifting, but then Bray again said folks were getting off topic and said it was time for a break.

7. VPIRG/Zwicky:

-Supports S. 51 as a step in the right direction, especially DG and transformation tiers. Explained 29 states have one (Sen. Campion was amazed we're so far behind).

-First suggestion: legislature should provide additional guidance to PSB on the transformation tier, in terms of eligible technologies etc.

-Second suggestion: allow for a scenario in which net metering more than fully fills this tier. For example, if NM > 1% DG requirement in 2017, the PSB should be able to look at the utility's load and other factors and potentially increase the requirement in that tier the subsequent year. This allows for customers to drive Tier 2 generation.

-Third suggestion: if customers choose to retain RECS, their net metering reimbursement floor should be retail rate.

-Sen. Bray asked if they were planning to propose language, and they said they'd be happy to work with members of the committee.

8. GMP/Dostis:

-Discussed GMP's DG portfolio, growth in RE over the years, trends. Supports S. 51, especially transformation tier to help offset rate pressure. Said 55% in 2017 is a tall order, and will be looking at all options (hydro retrofits, purchasing facilities; Sen. Rodgers asked about more HQ especially in light of potentially more transmission, and Robert said they'd look at all their opportunities, with cost being the bottom line).

-Sen. MacDonald asked a lot of questions about how this keeps shareholders happy, and wants someone in to testify on that (i.e. is GMP leadership shaping shareholder interests or are shareholder interest shaping policies). Also how shareholders gain or lose if RPS targets aren't met.

-GMP happy with VPIRG proposals except for REC ownership/NM rates, but then clarified they're ok with residential retail rates being the floor.

-Sen. Snelling wondered if GMP was engaged in the process that led to the creation of S. 51. Robert affirmed, said they have minor tweaks and are happy to provide language.

-There was a fair bit of discussion about the different programs (net metering, PPAs, Standard Offer) and how much each costs the utility/ratepayers. Sen. Rodgers isn't happy about the rate Barton solar (1st generation Standard Offer) is being paid. He's also concerned about cross subsidization and wondered whether net metering customers should be paying a monthly fee. Robert reminded the committee about the Act 99 process. Sen. Snelling wanted information on the size of a project a homeowner would need to offset their usage and the economics of such a system. Sen. Bray wondered, with net metering and now an RPS, what other big energy puzzle pieces were missing (weatherization?). Robert said what's in S. 51 touches on most of the energy areas. Sen. Bray wondered about the future pace of E-home after the pilot rollout (Robert didn't know). Sen. Rodgers wondered about utilities competing with the private market and also at what point net metering might become a problem.

9. EAN/ Colnes

-(Prior to start of testimony, Sen. Bray was asking Andi Colnes about the Comprehensive Energy Plan – whose is it, where does it come from, how to engage more people in ownership of it.)

-Andi gave an intro to EAN and discussed their 4 leverage points, saying the 2011 CEP was informed by that structure and “so will be the 2015 CEP.” She talked about the information EAN has put out to try to put meat on the bones of 90 by 2050, to provide a basis for conversations about options and tradeoffs. She had a handout she repeatedly referenced but not copies for the audience. She also discussed their community energy dashboard (Sen. Campion – wow, great!); Sen. Bray wondered how a town such as New Haven might take advantage of it to control their energy future. Andi said EAN is partnering with the PSD, RPCs, and VEIC to support some in-depth regional energy planning, very much in line with a Siting Commission recommendation. Sen. Bray wondered why Addison RPC wasn't part of the pilot; Andi said due to funding constraints.

-Sen. Bray wanted to know if EAN could use data/visualization to help them understand the performance of clean energy programs and policies. Andi said they're not currently doing that, but the PSD and others are. Sen. Snelling was very interested in this topic, and recalled at least one project the Chief Performance Officer is working on with PSD in terms of metrics.

-Andi suggested the next iteration of the CEP follow the structure EAN has laid out, in terms of providing actual metrics and milestones on the route to 2050, as well as policy metrics. Sen. Snelling was interested in synergy with the Governor's dashboard.

-Andi said EAN has convened a clean energy finance initiative, including a number of state entities and working with the Coalition for Green Capital to assess opportunities by sector and to create investment strategies. They said they're also working very closely with GMP and Neighborworks to bring the E-home approach statewide.

-Sen. Bray said EAN has done a lot of great work and are relatively quiet, so he's not not sure people know about all their work.

-Andi said we're getting a great start with S. 51