## MINUTES OF THE NEW YORK STATE ENERGY PLANNING BOARD MEETING HELD ON MARCH 3, 2025

Pursuant to notice dated February 21, 2025, the seventeenth meeting of the New York State Energy Planning Board ("Board") was convened on March 3, 2025, at 2:00 p.m. at the Department of Environmental Conservation, 625 Broadway, Public Assembly Rooms 129 A& B, Albany, New York. A copy of the meeting Notice is annexed as Exhibit A.

The following Energy Planning Board Members or their designees were present:

- Doreen Harris, President and CEO of the New York State Energy Research and Development Authority and Chair of the Board
- Richard Ball, Commissioner of the Department of Agriculture and Markets
- Didi Barrett, Assemblymember and Assembly Appointee
- Marie Therese Dominguez, Commissioner of the Department of Transportation
- John King, Chancellor of SUNY and Governor Appointee
- Sean Mahar, Executive Deputy Commissioner, designee of Commissioner of the Department of Environmental Conservation
- Kevin Malone, designee of Dr. James McDonald, Commissioner of the Department of Health
- Yvonne Martinez, designee of Roberta Reardon, Commissioner of the Department of Labor
- Emilie Nelson, designee of Richard Dewey, CEO of NYISO (non-voting member)
- Kisha Santiago, designee of Walter Mosley, Secretary of State
- Elisha Tomko, designee of Jackie Bray, Commissioner of the Department of Homeland Security and Emergency Services
- Jessica Waldorf, designee of Rory Christian, Chair of the Public Service Commission and Commissioner of the Department of Public Service
- David Whipple, designee of Hope Knight, Commissioner and President & CEO of the Empire State Development Corporation

Mr. William Suggs, appointee of the Senate, had an excused absence and was not in attendance.

## **Introductory Remarks**

Doreen Harris, President and CEO of the New York State Energy Research and Development Authority ("NYSERDA") and Chair of the Energy Planning Board, welcomed all to the meeting of the Board and noted the presence of a quorum. Chair Harris provided a year in review for 2024, highlighting the many achievements made in New York, including the commencement of operation for South Fork Wind, the Public Service Commission's electric bill credits totaling \$200 million for state ratepayers, the Empire State Development Corporation's implementation of FAST NY Grants, the establishment of SUNY's Energy Storage Engine, and the Future Energy Economy Summit.

Chair Harris provided an update on priorities and policies within the State and federal governments. Harris noted that the federal landscape is dynamic at present. She noted that there are areas where the federal administration has stated priorities that align well with New York's goals, specifically with respect to innovation, ensuring affordability, strengthening the grid, streamlining permitting, and the development of advanced nuclear as an energy resource. On State priorities, Chair Harris highlighted Governor Hochul's priorities outlined in her State of the State Address, including a historic \$1 billion investment in clean energy and climate funding, continuing to examine advanced nuclear and progress on developing a cap-and-invest program through the release of reporting regulations to gather information on emissions sources. Harris also noted additional energy and climate updates, including the Climate Justice Working Group's work updating the criteria for designation of disadvantaged communities (DACs), the partnerships between New York, California, and Massachusetts for energy innovation, and the approval by the Public Service Commission of the retail and residential energy storage program implementation plan.

# Consideration of Minutes of December 12, 2024 Meeting (Agenda Item No. 1)

The first item on the Agenda was to accept the minutes from the Board meeting held on December 12, 2024. Commissioner Ball moved and Chair Harris seconded to accept the minutes into the record. With no objection, the minutes were accepted into the record.

# **Resolution Regarding the Adoption of the Scope of the State Energy Plan (Agenda Item No. 2)**

Chair Harris next called for the consideration of a resolution to approve the Scope of the State Energy Plan. She noted that the Draft Scope was authorized for release via resolution at the September 9, 2024 meeting of the Board. A public comment period was opened through December 16, 2024, during which the Board received 1,878 public comments. Chair Harris then asked Carl Mas, Vice President of Policy, Research and Analysis at NYSERDA to review the comments and revisions.

