



## MINUTES

### Joint Committee of the CT Energy Efficiency Board and the Connecticut Green Bank Board of Directors

Albert Pope Board Room  
845 Brook Street, Rocky Hill, CT

Wednesday, December 18, 2019  
1:00-3:00 p.m.

#### In Attendance

Voting Members: Eric Brown, Mike Li (phone), John Harrity, and Taren O'Connor

Non-Voting Members: Steve Bruno, Bryan Garcia, Bert Hunter (phone), and Will Riddle

Others: Craig Diamond (phone), Mackey Dykes, Brian Farnen (phone), George Lawrence (phone), Selya Price, Madeline Priest, Glenn Reed (phone), Ariel Schneider, Mike Trahan, and from BW Research: Phil Jordan, Colby \_\_\_\_\_, Sarah Layman (phone)

#### 1. Call to Order

Bryan Garcia called the meeting to order at 1:04 pm.

#### 2. Public Comments

Mike Trahan with Solar CT stated that as representing residential contractors, they wanted to express strong interest in solar storage options. He reminded the Joint Committee of the interest in solar storage and urged to continue discussions.

- Eric stated he was more familiar commercial storage options but is unfamiliar with those available residentially. Mike clarified there were early adopters and some contractors in Connecticut are stocking residential batteries and are meeting regularly to discuss their capabilities, as residents are highly interested. There is a wide range of reasons consumers would benefit and stimulating the market would further that. He also stated that the price for residential batteries is dropping faster than the price of modules did, so consumers may begin looking more into options as the price continues to drop. He reiterated the continued interest on behalf of contractors and their customers.
- Bryan Garcia clarified that there are about 200 homes with solar batteries that have come through the contractors involved in the RSIP, but there are no incentives for purchasing one. Currently it has been set to the side as an option being discussed in the Equitable Grid Modernization docket. Mike Trahan stated there is benefits to all rate payers with batteries, and it was further clarified that the solar storage could do that by returning stored energy to the system during times of higher peak demand.

- Eric Brown commented that it is tricky in that there must be enough payback for the user to invest in a battery in the first place and questioned how to qualify the value of the resiliency. Battery viability, resiliency, and incentives were briefly discussed further.
3. Review and approval of Meeting Minutes for April 17, 2019 and July 17, 2019 meeting.

### **Resolution #1**

Motion to approve the meeting minutes for April 17, 2019 and July 17, 2019.

- Eric Brown briefly spoke about new docket 17-12-03 while the previous minutes were reviewed.
- John Harrity motioned to approve minutes, Eric Brown seconded. **The motion to approve the meeting minutes was voted on and approved.** There were none opposed but Taren abstained from voting.

### 4. Energy Jobs Report

- Bryan Garcia introduced Phil Jordan, Colby, and Sarah Layman from BW Research. He summarized the previous meeting discussions and decisions to move forward with a more advanced report focused on Connecticut. BW Research will be producing a report by April 2020 and Bryan stated that he sent a draft to the Committee of the data and scope of work and that the Green Bank subsequently engaged in a contract, including with the utility partners. Bryan believes there will be better perspective in March at the first Joint Committee meeting of 2020.
- Eric Brown advised that the report include information to help explain the purpose better to policy makers, and possibly expand the scope to explain impact. He stated that he doesn't want it to be just a lobbying tool.
  - Bryan explained that the report will be mostly data, and that BW Research can advise on how to explain and frame the data.
- Phil Jordan introduced his team and company background. BW Research has been working with this type of data collection for last 12 years with states around the country. Two years ago, the Energies Future Initiative raised funds to replicate the study by philanthropic and state agencies after the Energy Research budget changed in 2017. The data collected would be for Connecticut as well as neighboring states and used alongside the 2020 Energy and Employment Report which will be released in the spring. Phil stated that they focus on quantitative and qualitative direct feedback which mirrors the data setup of state agencies.
- Phil clarified that BW Research produces data that identifies gaps and opportunities. It does not give advice, but instead focuses on the framework of what is already there. He stated that many clients use data to inform policy but also for education and training programs as well as economic development. He wants the Joint Committee to understand the different intended uses so they can collect data for presentation to the right audiences.
- Phil clarified that BW Research builds reports off data in conjunction with data from the BLS Quarterly Census on Employment and Wages. Their reports look at all energy jobs, not just clean energy jobs.
  - Eric Brown asked if it would include manufacturing of fuel cells, etc. Phil said yes and clarified that BW Research uses two separate criteria that overlap to produce the most data. As an example they would look at if a company is

focused in Research & Development or Manufacturing, but then confirm the data against the census information to be sure it is categorized correctly and will allow for the most accurate reporting.

