Governor's Council on Climate Change (GC3) GC3 Public Forum – Progress on Mitigation Strategies, Electricity Breakout Group MEETING MINUTES

Meeting Date: September 23, 2020

Meeting Time: 4:30 p.m. Meeting Location: Zoom

ATTENDANCE

Working Group Member	Title	Organization	Present
Ben Martin			
Chris Phelps			
Alan Poirier			
Melinda Tuhus			
Henry Link			
Anne Schmidt			
Bonnie Potocki			
Cary Lynch			
Diane Hoffman			
Gannon Long			
Kris Kuhn			
Laura Bozzi			
Nathan Frohling			
Peter Shattuck			
Ralph Jones			
Roger Kuhns			
Susan Eastwood			
Weezie Nuara			
William Cavers			

Associated Staff	Title	Organization	Present
Michael Li	IKUreau (niet	Bureau of Energy & Technology Policy	Υ
Kate Donatelli	CT Careers Trainee	Bureau of Energy & Technology Policy	Υ

AGENDA & NOTES

Welcome and Announcements

Public comments

Melinda Tuhus

- I'm involved with a number of groups throughout the state and I'm very concerned about the climate crisis. I'm very concerned about the possibility of a third fracked gas power plant being built in CT. The one in Killingly would be 650MW would emit 2 million tons of CO2 per year when operational (data from local opponents). Methane gas is short-lived in the atmosphere, but it's 100x more damaging to the planet in a 10yr timeframe than CO2. It seems that we cannot build this plant. The governor is on the record as saying that it didn't seem like we needed the plant.
- Other states have decided, based on public health or other reasons, not to permit fracked gas pipelines. It seems like that's what we need to do. We cannot build this plant.
- There are local negative implications. Many cities and counties in the state claim to be the worst for asthma, but CT Health Dept. data does say that the county where Killingly would be located has the highest asthma rate (many ways to measure this). The natural has plant would exacerbate this.

Bonnie Potocki

- I would like more detail about the three strategies that outline how to achieve the zero-carbon energy goals. For the third strategy about 50MW solar and 10MW fuel cell, I was not sure if that would be a private or public endeavor in terms of funding.
 - Mike Li: The main incentive program for residential solar (RSIP) has historically provided incentives for that 50MW of development. There's a 350MW cap, which we're nearing, on the amount of incentives we've issued. We're transitioning to a tariff (PURA also working on this) and we're working on how to transition from RSIP to this tariff. In the long term, this tariff would provide solar incentives. We have the procurement authority to procure fuel cells. Currently, fuel cells are not a zero-carbon resource, but they do provide other benefits. We're considering what the role of a fuel cell is in a zero-carbon grid.
 - Bonnie Potocki: who is procuring the fuel cells?
 - **Mike Li**: DEEP does procurement. DEEP issues an RFP and developers submit proposals and request incentive amounts in order to get that fuel cell built.
 - Bonnie Potocki: are the 50MW of solar at the homeowner/property level?
 - **Mike Li:** Yes, typically.
- How will smart grids be deployed through the state and who would be establishing those smart grids and what was the participation for the different utilities?
 - Mike Li: PURA is investigating smart grids and various tech that make up smart grids. This is an ongoing process happening in PURA and will probably take another few months before they decide what they are going to approve as it pertains to smart grid investments.

- Regarding adaptation and resilience, I understand that there is a long-term goal for smart grids. Massachusetts has made some progress on vulnerability assessment, implementation, and resilience funding. Connecticut does not seem to have made similar progress. We've seen the impact of recent storms and we're going to get more. With this in mind, how are we going to ensure that the utilities and state make infrastructure investments to respond to storms? Are there any short-term strategies?
 - Mike Li: vulnerability assessments are a great concept, and this might be covered somewhere else in the GC3 process. For storm response, the governor held a press conference where he focused on performance-based ratemaking. This is the idea that the utilities compensation is based on their ability to perform in key areas. There is a bill before the legislature right now that clarifies that PURA has the ability to implement PBR with metrics like storm response. For infrastructure investment, PURA is still investigating this and will ultimately decide what is cost-effective and what the benefits ad costs are for some of these solutions.
- Other states have looked at the deployment of new technology and pilot studies. Battery storage was mentioned, which could be a key strategy. Are we looking to deploy any new technologies?
 - Mike Li: PURA is currently considering proposals for battery storage. There are a lot of different reliability technologies, including automatic reclosers, which basically isolate the problem to one part of the distribution grid. These are being implemented in various places, some of which are more industry-specific, that would help to address some of these reliability and related issues.

