# Power Gen Advisory Panel Meeting April 7, 2021 Meeting Notes

#### Attendees

Sarah Osgood – Acting Chair Annel Hernandez Betta Broad **Bill Acker** Cecilio Aponte **Darren Suarez** Emilie Nelson James Shillitto Jennifer Schneider John Reese Kit Kennedy Laurie Wheelock Lisa Dix **Rory Christian** Shyam Mehta Stephan Roundtree **Thomas Congdon** 

# Introduction

Acting Chair Sarah Osgood kicked off meeting reviewing agenda and introducing topics to be discussed. The session featured a public input at the end of the meeting.

# Electrification of Buildings and Transportation

The panel discussed the role of building and transportation electrification in achieving the goals of the CLCPA as they pertain to the scope of the Power Generation panel. It is the perspective of the panel that electrification is crucial to meeting the CLCPA goals and must involve consideration of cost, resilience and equity.

# **Recommendation Review**

The panel reviewed three of the recommendations currently under consideration and a series of supporting actions. Sarah Osgood provided a brief overview of each recommendation and supporting actions, followed by an open discussion. Details of each recommendation can be found in the meeting materials.

# Initiative #11: Retirement of Fossil Fuel-Fired Facilities

The panel discussed the recommendation to retire fossil fuel-fired facilities, highlighting the 3 components of the recommendation: a planning process to determine targets, emissions regulations from the DEC, and an iterative planning process to reach 2040 goals. The recommendation to place a moratorium on new or repowered fossil fuel-fired generation facilities was also discussed with alternative viewpoints.

**Lisa Dix:** Discussed a vision of how the recommendations will work together into 3 components. 1) An assessment and regulation planning process to look at oil and gas and how we get to zero by regulatory means. This needs to start now. 2) A comprehensive gas planning docket to look at other mechanisms and financing that has multiple stakeholders and comes up with creative ways to meet load increases and scale efficiency. This helps get our head around all the things that need to happen in the short-term so that we don't need to build out gas and we have a comprehensive system to take the fossil out and plan for the transition. It also gives us a long-range planning system to serve the grid. 3) To put a stop on the build out of new gas. Repowering gas also means new gas. The idea of the moratorium is in line with our 5 principles with this panel. We aren't in a reliability situation now. The moratorium doesn't talk about the existing facilities, it talks about new facilities until we can get the planning process in place to get the existing out. The moratorium idea is that no new gas will be built while we go through these planning processing and there is a reliability safety valve. If there was a reliability issue, those would need to go through heavy analyses to figure out that there isn't an alternative. Adding fossil fuels to our grid is going in the wrong direction because we are relying on fossil fuels instead of doing the hard work to get to 2040.

**Annel Hernandez (via chat):** The Sierra Club has been looking at the Long Island Peakers. Our ally in Long Island is LIPC, but they work on climate issues broadly, not specifically on peakers.

**Bill Acker (via chat):** In re-reading the Peak Coalition report on NYC peakers, noted that one of the. recommendation of the study is the Clean Dispatch (or clean peak) program that I spoke with you about.

**Kit Kennedy:** The panel has had great discussion and we are moving in the right direction in the planning processes to meet CLCPA emission and energy planning. Without this moratorium, we risk a rush to gas until those regulations are put in place. The CLCPA has mandates by 2040 that we are at 100% clean electricity. Until we have all these in place, we shouldn't allow new pants to move forward. There is this reliability safety valve so that is covered. We can't allow disadvantaged communities to be forced to be host of these plants that are damaging to quality of life. In terms of the costs, it doesn't make sense to invest in them and then need to close them by 2040. We have also had great discussions, and folks have come along the way. If everyone is not in agreement on this moratorium, I would invite a discussion of alternatives.

**Betta Broad:** I agree with Kit and Lisa. We are in a climate emergency and need to act ASAP. This approach is very reasonable, and reliability is built into it. Reliability is a priority and so is the sustainability of the planet and we can't allow business as usual until the CAC recommendations are in place. There is a lot of care going into all of this, but it will take time, and moving ahead with gas plants during this time doesn't make sense; it's moving in the opposite direction. As we look at what the alternatives are, we also need to have a study to determine the potential of those resources so that we don't build out new gas. This is especially for Zones J & K so that we know how quickly we need to move to scale up. The CAC will need that information to determine the scoping plan and regulations. We need a similar goal for the gas phase out and 2040 is just way too far, and this time from now to 2030 is critical and we need this moratorium to start as soon as possible.