- Phil stated the sectors listed in the Technology List provided are the broad sectors, but it doesn't break down differences such as solar versus wind, or the various ways to improve home energy efficiency, for example.
- John Harrity asked why railway technology is not included. Phil clarified that public transport is not included and neither are certain other travel methods. When asked about bus drivers being included in a previous national study, the answer was yes, and the funding was abruptly ended. At the time, including public transportation jobs was viewed negatively and it has been the trend carried forward ever since. He also stated it is easier and possible to list public transport jobs separately as a highlight. In regard to rails, Phil clarified that transportation efficiency was heavily focused on light-weighting of vehicles and petroleum based fuel economy. Historically, rails just were not included, but stated they would not be opposed to including in the future and refocus on when perspectives shift more in their favor.
  - Bryan stated in the context of fighting increased climate change, more public transportation and railways are good and those topics be flagged for discussion on future reports.
- Phil continued that there are 73 technologies they have collected data on historically which are on the Technology List provided. Each of them is modular to collect aggregation data and uses NAICS codes, which are a common set of industry classifications across the US, Canada, and Mexico. The codes allow for better state-by-state analysis. He stated that people tend to be focused on the number of clean energy workers, as it is viewed as the most news-worthy number, but BW Research focuses more on data across the board, and so they search for the best people to survey to get the most data to examine. He stated they would rather survey someone who will talk to them longer to gather more comprehensive data than more people for quick numbers.
  - The survey determines employment numbers, hiring expectations for the next 12 months, hiring difficulty by technology and industrial classification, high demand jobs and skill gaps, workforce demographics by race, ethnicity, gender, union status, age, and veteran's status, and geographic location by state, county, congressional and legislative districts, and the MSA of each technology and industrial classifications. Phil stated there are margins of error that resolve in less precision in smaller areas, but the survey does clearly show those concentrations and areas of focus.
- Phil clarified the definitions for the Joint Committee to keep in mind while data collection is taking place and during the analysis process.
  - The study is an industrial, not occupational, study. That means that the company must be focused on clean energy and that certain areas of the market are not included. For example, employees that work for a hospital, even if the hospital is utilizing clean energy practices. Because the focus of the hospital is not clean energy, it would be set aside, and historically including such groups and companies has led to poor reception of the report. In regard to legal and accounting firms, they may be included in part if the company has a specific division focused on clean energy, but it should be specific so the data is the best received.
  - There is no standard def of "clean energy" on a state, national, or international level.
  - There are different thresholds of work. He stated that they must consider those thresholds of people's work which is related to clean energy. Not every

- installer only installs clean energy products, and not every manufacturer only produces one product.
- There are multiple audiences. Phil stated the challenge is to balance the focus of the report to best benefit the intended audiences. He suggested being careful in nuancing the information so it is used best. There are the number of jobs and the different bottlenecks for opportunities, education, training, and equity and all that allows it to be useful to the most people without being too specific.
  - Phil stated that BW Research does not put a value statement on the data, as it is up to the Joint Committee to determine.
  - Phil gave a timeline update. He stated the data has been collected, cleaned, and BW Research is now in process of doing national analytical runs. In the next 2 weeks they will be producing the Connecticut data, so it should be ready by early January. The second piece is a landscape analysis for education providers and starting to collect information from partners of the Green Bank about other utilities and contractor training. He stated they will be circulating the preliminary research in the next couple weeks so that others can review it and make suggestions of other data to include which may have been missed. That process will be ongoing through January. The third piece is reviewing spatial analysis and unemployment throughout Connecticut. The final piece is looking at the data's potential based on "multipliers" that exist. He stated that not all industries are created equal so looking at how different areas of industry are equitable versus others is important.
    - Once all the data is collected, reviewed, recollected, and analyzed, a first draft of comprehensive data would be released in early March.
    - Bryan stated the Green Bank is in the contract with BW Research, but are working with United Illuminating and Eversource to support the whole report. He stated it is no trouble to involve and keep those committee members informed of the progress and can coordinate so the best results are made.
  - Eric Brown asked if there any distinctions between jobs tied to specific programs, like those funded through the Efficiency Fund or Green Bank, versus those supported by other means. Phil stated that the best option would be to align the segments of the CE Economy by those supported directly by the noted activities. He clarified that there is so much activity that happens outside of programs but is relevant, such as a new home built to energy efficient standards outside of involvement with a program, and so that makes it difficult to create an estimate that accurately shows direct involvement from specific, noted programs. He stated the "good news" is if there is any fluctuation in a program's results, by not claiming credit in how the data is presented, there is less push back or negative views back to the Green Bank or Joint Committee because the reported numbers changed or lowered.
    - Eric Brown asked that direct involvement be acknowledged somewhat, but does not want to get too detailed with the analysis of it. He clarified that people may come out to question the numbers from either the perspective of nit-picking or looking for more detail. Phil suggested that the report include an example statement of "These are the sectors that are supported by the Green Bank and Joint Committee activities" and then provide a list without getting too deep into numbers.
  - John Harranty asked if the report will include training happening in the state currently. Phil said yes. John clarified in the past there was difficulty in determining what is happening now and that the data was very sparse. Phil stated that BW Research acknowledged that not all the data is included and do not claim to be 100% comprehensive, but it will invite other programs that may not be included to contact them so that the data can be updated in the future. He clarified that the information is

