Power Generation Advisory Panel Meeting December 21, 2020 Meeting Notes

Attendees

John Rhodes*
Annel Hernandez
Corinne DiDomenico
Betta Broad
Bill Acker
Cecilio Aponte III
Darren Suarez
Emilie Nelson
Jenn Schneider
John Reese
Laurie Wheelock
Lisa Dix
Stephan Roundtree
Jim Shillitto

Not in Attendance

Kit Kennedy Rory Christian Shyam Mehta

Meeting Notes

Feedback from CAC Report Out

- Concern that we seem to chase issues, such as LSR. We focus on building the queue but need IOUs to respond with the investment needed.
- The question is how to envision a much more efficient system balancing siting and transmission (flex load, transmission, storage).
- Question of what the Panel sees as the relative benefits of community based resources, to which John Rhodes responded that in the right places it can be just as valuable as large scale resources, that they having resources close to load will help provide system flexibility, and that they can help address the issue of our current energy system that doesn't spread the environmental and health burdens equally.
- Carbon pricing
- Would like to ensure consideration of the ISO interconnection process.
- Assumes permitting problems are behind us, but still watching for that worth considering that we're not all the way through the permitting challenges.
- How are we defining criteria for solutions for the future? We should define emissions free and operating criteria for resources in future.

Feedback from CJWG

- Defining what a Disadvantaged Community is, must keep connecting with CJWG
- Feedback from the CJWG we shouldn't have a focus on technology, but should focus on the transition and moving away from the natural gas system. CJWG expressed similar concerns to what some members of the Power Generation Advisory Panel have expressed with Green Hydrogen and RNG.

Updates from Subgroups

Barriers

- (Emilie Nelson) Clean energy siting, energy delivery (transmission and virtual transmission), interconnections and hosting capacity.
- Need for transmission build out and storage.
- Particular need in the downstate area. Space, fire permitting.
- It is important to allow renewables to access the transmission system, and the cross-state transmission.
- Scaling storage how do we get to the 3 GW target. How can the state assist in getting to that target?
- (Lisa Dix) What are the barriers in State policy in order for us to meet the goals? What is the role of the State?
- (Lisa Dix) Creative solutions for transmission and delivery into the downstate Area. How are we transforming the system? How can we work with NYPA and utilities to reuse existing sites? As plants are moving offline and being phased out, can we reuse those sites for storage, renewables, interconnections, etc. To get energy into Zones J and K.
- Creative RFP solutions with the utilities, similar to what LIPA did to meet local reliability needs and really scale clean energy.
- To get to 70 by 30, we are out of time. We have real and substantial barriers that take a long time. To double the renewables in the next nine years, that means that these projects and barriers are in place now. A lot of the barriers are NYS money, interconnection processes, procurement.
- (Bill Acker) Barriers are in two bins barriers to the near term 70 by 30 goals and storage goals, and barriers to the zero emissions 2040 goal. The near term storage goal is 3 GW, but the studies are indicating that we need 15 GW to meet our goals.

Future Solutions

- (Emilie Nelson) Topics: reliability of the future grid (storage/flexibility), markets for the future, technology for the future, last X% megawatts.
- Markets: acknowledgement of the different elements that are needed to encourage innovation and the
 transition that's occurring across the system. Some discussion of the Carbon Pricing, and whether that is
 appropriate to include in the wholesale market. Whether the RGGI market is sufficient to cover the electric
 sector.
- Need for technologies to support bulk and distribution networks.
- Need for dispatchable, zero emissions, resource for the long term. Will need to carry forward the needs that studies are showing in the recommendations.
- In respect to equity new technologies should not hinder environmental justice.
- Instead of dictating specific technologies, we need to support the innovation coming forward.
- Acknowledged need for research and NYSERDA's important role in this.
- Some technologies will not come from standard utility projects/RFPs. Need demonstration projects on the utility scale.
- Markets need to work with the efforts of NYSERDA (e.g. RECs).

Resource Mix

- (Emilie Nelson) Topics: Electrification of buildings and transportation, instate renewables, regional connections, downstate peakers, transition, energy conservation, energy storage, natural gas system.
- Overarching themes: development of renewables, development of enabling technologies (long duration storage/demand side management), transition of fossil fuels (gas system and dependency).
- Peakers and their impacts on communities has been a central focus.
 - o Focus on the definition of peakers.

- As renewable buildout increases, the remaining fossil base will only be performing on a peaking basis
- How do we scale renewables, particularly in the downstate region?
 - The OSW buildout is critical

Discussion: Equity Subgroup

Community Impacts

- (Betta Broad) Focusing on community benefits and realizing those in rural communities. Concern with
 the impacts of communities that live near high emission plants and investing in those communities.
 What are the plans to retire these assets? What are the impacts of developing LSR and incentivizing
 such projects? Expanding benefits in rural communities.
- In the downstate area, alleviating the burden on disadvantaged communities by increasing renewables siting and energy efficiency in those communities. DER and community ownership of projects is important.
- Ensuring equitable access to technologies such as energy efficiency and demand response for homeowners and small businesses.
- Job training and job transition in communities where we are transitioning from fossil fuels and in communities siting the renewables projects.
- o Communities need to be a partner and be involved in this transition as much as possible.
- (John Reese/Betta Broad) With the New Siting Rules and the CJMG, they'll be establishing the new
 definition of environmental justice and disadvantaged communities. We are waiting on those
 definitions, and haven't discussed those as a group.
- (Laurie Wheelock) Please let us know if equity/community impacts are coming up in other subgroups so we can continue to be on the same page.

