MINUTES OF THE NEW YORK STATE ENERGY PLANNING BOARD MEETING HELD ON MAY 27, 2025

Pursuant to notice dated May 15, 2025, the eighteenth meeting of the New York State Energy Planning Board ("Board") was convened on May 27, 2025, at 2:00 p.m. at the Empire State Plaza, 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
- Rory Christian, Chair of the Public Service Commission and Commissioner of the Department of Public Service
- Marie Therese Dominguez, Commissioner of the Department of Transportation
- Hope Knight, Commissioner and President & CEO of the Empire State Development Corporation
- Sean Mahar, designee of Commissioner of the Department of Environmental Conservation
- Yvonne Martinez, designee of Roberta Reardon, Commissioner of the Department of Labor
- Terrence O'Leary, designee of Jackie Bray, Commissioner of the Department of Homeland Security and Emergency Services
- Kisha Santiago, designee of Walter Mosley, Secretary of State
- Richard Dewey, CEO of NYISO (non-voting member)

Acting Commissioner Amanda Lefton was also present for the second half of the meeting.

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 an update from the last meeting in May. At the federal level, Harris noted Governor Hochul's strong advocacy for New York energy projects. Harris also noted that she met with the New York delegation to discuss the energy needs of the State. She highlighted the restarting of construction on Empire Wind 1. She noted the importance of wind development in the northeast. Chair Harris also discussed Attorney General James' litigation work related to federal contracts for offshore wind, as well as electric vehicles and their related infrastructure.

Turning to State updates, Chair Harris noted that on May 9, the New York State legislature passed the State budget for fiscal year 2026, which was signed by Governor Hochul. She noted inclusion of \$1 billion for the Sustainable Future program, \$25 million for the Home Energy Affordability program, and \$300 million for the Power Up program to make sites ready for development. She also noted that on May 23, the Department of Environmental Conservation established enforcement discretion for clean vehicle standards. Harris also highlighted the Public Service Commission's May 15 release of the EE/BE orders, containing a \$5 billion investment in building electrification, and an order adopting Clean Energy Standards operational reforms. She also lauded the execution of 26 contracts for large scale solar, onshore wind and hydroelectric generation under the State's Tier 1 program.

Consideration of Minutes - May 1, 2025 Meeting (Agenda Item No. 1)

The first item on the agenda was to accept the minutes from the Board meeting held on May 1, 2025. No changes were requested to the minutes on the floor. Chair Harris made the motion, seconded by Commissioner Christian. The minutes were approved unanimously¹.

Panel on Gas System Planning (Agenda Item 2)

The next item on the agenda was a presentation on gas system planning. Commissioner Christian provided opening remarks. Commissioner Christian explained that the Department of Public Service performs regulatory oversight for gas planning and provision with New York State. He indicated that their role is to manage the system as it is and shape it into what it must become for future needs. With electrification expanding steadily, New York recognizes it is crucial to have gas system planning which allows for appropriate management of electrification, while also avoiding unnecessary costs to consumers and avoiding fuel choices which are at odds with the Energy Plan and the state's goals of clean energy. Christian noted that in March 2020, the Public Service Commission commenced the Gas Planning Proceeding. Since then, the Commission has issued several orders have been implemented to ensure appropriate gas planning. Christian noted that the state has made great progress in the 5 years since the commencement of that proceeding, but much remains to be done.

John Williams, Executive Vice President of Policy and Regulatory Affairs at NYSERDA moderated a panel of utility regulators from other jurisdictions to discuss the different paths each state is taking as they engage in gas planning. The panelists were James M. Van Nostrand, Chair of the Massachusetts Department of Public Utilities, Commissioner J. Andrew McAllister of the California Energy Commission, and Keith Hay, Senior Director of Policy at the Colorado Energy Office.