- presented as a more general gap analysis for employer needs instead of the nitty gritty as to who is or is not involved.
- Phil stated that people generally know what renewable energy is, but there are a couple other areas worth discussing. One example is nuclear energy, which is typically considered Advanced Energy instead of Clean Energy. The Joint Committee is welcome to include it in their definition, but Connecticut would be the only state in the Northeast to do so. He reiterated that each state defines “clean energy” differently based on the Technology List, but there are trends as people reconsider the different types. Other areas to discuss would be Bioenergy/Biomass Generation (#5 on the list), Traditional Hydroelectric Generation (#7), Nuclear Generation (#9), and Natural Gas Generation (#12). He stated Massachusetts only includes Low-Impact Hydroelectric Generation but other states such as New York include all hydroelectric, and that natural gas generation is another type that is typically considered Advanced Energy. Those key decisions will lead to other discussions as to other fuels that should be discussed, such as corn ethanol (#56).
    - John Harrity asked about steam loops. Phil clarified that steam loops have typically been classified under Combined Heat and Power (#13).
    - Phil also highlighted discussing Hybrid Electric Vehicles (#63). He stated many states are moving to include Plug-In Hybrid Vehicles (#64) only and doing away with incentives to older style hybrid vehicles.
    - Bryan Garcia asked if rails be considered in this context, given John’s point about rail inclusion earlier. Phil suggested possibly next year, but it can’t actively include it now because it wasn’t in the initial survey. He also stated his doubt that mass transit would be viewed positively because of the outlook on the national level.
  - Phil clarified that BW Research does not need a decision today as to what will be included or not. He asked for any specific questions why something would be included or not, and if it comes up after the meeting to contact him.
    - Bryan requested a draft table of where each item falls in relation to other states and with information as to how much focus each item has, to be sent by email and reviewed by phone. Steve Bruno asked if BW Research has the data for how many jobs are in each sector. Phil stated they will in the next couple weeks. Bryan stated he would prefer to include the job number breakdown per sector.
    - Eric stated the idea of the table, to better look at and understand the sectors, would be very useful, and asked Phil and BW Research to let the Joint Committee know what they need to make it.
  - Will Riddle asked if the Joint Committee is considering only the ones it supports or all clean energy jobs. He stated it seems that the members are on different pages as to what to include and focus on. He stated that he tends to only want to include what the Joint Committee supports.
    - Andy Brydges stated that he disagrees. He discussed his experience creating a similar analysis in Massachusetts and that including them all can be beneficial in a wholistic sense. As he had previously gone through the process, that group realized there were more companies involved because of their levels of focus which was unknown before.
      - Eric Brown asked if that group had the ability to identify those individual companies without including every one that is of the similar type. For example, a packaging manufacturer of something directly related to energy efficiency instead of all packaging manufacturers who happen to use energy efficient elements in their business. Andy said yes. Bryan stated the need to view the data at a macro level and unify

the efforts instead of solely focusing on what the Green Bank and Joint Committee support directly. Eric stated the need to make the report as defensible as possible.

- Phil summarized because the report is not a lobbying document, that it is just tracking changes in the workforce, that already makes it more defensible than if presented with different language. He stated the key is to be clear with the assumptions and definitions within it.
  - Andy Brydges stated that the report should present the data as a deeper dive to info people may already know, which will be favorable overall.

## 5. 2020 Regular Schedule of Meetings

- a. Realigning Strategic Planning and Legislative Session with the Regular Schedule of Meetings
  - Bryan clarified that the Green Bank looked at the C&LMP and CGB planning cycles and accounted for them to adjust the quarterly schedule to best tackle the information presented. The Joint Committee meeting dates have been moved to a month prior from previously scheduled, to the 2020 schedule of:
    - March 18 at DEEP in Hartford
    - June 17 at Eversource in Berlin
    - Sept 16 at the Green Bank in Rocky Hill
    - Dec 16 at United Illuminating in Orange
    - All meetings are scheduled for 1:30 pm – 3:30 pm.
  - John motioned to approve the 2020 meeting schedule, Taren seconded. There were no questions on locations or dates. **The schedule was voted on and approved unanimously.** There were none opposed and no abstentions.
  - Taren had to leave after the vote on the meeting schedule.