Mr. Mas stated that, among the public comments received, 86 comments came from organizations and 93 unique comments came from individuals. Three organizations encouraged common comments which generated 250, 409, and 1,082 comments respectively. Mas outlined the key themes found within these comments, which can be summarized as follows:

- A deep value for the reliability of energy systems and the need to meet forecasted demand;
- Concerns regarding the effects of climate change worsening, requiring climate mitigation, adaptation, and resiliency;
- The importance of emergency preparedness and planning to address multiple hazards;
- The need for careful attention to environmental justice and climate justice, including impacts and benefits to DACs;
- The need to support workforce analysis and development, with a priority on energy transition workers and DACs;
- Support for in-state economic development and competitiveness as an energy planning objective;
- The importance of reliability of both gas and electric systems;
- The need for renewable energy generation and storage, with specific concerns raised regarding siting and development;
- Varied views regarding nuclear energy and alternative fuels;
- The importance of considering how the electrification of transportation intersects with grid planning, resilience and rate design, as well as considering smart growth for new development and redevelopment;
- Support for energy efficiency and demand management in buildings and industries; and
- The importance of cost and energy affordability.

In response to these points, the Scope was updated to ensure that considerations and priorities raised by the comments were incorporated into the final document. State actions recommended by the comments will be considered in developing the draft Plan.

Chair Harris then asked if members had any questions regarding the final Scope being considered. Assemblymember Barrett asked about the process for refining the definition of DACs to ensure that rural communities can also benefit. Mr. Mahar offered to provide a separate briefing to Assemblymember Barrett to on how the process will take a holistic view of urban and rural areas. Ms. Santiago expressed her appreciation to the staff for their work and thoughtful review and care in developing these changes, which was echoed by Commissioner Ball.

Ms. Waldorf and Commissioner Dominguez moved for adoption of the Scope as drafted. The Board voted unanimously in favor and the Scope was adopted without further comment.

## Presentation on New York Infrastructure Investment (Agenda Item 3)

Carl Mas introduced three panelists to discuss New York's infrastructure investments as it relates to the State Energy Plan.

The first panelist was Aric Rider, Deputy Director of Energy System Planning and Performance at the Department of Public Service (DPS), who presented on the energy investments in infrastructure in New York. Mr. Rider provided an overview of the electric and natural gas systems, explaining that between those services, there are millions of distribution poles and hundreds of thousands of miles of transmission circuit miles for electric service and thousands of miles of service pipes for natural gas distribution. He noted that in 2024, New York's investor-owned electric utilities made nearly \$4.5 billion in capital investments for their service territories. Looking forward, there is need for additional investment to ensure safe and reliable service, with annual investment forecasted to trend upward. Such additional investments would include upgrades for increased load, capacity and system stability, as well as safety and reliability based upon current and expected future demand. Mr. Rider discussed the age of system assets for the electrical system, explaining that the bulk transmission, utility transmission and distribution systems each require individualized investments and maintenance. There are significant differences among the individual utilities in relation to the age of their systems and the process for assessing whether investments are necessary, and which should be made at various points. Mr. Rider noted that new requirements were added to recent Public Service Commission (PSC) orders regarding design guidelines which address system resiliency, as weather events from climate change impact electrical assets depending on location and asset type. He also discussed that New York's fossil fuel-fired electric generators are aging, referencing recent studies by the New York State Independent System Operator and noting that the increasing costs to maintain aging generators could lead to the retirement of a meaningful amount of fossil fuel generation capacity by the end of this decade. Mr. Rider next turned to the natural gas system and its investments. He explained that the system is comprised of inter-state pipelines, the transmission system and localized distribution systems, all used to move natural gas to the point of use. He noted that New York's investor-owned gas utilities made about \$3.2 billion in capital investments in 2023, and annual spending for infrastructure improvements for the natural gas system is forecasted to increase in future years. Again, Mr. Rider noted that the assets for the natural gas system are aging, with aging pipes more susceptible to stressors that increase the likelihood of leaks, failures or other problems causing service disruption. Asset age can be used as one indicator of system health but is not the only element analyzed to determine if pipe replacement is warranted. Mr. Rider reiterated that DPS and the PSC maintain a strong commitment to ensure the safe, reliable delivery of electric and natural gas service in New York State, at reasonable rates.