Ben Martin

- The presentation mentioned various percentage targets as well as the 100% by 2040 goal from the governor's executive order. In 2019, the UN said that if we do not address the climate crisis by 2030, we're out of time. Where did you come up with these percentages when scientific consensus says that we should be moving faster?
 - o **Mike Li:** those percentages were decided in the 2018 GC3 process.
 - Chris Phelps: I cannot provide a definitive answer, but at the time those numbers were based on the climate targets in the Global Warming Solutions Act and were the product of working backwards from existing statutory targets.
 - o **Mike Li:** we will look into this for a more definitive answer.
- Would it be possible within the GC3 and this working group to update the numbers based on more recent science?
 - o **Mike Li:** this is something we can revisit as part of this process.
- [via chat] https://www.un.org/press/en/2019/ga12131.doc.htm
- [via chat] literally no good reason to build NTE fracked gas in Killingly
- [via chat] the zero carbon talk makes me want to emphasize the Nuclear in not climate friendly: https://theecologist.org/2015/feb/05/false-solution-nuclear-power-not-low-carbon
- [via chat] has CT leaving ISO Ne been part of the conversation? (Commissioner) Dykes talked about it
 - o Mike Li: Commissioner Dykes has been clear with her concerns about ISO-NE

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with respect to the state's energy goals. When we issue the IRP, you'll see more from DEEP about ISO-NE. Commissioner Dykes did provide some legislative testimony a few weeks ago (you can access the video online) where she walks through some of the issues with ISO-NE.

• [via chat] also breaking up Eversource or not using them as an electric monopoly **Chris Phelps**

- There is a tension around fuel cells and the fact that they're in our Class I RPS. Looking at the strategies, are the 50MW solar and 10MW fuel cells annual targets?
 - o Mike Li: Solar is an annual target.
- Our organization has talked a lot about focusing CT policymaking around 100% zero-carbon as a short-term goal. There could be more emphasis on tying these specific recommendations in the report to those kinds of clear targets. For instance, the governor introduced legislation to get the electric sector to 100% zero-carbon by 2040. Tying these policy recommendations in this report to those kinds of clear targets will get us to 100% zero-carbon sooner rather than later.
 - Mike Li: CT is in the middle of doing an Integrated Resources Plan (IRP), a modeling exercise that looks at the kinds of resources that will need to come online to meet our energy goals and what is the optimum mix to achieve the goal at the lowest cost to customers. The IRP draft will be out for public comment probably in early October. Once the IRP is out and we have that analysis, we're be more able to talk about interim targets and related strategies.

Susan Eastwood

- [via chat]: I'd strongly support incentives for battery storage as the prices come down. Great way to really decentralize the grid!
- [via chat] Killingly power plant is going in the opposite direction on decentralization.
- [via chat] Thanks to Charles for mentioning the trash incinerators, which are a false solution for energy generation. We need to implement zero waste policies for organic waste and do more aggressive composting to dramatically reduce our waste stream.

 More composting will reduce methane emissions too!
- [via chat] FERC too! Their policies don't work with our state CC goals.
- Include glass and nips in bottle bill!
- [via chat] If we don't burn it, we cut GHG emissions!
- [via chat] They must change those policies soon, as Roger is pointing out! Time is short!

Peter Shattuck

- You answered one of my questions by talking about the IRP process. It's encouraging
 to see the recognition that transmission is important. Some past New England
 projects have not been able to move forward because of transmission constraints.
 There's some concerning signs that offshore wind projects coming into the Cape Cod
 area could face transmission constraints.
- Also encouraged to see energy storage in the report. Storage will play a key role in balancing renewable supply with demand. CT hosts a lot of peaking power plants, and is a disproportionate host within the region, and storage could reduce the reliance on some of these plants. There was some news today from Tesla about dropping battery prices by about 30-40%, which would be a game changer.