## 6. Input to FY 2020 Connecticut Green Bank Annual Plan (Revisions)

- Bryan summarized the Green Bank's future focus on "Green Bank 2.0" in order to scale up the investment in the green economy. The Green Bank Board discussed and approved the mission statement changes. Bryan explained the specifics of the language changes to the mission statement and the 3 goals of the Green Bank as well as the new vision statement. Overall, the intent is to imbue the mission with a more encompassing scope and to include the emotional impact within the vision statement.
- Bryan summarized the Green Bank organizational structure, funding structure, and relationship to IPC. He also summarized the targets for Fiscal Year 2020 for programs, investments, and installed capacity.
  - Steve Bruno asked about the RSIP incentives. Bryan explained it will end approximately Q3 2020. He stated the Green Bank is focusing now on the transition after RSIP ends and net metering becomes more prominent before the tariff comes into effect. He stated that what the Green Bank is frequently hearing are questions about HES projects when RSIP ends, because the RSIP includes an energy audit requirement, and that the Green Bank and contractors are already discussing what will happen.

- Bryan invited comments and questions of the information so that the Green Bank can take it into consideration and be as comprehensive as possible. He asked to send any comments or questions by the first week of January.

## 7. Plans for the 2020 Legislative Session

- Donna Wells explained there are no plans for the 2020 legislative session that are currently ready to be announced.
- Bryan Garcia stated the Green Bank has a technical fix for the auditors and that the Green Bank is looking to include EV infrastructure in CPACE. He clarified that they are looking to exempt certain infrastructure so homeowners can finance it through CPACE.

## 8. Other Business

- a. Update – Small Business Energy Advantage: Recent Amendments to Expand Opportunities for State and Municipal Facilities
  - Steve Bruno and Mackey Dykes summarized the SBEA updates and amendments. Mackey stated that in last month, an amendment was executed between Green Bank and Eversource, and Amalgamated Bank to expand terms of SBEA financing. The cap is raised from \$500,000 to \$1,000,000. Any individual loan can now be up to \$1,000,000 and aggregate loans of \$1,000,000. The State can do individual loans up to \$1,000,000 and has no aggregate loan limit. The term was extended from 4 years to 7 years. Mackey also stated that the Green Bank is having a broader conversation with the State as to financing energy efficiency projects. In the course of the conversations with State Comptroller, State Agencies, etc, it became clear that the State was taking on debt. Now they are working with Steve Bruno at Eversource to make sure all the debt is captured for reporting purposes. He stated that on the agency side there will also be a more comprehensive approval process implemented.
    - Steve Bruno stated that everything has been positive so far. There is a process in place to update people on the project timeline, which in turn increases the limit to do more state projects including finalizing next round of master agreements and working to improve reporting.
    - Andy Brydges asked if the agreement with SBEA is to renew as well as expand it. Steve clarified they want to capture more projects from the State including, hopefully, larger scale projects. Having a report to provide to the Treasurer's Office with updates seems to be working well, and the staff at the Treasurer's Office are excited to have a tool to use.
  - Mackey Dykes stated the Green Bank has partnership with the MIF fund. Previously there was \$800,000 to give to manufacturers who did a CPACE project, but it expired at end of 2018. There have been discussions on how to handle the leftover funds, and the Green Bank was able to get an extension of the program to spend remaining money by the end of the 2020 calendar year.
  - Bryan Garcia summarized Docket 17-12-03, which was mentioned earlier. The Equitable Modern Grid currently addresses 6 areas and will research 5 more. He and other Joint Committee members expressed how impressed they each were by amount of policy done in short amount of time surrounding this docket.

- Bryan discussed Lonnie Reed's appointment as the Green Bank Board of Director's Chair and mentioned that Green Bank has other Governor appointments to fill. He also stated the need to assign a Green Bank member to the Joint Committee.
- Bryan summarized the Green Bonds US campaign plan. The public awareness campaign has already begun, and the launch of the purchase of = Green Bonds to support the SHREC Tranche 4 will begin on the 50<sup>th</sup> anniversary of Earth Day which is April 22, 2020.

b. Others

- Bryan Garcia mentioned it may be worthwhile to look again at the goals, structure, etc of the Joint Committee as the new administration begins next year. Eric Brown agreed on the need to re-evaluate and to provide value and context in what is done.
  - John Harrity stated regarding the legislative climate, there is a big desire to address the issues but there isn't necessarily a lot of expertise. Legislative staff are really looking for leadership and the best ideas. He stated if the Joint Committee can provide that, it is a great opportunity and help to them.
  - John stated that stakeholders are working with the Governor's Office to revamp the transportation plan and improve it. He stated the need to implement strategic transportation which goes hand in hand with climate change policy.

9. Adjourn

The meeting was motioned to adjourn by John Harrity and seconded by Eric Brown at 2:50 pm.

Respectfully Submitted,

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Eric Brown, Chairperson