**Lisa Dix (via chat):** What Betta is describing was the intent of the gas planning docket / iterative planning process. This needs to start as soon as possible.

**Sarah Osgood**: The CAC integration analysis that is part of this planning for the draft scoping plan will help with that assessment.

**Stephan Roundtree**: This problem of blunting the curve and kicking the can down the road is unnecessary. The end game for NY's future and the CLCPCA is so that NY can thrive in the future. We are creating a clean system and it starts now. I want to reaffirm what was said and what Betta said about the study; there is a real opportunity there.

**Laurie Wheelock**: This proposal is a result of a lot of hard work to meet the goals of the CLCPA and has a safety valve in it. It is very thoughtful. We want to hear from others. We are proud to bring it forward and discuss it more and move it to a proposal for the CAC.

**John Reese:** Recommendation #11 shows the collaborative effort we have. I am opposed to the moratorium for a few reasons, and not because of the environmental crisis and economics. My opinion is based on the process of reducing fossil fuel as we increase renewables. It requires looking backwards and forwards. To me, adding a moratorium is giving up on the process that we had discussed because it forgets the substance and complexity without all of the information we need, and we need to go through #11 before we get to #12. No fossil fuel has ever made it through Article 10, the process is very complex and requires a lot of work to get through. For the process and analysis to do #11, I think a moratorium is harmful and not necessary.

**Lisa Dix (via chat):** New gas is going through the Article 10 process now. It has already been determined that solutions exists and there are not reliability issues with those. So why would we continue to waste state resources to keep going down this path?

**Annel Hernandez**: The CLCAP target is clear. We have been fighting these fossil fuel proposals instead of dedicating time to renewable energy. The DEC peaker rule is a great example. These projects are in competition with the wind and storage projects that we need in the NYC. The moratorium gets us to the spirit for the CLCPA.

**Emilie Nelson:** The CLCPA goes to the heart of how the system needs to change. It will be hard to get to this and we need to move quickly and in an informed matter. Renewable energy, storage, and transmission will decrease the need for fossil fuels. This focus is critical to phase down fossil fuels. The CLCPA has a 70% renewable energy requirement by 2030. The moratorium goes beyond the CLCPA and takes solutions off of the table. Well informed discussion is what we need to focus on.

**Lisa Dix (via chat):** Local transmission upgrades are a clear alternative instead of building new gas (or "repowering" as some call new gas plants now), please see the ConEd case docket for details.

**Kit Kennedy**: How do we proceed from here? We have had a robust discussion and heard a lot of support and heard some concerns.

**Sarah Osgood**: What has been communicated by the CAC is that if we don't have full agreement, we can put forward alternative viewpoints. We can indicate that we don't have full alignment but can still put it forward to the CAC. We will take back these comments and the comments from the public and determine our next steps.

**Kit Kennedy:** I would suggest that if a majority of the panel supports this, it should be noted. We want to present the sense of the panel as a whole.

• Lisa Dix, Shyam Mehta, Rory Christian and John Reese noted their agreement.

**Emilie Nelson**: I agree as well, the CAC has much to work to do with the integration analysis and should have a full understanding of the discussion and recommendations. Putting that information forward for the CAC on how to best act is appropriate.

James Shillitto (via chat): I am opposed to the natural gas moratorium.

**Lisa Dix (via chat):** I do want to point out that the moratorium is on new gas/building new gas, so not a loss in jobs for workers. We look forward to working with labor on a comprehensive transition.

# Initiative #12 – Clean Energy Siting and Community Acceptance

The panel discussed the recommendation on clean energy siting and community, highlighting the use of information and resources to help local communities make decisions for clean energy development. For details, please see the meeting materials.

**Betta Broad**: These are really solid and could help to build community acceptance for siting renewables. What I don't see is increasing grassroots education resources for renewables. We need increasing funding for non-profits based in the community/region that can do K-12 education and outreach is needed.

**Kit Kennedy**: These recommendations are really looking good. I think there was also a recommendation about increasing NY-Sun's mandate. Is that somewhere or should we discuss it further? I like the focus on education and outreach and the use of the mapping tool to help educate and assist communities in making decisions.

