MINUTES OF THE CLIMATE ACTION COUNCIL MEETING HELD ON JUNE 8, 2021

Pursuant to Notice and Agenda, a copy of which is annexed hereto, a meeting of the Climate Action Council ("Council") was convened at 2:00 p.m. on Tuesday, June 8, 2021. The following Members attended:

Council Co-Chairs

- Doreen Harris, President and CEO, New York State Energy Research and Development Authority
- Basil Seggos, Commissioner, New York State Department of Environmental Conservation

Council Members

- Richard Ball, Commissioner, New York State Department of Agriculture and Markets
- Donna L. DeCarolis, President, National Fuel Gas Distribution Corporation
- Marie Therese Dominguez, Commissioner, New York State Department of Transportation
- Gavin Donohue, President and CEO, Independent Power Producers of New York
- Dennis Elsenbeck, President, Viridi Parente, Inc.
- Thomas Falcone, CEO, Long Island Power Authority (Rick Shansky, Designee)
- Eric Gertler, Acting Commissioner and President and CEO-designate of Empire State Development
- Rose Harvey, Senior Fellow for Parks and Open Space, Regional Plan Association
- John Howard, Interim Chair and CEO, New York State Public Service Commission
- Dr. Bob Howarth, Professor, Ecology and Environmental Biology at Cornell University
- Peter Iwanowicz, Executive Director, Environmental Advocates of NY
- Jim Malatras, Chancellor, State University of New York
- Gil C. Quiniones, President and Chief Executive Officer, New York Power Authority
- Roberta Reardon, Commissioner, New York State Department of Labor
- Anne Reynolds, Executive Director, Alliance for Clean Energy New York
- Rossana Rosado, Secretary of State, New York State Department of State (Sarah Crowell, Designee)
- Raya Salter
- Dr. Paul Shepson, Dean, School of Marine and Atmospheric Sciences at Stony Brook University
- RuthAnne Visnauskas, Commissioner and CEO, New York State Homes and Community Renewal
- Howard A. Zucker, Commissioner, New York State Department of Health (Henry Spliethoff, Designee)

Also present were various State agency staff and members of the public.

Mr. Seggos and Ms. Harris, Co-Chairs of the Council, welcomed all in attendance. A quorum was present throughout the meeting.

Consideration of the Minutes of the May 10, 2021 Meeting

The next item on the Agenda was to advance the minutes from the May 10, 2021 meeting, which included a recent professional role change for CAC Member Dennis Elsenbeck. Upon hearing no further changes or objections, upon motion duly made and seconded, the minutes were adopted. Co-Chair Seggos stated that the minutes will be posted to the Council website.

Co-Chair Remarks and Reflections

Co-Chair Harris mentioned that, at the request of the Climate Justice Working Group, the receipt of its feedback on the Advisory Panel recommendations would be taken up at a meeting scheduled for June 28, 2021.

Co-Chair Harris also highlighted some recent announcements that included the launch of a funding opportunity issued by the NY Green Bank for expanded investment in projects that prioritize energy efficiency and electrification in housing within disadvantaged communities. She also mentioned a Joint Governors' letter to the Biden Administration on prioritizing offshore wind development, as well as the Energy to Lead Awards announced for four innovative college campus projects.

Presentation and Discussion: Adaptation and Resilience Recommendations from the Land Use and Local Government Advisory Panel

Co-Chair Seggos introduced Sarah Crowell, Chair of the Land Use and Local Government Advisory Panel and Mark Lowery, Assistant Director Office of Climate Change, NYS Department of Environmental Conservation to present the adaptation and resilience recommendations. The recommendations are intended to enhance the State's resilience to climate hazards it will continue to face and to adapt to the inevitability of a changing climate.

Ms. Crowell stated that the Climate Act amended the 2014 Community Risk and Resiliency Act (CRRA) by authorizing the NYS Department of Environmental Conservation to support adaptation measures, requiring applicants for major permits in nearly all of its permit programs to demonstrate consideration of climate change and providing DEC greater authority to mitigate significant climate risks

in its permitting activities. The Climate Act also authorizes the Council to include adaptation and resilience recommendations in its Scoping Plan.