Roger Kuhns

- Want to go back to the Killingly topic, there are a couple of concerns about natural gas infrastructure. Eversource proposed to Yankee that they would pay for the pipeline, and then they asked (through PURA) if they could raise rates, and have ratepayers pay for the pipeline to NTE's facility. I spoke to NTE's vice president on the project about financing and the future of this plant. There is a likelihood that this plant will be sold and the outcome of that (liability exchange, etc.) is unknown. So there are a lot of unknowns about the financials and support of this project that residents are concerned about.
- 67% of our natural gas is produced through fracking. Allowing this plant to be built could be a tacit approval of fracking by the state. There are many externalities associated with fracking: aquifer contamination, neurological, damage, cancer impacts to workers and nearby residents, etc.
- Last year, several senators contacted ISO-New England and demanded that they do
 more planning and integration and financing for renewable energy. This has not yet
 happened. I asked at the PURA hearing last month when Yankee was seeking a permit
 to build the pipeline, if they had considered in their financial models any carbon tax
 (state, regional, federal). None of their models considered variability on the sale and
 price of natural gas. If you don't plan for these things, this could be a real liability for
 CT.
 - Mike Li: you identified a lot of the issues and processes in place. The Commissioner has expressed her concern about these issues and we understand that there is a lot of concern about the open-ended issues surrounding natural gas and the facility.
- When I've spoken to people at Eversource and NTE, I see an antiquated business model. I think it would be interesting for DEEP to consider how business models evolve in terms of what we can regulate, incentivize, etc. I would urge them to think of people not as customers, but partners. With behind the meter generation, people are contributing rather than just being customers.
 - Mike Li: this is the future paradigm that we're looking at. We need to get the pieces in place to provide a platform for these transactions to happen. This is on our radar and different utilities are also getting into this area. We get to this in the electricity chapter with a discussion of grid-integrated buildings that both provide and receive services.
- America's grid system is getting close to this. In some states, it's been going on for a while. Across the state, we do have good goals but we need to accelerate the pace of this transition because climate change is happening now.

Gannon Long

- In the drafting process, there was some discussion about siting and some conflicting messaging about the impact of power generation on communities. The presence of black and brown people is the number one indicator of whether a facility will be sited in a community. There seems to be some conflict in the report because it says that marginalized communities are suffering because they're close to these plants which I think is right but there's also some language about the jobs benefits of these facilities. How does the report recognize this difference? As a person who lives in a community where these projects happen, it is not a safe assumption to say that local people get jobs from these facilities. In fact, this is often not the case.
 - o **Mike Li:** we're trying to address some of the issues that you raised. Just

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because new generation facilities are non-emitting (solar panels) does not mean that it is going to benefit the community that hosts it. We want to point out the important of ensuring local jobs, for example in offshore wind.

- This is also a chance to mention that there are opportunities in the C&LM and EEB to provide input about progress in low-income communities. Basic representation is very important in driving solutions and responses to these issues. With energy efficiency, we have a few years' worth of data and reports on workforce development. We need more step-by-step direction on implementation.
- [via chat] also a bottle bill!
- [via chat] let's give a 10 cent deposit for nips water bottles and wine bottles.
- [via chat] This would greatly improve correct single stream recycling. you would help people who need money. do better recycling. and have cleaner streets of litter. it's a win win.

Kris Kuhn

- [via chat] I appreciate the work of the team and the importance of qualified goals. However, I find myself focused on ongoing or impending fossil fuel expansion that defies common sense and absolutely needs to be halted. I find the impending build-out of Killingly appalling. In addition, I live on a street that has been torn up for months due to Eversource hook-ups that are subsidized by rate-payers. There is increasing evidence (including by satellite) of massive methane release that exceeds prior understanding. This subsidy for natural gas expansion needs to stop immediately. Is it not an appropriate item in the GC3 recommendations?
 - Mike Li: it would certainly be an appropriate topic for the GC3 report and it
 might be addressed in the buildings chapter. Historically, utilities have been
 allowed to expand transmission to new construction and there was some
 discussion about whether they should continue to do that.

Diane Hoffman

- [via chat] Why isn't PURA and CT Siting Council part of the GC3 process?
 - o **Mike Li:** we will take a look at this.

Cary Lynch

- [via chat] Siting might be covered by the Natural and Working Lands WG which has a forum next week.
- [via chat] The NEPOOL GIS Deep Decarbonization study has some ideas on future technologies to achieve sector-wide emission reductions: http://nepool.com/uploads/FG-20200804-02A-EFI-E3-Deep-Decarbonization.pdf
- [via chat] ISO/FERC controls the transmission lines. It would be difficult and costly to extract CT from the regional grid. Putting pressure on ISO/FERC is good, though.

NOTE: Identify if slides or presentations are available on GC3 web page: <u>www.ct.gov/deep/gc3</u>