**Stephan Roundtree:** The CLCAP has a mandate for distributed solar up to 2025 and distributed solar is important for 2030 and 2040 from a society and justice mandate. It is important that this whole undertaking is public; we need to get everyone on board with the transition. It is the State's responsibility to socialize this idea and providing funding for the educational track.

**Cecilio Aponte**: Want to add support for the work that went into these recommendations. The State does have a big role to play in community acceptance. We also had discussions with the land-use and local government panel, and they will have additional recommendations. The CAC may also need additional guidance on these recommendations, as they are complex.

**Betta Broad:** Utility-scale solar developer and municipality coordination for community-owned projects is key. This could help to empower the community to feel better about their projects and see long term benefits. I appreciate seeing this on the list.

• Darren Suarez to provide an example of this from Canada.

**Bill Acker**: I support these proposals and appreciate the work. There are two areas that link to other proposals. 1) Hosting Capacity: we have discussed having a dashboard to show the degree of penetration of renewable to show that we are on track for renewable energy on the grid and to enable us to see the electricity capabilities of the grid. 2) In the Energy Storage proposal, we have a recommendation on permitting challenges for energy storage. Perhaps this can be added here for cross-referencing

• Betta Broad agreed to add something about siting storage in Zone J to this recommendation.

**Darren Suarez:** I'm supportive of integrating opportunities for communities to have a stake in larger projects and being a solution on the distribution end. Storage allows for non-wires alternatives to help with energy delivery and the integration of renewables.

**Stephan Roundtree (via chat):** Public information can help people get on board and see the bigger picture of what we're endeavoring to do.

**Darren Suarez (via chat):** I support Stephan's advocacy of robust and meaningful public information exchange about our energy future.

**Betta Broad (via chat):** I agree with Stephen and Darren. Everyone in New York state should know about the clean energy transition and how to participate, benefit, etc. We need a massive PR campaign.

# Initiative #13: Energy Delivery and Hosting Capacity

The panel discussed the recommendation on energy delivery and hosting capacity, emphasizing the procedural elements of the recommendation in facilitating the renewable energy transition. Details can be found in the meeting materials.

**Bill Acker**: It is very important that we recognize that advanced grid technologies exist today and should be deployed today in a meaningful way. Rapid deployment and R&D are to happen concurrently, not sequentially. As we get higher amounts of renewables, there will be times when the grid is necessarily over-producing. Therefore, I would recommend changing words in a) and b) (on slide 24 of the meeting materials) to be broader and focus on "maximizing energy delivery" rather than "alleviating system bottlenecks," and "optimizing energy delivery" rather than "relieving congestion points." Hosting capacity recommendations are also incredibly important. It includes both grid investments to maximize capacity and maximizing systems on the grid (storage, smart loads, etc.) to maximize hosting capacity. As we look at how we will do the evaluation, look at interconnects. We now have substations that are effectively closed due to electrical constraints. We need to understand where there is headroom within the existing system so that the state and developers can understand this. I recommend the use of a dashboard to make this data available.

**Emilie Nelson:** The concept of energy delivery and how to ensure that clean energy connects with demand is critical. With respect to the buildout of renewables and focus on unbottling. We do have the concept of renewable energy zones. Combining the natural resources available, community acceptance, and how to connect that energy to the load will require significant investment in the transmission infrastructure. We don't have all the answers today and I would like to commend the work that State has done so far to identify where investments are needed and would like that work to continue.

# Next Steps

Acting Chair Sarah Osgood concluded the panel discussion, thanking the panel for their hard work and discussion. It was noted that this is the last planned Power Generation Panel meeting, with the final recommendations to be submitted to the CAC later this month. Panel members will be kept abreast of future developments and may be brought in for further discussion or input.

The next Climate Action Council Meeting is scheduled for 9:15am on April 12<sup>th</sup>. Details can be found on climate.ny.gov.

The panel took a short break ahead of the 12:00pm Public Input Session

# **Public Input Session**

Jeremy Koo (Cadmus) kicked off the public input session as the host, advising participants of the standard protocols for participation.