Consisting of Land Use and Local Government Advisory Group members, Staff Working Group members, and liaisons from each advisory panel, the Adaptation and Resilience Group scope addressed three specific climate hazards (sea level rise, extreme and repetitive flooding and thermal extremes) and included recommendations addressing:

- Hazard-specific adaptation and resilience;
- Enhancing community adaptation and resilience;
- Enhancing Statewide adaptation and planning; and
- Adaptation and resilience aspects of greenhouse gas mitigation strategies.

The Group did not set out to develop a comprehensive set of recommendations to address all climate risks faced by the State, its communities, or its residents. However, it recommended work that begins or expands "no regrets" solutions to several well understood hazards, as well as more foundational work to advance a comprehensive and equitable response to climate change and climate hazards.

Ms. Crowell also discussed the public and stakeholder input process undertaken. Feedback was also requested from approximately 130 members of the interagency climate adaptation and resilience (ICAR) work group that represents 20 State agencies and authorities, as well as from members of the New York State resilience practitioners network.

Mr. Lowery began his presentation by discussing the State's climate vulnerabilities that are likely to threaten the health and well-being of its residents – from decreased air quality, disease transmission, compromises to infrastructure, and intense heat and precipitation events. He described some of these as inevitable yet stressed the importance to reduce greenhouse gas emissions for the long-term benefits. He stated that the Advisory Panel proposes twelve initiatives organized under three themes, comprising approximately 90 separate recommendations. The three themes are:

- Building the State's adaptive capacity;
- Enhancing the resilience of communities and infrastructure; and
- Enhancing the resilience of living systems under both current and future climate conditions.

Mr. Lowery presented the following twelve Advisory Panel initiatives along with specific detailed recommendations to effectuate them:

- Commit to creating, implementing and updating a comprehensive and equitable State climate change adaptation and resilience plan, including the naming of a State resilience officer

charged with convening a subcabinet focused on adaptation and resilience;

- Incorporate equitable adaptation and risk-reduction consideration into relevant State funding and regulatory programs, projects and policies;
- Strengthen meaningful community engagement and public education and build adaptive capacity across all sectors, including the establishment of two training corps one focused on disadvantaged and unemployed youth for ecosystem protection and installation of green infrastructure and the other modeled on relationships between colleges and their home communities to promote student engagement in local climate action plans;
- Identify and evaluate options for supporting equitable adaptation and resilience practices and projects, and to enhance insurance protection;
- Provide State agency planning and technical support for equitable regional and local adaptation and resilience plans and projects;
- Evaluate opportunities to ensure equitable considerations of future climate conditions in landuse planning and environmental reviews;
- Develop policies, programs, and decision support tools to reduce risks associated with coastal and inland flooding;
- Develop policies and programs to reduce human health risks associated with new patterns of thermal extremes;
- Ensure the reliability, resilience and safety of a decarbonized energy system;
- Develop policies and programs to reduce risks threatening ecosystems and biodiversity;
- Enhance climate resilience and adaptive capacity of the agricultural community, while preparing to take advantage of emerging opportunities; and
- Preserve and protect the ability of forest ecosystems to sequester carbon.

Mr. Lowery also presented the benefits and impacts on disadvantaged communities, a focus of many of the recommendations. He stated that comprehensive adaptation planning would provide opportunity for strategic development, implementation, and evaluation of programs and projects intended to address vulnerabilities in disadvantaged communities; as well as to better integrate equity considerations into resilience planning and financing while avoiding maladaptive practices and unintended consequences.

Mr. Lowery characterized the direct human health benefits of reducing exposure to climate risk as well as fossil fuel pollution as almost too numerous to list. Further, healthy ecosystems provide additional beneficial services that include flood mitigation, recreation, carbon sequestration, clean water and air and renewable natural resources, and others.

Regarding a just transition, recommendations to incorporate climate change into design guidelines would create demand for skilled design professionals and trade people as would expanded green and resilient infrastructure programs. Training programs to meet this demand could be targeted to industries and communities in transition, particularly those in disadvantaged communities.