Chair Van Nostrand spoke first, providing an explanation of Massachusetts' natural gas transition process. He explained that Massachusetts has a net zero goal by 2050 set in statute. The state has established sector specific emission reduction targets for 2025 and 2030 in its' Clean Energy and Climate Plan. Van Nostrand indicated that a main challenge is getting the local distribution companies (LDC) to work with the state in meeting the targets. He explained that Massachusetts commenced the Future of Gas proceeding in 2023, which advances electrification as a primary pathway for meeting GHG emissions reduction targets. This is being advanced mostly through the installation of air-source and ground-source heat pumps, with no change to recovery under the existing framework. LDCs were directed under that proceeding to file climate compliance plans by April 1, 2025, to show how they are on the path for compliance. A further targeted electrification plan from the LDCs is due by March 1, 2026. Van Nostrand said the current challenges identified are 'resetting' the gas system enhancement plans for addressing leak prone pipes, evaluating whether LDCs should be continued to allow for line extension, and addressing obligations to serve existing customers.

Commissioner McAllister spoke next, indicating that California had complementary, but somewhat different challenges from Massachusetts. McAllister explained that California has significantly invested in the supply end of clean energy in the form of renewables, solar, and battery storage; however, natural gas demand still persists, particularly in relation to consumption within homes. He

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¹ Commissioner Dominguez arrived after the vote on the meeting minutes was taken.

indicated that there is a significant sunk cost investment in relation to the gas system. California admits that there are no easy solutions, as electric rates remain quite high. McAllister indicated that they are working on greening their systems and decarbonizing the gas system through reducing costs on gas while increasing flexibility on the system, reducing the obligation to serve, and identifying the best areas to unwind and decommission the gas system over time. California is also engaging in a targeted electrification and strategic gas implementation plan, seeking to reduce further extension of the gas grid. One concept under consideration is the use of dual fuel facilities to manage the expanding electrical system while reducing demand on the natural gas system. They are also engaging in a fuel substitution market study to unpack issues related to the gas sector and transition to ensure cost effectiveness and benefits to ratepayers.

Finally, Mr. Hay provided his perspective on Colorado's gas transition planning. He explained that the Colorado Energy Office is a non-regulatory agency which has intervention rights under the state's Public Utility Commission. He explained that in Colorado, dual fuel utilities are where these conversations are moving forward first. Approximately 78% of homes in Colorado are heated by natural gas, with some utilities continuing to expand that service. Hay explained that Colorado's decarbonization efforts include a suite of legislation which established statewide GHG targets, an enhanced gas demand side management programs, clean heat plan, requirements for beneficial electrification, and updated building codes. The state's Public Utilities Commission has also engaged with substantial planning. Legislation requires a 22% emissions reduction by 2030, with a 40-60% reduction to get to the baseline required. Hays explained that Colorado's clean heat planning framework calls for several initiatives, including: the elimination of the gas line extension policy, removing a statutory ban on fuel substitutions, implementation of networked and individual thermal energy networks, and the installation of ground source heat pumps. Colorado is shifting from a summer peaking electric system to winter peaking and the state is analyzing what that will need to look like from the utility perspective. They are also working toward getting customers to move from gas towards more non-gas alternatives. This is being done through a combination of utility efforts and seeking local governments to conduct community engagement and solicit for decommissioning of portions of the gas system locally.

Chair McAllister provided a concluding note regarding cost as a major challenge in relation to winding down gas service. He noted that the math related to rates and what would be required in the next 5 to 15 years is staggering, with per therm costs increasing tenfold if a resolution is not developed. This needs to be avoided to prevent disproportionate impacts on the individuals who can least afford the electrification transition. Commissioner Christian asked about the effectiveness in the abilities of utilities within these states to transition communities to non-pipe alternatives and encourage electrification. Van Nostrand indicated that in Massachusetts some utilities have expressed that they need 100% support from the customer base to make non-pipe alternatives viable. McAllister indicated that California has a different issue in that much of their gas is delivered. California's strategy is to push for larger scale decarbonization in priority zones, which will require substantial innovation. Hay indicated that Colorado is still gathering information, as utilities are in the process of developing engagement plans for approval so that clear direction can be provided by the Public Utilities Commission for customer engagement.

