

MINUTES OF THE ONE HUNDRED SEVENTH MEETING OF THE
PROGRAM PLANNING COMMITTEE
HELD ON JUNE 26, 2019

Pursuant to a notice and agenda dated June 18, 2019, a copy of which is annexed hereto, the one hundred seventh (107th) meeting of the Program Planning Committee (the “Committee”) of the NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (the “Authority”) was convened at 1:00 p.m. on Wednesday, June 26, 2019, at the Authority’s Albany Office at 17 Columbia Circle, Albany, New York and the Authority’s New York City Office located at 1359 Broadway, 19th Floor, New York, New York. The two locations were connected by videoconference.

The following members of the Committee were present:

Mark Willis, Committee Chair (by videoconference in New York City)
Sherburne Abbott
Charles Bell
Kate Fish
Ken Daly
Jay Koh (by videoconference in New York City)
Gil Quiniones

Also present were Alicia Barton, President and CEO; Janet Joseph, Senior Vice President for Strategy and Market Development; Jeffrey J. Pitkin, Treasurer; Noah C. Shaw, General Counsel; Sara L. LeCain, Senior Counsel and Secretary to the Committee; and various other staff of the Authority.

Mr. Willis called the meeting to order and noted the presence of a quorum. The meeting notice and agenda were forwarded to the Committee members on June 18, 2019 and the press on June 19, 2019.

Mr. Willis indicated that the first item on the agenda concerned the approval of the minutes of the one hundred sixth (106th) meeting of the Committee, held on April 30, 2019.

Whereafter, upon motion duly made and seconded, and by unanimous voice vote of the Committee members, the minutes of the hundred sixth (106th) meeting of the Committee, held on April 30, 2019 were approved.

Mr. Willis indicated that the next item on the agenda was a discussion of the Authority's metrics. This item was presented by Alicia Barton.

Ms. Barton stated that this presentation was designed to respond and build upon questions as well as discussions previously had with Members, particularly addressing the question of how the Authority is doing and how progress is measured. The Energy Efficiency target was recently codified in law, based upon the work that the Authority and the New York State Department of Public Service ("DPS") did last year through New Efficiency New York ("NENY") and as part of the New York State Public Service Commission's ("PSC") Order last December, directing the Authority and utilities to deliver an accelerated pace for energy efficiency savings by 2025.

Ms. Barton continued, noting that the Clean Energy Fund ("CEF") represents 75% of the Authority's contribution to NENY. Energy efficiency, renewable energy, and carbon dioxide progress are well positioned in light of these investments. Customer bill savings and leveraged funds will increase with future addition of indirect benefits, the Authority has not yet had the ability to estimate indirect impacts at this time. The metrics presented for the CEF are presented on a quarterly basis and are public facing.

In response to an inquiry from Mr. Willis, Ms. Barton along with Janet Joseph, explained that the ten-year spread is based upon the original appropriation of the CEF as set out when it was established in 2015. Additionally, the metrics Ms. Barton presented showed three-year progress based on the goals that were set forth in order to accelerate the energy efficiency goals that were previously put in place, as they have changed recently. Ms. Joseph noted that there will be a lot of work over the next 1 to 2 years that will likely lay out new goals and targets.

Ms. Barton continued, presenting to the Members the tools that management uses internally to measure progress. All of the initiatives of the CEF are being tracked as well as where there is a lag in performance and where performance is above expectations. It is important to note that there are initiatives that are too new to the market to draw a conclusion one way or the other as to their performance. A snapshot of how the Authority internally measures progress highlighted that a “test-measure-adjust” approach is used. This approach examines the progress of each program against the ultimate outcome of CO₂ reduction as well as various interim milestones including market uptake. Fifteen initiatives make up 85% of the expected portfolio CO₂ benefits and require special attention. If initiatives are not performing then there is a deeper diagnosis and potentially make changes to the program or end it altogether if it is not working well. If a program is delivering above expectations, there may be additional funding allocated to that program.

Ms. Barton then presented the NY Clean Energy Dashboard, which she noted is a public facing dashboard. This dashboard is newly launched through a collaborative effort by the Authority, DPS and utilities. It has become the go-to source for progress information on all ratepayer funded clean energy activities. Future releases will assess in more program portfolios to the dashboard, and feature progress toward state level goals. The early view that is presented, depicts current program portfolios, and the addition of major legacy portfolios will bring in progress from earlier years.