Bob Howarth suggested that electrification will help with human heat stress and believes public education is needed to meet the challenges of this effort. In response to his inquiry regarding flood mapping and clarifying the terminology, Mr. Lowery agreed that terminology is an issue and that work is underway to incorporate findings from the flood risk management guidance pursuant to CRRA for permitting programs so that local municipalities can incorporate the guidelines into their local floodplain ordinances.

In response to an inquiry by Dr. Howarth regarding the increase in harmful algal blooms that cause public health issues and put drinking water at risk and the need to alter best management practices to address them, Mr. Lowery acknowledged that this is one of many important climate hazards that should be addressed through comprehensive planning. Co-Chair Seggos added that, separate from the Council and the NYS Department of Environmental Conservation, the NYS Department of Health has also been closely tracking the issue and has made substantial investments.

Donna DeCarolis was pleased to see the emphasis on priority investments in energy systems to ensure reliability, resilience, and safety and mentioned the existing underground pipeline infrastructure as an asset to assist with that effort. She also mentioned the idea of a hybrid heating solution (two sources of energy for the home) as a solution to consider in addressing thermal extremes.

Dennis Elsenbeck stated that focus on the consumer side is needed, but there is also a need to better assess the impact of decarbonization on the distribution side of the electric system and how location-based distributed energy resources, or microgrids, can contribute not only as a mitigation strategy but also as a business opportunity. This may require examining the alignment with legislation and regulatory oversight and the manner in which utilities develop business models and aligning smart growth with traditional utility practices. Mr. Lowery stated that, although the Advisory Panel did not discuss this specific issue, it focused on the alignment of infrastructure, housing, and employment investments and suggested this topic may be best suited for inter-panel discussions. Mr. Elsenbeck suggested that solutions should be considered in broader, more holistic ways and also suggested that local manufacture of products could be a means to marry climate and resiliency concerns with the creation of a new economy.

Raya Salter expressed her support for the inter-agency planning and guidance, the focus on resilience, metrics for disadvantaged communities and public engagement, a student corps, climate

gentrification and attention to wildlife and invasive species. In response to her inquiry regarding how to effectuate education, training, and the student corps at the local level, Mr. Lowery believes that there is a long-term lack of educational investment and that more is needed in this area.

In response to her inquiry regarding successfully mitigating resiliency and risk reduction on future infrastructure projects, Mr. Lowery explained that the NYS Department of Environmental Conservation must consider future physical climate risk in major permits and that a working group is implementing this, beginning with DEC's Protection of Waters Program, including incorporation of findings from the flood risk management guidance developed under CRRA.

In response to the recommendation to make energy systems more resilient, CEO Quiniones announced that the New York Power Authority is launching a study of its assets (power plants, transmissions system, and customer-sited projects) by partnering with Argonne National Laboratory, the Electric Power Research Institute, and Columbia University to study the impact of climate change and to investigate how to change the design basis for planning, engineering design, construction and maintenance. He also mentioned that the Consolidated Edison Company of New York has undertaken a comprehensive resiliency study.

CEO Quiniones also mentioned that, as part of its responsibility of operating the New York State canals, the Authority works very closely with NYS Department of Environmental Conservation and the NYS Department of State on wetland restoration, flood mitigation, and invasive species, including algal blooms. He offered to share and collaborate the results of these efforts with the Advisory Panel, to the extent they had not yet been shared.