The next panelist was Dr. Jeffrey Freedman of the Atmospheric Sciences Research Center at the University of Albany, who discussed adaptability and resiliency with respect to investments in the energy system. Freedman provided background information on the State's climate impacts assessment as it relates to energy, which indicates that climate change is constraining some energy supply sources and stressing both transmission and distribution infrastructure due to extreme heat, changed precipitation, and increased storm intensity. This trend is expected to continue for the foreseeable future. Freedman noted that with energy usage patterns changing over time and the electrification of buildings and transportation, new approaches will be needed to adapt to climate change and ensure the system is flexible, safe, resilient, and cost-effective. Moreover, climate change could result in unequal impacts across communities due to existing inequalities. He noted that, presently, most energy in the United State is generated through fossil fuels, though New York has greater renewable generation than many other areas. Freedman discussed how NYISO incorporates weather forecasting into planning to better anticipate outages, training and logistical mobilization needs prior to events. He expressed the need for redundancy in natural gas compression, and the need for dual and backup fuel requirements for fossil-fueled electric generators. He also addressed the need for storage capacity to ensure grid flexibility. Freedman recommended the development of microgrids to provide emergency power, along with hybrid renewable stations combined with energy storage. He also recommended redundant communication systems and smart meters, along with autonomous grids to obtain demand response resources through machine learning. Freedman presented the Marcus Garvey Apartments in Brooklyn as a case study on how microgrids can be implemented and function to mitigate impact to residents during adverse weather events. He highlighted that renewable energy sources can reduce energy cost burdens, while also providing environmental and resiliency benefits.

The final panelist on this topic was David Whipple, Senior Director of Industry Development at Empire State Development (ESD). ESD is the lead agency for attracting economic development to New York to foster innovation and commercialization. ESD takes an employer-centric approach to workforce development and key infrastructure improvements to allow for greater economic growth. Whipple explained that New York is one of the top ten states for reshoring manufacturing - attracting companies through a variety of assets, including research and development, workforce, incentive programs, and providing infrastructure ready sites. Whipple described how manufacturing jobs bring not only individual opportunities with them, but on average create an additional 4.8 jobs for each manufacturing worker to support that industry in areas from materials supply to logistics, the service industry and beyond. ESD sees that the industry trend is moving towards increased power demands, which puts additional stress on transmission grids. Often, entities are seeking 50MW of power for large manufacturing users, which in turn creates hundreds of jobs and leads to hundreds of millions of dollars in investments. Whipple indicated that to compete and win projects and allow industry growth, a critical focus is placed on site readiness. He explained that the Site Selectors Guild indicates that shovel-ready and power-ready sites are the greatest incentive to draw industry to an area. New York has been successful in developing high-power megasites, almost all of which are at or nearing capacity. Whipple noted that New York understands the need to proactively develop sites and capture the competitive moment; notably, this year's Executive Budget proposes new and expanded programs to fund shovel-ready and power-ready sites, including an additional \$100 million for FAST NY (expanding it to a \$400 million total program) and \$300 million for a new Power Up program. The State has already had success in attracting businesses like Micron, Edwards Vacuum, Fairlife, and the development of the Port of Albany. Whipple closed by explaining that job creation from these investments is not the only benefit to New York, as maintaining manufacturing within the state supports food security, energy security, and national security.