Chair Harris thanked the panelists for their participation and insights. John Williams noted that there are near-term concerns which must be addressed as we transition away from the gas system towards electrification. To discuss these challenges and the policy drivers for the gas transition, he introduced Ross Turrini, Chief Operating Officer of New York Gas for National Grid. Turrini explained that National Grid provides both electric and gas service in New York and Massachusetts. He explained that, for the gas system to remain reliable, each element of its system – from field production,

transmission pipelines, and local distribution, must be fully functional. He stated that the quantity of energy needed is staggering, with electric systems summer-peaking and gas systems peaking in winter. He noted that New York City has both infrastructure congestion and generalized planning concerns. Turrini further noted that the gas system does not have an independent service operator like the NYISO's governing of the electric grid. He expressed that, in his experience, it has been difficult to get customers to switch from gas to electric service, even when substantial offers are made. Fuel oil is often utilized as a back-up to electrification, which adds to the complexity of transitioning. With respect to demand, Turrini noted that National Grid has supply available and they forecast need based on several factors, with economic factors driving the largest change on demand from year to year. National Grid also has added challenges as it sits at the end of the distribution line, leaving it vulnerable to any problems which may impact earlier elements of the distribution system. To address these concerns, National Grid processing plants can require delivery of compressed natural gas on the coldest days of the year to avoid service disruptions. He expressed concern regarding overreliance on these practices in the downstate region.

Turrini also provided a case study stemming from winter storm Eliot, which almost led to a service outage on Long Island. He explained that the effects of climate change and the increased variation of temperatures can create difficulty in managing gas pipeline operations. He also noted that restoration of service for gas customers is more complex than the electric grid, requiring physically shutting down all the valves and entering every customer's residence or facility to confirm the system is shut down before testing the system for leaks, re-energization, and removal of any air pockets before finally restoring service to each customer individually. Turrini closed by emphasizing the need for New York to utilize a policy approach that ensures reliability of the gas system while it goes through the process of decarbonization. John Williams noted that, while the electric and gas systems may seem similar, they are in fact very different in operation.

Presentation on Selected Energy Topics: Economic Development, Agriculture, Innovation, Workforce Development, and Just Transition (Agenda Item 3)

The next agenda item included presentations on the recommendations for the Energy Plan as it relates to economic development, agriculture, innovation, workforce development, and just transition.

The first topic was economic development, industry, and agriculture, presented by David Whipple, Senior Director of Industry Development at Empire State Development Corporation, Sean Mulderrig, Program Manager for Demonstration Programs at NYSERDA, and Elizabeth Wolters, Deputy Commissioner of the Department of Agriculture and Markets. Mulderrig started the presentation and explained that there are 2 key themes to consider: 1) there is likely to be a substantial demand for energy in the industrial sector in coming years, and 2) while the clean energy transition has challenges, it should also be considered an opportunity to utilize economic development to speed the transition. Mulderrig continued that, in addition to these two key points, there are other factors which will require consideration, such as paying attention to resiliency, focusing investments within disadvantaged communities that provide beneficial impacts, and identifying cross-cutting opportunities to support clean energy systems. Whipple then stated that some large load industries are already developing, and this trend is expected to grow. He recommended increasing interagency coordination, continuing to invest in affordability and rate design, and examine the opportunities and challenges associated with emerging energy intensive industry subsectors. He noted that investment in energy infrastructure is critical to attract industry and promote competitiveness. He recommended continued support for power ready sites and the development of in-state clean energy supply chains. Mulderrig explained that industrial energy use is expected to grow, and it will be necessary to

manage growth throw efficiency and electrifying technologies. The presenters recommended prioritizing action on process heating and studying the health benefits of clean energy investments in the industrial and agricultural fields. It was noted that deep emissions reductions in the industrial space will require nascent or yet to be developed technologies. To support these, the state will need medium and long term decarbonization of industry through a diverse research, development, and demonstration portfolio, targeting subsectors without alternatives or those with high-heat industrial processes. This may require de-risking the barriers to adoption of some of these technologies and the encouragement of alternative fuel use which prioritizes GHG emissions reductions. Wolters then analyzed the recommendations for the agricultural industry. She explained that agricultural operations can reduce costs and enhance resiliency through energy efficiency, efficient electrification, and on-site energy production. She recommended expansion of climate resilient farming programs to support adaptation projects, along with access to three-phased power and support upgrades. To further support agriculture, recommendations were made for cost-sharing programs to reduce costs across the field, as well as the use of cover crops, reduced tillage, and other best management practices. Staff also recommend the facilitation of more pilot programs on small scale digestion systems to help produce energy and minimize methane emission, as well as continued research, development, and design of co-digestion of anaerobic manure and food waste for strategic and limited use.