# Sam Lehr

### Policy manager; RNG Coalition

I appreciate the acknowledgements that green hydrogen can be used among other resources. Both green hydrogen and renewable natural gas (RNG) can be used in the economy. RNG needs more immediate attention as it's an important GHG reduction strategy. In E3's June 2020 analysis, anaerobic digestion of subsequent materials will play huge role in waste diversion. All the CO<sub>2</sub> from RNG is carbon neutral. These emissions would otherwise be released into the atmosphere. RNG can be considered carbon-negative since it captures these emissions. Please support this in the waste and power sector panels.

# Timothy Judson

Executive director of nuclear information and resource service. Co-founder of Alliance for Clean Energy in NY, contributor to US climate action network

I am encouraged to see the detailed planning regarding the fossil fuel phase out. We must take on urgent planning for the four upstate nuclear reactors. Nine-mile Point is one of the oldest 3 operating plants in the US, many of which would've closed by now except for a multi-billion-dollar nuclear subsidy the PSC enacted in 2016. Eminent closures are needed, including those the state has and has not planned for. Direct investment toward accelerating renewables will also be key. Nuclear subsidies are on track to total \$7.6 Billion by the time program expires in 2029. The PSC never conducted an analysis of alternatives to ZEC program. Compared to the renewable energy, the nuclear bailout is up to 6 times less effective to meeting the goal with renewables. ZRECs equate to 3 times more the cost of new renewable energy credits to meet the standard.

# Taylor Scarpa

#### Student at Syracuse, Legislative Associate

Gas and nuclear energy can no longer be parts of NY's energy future, we must have increasing sources of wind solar and geothermal. Nuclear is not clean safe nor renewable and is a significant threat to public safety as they age out. Radiation is given off and there is no safe exposure to radiation. Twothirds of plants had admitted to unauthorize tritium leaks. Wind and other renewable energy sources are more affordable. There would be enough time and money saved by deploying renewable energy instead to eliminate fossil fuels.

# Renee Vogelsang

#### Coordinator of campaign: Beyond Indian Point

I advise developing a plan that transitions us off of nuclear and gas power into renewable energy. Gas is not clean, safe or renewable. It is dangerous for our homes, lands, community and climate. Fracking is the primary method to obtain it. Across US fracking has caused many environmental and community problems. While NY has banned fracking, the state is still highly invested in fracked gas infrastructure, and therefore vulnerable to explosions and leakages. Nuclear also is not safe. Currently there is no viable plan for how to store nuclear waste safely. EJ communities bare most of the burden and carry the risk of catastrophic accidents. In NY it's a key reason why state that has shut down Indian Point.

# Kim Fraczek

# Director of Saint Energy Project

NY should ban all new fossil fuel facilities. We need to prevent plants from increasing emissions right now. Cricket Valley was built without the consent of its community it is polluting in. I have seen everyone drag their feet on making key decisions for the carbon-free future. We can't include renewable hydrogen waste gas which is referred to as renewable natural gas. Make the DEC pass regulations that starts the process now.

# Robert Wood

### **Concerned** Citizen

I am asking you to ban fracked gas for power generation immediately. It is framed as a better alternative to oil and goal and utilities such as National Grid brand natural gas as clean. When upstream processes are considered, with a 2% leakage, it's worse environmentally than coal. The latest research shows that leakage is likely up to 4x that amount. We need to link the emissions of utilities to upstream issues instead of burying upstream emissions data in footnotes. It is the responsibility of this council that the motivating factors are returns on equity. It is the responsibility of the council to realize the impossibility to meet the emissions goals with new fossil fuels. There is no room for more gas in NYS. Implement an immediate ban on natural gas power generation.

# Joel Harrington

### Head of public policy in eastern us region for Enel X

I support ESS actions, it will play an integral role in achieving CLPCA goals. I have two recommendations regarding the bridge incentive and a clean dispatch standard. I commend the DPS, PSC and NYSERDA for managing the bridge incentive program two years ago, intended to cover the gap between deploying storage projects in NY and the revenues that they could earn. Even with a decreasing per-MWh value, it is still economic. However, no funding is left for the program in most areas of the state. Storage incentives downstate, where it is most needed, will dry up soon. I respectfully request that enough total dollars are allocated so developers know they can depend on funding. I recommend a clean dispatch standard also be adopted. This would enable any eligible resource that generates during the peak hour to generate a credit. This recommendation is in line with EJ goals to help keep NY's peaker plants from producing harmful emission

# Juan Pablo Velez

#### Cofounder of Friends of Columbia Solar

We have 15-20 years to make all electricity clean and will roughly double the amount of power needed via electrification. We need to remove obstacles to scalability. The first method is technological: smoothing intermittency with ESS, more dispatching during the night, and overbuilding as much as is cost effective. We should eliminate nuclear at that time, after gas. We also want to get as much solar out of the way from communities as we can. We can do this by putting panels on right of ways for transmission lines, or on highway medians. This would get us about 60% of the way. Local power should also benefit local communities by making local electricity prices cheaper for host communities.