Access and Affordability:

- (Laurie Wheelock) Ensuring that recommendations and the cost of the energy transition does not trickle down to low-income, disadvantaged communities, and small businesses. (e.g. How to apply a carbon tax so it doesn't hurt low-mid income communities, like renters and NYCHA. How do we deal with predatory ESCOs and make sure bills stay low?)
- How do we publicize, expand, and increase the effectiveness of current programs in place for low-mid income communities (e.g. Solar for All, EmPOWER, Home Energy Assistance Program, other energy efficiency programs, etc.) to reduce rate payer cost burdens?
- (Annel Hernandez) We are focused on disadvantaged communities, as they have very high energy burdens. We have to be very intentional in our programming and recommendations to make sure we are penetrating these communities and achieving 35% in the communities that need it most.
 Expansion of HEAP for cooling assistance over the summer due to COVID was a great example of reaching a vulnerable community in an effective manner.
- (Darren Suarez) Has there been thought to the definition of small businesses? SBA defines small business as less than 500 people. Are you looking at these or microbusinesses? (Laurie) Haven't looked at that specifically, but are looking at definitions and focused on being consistent. Will share definition with group.
- (Cecilio Aponte) Is there any work being done on how energy burden will change in the future? For example, when we move energy targets up, how does this affect energy rates and bills. (Laurie Wheelock) Want to point out DPS's Order 14-M-0565 that discusses keeping energy burdens low for low income communities.

• Workforce Development:

 (Jenn Schneider) Much in line with the Just Transition Working Group, we want to ensure that people in the F.F. industry are considered in this transition and there are workforce development and education opportunities in disadvantages communities. Looking at expanding pre-apprentice and apprentice programs so that jobs are long-term, family-sustaining jobs, not just temporary placement. How do we increase the diversity of the workforce and education prior to high school? And getting involved with BOCES.

- o (Betta Broad) Making sure that all communities are included, both urban and rural, and having a robust program for K-University. There are several good programs in NYC.
- (Annel Hernandez) Making sure that we are localizing the workforce benefits and growing the renewable industry in the state. Focusing on environmental justice communities that have been historically left out of these industries.
- O (Jim Shillitto) How do we engage the current power producers and the workforce they currently have, and how are we going to transition and include this workforce in the future energy system? In doing so, they need to keep their current jobs and "keep the lights on". Can't just focus on the future workforce, need to focus on the current workforce (35 year old with two kids and a mortgage currently working at a fossil fueled power plant how do we get him to work on a wind turbine?).
- (Betta Broad) We need to do both, engage the current workforce and we also need to focus on K 12 pathways.
- (Darren Suarez) Providing long term trajectories/pathways is important. Pathways and Technologies Early College & High School (PTECH) Program. It's a 2 + 2 program with a focus on STEM learning.
 PTECH often is operating in underserved communities that don't have strong STEM curriculums.
- (Betta Broad) Need to focus a holistic approach to workforce training. Perhaps we can bring in someone from this space to learn about where there are gaps and where improvements can be made.
 - Darren Suarez: Can help connect with PTECH.
- (Cecilio Aponte) How are you thinking about framing these issues for the CAC? (Jenn Schneider) We have discussed the organizations that we should get involved with, but haven't discussed how we are going to get involved with them. (Laurie Wheelock) Specificity is important, but how specific we can get might vary by topic.

Next Steps

- Continue discussion of issues and development of draft recommendations
- Engage in cross-panel discussions
- Power Generation Advisory Panel Meeting on January 11th 9:30am EST.
 - (Emilie Nelson) Discussion about what we are working towards and what the deliverable will look like?
 Is the CAC looking for broad recommendations or a specific roadmap?
 - Suggestion from Irene Weiser: Please discuss BTM issues with respect to FF and how those will be addressed within the Transition. (Following on email memo on 11/24).
 - (Betta Broad) Addressing the shorter-term goals in the CLCPA (e.g. 2025). Gas distribution Need cross-panel discussion on the gas distribution system (Housing, Land use and Local Governments).
 Workforce inter-panel discussion?
 - (Bill Acker) Support Resource Mix focus in January. Also agree with Emilie that we need a process discussion and to lay out the next few meetings for this group and for the other discussions for Barriers and Solutions subgroups.
 - o (Betta Broad): We will review the BTM memo and definitely include it in the considerations.
 - (Lisa Dix): We should add Barriers into the January meeting because it is related to the Resource Mix discussion, as we can't meet our goals for Resource Mix without the Barriers being addressed. If there is time.
 - (Stephan Roundtree) Vote Solar has been collaborating on a report analyzing what the lowest cost
 100% renewable grid looks like. Will share the national version, but also have a NY version.