Brandon Owens, Vice President of Innovation at NYSERDA, presented the next topic, outlining recommendations related to innovation. Owens stated that state support of energy innovation helps to catalyze development of technology to achieve the energy transition and reduces the cost of deployment. He explained that state support is key in allowing innovation to reduce the costs of emerging technologies and ultimately improve affordability. State support is also necessary to support commercialization and growth of start-ups, which aids in bringing market-ready products and businesses to the state. Owens also emphasized the importance of partnership in supporting innovation to foster economic development and job growth. To do this, it is recommended to formalize partnerships with the state in the public and private sectors, including strategic roadmaps, training for the clean energy workforce, and coordination with universities and community organizations to develop best practices in working with DACs, developing demonstration sites, encouraging project participation, and conducting benefit assessments. He explained that the state should build on successful models to leverage market shares and economies of scale to allow for accelerated cost reduction and market adoption, particularly with partners which have substantial purchasing power. Owens concluded by noting that education and workforce development are critical to driving research, commercialization, and large-scale demonstration projects. He highlighted the SUNY portfolio and research capabilities which continue to drive innovation and support commercialization investments in incubators and start-ups in emerging energy technologies and recommended continuing to support SUNY.

Sasha Berger, Policy Advisor at the Department of Labor, and Aimee Bell-Pasht, Project Manager on the Policy Development Team at NYSERDA, jointly presented on the final topic of the day regarding clean energy jobs and a just transition. They noted that there are over 318,000 workers in New York's energy sector, with more than half of those in clean energy. They explained that the clean energy transition is an economic opportunity and providing a marker of success for workers, as those in the clean energy sector have higher wages than their counterparts due to the quality of the jobs. They noted that the state's support of workforce development is essential to the transition, as part of a larger ecosystem including primary and secondary education, universities, unions, and non-profit training providers working to ensure sufficient workforce for the future. They recommended continued investment in workforce development programs, curriculum, and services for the transition of the energy workforce. This includes incentives for workforce training participation, expansion of

clean energy career awareness in primary and secondary schools, investment in SUNY and CUNY campuses, and investment in direct entry and pre-apprenticeship programs in support of clean energy projects. They emphasized the need for workforce development programs to evolve to account for emerging needs, such as expanding the energy efficiency workforce and skilled building trades, building and maintaining new transmission and distribution infrastructure, clean energy storage and electric vehicle charging, and building transferrable skills related to nuclear energy. They also noted that labor standards are a critical tool for improving quality of life to drive the transition, minimize inequality, generate local benefits, and improve project outcomes. They recommend research to analyze labor standards that apply to clean energy jobs across sectors and expanding coverage so that workers are protected, particularly when state investment is involved. They also recommended providing direct support for workers in DACs, veterans, and justice involved workers to ensure they are aware of opportunities, address barriers to participating in job training programs, and expand clean energy training programs in correctional facilities. To ensure a just transition, additional support is also recommended for fossil fuel workers who are at risk of job loss due to the clean energy transition. This is being done in part through the Office of Just Transition, but additional research is needed to assess more specifically how workers will be impacted by the transition and to assess safety net measures to support workers affected by climate policies. Once the most effective safety net policies are identified, they recommended considering additional funding to support the just transition in those areas.

Chair Harris asked if members had any questions for the presenters. Yvonne Martinez asked if there was information on programs being instituted by other states to reskill or upskill incumbent fossil fuel workers to aid in the just transition and whether there are lessons that can be drawn from those experiences. Berger indicated that the Office of Just Energy Transition is leading an interstate group where similar offices in other states are learning from one another's experiences. Most of these offices are very new. She then provided examples of career transition navigators in Colorado and Illinois' efforts to fund community supports in areas where plant closures are looming. Assemblymember Barrett noted that she has been in conversation with the Cornell Climate Jobs Institute on where these programs are located throughout the state. She expressed a need for an overview of where we are reaching the populations and expressed concern for rural areas which will be in need beyond those in the city. Bell-Pasht noted that they are expanding their knowledge in these areas, as more agencies join in this work, and that this work continues to progress.

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