Chair Howard reflected on several site visits to devastated properties and inquired as to how best to rectify bad land use decisions and prevent future poor decision making, citing a specific effort on Staten Island that resulted in the relocation of an entire neighborhood that could not be properly protected, while simultaneously realizing the value of that property as a wetland. He inquired as to whether this should, or could, be pursued on a strictly voluntary basis or how best to pursue it given the resources needed to respond to climate disasters. In response, Co-Chair Seggos suggested that some of the proposed Bond Act funds would be slated to solve poor drainage issues (through culverts and bridges), but that it can be quite challenging to implement successful strategies. Mr. Lowery added that pre-event, long-term recovery planning is key, but is often difficult to achieve prior to an actual event. Most investments in risk-reduction occur after a disaster, owing to the availability of federal disaster relief funds. Ms. Crowell added that the key is ensuring sufficient and appropriate resources are available, citing various household

scenarios across all economic spectrums that make it more difficult for residents to relocate. She also cited Superstorm Sandy, Hurricane Irene and Tropical Storm Lee and the impact they had on several areas in the Adirondacks. Commissioner Dominguez emphasized that this highlights the importance of investments in bridges and culverts.

In response to an inquiry by Anne Reynolds regarding how close the current set of recommendations are to the contents of NYSERDA's 2011 ClimAID assessment that was updated in 2014, Mr. Lowery clarified that the ClimAID assessment was not intended to be a comprehensive policy plan, but rather is an integrated, scientific climate, or vulnerability, assessment that contains some sectoral recommendations. Co-Chair Harris added that this work is being updated and can be a topic for a presentation to the Council at a future meeting.

In response to an inquiry by Anne Reynolds regarding any discussion about the potential risks of electric emergency vehicles, Mr. Lowery stated that there was not extensive discussion of the issue, but he identified the issues of fossil fuel disruptions during extreme weather events and the need to power electric vehicles during an evacuation. Ms. Reynolds suggested the need for exploration of community emergency centers that could be designed with battery back-up, solar, cooling centers, and similar technologies, for emergency situations. Mr. Lowery also stated that there is an effort to move emergency centers out of floodplain areas, as well as to ensure that infrastructure, such as electric vehicle charging stations, are also not located within flood prone areas.

In response to an inquiry by Paul Shepson regarding how to manage the tension between investing in the resilience of existing energy delivery systems and the conversion to a renewable energy future and how that divestment from existing fossil fuel-based energy systems is effectuated while maintaining reliability, Rick Shansky, Senior Vice President of Operations Oversight, Long Island Power Authority, stated that hardening the distribution system is a big focus and takes a great deal of investment. He added that recovering from Superstorm Sandy was a multi-year effort and that prioritizing is a challenge given the lack of funding to accomplish all that should be done. Donna DeCarolis agreed that this is an important issue and believes that there is a growing work of knowledge, citing several studies, to support the need for both systems. She stated that the existing natural gas system is storm resistant, highly functional in cold weather events, and can be leveraged while building out renewable systems. CEO Quiniones believes that both systems are needed, and resource adequacy and fast-ramping resources are areas for further consideration, as well as the interdependent sectors, such as telecommunications, that also

depend on the energy infrastructure. Chair Howard stated that, when it comes to hardening the overhead electric system, the question is not one of feasibility but of affordability given today's approach – which is exclusively through the rate base, which has equity implications and raises the question of how to conduct an appropriate cost benefit analysis to result in the most financially efficient investments. Mr. Elsenbeck stressed the need to focus on the demand side of the electric system, as the focus on generation and transmission side impacts of greenhouse gas emissions only up to 15%.

In response to an inquiry from Gavin Donohue regarding the priorities, timeframe, and costs of the recommendations from the Advisory Panel, Mr. Lowery explained that, absent an approved plan, most of the recommendations could be addressed at the agency or program level.

In response to an inquiry from Peter Iwanowicz regarding the engagement with the Climate Justice Working Group, Mr. Lowery stated that the Advisory Panel met with the Working Group very early in its process, invited an appointed representative, and sought feedback from the Climate Justice Working Group during drafting of the recommendations.

In response to an inquiry by Mr. Iwanowicz as to the extent of any discussions regarding urban forestry, Mr. Lowery stated that the topic was considered as part of the green infrastructure discussions and also emphasized the Agriculture and Forestry Advisory Panel work in this area.