Following the final panelist, Chair Harris opened the floor to questions and comments from the Board members. Ms. Waldorf thanked Mr. Rider for his presentation and noted that it is important to keep

the level of investment needed in mind, much of which is directly related to ensuring system reliability, safety and the provision of utility services to new businesses. Chancellor King asked Dr. Freedman about the relationship of artificial intelligence (AI) and the transition from fossil fuel to renewable energy. Dr. Freedman explained that AI is anticipated to be one of the largest drivers for the increased electric capacity needs in New York, along with building electrification and transportation. Emilie Nelson, representing NYISO, noted that large electric loads in the form of data centers and manufacturing needs are driving NYISO's increases in forecasted loads over time and are an important part of economic development for New York. Chair Harris noted that the Board is examining these issues in an intentional way, as infrastructure investments are necessary for reliability, resilience, and economic growth, while also balancing the State's clean energy objectives.

#### Presentation on Techno-economic Pathways Analysis (Agenda Item 4)

Nick Patane, Assistant Director for Policy Analysis at NYSERDA, presented on the technoeconomic "pathways analysis" which will be utilized in the development of the State Energy Plan. This analysis includes economy-wide modeling of multiple scenarios. Patane explained that the pathways analysis forecasts future demand for electricity and other fuels, as well as the resources needed to meet forecasted demand. The analysis will also provide: an overview on deployment of key demand-side technologies, including energy efficiency and electrification; projected greenhouse gas emissions; and an assessment of the impacts of current policies and programs, including to public health. The pathways modeling approach has two primary components, an economy-wide model and an electric capacity expansion model. The economy-wide model uses as inputs key data from industry studies and programs, and models equipment sales and stocks to output energy and emissions forecasts. The electric capacity model takes as inputs the energy loads and peaks from the economy-wide model to develop an electric system which meets the scenario load and maintains reliability standards while achieving various scenario-based constraints. He explained that the analysis utilizes four different scenario types to assess outcomes based on several courses of action. A baseline scenario includes federal policies but excludes New York's recent clean energy policies; it reflects modest adoption of clean energy technologies. The second scenario is based on current trends, which incorporates impacts of state and local actions across a variety of sectors, including policies and programs related to electric vehicles and clean energy generation. This scenario, when compared to the baseline scenario, will be able to show the impact of New York's policies. The third scenario is one which assumes steady progress, adding additional policies onto the current trends scenario to see what additional impacts can be expected. Finally, additional mitigation scenarios will be run to explore various paths available to achieve the existing 2050 economy-wide emissions limit. These models are being developed and run imminently. Patane will return to the Board to present the findings and results of the modeling and analysis.

Chair Harris then opened the floor to questions from Board members on this presentation. Assemblymember Barrett asked for greater detail about how data is input and run through the system to create the final work product. Mr. Patane explained that the process begins with data inputs from industry studies and energy programs, which are utilized to develop the quantitative analysis; this allows for the comparison of different potential energy futures based upon the inputs utilized for different scenarios. Assemblymember Barrett then asked if the model will take into account more or less uptake of technologies on a regional basis within the state. Patane answered that it would be possible to examine differences based on regions and the varied dynamics throughout the state. Ms. Santiago asked how a baseline is being built based on the existing federal policies, given the recent shifts in position by the current administration. Patane stated that his team is monitoring the latest landscape and will create a baseline case based on policies as of the time the model is run. There will be continued monitoring and use of future sensitivities to determine how those policies or additional modifications change impacts. Chair Harris also indicated that the Climate Action Council conducted a similar analysis based on the policies set forth in the Inflation Reduction Act, which showed the significant benefits of those policies. Commissioner Dominguez asked if the analysis would look at demographic changes and shifts throughout the area. Patane answered that the models contain key activity drivers, including changes to population, vehicle miles travelled (VMT) and climate.

## **Other Business**

Chair Harris asked if there was any other business, which had no responses.

There being no other business, the meeting was adjourned.

Sarah E. Simpson, Secretary to the Board Senior Counsel, NYSERDA