Ms. Barton explained that renewable energy, has a State Energy Plan Goal of 50% electricity generation from renewable energy by 2030, although this goal has just been increased to 70% by 2030 based on the new legislation. The CES Order 2030 Load Projection requires 70,496 GWh to meet the 50% renewable goal. Currently, 53,967 GWh are coming from the baseline, import and pipeline renewable generation. In order to meet the rest of the goal, there will be Tier 1 procurements including Long Island Power Authority (“LIPA”) and New York Power Authority (“NYPA”) contributions, offshore wind (“OSW”) procurements, and NY-Sun and market-based solar projects. More specifically, Large Scale Renewable Tier 1 Procurements have a minimum total of 6,858 GWh by 2021. In 2017 and 2018 Authority solicitations far

exceeded minimum procurement targets. In terms of OSW procurement, the State goal of OSW Renewable Energy Credits (“ORECs”) is associated with 2.4 GW of OSW capacity by 2030. The PSC has authorized the Authority to issue a Phase 1 procurement for approximately 800 MW. The Authority’s first solicitation for OSW procurement is in progress.

Ms. Barton concluded her presentation with a look at the big picture, which is emissions reductions. According to the State Energy Plan, a 40% reduction in emissions from 1990 levels by 2030 (“40 by 30”) is inclusive of both energy and non-energy sources. The initiatives that were outlined in the 2015 State Energy Plan, including the CES and the State Energy Efficiency programs, were estimated to deliver approximately half of the 40 by 30 reductions. The NENY program will deliver 30% of the necessary 2030 reductions. The attainment of these goals requires contributions of public institutions as well as private sector markets.

Mr. Willis indicated that the next item on the agenda concerned a report on the Authority’s NY-Sun initiative (“NY-Sun”). This item was presented by the Vice President for Distributed Energy Resources Technology, David Sandbank.

Mr. Sandbank reported that Wood Mackenzie, whose ranking come out quarterly, has rated New York as the 6th among all states in total photovoltaic (“PV”) deployment in 2018, compared to its previous position as 12th in the nation. New York was rated 2nd in distributed non-utility solar deployed in 2018. According to the report, New York saw a 27% growth in solar deployment in 2018 over 2017, in comparison there was a nationwide decline of 8%. New York also took the top ranking for community solar installed in the first quarter of 2019.

Mr. Sandbank explained that 2018 was the NY-Sun’s best year with PV deployment based on MW completed with Authority support. Authority support refers to everything that the Authority has incentivized. Upstate New York has had the majority of the projects in 2018 and 2019, as well as in the pipeline. This is a result of the projects in Upstate New York being much bigger when talking in terms of MW, due to cheaper land and a lower cost of doing business and siting.

In response to inquiry from Mr. Willis, Mr. Sandbank explained that the difference between a residential solar project and a community solar project is that the residential solar system is tied to a residential utility bill, whereas the community solar system is usually in a field somewhere and the bill credits go to a subscriber of that system either commercial subscriber or residential subscriber.

Mr. Sandbank continued, noting that in the first quarter of 2019 there was a significant uptake in the community solar applications received compared to previous quarters. Solar Plus Energy Storage MW Block launched in October 2018 has approved 13 total projects, totaling 96 MWh. All of the energy storage applications that have been received are associated with a solar project, not one has been stand alone storage. Quality assurance has been a priority of NY-Sun, especially on the residential and community solar projects, there is now a solar quality designation that has encouraged solar installers to improve on their quality of work. There were 37 designees in the first year, and it has been a huge success in creating a market of qualified installers.

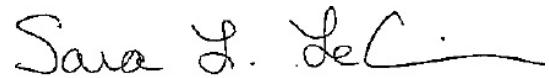
Mr. Sandbank reported that Solar For All has been a success thus far, providing no cost community solar for 10,000 low income New Yorkers. The Authority has secured capacity in nine community solar projects via an RFP in 2018, with additional RFP rounds planned for 2019-2020. The Multifamily Affordable Housing Added Incentive also provides funding for solar projects at regulated affordable housing. Since June 2018, 10 projects have been completed with an additional 29 projects in the pipeline.

Mr. Sandbank continued, explaining the NY-Sun Program outlook. In January 2019, Governor Cuomo announced a new target of 6 GW of installed distributed solar by 2025, with an expanded effort to support LMI households and disadvantaged communities. The 6GW target with expanded low-income benefits was also passed in the recent climate bill. The Authority plans to file a petition to the Public Service Commission in the coming months to expand and extend the NY-Sun Initiative to implement these goals. The 6 GW target will be met through a combination of new incentive funding and capacity installed without Authority incentives.

Mr. Willis indicated that the next item on the agenda was other business. There being no other business, Mr. Willis called for a motion to adjourn.

Whereafter, upon motion duly made and seconded, and by voice vote of the Members present, the meeting was adjourned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Sara L. LeCain".

Sara L. LeCain

Secretary to the Committee