# Zongkai Wang

# Student at NYU Garrington

Demand response is becoming more important to reduce investments in seldom-used infrastructure and reliance on special generation. Look at the Tempo Tariff program in France and Maryland's smart energy

rewards program, both successful residential demand response programs. The Tempo Tariff started in 1996, and by 2018 had 10 million customers. The company divided days of the year into 3 categories which represent the type of electricity pricing constructs. On most days, users of the simple tariff saved on energy, while on select, higher-demand days, energy prices increased significantly. Customers saved on average 10% on electricity, which is significant considering the reliance on electric heating. In Maryland, the Smart Energy Rewards program provided incentives for installing smart meters. The company then notes 5-10 peak energy days and will notify users one day in advance to reduce energy use. The program has proven to be effective at reducing energy use and peak demand and only 1% of users have opted out of the program.

#### Gerrit Bruhaug

#### PHD Candidate at University of Rochester

Commenting about nuclear, I am pleased to see there were slides including it in the recommendations. Nuclear can provide significant benefits. We need to evaluate the effect of the ZECs long before the 2030 date. Some of the reactors in upstate will run out of their license before that date. Nuclear is a solution for climate change, included in IPCC UN reports and the only way to fully decarbonize. Without it, NY will fail.

#### Charlie Feurmann

#### Senior in High School from Queens

A large number of students at school are concerned about climate change. My girlfriend said she wouldn't want to have kids because of the environmental impact. I want to have a future in which I can have a large family. The IPCC reports urge us to more than double current nuclear capacity. Indian Point prevents 12,000 MT of carbon emissions per year. When we shut down unit 2, it led to more gas. Please include nuclear in the energy infrastructure. Please consider next generation technology.

#### Jen Metzger

#### Former NY State Senator

I attended the earlier meeting and am throwing support behind moratorium on new fossil infrastructure. I Appreciate Kit Kennedy's comments making sure that the recommendation of the Panel represents the majority opinion of the panel. I also appreciate all the recommendations on community benefits. I was in local government for many years before entering the state senate. It will be really important for communities to feel like they have a stake in it. I appreciated Stephan Roundtree's comments on public awareness public information campaigns. Communities benefit more when there is local ownership. There is a critical importance of prioritizing distributed generation, and I believe we should go beyond the 6 MW goal and would like the panel to push to go beyond that goal. I want to second the comments of Bill Acker on the critical importance of investing in the distribution infrastructure to support distributed generation.

#### Isaac Mathou

#### **Resident of Queens**

Used to be anti-nuclear, until I began reading about technologies. Anti-nuclear positions may be just a case of fear. A recent study by the Environmental Defense Fund has shown that solar energy has much more generation potential in CA than in other places. They would need 500 GW of solar just to meet the overbuilding capacity needed for the variability of solar. The report estimates that wholesale electricity prices would increase by 65% from today if solar and storage alone were used to meet demand. It would

require a rate of adoption more than 10 times has ever been done before. Nuclear uses less mining and is less land-intensive than solar. Mixing renewables and nuclear is the best way to reach our goals.

# Eric Dawson

In the context of rising demand for reliable electricity, the main CLPCA goal is to achieve zero emission electricity by 2040. We should dramatically increase zero emission electricity. I support the moratorium of new gas. Nuclear is the most reliable, efficient, and scalable carbon-free source of energy. Investing in R&D can't help us scale it up to the level we need it today, Indian Point has supplied the majority of carbon-free electricity to the state. No one has ever died from storage of nuclear waste. Nuclear needs to be a part of any effort to increase zero emission electricity, primary goal.