Mr. Iwanowicz also inquired as to the meaning of decarbonization in the context of the Climate Act in that, in his view, decarbonization contemplates a level of fuel combustion that he does not believe to be compatible with the requirements of deep pollution reductions, prioritization of co-pollutants, and alignment of these policies with disadvantaged communities. Co-Chair Harris agreed that this is an important discussion to have, particularly as the Council is presented with various scenarios that will result from the integration analysis and the need to contemplate the post-2030 future of the electricity grid.

Next Steps

Sarah Osgood, Executive Director, Climate Action Council, presented the future meeting schedule. The next Council Meeting is scheduled for June 28, 2021, at which time the Council will receive feedback from the Climate Justice Working Group on Advisory Panel recommendations. Future meetings include July 22, 2021), September 13, 2021 and October 14, 2021 where iterations from the integration analysis will be a focus. She also mentioned that there are a number of cross-cutting topics that may necessitate

further engagement and discussion with the Council over the next few months. The current topics being considered are reliability, financing, innovation, and bio-energy. The first topic, reliability, is being planned for July 2021. Ms. Osgood also provided additional clarification as to the expectations for the feedback of the Climate Justice Working Group on the Advisory Panel recommendations. Until additional State guidance is provided, all future meetings are currently planned to be held virtually.

In response to comments from Dennis Elsenbeck relating to the announced speaker series and his belief in the need for additional consideration of the electric distribution system, Ms. Osgood stated that participation is being sought from the Utility Consultation Group. Donna DeCarolis agreed that the Utility Consultation Group would be a helpful and necessary addition to the conversation. Chair Howard and Rick Shansky also offered their respective staff resources toward the discussion.

In response to inquiries from Donna DeCarolis regarding the integration analysis and how the sum total of recommendations fit into that process, Ms. Osgood stated that the model is being developed and, as a starting point, will consider all of the recommendations put forth by the Advisory Panels. It will also result in various scenarios to provide a full picture of the impact of different policy levers – all of which she expects will ultimately be part of a Council discussion. She cautioned that attribution will be with regard to packages of policies as opposed to individual recommendations.

With regard to an inquiry by Donna DeCarolis regarding the timing of more broadly considering the voice of consumers and to increase public awareness of the Council's efforts, Ms. Osgood acknowledged that, in addition to the formal public comments that will be solicited between the Draft and Final Scoping Plans, more planning needs to be undertaken to engage the general public and increase their awareness of the activities of the Council.

Gavin Donohue thanked Co-Chair Harris for providing the summary document of the complete set of recommendations and expressed his desire that it continue to be a working document that is periodically updated. In response to his inquiry as to the status of the Advisory Panels and Working Groups at this stage, Ms. Osgood stated that the Advisory Panel work has essentially wrapped up, but they have been requested to remain available to provide any additional analysis or input upon request. The Climate Justice Working Group is continuing to meet and will examine the disadvantaged community criteria. The Just Transition Working Group continues to meet and discuss the Jobs Study. Co-Chair Harris added that there may be the potential need for certain Advisory Panels to recalibrate upon release of the integration analysis.

Regarding an inquiry from Gavin Donohue as to the opportunity for public comment during the integration analysis stage, Ms. Osgood did not anticipate there would be an opportunity due to timing, but that opportunity will present itself once the Draft Scoping Plan is released. She also confirmed that a preliminary draft of the Draft Scoping Plan would be provided to the Council in the October or November timeframe for their review in order to fulfil the statutory end of the year deadline for release of the Draft Scoping Plan, and that costs and benefit information will be included, to the extent the information is available.

With that, the meeting was adjourned.



Climate Action Council

ANDREW M. CUOMO GOVERNOR DOREEN HARRIS CO-CHAIR BASIL SEGGOS CO-CHAIR

Meeting Agenda

June 8, 2021

- Welcome
- Consideration of May 10, 2021 Minutes
- Presentation and Discussion: Adaptation and Resilience Recommendations from the Land Use and Local Government Advisory Panel
- Next Steps

In keeping with measures designed to limit the spread of COVID-19, the meeting will be conducted by teleconference and members of the public will be welcomed to observe and listen to the meeting via webcast only. The webcast may be accessed by going to the Climate Action Council website: climateact.ny.gov