### Tara Vamos

#### NY Renews

I am strongly in favor of stopping all building or repowering fossil fuel generation systems if that could come clearly from this panel it would be very helpful. Senator Metzger noted there must be a large public campaign, right now there are a large number of people very motivated and spend lots of time fighting plants and pipelines in communities. For the Williams and Danskammer lines, 500 people signed up for local opposition. 178 folks spoke against it compared to 13 speaking for it. We could reallocate a lot of time if these people didn't have to fight so much new fossil fuel infrastructure but could instead put their efforts to supporting renewables.

### Lynne Bruning

#### Schenectady County NY

I am concerned that the Climate Action Council fails to consider rural disadvantaged communities. Land intensive, weather intensive energy resources are an issue for these communities. The state has stripped away rural taxpayers' rights. To generate 1 MW of solar energy requires about 4 acres of land. Once utilities construct them, there is little opportunity for farming, community, conservation, or tourism. The siting of T&D limits and prohibits taxpayer-directed land-use plans and policies. These communities pay into the state's tax system, I request that the panel consider the industrialization of rural EJ counties. Please thoughtfully consider and examine environmental conservation Article 75. These are the people most impacted by the states rush to adopt weather-dependent resources. Consider all fuel options while reducing greenhouse gas. Is it wise to put all of our eggs into one renewable basket?

#### **Richard Fennely**

#### Coilpod LLC

I am raising the issue of cooling efficiency as a resource for power generation. If anyone wants to discuss further with me on this topic, please contact Richard at: Richard@coilpod.com. Cooling equipment and AC represents a huge waste. Owners rarely replace dirty filters or conduct mundane and preventative maintenance. The Carbon Trust, ASHRAE and the International Refrigeration Institute did a study in 2018 and concluded that globally, the unneeded, indirect power-plant emissions from inefficient cooling are around 500 million MT annually. NYC has 8.5 million MT from dirty A/C and refrigeration, fully 25% of the city's stationary energy emissions. We've approached ConEd, New York City Climate and have not received a response. This needs to be coordinated with the Energy Efficiency & Housing Panel, but this waste cannot continue. This represents 39.4 billion cubic feet of natural gas use every year just because people do not do routine maintenance on cooling equipment.

## John Reese Rath

## NY Geothermal Association

People comment on lots of seemingly credible studies that conflict and counter each other. After a 30year career in West Texas, where nuclear waste has been inefficiently dumped, I believe those folks would have a different opinion on nuclear. The waste is dumped and near the largest aquifer in the country. As for green hydrogen, it sounds really good and may have some limited applications, but I would like to see the data that shows that during the transportation and storage it won't leak and release greenhouse gasses. From a commonsense standpoint, we should stick to what we know what works: demand reduction, energy efficiency, and clean energy.

### Eric Meyer

#### **Generation Atomic**

As nuclear plants shut down, we are treading water against the climate crisis. There is constant conflation of waste to the byproducts from nuclear weapons production. This is related to the Savannah River site which dates back to cold war era nuclear weapons testing. This is not the same treatment as nuclear power generation waste receives. We should focus on what we know works, France, Sweden, and Ontario totally decarbonize their electricity grid in under 15 years at an affordable price. We should be looking to them as examples. Look at how long it took Sweden, the fastest for nuclear, to decarbonize: 8 years. Contrast this with Denmark, the fastest to switch to renewables, which took 30 years. Losing Indian Point is a huge setback.

• Timothy Judson responded to this statement via chat: What Eric Meyer just said is completely false. The proposed nuclear waste site in Andrews, TX is for commercial irradiated fuel from nuclear power plants. The site Meyer described is a Department of Energy waste site in Carlsbad, NM.

# Amber Ruther

#### NYC Democratic Socialist of America and Alliance for a Clean Economy

We need a ban on new fracked gas now. There are several proposals for new fracked gas plants currently in motion. Hundreds of people have testified against them. NYISO analyses have proven they're not needed to meet energy demands. They'll last for decades past climate targets and set us back in the transition to a 100% carbon-free electricity. If we keep kicking the can down the road, it will make the transition more difficult. We need to stop investing in false solutions like Natural Gas, Green Hydrogen, and Renewable Natural Gas.

# Conclusion

Sarah Osgood thanked panel members as well as attendees for their participation. Participants that were not able to speak during the day's session were encouraged to submit their comments to <a href="mailto:PowerGenPanel@dps.ny.gov">PowerGenPanel@dps.ny.gov</a>.